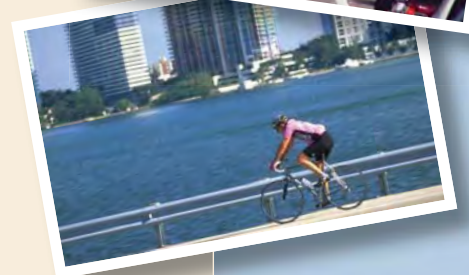




Miami-Dade 2035 Long Range Transportation Plan Final Report

October 29, 2009



Prepared by:



In association with:

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Miami-Dade 2035 Long Range Transportation Plan

Metropolitan Planning Organization
for the Miami Urbanized Area

Approved by MPO Governing Board on October 29th, 2009

This document was prepared by the Metropolitan Planning Organization for the Miami Urbanized Area in collaboration with Florida Department of Transportation, Miami-Dade Expressway Authority, Florida's Turnpike Enterprise, South Florida Regional Transportation Authority, Florida Department of Environmental Protection, Miami-Dade League of Cities, Miami-Dade County Department of Environmental Resources Management, Miami-Dade County Public Works Department, Miami-Dade Transit Agency, Miami-Dade Planning and Zoning Department, Miami-Dade Aviation Department, Miami-Dade Seaport Department, Miami-Dade County Office of Strategic Business Management, City of North Miami, City of Hialeah, City of Miami, City of Miami Beach, City of Miami Gardens, City of Homestead, Miami-Dade County Public Schools, Miami-Dade MPO Citizens Transportation Advisory Committee, Broward MPO, Palm Beach MPO, and South Florida Regional Planning Council

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The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.



MIAMI-DADE 2035 LONG RANGE TRANSPORTATION PLAN

FINAL REPORT

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October 2009

Metropolitan Planning Organization for the Miami Urbanized Area Governing Board*

On March 23, 1977, the Miami-Dade Metropolitan Planning Organization (MPO) was established to guide the transportation planning process in the Miami Urbanized Area. The United States Department of Transportation (US DOT) requires the MPO Governing Board to ensure a continuous examination of transportation plans and programs.

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Table of Contents

Summary Highlights	S-1
2035 LRTP Best Practices.....	
Chapter 1: Introduction	
2035 Long Range Transportation Plan (LRTP) Overview.....	1-2
Miami-Dade County Overview	1-3
<i>Transportation Planning Areas</i>	1-3
<i>Socioeconomic Trends</i>	1-5
<i>Mobility Trends</i>	1-8
Context-Sensitive Design	1-8
Chapter 2: Goals, Objectives, and Measures of Effectiveness	
Goals & Objectives Overview	2-2
U.S. Department of Transportation Congestion Initiative	2-2
SAFETEA-LU Planning Factors.....	2-3
Florida Transportation Plan.....	2-3
2006 Florida Strategic Highway Safety Plan (SHSP)	2-3
2035 Regional LRTP Goals	2-4
Goals, Objectives, and Measures of Effectiveness	2-5
Chapter 3: Financial Resources and Costs	
Financial Resources Review	3-2
Alternative Funding Strategies	3-4
Financial Set Asides.....	3-4
Cost Estimates.....	3-4
Transportation Management Area (TMA) Fund Allocation.....	3-5
Chapter 4: Plan Development Process	
SAFETEA-LU	4-2
Compliance with Federal Requirements.....	4-3
Compliance with State Requirements	4-5
Public Involvement Process	4-7
<i>Environmental Justice and Title VI</i>	4-7
<i>Public Information and Workshops</i>	4-9
Travel Demand Model Application	4-14
Candidate Improvements.....	4-14
Project Evaluation.....	4-14
Application of MOEs (Plan Performance).....	4-14
Efficient Transportation Decision Making (ETDM) Process.....	4-19
Safety Improvements	4-20
Security Improvements	4-20
Cost Feasible Plan	4-24

Table of Contents

Chapter 5: Transportation System Management and Operations (TSM&O)

U.S. Department of Transportation Congestion Initiative	5-2
Congestion Management Process (CMP).....	5-2
<i>Miami-Dade 2009 Congestion Management Process (CMP) Update</i>	5-3
<i>Role of Congestion Management Process in the Metropolitan Planning Process</i>	5-3
Transportation Demand Management (TDM)	5-4
Intelligent Transportation Systems (ITS).....	5-5

Chapter 6: Intermodal Systems Planning

Miami-Dade Freight Plan	6-2
Miami-Dade Bicycle/Pedestrian Plan	6-5

Chapter 7: Regional Long Range Transportation Plan

2035 Regional Long Range Transportation Plan (RLRTP) Overview	7-2
Corridors of Regional Significance	7-4

Chapter 8: Environment and Sustainability

Global Warming/Greenhouse Gas Emissions (GHG)	8-2
<i>County Legislation</i>	8-3
Climate Change Emission Calculation Guidelines.....	8-5
Vehicle Emissions Testing Methodology.....	8-6
Environmental Mitigation Strategies	8-7

Table of Contents

List of Tables

Table 1-1: MPO Committees	1-3
Table 1-2: Context Sensitive Solutions Foundation	1-8
Table 2-1: Examples of 4T's Strategies	2-2
Table 2-2: SAFETEA-LU Planning Factors	2-3
Table 2-3: 2025 Florida Transportation Plan Goals	2-3
Table 2-4: Florida SHSP Goals	2-3
Table 2-5: Goals and Objectives from Broward and Palm Beach Counties	2-4
Table 2-6: Regional LRTP Goals	2-4
Table 2-7: Goals, Objectives, and Measures of Effectiveness (MOE)	2-5
Table 3-1: Revenue Forecast FY 2015 - 2035 Estimates for Miami-Dade County	3-3
Table 3-2: Summary of Forecasted Revenues, FY 2015 to FY 2035	3-4
Table 3-3: FDOT Inflation Factors	3-4
Table 4-1: Federal Requirements for Long Range Transportation Plans	4-3
Table 4-2: State of Florida Requirements for Long Range Transportation Plans	4-5
Table 4-3: Organizations Serving Low- and Fixed-Income Populations	4-8
Table 4-4: Visualization Techniques	4-13
Table 4-5: Qualitative Measures of Effectiveness	4-17
Table 4-6: Safety Projects	4-20
Table 4-7: Safety Programs by Agency	4-21
Table 4-8: Security Programs by Agency	4-22
Table 4-9: Priority I Projects	4-26
Table 4-10: Priority II-IV Projects	4-32
Table 4-11: Partially Funded Projects	4-38
Table 4-12: Unfunded Projects	4-40
Table 4-13: Private Sector Projects	4-43
Table 4-14: Congestion Management Projects	4-46
Table 4-15: Non-motorized Projects	4-49
Table 5-1: Congestion Management 8-Step Process	5-2
Table 5-2: Examples of TDM Strategies	5-4
Table 5-3: Examples of Congestion Management Strategies	5-5
Table 6-1: Cost Feasible Freight Projects	6-3
Table 6-2: Bicycle and Pedestrian Infrastructure Examples	6-5
Table 6-3: On-road Facility Needs Assessment	6-6
Table 6-4: Off-road Facility Needs Assessment	6-6
Table 7-1: Main Components of the 2035 Regional Long Range Transportation Plan	7-2
Table 8-1: Miami-Dade County Plans	8-3

Table of Contents

List of Figures

Figure 1-1: Transportation Planning Areas.....	1-4
Figure 1-2: Population Projections by Planning Area.....	1-5
Figure 1-3: Population Growth, 2005 - 2035.....	1-6
Figure 1-4: Employment Projections by Planning Area.....	1-5
Figure 1-5: Employment Growth, 2005 - 2035.....	1-7
Figure 1-6: Level of Service, 2005.....	1-9
Figure 3-1: TMA Breakdown.....	3-5
Figure 4-1: 2035 LRTP Development Flow Chart.....	4-2
Figure 4-2: Interactive LRTP Website Project Search Methods.....	4-10
Figure 4-3: Regional Demographics and Travel Indicators.....	4-15
Figure 4-4: Cost Feasible Plan Level of Service.....	4-16
Figure 4-5: ETDM Process Diagram.....	4-19
Figure 4-6: Priority I Improvements.....	4-25
Figure 4-7: Priority II-IV Improvements.....	4-31
Figure 4-8: Partially Funded Improvements.....	4-37
Figure 4-9: Congestion Management Improvements.....	4-45
Figure 4-10: Non-motorized Improvements.....	4-48
Figure 6-1: Freight Improvements.....	6-4
Figure 6-2: Pedestrian Danger Index (PDI) Formula.....	6-5
Figure 7-1: Miami Urbanized Area.....	7-3
Figure 7-2: Corridors of Regional Significance.....	7-4
Figure 8-1: MPO Resolution-38-09.....	8-4
Figure 8-2: Emissions Summary by Scenario.....	8-6
Figure 8-3: Environmentally Sensitive Lands.....	8-8

Appendices

Appendix A: Glossary of Terms.....	
Appendix B: Measures of Effectiveness Analysis.....	
Appendix C: Financial Resources Review and Update.....	
Appendix D: Efficient Transportation Decision Making.....	
Appendix E: Regional LRTP.....	
Appendix F: Strategic Intermodal System Documentation.....	
Appendix G: <i>Blocks & Ribbons</i> - Public Survey Reports.....	
Appendix H: Project Purpose and Need Statements.....	



Miami-Dade 2035 Long Range Transportation Plan

Summary Highlights

- Between the years 2005 and 2035, population and households within Miami-Dade County are expected to increase by 39 percent. Employment is projected to surpass the population growth rate with a 45 percent increase. The number of automobiles and person trips are also projected to increase by 64 and 48 percent, respectively.
- The transportation deficiency analysis for the 21-year period from 2015 to 2035 identified more than 200 candidate capacity improvement projects needed to meet desired mobility conditions. These include highway projects which would cost \$14.6 billion, transit capital projects which would cost \$12.1 billion, and transit operations and maintenance expenditures amounting to \$13.5 billion (\$10.4 billion for existing system, \$3.1 billion for new services). The total cost of the needed improvements amounts to \$40.2 billion.
- The 2035 Cost Feasible Plan (Plan) was developed based on the projected available revenue of \$19.5 billion for the plan period. The projected revenue covers about 50 percent of the cost of the improvements needed.
- Improvements to the public transportation system is one of the primary objectives of the Plan. Proposed transit capital projects that are cost feasible include 10 park-n-ride lot / transit hub expansions and developments and the following premium transit service improvements:
 - Earlington Heights Connection (Metrorail Station-to-Miami Intermodal Center MIC)
 - Kendall Enhanced Bus Service
 - Biscayne Enhanced Bus Service
 - I-95 Express regional bus service
 - South Florida Rail Corridor (completion of Tri-Rail double tracking)
 - 5 City of Miami trolley routes – (American Recovery and Reinvestment Act ARRA projects)
 - Additional tracks at MIC (for Amtrak and/or commuter rail service at MIC)
- The MPO coordinated closely with County's Climate Change Advisory Task Force (CCATF) Greenhouse Gas Reduction Alternative Fuels and Transportation Subcommittee during the plan development process.
- Highway improvements are an integral part of the Plan. High Occupancy Toll (HOT) or Special Use Lanes are proposed along major expressways such as I-95 and SR 836. Incorporation of the latest electronics technology or Intelligent Transportation Systems (ITS) plays an integral role in these major projects as a measure of easing congested traffic conditions. Other freeway improvements are listed for the HEFT and the Miami-Dade Expressway Authority (MDX).
- In addition to cost feasible projects, the plan includes the allocation of funding for projects that are cost feasible for pre-construction phases only, including Planning, Design, and Right of Way acquisition.
- Non-motorized facilities (on-road bicycle lanes, off-road greenways / trails and sidewalks) are included in the Plan. On-road bicycle and pedestrian projects will be incorporated with capacity projects, when feasible. Funding for other non-motorized projects is based on the assumption that a pre-determined financial set-aside from eligible surface transportation funds will be devoted to non-motorized transportation projects.
- The 2009 Congestion Management Process is integrated with the LRTP cost feasible plan and includes a variety of short-term strategies identified to deal with urban travel congestion. These range from highway traffic design solutions to employer-based measures to promote use of carpooling and public transportation. Funding for these improvements is based on the assumption that a pre-determined financial set-aside from eligible surface transportation funds will be devoted to congestion management.
- The 2009 Miami-Dade Freight Plan is integrated with the LRTP cost feasible plan and includes a variety of freight related improvements identified to deal with freight transportation needs. These range from highway improvements such as roadway extensions and intersection improvements to freight rail safety and truck parking improvements.
- The plan also includes highway improvements to be completed by private sector sources as part of proposed land developments. As such, these projects are dependent upon market and other conditions, and are not included in the cost feasible network.

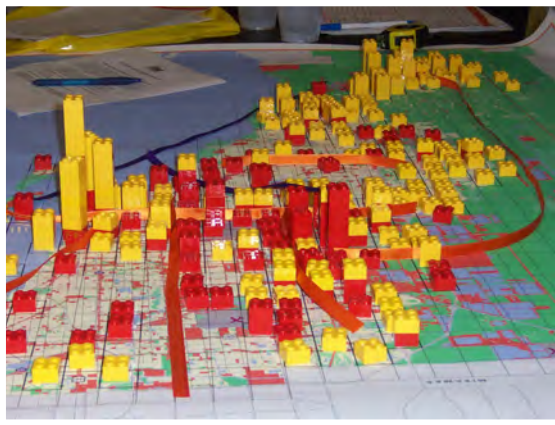
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2035 LRTP Best Practices

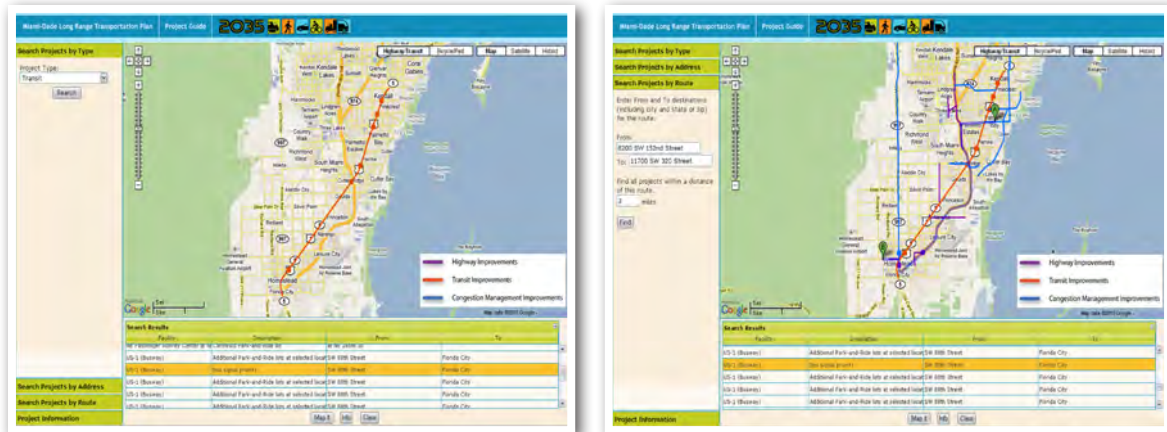
The 2035 LRTP for Miami-Dade County represents an advance in the state of long range transportation planning in the County to a level that innovates and maximizes the benefits of public involvement, optimal financial allocation, and regional coordination, to name a few. A collection of best practices in transportation planning can be gleaned from this plan update, including the following:

1. **Visualization techniques** – The use of visualization techniques, required by SAFETEA-LU, is an important method of dissemination of technical transportation information to the public and decision makers. A variety of visualization techniques were developed and utilized in the 2035 LRTP, as described on page 4-13 of the LRTP Adoption Document. Some examples of the techniques include the following:
 - **Blocks and Ribbons Exercise** – The Blocks and Ribbons exercise includes the use of Legos, ribbon, and base maps, providing a 3-dimensional interactive medium for participants to visualize population and employment growth (Legos) and address the growth with transportation solutions (ribbon). Blocks and Ribbons was utilized for six public workshops and the LRTP Steering Committee's use. The exercise both engaged users to participate actively and provided them an opportunity to learn about the challenges faced by transportation planners.

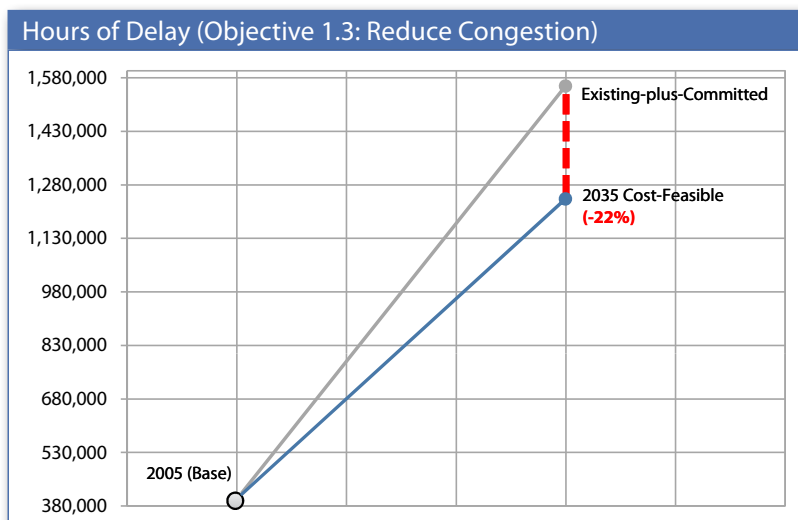


- **Interactive Survey Technology** – An audience response system called OptionFinder provided an interactive survey methodology to gauge public sentiment regarding mobility issues and challenges facing Miami-Dade County. This enabled a real-time assessment of the transportation priorities of participants. At each of twelve workshops, participants were asked a series of questions and, using a digital keypad resembling a television remote, keyed in their respective choices. As soon as the choices were selected, the OptionFinder system displayed a chart depicting participants' responses. The use of OptionFinder successfully engaged participants and facilitated the efficient and accurate collection of public input that ultimately helped shape the outcome of the LRTP. The OptionFinder technology was also utilized for Steering Committee project evaluation during a two day workshop.
- **Interactive LRTP Web Application** – An Interactive LRTP website was developed to provide users with a wide variety of information pertaining to the development of the 2035 LRTP. Citizens can utilize this website to download materials, stay current with public involvement activities, and provide comments and/or suggestions using online applications of surveys administered at the public meetings. Another interactive feature of the LRTP website is a project mapping element that can be used to view projects in a Google Maps® environment, which includes aerial photography and other mapping elements. Cost Feasible Plan projects can be accessed through a variety of methods, including by proximity to a particular location, in the path of a particular trip, or simply by project type, such as highway or transit projects. These search methods are illustrated on page 4-10 of the LRTP Adoption Document. Where project visualizations exist, they are also accessible in this electronic mapping environment.





2. **Integration of the Freight Plan and Congestion Management Process (CMP) to the 2035 LRTP** – Both the Freight Plan and the CMP were integrated into the LRTP update process for the first time in Miami-Dade County. This integration provides a more meaningful role for both the Freight Plan and the CMP in the cost efficient improvement of the transportation network in the County at a time when transportation funding projections are more limited than in past plan updates.
3. **Financial Set-Asides for Congestion Management and Non-Motorized Projects** – Financial set-asides were established early in the LRTP update process for two programs: Congestion Management and Non-Motorized improvements. The funds set aside for these programs were subtracted from projected revenue estimates prior to the development of the Cost Feasible Plan, ensuring a minimum funding commitment in the plan to those two programs. This represents a commitment to two very important types of transportation improvements, consistent with public input indicating that 82% of participants are strongly in favor of the inclusion of non-motorized improvements and non-highway expansion improvements to the roadway system in Miami-Dade County.
4. **Regional LRTP Process and the South East Florida Transportation Council (SEFTC)** – A regional coordination process was conducted for the Southeast Florida region to develop a regional LRTP that is focused on highway and transit facilities serving regional travel markets. The 2035 LRTP updates in Southeast Florida marked the first regional coordination throughout the plan update process through the participation of a regional board and two regional committees that report to the SEFTC: the Regional Transportation Technical Advisory Committee (RTTAC) and the RTTAC Modeling Subcommittee.
5. **Measures of Effectiveness (MOEs)** – MOE's were developed for each of 49 objectives in the LRTP Goals and Objectives. The MOE's include both quantitative and qualitative measures, all of which are useful indicators of the plan's ability to meet the goals established early in the plan update process. The MOE's were utilized to assess plan performance on a systemwide basis. The table on page 4-16 and 4-17 and the graphs in **Appendix B** summarize the performance of the Cost Feasible Plan with respect to the MOE's.



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1 Introduction

Chapter Highlights

- 2035 Long Range Transportation Plan (LRTP) Overview
- Miami-Dade County Overview
 - Transportation Planning Areas
 - Socioeconomic Trends
 - Mobility Trends
- Context-Sensitive Design





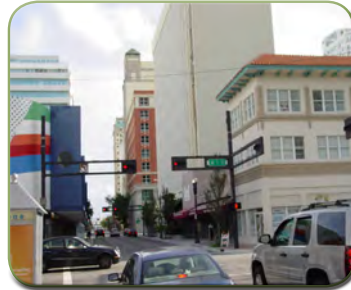
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2035 Long Range Transportation Plan (LRTP) Overview

Transportation plays a prominent role in shaping the quality of life experienced by Miami-Dade County residents and visitors by impacting nearly every aspect of travel choices, including place of work, place of residence, and the distance people are willing to commute for shopping and entertainment. Miami-Dade County's transportation infrastructure is also at the heart of the County's economy. The financial costs of congestion experienced by Miami-Dade residents in 2007 amounted to approximately \$3.0 billion, and resulted in excess fuel consumption of 102 million gallons¹; the average annual cost of congestion per Miami-Dade traveler was approximately \$955. As the population of Miami-Dade County continues to grow, so does the demand on the existing transportation system, which requires innovative investments and collaborative strategies to curtail the rising costs of congestion. The development patterns that occur, whether conducive to urban sprawl or compact urban development, will impact the requirements of the County's mobility needs.

Addressing the transportation system challenges through congestion mitigation solutions, operational improvements, capacity expansion, or creating new public transit systems, begins with the Miami-Dade Long Range Transportation Plan Update to the Year 2035. This chapter provides an overview of Miami-Dade County, describes the Metropolitan Planning Organization for the Miami Urbanized Area (MPO) involvement in the County's transportation planning activities, and summarizes the

County's current and projected socioeconomic and transportation characteristics.

The Miami-Dade Long Range Transportation Plan Update to the Year 2035, hereto referred to as the 2035 LRTP, commenced in February 2008 and involves a major update of the 2030 LRTP, which was adopted in November 2004. The 2035 LRTP's primary purpose is to assist citizens, businesses, and elected officials in cultivating their transportation vision for the County through the next 26 years. The 2035 LRTP serves as an instrument to identify the needed improvements to the transportation network, and provides a long-term investment framework to address current and future challenges. This plan outlines the strategic objectives necessary to develop an efficient, multi-modal transportation system. The LRTP update process relied extensively on the input of the general public through a series of twelve (12) public involvement meetings/workshops: six (6) kick-off meetings/workshops and six (6) needs plan meetings/workshops. The 2035 LRTP is a multi-modal plan establishing the priorities for the County's road, transit, freight, pedestrian, and bicycle improvements.

The MPO is the federally designated transportation planning authority serving the mobility needs of the Miami urbanized area. The Miami-Dade MPO is required, by federal law, to develop and update the long range transportation plan every five years in cooperation with the respective agencies that operate the County's transportation network. As one of its primary

1. Texas Transportation Institute (2009). 2009 Urban Mobility Report. College Station, TX

responsibilities, the Miami-Dade MPO approves the development of highway, transit, and non-motorized transportation-related projects. The Miami-Dade MPO is governed by the Miami-Dade MPO Governing Board, which is comprised of 22 elected officials charged with setting policy for transportation planning activities in the County. The MPO also includes ten (10) advisory committees that provide the foundation for coordination and decision-making in regards to transportation planning. **Table 1-1** lists the MPO's committees.

Table 1-1 | MPO Committees

Bicycle Pedestrian Advisory Committee (BPAC)
Citizens Transportation Advisory Committee (CTAC)
Freight Transportation Advisory Committee (FTAC)
Long Range Transportation Plan (LRTP) Steering Committee
Transportation Aesthetics Review Committee (TARC)
Transportation Disadvantaged Local Coordinating Board (LCB)
Transportation Improvement Program (TIP) Development Committee
Transportation Planning Council (TPC)
Transportation Planning Technical Advisory Committee (TPTAC)
Unified Planning Work Program (UPWP) Development Committee

Miami-Dade County Overview

Miami-Dade County is a densely populated metropolitan area encompassing approximately 2,000 square miles of land, and is the most populous county in the State of Florida. As of 2007, based on Census estimates, Miami-Dade County was the eighth most populous county in the United States². Its economic, cultural, and ethnic climate makes it one of the most diverse regions within the country. It is home to more than 2.4 million people spread across 35 municipalities; the City of Miami is the largest with a population greater than 400,000 persons. Miami-Dade is well-characterized by its energetic atmosphere, vibrant nightlife, and connectivity to Latin America and the Caribbean. It consistently ranks as one of the top tourism destinations in the country.

The County's transportation network provides significant options as well, including an expansive system of roadways, transit service operated by Miami-Dade Transit (MDT), and Miami International Airport. Miami-Dade is home to one of the world's most renowned seaport facilities in the Port of Miami, which has been called the "Cruise Capital of the World." Miami-Dade County is also home to a portion of Tri-Rail, a commuter rail system operated by the South Florida Regional Transportation Authority that offers commuter rail service at five stations within Miami-Dade County. The County also has a robust freight rail network and complimentary trucking facilities. The Miami-Dade County transportation network is comprised of 1,809 centerline miles of roadways; 84 route miles of passenger rail; 3,572 route miles of bus service; 164 miles of freight rail; and 241 miles of non-motorized facilities.



Transportation Planning Areas

For the purposes of administering transportation programs and studies, the MPO divided Miami-Dade County into six distinct geographic units identified as Transportation Planning Areas (TPAs). The TPAs that comprise the County's geographic area are:

- Beach/Central Business District (CBD)
- Central
- North
- Northwest
- South
- West

Each planning area presents its own unique transportation opportunities and challenges. **Figure 1-1** (following page) illustrates the boundaries and location of each planning area.

2. Population Division, U.S. Census Bureau (2008). *Table 7: Population Estimates for the 100 Largest U.S. Counties Based on July 1, 2007 Population Estimates: April 1, 2000 to July 1, 2007 (CO-EST2007-07)*. Washington, D.C.

Socioeconomic Trends

Socioeconomic characteristics shape the nature and demand for transportation infrastructure and services. According to the 2009 Urban Mobility Report, Miami-Dade residents wasted 146 million hours in traffic attributed to congestion delays in 2007. Population and employment growth in the County will add to the congestion and resulting delays without planned improvements to the system that are correlated to the growth, in terms of both its magnitude and patterns. The increased demand on the transportation system represented by the population and employment growth can result in further deterioration of the system’s performance, directly impacting the quality of life of the County’s residents. In an effort to sustain the County’s quality of life, and enhance the region’s economic vitality, the 2035 L RTP supports the development of a safe, efficient, multimodal transportation system that will provide the prosperity valued by the citizens of Miami-Dade County.

In 2035, the population in Miami-Dade County is projected to increase by 919,000 persons (**Figure 1-2**), resulting in a total population in 2035 of more than 3 million persons. The population density in the County will also experience an increase, from an average of 1,180 persons per square mile in 2005 to 1,639 persons per square mile in 2035. **Figure 1-3** (following page) provides a depiction of the projected population growth in the County from 2005 to 2035. The total number of jobs, or employment, is expected to increase by 45% between 2005 and 2035, resulting in an additional 615,000 jobs. The service employment sector is projected to grow by 53%, creating more than 541,000 jobs. Conversely, jobs in the industrial and commercial sector is forecasted to grow at 10% and 27%, respectively. **Figure 1-4** summarizes the County’s employment estimates from 2005 to 2035 by planning area. **Figure 1-5** (page 1-7) illustrates the County’s employment density from 2005 to 2035. **Figures 1-4** and **1-5** depict the County’s Urban Development Boundary (UDB) and Expansion Area Boundary (EAB), which are part of the County’s land use policy to limit urban growth in the agricultural and environmentally sensitive areas on the fringes of the County area.

Figure 1-2 | Population Projections by Planning Area

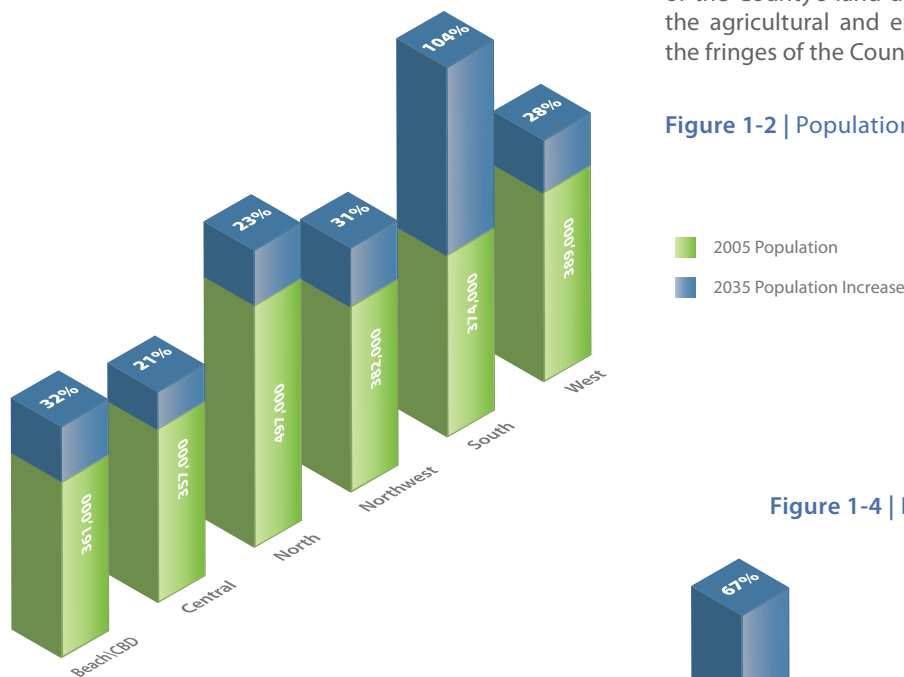
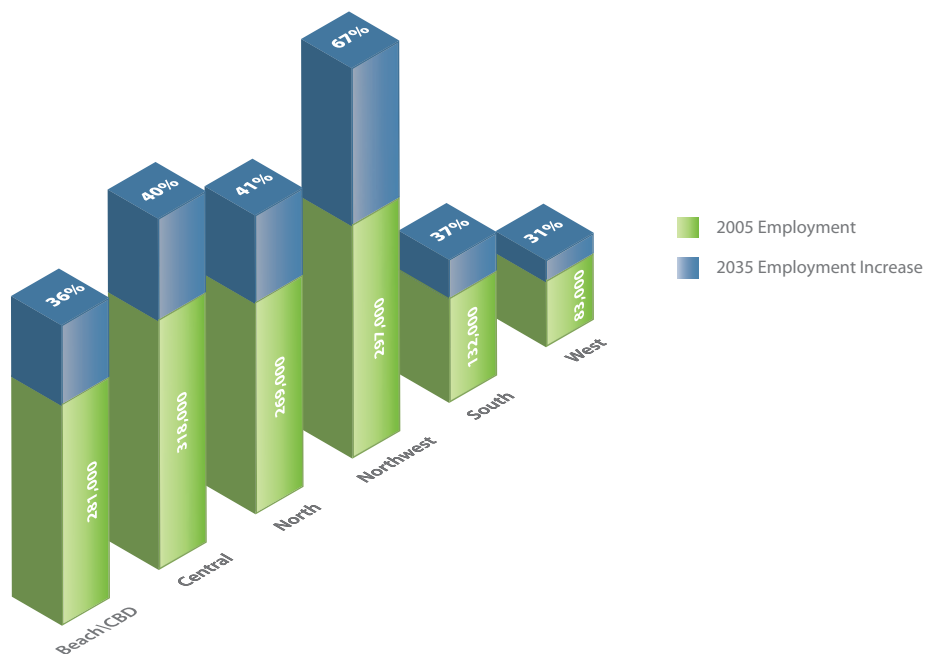
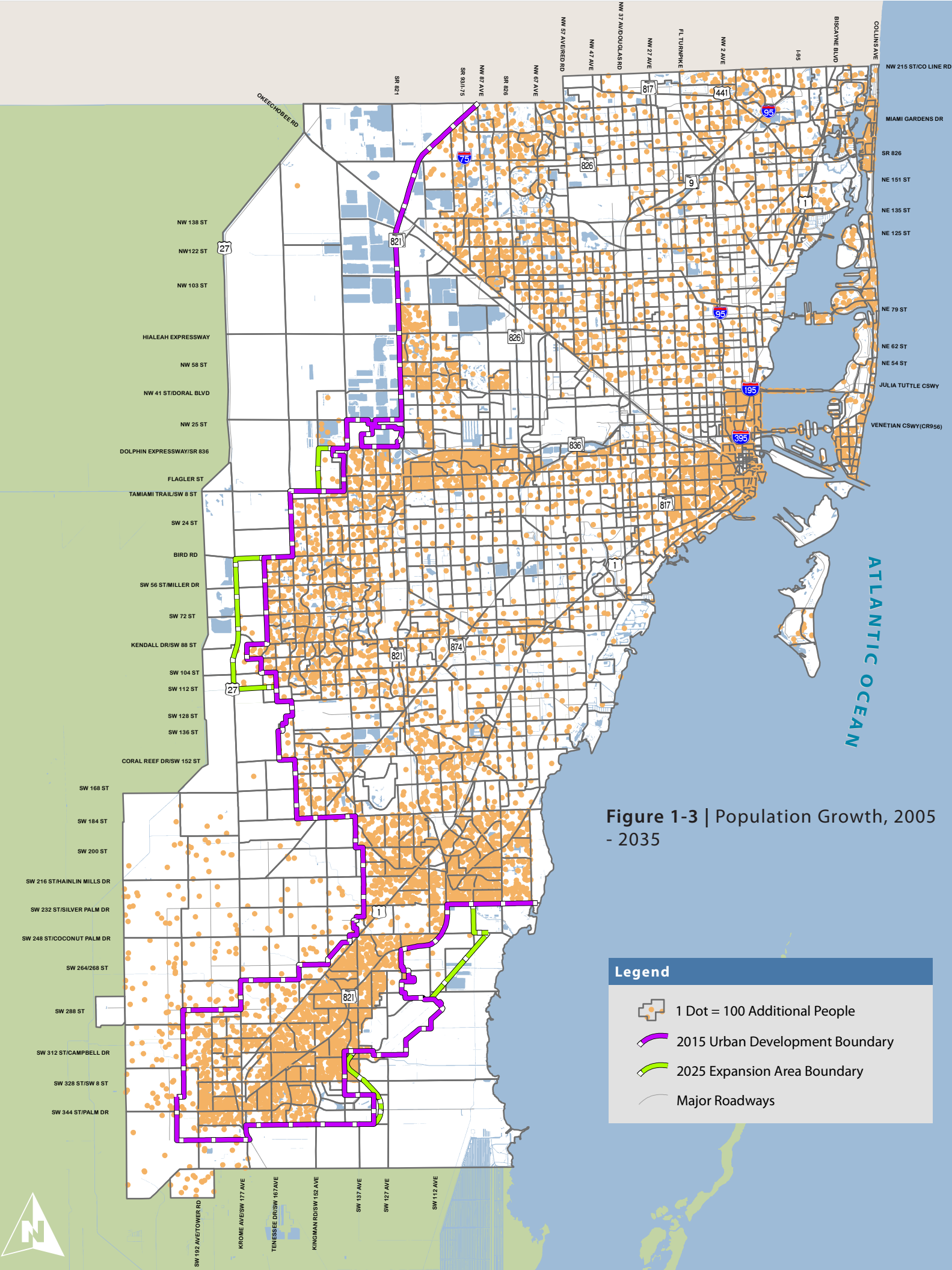
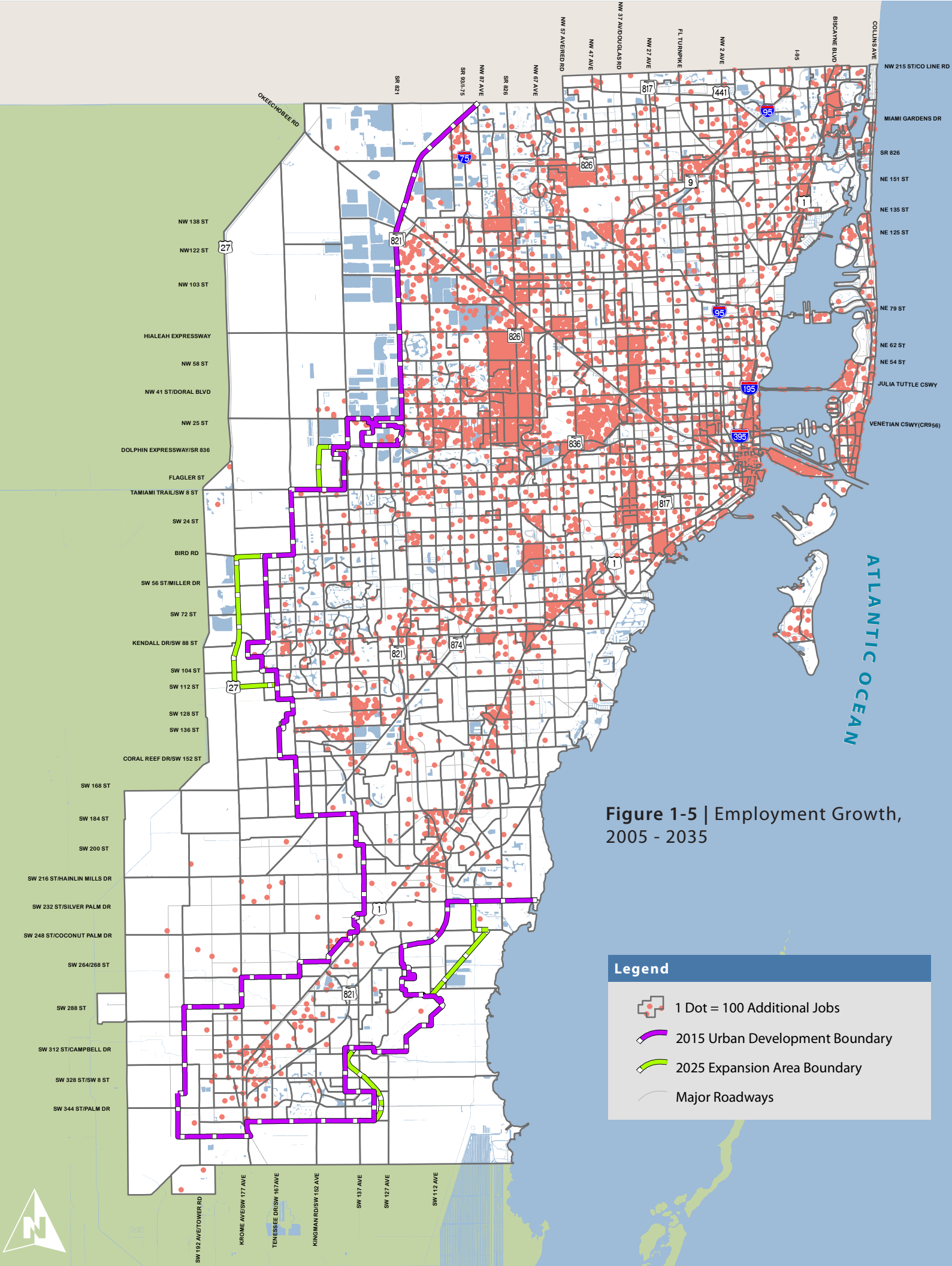


Figure 1-4 | Employment Projections by Planning Area







Mobility Trends

The projected growth in population and employment will lead to a myriad of challenges for Miami-Dade's transportation system. There are many factors that contribute to planning an efficient transportation network, including defining the needs of the primary transportation users and developing a cohesive, collaborative strategy that will optimize transportation investments over the course of the plan period. Defining the mobility needs requires an understanding of Miami-Dade's current transportation trends. The development of a long-range transportation plan is a technical process requiring the use of sophisticated travel demand modeling tools. The Southeast Regional Planning Model (SERPM) served as the multi-modal travel demand modeling platform used to project and assess the County's transportation needs through 2035.

The 2035 Plan applies Level of Service (LOS) standards to assess base year (2005) and horizon year (2035) travel conditions. LOS is a quantitative measure that describes the operational conditions of transportation facilities. There is a range of six LOS categories used to assess the roadway system, each tied to a range of volume-to-capacity (V/C) ratios for any particular section on a facility: LOS B ($v/c \leq .70$), LOS C ($.71 < v/c \leq .80$), LOS D ($.81 < v/c \leq .90$), LOS E ($0.91 - 1.00$), and LOS F ($v/c > 1.00$). LOS B is the ideal standard, which depicts free-flowing travel conditions, while LOS F indicates a level of congestion that can be described as gridlock. **Figure 1-6** (page 1-9) illustrates the daily LOS for the base year (2005). The overall LOS in 2005 can be summarized as LOS B. With only the committed improvements in the County's 5-year Transportation Improvement Program (TIP), the projected LOS in 2035 would be LOS C, representing a 23% growth in volume-to-capacity. This deterioration in mobility provides the framework for building a plan that addresses system deficiencies. While it may be difficult for improvements to the system to keep pace with the growth that continues to demand more capacity on the system, the goal of the LRTP is to mitigate the deficiencies in an optimal balance of improvements.

Context-Sensitive Design

It is the policy of the MPO to have aesthetic and urban design features considered in the design of major projects. To accomplish this, the project planning phases will be evaluated by the Transportation Aesthetics Review Committee (TARC) to identify potential aesthetic and urban design enhancements that can be incorporated early in the design process. The TARC uses Context-Sensitive Design, also referred to as Context-Sensitive Solutions, to "find a best fit transportation solution for the context that meets expectations of the transportation agency, stakeholders, and community." **Table 1-2** outlines the core strategies, action principles, and fundamental benefits of Context-Sensitive Design, which the TARC will analyze in regards to planned improvements through 2035.

Table 1-2 | Context Sensitive Solutions Foundation

Core Strategies	Establish a shared stakeholder vision to provide a basis for decisions
	Demonstrate a comprehensive understanding of context
	Foster continuing communication and collaboration to achieve mutual success
	Exercise flexibility and creativity to shape transportation solutions
Action Principles	Preserve and enhance community and natural environments
	Use interdisciplinary teams
	Involve stakeholders
	Seek broad-based public involvement
	Use full range of communication methods
	Achieve consensus on purpose and need
	Address alternatives and all modes
	Consider a safe facility for users & community
	Maintain environmental harmony
	Address community & social issues
	Address aesthetic treatments & enhancements
	Utilize full range of design choices
	Document project decisions
	Track and meet all commitments
Fundamental Benefits	Use agency resources effectively
	Create a lasting value for the community
	Increased stakeholder/public participation, ownership, and trust
	Improved community satisfaction
	Design features appropriate to context
	Decreased costs for overall project delivery
	Minimized overall impact to human and natural environment
	Improved mobility for users
	Improved safety (vehicles, pedestrians, and bikes).
	Improved quality of life for community

Source: NCHRP Report 642, Quantifying the Benefits of Context Sensitive Solutions

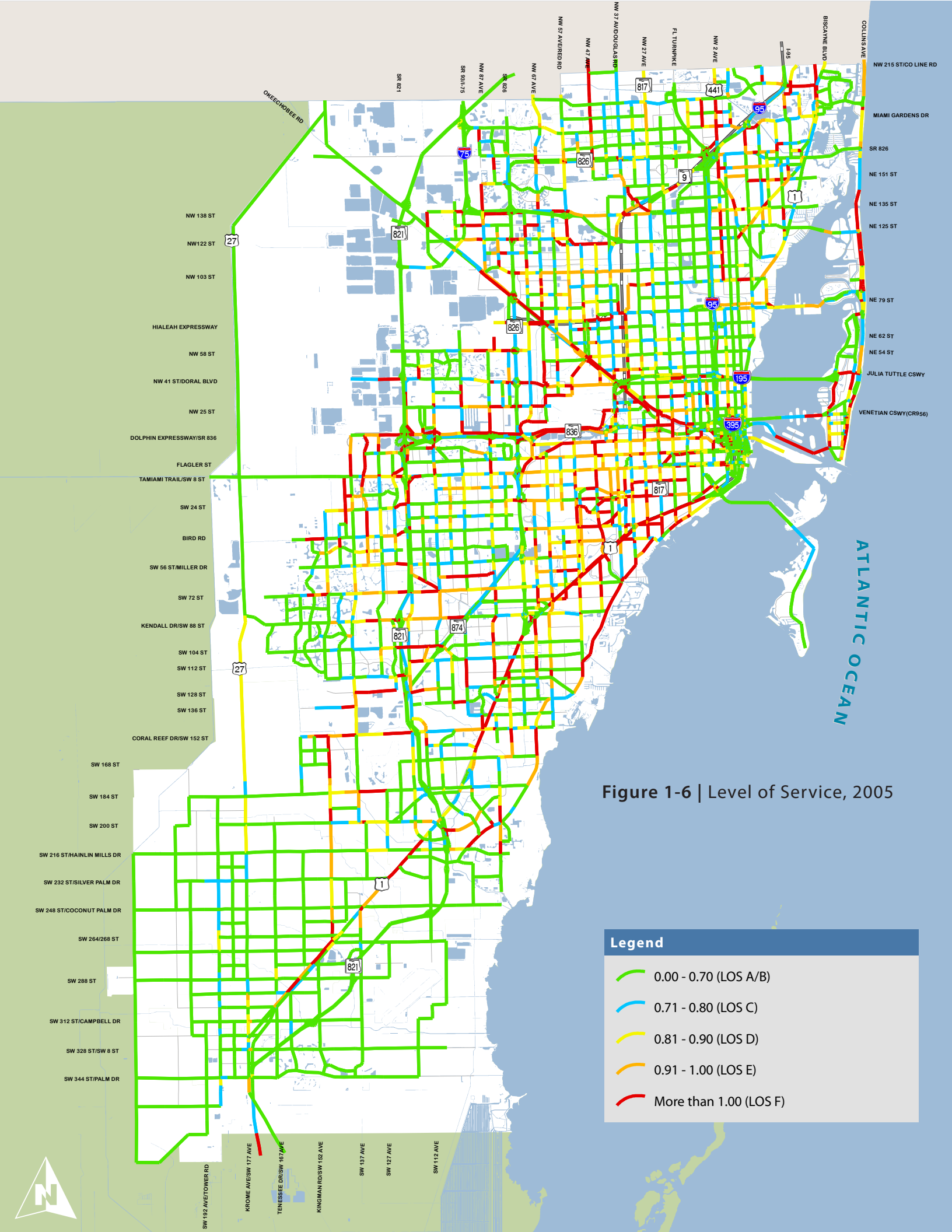


Figure 1-6 | Level of Service, 2005

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② Goals, Objectives, and Measures of Effectiveness

Chapter Highlights

- Goals & Objectives Overview
- U.S. Department of Transportation Congestion Initiative
- SAFETEA-LU Planning Factors
- Florida Transportation Plan
- 2006 Florida Strategic Highway Safety Plan (SHSP)
- 2035 Regional LRTP Goals
- Goals, Objectives, and Measures of Effectiveness (MOE)

Goals & Objectives Overview

The 2035 LRTP is guided by eight goals designed to improve the transportation system in Miami-Dade County and meet federal and state regulations. Each goal includes one or more objectives that provide measureable actions that should be taken to realize the goals and measures to assess the plan performance. This chapter outlines the goals, objectives, and measures of effectiveness developed in the early stages of the LRTP update process. Building on the previous LRTP (2030) and relying on extensive public input, the LRTP steering committee developed the goals and objectives.

The public involvement process utilized in the development of the goals and objectives, which is more thoroughly discussed in Chapter 4, consisted of a survey of participants' priorities and opinions about the desired direction of transportation system improvements in Miami-Dade County.

Participants were given the opportunity to analyze population and employment growth in a hands-on interactive exercise, allowing them to relate their desires to socioeconomic growth data that represents the future transportation needs of the County. Other resources utilized to refine the goals and objectives, ensuring compliance with state, federal, and regional guidelines included the following:

- U.S. Department of Transportation Congestion Initiative
- The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Florida Transportation Plan Goals and Objectives
- 2006 Florida Strategic Highway Safety Plan
- Broward County LRTP and Palm Beach County LRTP Goals and Objectives

U.S. Department of Transportation Congestion Initiative

As part of the National Strategy to Reduce Congestion on America's Transportation Network (otherwise known as the Congestion Initiative), the United States Department of Transportation (US DOT) devised a four-prong strategy to manage the nations burgeoning congestion. These strategies, collectively known as the 4T's, include Tolling, Transit, Telecommuting, and Technology. **Table 2-1** lists examples of each type of strategy.

In August 2007, the US DOT selected the Miami-Area (Miami-Ft. Lauderdale region) as one of five metropolitan regions to participate in the Urban Partners Program in an effort to utilize the 4T's concept to relieve urban congestion. Through this urban partnership agreement between the US DOT and the Miami-Area Urban Partner (consisting of the FDOT, Miami-Dade MPO, Broward MPO, Miami-Dade Transit, Broward County Transit, Miami-Dade Expressway Authority, and Florida Turnpike Enterprise) southeast Florida received \$62.9 million towards the conversion of high-occupancy vehicle (HOV) lanes into high-occupancy tolling (HOT) lanes along a 21-mile stretch of I-95, including additional transit services in both Broward and Miami-Dade counties. \$43.4 million has already been allocated towards the I-95 Express project, which will provide variable-priced tolling lanes connecting I-395 in Miami-Dade County to I-595 in Broward County. States and MPOs are encouraged to identify strategies in their long range transportation plans to implement 4T's and other approaches to reduce congestion.

Table 2-1 | Examples of 4T's Strategies

Tolling
Dynamically Priced Lanes
Congestion Pricing
Transit
Bus Rapid Transit
Transit Incentives
Telecommuting
Flexible Work Schedules
Carpooling/Vanpooling Programs
Technology
Intelligent Transportation Systems (ITS)
Real-Time Traveler Information

SAFETEA-LU Planning Factors

SAFETEA-LU is the federal legislation – signed into law in August 2005 – that governs federal surface transportation spending in the United States. SAFETEA-LU builds on the Transportation Equity Act for the 21st Century (TEA-21), which was the previous surface transportation legislation. SAFETEA-LU expired on September 30, 2009, but was extended, in anticipation of reauthorization legislation. SAFETEA-LU includes eight planning factors, as outlined in 23 USC 134(h)(1), which must be addressed in the long-range transportation planning process. These planning factors place an emphasis on systems management and operations, safety, security, mobility, and environmental concerns. **Table 2-2** lists the SAFETEA-LU planning factors, which provided the foundation for the 2035 LRTP goals and objectives.

Table 2-2 | SAFETEA-LU Planning Factors

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
Increase the safety of the transportation system for motorized and non-motorized users
Increase the security of the transportation system for motorized and non-motorized users
Increase the accessibility and mobility of people and for freight
Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns
Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
Promote efficient system management and operation
Emphasize the preservation of the existing transportation system

Florida Transportation Plan

The goals and objectives for the 2035 LRTP must also be consistent with the goals and objectives of the 2025 Florida Transportation Plan (FTP). The 2025 FTP is comprised of 5 goals (**Table 2-3**), all of which were developed to be consistent with the 2035 LRTP goals.

Table 2-3 | 2025 Florida Transportation Plan Goals

Goal 1: A safer and more secure transportation system for residents, businesses, and visitors
Goal 2: Enriched quality of life and responsible environmental stewardship
Goal 3: Adequate and cost-efficient maintenance and preservation of transportation assets
Goal 4: A stronger economy through enhanced mobility for people and freight
Goal 5: Sustainable transportation investments for Florida's future

2006 Florida Strategic Highway Safety Plan (SHSP)

The SHSP was developed to strategically guide investments and other resources to address safety concerns where the need for improvement is greatest. The SHSP outlines four areas of emphasis: aggressive driving, intersection crashes, vulnerable road users (pedestrians, bicyclists, and motorcycles), and lane departure crashes. The SHSP sets forth the priorities for both public and private entities involved in the reduction of traffic-related fatalities and injuries on Florida's transportation system. **Table 2-4** summarizes the goals for each emphasis area.

Table 2-4 | Florida SHSP Goals

Emphasis Area	Goal
Aggressive Driving	Reduce the rate of fatalities and serious injuries involving aggressive driving
Intersection Crashes	Reduce the rate of fatalities and serious injuries occurring at intersections
Vulnerable Road Users	Reduce the rate of fatalities and serious injuries involving vulnerable road users
Lane Departure Crashes	Establish mobility strategies that are consistent with pedestrian, cyclist, and motorcyclist safety.

The overall goal of the SHSP is, "To improve the safety of Florida's surface transportation system by achieving a five percent annual reduction in the rate of fatalities and serious injuries beginning in 2007."

2035 Regional LRTP Goals

Southeast Florida has increasingly become a region that functions more as an integrated urbanized area rather than a collection of isolated areas independent of one another. Because of this regional connectivity, the three southeast Florida counties – Broward, Miami-Dade, and Palm Beach – have embarked on a regional planning effort that recognizes the importance of the regional facilities that serve the transportation needs of both people and freight. The Southeast Florida Regional 2035 Long Range Transportation Plan (RLRTP) is the product of this effort. The purpose of the 2035 RLRTP is to coordinate transportation planning activities that address growth in the tri-county region in the years to come. The goals of Miami-Dade 2035 LRTP were developed to be consistent with the goals of the Regional 2035 LRTP goals. **Table 2-5** lists the goals for Broward and Palm Beach counties 2035 LRTPs, which were considered in the development of the Regional LRTP and Miami-Dade's 2035 LRTP. **Table 2-6** lists the RLRTP goals.

Table 2-6 | Regional LRTP Goals

Goal 1: Improve Regional Transportation Systems and Travel
Goal 2: Support Regional Economic Vitality
Goal 3: Enhance Regional Social Benefits
Goal 4: Mitigate Regional Environmental Impacts
Goal 5: Integrate Regional Transportation with Land Use and Development Considerations
Goal 6: Optimize Sound Regional Investment Strategies
Goal 7: Provide for a safer and more secure transportation system for residents, businesses, and visitors

Table 2-5 | Goals and Objectives for Broward and Palm Beach Counties

Palm Beach County 2035 LRTP	Broward County 2035 LRTP
Goal 1: The Plan will effectively address the integration of land, water, and air modes of transportation, and associated intermodal facilities into a cohesive intermodal system	Goal 1: Provide a balanced multi-modal transportation system that serves the local and regional movement of people, freight and services, and that encourages travel by public transit
Goal 2: The Plan will consider effective alternative modes of transportation to the single occupant vehicle (SOV)	Goal 2: Ensure that the transportation system furthers the economic vitality of Broward County
Goal 3: The Plan will provide highway corridor capacity for the safe, effective, and efficient movement of people and goods	Goal 3: Increase the safety of the transportation system for all of its users
Goal 4: The Plan will be financially feasible and develop multimodal facilities and services that support economic development	Goal 4: Increase the security of the transportation system for all of its users
Goal 5: The Plan will be supportive and consistent with Land Use and Growth Management Regulations	Goal 5: Promote sustainable systems and programs
Goal 6: The Plan will preserve, and wherever possible, enhance the communities' social and environmental resources	Goal 6: Provide an aesthetically pleasing transportation system which improves the relationship between public transportation and land use development and promotes the quality of life for the community
Goal 7: The Plan will improve the safety and security of the transportation system	Goal 7: Preserve the existing and planned transportation system
Goal 8: The Plan will coordinate with other transportation plans in the region and promote transportation and land use activities in support of regional travel	
Goal 9: The Plan will adhere to the mandated Plan development process	

Goals, Objectives, and Measures of Effectiveness

The LRTP goals and objectives serve as the basis for selecting and prioritizing projects that optimize the use of available transportation revenue and, as such, must be inclusive of both state and federal requirements discussed previously and the priorities of Miami-Dade County. Measures of Effectiveness (MOE) serve as performance assessment benchmarks for each objective. The use of MOEs enables the MPO to track the performance of the LRTP, by measuring the accomplishment of each objective.

The use of MOEs in the development of the 2035 LRTP was a critical element of the LRTP process, acting as an important indicator of how the plan addressed each objective and, effectively, each goal. The MOEs were utilized to assess the performance of the 2035 Cost Feasible Plan on systemwide basis. **Table 2-7** lists the goals, objectives, and MOEs adopted by the MPO Governing Board on October 23, 2008. Chapter 4 - *Plan Development Process* represents the results of the quantitative and qualitative MOE analyses.

Table 2-7 | Goals, Objectives, and Measures of Effectiveness (MOE)

Goal 1: Improve Transportation System and Travel	Measure
Objective 1.1: Improve accessibility to major health care, recreation, education, employment and cultural facilities	Highway lane & centerline miles within 1 mile of major health facilities, recreation, education, employment, and cultural facilities
	Transit service route miles within 0.5 miles of major health care facilities, recreation, education, employment, and cultural facilities
Objective 1.2: Enhance mobility for people and freight	Average travel time (all purposes)
	Number of daily passengers on public transit
Objective 1.3: Reduce Congestion	Hours of delay
Objective 1.4: Maximize multimodal travel options and provide travel choices	Transit service route miles and HOV/HOT lane miles
Objective 1.5: Fill transit service gaps	Service coverage in transit supportive areas
Objective 1.6: Promote transit reliability	Total hours of delay on highway facilities with transit service
Objective 1.7: Improve transportation facilities' and services' regional connectivity	Highway lane & centerline miles in corridors of regional significance
	Transit service route miles in corridors of regional significance
	Number of Park-n-Ride/multimodal facilities
Objective 1.8: Include provisions for non-motorized modes in new projects and in reconstructions	Does the plan consider non-motorized infrastructure in highway and transit improvements?
	Percentage increase in number/mileage of non-motorized facilities
Objective 1.9: Promote new non-motorized (bicycle, pedestrian, greenways) projects	Does the plan consider new non-motorized facilities?
	Percentage increase in number/mileage of non-motorized facilities
Objective 1.10: Increase reverse commute opportunities for disadvantaged communities	Transit service route miles from cities and central areas in the AM Peak period (City of Hialeah, City of Homestead, City of Miami, City of Miami Beach, City of Miami Gardens, City of North Miami, City of North Miami Beach)
Objective 1.11: Promote transportation improvements that provide for the needs of the elderly and disabled	Average highway and transit travel time to/from TAZs with a high proportion of elderly population
Objective 1.12: Improve transit services that provide access to educational facilities	Transit service route miles within 0.5 miles of educational facilities
Goal 2: Increase the Safety of the Transportation System for Motorized and Non-motorized Users	Measure
Objective 2.1: Improve safety on facilities and in operations	Level of investment in safety projects
Objective 2.2: Reduce roadway and multi-modal crashes	Number of accidents

Table 2-7 cont'd | Goals, Objectives, and Measures of Effectiveness (MOE)

Objective 2.3: Increase safety at transit stops and intermodal stations and connections	Does MDT address safety at transit stops and stations as part of the operation of its system?
Objective 2.4: Implement safe route to schools	Does the County have a safe route to schools program?
Goal 3: Increase the Security of the Transportation System for Motorized and Non-motorized Users	Measure
Objective 3.1: Enhance the capacity of evacuation corridors	Total lane miles within evacuation travel corridors
Objective 3.2: Improve transportation security for facilities and in operations	Does the plan address security as part of the operation of its system?
Objective 3.3: Ensure transportation options are available during emergency evacuations for the elderly and persons with disabilities	Transit service route miles within 0.5 miles of TAZs with a high proportion of elderly population
Objective 3.4: Ensure security at ports, airports, and major intermodal centers/terminals	Do airports, seaports, and intermodal centers address security as part of the operation of their facilities?
Goal 4: Support Economic Vitality	Measure
Objective 4.1: Increase access to employment and sites	Average HBW travel time
Objective 4.2: Enhance tourist travel and access opportunities	Highway lane & centerline miles within 1 mile of tourist attractions
	Transit service route miles within 0.5 miles of tourist attractions
Objective 4.3: Increase and improve passenger and good access to airports and seaports	Highway lane & centerline miles within 1 mile of MIA, Opa Locka, HGAA, and Port of Miami
	Transit service route miles within 0.5 miles of MIA, Opa Locka, HGAA, and Port of Miami
	Number of transit patrons going to/from the airports and seaport
Objective 4.4: Augment multimodal access to major activity centers	Highway lane & centerline miles within 1 mile of major activity centers
	Transit service route miles within 0.5 miles of major activity centers
Objective 4.5: Enhance the efficient movement of freight and goods	Does the plan consider freight-specific infrastructure improvements/programs?
Objective 4.6: Implement projects that support economic development and redevelopment areas	Highway lane & centerline miles within 1 mile of redevelopment areas
	Transit service route miles within 0.5 miles of redevelopment areas
Goal 5: Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation	Measure
Objective 5.1: Minimize and mitigate air and water quality impacts of transportation facilities, services, and operations	Tons per day of emissions (NOx, CO, VOC)
	Surface coverage of transportation system on acres of wetlands
Objective 5.2: Reduce fossil fuels use	Vehicle Miles Traveled (VMT)
	Non fossil fuel burning daily transit service route miles
Objective 5.3: Promote projects that support urban infill and densification	Highway lane & centerline miles within the Urban Infill Area
	Transit service route miles within the Urban Infill Area
Objective 5.4: Minimize adverse impacts to established neighborhoods	Does the plan minimize impacts to established neighborhoods?

Table 2-7 cont'd | Goals, Objectives, and Measures of Effectiveness (MOE)

Objective 5.5: Promote transportation improvements that are consistent with adopted comprehensive development master plans	Is the plan consistent with adopted comprehensive development master plans?
Objective 5.6: Prioritize funding to favor intra-urban (within UDB) improvements	Ratio of lane & highway centerline miles inside/outside UDB boundaries
	Ratio of transit service route miles inside/outside UDB boundaries
Objective 5.7: Promote the use of alternative vehicle technologies	Does the plan promote the use of alternative vehicle technologies?
Objective 5.8: Apply transportation and land use planning techniques, such as transit-oriented development, that support intermodal connections and coordination	Does the plan's socioeconomic data projections/allocations encourage TOD and other transit-supportive land uses?
Goal 6: Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight	Measure
Objective 6.1: Improve connectivity to Strategic Intermodal System (SIS) and intermodal facilities	Highway centerline miles on SIS connectors
Objective 6.2: Provide multi-modal options consistent with the local government comprehensive plan	Is the plan consistent with adopted comprehensive development master plans?
Objective 6.3: Facilitate connections between transportation modes	Does the plan address multimodal connections?
Objective 6.4: Improve goods movement by enhanced intermodal access and other infrastructure that serve major freight origins and destinations in Miami-Dade County	Highway lane miles within 1 mile of major freight origins and destinations
Objective 6.5: Improve freight movement operations and reliability by promoting expedient and cooperative practices across all modes	Does the freight component of the plan address multimodal freight improvements?
Goal 7: Optimize Sound Investment Strategies for System Improvement and Management/Operation	Measure
Objective 7.1: Optimize benefits of capital expenditures	Capital expenditure/travel time savings benefit ratio
Objective 7.2: Optimize operations and maintenance expenses	O&M expenditure/travel time savings benefit ratio
Objective 7.3: Optimize applications of People's Transportation Plan funding	PTP expenditure/travel time savings benefit ratio
Objective 7.4: Maximize use of private sector funding sources	Number of private sector funded projects
	Dollar amount of private sector funding (as a proportion of total cost of plan)
Objective 7.5: Maximize use of State and Federal funding sources	Percent of State and Federal funding sources
	Dollar amount of State and Federal funding (as a proportion of total cost of plan)
Objective 7.6: Promote local improvement projects within the systems improvement context	Number of improvements on local facilities (non-State Highway System)

Table 2-7 cont'd | Goals, Objectives, and Measures of Effectiveness (MOE)

Goal 8: Maximize and Preserve the Existing Transportation System	Measure
Objective 8.1: Continue to examine the provision and utilization of special-use lanes on the existing system	Lane miles of special use/managed lanes
Objective 8.2: Identify and implement the best available technologies and innovations to improve the reliability and efficiency of the transportation system	Does the plan consider the latest technologies and innovations in transportation improvements?
Objective 8.3: Identify and reserve corridors and right-of-way (on roadways, railways, and waterways) for future transportation facilities and services	Does the plan consider right-of-way acquisition as a phase that can be planned independently?
Objective 8.4: Expand the use of Transportation Demand Management (TDM) strategies	Does the plan make use of TDM strategies?



③ Financial Resources and Costs

Chapter Highlights

- Financial Resources Review
- Alternative Funding Strategies
- Financial Set Asides
- Cost Estimates
- Transportation Management Area (TMA) Fund Allocation

Financial Resources Review

Extensive financial analysis was performed to estimate available revenues for the plan period that can be applied to transportation improvements and to operating and maintenance (O&M) expenses. Projections of available resources were based on the estimated growth of population, gasoline/diesel fuel use, vehicle miles traveled, fuel efficiency, and motor vehicle registrations. Financial resources have been identified for the Florida Department of Transportation (FDOT), Florida Turnpike Enterprise, Miami-Dade Expressway (MDX), Miami-Dade Department of Public Works, and Miami-Dade Transit (MDT).

In 2003, the Florida Legislature approved the creation of the Florida Strategic Intermodal System (SIS) to guide the investment of state funds for a well-planned transportation system that efficiently connects the various modes of transportation. The SIS is focused on statewide and regional priorities; addressing all forms of transportation for moving people and goods; and incorporating individual facilities, services, modes, and linkages into a single, integrated transportation system. The SIS portion of FDOT revenues is programmed by FDOT. Those FDOT projects programmed with SIS funds have been incorporated into the LRTP Cost Feasible Plan.

Since the Miami-Dade 2030 LRTP update (adopted in 2004), financial conditions have changed considerably in South Florida. At the time of preparation of the 2035 plan update, overall construction costs were up 45%, compared to an increase in Consumer Price Index (CPI) of only 15% over the same period, relative to the previous plan update. There are also projected declines in future revenue of up to 30% and general uncertainty regarding the future of transportation revenues, given the current recession. Both the cost and revenue data utilized in the update of the plan are subject to further fluctuation in the coming years. This, combined with an expected reauthorization of federal transportation legislation, will likely necessitate an update to the LRTP, which will be accomplished by amendment of the adopted plan.

The revenue forecast assumptions contained in the 2035 LRTP were derived from a variety of independent state and local agency sources as well as long-term growth assumptions determined by the MPO and the County Office of Strategic Business Management (OSBM). The revenue forecasts for the first five years of the plan (2010 through 2014) match the forecasts in the 2010 Transportation Improvement Program (TIP). The primary sources for the long-term revenue forecasts, from 2015 through 2035, included the following:

- Florida Department of Transportation (FDOT) Revenue Forecast Handbook: Includes detailed revenue forecasts through 2035 for each major Capacity Program area by metropolitan area.
- Local Government Financial Information Handbook: This report by the Florida Legislative Committee on Intergovernmental Relations provides

- current county-level revenue projections for the various taxes, including sales and fuel taxes, that support transportation.
- People's Transportation Plan (PTP) Pro Forma: The Pro Forma includes the County's required projection of revenues for Miami-Dade Transit (MDT). The current Pro Forma projects revenues to 2039 and includes a range of assumptions regarding revenue growth.
- Florida's Turnpike 2008 Traffic Engineer's Annual Report (TEAR): The TEAR includes projections through 2019. Future year growth rates in the Turnpike projections were continued through 2035 in order to extend the projections to the Plan horizon.
- Miami-Dade Expressway (MDX) Financial Plan: MDX provided projections of toll revenues and expenses for its facilities through 2022. Based on this projection, net revenues were forecast to 2035.

Transportation Regional Incentive Program (TRIP)

The Transportation Regional Incentive Program (TRIP) was developed to encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities and transit services identified and prioritized by regional partners.



TRIP funds are allocated based on a share of population and motor fuel tax collections; the funds are distributed annually to FDOT Districts. Because it is a funding mechanism to enhance regional collaboration, TRIP funds are not eligible to MPOs or counties that are not part of a designated regional transportation area per 339.155 (5) Florida Statutes.

The financial resources were analyzed to determine the available revenues for capacity-related improvements for surface transportation and for operations and maintenance (O&M). Capacity-related improvements are improvements to surface transportation facilities that add capacity to the transportation network, including highway, transit, rail, bicycle, or pedestrian facilities.

The assumptions made for the financial resources analysis are provided in more detail in **Appendix C: Financial Resources Review and Update**. Total revenue for highway and transit improvements were estimated at \$35.4 billion dollars. **Table 3-1** identifies the revenues and costs for highway and transit projects.

Table 3-1 | Revenue Forecast FY 2015 - 2035 Estimates for Miami-Dade County

\$ in millions - Year of Expenditure (YOE)

	FY 2015 Subtotal	FY 2016-20 Subtotal	FY 2021-25 Subtotal	FY 2026-30 Subtotal	FY 2031-35 Subtotal	21-Year Total
Capital Revenues						
FDOT						
SIS/FIHS Construction/Right of Way	\$117	\$259	\$277	\$317	\$287	\$1,257
Other Arterial Construction/Right of Way	\$58	\$355	\$398	\$427	\$465	\$1,703
TMA Funds	\$46	\$243	\$257	\$265	\$266	\$1,077
District-wide TRIP Funds	\$17	\$77	\$74	\$74	\$74	\$316
Port of Miami Tunnel & SR-836/I-95	\$0	\$325	\$798	\$798	\$798	\$2,719
Turnpike						
Revenues for Capital	\$15	\$76	\$77	\$77	\$75	\$320
MDX						
Net Revenues*	\$118	\$604	\$611	\$611	\$611	\$2,555
Dept. of Public Works (DPW)						
Secondary Gas Tax	\$16	\$82	\$89	\$95	\$102	\$384
5-cent/Local Option Gas Tax	\$2	\$7	\$8	\$9	\$9	\$35
Road Impact Fees	\$13	\$64	\$64	\$64	\$64	\$269
MDT						
PTP Surtax (debt service for capital)	\$101	\$1,009	\$1,270	\$1,341	\$1,470	\$5,192
Federal Grants	\$3	\$0	\$0	\$0	\$0	\$3
Operating Revenues						
Dept. of Public Works (DPW)						
6-cent Local Option Gas Tax	\$22	\$115	\$124	\$134	\$144	\$539
County Fuel Tax	\$9	\$47	\$50	\$54	\$59	\$219
9th Cent Gas Tax	\$11	\$58	\$62	\$67	\$72	\$270
MDT						
Direct Operating Revenues	\$166	\$924	\$1,083	\$1,269	\$1,457	\$4,899
Federal/State Grants (incl. FDOT Transit)	\$111	\$594	\$667	\$749	\$842	\$2,963
PTP Surtax (for operations)	\$109	\$212	\$288	\$648	\$1,069	\$2,326
All Other Existing (incl. General Fund and Local Option Gas Tax)	\$214	\$1,184	\$1,400	\$1,662	\$1,829	\$6,298
New General Fund and Local Option Gas Tax	\$61	\$347	\$429	\$531	\$661	\$2,029
Total Revenues	\$1,210	\$6,582	\$8,025	\$9,191	\$10,352	\$35,360

*Revenue estimates do not account for increased revenue anticipated from the ORT improvements on SR 836 and SR 122. As a result, MDX project priorities in the 2035 Cost Feasible Plan can potentially be advanced based on anticipation of additional funds from the system-wide ORT conversion and other sources.

Alternative Funding Strategies

A review of potential new revenue sources and increases in existing revenue sources was completed to assess alternatives that may be considered in future updates to the LRTP. While these potential revenues are not considered in the 2035 LRTP update due to lack of supporting policy, their feasibility should be explored in greater detail for consideration in future updates. Among the existing revenue sources that can be augmented are the following:

- Additional ½-cent sales tax (to maximum allowable under Charter County Transit Surtax)
- Additional 2-cent fuel tax (to maximum allowable under existing 1-to-5 cent LOGT)
- Increased tolls on MDX expressways
- Increases in taxes/fees, such as hotels, car rentals, and car registration
- Increase in the growth rate of County general funds contribution to transit, which is currently 3.5% annually

Among the new revenue sources that have been considered are the following:

- Additional fuel tax beyond current authority
- Tolling on currently un-tolled roadways
- Vehicle miles traveled (VMT) tax

The existing sources can generally be increased either by action of the Board of County Commissioners or the MDX Board of Directors or by countywide referendum, with no approval or new legislation required from the State legislature. The new funding sources, by contrast, may require that the legislature grant significant new authority to the County, and in some cases a state constitutional amendment might be required.

Financial Set Asides

Financial set asides in the LRTP provide assurance that particular programs are afforded a minimum level of investment in the plan. Among the requirements of SAFETEA-LU are integration of a Congestion Management Process (CMP) into the LRTP and the incorporation of non-motorized transportation improvements. The 2035 LRTP includes two financial set aside programs that address these two requirements. The congestion management set aside will enable both a commitment to congestion management improvements in the fiscally constrained plan and the flexibility to implement congestion management improvements as appropriate, as is more thoroughly discussed in Chapter 5 - *Transportation Management Systems and Operations*. The bicycle/pedestrian, or non-motorized set aside provides a minimum level of funding to plan non-motorized improvements throughout the County. **Table 3-2** outlines the set aside programs including their funding levels and funding sources.

Cost Estimates

In order to determine the financial feasibility of needed improvements, individual project costs were determined by referencing existing reports and work programs from the various transportation agencies where available. Where not available, estimates were derived using FDOT unit cost tables and current unit operating costs for transit services. The capital and operating costs were converted to year of expenditure dollars, based on FDOT period inflation factors, as listed in **Table 3-3**. All costs were initially developed in year 2008 dollars for preliminary analysis.

Capital and Operating and Maintenance (O&M) cost estimates for the proposed highway improvements in the 2035 Plan were primarily based upon existing estimates of O&M expenses from the road-building agencies. In the case of the State Highway System, FDOT has already set aside sufficient funding to operate and maintain State facilities. For the County road facilities, Miami-Dade County Public Works Department provided estimates, based on per-unit maintenance costs and recent mileage reports. O&M cost estimates for transit were projected based on historical data on operations costs.

Table 3-3 | FDOT Inflation Factors

Year/Period	Highway	Transit
2015	1.28	1.17
2016-2020	1.44	1.28
2021-2025	1.69	1.45
2026-2030	1.99	1.64
2031-2035	2.34	1.85

Table 3-2 | Summary of Forecasted Revenues, FY 2015 to FY 2035

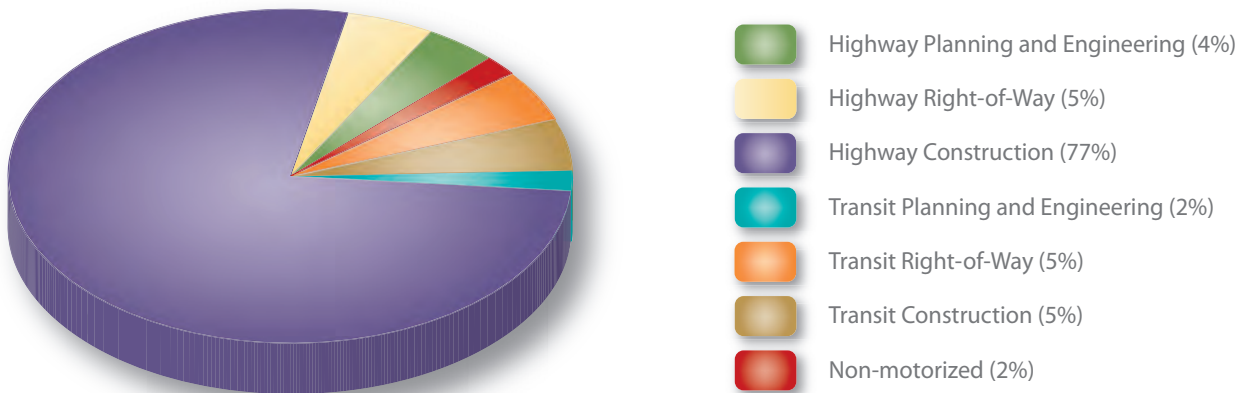
Set Aside Program	Sources	Level
Non-Motorized	TMA Enhancement	\$104 million (Year of Expenditure \$)
Congestion Management	Other Arterials & ROW Transit Local Taxes	\$214 million (Year of Expenditure \$)

Transportation Management Area (TMA) Fund Allocation

Transportation Management Areas (TMA) are those areas with populations greater than 200,000 people. TMAs are eligible to receive TMA funding, which is the same as “XU” funds in the FDOT 5-Year Work Program. The planned allocation of TMA funds was coordinated with FDOT District 6 through the LRTP Steering Committee.

The breakdown of TMA fund allocation in the 2035 LRTP Cost Feasible Plan is displayed in **Figure 3-1**, consistent with the plan development guidelines set by the Steering Committee.

Figure 3-1 | TMA Breakdown



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4 Plan Development Process

Chapter Highlights

- SAFETEA-LU
- Compliance with Federal Requirements
- Compliance with State Requirements
- Public Involvement Process
 - Environmental Justice and Title VI
 - Public Information and Workshops
- Travel Demand Model Application
- Candidate Improvements
- Project Evaluation
- Application of MOEs (Plan Performance)
- Efficient Transportation Decision Making (ETDM) Process
- Safety Improvements
- Security Improvements
- Cost Feasible Plan

The Miami-Dade 2035 LRTP update was a technical, collaborative process that involved interested parties throughout the County, including transportation providers and the general population. There were five key stages that led to the adoption of a financially constrained plan of transportation improvements by the Miami-Dade MPO Governing Board (Figure 4-1). The culmination of this process was a plan that represented the unified vision of citizens, business leaders, elected officials, and transportation agencies, all of whom have an important stake in the future of the County's transportation system. The 2035 LRTP was developed in a manner to ensure consistency with all applicable state and federal requirements guiding the LRTP process. This chapter discusses the state and federal context of the LRTP update process and describes the plan development activities resulting in the 2035 LRTP Cost Feasible Plan. The chapter is broken down into several primary categories relating to the plan development process, including the following:

- Public involvement process (continuous)
- Travel demand model application (steps 2 and 3)
- Candidate improvements (step 3)
- Project evaluation and application of Measures of Effectiveness (steps 4 and 5)
- Efficient Transportation Decision Making (ETDM) process (step 4)
- Cost feasible plan development (step 5)

The appendices to this report provide a more in depth description and analysis of the individual steps in the plan development process.

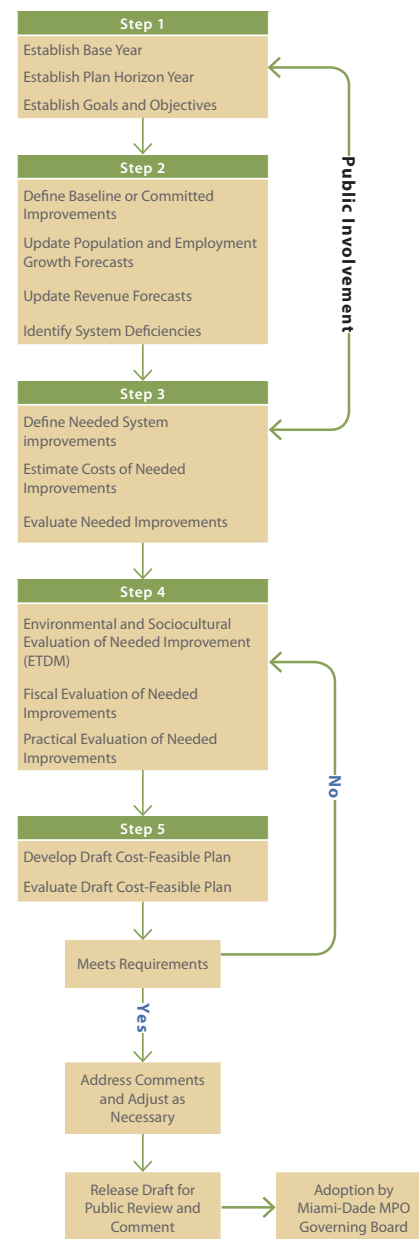
SAFETEA-LU

On August 25, 2005 the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law. SAFETEA-LU authorized \$244.1 billion in guaranteed funding, for highways, highway safety, and public transportation programs through 2009. SAFETEA-LU built on the previous two transportation authorization bills: Intermodal Surface Transportation Efficiency Act of 1991 and Transportation Equity Act for the 21st Century. Because Miami-Dade County has a total population exceeding 200,000 and is therefore a federally designated Transportation Management Area (TMA), the County is required to develop a congestion management program consistent with SAFETEA-LU requirements. Chapter 5 of this document and the 2009 Congestion Management Process (CMP) contain a detailed discussion of congestion management, which is one of the unique highlights of this LRTP update.

As mentioned in Chapter 2 - *Goals and Objectives*, the 2035 LRTP incorporates all eight planning factors outlined within SAFETEA-LU. The planning factors as described in 23 USC 134(h)(1) include:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system

Figure 4-1. | 2035 LRTP Development Flow Chart



for motorized and nonmotorized users;

3. Increase the security of the transportation system for motorized and nonmotorized users;
4. Increase the accessibility and mobility of people and for freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system across and between modes for people and freight;
7. Promote efficient system management and operations; and
8. Emphasize the preservation of the existing transportation system.

Compliance with Federal Requirements

As a federally designated transportation planning authority, the Miami-Dade MPO is required to coordinate the transportation planning activities for the Miami urbanized area. This includes the planning and programming of federal funds through the LRTP and Transportation Improvement Program (TIP), respectively.

To ensure compliance, the 2035 LRTP is required to address statutory requirements as set forth by federal regulations (Table 4-1). The 2035 LRTP has been developed in adherence to the federal requirements listed below.

Table 4-1 | Federal Requirements for Long Range Transportation Plans

Federal Requirements	How/Where Addressed
Identify transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that function as an integrated metropolitan system, giving emphasis to facilities that serve important national, state, and regional transportation functions. [23 U.S.C. 134 (i)(2)(A); 23 C.F.R. 450.322(f)(2)]	- Plan Development Process – Chapter 4 (p. 4-23 to 4-55) - Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Regional LRTP – Chapter 7, Regional LRTP - Appendix E - Intermodal Systems Planning – Chapter 6, Bicycle/Pedestrian Facilities Plan
Include discussion of the types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan. This discussion shall be developed in consultation with federal, state, and tribal, wildlife, land management, and regulatory agencies. [23 U.S.C. 134 (i)(2)(B) (i)(ii); 23 C.F.R. 450.322(f)(7)]	Environmental Quality– Chapter 8 (p. 8-4)
Include a financial plan that demonstrates how the adopted transportation plan can be implemented and indicates public and private resources reasonably expected to be available to carry out the plan. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted plan if reasonable additional resources beyond those identified in the financial plan were available. Projects in the financial plan are required to be expressed in Year of Expenditure costs. [23 U.S.C. 134 (i)(2)(C); 23 C.F.R. 450.322(f)(10)]	- Financial Resources and Costs – Chapter 3 (p. 3-3 and 3-4) - Table 3-1 Revenue Forecast FY 2015-2035 Estimates for Miami-Dade County - Financial Resources Review and Update – Appendix C
Include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods. [23 U.S.C. 134 (i)(2)(D); 23 C.F.R. 450.322(f)(3)]	- Transportation Systems Management & Operations – Chapter 5 (p. 5-2 to 5-5) - Congestion Management Process - Appendix L-4
Include capital investment and other strategies to preserve the existing and future system and provide for multimodal capacity increases based on regional priorities and needs. [23 U.S.C. 134 (i)(2)(E); 23 C.F.R. 450.322(f)(5)]	- Plan Development Process – Chapter 4 (p. 4-23 to 4-55) - Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Regional LRTP – Chapter 7, Regional LRTP - Appendix E

Table 4-1 cont'd | Federal Requirements for Long Range Transportation Plans

Federal Requirements	How/Where Addressed
Include proposed transportation and transit enhancement activities. [23 U.S.C. 134(i)(2)(F); 23 C.F.R. 450.322(f)(9)]	- Plan Development Process – Chapter 4 (p. 4-44 to 4-55) Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Intermodal Systems Planning – Chapter 6 (p. 6-4 to 6-6) - Bicycle/Pedestrian Facilities Plan
Identify the projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan. [23 C.F.R. 450.322(f)(1)]	- Plan Development Process – Chapter 4 (p. 4-13 and 4-18) - Model Validation Review
Identify pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g). [23 C.F.R. 450.322(f)(8)]	- Plan Development Process - Chapter 4 (p. 4-46 to 4-55) Table 4-15 Non-motorized Projects - Intermodal Systems Planning – Chapter 6 (p. 6-4 to 6-6) - Bicycle/Pedestrian Facilities Plan
Within Transportation Management Areas (TMAs), the plan should address congestion management through a metropolitan-wide strategy of new and existing transportation facilities and the use of travel demand reduction and operational management strategies. [23 USC 134 (k)(3); 23 C.F.R. 450.322(f)(4)]	- Plan Development Process - Chapter 4 (p. 4-43 to 4-45) Table 4-14 Congestion Management Projects - Transportation Systems Management & Operations – Chapter 5 (p. 5-2 to 5-5) - Congestion Management Process
Describe proposed improvements in sufficient detail to develop cost estimates, e.g. design concept and design scope descriptions. [23 C.F.R. 450.322(f)(6)]	Plan Development Process – Chapter 4 (p. 4-23 to 4-55) Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects
Include a safety element incorporating or summarizing the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under [23 U.S.C. 148], as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies supporting homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users. [23 C.F.R. 450.322(h)]	Plan Development Process – Chapter 4 (p. 4-14 to 4-17) Table 4-5 Safety Projects; Table 4-6 Safety Programs by Agency; Table 4-7 Security Programs by Agency
When updating the plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. [23 C.F.R. 450.322(e)]	- Introduction - Chapter 4 (p.1-5 to 1-7) Figure 1-2 Population Summary by Planning Area; Figure 1-4 Employment Summary by Planning Area - Plan Development Process – Chapter 4 (p. 4-13 and 4-18) - Congestion Management Process
Include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. [23 C.F.R. 450.322(b)]	- Plan Development Process – Chapter 4 (p. 4-23 to 4-34) Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-14 Congestion Management Projects - Transportation System Management and Operations - Chapter 5 - Congestion Management Process

Compliance with State Requirements

In addition to adhering to federal statutory requirements, the 2035 LRTP addresses state requirements (Table 4-2). Every measure was taken to ensure compliance with the statutory requirements set forth by the State of Florida in regards to development of long range transportation plans.

The 2035 Miami-Dade LRTP is an iterative process that requires open and frequent communication between transportation agencies and transportation users. The 2035 LRTP has been consistently developed with the state requirements.

Table 4-2 | State of Florida Requirements for Long Range Transportation Plans

State Requirements	How/Where Addressed
Identify transportation facilities that should function as an integrated metropolitan transportation system, giving emphasis to facilities that serve important national, state, and regional transportation functions. Those facilities include the facilities on the Strategic Intermodal System designated under Section 339.63 and facilities for which projects have been identified pursuant to Section 339.2819 (Transportation Regional Incentive Program). [339.175(1), F.S.]	- Plan Development Process – Chapter 4 (p. 4-23 to 4-55) - Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Regional LRTP – Chapter 7, Regional LRTP - Appendix E - Intermodal Systems Planning – Chapter 6, Bicycle/Pedestrian Facilities Plan
Address the prevailing principles to be considered in the long range transportation plan: preserving the existing transportation infrastructure; development of surface transportation systems that will foster economic growth and development while minimizing transportation related fuel consumption, air pollution and green house gas emissions; and improving travel choices to ensure mobility needs of people and freight. The LRTP must be consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies in the approved local government comprehensive plans of the units of local government located within the jurisdiction of the MPO. [339.175(1),(7), F.S.]	- Goals and Objectives – Chapter 2 (p. 2-5 to 2-8) - Plan Development Process – Chapter 4 (p. 4-18) - Environmental Quality – Chapter 8
When developing the LRTP, each MPO is encouraged to consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions. [339.175(7), F.S.]	- Goals, Objectives, and Measures of Effectiveness – Chapter 2 (p. 2-5 to 2-8) - Environmental Quality – Chapter 8 (p. 8-2 to 8-4)
Identify transportation facilities, including, but not limited to, major roadways, airports, seaports, spaceports, commuter rail systems, transit systems, pedestrian walkways, bicycle transportation facilities, and intermodal or multimodal terminals that will function as an integrated metropolitan transportation system. [339.175(7)(a), F.S.]	- Plan Development Process – Chapter 4 (p. 4-23 to 4-55) - Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Intermodal Systems Planning – Chapter 6 (p. 6-6), Bicycle/Pedestrian Facilities Plan
Consider the goals and objectives identified in the Florida Transportation Plan. [339.175(7)(a), F.S.]	Goals, Objectives, and Measures of Effectiveness – Chapter 2 (p. 2-3) Table 2-3 2025 Florida Transportation Goals

Table 4-2 cont'd | State of Florida Requirements for Long Range Transportation Plans

State Requirements	How/Where Addressed
If a project is located within the boundaries of more than one MPO, the MPOs must coordinate plans regarding the project in their L RTPs. [339.175(7)(a), F.S.]	Regional L RTP – Chapter 7 (p. 7-2), Regional L RTP - Appendix E
Include a financial plan that demonstrates how the plan can be implemented, indicating resources from public and private sources which are reasonably expected to be available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted plan if reasonable additional resources beyond those identified in the financial plan were available. [339.175(7)(b), F.S.]	- Financial Resources and Costs – Chapter 3 (p. 3-3 and 3-4) Table 3-1 Revenue Forecast FY 2015-2035 Estimates for Miami-Dade County - Financial Resources Review and Update – Appendix C
Assess capital investment and other measures necessary to ensure the preservation of the existing metropolitan transportation system, including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities. [339.175(7)(c), F.S.]	Plan Development Process – Chapter 4 (p. 4-23 to 4-55) Table 4-9 Priority I Projects; Table 4-10 Priority II-IV Projects; Table 4-13 Private Sector Projects; Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects
Make the most efficient use of existing transportation facilities to relieve congestion and maximize the mobility of people and goods. [339.175(7)(c), F.S.]	- Transportation Systems Management & Operations – Chapter 5 (p. 5-2 to 5-5) - Congestion Management Process
Indicate, as appropriate, proposed transportation enhancement activities, including, but not limited to, pedestrian and bicycle facilities, scenic easements, landscaping, historic preservation, mitigation of water pollution due to highway runoff, and control of outdoor advertising. [339.175(7)(d), F.S.]	- Plan Development Process – Chapter 4 (p. 4-44 to 4-55) Table 4-14 Congestion Management Projects; Table 4-15 Non-motorized Projects - Intermodal Systems Planning – Chapter 6 (p. 6-4 to 6-6) - Bicycle/Pedestrian Facilities Plan
Be approved on a recorded roll call vote or hand-counted vote of the majority MPO membership present. [339.175(13)]	Executive Summary

Public Involvement Process

Public involvement plays an important role in all transportation planning projects. MPOs must provide citizens, affected public agencies, users of public transit, and other interested parties with an opportunity to comment on the LRTP process, as mandated by federal requirements.

The Miami-Dade MPO was committed to providing opportunities for public involvement throughout the duration of the process for other public agencies, stakeholders, property owners, business interests, community groups, environmental agencies, and the general public. The Miami-Dade MPO offered open, frequent, and effective public participation activities throughout the process, including two series of workshops that featured interactive programs to solicit community input on the LRTP goals and objectives and needs plan projects.

In June 2008, the Miami-Dade Long Range Transportation Plan to the Year 2035 Public Involvement Plan was developed as a project-specific Public Involvement Program (PIP) to complement the MPO Public Involvement Program. The project PIP identified the mechanisms that were available to interested individuals and groups to participate in the planning process of the 2035 Plan. The project PIP also identified the methods of project coordination that were employed, including business and community groups, public organizations, elected and appointed officials, and agencies having jurisdictional responsibilities over planning and transportation issues.

Environmental Justice and Title VI

Executive Order 12898, ordered in February 1994, directed all Federal agencies to make environmental justice a

key part of their mission by identifying and addressing the impacts of programs, policies, and activities on both minority and low-income populations. Throughout the study process, the provisions of environmental justice, as defined by the Federal Highway Administration, were considered to ensure that the Plan was consistent with Title VI of the Civil Rights Act. MPO staff and consultants made every effort to include all affected parties from varying socioeconomic groups to ensure that their input was considered in the 2035 LRTP.

The MPO is committed to developing strategies and methods to address the degree of impact of proposed transportation projects on minority and low-income communities. The MPO has developed a web-based GIS application, Community Characteristics Program (CCP), whereby planners and decision-makers can create customized demographic, project related reports for any area within Miami-Dade County. This tool aides in the determination of appropriate public involvement strategies to address environmental justice and Title VI requirements. The web application was accessed at: <http://mpoportal.fiu.edu/>

Every effort was made to reach and serve disadvantaged populations during the LRTP update process. Online survey advisories were sent to Haitian American Business News, Amigos for Kids, and We Care of South Dade, Inc, a not-for-profit organization that oversees a network of low-income programs in south Miami-Dade. Furthermore, local, state, and Congressional officials were asked to distribute study information to their constituents. LRTP materials were produced in English, Spanish, and Creole and mailed to residents on the MPO's database. Materials were also hand-delivered to venues serving disadvantaged populations, including

Interactive LRTP Website

www.miamidade2035transportationplan.com

The Interactive LRTP website provides users with a wide variety of information pertaining to the development of the 2035 LRTP. Citizens can utilize this website to download materials, stay current with public involvement activities, and provide comments and/or suggestions. Also, the project guide application (powered by Google Maps®) gives users the ability to search and query additional information about projects that are included in the 2035 Cost Feasible Plan.



the Haitian Organization of Women, Homestead City Hall, and Wynwood Neighborhood Service Center. Meeting surveys, agendas, and comment cards were produced in English, Spanish, and Creole. Spanish and Creole-speaking translators were on-hand at public meetings to assist non-English speaking attendees.

Table 4-3 includes a list of organizations dedicated to serving low- and fixed-income and minority populations, all of which were contacted through multiple media outlets to encourage their participation in the LRTP process.

Table 4-3 | Organizations Serving Low- and Fixed-Income Populations

Organization	African-Americans	Disabled	Haitian Americans	Hispanics	Homeless	Migrants	Native Americans	Elderly
American Association of Retired Persons (AARP)								●
Amigos For Kids				●				
Association for Retarded Citizens (ARC)		●						
Camillus House					●			
Centro Campesino						●		
Coconut Grove Collaborative	●							
Goulds CDC	●			●				
Haitian Organization of Women			●					
Miami Gardens Seniors Program	●		●	●				●
Miccosukee Tribe of Indians of Florida							●	
Miami Lighthouse for the Blind		●						
NANAY, Inc.			●					●
Sagrada Familia				●				●
Sunkist HOA	●							
Vecinos en Acción				●				●
We Care of South Dade	●	●	●	●	●	●	●	●
Westside HOA	●		●					

Public Information and Workshops

Throughout the development of the 2035 LRTP, a variety of outreach techniques were utilized by the MPO staff and consultants to both provide information to the public about the LRTP update process and to solicit their input. Those outreach efforts included print media, electronic media, and face-to-face interactions with various public groups and the public at large. They included the following techniques and activities.

Interactive LRTP Website

The MPO developed and maintained an internet site dedicated to the LRTP update process at www.miamidade2035transportationplan.com. The site contains all pertinent information to the LRTP, including public involvement activities, schedules, and materials and online applications of surveys administered at the public meetings. Another interactive feature of the LRTP website is a project mapping element that can be used to view projects in a Google Maps® environment, which includes aerial photography and other mapping elements. Cost Feasible Plan projects can be accessed through a variety of methods, including by proximity to a particular location, in the path of a particular trip, or simply by project type, such as highway or transit projects. These search methods are illustrated in **Figure 4-2** (following page). Where project visualizations exist, they are also accessible in this electronic mapping environment.

Countywide Mailing List

The MPO maintained a permanent mailing list of all elected officials, MPO committee members, federal, state, and local agencies, community groups, and individuals interested in long-range transportation planning issues in Miami-Dade County. This mailing list was used as a basis for the dissemination of project brochures, special notifications, and other messages that were appropriate for this group.

Citizens Transportation Advisory Committee (CTAC) Meetings

MPO staff and the consulting team made three presentations to the CTAC through the plan development process, including the following:

- May 2009 – Public Involvement Process and results of January/February 2009 public workshops
- September 2009 – Draft Cost Feasible Plan
- October 2009 – Final Cost Feasible Plan

The presentations included the results of the public workshops, a draft review of the cost feasible plan, and a final presentation on the cost feasible plan. Members of the CTAC also participated in a June 20, 2008 television airing of a CBS 4 news story on the interactive *Blocks and Ribbons* public involvement exercise showcased at a June/July 2008 series of public workshops. A write-up on the news story was available at <http://cbs4.com/local/miamidade.transit.2.753251.html>.

Newspaper Advertisements and Media Advisories

Under Florida law, all public meetings and workshops must be advertised in a newspaper of general circulation so that the public has an opportunity to attend such meetings. These advertisements were used to announce the date, time, and location of area-specific public meetings. Special efforts were made to make the announcement in local publications such as the Miami Herald, El Nuevo Herald, and En Marche, with high levels of readership in the respective study area.

Media advisories were prepared and sent to the local media requesting citizen participation in the future of Miami-Dade County's transportation system by attending the Long Range Transportation Plan Workshops and participating in on-line surveys. The media advisories included the following:

- June 4, 2008 – Announcing kick-off public workshops held in June/July 2008
- July 1, 2008 – Announcing kick-off public workshops held in July 2008
- September 2, 2008 – Announcing an on line public opinion survey
- January 7, 2009 – Announcing needs plan review public workshops held in January/February 2009
- September 24, 2009 – Announcing the public hearing for LRTP adoption on October 29, 2009

Radio and Television Shows

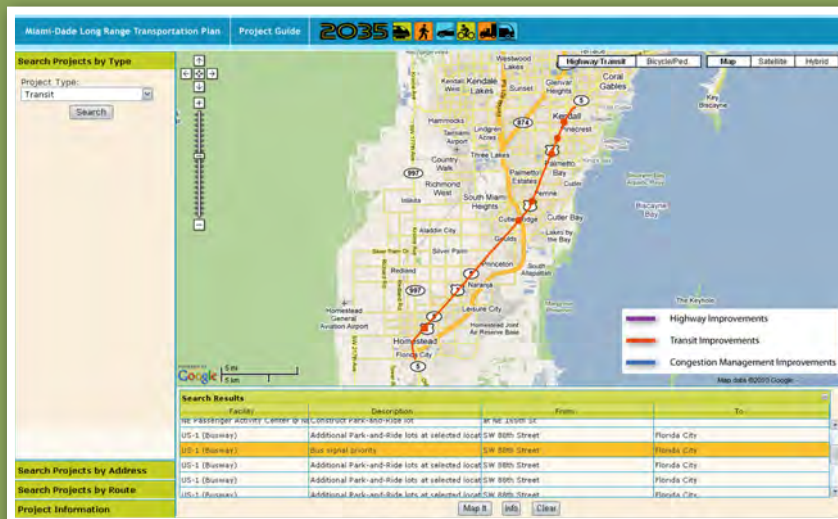
Community involvement in the LRTP process was discussed during radio and TV shows. On June 23, 2008, the Haitian-American WRHB Radio Mega (1020 AM) "Women's Issues" program conducted a live interview to discuss the Miami-Dade 2035 LRTP update. The interview was followed by announcements of upcoming public workshops. On Tuesday, January 27, 2009, during a live broadcast of the City of North Miami Council meeting on Cable Access Channel 77, the LRTP 2035 public meetings were announced. The information was repeated during rebroadcast of the council meeting.

The MPO also taped a television news story that aired on the CBS 4 News on June 20, 2008. The broadcast featured a demonstration of an interactive exercise implemented at public workshops and provided information on how the community could become involved in the LRTP process. Members of the CTAC participated in the program, as did the MPO LRTP Project Manager.

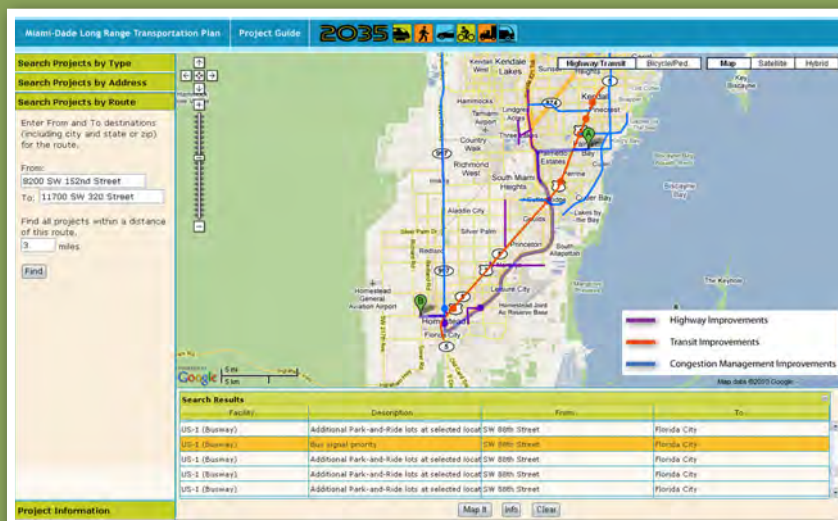
Multi-lingual Written Materials, Project Brochures, and Graphic Displays

Written materials and graphic displays with easy-to-understand text, maps, photographs, and other media were used to convey technical information in clear terms to the general public concerning the project. Large-size, colorful graphics, and maps were used during public meetings to facilitate the public's understanding of the 2035 Plan its issues.

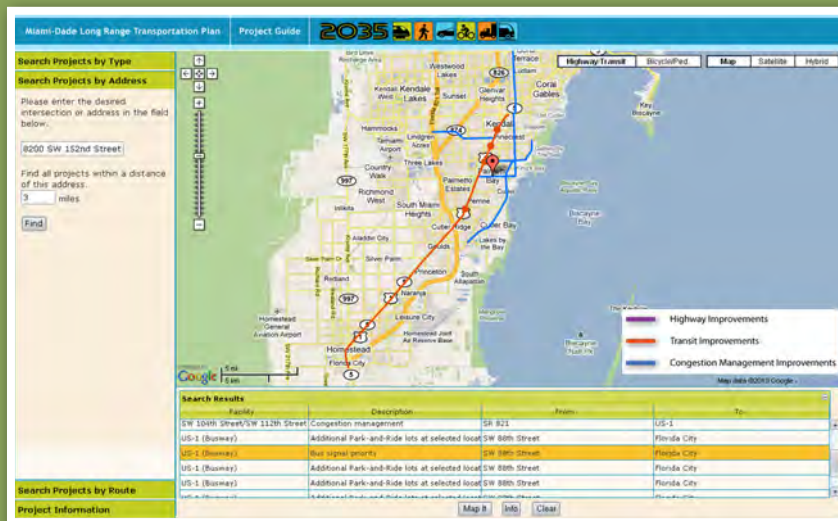
Figure 4-2 | Interactive L RTP Webiste Project Search Methods



Search by Project Type, such as highway or transit projects



Search by Travel Route



Search by Address

Flyers and brochures were developed at key points in the project including at the project start, prior to the public workshops and after the adoption. The first brochure explained the purpose and importance of the Long Range Transportation Plan Update, and how to get involved.



This brochure was produced in English, Spanish, and Creole.

The second brochure explained the future socio-economic (population and employment) conditions that are projected in the Year 2035, Miami-Dade County's associated travel needs within the plan period, and the potential opportunities to improve the County's highway and public transportation system to meet those needs. This was a countywide brochure that featured a full-page for each of the six transportation planning areas in Miami-Dade County.



The third and final brochure summarized the findings of the study process and identified the final recommendations for the

2035 Plan. This brochure will be used to document the final plan development process. This brochure will include

a compact disc insert containing a digital interface with L RTP materials, including technical memoranda produced during the plan development process.

Community Workshops

Two series of public workshops were conducted to gather public input at critical stages in the plan development process. Each series consisted of 6 meetings, one in each of the 6 transportation planning areas. The geographically decentralized public involvement process enabled a focus on sub-regional issues that were specific to the distinct planning areas. The first series of meetings was conducted in June/July 2008 as a project kick-off and included an introduction of the L RTP to the community. The second series was conducted in January/February 2009 to present a draft Needs Plan and obtain participants' input on each specific project in the Needs Plan. Both series of workshops included the use of the Option Finder® technology, which is a wireless audience response polling system designed to capture responses anonymously and display results in real time. Survey results remain posted on the screen as audience members compare their personal views with others. The use of this tool was designed to highlight the priorities and key issues important to participants. Most importantly, the Option Finder® reports the level of participation by the attendees, enabling the moderator to ensure 100% participation. The workshops are described in more detail below, including depictions of the tools and pictures taken at the meetings.



Blocks and Ribbons Exercise

Miami-Dade Interactive Transportation Planning

Utilizing Legos®, two spools of ribbon, and a future land-use map of Miami-Dade County, participants provided their input by identifying corridors in need of transportation improvements. The exercise was completed in groups of eight to ten participants and took about 90 minutes. Participants were instructed to plot future growth in Miami-Dade County by stacking the Lego® blocks vertically on the map in accordance with predefined Miami-Dade Department of Planning and Zoning socioeconomic data projections for the year 2035. The yellow Legos® represented households, and the red Legos® represented jobs. With the purple and orange spools of ribbon, participants were asked to identify transit and highway improvements, respectively. After placing an unlimited length of ribbon on the maps, participants were asked to prioritize their recommended improvements in accordance with transportation funding limitations. Allocations of ribbon were provided to the participants based on L RTP revenue projections. After prioritizing the ribbon on the map, participants examined and discussed their results with their groups. The exercise successfully engaged participants, giving them an opportunity to play the role of the planner and provide their input in an informed and meaningful context.

Series 1: Kick-Off Workshops

The first series of public workshops, held in June/July 2008, included a multi-part interactive agenda made up of a presentation by the Project Manager, a survey, and a hands-on exercise called *Blocks and Ribbons*. The survey consisted of a series of questions designed to poll participants on transportation issues and priorities. The purpose of the survey was to understand and utilize public opinion to finalize the LRTP goals and objectives. The *Blocks and Ribbons* exercise utilized Legos® and ribbons to visualize population and employment growth and needed improvements to the transportation infrastructure. **Appendix G** includes a complete report of the survey results and the *Blocks and Ribbons* Participants' Workbook.



Series 2: Needs Assessment Workshops

The second series of workshops, held in January/February 2009, consisted of the presentation of the draft Needs Plan and evaluation of the projects in the Needs Plan projects in each respective planning area. At these workshops, participants were given the opportunity to rank/vote for each proposed transportation improvement using the Option Finder® system. Participants were asked to rate each individual project on a five-point scale (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree). Plots with project locations and aerial photography were displayed for each project to provide a visual reference for participants. Project scores were tabulated for each project and summary statistics of the exercise were presented to the groups at the conclusion of the survey. The surveys from both series of workshops were posted on the LRTP website following the workshops to maximize participation.

In addition to the survey of existing Needs Plan projects, participants were encouraged to provide feedback in the form of comments or proposed project additions to the Needs Plan.

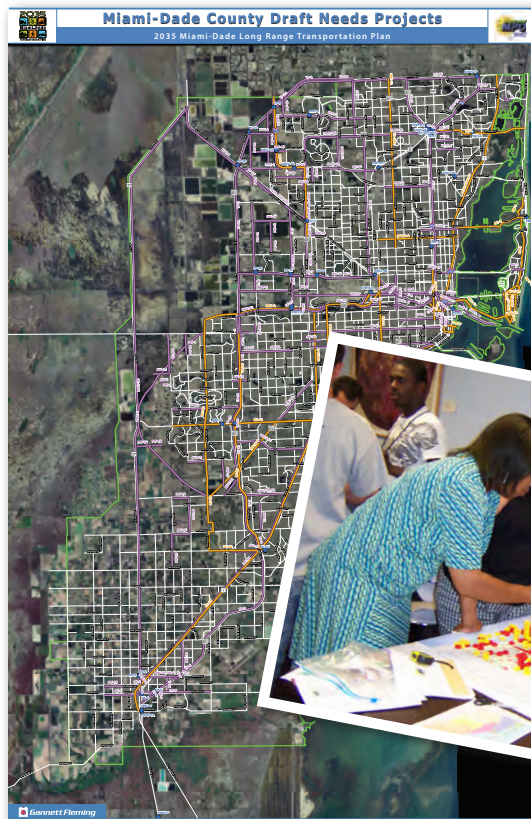
OptionFinder Survey

An audience response system called OptionFinder provided an interactive survey methodology to gauge public sentiment regarding mobility issues and challenges facing Miami-Dade County. This enabled a real-time assessment of the transportation priorities of participants. At each of twelve workshop, participants were asked a series of questions and, using a digital keypad resembling a television remote, keyed in their respective choices. As soon as the choices were selected, the OptionFinder system displayed a chart displaying participants' responses. The use of OptionFinder successfully engaged participants and facilitated the efficient and accurate collection of public input that ultimately helped shape the outcome of the LRTP.



Visualization Techniques

SAFETEA-LU requires that transportation plans and programs incorporate the use of visualization techniques to communicate planning concepts to the public. The 2035 L RTP included multiple uses of visualization techniques in a variety of formats, contexts, and applications. Some of the visualization techniques used in the 2035 L RTP development process are listed in Table 4-4.



Population Growth, 2005 - 2035

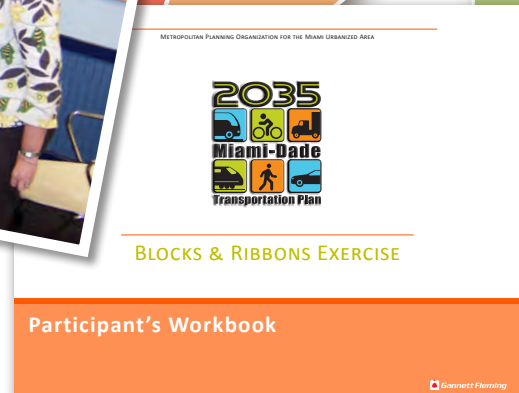
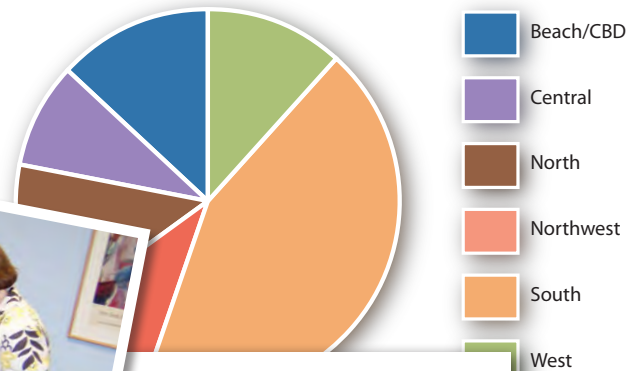


Table 4-4 | Visualization Techniques

Technique	Format	Application/Context
<i>Blocks and Ribbons</i>	Interactive exercise utilizing Legos and ribbons	3-dimensional tool used in workshops to visualize growth and transportation solutions
Density Visualizations	Photographs of varying levels of development intensities	Used in workshops to visualize population/employment growth
Needs Project Evaluation	Project mapping element that includes aerial photography	Used in workshops to evaluate Needs Plan projects
Cost Feasible Plan	Interactive website with mapping element and project specific visualizations	Web application with interactive element
Maps, Charts, Graphs	Various graphic formats	Used throughout process to present various information at various study phases

Travel Demand Model Application

The Southeast Florida Regional Planning Model (SERPM) was utilized to forecast demand on the transportation system to the year 2035. The modeling process was coordinated at the regional level and guided by the Modeling Subcommittee of the Regional Transportation Technical Advisory Committee (RTTAC) through a series of meetings which included representatives of the following agencies:

- Broward MPO
- Florida Department of Transportation - Districts IV and VI
- Miami-Dade MPO
- Palm Beach MPO

A series of four network scenarios were developed and simulated in the SERPM for the LRTP update, including the following:

- 2005 Base Year network
- 2014 Existing plus Committed (E+C) network
- 2035 Candidate Improvements network
- 2035 Cost Feasible network

The Base Year network was utilized to validate the model to observed conditions. The E+C network was developed and simulated against 2035 socioeconomic data, or demand, to highlight deficiencies in the system for the horizon year. The 2035 Candidate Improvements network was developed as an unconstrained scenario that includes all needed improvements. Finally, the Candidate Improvement network reflects the cost-constrained plan that includes the highest ranked and most productive candidate improvements.

Candidate Improvements

The list of Candidate Improvements can be defined as a wish list of highway and transit improvements needed to accommodate future travel demand without regard to the availability of financial resources to pay for them. The development of the Candidate Improvements is a technical process that includes the collaborative efforts of local, state, and regional agencies and public input. In addition to the results of the travel demand modeling effort described above, parallel planning efforts of participating transportation agencies were utilized to guide this process. The Candidate Improvements included 230 multi-modal transportation improvements for motorized modes of transportation.

In addition to highway capacity and fixed guideway transit expansion improvements, lower cost alternatives, including non-fixed guideway premium transit services along significant corridors were included. Also included are managed lanes conversions and congestion management improvements, all of which represent strategies to make better use of existing facilities, rather than expansion of those facilities.

Project Evaluation

The project evaluation stage represented the assessment of the Needs Plan in an effort to prioritize the candidate improvements for cost feasible plan development. On April 20-21, 2009, the Miami-Dade MPO conducted the Needs Plan Project Evaluation Workshop to evaluate the transportation improvements identified through the 2035 LRTP process. At this workshop, the LRTP steering committee members utilized the Option Finder® to score all 230 needs projects. Steering Committee members were provided with the information needed for informed evaluations, including the following:

- Travel demand model results at a project-defined sub-area scale;
- Project purpose and need statements;
- Project location reference;
- Public opinion ; and
- LRTP goals and objectives.

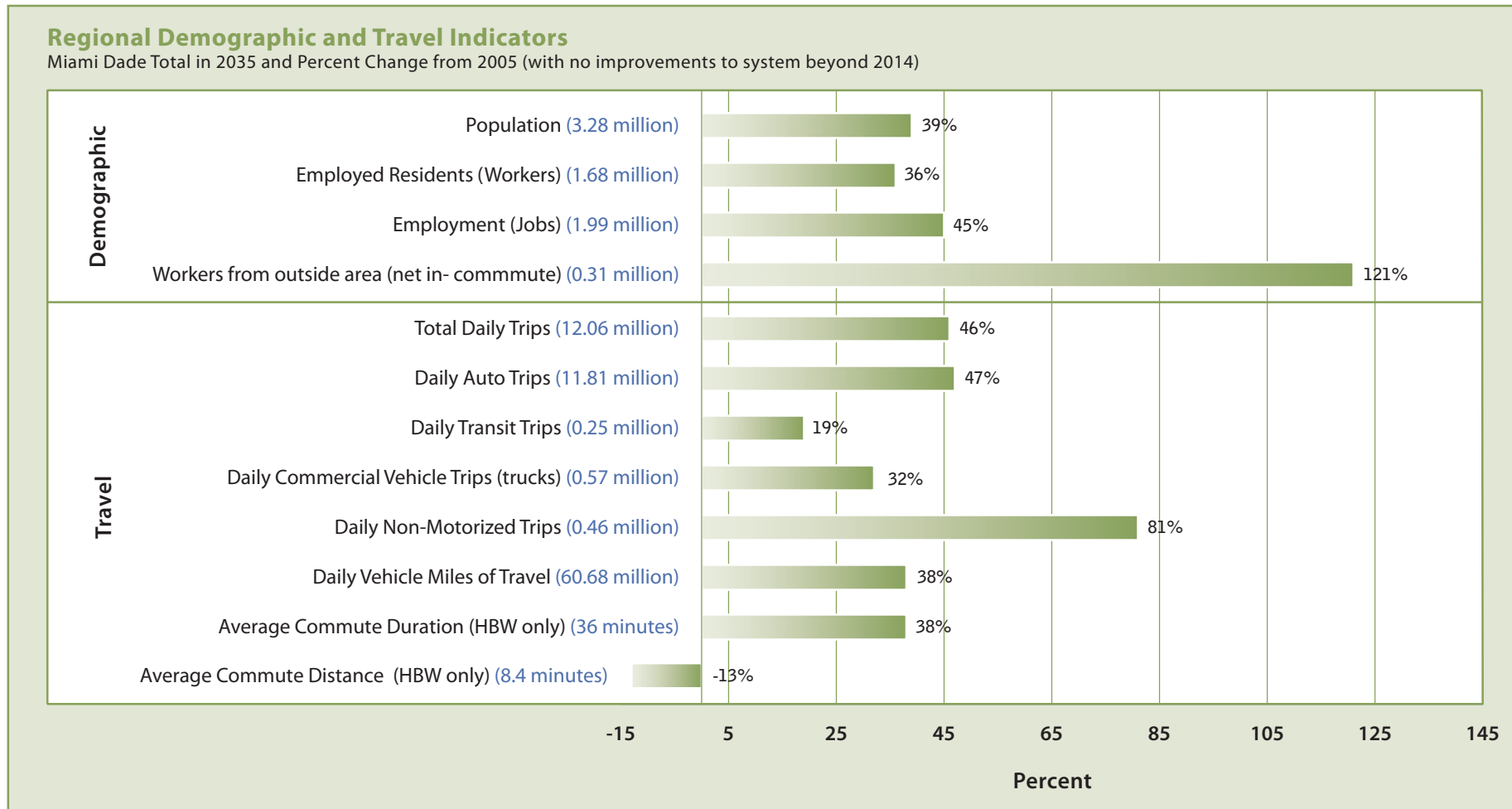
The projects were scored on a -3 to +3 scale, with -3 being least favorable, and +3 being the most favorable. Once the projects were rated by Steering Committee members, a summary screen displayed the results with the total number of scorers and average score for each needs project. Steering Committee members were encouraged to discuss the merits of the projects, taking full advantage of the breadth of knowledge and experience inherent in the Steering Committee representation. This evaluation process established the criteria for which projects were selected for inclusion in the 2035 LRTP Cost Feasible Plan.

Application of MOEs (Plan Performance)

Through the implementation of measures of effectiveness (MOE), the overall effectiveness of the 2035 Cost Feasible Plan was assessed to identify the potential benefits in meeting the County's mobility needs through the year 2035. **Figure 4-3** (page 4-15) provides a snapshot of the regional demographics and travel indicators for the 2035 existing-plus-committed network. **Figure 4-4** (page 4-16) depicts the performance of the cost feasible plan network in terms of volume-to-capacity ratio, which is a measure of level of service.

The 2035 LRTP incorporated measures of effectiveness (MOE) that are both quantitative and qualitative. The methods used to analyze the quantitative MOEs were conducted utilizing GIS and travel demand modeling software. The use of MOEs enabled decision-makers, transportation operators, and the public to track the progress of the 2035 Cost Feasible Plan in relation to the adopted goals and objectives. **Table 4-5** (page 4-17 and 4-18) includes a list of the qualitative MOEs or, in some cases, those that did not require any GIS or travel demand modeling analysis. **Appendix B** includes a comprehensive summary of the quantitative MOEs. The measures were applied to the base year scenario (2005), Priority I (existing-plus-committed), and 2035 Cost Feasible Plan scenario to indicate the performance of the 2035 Cost Feasible Plan, relative to the committed short-term improvements.

Figure 4-3 | Regional Demographics and Travel Indicators



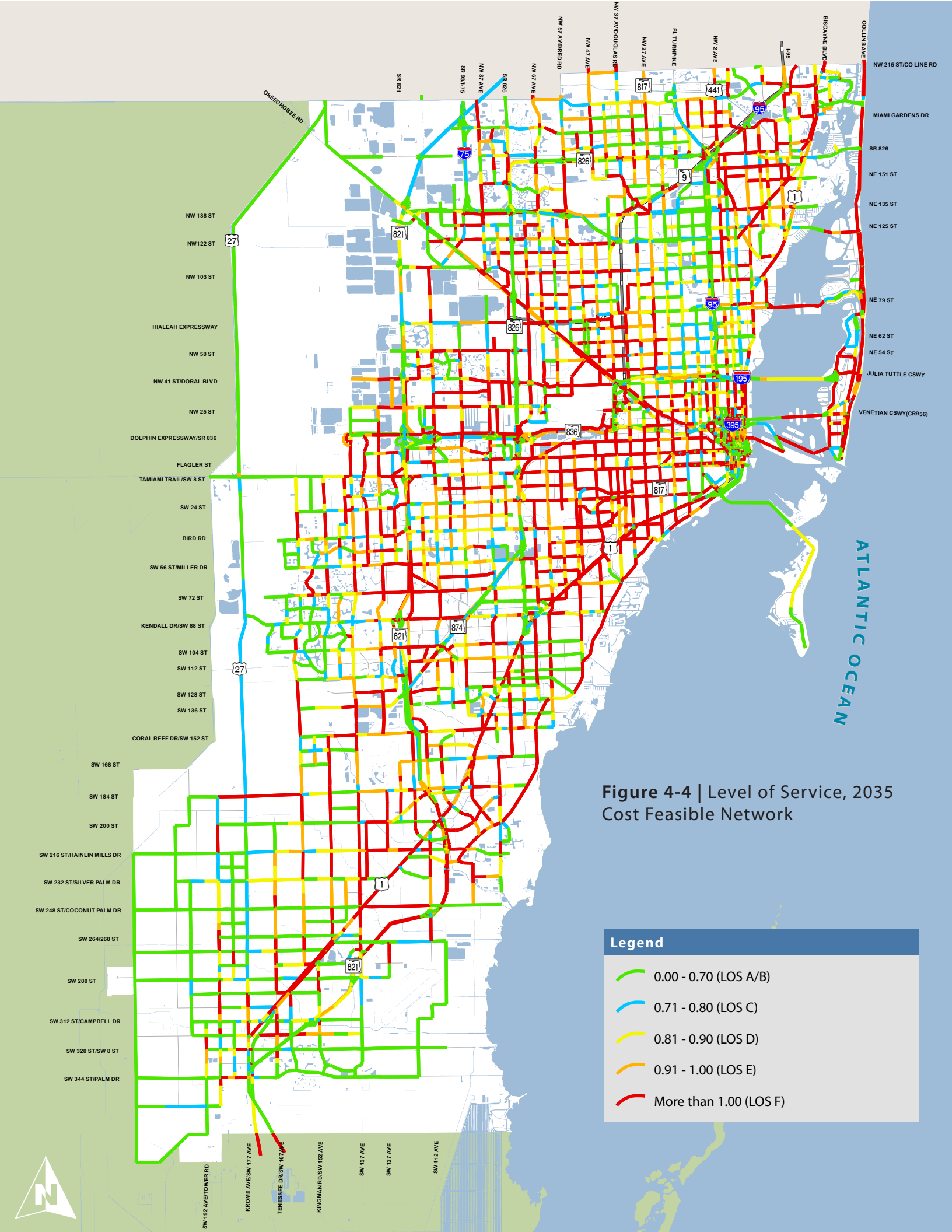


Table 4-5 | Qualitative Measures of Effectiveness

Objective	Measure	Plan Assessment by Measure	How/Where Measure is Addressed
Objective 1.7: Improve transportation facilities' and services regional connectivity	Number of park-and-ride/multimodal facilities	17	Chapter 4 - Plan Development Process, Tables 4-9 and 4-10
Objective 1.8: Include provisions for non-motorized modes in new projects and in reconstructions	Does the plan consider non-motorized infrastructure in highway and transit improvements?	Yes	Chapter 6 - Intermodal Systems Planning; Bike/Pedestrian set-aside
	Percentage increase in number/mileage of non-motorized facilities	48% (miles)	Chapter 6 - Intermodal Systems Planning; Bike/Pedestrian set-aside
Objective 1.9: Promote new non-motorized projects	Does the plan consider new non-motorized facilities?	Yes	Chapter 6 - Intermodal Systems Planning; Bike/Pedestrian set-aside
Objective 2.2: Improve safety on facilities and in operations	Level of investment in safety projects	\$880 million	Chapter 4 - Plan Development Process
Objective 2.3: Increase safety at transit stops and intermodal stations and connections	Does MDT address safety at transit stops and stations as part of the operation of its system?	Yes	Chapter 4 - Plan Development Process, Table 4-6
Objective 2.4: Implement safe routes to schools	Does the County have a safe route to schools program?	Yes	Chapter 6 - Intermodal Systems Planning; Bike/Pedestrian set-aside
Objective 3.2: Improve transportation security for facilities and in operations	Does the plan address security as part of the operation of its system?	Yes	Chapter 4 - Plan Development Process, Table 4-7
Objective 3.4: Ensure security at ports, airports, and major intermodal centers/terminals	Do airports, seaports and intermodal centers address security as part of the operation of their facilities?	Yes	Chapter 4 - Plan Development Process, Table 4-7; Freight Plan
Objective 4.5: Enhance the efficient movement of freight and goods	Does the plan consider freight-specific infrastructure improvements/programs?	Yes	Freight Plan
Objective 5.4: Minimize adverse impacts to established neighborhoods	Does the plan minimize impacts to established neighborhoods?	Yes	Steering Committee Review
Objective 5.5: Promote transportation improvements that are consistent with adopted comprehensive development master plans	Is the plan consistent with adopted comprehensive development master plans?	Yes	Steering Committee Review
Objective 5.7: Promote the use of alternative vehicle technologies	Does the plan promote the use of alternative vehicle technologies?	Yes	Chapter 4 - Plan Development Process; Chapter 5 - TSM&O

Table 4-5 cont'd | Qualitative Measures of Effectiveness

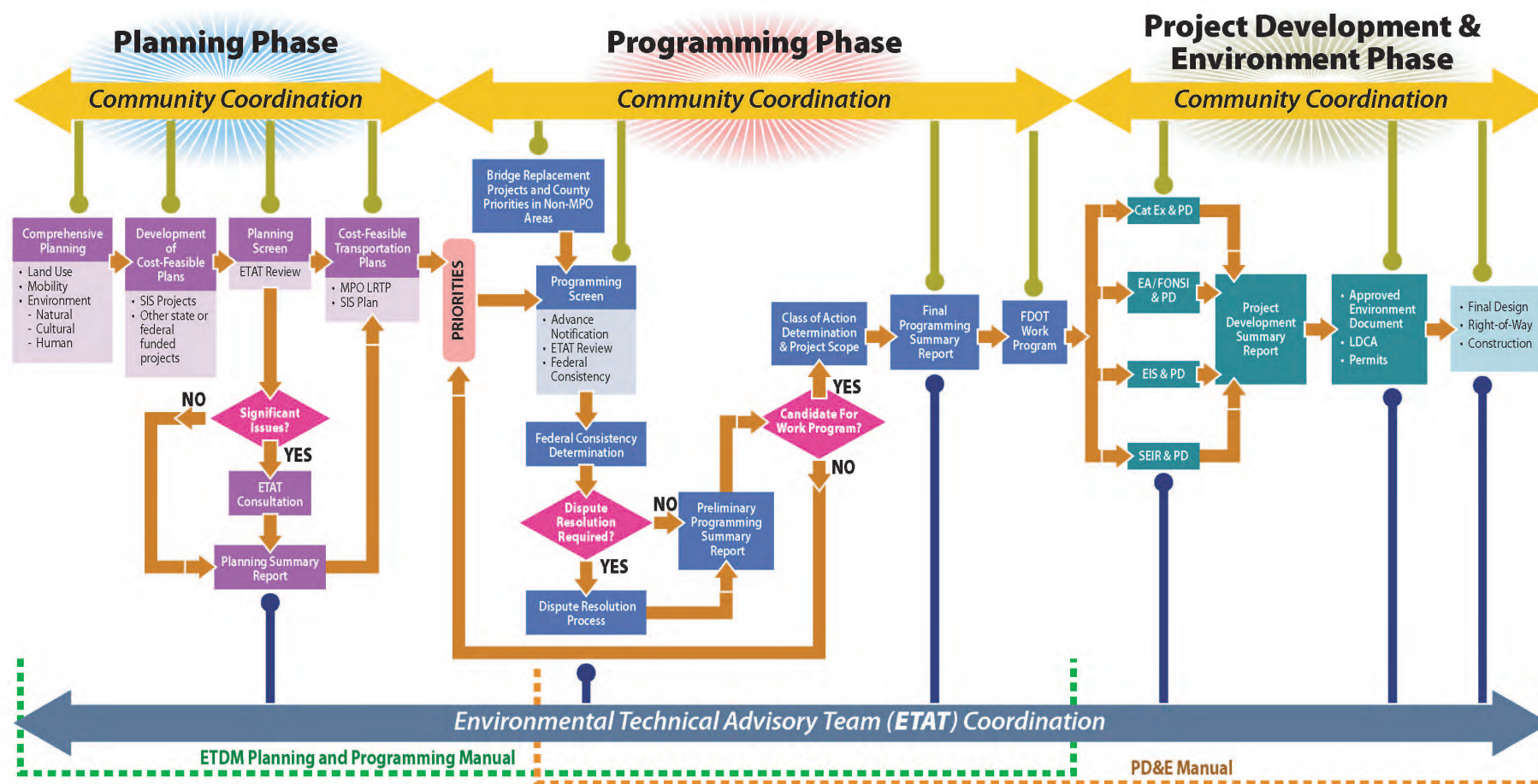
Objective	Measure	Plan Assessment by Measure	How/Where Measure is Addressed
Objective 6.2: Provide multi-modal options consistent with the local government comprehensive plan	Is the plan consistent with adopted comprehensive development master plans?	Yes	Steering Committee Review
Objective 6.3: Facilitate connections between transportation modes	Does the plan address multimodal connections?	Yes	Chapter 6 - Intermodal Systems Planning
Objective 6.5: Improve freight movement operations and reliability by promoting expedient and cooperative practices across all modes	Does the freight component of the plan address multimodal freight improvements?	Yes	Freight Plan
Objective 7.1: Optimize benefits of capital expenditures	Capital expenditure/travel time savings benefit ratio	\$27/hr (in millions)	N/A
Objective 7.2: Optimize operations and maintenance expenses	O&M expenditure/travel time savings benefit ratio	\$47/hr (in millions)	N/A
Objective 7.3: Optimize applications of People's Transportation Plan funding	PTP expenditure/travel time savings benefit ratio	\$13/hr (in millions)	N/A
Objective 7.4: Maximize use of private sector funding sources	Number of private sector funded projects	35	N/A
	Dollar amount of private sector funding (as a proportion of total cost of plan)	\$190 million	N/A
Objective 7.5: Maximize use of State and Federal funding sources	Percent of State and Federal funding sources	29%	N/A
	Dollar amount of State and Federal funding	\$5.7 billion	N/A
Objective 7.6: Promote local improvement projects within the systems improvement context	Number of Improvements on local facilities (non-State Highway System)	100	2035 Cost Feasible Plan
Objective 8.2: Identify and implement the best available technologies and innovations to improve the reliability and efficiency of the transportation system	Does the plan consider the latest technologies and innovations in transportation improvements?	Yes	Innovative improvements include active traffic management systems, open-road tolling
Objective 8.3: Identify and reserve corridors and right-of-way (on roadways, railways, and waterways) for future transportation facilities and services	Does the plan consider right-of-way acquisition as a phase that can be planned independently?	Yes	Chapter 4 - Plan Development Process, Tables 4-10 and 4-11
Objective 8.4: Expand the use of Transportation Demand Management (TDM) strategies	Does the plan make use of TDM strategies?	Yes	2009 Congestion Management Process; Congestion Management set-aside

Efficient Transportation Decision Making (ETDM)

Efficient Transportation Decision Making, or ETDM, is an environmental streamlining tool developed by the Florida Department of Transportation (FDOT) to provide early interaction among resource and planning agencies and the public to participate in the transportation planning process. ETDM is comprised of two primary stages: planning and programming. The 2035 Miami-Dade LRTP took into account the planning phase; the programming phase typically takes place prior to inclusion into the MPO's TIP or FDOT's Five-Year Work Program.

Candidate projects were selected to be reviewed in the ETDM process in accordance with FDOT criteria, as depicted in **Figure 4-5. Appendix D** provides a more detailed summary of the project selection process and results. For each ETDM project reviewed, a purpose and need statement was prepared to serve as information for screeners in the review process. The ETDM process consisted of a 45-day review period for each project submittal, and as such, was a very time intensive process, given the large number of projects in the LRTP. Projects will continue to be screened after adoption of this LRTP and required adjustments to the cost feasible plan resulting from the screening will be made as LRTP amendments.

Figure 4-5 | ETDM Process Diagram



Safety Improvements

Safety improvements include measures taken to either minimize or eliminate hazardous conditions in the transportation network that can cause accidents and injuries to the traveling public. Safety was a critical element of the 2035 LRTP and of the transportation system. The Miami-Dade MPO and implementing transportation agencies are committed to providing a safe and efficient transportation system and will continue to improve the safety of transportation in the County through improvements and programs for all modes of transportation. Examples of facility improvements in the cost feasible plan that were geared toward safety included intelligent transportation system improvements, open road tolling improvements, and bridge repairs/replacements, as listed in **Table 4-6**.

Transportation agencies in Miami-Dade County also provide safety improvements through a variety of ongoing and planned programs, as listed in **Table 4-7** (page 4-21). Additional safety measures will be built on the existing programs and agencies that improve the safety of Miami-Dade's transportation system.

Security Improvements

Providing a secure transportation system involves the protection of travelers, commerce, and the transportation infrastructure from injury, loss of life, damage, or destruction, due to terrorist attacks or other malicious acts. The Miami-Dade transportation system is vital to commerce and economic growth in the region as well as national defense. As a result, it is important to enhance the security of the transportation system across all modes. Therefore, Miami-Dade MPO and the implementing agencies are committed to providing a highly-secure transportation system. The MPO and implementing agencies will work continuously to improve the security of transportation in Miami-Dade County through all feasible means for each mode of transportation.

A key component in this effort is ITS. The ITS component of security entails maintaining the control and monitoring capabilities of the transportation infrastructure in the event of terrorist attacks, natural disasters and other unforeseen events. Additional security measures will be built upon current programs and agencies that provide security for the Miami-Dade transportation system. A summary of the programs that address the security of the Miami-Dade transportation system is detailed in **Table 4-8** (page 4-22 and 4-23).

Table 4-6 | Safety Projects

Advanced Traffic Management Systems	Intelligent transportation system (ITS) improvements on County roads
SR 821/HEFT all-electronic tolling	Toll plaza conversion to all electronic tolling
SR 112/SR 836/SR 874/SR 878/SR 924	Toll system conversion to open road tolling
1st Street Bridge over Miami River	Bridge replacement
SR 886/Port Bridge	Repairs to bascule rail and vehicle bridge
SR 934/Venetian Causeway Bridge	Bridge replacement
Freight Rail Safety and Security	Safety and security enhancements of freight transportation system, including grade crossing improvements and signal upgrades

Table 4-7 | Safety Programs by Agency

Agency	Program
FDOT District 6	Traveler Information – Traveler Information collection and dissemination: Provides uniform, real-time traveler and traffic information in the region under the SunGuide program. Includes a voice-activated and touch-tone navigation 511 phone service. Statewide informational website (www.FL511.com) and regional website (www.sunguide.org).
	Service Patrols – The Road Ranger service patrol is a free service of the FDOT. Road Rangers in FDOT District 6 currently patrol I-95, I-395, I-75, I-95, SR 826, and Miami-Dade Expressway Authority (MDX) roads (SR 836, SR 874, SR 924, SR 878, and SR 112).
Florida's Turnpike Enterprise	Turnpike Enterprise Road Ranger/State Farm Safety Patrol – The Florida's Turnpike Enterprise's TMC dispatches Road Rangers on the Turnpike Mainline and Homestead Extension of Florida's Turnpike (HEFT). Road Rangers provide service between 6:00 AM to 8:00 PM., 7 days per week. Additional Road Ranger coverage is also scheduled during peak holiday or special event travel times. Road Rangers are dispatched by the TMC via 450 MHz radio (primary mode of communication) and Nextel Direct Connect (back-up communication) systems and are tracked via an AVL system.
Miami-Dade Expressway Authority	MDX Transportation Management Center (TMC) – The MDX Transportation Management Center (TMC) is MDX's central operations center for collection and dissemination of information regarding freeway management, incident management, regional traveler information (via 511), and emergency services management.
	Service Patrols – The Road Ranger service patrol is a free service of Miami-Dade Expressway Authority (MDX) and patrols 24/7/365 State Roads 112, 836, 874, 878, and 924. Road Rangers are dispatched by the MDX TMC in response to incidents reported by FHP, patrons, Road Rangers, and discovered by the TMC operators monitoring closed-circuit television cameras (CCTV).
Miami-Dade Public Works Department	Emergency Vehicle Preemption System (EVPS) – The Miami-Dade Public Works Department currently operates an emergency vehicle preemption system which enables vehicles traveling from fire stations in the Cities of Miami and Miami Beach to locations of emergency incidents along over 100 pre-defined routes to obtain green displays at traffic signals, thereby reducing their emergency response times.
Miami-Dade Transit	Computer Aided Dispatch/Automated Vehicle Locator (CAD/AVL) – Replacement of the existing CAD/AVL system which is 13 years old and reached its end-of-life cycle 8 years ago. This system is utilized for the daily monitoring and dispatching of Metro buses, Metrorail, and Metromover vehicles. The system is no longer supported by any vendor. The new system will also allow easier integration to the new critical systems, such as Transit Operation System (TOS) and Fare Collection.
	Data Transmission System – Complete replacement of the Central Control and wayside interface Data Transmission System (DTS) and the High Speed Processing equipment. This replacement is needed due the obsolescence and decreased reliability of this equipment due to age. The data transmission system is used for control and indications between Central Control and the wayside traction power and train control equipment.
	Metrorail Redundant Track Circuit System – Installation of a redundant track circuit system with alarms including manual intervention to reset the alarms from both Central Control and remote locations. The alarms will be transmitted to CCF via communications medium and possibly cause automatic speed reduction when a loss of shunt is detected in an occupied track section. The system will need to be designed to tell the difference between a false occupancy and a loss of shunt in an occupied track circuit. This is an NTSB high priority safety issue that could affect the safety of our train operations.
	Local/Supervisor Control Panel Replacement – Replacement of all existing Train Control Local and Supervisor Control Panels at all Metrorail Stations.
	Metromover Fiber repairer/replacement – Replacement of the existing multi-mode fiber at SPCC 5th fl Train Control needs to be replaced as well as all fiber modems to accommodate single-mode fiber.

Table 4-8 | Security Programs by Agency

Agency	Program
Aviation Department	Paging/PA – This project will provide the capability for a new paging and public address system, including emergency enunciation, for the terminal. This provides the link to allow the department to do visual paging to support the hearing impaired.
	Visual Displays – Deployment airport wide to support the traveling public to locate carriers for check in, in addition the displays support emergency announcements and security directives.
	Security Badge tracking - System to support and maintain all personnel doing business on any MDAD facility. System is running on a legacy platform and needs to be converted. Need \$250,000. Unfunded at this time.
FDOT District 6	Service Patrols – The Road Ranger service patrol is a free service of the FDOT. Road Rangers in FDOT District 6 currently patrol I-95, I-395, I-75, I-95, SR 826, and Miami-Dade Expressway Authority (MDX) roads (SR 836, SR 874, SR 924, SR 878, and SR 112).
Florida's Turnpike Enterprise	Traffic Management Centers (TMC) – ITS deployment projects have been completed within Miami-Dade County. Incident management is accomplished utilizing 551 closed-circuit televisions (CCTVs), 16 highway advisory radio transmitters (HARs) and 115 dynamic message signs (DMSs), and travel time/speed sensors located along the Turnpike's entire system. TMC operators, located in Pompano Beach and Orlando, work closely with the Florida Highway Patrol (FHP) Troop K and other agencies to detect, verify, and manage incidents. TMC staff at each facility work in close coordination with Turnpike Road Rangers and wrecker/tow contractors by dispatching them on the Turnpike Mainline and Homestead Extension of Florida's Turnpike (HEFT) within Miami-Dade County. The Florida's Turnpike Enterprise is also part of the Florida Statewide 511 service and the South Florida Regional TMC Operations partnership for coordinating on advanced traveler information.
Miami-Dade Expressway Authority	MDX Transportation Management Center (TMC) – The MDX Transportation Management Center (TMC) as a partner of the State of Florida and in an effort to standardize TMCs across the State has implemented the Statewide Transportation Management Center Software Library System (SunGuide), which is used to operate the Advanced Traffic Management System (ATMS) of MDX's roadways. Currently, incident management is accomplished utilizing closed-circuit television (CCTV) cameras and traffic sensors which detect presence and measures traffic patterns on SR 836. Additional cameras and detectors are being installed on the remaining of the MDX roadways. It is expected that by the summer of 2010 the entire MDX roadway system will be covered with ITS. In an effort to make real time information available to the customers and in partnership with the Florida Department of Transportation, MDX disseminates traffic information through the new statewide 511 system.
	Service Patrols – The Road Ranger service patrol is a free service of Miami-Dade Expressway Authority (MDX) which patrols 24/7/365 state roads (SR 112, SR 836, SR 874, SR 878, and SR 924). All units are equipped with DMS boards providing mobile messaging system wide.
	Automated Vehicle Location (AVL) System – The existing MDX Road Rangers' AVL system is integrated with the TMC facility. The current AVL system provides the MDX TMC with Road Rangers location information enabling more efficient response to incidents on the MDX system by dispatching the closest available unit(s). The AVL system also provides the TMC with accurate vehicle speed of MDX TMC monitored vehicles to help determine traffic flow. The AVL system collects vital information and delivers this information to the TMC in "real time."

Table 4-8 cont'd | Security Programs by Agency

Agency	Program
Miami-Dade Transit	Lehman Center Access Control – Installation of video cameras and access control at the main gate at Lehman Center.
	Metromover Video Project – Provides CCTV surveillance of the Metromover platform and station areas with enhanced quality and coverage. The installation of Optical Fiber is required to support the transmission of video information from the various Metromover stations to Central Control. This system will replace the obsolete analog system.
	CAD/AVL RF Vehicular Radios – Replacement mobile radios presently used in all vehicles installed with CAD / AVL radio systems. The CAD / AVL system in the revenue vehicles provide on time performance data. These radios are at end of life and shortly repair parts will no longer be available to repair these radios. A new radio will have to be designed to work with our present CAD / AVL system. MDT will have to replace approximately 1600 obsolete mobile radios. The lifespan of a mobile radio is typically 25 years.
	MDT Warehouses Video Surveillance System – Installation of video surveillance system at all seven warehouse location.
	Revenue Island Security and Access Control – Installation of video cameras and access control at the three existing Revenue Islands (Central Bus, Coral Way and Northeast)
Seaport	Port-wide Wireless Electronic Monitoring for Fire Extinguishers – A system to electronically supervise fire extinguishers as a sustainable expansion of security and fire alarm infrastructure.
	Mass Notification and Evacuation System – Enhance maritime domain awareness by deploying a fully integrated Port Wide Emergency Notification System (ENS). This system will enhance the capability of emergency notification and prompt evacuation of tenants, visitors, employees, etc.
	Underwater Sonar System – Enhancements to MDA and Command, Control and Communication Center to Detect and Deter Under Water Threats.
	Command and Control Center – Rehabilitation of old Cruise Terminal building to house the command and control center.

Cost Feasible Plan

The 2035 LRTP was developed to guide transportation investments in Miami-Dade County to the Year 2035. The 2035 Plan is intended to be comprehensive, including connections to major activity centers, between and among roadways, transit, bicycle, and pedestrian facilities. Based on the financial resource analysis, there is only a limited amount of funding available for transportation improvements in Miami-Dade County during the Plan period.

Projects in the Cost Feasible Plan were grouped into priorities based on funding availability. The priorities are described as follows:

- **Priority I Improvements**
Projects scheduled to be funded for construction by 2014. This group includes those projects needed to address the County's most pressing and current travel problems.
- **Priority II Improvements**
Projects planned to be funded for construction between 2015 and 2020. This category includes freight and private sector improvements.
- **Priority III Improvements**
Projects planned to be funded for construction between 2021 and 2025.
- **Priority IV Improvements**
Projects planned to be funded for construction between 2026 and 2035.
- **Partially Funded Improvements**
Projects that have been identified in the Needs Plan, however, revenues are available to fund pre-construction phases only.
- **Unfunded Improvements**
Projects that have been identified in the Needs Plan, however, revenues are not available to fund the project.
- **Congestion Management Improvements**
Projects that have been identified in the Needs Plan and Congestion Management Process (CMP). Funds for these projects are available through the congestion management set-aside.
- **Non-motorized Improvements**
Projects that have been identified in the Needs Plan and Bicycle/Pedestrian Plan. Funds for these projects are available through the non-motorized set-aside.

Highway and transit projects included in the 2035 Cost Feasible Plan are listed in **Table 4-9** through **Table 4-15** (page 4-26 through 4-57) by priority phase and improvement type (congestion management, non-motorized, and private sector), and illustrated in **Figure 4-6** through **Figure 4-10**. Freight improvements are illustrated in **Figure 6-1** (page 6-4). Purpose & Need statements for each project in Priorities II-IV, Partially Funded and Congestion Management categories are included in **Appendix H**.

Transportation Planning Council (TPC) Meetings

Six presentations were made to the Transportation Planning Council (TPC) during key points in the study process and included the following:

- October 2008 – LRTP Goals and Objectives
- April 2009 – Financial Set Asides
- June 2009 – Financial Resources Review
- July 2009 – LRTP Status Update
- September 2009 - Cost Feasible Plan Information Item
- October 2009 - Cost Feasible Plan Endorsement

The full MPO Governing Board adopted the Cost Feasible Plan at the October 29th, 2009 meeting.



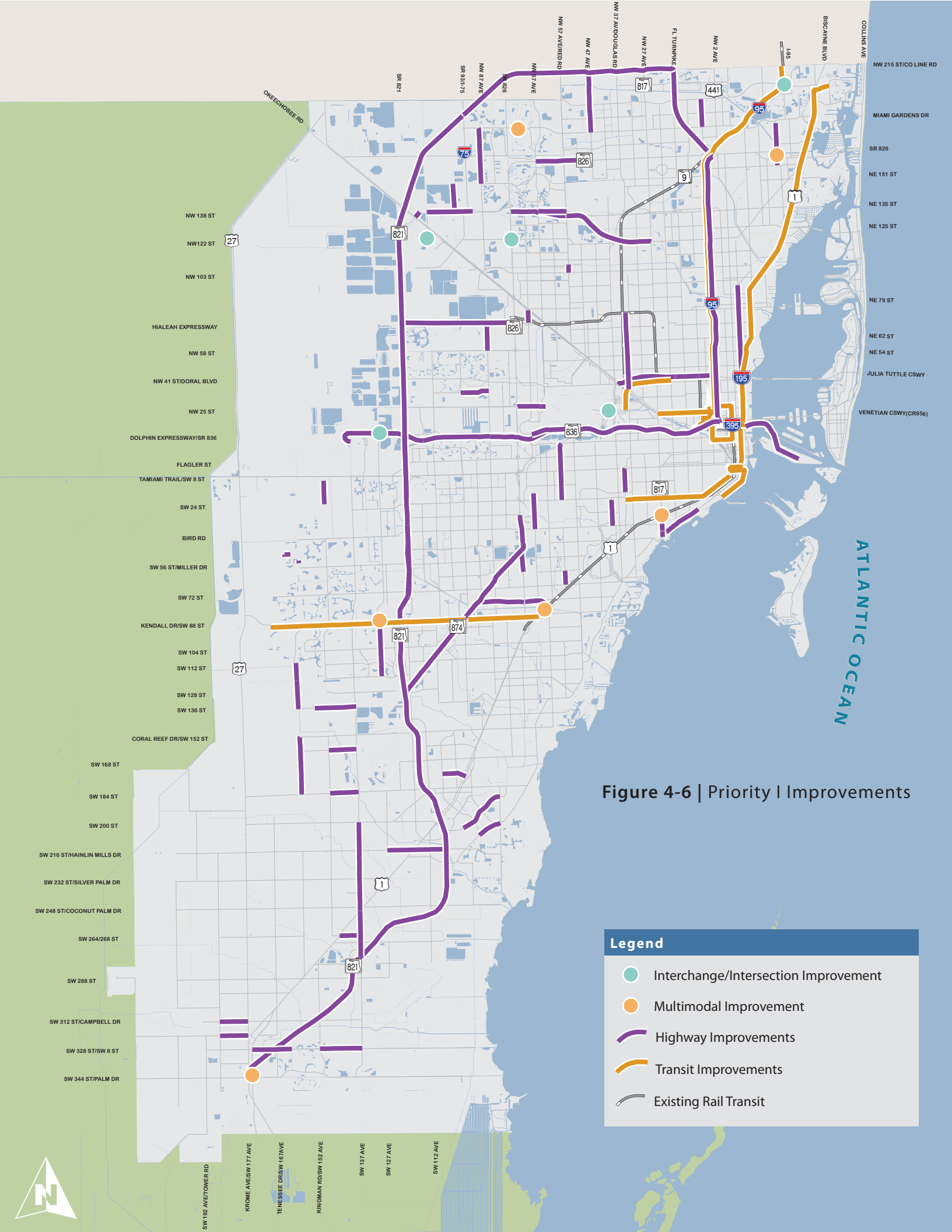


Figure 4-6 | Priority I Improvements

Table 4-9 | Priority I Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Advanced Traffic Management Systems			Intelligent transportation system (ITS) improvements on County roads	C			
Allapattah-Health District Trolley	NW 17th Avenue	NW 27th Avenue	Implement rubber tire trolley service	C			
Bus Pull-Out Bays			Construction of bus pull out bays at various locations	C			
Caribbean Boulevard	Coral Sea Road	SW 87th Avenue	Widen to 3 lanes (2 to 3)	P C			
Coral Way-Brickell Trolley	Brickell Metrorail/ Metromover station	Ponce de Leon Boulevard	Implement rubber tire trolley service	C			
Dadeland South Metrorail parking lot expansion			Expand existing park-and-ride lot	P C			
Douglas Road Metrorail Station			Reconstruct existing park-and-ride lot	P C			
Downtown-Brickell Trolley	Brickell Metrorail/ Metromover station	Omni area	Implement rubber tire trolley service	C			
Earlington Heights - Miami Intermodal Center extension	Earlington Heights Metrorail Station	Miami Intermodal Center (MIC)	Metrorail extension	C			
Health District (Civic Center) Trolley			Implement rubber tire trolley service loop providing service in the Health District area	C			
I-95	Interchange at Ives Dairy Road		Interchange modification	C			
I-95 Express	North of SR 836/I-395	Golden Glades Interchange	Add special use lanes	C			
I-95 regional express bus service	Broward Boulevard	Downtown Miami	Implement regional express bus service on I-95 between Broward and Miami-Dade counties	C			
MIA Central Boulevard	Miami International Airport	N/A	Ground transportation: construct access road	C			
Miami Intermodal Center (MIC)	MIC Central Station		Ground transportation hub improvements	P C			
Miami Intermodal Center (MIC)	MIC/MIA Station		Station improvement for MIC-MIA mover	C			
NE 15th Avenue	NE 163rd Street	NE 170th Street	Widen to 4 Lanes	C			
NE 15th Avenue	NE 159th-163rd Street	NE 170 Street-Miami Gardens Drive	Widen to 3 lanes, topics improvements	C			

 Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-9 cont'd | Priority I Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
NE 2nd Avenue	NE 20th Street	NE 91st Street	Street/Traffic Operational Improvements	C			
NE Passenger Activity Center @ NE 15th Avenue	at NE 165th Street		Park-and-Ride lot	P R C			
NW 7th Avenue	NW 183rd Street	NW 199th Street	Widening, drainage, pavement marking	C			
NW 107th Avenue and NW 122nd Street			New flyover ramp	C			
NW 25th Street Viaduct	SR 826	NW 68th Avenue	New road construction	C			
NW 25th Street	SR 826	NW 67th Avenue	Widen to 6 lanes (5 to 6)	C			
NW 33rd Street	NW 97th Avenue	NW 87th Avenue	Widen to 4 lanes (2 to 4)	C			
NW 37th Avenue	North River Drive	NW 79 Street	Widen to 3 lanes (2 to 3)	C			
NW 72nd Avenue	NW 74th Street	Okeechobee Road	Widen to 4 lanes and bridge (2 to 4)	C			
NW 74th Street	HEFT	SR 826 (Palmetto)	New 6 Lanes	C			
NW 74th Street	NW 87th Avenue	NW 84th Avenue	New 4 lanes	C			
NW 87th Avenue	NW 58th Street	NW 74th Street	New road construction	C			
NW 87th Avenue	NW 154th Street	NW 186th Street	Widen to 4 lanes (2 to 4)	C			
NW 97th Avenue	NW 138th Street	NW 154th Street	New 4 lanes	C			
NW 138th Street	NW 107th Avenue	I-75	Widen to 6 lanes and canal relocation (2 to 6)	C			
NW 138th Street bridge	Bridge over Miami River Canal at NW 138 Street		Bridge construction	C			
Old Cutler Road	SW 97th Avenue	SW 87th Avenue	Traffic operational improvements	P C			
Overtown-Health District Trolley			Implement rubber tire trolley service loop providing service in the Overtown community	C			
Park-and-Ride @ SW 344th Street and Busway	SW 344th Street and Busway		Park-and-Ride lot	C			
Park-and-Ride at FP&L site			Park-and-Ride lot	P C			
Perimeter Road	NW 72nd Avenue	NW 57th Avenue	Intermodal hub capacity	C			

Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-9 cont'd | Priority I Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Ponce De Leon Boulevard	Alcazar Avenue	SW 8th Street	Addition of left turn bays	C			
Port of Miami Tunnel	Port of Miami	SR 836/I-395	New port access road	P C			
Segovia Street	Bird Road	Biltmore Way	4 to 2 lanes	C			
South Bayshore Drive	Darwin Street	Mercy Way	Road improvements	C			
SR 5/US-1/Biscayne BRT	Biscayne Blvd/SR 5/US-1 From Omni Terminal	Aventura Mall	Premium transit improvement	C			
SR 5/US-1	Mile Marker 121.32	Mile Marker 124.18	Capacity improvement	C			
SR 94/Kendall Enhanced Bus Service	Dadeland North Metrorail Station	SW 167th Avenue	Premium transit improvement	C			
SR 112/Airport Expressway	NW 17th Avenue	NW 12th Avenue	SR 112 infrastructure modifications for open road tolling	P C			
SR 112/Airport Expressway	Lejeune Road	I-95	Toll system conversion to open road tolling	C			
SR 821/HEFT	US-1	I-595	Toll plaza conversion to all electronic tolling	P C			
SR 823/NW 57th Avenue/Red Road	W 46th Street/103rd Street	W 53rd Street	Widen to 6 lanes (4 to 6)	C			
SR 826/Palmetto Expressway & SR 836/ Dolphin Expressway Interchange	NW 87th Avenue	NW 57th Avenue	Interchange modification	P C			
SR 826/Palmetto Expressway @ NW 122nd Street	West 21st Court	East of West 20th Avenue	Interchange ramp modification	C			
SR 826/Palmetto Expressway	North of Sunset Drive/ SW 72nd Street	SW 32nd Street	Interchange modification	C			
SR 826/Palmetto Expressway	NW 67th Avenue	NW 47th Avenue	Add auxiliary lane	C			
SR 836/Dolphin Expressway	SR 826/SR 836 Interchange	NW 42th Avenue	Construction of an additional auxiliary lane on SR 836	C			
SR 836/Dolphin Expressway	NW 107th Avenue	SR 836	Construction of emergency access ramp	C			
SR 836/Dolphin Expressway	NW 22nd Avenue	NW 17th Avenue	Modification of existing toll plaza for open road tolling	P C			
SR 836/Dolphin Expressway	NW 137th Avenue	I-95	Toll system conversion to open road tolling	C			

 Planning & Design **P** | Right of Way (ROW) **R** | Construction **C**

Table 4-9 cont'd | Priority I Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SR 847/NW 47th Avenue	NW 183rd Street	Miami-Dade/ Broward County Line	Widen to 4 lanes (2 to 4)	P C			
SR 860/Miami Gardens Drive			Park-and-Ride lot	C			
SR 874/Killian Parkway interchange	HEFT	Kendall Drive	Modifications: interchange/new construction: toll plaza, ramp plaza	C			
SR 874/SR 826 interchange	North of SR 874 / 826 interchange	South of SR 874 / 826 interchange	Interchange improvements	P C			
SR 874/Don Shula Expressway	Kendall Drive	SR 826	Modification of SR 874 mainline roadway	C			
SR 874/Don Shula Expressway	SR 826	HEFT	Toll system conversion to open road tolling	C			
SR 878/Snapper Creek Expressway	US-1	SR 874	Toll system conversion to open road tolling	C			
SR 916/NW 138th Street	NW 57th Avenue	NW 67th Avenue	Widen to 5 lanes (3 to 5)	C			
SR 924/Gratigny Parkway	East of 57th Avenue	LeJeune Road	Remove existing toll plaza, roadway reconstruction/modifications for open road tolling	C			
SR 924/Gratigny Parkway	SR 826	NW 27th Avenue	Toll system conversion to open road tolling	C			
SW 127th Avenue	SW 88th Street	SW 120th Street	Widen to 4 lanes with median, swales, frontage road	C			
SW 136 Street	SW 149th Avenue	SW 139th Court	Widen to 4 lanes (2 to 4)	C			
SW 137th Avenue	HEFT	US- 1	Widen to 4 lanes (2 to 4)	C			
SW 137th Avenue	US-1	SW 200th Street	Completion as 2 continuous lanes	C			
SW 147th Avenue	SW 22nd Terrace	SW 10th Street	Widen to 4 lanes (New 2 lanes)	C			
SW 157th Avenue	SW 54th Terrace	SW 52nd Street	Widen to 4 lanes (2 to 4)	C			
SW 157th Avenue	SW 136th Street	SW 120th Street	New 4 Lanes	C			
SW 157th Avenue	SW 120th Street	SW 112th Street	New 4 Lanes	C			
SW 157th Avenue	SW 184th Street	SW 152nd Street	New 4 Lanes	C			
SW 160th Street	SW 147th Avenue	SW 137th Avenue	New 4 lanes	C			
SW 162nd Avenue / SW 47th Street	SW 47th Street/ SW 160th Avenue	SW 48th Terrace/ SW 162nd Court	Widen SW 162nd Avenue to 4 lanes (2 to 4)/ SW 47th Street to 3 lanes (2 to 3)	C			

Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-9 cont'd | Priority I Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SW 176th Street	US-1	SW 107th Avenue	Traffic operational improvements	C			
SW 184th Street	SW 147th Avenue	SW 137th Avenue	Widen to 4 lanes (2 to 4)	C			
SW 27th Avenue	US-1	Bayshore Drive	Widen to 3 lanes (2 to 3)	C			
SW 216th Street	HEFT	SW 127th Avenue	Traffic operational improvements	C			
SW 264th Street	US-1	SW 137th Avenue	Traffic operational improvements	C			
SW 312th Street/Campbell Drive	SW 187th Avenue	SW 177th Avenue	Widen to 5 lanes	P C			
SW 320th Street/Mowry Drive	SW 187th Avenue	Flagler Avenue	Add turn lane(s)	C			
SW 328th Street/North Canal Drive	SW 152nd Avenue	SW 137th Avenue	Widen to 4 lanes (2 to 4)	C			
SW 328th Street/North Canal Drive	US-1	SW 162nd Avenue	Widen to 4 lanes (2 To 4)	C			
SW 62nd Avenue	SW 70th Street	SW 64th Street	5 to 2 lanes	C			
SW 62nd Avenue	SW 24th Street	NW 7th Street	Street improvements	C			
SW 72nd Avenue	SW 20th Street	SW 40th Street	Street and traffic operational improvements	C			
Traffic control devices			Signalization improvements at various locations	P C			
Transit Hub @ NW 7th Avenue and NW 62nd Street	NW 7th Avenue/NW 62nd Street		Construct new passenger activity center	R C			
W 68th Street	W 19th Court	W 17th Court	Add lane on south side and signalization	C			

 Planning & Design P | Right of Way (ROW) R | Construction C

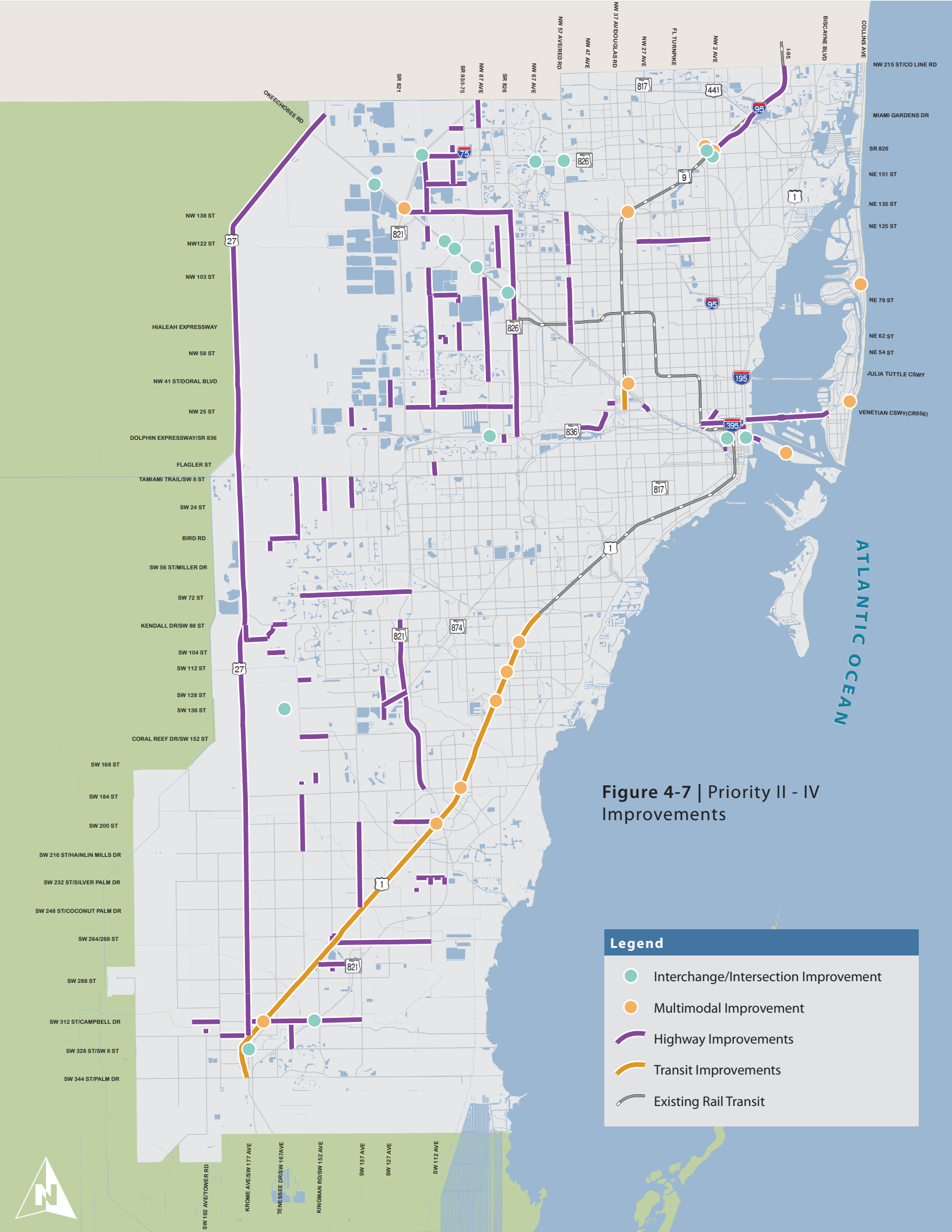


Figure 4-7 | Priority II - IV Improvements

Legend

Interchange/Intersection Improvement

Multimodal Improvement

Highway Improvements

Transit Improvements

Existing Rail Transit

Table 4-10 | Priority II - IV Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Existing County roads O&M				*	*	*	*
Existing transit system O&M				*	*	*	*
MDT contribution to SFRTA				*	*	*	*
MDT bus acquisition				*	*	*	*
MDT Metrorail vehicle replacement				*	*		
MDT Infrastructure Renewal Program				*	*	*	*
Non-motorized set aside					*	*	*
Congestion Management set aside					*	*	*
Priority II Improvements							
1st Street Bridge	over Miami River	US-1	Bridge replacement	P	P C		
Golden Glades Multi-modal Facility Upgrade			Capacity improvement, including a pedestrian overpass to connect Golden Glades intermodal center to business park west of CSX tracks		P R C		
Golden Glades Multi-modal Terminal		Tri-Rail/MDT Terminal	1,000 space deck, intermodal center with improved bus circulation and improved ADA, Replace multiple existing pedestrian bridges with a single-level bridge		C		
I-95 (NB) Ramp to Turnpike/SR 826			Add 1 auxiliary/acceleration lane		P C		
Miami Beach Intermodal Center	63rd Street Collins Avenue	87th Street West Bay Drive	New North Beach bus transfer station		C		
NW 14th Street	Civic Center	Biscayne Boulevard	Widen to 3 lanes (2 to 3)		R C		
NW 25th Street	NW 89th Court	HEFT	Traffic signal improvements; improve intersections to accommodate truck movements.		P R C		
NW 25th Street	NW 89th Court	SR 826	Widen to 6 lanes (4 to 6)		C		
NW 25th Street Viaduct	SR 826	NW 87th Court	Phase 2 - construction of Viaduct from SR 826 to NW 87th Court		C		
NW 87th Avenue	NW 36th Street	NW 58th Street	Widen to 6 lanes (4 to 6)		P R C		

 Planning & Design P | Right of Way (ROW) R | Construction C

* Denotes program expenditure by period.

Table 4-10 cont'd | Priority II - IV Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
NW 87th Avenue extension	NW 58th Street	NW 95th Street	Extend to connect the freight hubs of Doral and Medley		P R C		
NW 107th Avenue	NW 41st Street	NW 25th Street	Widen to 6 lanes (4 to 6)		P R C		
NW 107th Avenue	1000ft N of NW 122nd Street	Okeechobee Road	Widen bridge over Miami Canal		C		
NW South River Drive	NW 19th Street	NW 23rd Avenue	Widen Tamiami Swing Bridge to 4 lanes (2 to 4)		P C		
Parking expansion at Opa-Locka Tri-Rail station	Opa-Locka Tri-Rail Station		Opa-Locka Tri-Rail station parking improvements		P C		
Port of Miami			Construct parking garage - intermodal hub capacity		C		
South Beach bus transfer station			New South Beach bus transfer station		C		
SR 25/Okeechobee Road	at NW 154th Street		Traffic signals		C		
SR 823/NW 57th Avenue/Red Road	W 19th Street	W 23rd Street	Widen to 6 lanes (4 to 6)		C		
SR 823/NW 57th Avenue/Red Road	Okeechobee Road	W 19th Street	Widen to 5 lanes (4 to 5)		C		
SR 823/NW 57th Avenue/Red Road	W 53rd Street	W 65th Street	Widen to 6 lanes (4 to 6)		C		
SR 823/NW 57th Avenue /Red Road	W 23rd Street	W 46th Street	Widen to 6 lanes (4 to 6)		C		
SR 860/NW 186th Street/Miami Gardens Drive	NW 97th Avenue	I-75	New 4 lanes		P R C		
SR 997/Krome Avenue	SW 136th Street	Kendall Drive	Widen to 4 lanes (2 to 4)		P C		
SR 997/Krome Avenue	SR 94/Kendall Drive	SR 90/SW 8th Street	Widen to 4 lanes (2 to 4)	P	C		
SW 137th Avenue	US-1	SW 184th Street	Widen to 4 lanes (2 to 4)		C		
SW 137th Avenue	SW 24th Street	SW 8th Street	Widen to 6 lanes (4 to 6)		P C		
SW 264th Street	US-1	SW 147th Avenue	New 2-lane		P R C		
SW 264th/SW 268th St	SW 147th Ave	SW 112th Avenue	Roadway improvements		P R C		
SW 320th Street/Mowry Drive	S. Dixie Highway	SW 187th Avenue	Widen to 4 lanes with continuous left turn lanes (2 to 4)		P R C		
SW 328th Street/North Canal Drive		US-1	Intersection improvements - add turn lanes		P R C		

Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-10 cont'd | Priority II - IV Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Truck Parking Improvement		Okeechobee Road	Provide a location in the area of Okeechobee and the HEFT for long-term truck parking and staging.		P R C		
Truck Parking Improvement			Develop a truck staging area near NW 36th Street and NW 37th Avenue for the Port of Miami River.		P R C		
West 24th Avenue	W 52nd Street	W 76th Street	Widen to 5 lanes (2 to 5)		P C		
Priority III Improvements							
Downtown/Port Access			Construct I-95 NB Slip Ramp on NW 6th St; Implement NE/NW 5th/6th St/Port Blvd. improvements for access between POM and I-95 slip ramp		P R	C	
I-95	Golden Glades Interchange	Broward County Line	Special use lanes (managed lanes)			C	
MIC Loan Repayment						C	
SR 821/HEFT	Eureka Drive	Kendall Drive	Widen to 8-, 10-, 12-lanes plus auxiliary lanes			C	
SR 826/Palmetto Expressway	SR 836	NW 87th Avenue on I-75	Special use lanes		P C	C	
SR 826/Palmetto Expressway @ 67th Avenue			Interchange improvements - reconstruct as SPUI interchange		P	C	
SR 836/Dolphin Expressway	NW 12th Avenue	Ramp to I-95	Ramp to I-95			C	
SR 886/Port Bridge			Repairs to bascule rail and vehicle bridge			P C	
SR 924/Gratigny Parkway Extension (west)	SR 826/I-75	HEFT	Limited access facility providing a connection between HEFT, I-75, SR 924, SR 826	P	P R	C	
SW 127th Avenue	SW 120th Street	SW 144th Street	New 4 lanes / Widen to 4 lanes		P R	C	
SW 152nd Street	SW 147th Avenue	SW 157th Avenue	Widen to 4 lanes (2 to 4)			P C	
Venetian Causeway Bridge	Bayshore Drive	Purdy Avenue	Bridge replacement		P	C	

 Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-10 cont'd | Priority II - IV Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Priority IV Improvements							
Farmlife Roadway Expansion	SW 312th Street (Campbell Drive)	SW 328th (Lucy Street)	Widen to 4 lanes with left turn lanes (2 to 4)				P R C
Freight Rail Safety and Security			Safety and security enhancements of freight transportation system, including grade crossing improvements and signal upgrades				P C
I-395	East of I-95	MacArthur Causeway Bridge	Major capital improvement		P R	C	C
Medley Bridge/Canal Improvement Program	NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave		Improve the connections between Okeechobee Rd and Medley through a combination of bridge widening and canal improvements (NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave)				P C
NW 82nd Avenue	NW 8th Street	NW 12th Street	New 4 lanes				P R C
NW 97th Avenue	NW 58th Street	NW 74st Street	New 4 lanes / Widen to 4 lanes				P C
NW 170th Street	HEFT	NW 97th Avenue	New 6 lanes				P R C
Perimeter Road	NW 20th Street	NW 57th Avenue	Widen to 4 lanes (2 to 4)				P C
South Florida Rail Corridor	North of Hialeah Market	North of MIC	Double tracking of the remaining single track of Tri-Rail				P R C
SR 5/US-1/ Biscayne Boulevard			Expand SB left turn lane for trucks entering Port				P C
SR 823/NW 57th Avenue/Red Road	W 65th Street	W 84th Street	Widen to 6 lanes (4 to 6)				C
SR 826/Palmetto Expressway (EB) to I-95 (NB)			Operational improvement within the Golden Glades Interchange				P C
SR 826/Palmetto Expressway @ 57th Avenue			Interchange Improvements - reconstruct as SPUI interchange			P	C
SR 826/Palmetto Expressway (NB)	Okeechobee Road	NW 103rd Street	Addition of 1 auxiliary lane				P C
SR 826/Palmetto Expressway (EB) to NW 167th Street			Operational improvement within the Golden Glades Interchange				C
SR 836/Dolphin Expressway		NW 87th Avenue	Interchange improvement	P			C
SR 874/Don Shula Expressway Ramp Connector	SW 136th Street	SR 874	Ramp connection to SW 136th Street	P	P		R C

Planning & Design P | Right of Way (ROW) R | Construction C

Table 4-10 cont'd | Priority II - IV Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SR 924/Gratigny Parkway Extension (east)	NW 32nd Avenue	I-95	Limited access facility providing E/W mobility to I-95	P	P R	C	C
SR 985/SW 107th Avenue	SW 8th Street	Flagler Street	Widen to 6 lanes (4 to 6)				C
SR 997/Krome Avenue	North of SW 8th Street	Mile post 2.754	Widen to 4 lanes (2 to 4)				C
SR 997/Krome Avenue	SR-5/US-1	SW 328th Street (Lucy Street)	Widen to 4 lanes (2 to 4)				C
SR 997/Krome Avenue	SW 296th Street	SW 136th Street	Widen to 4 lanes (2 to 4)	P		R	R C
SR 997/Krome Truck By-Pass	Along Flagler Avenue/ Civic Court	NW 6th Street	New 2 lanes (Companion project with Krome widening SW 328th Street to SW 296th Street)				C
SR 997/Krome Avenue	SW 328th Street (Lucy Street)	SW 296th Street	Widen to 4 lanes (2 to 4) (Companion project with Krome truck by-pass)				C
SR 997/Krome Avenue	Mile post 2.754	Mile post 5.122	Widen to 4 lanes (2 to 4)				C
SR 997/Krome Avenue	Mile post 5.122	Mile post 8.151	Widen to 4 lanes (2 to 4)				C
SR 997/Krome Avenue	Mile post 8.151	Mile post 10.626	Widen to 4 lanes (2 to 4)				C
SR 997/Krome Avenue	Mile post 10.626	Mile post 14.184	Widen to 4 lanes (2 to 4)				C
SW 72nd Street/Sunset Drive	SW 117th Avenue	SW 157th Avenue	Widen to 6 lanes (4 to 6)				P C
SW 104th Street/Killian Parkway	SW 160th Avenue	SW 167th Avenue	New 4 lanes / Widen to 4 lanes				P R C
SW 157th Avenue	SW 8th Street	SW 42nd Street	New 4 lanes / Widen to 4 lanes				P R C
SW 157th Avenue	SW 184th Street	SW 216th Street	New 2 lanes				P R C
SW 200th Street	US-1	Quail Roost Drive	Widen to 4 lanes (2 to 4)				P C
SW 312th Street/Campbell Drive			Turnpike access ramps (west-to-north and south-to-west)				P C
SW 312th Street/Campbell Drive	SW 152nd Avenue	SW 137th Avenue	Widen to 6 lanes with left turn lanes (4 to 6)				P R C
SW 312th Street/Campbell Drive	NW 14th Avenue SW 176th Avenue	SW 197th Ave HEFT	Widen to 6 lanes (4 to 6)				P R C
US-1 (Busway)	SW 88th Street	Florida City	Additional park-and-ride lots at selected locations		P	R	R C
US-1 (Busway)	SW 88th Street	Florida City	Bus signal priority				P C
West Avenue	North of Lincoln Road	South of 18th Street	New connector bridge	P			P R C

Planning & Design P | Right of Way (ROW) R | Construction C

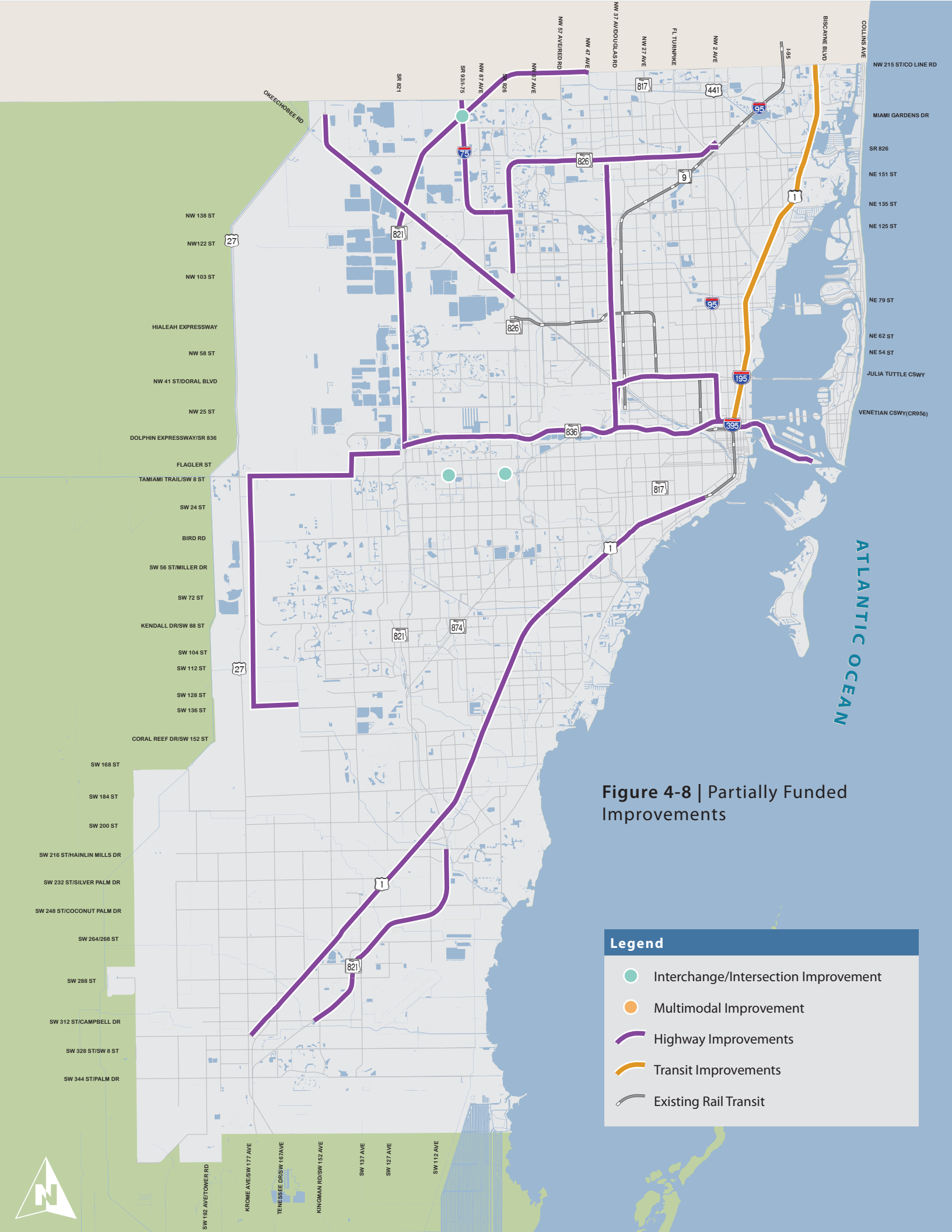


Table 4-11 | Partially Funded Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SR 826/Palmetto Expressway	I-75	Golden Glades Interchange	Add special use lanes				P D
East-West/Dolphin Corridor Premium Transit	MIC	Vicinity of FIU	Premium transit service	P			
FEC Corridor	Downtown Miami	Broward County Line	Premium transit service	P			
Additional Tracks at Miami Intermodal Center*	Miami Intermodal Center		Construct passenger rail tracks to allow Amtrak service at the MIC and/or commuter rail				
SR 25/Okeechobee Road/US 27	79th Avenue	Krome Avenue	Expressway conversion - Construct grade separated overpasses at major intersections				P D
Metrorail North Corridor extension	Martin Luther King Jr. Metrorail station	NW 215th Street/ NW 27th Avenue	Premium transit service along NW 27th Avenue	R			
SW 82nd Avenue	Tamiami Canal		Bridge construction	P D			
SW 102nd Avenue	Tamiami Canal		Bridge construction	P D			
SR 836/Dolphin Expressway	NW 42nd Avenue/NW 27th Avenue	NW 17th Avenue/ NW 57th Avenue	EB Auxiliary Lane from NW 42nd Avenue to NW 17th Avenue; WB Auxiliary Lane from NW 27th Avenue to NW 57th Avenue and associated interchange improvements at NW 42nd Avenue and NW 27th Avenue		P D		
SR 836/I-95 Corridor	West of NW 17th Avenue	I-95	Corridor Improvements	P	D		
SR 836/Dolphin Expressway	HEFT	SR 826/836 Interchange	Conversion of general purpose lanes to managed lanes		P D		
SR 836/SR 112 Interconnector	SR 836/Lejeune interchange	SR 112/37th Avenue interchange	Express connection between SR 836 and SR 112 in the general alignment of 37th/42nd avenues		P D		
SR 836/SR 112	SR 826	I-95/I-395	Conversion of general purpose lanes to managed lanes		P D		
Connect 4Xpress	Central Miami-Dade County	North Miami-Dade County	Limited access N/S facility connecting the northern and central portion of the County. Multimodal Corridor		P D		
SR 836 Southwest Extension**	NW 137th Avenue	SW Miami-Dade	Multimodal transportation corridor	P			
SR 5/US-1	Dadeland South	I-95	Corridor improvements and managed lanes				P D
SR 25/Okeechobee Road	SR 826	Krome Avenue	Conversion to limited access toll facility				P D R
US-1 Busway**	Florida City	Dadeland South	Managed lanes	P			D

*Illustrative project - assumes Federal and State New Starts program funding

**Project would require amendment of the Miami-Dade County Comprehensive Development Master Plan

Planning P | Design D | Right of Way (ROW) R

Table 4-11 cont'd | Partially Funded Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SR 821/HEFT	SR 836	I-75	Widen to 10 lanes		P D		
SR 821/HEFT	I-75		Interchange modification	P D	R		
SR 821/HEFT	I-75	Turnpike Mainline	Widen to 8 lanes		P D		
SR 821/HEFT	Campbell Drive	Biscayne Drive (SW 288th Street)	Widen to 6 lanes				P D
SR 821/HEFT	Biscayne Drive (SW 288th Street)	SW 216th Street	Widen to 8 lanes				P D
Golden Glades Interchange	SR 826 (EB)	I-95 (NB)	Ramp improvements to provide direct system to system connection				D
I-75	SR 826	Broward County Line	Add special use lanes and provide an envelope for future transit service				P D
SR 826/Palmetto Expressway	NW 103rd Street	I-75	Provide transit envelope for future transit service				D R

Planning P | Design D | Right of Way (ROW) R

Table 4-12 | Unfunded Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Baylink	Downtown Miami	Miami Beach	Premium transit service connecting Downtown Miami and Miami Beach				
US-1 (South Dixie Highway)	SW 88th Street	SW 104th Street	Metrorail extension to SW 104th Street				
SR 826/Palmetto Expressway	Palmetto Station	NW 103rd Street	Transitway				
Kendall Area LRT	Metrozoo Area	Dadeland North	Implement new premium transit service				
SR 94/SW 88th Street	SW 157th Ave	US-1 (Dadeland North)	Premium transit service				
Douglas Road	US 1	MIC	Premium transit service				
South Beach Local	South Pointe Drive	Dade Boulevard	Implement transit service				
NE 163rd Street (Sunny Isles Boulevard) / 167th Street	Golden Glades Interchange	Collins Avenue	Improve/implement transit service				
SR 821/HEFT	SW 88th Street	FIU (SW 8th Street)	Premium transit service				
Metromover Brickell loop extension			Extension of Metromover service in the Brickell area	UNFUNDED			
Freight Rail Line Upgrade and Extension			Double track improvements on FEC and other projects that increase the capacity of the freight rail network, including double track projects, line extensions and upgrades to accommodate 286k rail cars.				
North Beach Circulator	69th Street	87th Street	Implement transit service				
I-75/Gratigny Parkway	County Line Road	Miami-Dade College North Campus	Premium transit service				
New Tri-Rail station in northern Miami-Dade County	Between Golden Glades Tri-Rail Station and County Line Road		New Tri-Rail station in the vicinity of Ives Dairy Road				
SW 200th Street SW 137th Ave	US-1 SW 200th Street	SW 137th Avenue SR 836	Improve/implement transit service				
I-75		at 154th Street	New interchange				
US-1 (Busway)	SW 88th Street	Florida City	Grade separations at selected intersections				
SW 184th Street	SW 157th Avenue	SW 147th Avenue	Widen to 4 lanes (2 to 4)				
I-95	South of SR 836/I-395	Broward County Line	Capacity improvement				
West 76th Street	W 36th Avenue	W 20th Avenue	Widen to 5 lanes (2 to 5)				
SW Ludlam Rd SW 8th Street 42nd Avenue	SW 88th Street SW Ludlam Road SW 8th Street	SW 8th Street SW 42nd Avenue MIC	Improve/implement transit service				

Table 4-12 cont'd | Unfunded Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SW 117th Avenue	SW 40th Street	SW 8th Street	Widen to 4 lanes (2 to 4)				
SR 821/HEFT	US-1 (South Dixie Highway)	SW 88th Street	Improve/implement transit service				
SR 992/SW 152nd Street/Coral Reef	HEFT	US-1	Widen to 6 lanes (4 to 6)				
SW 80th Street	SW 72nd Avenue	US 1/S Dixie	Widen to 5 lanes (2 to 5)				
SW 147th Avenue	SW 184th St	SW 152nd St	Add 2 lanes and resurface				
SW 120th Street	SW 147th Avenue	SW 157th Avenue	Add 2 lanes				
SW 107th Avenue	Quail Roost Drive	SW 160th Street	Widen to 4 lanes (2 to 4)				
Middle Beach Circulator	Dade Boulevard	72nd Street	Implement transit service				
FEC South Spur/Ludlam Trail Premium Transit	Miami Intermodal Center	Dadeland North Area	Premium transit service and non-motorized facility				
I-95/NW 20th Street			New ramp construction to serve Health District				
SW 328th Street/North Canal Drive	US 1	SW 187th Avenue	Widen to 4 lanes (2 to 4)	UNFUNDED			
SW 24th Street/Coral Way	SW 107th Avenue	SW 87th Avenue	Widen to 6 lanes (4 to 6)				
SR 5/US-1	SW 104th St	Florida City	Metrorail extension				
SW 16th Street	SW 82nd Avenue	SW 71st Avenue	Overpass across SR 826				
FEC Corridor East-West Connection	South Florida Rail Corridor	FEC Mainline	Construct new east-west rail connection in the vicinity of 71st Street				
SW 152nd Street BRT	SW 137th Avenue	US-1 Busway	1 Dedicated transit lane - BRT service				
SW 24th Street/Coral Way	SW 117th Avenue	SW 107th Avenue	Widen to 6 lanes (4 to 6)				
SW 47th/48th Street	SW 112th Avenue	SW 122nd Avenue	Overpass across HEFT				
SW 152nd Avenue	US-1	SW 312th Street	Widen to 4 lanes (2 to 4)				
NW 72nd Avenue	NW 122nd Street	NW 138th Street	Widen to 3 lanes (2 to 3)				
NW 21st Street/NW 32nd Avenue	NW 37th Avenue	NW 28th Street	Construct high level bridge				
SW 320th Street/Mowry Drive	SW 187th Avenue/S. Dixie Highway	SW 197th Avenue/ SW 142nd Avenue	Widen to 4 lanes				
NE 167th/163rd Street	NE 6th Avenue	US-1	Add 1 reversible lane				
Miami Streetcar	Miami Design District	Downtown Miami	LRT from the Design District to Downtown Miami				
Marlins Stadium Premium Transit Connection	Metrorail/Metromover	Marlins Stadium	Premium transit connection from existing Metrorail/Metromover to the Marlins stadium at the former Orange Bowl stadium site				
SR 934/NW 79th St/NW 81st Street/ NW 82nd Street PD&E	NW 13th Avenue	Biscayne Bay	Capacity improvements				

Table 4-12 cont'd | Unfunded Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
I-95 (SB)		SW 7th & 8th Street	Modify interchange				
SR 5/US-1	at SW 344th Street		Grade separated overpass				
NE 151st Street	NE 10th Avenue	West Dixie Highway	Widen to 4 lanes (2 to 4)				
SR 847/NW 47th Avenue	SR 826	Broward County line	Major capital improvement				
SW 120th Street	SW 137th Avenue	SW 147th Avenue	Widen to 6 lanes (4 to 6)				
SR 90/SW 8th St /Tamiami Trail			Grade separations at SW 8th Street/SW 87th Avenue, SW 8th Street/SW 107th Avenue				
NE 159th Street	NE 6th Avenue	West Dixie Highway	Widen to 4 lanes (2 to 4)				
NW 215th/203rd Street Elevated Expressway	Turnpike	MacArthur Causeway	Elevated east/west expressway				
Connection	Wm Lehman Causeway	Aventura Mall	New connector				
SE 1st Avenue	SE 8th Street	SE 5th Street	Extend SE 1st Avenue				
SW 104th Street/Killian Parkway	SW 167th Avenue	SW 177th Avenue	New 2 lanes		UNFUNDED		
NW 107th Avenue	NW 170th Street	Broward County line	Extend NW 107th Avenue to the Broward County line				
SW 104th Street/Killian Parkway	Hammocks Boulevard	SW 137th Avenue	Widen to 6 lanes (4 to 6)				
SW 136th Street	SW 127th Avenue	HEFT	Widen to 6 lanes (4 to 6)				
SR 821/HEFT	Kendall Drive (SW 88th Street)	SR 836	Widen to 10 lanes				
SR 821/HEFT	SW 216th Street	Eureka Drive	Widen to 10 lanes				
SR 821/HEFT	Lucy Street		New half-interchange (to/from N.)				
North Miami Avenue	14th Street	City Limit	Roadway improvements				
SW 142nd Avenue	SW 26th Street	SW 8th Street	Realigning roadway, interchange improvements, mill/resurface, sidewalk, drainage				

Table 4-13 | Private Sector Projects* [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description
NW 33rd Street (south side)	NW 102nd Avenue	NW 104th Avenue	Matching existing to the east and west
NW 66th Street	NW 102nd Avenue	NW 107th Avenue	Full Improvement
NW 90th Street (south side)	NW 107th Avenue	NW 97th Avenue	New 2-lane
NW 97th Avenue (west side)	NW 86th Street	NW 90th Street	New 2-lane
NW 97th Avenue	NW 154th Street	NW 176th Street	New 2-lane
NW 102nd Avenue (west side)	NW 62nd Street	NW 67th Street	2 lanes and 1/2 of turn lane
NW 107th Avenue	NW 90th Street	NW 106th Street	Widen to 4 lanes (2 to 4)
NW 107th Avenue	NW 106th Street	NW 41st Street	New 4 lane
NW 107th Avenue	NW 138th Street	NW 170th Street	4-lane divided roadway
SW 120th Street (north side)	SW 152nd Avenue	SW 157th Avenue	2 lanes of 4 lanes divided
NW 122nd Avenue	NW 25th Street	NW 41st Street	New construction: 2 lanes
NW 132nd Avenue	NW 13th Street	NW 14th Street	2 lanes
NW 132nd Place (west side)	NW 17th Street	NW 25th Street	2 lanes and 1/2 of turn lane
NW 154th Street/Miami Lakes Boulevard	NW 97th Avenue	I-75	New 2-lane
SR 94/Kendall Drive/SW 88th Street	SW 167th Avenue	SW 162nd Avenue	Widening to 6 lanes
SR 821/HEFT	@ NW 170th Street		New interchange
SW 96th Street (south side)	SW 167th Avenue	SW 172nd Avenue	2 lanes and 1/2 of turn lane
SW 107th Avenue/SW 107th Court	SW 232nd Street	SW 236th Street	R4.4 (R4.4: 4 lane divided)
SW 112th Avenue (east side)	SW 232nd Street	SW 236th Street	1/2 of R4.4 (R4.4: 4 lane divided) (Coordinate with FDOT)
SW 117th Avenue (east side)	SW 238th Street	SW 240th Street	2 lanes of 4 lanes divided
SW 147th Avenue	SW 8th Street	SW 26th Street	Complete as a 4 lane roadway
SW 147th Avenue (east side)	SW 21st Street	SW 22nd Street	2 of 4 lanes divided
SW 147th Avenue	SW 280th Street	SW 284th Street	Additional pavement and markings
SW 152nd Avenue	SW 173rd Street	SW 178th Street	2 lanes
SW 157th Avenue	SW 176th Terrace	SW 178th Lane	2 lanes of 4 lanes divided
SW 162nd Avenue (east side)	SW 136th Street	R/R Right-of-Way	1/2 of R3.3 (R3.3: 2 lanes)
SW 167th Avenue	SW 43rd Street	SW 44th Street	2 lanes of 4 lanes divided
SW 167th Avenue	SW 42nd Street	SW 43rd Street	2 lanes of 4 lanes divided
SW 167th Avenue (west side)	North of SW 96th Street		Matching existing to the north
SW 172nd Avenue (east side)	SW 88th Street	SW 96th Street	2 lanes and 1/2 of turn lane
SW 192nd Avenue	SW 316th Street	SW 318th Street	2 lanes

*Private sector projects are dependent upon the construction schedule of specific development projects, which can vary considerably according to the market and other conditions.

Table 4-13 cont'd | Private Sector Projects* [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description
SW 232nd Street (south side)	SW 112th Avenue	SW 107th Avenue	1/2 of R4.4 (R4.4: 4 lane divided)
SW 232nd Street (south side)	SW 117th Avenue	SW 112th Avenue	2 lanes of 4 lanes divided
SW 280th Street	SW 142nd Avenue	SW 152nd Avenue	Modification of existing improvements
SW 42nd Street	SW 162nd Avenue	SW 167th Avenue	New 2 lane

*Private sector projects are dependent upon the construction schedule of specific development projects, which can vary considerably according to the market and other conditions.

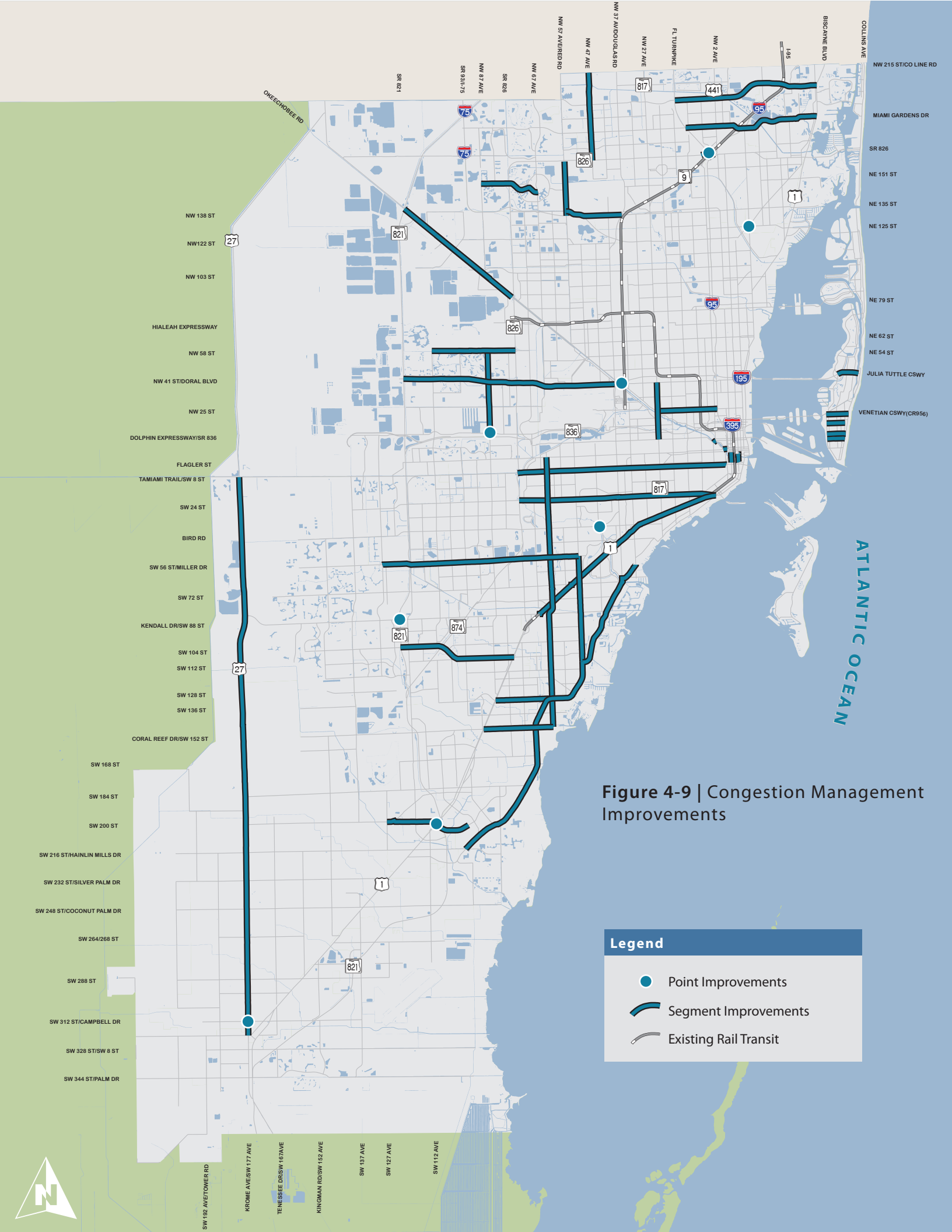


Figure 4-9 | Congestion Management Improvements

Legend

Point Improvements

Segment Improvements

Existing Rail Transit

Table 4-14 | Congestion Management Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description
41st Street	Atlon Road	Collins Avenue	Corridor improvements
Coral Way/SW 22nd Street	SR 826	US-1	Congestion management
Freight Rail Landside Access			Projects that enhance landside access, including intermodal ramps and truck access to railroad terminals
Golden Glades Interchange			Ramp and/or operational improvements. Series of low cost operational improvements within the Golden Glades
Granada Boulevard	Bird Road		Intersection improvement
Integration of Truck Route System and Regional ITS Network			Implementation of ITS improvements specifically geared toward trucks
Ives Dairy Road	Florida Turnpike	Biscayne Boulevard	Congestion management
Medley freight hub streetlight and local roadway improvements			Improve the local infrastructure to and from businesses in the Medley area-pavement, turning radii. 15 miles of roadway
Medley Gateway Establishment			Provide business and wayfinding signing, including a Medley area business inventory
Miami Ave/2nd Avenue/NW 5th Street/Flagler (1st Street)	Bridge over Miami River		ITS/advance warning signals
NE 125th Street/NE 6th Avenue/W Dixie Highway			Intersection improvements
North River Drive	NW 107th Avenue	NW 74th Avenue	Widen North River Drive to include shoulders and improved access management
NW 12th Street		NW 87th Avenue	Signal Improvements
NW 20th Street	NW 27th Avenue	I-95	Roadway infrastructure improvements
NW 36th St/41st Street	NW 42nd Avenue	HEFT	Express Street (ITS, grade separations, etc.)
NW 58th Street	NW 107th Avenue	SR 826	Congestion management
NW 87th Avenue	SR 836	NW 58th Street	Improve SR 836/NW 12th Street/NW 87th Avenue interconnections; improve intersections to accommodate truck movements
NW 154th Street/Miami Lakes Boulevard	NW 87th Avenue	NW 67th Avenue	Congestion management
Park-and-Ride Lot Program			MDT program to identify potential sites and construct park & ride lots
Port of Miami Operations			PierPass Feasibility Study to examine the impact of implementing congestion mitigation incentives for off-peak operations
Old Cutler Road	SW 216th Street	SW 37th Avenue	Congestion management
One-waying of South Beach Local Streets			Capacity improvements
SR 5/US-1	SW 88th Street (Kendall Drive)	I-95	Congestion management
SR 9/SW/NW 27th Avenue	SW 8th Street	NW 36th Street	Median/access improvements

*Projects funded by congestion management set aside program

Table 4-14 cont'd | Congestion Management Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description
SR 25/Okeechobee Road Operations/Access Improvements	NW 138th Avenue	79th Avenue	Signal timing improvements, improve access and improve signing to provide better flow along Okeechobee and access from side roads and access by trucks to and from Medley
SR 90/Tamiami Trail	SR 826	I-95	Congestion management
SR 112/Airport Expressway (WB)		NW 36th Street/ Okeechobee Road	Reconstruct intersection
SR 823/Red Road/NW 57th Avenue	SR 826	NW 135th Street	Congestion management
SR 826/SR 9/I-95 Interchange			Congestion improvements; improve turning radius/speeds on ramp from Turnpike to WB SR 826
SR 847/NW 47th Avenue	SR 826	NW 215th Street	Congestion management
SR 860/Miami Gardens Drive	Florida Turnpike	Biscayne Boulevard	Congestion management
SR 916/NW 135th Street	NW Red Road	Douglas Road	Congestion management
SR 997/Krome Avenue		SW 312th Street	Intersection improvements
SR 997/Krome Avenue	SR 90/Tamiami Trail	US-1	Improve intersections to accommodate truck movements
SW 56th Street/Miller Drive	SW 127th Avenue	SW 57th Avenue	Congestion management
SW 57th Avenue	Old Cutler Road	SW 56th Street	Congestion management
SW 67th Avenue	SW 152nd Street	Flagler Street	Congestion management
SW 88th Street / HEFT			Multimodal terminal
SW 104th/SW 112th Street	SR 821	US-1	Congestion management
SW 136th Street	US-1	SW 67th Avenue	Congestion management
SW 152nd Avenue	US-1	Old Cutler Road	Congestion management
SW 200th St/Caribbean Boulevard	SW 127th Avenue	Coral Sea Road	Congestion management
SW 200th Street / US-1 (South Dixie Highway)			Multimodal terminal
Way-Finding Sign Improvement Program			Improve county-wide for movements to/from regional freight hub

*Projects funded by congestion management set aside program

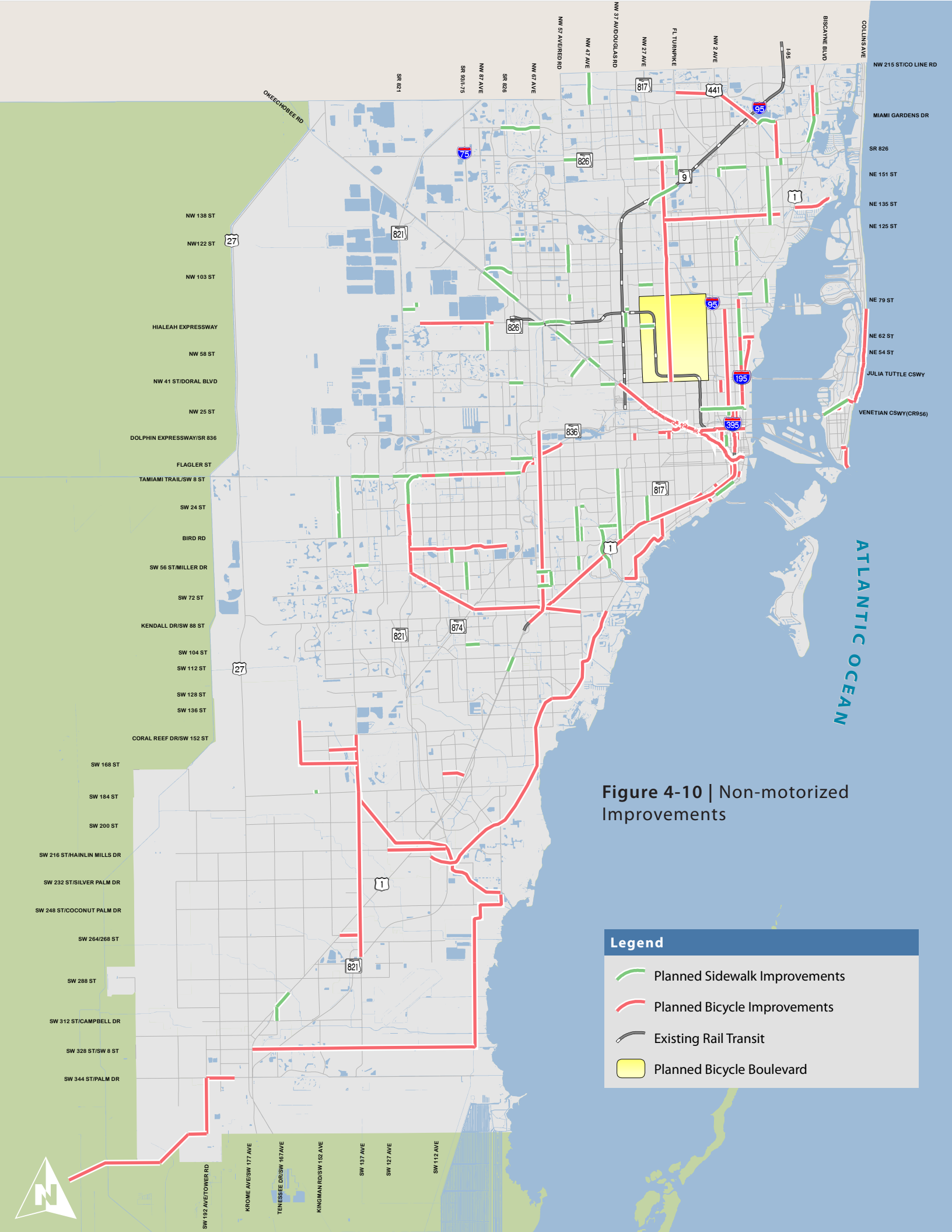


Figure 4-10 | Non-motorized Improvements

Legend

Planned Sidewalk Improvements

Planned Bicycle Improvements

Existing Rail Transit

Planned Bicycle Boulevard

Table 4-15 | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Atlantic Trail	44th Street	46th Street	Trail Improvements	P C			
Atlantic Trail	South Pointe Park	5th Street	Trail Improvements	P C			
Atlantic Trail (except portion between 44th and 46th Street)	23th Street	64th Street	Trail Improvements (Design)	P			
Beachwalk Greenway/5th Street	South end of Lummus Park	South of Washington Avenue	Trail Improvements	P C			
Biscayne Trail	Black Point Park	SW 280th Street	Trail Improvements	P C			
Biscayne Trail	Black Point Park	Biscayne National Park to US-1	Trail Improvements (PD&E Study)	P			
Black Creek Trail "A"	Black Point Park	Larry and Penny Thompson Park	Trail Improvements	P C			
Black Creek Trail "B"	SW 184th Street	SW 144th Street	Trail Improvements	P C			
Commodore Trail	Coco Plum Circle	SW 27th Avenue	Trail Improvements	P C			
Dade Boulevard Bike Path	Venetian Causeway	Beachwalk	Bicycle Facility Improvements	P C			
Dade Boulevard	Purdy Drive	23rd Street	Pedestrian Facility Improvements	P C			
East of Little Havana	Greenways/South River Drive	SW 12th Avenue to Jose Marti Park	Pedestrian Facility Improvements	P C			
El Portal/87th Street	NE 2nd Avenue	Biscayne Boulevard (E) and NW 5th Avenue (W)	Pedestrian Facility Improvements	P C			
Greenway Bridges	Biscayne and Black Creek	Trail Bridges	Pedestrian Underpass	P C			
Ludlam Trail	Dadeland North Station	NW 12th Street	Trail Improvements (PE)	P			
Miami River Greenway	NW 12th Avenue	SE 2nd Avenue	Trail Improvements	P C			
Miami River Greenway	5th Street Bridge		Trail Improvements	P C			
M-Path Extension	Dadeland South Station	SW 67th Avenue	Trail Improvements	P C			
N 20th Street	Civic Center	Biscayne Boulevard	Pedestrian Facility Improvements	P C			

Planning & Design P | Construction C

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
NE 135th Street	East of Biscayne Boulevard	Bayvista Boulevard at FIU	Bicycle Facility Improvements	P C			
NE 15th Avenue	NE 163rd Street	NE 186th Street	Bicycle Facility Improvements	P C			
NE 2nd Avenue	NE 20th Street	NE 36th Street	Bicycle Facility Improvements	P C			
NE 2nd Avenue	NE 36th Street	NE 43rd Street	Bicycle Facility Improvements	P C			
NE 2nd Avenue	NE 43rd Street	NE 62nd Street	Bicycle Facility Improvements	P C			
NE 2nd Avenue	NE 62nd Street	West Little River Canal/ NE 84th Street	Bicycle Facility Improvements	P C			
NW 112th Avenue	NW 84th Street	NW 86th Street	Pedestrian Facility Improvements	P C			
NW 74th Street	NW 107th Avenue	NW 84th Avenue	Bicycle Facility Improvements	P C			
NW 82nd Street	NW 113th Avenue	NW 117th Avenue	Pedestrian Facility Improvements	P C			
NW 87th Avenue	NW 58th Street	NW 74th Street	Pedestrian Facility Improvements	P C			
Old Cutler Road Path Phase 1	SW 224th Street	SW 136th Street	Trail Improvements	P C			
Overtown Greenway	NW 3rd Avenue	NW 7th Avenue	Trail Improvements	P C			
Safe Route to School Program	Doctors Charter School		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Southside		Non-motorized Facility Improvements	P C			
Safe Route to School Program	NOR Miami Elementary		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Peskoe		Non-motorized Facility Improvements	P C			
Safe Route to School Program	W Homestead		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Saunder		Non-motorized Facility Improvements	P C			
Safe Route to School Program	LUD Pine Villa		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Avocado Elementary		Non-motorized Facility Improvements	P C			
Safe Route to School Program	WM Chapman		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Campbell Drive		Non-motorized Facility Improvements	P C			
Safe Route to School Program	WJ Brian		Non-motorized Facility Improvements	P C			

 Planning & Design P | Construction C

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Safe Route to School Program	Riverside, Fulford		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Henry M Flagler Elementary		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Caribbean		Non-motorized Facility Improvements	P C			
Safe Route to School Program	South Pointe		Non-motorized Facility Improvements	P C			
Safe Route to School Program	South Miami Heights Elementary School		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Poinciana Park		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Thena Chowder		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Amelia Earhart		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Bob Graham		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Miami Shores		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Barbara Hawkins		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Eugenia B Thomas		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Flamingo		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Joella Good Elementary School		Non-motorized Facility Improvements	P C			
Safe Route to School Program	Van E. Blanton		Improve safety by public outreach initiatives	*			
School Safety Enhancement Program			Pedestrian Facility Improvements	P C			
Snake Creek Trail	NW 17th Avenue/ Turnpike	NW 186th Street	Trail Improvements	P C			
Snapper Creek Trail	K-Land Park/SW 88th Street	SW 72nd Street	Trail Improvements	P C			
SR 948/NW 36th Street	NW 79th Avenue	NW 74th Avenue	Pedestrian Facility Improvements	P C			
SR 953/LeJeune Rd	SR 5/ US-1/ S Dixie Hwy	SR 90/SW 8th Street	Pedestrian Facility Improvements	P C			
SW 137th Avenue	US-1	SW 184th Street	Bicycle Facility Improvements	P C			
SW 137th Avenue	HEFT	US-1	Bicycle Facility Improvements	P C			

Planning & Design P | Construction C

* Denotes program expenditure by period.

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SW 137th Avenue	SW 184th Street	SW 152 Street	Bicycle Facility Improvements	P C			
SW 142nd Avenue	SW 42nd Street	SW 26th Street	Pedestrian Facility Improvements	P C			
SW 142nd Avenue	SW 26th Street	SW 8th Street	Pedestrian Facility Improvements	P C			
SW 152nd Avenue	SW 182nd Street	SW 184th Street	Pedestrian Facility Improvements	P C			
SW 160th Street	SW 147th Avenue	SW 137th Avenue	Bicycle Facility Improvements	P C			
SW 176th Street	SW 107th Avenue	US-1	Bicycle Facility Improvements	P C			
SW 216th Street	SW 127th Avenue	HEFT	Bicycle Facility Improvements	P C			
SW 264th Street	US-1	SW 137th Avenue	Bicycle Facility Improvements	P C			
SW 27th Avenue	S Bayshore Drive	US-1	Bicycle Facility Improvements	P C			
SW 8th Street	HEFT	SR 826	Bicycle Facility Improvements	P C			
West Dixie Highway	NE 186th Street	Ives Dairy Road	Bicycle Facility Improvements	P C			
Alhambra Circle	Blue Road	SW 40th Street	Pedestrian Facility Improvements		P C		
Biscayne Boulevard	NE 187th Street	NE 191st Street	Pedestrian Facility Improvements		P C		
Biscayne Boulevard	NE 191st Street	Aventura Boulevard	Pedestrian Facility Improvements		P C		
Curtis Parkway	Hunting Lodge Drive	Curtis Parkway Roundabout	Pedestrian Facility Improvements		P C		
Dade Boulevard	Alton Road	Meridian Avenue	Pedestrian Facility Improvements		P C		
E 9th Street	E 4th Avenue	E 8th Avenue	Pedestrian Facility Improvements		P C		
E Okeechobee Road	E 1st Avenue	East Drive	Pedestrian Facility Improvements		P C		
Federal Highway/NE 4th Court	NE 39th Street	NE 61st Street	Bicycle Facility Improvements (Restriping)		P C		
Granada Boulevard	Ponce De Leon Bd	Blue Road	Pedestrian Facility Improvements		P C		
Granada Boulevard	Hardee Road	S Dixie Highway	Pedestrian Facility Improvements		P C		
Granada Boulevard	Blue Road	SW 40th Street	Pedestrian Facility Improvements		P C		
Hialeah Expressway	W Okeechobee Road	W 10th Avenue	Pedestrian Facility Improvements		P C		
Hialeah Expressway	W 8th Avenue	W 4th Avenue	Pedestrian Facility Improvements		P C		

Planning & Design P | Construction C

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Hialeah Expressway	NW 72nd Avenue	N Royal Poinciana Boulevard	Pedestrian Facility Improvements		P C		
Hialeah Expressway	W 10th Avenue	W 8th Avenue	Pedestrian Facility Improvements		P C		
Miami River Greenway	NW 36th Street	NW 12th Avenue	Trail Improvements		P C		
M-Path Master Plan	Miami River	SW 37th Avenue	Trail Improvements		P C		
NE 10th Avenue	NE 82nd Street	NE 95th Street	Pedestrian Facility Improvements		P C		
NE 119th Street	NE 2nd Avenue	W Dixie Hwy	Pedestrian Facility Improvements		P C		
NE 12th Avenue	NE 8th Street	NE 15th Street	Pedestrian Facility Improvements		P C		
NE 12th Avenue	NE 159th Street	N Miami Beach Boulevard	Pedestrian Facility Improvements		P C		
NE 159th Street	N Miami Avenue	NE 6th Avenue	Pedestrian Facility Improvements		P C		
NE 16th Avenue	NE 159 Street	NE 163 Street	Pedestrian Facility Improvements		P C		
NE 185th Street	NE 10th Avenue	NE 15 Avenue	Pedestrian Facility Improvements		P C		
NE 2nd Avenue	NE 71st Street	NE 79th Street	Pedestrian Facility Improvements		P C		
NE 2nd Avenue	NE 61st Street	NE 71 Street	Pedestrian Facility Improvements		P C		
NE 2nd Avenue	NE 46th Street	NE 54th Street	Pedestrian Facility Improvements		P C		
NE 2nd Avenue	NW 111th Street	W Dixie Hwy	Pedestrian Facility Improvements		P C		
NE 2nd Avenue	NE 103rd Street	NW 111th Street	Pedestrian Facility Improvements		P C		
NE 61st Street	Biscayne Boulevard	NE 2nd Avenue	Bicycle Facility Improvements (Restriping)		P C		
NE 62nd Street	Biscayne Boulevard	NE 2nd Avenue	Bicycle Facility Improvements (Restriping)		P C		
Non-motorized Safety Program	Various Locations		Improve safety by public outreach initiatives		*		
North Miami Avenue	NW 14th Street	NW 20th Street	Bicycle Facility Improvements (Restriping)		P C		
North Miami Avenue	NW 14th Street	NW 5th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 103rd Street	W 28th Avenue	W 24th Avenue	Pedestrian Facility Improvements		P C		
NW 103rd Street	W 24th Avenue	W 49th Street	Pedestrian Facility Improvements		P C		
NW 11th Street	NW 22nd Avenue	NW 27th Avenue	Bicycle Facility Improvements (Restriping)		P C		

Planning & Design P | Construction C

* Denotes program expenditure by period.

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
NW 159th Street	NW 2nd Avenue	N Miami Avenue	Pedestrian Facility Improvements		P C		
NW 167th Street	NW 27th Avenue	NW 22nd Avenue	Pedestrian Facility Improvements		P C		
NW 167th Street	NW 22nd Avenue	NW 17th Avenue	Pedestrian Facility Improvements		P C		
NW 167th Street	NW 57th Avenue	NW 47th Avenue	Pedestrian Facility Improvements		P C		
NW 167th Street	NW 32nd Avenue	NW 27th Avenue	Pedestrian Facility Improvements		P C		
NW 17th Avenue	NW 157th Street	NW 167th Street	Pedestrian Facility Improvements		P C		
NW 186th Street	NW 77th Avenue	NW 67th Avenue	Pedestrian Facility Improvements		P C		
NW 2nd Avenue	NW 20th Street	NW 79th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 2nd Avenue	NW 17th Street	NW 20th Street	Pedestrian Facility Improvements		P C		
NW 2nd Avenue	N Biscayne River Drive	NW 159th Street	Pedestrian Facility Improvements		P C		
NW 22nd Avenue	NW 36th Street	NW 183rd Street	Bicycle Facility Improvements (Restriping)		P C		
NW 22nd Avenue	NW 36th Street	NW 183rd Street	Bicycle Facility Improvements (Restriping)		P C		
NW 23rd Avenue	NW 11th Street	NW 7th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 3rd Court	I-95	NW 8th Street	Pedestrian Facility Improvements		P C		
NW 35th Court	NW 11th Street	NW 7th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 36th Street	East Drive	N Le Jeune Road	Pedestrian Facility Improvements		P C		
NW 37th Avenue	NW 71st Street	NW 79th Street	Pedestrian Facility Improvements		P C		
NW 47th Avenue	NW 199th Street	NW 215th Street	Pedestrian Facility Improvements		P C		
NW 5th Avenue	NW 29th Street	NW 36th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 5th Avenue	NW 4th Street	NW 11th Street	Bicycle Facility Improvements (Restriping)		P C		
NW 71st Street	NW 32nd Avenue	NW 27th Avenue	Pedestrian Facility Improvements		P C		
NW 81st Street	NW 37th Avenue	NW 36th Avenue	Pedestrian Facility Improvements		P C		
NW 95th Street	NW 32nd Avenue	NW 27th Avenue	Pedestrian Facility Improvements		P C		
S Dixie Highway	SW 304th Street	SW 296th Street	Pedestrian Facility Improvements		P C		
S Dixie Highway	SW 120th Street	SW 112th Street	Pedestrian Facility Improvements		P C		

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Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
S Miami Avenue	SW 17th Road	S Dixie Highway	Pedestrian Facility Improvements		P C		
Safe Route to School Program	Various Locations		Non-motorized Facility Improvements		P C		
Sevilla Avenue	Alhambra Circle	Anastasia Avenue	Pedestrian Facility Improvements		P C		
Snapper Creek Trail	North of 56th Street	SW 8th Street	Trail Improvements		P C		
Snapper Creek Trail "B"	SW 94th Avenue	SW 57th Avenue	Trail Improvements (PD&E Study)		P		
South Miami Avenue	SW 14th Terrace	SW 12th Street	Bicycle Facility Improvements (Restriping)		P C		
South Miami Avenue	SW 6th Street	SW 3rd Street	Bicycle Facility Improvements (Restriping)		P C		
SR 9 Frontage Road	NW 27th Avenue	SR 9	Pedestrian Facility Improvements		P C		
SW/NW 1st Avenue	SW 2nd Street	NW 20th Street	Bicycle Facility Improvements (Restriping)		P C		
SW 102nd Avenue	SW 56th Street	SW 48th Street	Pedestrian Facility Improvements		P C		
SW 104th Street	SW 97th Avenue	SW 92nd Avenue	Pedestrian Facility Improvements		P C		
SW 117th Avenue	SW 24th Street	SW 113th Avenue	Pedestrian Facility Improvements		P C		
SW 137th Avenue	SW 72nd Street	SW 56th Street	Bicycle Facility Improvements (Restriping)		P C		
SW 2nd Avenue	SW 15th Road	SW 8th Street	Bicycle Facility Improvements (Restriping)		P C		
SW 25th Road	Brickell Avenue	Coral Way	Bicycle Facility Improvements (Restriping)		P C		
SW 3rd Avenue	US-1	SW 22nd Street	Bicycle Facility Improvements (Restriping)		P C		
SW 32nd Avenue	S Dixie Highway	SW 22nd Street	Pedestrian Facility Improvements		P C		
SW 32nd Road	Vizcaya Metrorail Station	Coral Way	Bicycle Facility Improvements (Restriping)		P C		
SW 32nd Road	Brickell Avenue	Vizcaya Pedestrian Bridge	Bicycle Facility Improvements (Restriping)		P C		
SW 40th Street	University Drive	Segovia Street	Pedestrian Facility Improvements		P C		
SW 40th Street	Segovia Street	SW 42 Avenue	Pedestrian Facility Improvements		P C		
SW 56th Street	SW 137th Avenue	SW 132nd Avenue	Pedestrian Facility Improvements		P C		
SW 57th Avenue	Blue Road	SW 40th Street	Pedestrian Facility Improvements		P C		
SW 57th Avenue	SW 64th Street	SW 56th Street	Pedestrian Facility Improvements		P C		

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Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
SW 57th Avenue	SW 40th Street	Seville Avenue	Pedestrian Facility Improvements		P C		
SW 64th Street	SW 72nd Avenue	SW 67th Avenue	Pedestrian Facility Improvements		P C		
SW 67th Avenue	SW 72nd Street	SW 64th Street	Pedestrian Facility Improvements		P C		
SW 72nd Avenue	SW 4th Street	W Flagler Street	Bicycle Facility Improvements (Restriping)		P C		
SW 72nd Street	SW 72nd Avenue	SW 67th Avenue	Pedestrian Facility Improvements		P C		
SW 8th Street	SW 107th Avenue	SW 102nd Avenue	Pedestrian Facility Improvements		P C		
SW 8th Street	SW 122nd Avenue	SW 112th Avenue	Pedestrian Facility Improvements		P C		
SW 8th Street	SW 132nd Avenue	SW 127th Avenue	Pedestrian Facility Improvements		P C		
SW 8th Street	SW 82nd Avenue	SW 76th Court	Pedestrian Facility Improvements		P C		
SW 8th Street	SW 137th Avenue	SW 132nd Avenue	Pedestrian Facility Improvements		P C		
SW 97th Avenue	SW 72nd Street	SW 64th Street	Pedestrian Facility Improvements		P C		
SW 97th Avenue	SW 64th Street	SW 56th Street	Pedestrian Facility Improvements		P C		
Tamiami Canal Road	SW 8th Street	NW 7th Street	Bicycle Facility Improvements (Restriping)		P C		
Tamiami Canal Road	West Flagler Street	SW 8th Street	Bicycle Facility Improvements (Restriping)		P C		
Urban Center Pedestrian Safety and Mobility Improvements	Various Locations		Non-motorized Facility Improvements		P C		
W 4th Avenue	W 33rd Street	W 37th Street	Pedestrian Facility Improvements		P C		
W 4th Avenue	W 49th Street	W 53rd Street	Pedestrian Facility Improvements		P C		
W 4th Avenue	W 53rd Street	NW 114th Street	Pedestrian Facility Improvements		P C		
W 4th Avenue	NW 114th Street	NW 119th Street	Pedestrian Facility Improvements		P C		
W 68th Street	SR 826	W 16th Avenue	Pedestrian Facility Improvements		P C		
W Dixie Highway	NE 171st Street	NE 186th Street	Pedestrian Facility Improvements		P C		
W Flagler Street	NW 79th Avenue	NW 72nd Avenue	Pedestrian Facility Improvements		P C		
W Okeechobee Road	NW 103rd Street	W 18th Avenue	Pedestrian Facility Improvements		P C		
W Okeechobee Road	W 8th Avenue	W 4th Avenue	Pedestrian Facility Improvements		P C		

Planning & Design P | Construction C

Table 4-15 cont'd | Non-motorized Projects [Miami-Dade 2035 Long Range Transportation Plan]

Facility/Corridor	From	To	Description	Priority/Funding Phase			
				I 2010-2014	II 2015-2020	III 2021-2025	IV 2026-2035
Bike Boulevard Demo Project	NW 32 Avenue/NW 41 Street	NW 11 Avenue/ Little River Drive	Bike Boulevard improvements			P C	
Biscayne Trail "C"	SW 280th Street	SW 328th Street	Trail Improvements			P C	
M-Path Master Plan	SW 37th Avenue	SW 67th Avenue	Trail Improvements			P C	
Non-motorized Safety Program	Various Locations		Improve safety by public outreach initiatives			*	
NW/NE 131st Street	NW 22nd Avenue	NE 16th Avenue	Bicycle Facility Improvements			P C	
Overtown Greenway (except portion between NW 3rd and 7th Avenue)	Miami River Greenway	Bicentennial Park	Trail Improvements			P C	
Safe Route to School Program	Various Locations		Non-motorized Facility Improvements			P C	
Snapper Creek Trail	North of SW 56th Street	SW 72nd Street	Trail Improvements			P C	
Urban Center Pedestrian Safety and Mobility Improvements	Various Locations		Pedestrian Facility Improvements			P C	
Atlantic Trail (except portion between 44th and 46th Street)	23rd Street	64th Street	Trail Improvements				P C
Biscayne Trail "D"	SW 97th Avenue	US-1	Trail Improvements				P C
Ingraham Highway	SW 376th Street	SW 392nd Street	Bicycle Facility Improvements				P C
Non-motorized Safety Program	Various Locations		Improve safety by public outreach initiatives				*
Old Cutler Road Path Phase 2	SW 136th Street	SW 88th Street	Trail Improvements				P C
Safe Route to School Program	Various Locations		Non-motorized Facility Improvements				P C
SW 192nd Avenue	SW 344th Street	SW 376th Street	Bicycle Facility Improvements				P C
SW 344th Street	SW 192nd Avenue	NW 6th Avenue	Bicycle Facility Improvements				P C
SW 376th Street	Ingraham Highway	SW 192nd Avenue	Bicycle Facility Improvements				P C
SW 392nd Street	Ingraham Highway	Everglades National Park	Bicycle Facility Improvements				P C
SW 48th Street	SW 117th Avenue	SW 82nd Avenue	Bicycle Facility Improvements				P C
Urban Center Pedestrian Safety and Mobility Improvements	Various Locations		Pedestrian Facility Improvements				P C

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* Denotes program expenditure by period.

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5 Transportation Systems Management and Operations

Chapter Highlights

- U.S. Department of Transportation Congestion Initiative
- Congestion Management Process (CMP)
 - Miami-Dade 2009 Congestion Management Process (CMP)
 - Role of Congestion Management Process in the Metropolitan Planning Process
- Transportation Demand Management (TDM)
- Intelligent Transportation Systems

Transportation Systems Management & Operations (TSM&O) is an integrated planning approach designed to improve the performance of the existing transportation infrastructure by relieving congestion, and allowing for the safe movement of people and goods. SAFETEU-LU places considerable emphasis on systems management and operations, as illustrated by one of the eight planning factors, "Promoting efficient system management and operation."

The 2035 LRTP includes several congestion management improvements to address the needs of the County's existing and future transportation supply and, incorporates transportation demand management and intelligent transportation system improvements to efficiently manage the demand on the system.

U.S. Department of Transportation Congestion Initiative

In 2006, the U.S. Department of Transportation (US DOT) introduced the *National Strategy to Reduce Congestion on America's Transportation Network*, referred to as the Congestion Initiative. The Congestion Initiative is a program designed to curb growing congestion. The Miami-Ft. Lauderdale region was selected as one of five urban partners to participate in a series of congestion relief programs. These urban areas were sought to implement four complementary and synergistic strategies, referred to as the "4Ts," to relieve urban congestion: Tolling, Transit, Telecommuting, and Technology.

The I-95 Express High Occupancy Toll Lanes project is the result of the Urban Partnership Agreement between the Miami-Fort Lauderdale urban area and the USDOT. This project, included in the 2035 Cost Feasible Plan, incorporates the use of tolling and technology as a means to implement toll collection electronically.



Congestion Management Process

SAFETEA-LU, Section 6001, mandates the development and implementation of a Congestion Management Process (CMP) to serve as an integral component of the long range transportation planning process; the CMP is required of all Transportation Management Areas (TMAs). Prior to SAFETEA-LU, the CMP was known as the Congestion Management System (CMS). Since the reauthorization, the CMS was reinvented into the CMP to reflect a shift in perspective and regulatory requirements.

As defined by the Federal Highway Administration (FHWA), the CMP is a systematic process for defining what levels of congestion are acceptable to the community; developing performance measures to monitor congestion levels; identifying alternative solutions to manage congestion; prioritizing funding for those strategies; and assessing the effectiveness of those actions. **Table 5-1** outlines the eight key steps embodied within a CMP.

Table 5-1 | Congestion Management 8-Step Process

Develop Congestion Management Objectives

Identify Area of Application

Define System or Network of Interest

Develop Performance Measures

Institute System Performance Monitoring Plan

Identify and Evaluate Strategies

Implement Selected Strategies and Management Transportation System

Monitor Strategy Effectiveness

Source: An Interim Guidebook on the Congestion Management Process in Metropolitan Transportation Planning, FHWA

Federal regulation 23 CFR Part 450.320 summarizes the required components of the CMP as follows:

- Methods to monitor and evaluate the performance of multimodal transportation systems, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;
- Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods;
- Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions;
- Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures;
- Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

- Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures.

Miami-Dade 2009 Congestion Management Process (CMP)

The Miami-Dade MPO last updated its CMS document in 2004. The 2004 CMS is a dynamic process that has expanded in scope and content over the last several years and is currently known as the Congestion Management Process (CMP). The 2009 CMP is consistent with the recent changes in scope and federal requirements, as catalyzed by SAFETEA-LU. Traditionally, Miami-Dade County's LRTP has primarily focused on capital investments needed to address the projected travel demand; however, funding constraints, concerns related to quality of life, regional and global environment, and land use implications have necessitated a close examination of alternative approaches such as effective systems management and operations. The 2009 CMP is a fully integrated component of the 2035 LRTP.

The CMP is a systematic approach to transportation improvements that is expected to support the County's transportation vision, goals and objectives. The CMP aims for safer and more effective management and operation of new and existing transportation facilities through travel demand reduction and operational management strategies. The CMP is comprised of three objectives:

- Reduce vehicle trips and trip lengths;
- Shift trips from single-occupancy vehicles to high-occupancy vehicles and other modes; and
- Maximize effectiveness and efficiency of the existing system.

The CMP aims to build on the previous efforts of the 2004 CMS by:

- Furthering the County's transportation vision as established in the County's 2035 LRTP;
- Defining systematic methods to monitor and evaluate system performance;
- Focusing on management and operations and, demand management;
- Using specific performance measures to identify, and evaluate congestion and congestion management strategies;
- Defining a program of data collection and management incorporating existing data sources and methods;
- Defining procedures for periodic review of the effectiveness of strategies selected for implementation, as well as assessments of the usefulness of performance measures and supporting data; and,
- Addressing congestion related issues in a holistic way encompassing a broad range of multimodal and non-transportation elements.

The 2004 CMS identified congestion based on a Relative Congestion Ratio (RCR); this same measure is applied to the 2009 CMP. The RCR is defined as the existing Volume-to-Capacity (V/C) ratio divided by the adopted V/C ratio for the traffic count location. The adopted V/C ratio refers to acceptable LOS thresholds established in the County's Comprehensive Development Master Plan (CDMP). The County has adopted congestion thresholds based on several factors such as availability of public transportation and geographic location.

The RCR used to identify congested spots and corridors, takes into account current and future conditions and is referred to as weighted RCR. The weighted RCR is calculated as follows:

$$\text{Weighted RCR} = (\text{Existing RCR} \times .60) + (\text{Future RCR} \times .40)$$

Roadway segments with weighted RCR values of 0.90 or greater are considered congested or nearly congested. The following categories are used for classification:

- Nearly Congested: $0.90 < \text{RCR} \leq 1.00$
- Moderately Congested: $1.00 < \text{RCR} \leq 1.20$
- Highly Congested: $\text{RCR} \geq 1.20$

The Transportation Planning Technical Advisory Committee (TPTAC) of the Miami-Dade MPO approved the criteria that a corridor should be at least two miles in length to be considered a CMP corridor. Roadway segments less than two miles in length are considered congested spots.

Additional congestion management improvements were identified through the Miami-Dade Freight Plan, and several agency master plans.

Role of Congestion Management Process in the Metropolitan Planning Process

In accordance with federal regulations, Miami-Dade's CMP will direct the 2035 LRTP process by:

- Identifying projects that can be programmed into the LRTP and TIP.
- Assisting in the prioritization of projects in the TIP and/or LRTP.
- Identifying a set of well-defined congestion mitigation/alleviation strategies that can be implemented on congested and/or strategically significant (i.e. evacuation routes) corridors.

The purpose of the Congestion Management Process and LRTP integration is to provide a seamless connection between the two planning processes, whereas in the past, they were separate and relatively ineffective. The LRTP's congestion management financial set-aside enables both a commitment to congestion management improvements in the fiscally constrained plan and the flexibility to implement congestion management improvements as appropriate. The fiscally constrained Congestion Management Process will consist of three elements:



Open-Road Tolling Gantry, Miami-Dade Expressway (MDX) Facility

1. Candidate facilities identified for congestion management improvements;
2. Financial resources set-aside for congestion management improvements; and
3. Toolbox of congestion management strategies.

Successful implementation of the congestion management improvements would simply be guided by the LRTP in regards to the availability of funding, pre-determined facilities, and the toolbox of improvement types and strategies. The toolbox will include a variety of congestion management strategies that will be prioritized based on the nature and scope of improvements. For example, solutions that reduce auto trips or improve traffic operations would be more favorable over solutions such as adding additional road capacity. Some examples of congestion management improvements are included in **Table 5-3 (page 5-5)**. The complete toolbox is included in the CMP.

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) is a subcategory of congestion management that emphasizes strategies affecting a person's travel behavior or patterns to efficiently manage congestion. The main objective of TDM is to alleviate congestion through alternative means, which do not require large capital expenditures. Managing the demand on the transportation can prove to be a cost-effective alternative to increasing capacity. Some of the TDM strategies discussed during the 2035 LRTP development process are listed in **Table 5-2**.

One particular TDM strategy employed by Miami-Dade County is the South Florida Vanpool (SFVP) program, which



was created by the Miami-Dade MPO in 1998. Today, the SFVP program has expanded to include Broward and Palm Beach counties, with 201 vanpools operating within the tri-county area.

Table 5-2 | Examples of TDM Strategies

Congestion Pricing	Variable road tolling on the transportation system to reduce peak-period traffic volumes
Park-and-Ride Options	Parking facilities at transit stations, bus stops and along roadways to accommodate transit and rideshare use
Rideshare Options	Refers to carpooling and vanpooling
Telework/Telecommute	The use of telecommunications (telephone, email, online, etc.) to substitute for physical travel
Transit-Oriented Development	Residential and/or commercial development designed to maximize access by transit and non-motorized transportation

Source: Victoria Transport Policy Institute

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) employ the use of advanced information and communication technologies to improve the efficiency and safety of Miami-Dade's transportation system. ITS allows transportation operators and users to optimally manage the use of new and existing transportation infrastructure. ITS collects data on roadways, public transit vehicles, freight and rail, and assimilates that data into meaningful ways to improve systems operation and the decision-making process.

The 2035 LRTP includes a myriad of both highway and transit ITS improvements. Some example project types included in this plan are:

- Advanced Traffic Management Systems
- Open-Road Tolling (ORT)
- Bus Signal Priority
- Metrobus Automatic Passenger Counting System
- Metrorail/Metrobus EASY Card Electronic Fare Collection System

Table 5-3 | Examples of Congestion Management Strategies

Signal Optimization	Strategies designed to make traffic signals operate at an optimal level
Access Management	Improving the design and placement of roadways, driveways, and medians to reduce traffic conflicts
Reversible Lanes	Operational improvements in which traffic may flow in either direction
Signs and Markings	Improvements to navigation through an area
HOV Lane Priority	Strategies that give priority to high-occupancy vehicles
Dedicated Bus Lanes	Bus lanes that have their own right-of-way and operate separately from other traffic
Compact Development	Smart growth/land use strategies designed to increase densities for residential and commercial developments
Advance Traveler Information Systems	The use of intelligent transportation systems to improve transportation system performance and efficiency by disseminating travel information to users
Electronic Toll Collection	Technology that allows for the electronic payment of roadway tolls

Source: 2009 Miami-Dade Congestion Management Process



Active Traffic Management Systems

The ability to dynamically manage recurrent and nonrecurrent congestion based on prevailing traffic conditions. Focusing on trip reliability, it maximizes the effectiveness and efficiency of the facility. It increases throughput and safety through the use of integrated systems with new technology, including the automation of dynamic deployment to optimize performance quickly and without the delay that occurs when operators must deploy operational strategies manually.

This congestion management approach consists of a combination of operational strategies that, when implemented in concert, fully optimize the existing infrastructure and provide measurable benefits to the transportation network and the motoring public. These strategies include but are not limited to speed harmonization, temporary shoulder use, junction control, and dynamic signing and rerouting. Managed lanes, as applied in the United States, are an obvious addition to this collection.

Source: Federal Highway Administration (FHWA)

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6 Intermodal Systems Planning

Chapter Highlights

- Miami-Dade Freight Plan
- Miami-Dade Bicycle/Pedestrian Plan

Intermodal systems planning is the process of connecting individual modes of transportation, such as highways, transit, freight, and bicycle/pedestrian facilities into one integrated transportation system. The central theme is to develop a unified transportation system that will, essentially, provide for the safe and efficient movement of people and goods.

The 2035 Miami-Dade LRTP includes an array of improvements utilizing all modes available to the system. There were two separate plans developed concurrently with the 2035 LRTP: the Miami-Dade Freight Plan and Bicycle/Pedestrian Facilities Plan. Both of these plans incorporate integrated elements of the 2035 LRTP.

Miami-Dade Freight Plan

Freight movement touches the lives of all businesses and residents throughout the County. Without efficient goods movement, the economic engine of the County would stall. The efficient movement of these goods is a critical component of Miami-Dade County residents' daily lives and should be planned for as a necessary activity for continued growth and prosperity.

The Miami-Dade Freight Plan addresses the County's freight mobility needs and identifies candidate freight improvements that have been incorporated into the 2035 LRTP. The Freight Plan describes the County's freight system, identifies needed improvements and policies through the year 2035. To this end, the freight industry (as with the robust regional tourism industry) requires financial public support, and advocacy to fulfill its needs and serve County residents. Freight movement and generation trends tend to follow the ebb and flow of the national and regional economies, whereas goods movement modal shifts and technological advances follow regulatory and industry efficiency trends. The balance between these two different, dynamic drivers should be planned for so that the ever-changing freight industry is consistently well represented in the MPO.

Freight needs are similar to those of the commuting public. Freight modes use much of the same infrastructure. Knowing the issues and potential conflicts (now and in the future) provides insight into mitigating the negative impacts and accentuating the positive. Freight needs are addressed by projects and policies that relate to the requirements of the freight industry and that benefit the region. The candidate freight improvements were assessed, among other priorities, to provide the best infrastructure improvement and maintenance program for the County.

Freight Plan Goals

The following eleven goals were developed by the Freight Transportation Advisory Committee and the Miami-Dade MPO.

1. Support economic development by enhancing freight system connectivity.
2. Advance strategic freight initiatives that support job creation and retention to enhance the region's long-term competitive position.
3. Enhance freight transportation safety and convenience to ensure mobility and access.
4. Provide the secure movement of international and domestic goods.
5. Address the varied freight improvement needs of area shippers, carriers and distributors at both a regional and corridor level.
6. Improve multimodal access in order to enhance freight efficiency throughout the County.
7. Promote methods for regional goods movement that are socially and environmentally responsible.
8. Educate the public on the importance of freight transportation to the region as well as the needs and issues of shippers, carriers, and other affected stakeholders.
9. Give greater priority and attention to freight in the regional planning process.
10. Make public investments that help minimize the cost and improve the reliability of goods movement within County.
11. Implement and maintain freight initiatives that provide long-term returns on public investment.

Freight Improvements

Candidate freight improvements have been identified by developing a consolidated inventory of existing projects and comparing the inventory of projects in relation to needs addressed through data analysis, stakeholder input, and consistency with Freight Plan and LRTP goals and objectives. The data analysis included a commodity flow study of historic trends and future forecast through 2035, a subarea study of the Medley area, an origin and destination study based on a survey of area truckers, and a review of outputs of the region's travel demand model. Cost feasible freight improvements are listed in **Table 6-1** (page 6-3) and depicted on **Figure 6-1** (page 6-4). These projects are also listed among other system improvements in the cost feasible tables in Chapter 4 - *Plan Development Process*.

Table 6-1 | Cost Feasible Freight Projects

Facility/Corridor	From	To	Description
NW 25th Street	NW 89th Court	HEFT	Traffic signal improvements; improve intersections to accommodate truck movements.
NW 25th Street Viaduct	SR 826	NW 87th Court	Phase 2 - construction of Viaduct from SR 826 to NW 87th Court
NW 87th Avenue	NW 36th Street	NW 58th Street	Widen to 6 lanes (4 to 6)
NW 87th Avenue extension	NW 58th Street	NW 95th Street	Extend to connect the freight hubs of Doral and Medley
NW 107th Avenue	NW 41st Street	NW 25th Street	Widen to 6 lanes (4 to 6)
Truck Parking Improvement		Okeechobee Road	Provide a location in the area of Okeechobee and the HEFT for long-term truck parking and staging.
Truck Parking Improvement			Develop a truck staging area near NW 36th Street and NW 37th Avenue for the Port of Miami River.
Downtown/Port Access			Construct I-95 NB Slip Ramp on NW 6th St; Implement NE/ NW 5th/6th St/Port Blvd. improvements for access between POM and I-95 slip ramp
Freight Rail Safety and Security			Safety and security enhancements of freight transportation system, including grade crossing improvements and signal upgrades
Medley Bridge/Canal Improvement Program	NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave		Improve the connections between Okeechobee Rd and Medley through a combination of bridge widening and canal improvements (NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave)
SR 5/US-1/ Biscayne Boulevard			Expand SB left turn lane for trucks entering Port
SR 924/Gratigny Parkway Extension (east)	NW 32nd Avenue	I-95	Limited access facility providing E/W mobility to I-95
Congestion Management Improvements			
Freight Rail Landside Access			Projects that enhance landside access, including intermodal ramps and truck access to railroad terminals
Integration of Truck Route System and Regional ITS Network			Implementation of ITS improvements specifically geared toward trucks
Medley freight hub streetlight and local roadway improvements			Improve the local infrastructure to and from businesses in the Medley area-pavement, turning radii. 15 miles of roadway
Medley Gateway Establishment			Provide business and wayfinding signing, including a Medley area business inventory
North River Drive	NW 107th Avenue	NW 74th Avenue	Widen North River Drive to include shoulders and improved access management
NW 12th Street		NW 87th Avenue	Signal Improvements
NW 36th St/41st Street	NW 42nd Avenue	HEFT	Express Street (ITS, grade separations, etc.)
NW 87th Avenue	SR 836	NW 58th Street	Improve SR 836/NW 12th Street/NW 87th Avenue interconnections; improve intersections to accommodate truck movements
Port of Miami Operations			PierPass Feasibility Study to examine the impact of implementing congestion mitigation incentives for off-peak operations
SR 25/Okeechobee Road Operations/Access Improvements	NW 138th Avenue	79th Avenue	Signal timing improvements, improve access and improve signing to provide better flow along Okeechobee and access from side roads and access by trucks to and from Medley
SR 826/SR 9/I-95 Interchange			Congestion improvements; improve turning radius/speeds on ramp from Turnpike to WB SR 826
SR 997/Krome Avenue	SR 90/Tamiami Trail	US-1	Improve intersections to accommodate truck movements
Way-Finding Sign Improvement Program			Improve county-wide for movements to/from regional freight hub

Miami-Dade Bicycle/Pedestrian Plan

The non-motorized transportation element of the 2035 L RTP represents bicycling, walking, and other pedestrian-oriented modes of travel. Non-motorized forms of travel are equally important as highway and transit modes. In a 2009 report published by Transportation for America, *Dangerous by Design*, Miami was rated as the third most dangerous metropolitan area for walking, with a Pedestrian Danger Index (PDI) of 181.2 in 2008; the top two metropolitan areas were Orlando and Tampa, with a PDI of 221.5 and 205.5, respectively. This statistic highlights the importance of providing non-motorized improvements within the County. The PDI is used to assess the relative risks of walking in cities (Figure 6-2).

Figure 6-2 | Pedestrian Danger Index (PDI) Formula

FORMULA

$$\text{Pedestrian Danger Index (PDI)} = \frac{(\text{Total 2007-2008 pedestrian fatalities/population}) \times 100,000}{\text{Percentage of commuters walking to work}}$$

Source: *Dangerous by Design*, Transportation for America

The purpose of the Bicycle/Pedestrian Plan is to make the County a place where cycling and pedestrian activities are safe, easy, attractive, and convenient modes of transportation and recreation for people of all ages and abilities. The plan serves the following purposes:

- Define goals and objectives for bicycle and pedestrian infrastructure development in the County;
- Allow inclusion of bicycle and pedestrian planning efforts in the County's 2035 L RTP;
- Guide state, county, and local agencies in developing bicycle and pedestrian facilities;
- Allow coordination of plans and policies of different state, county, and local agencies so that the needs of cyclists and pedestrians are weighted equally with the needs of other travel modes;
- Provide recommendations to implement identified goals and objectives; and,
- Direct County funding to venues through the People's Transportation Plan and the Florida Department of Transportation's Safety Office's Bicycle and Pedestrian Safety Grant Program.

Bicycle/pedestrian facilities are often times an overlooked mode of transportation in an auto-oriented society; there are several substantial health and economic benefits directly attributed to providing bicycle/pedestrian facilities – or, "active transportation" options.

In its report, *Active Transportation for America*, the Rails-to-Trails Conservancy outlined several direct benefits associated with integrating bicycling and walking into our existing transportation system, such as a reduction in vehicle miles traveled, fuel savings, and congestion relief, which, when effectively combined with other strategies can significantly lower CO₂ emissions. Some examples of bicycle and pedestrian infrastructure are listed in Table 6-1.

Table 6-2 | Bicycle and Pedestrian Infrastructure Examples

Pedestrian Infrastructure	Bicycle Infrastructure
Sidewalks/Walkways	Bike Lanes
Pedestrian overpass/underspass	Shared-use paths/trails
Transit stop treatments	Bike route signs
Street furniture	Bike racks/lockers

The County's Bicycle/Pedestrian Network consists of the following three facility types:

- **On-road Facilities:** The existing on-road bicycle and pedestrian network is based on the Metropolitan Planning Organization's (MPO) designated Major Road Network except facilities such as highways, limited access facilities, High Occupancy Vehicles (HOV) and toll facilities, and ramps where bicycling is prohibited. All corridors that area part of the Major Road Network are eligible for federal transportation funding through the MPO process. The County has approximately 160 miles of on-road bicycle facilities.
- **Off-road Bicycle Facilities:** Off-road bicycle facilities are separated from the roadway surface by a curb or some other type of border. They may also include greenways, trails, and shared-use paths and are often considered more suitable for mountain biking. The County has approximately 260 miles of existing or under-construction off-road facilities.
- **Sidewalk Facilities:** Most functionally classified arterial and collector roadway have sidewalks creating a large network of pedestrian facilities.

Bicycle/Pedestrian Improvements

The bicycle needs assessment identified facilities where bicycle improvements should be prioritized. The Plan's goals and objectives were used to develop evaluation criteria that were broadly divided into four parameters: Existing Conditions, Connectivity, Local Support, and Cost Feasibility. Each parameter included one or more variables measuring different aspects of a given parameter. For example, the connectivity parameter included variations such as access to transit facilities, schools, parks, and high-density residential and commercial land uses. Evaluation Criteria and weights assigned by the Bicycle and Pedestrian Advisory Committee were used to conduct a needs assessment analysis for on-road and off-road facilities. The results are presented in **Tables 6-2 and 6-3**.

Table 6-3 | On-road Facility Needs Assessment

Need	Roadway Miles	Percent of Total
Very Low Need	282	18.7%
Low Need	369	24.5%
Moderate Need	320	21.3%
High Need	328	21.8%
Very High Need	206	13.7%
Total	1,505	100%

Table 6-4 | Off-road Facility Needs Assessment

Need	Trail Miles	Percent of Total
Very Low Need	153	21.6%
Low Need	210	29.6%
Moderate Need	111	15.7%
High Need	109	15.4%
Very High Need	126	17.7%
Total	709	100%

The 2035 Cost Feasible Plan includes new multi-use paved paths, bike lanes and sidewalk projects that have been developed based on technical review and public input. The 2035 Cost Feasible Plan was established from the L RTP policy allocating at least 1.5% of projected surface transportation funds to non-motorized transportation, as well as funds from the federal Transportation Enhancement and Safe Routes to School Programs. The total projected non-motorized set-aside equals \$58.1 million in 2008 dollars.

The 2035 Cost Feasible Plan includes funding for 58 miles of new sidewalks, 136 miles of new bicycle facilities, as well as funding for safe routes to school and other safety and mobility improvements. Cost feasible non-motorized projects are listed in **Table 4-15** (page 4-47 through 4-55) and illustrated in **Figure 4-8** (page 4-46).

Safe Routes to School

SRTS is a national initiative that seeks to encourage children to safely walk and bicycle to school. SAFETEA-LU, Section 1404, created the SRTS program and, allocated approximately \$612 million (FY 2005 – 2009) to administer the SRTS program for elementary and middle school students in grades K-8. The appropriated funds are available for infrastructure and noninfrastructure improvements.

Eligible Infrastructure Improvements include:

- Sidewalk improvements
- Traffic calming and speed reduction improvements
- Pedestrian and bicycle crossing improvements
- On-street bicycle facilities
- Off-street bicycle and pedestrian facilities
- Secure bicycle parking facilities
- Traffic diversion improvements in the vicinity of schools

Eligible Noninfrastructure improvements include:

- Public awareness campaigns and outreach to press and community leaders
- Traffic education and enforcement in the vicinity of schools
- Student sessions on bicycle and pedestrian safety, health, and environment
- Funding for training, volunteers, and managers of safe routes to school programs





⑦ Regional Long Range Transportation Plan

Chapter Highlights

- 2035 Regional Long Range Transportation Plan (RLRTP) Overview
- Corridors of Regional Significance



2035 Regional Long Range Transportation Plan (RLRTP) Overview

The Year 2000 Census designated the Broward, Miami-Dade, and Palm Beach MPO areas as one urbanized area, the Miami Urbanized Area, as depicted in **Figure 1** (page 7-3). Currently, the Miami Urbanized Area is the 7th largest metropolitan statistical area in the United States, with a total population of close to 5.5 million.

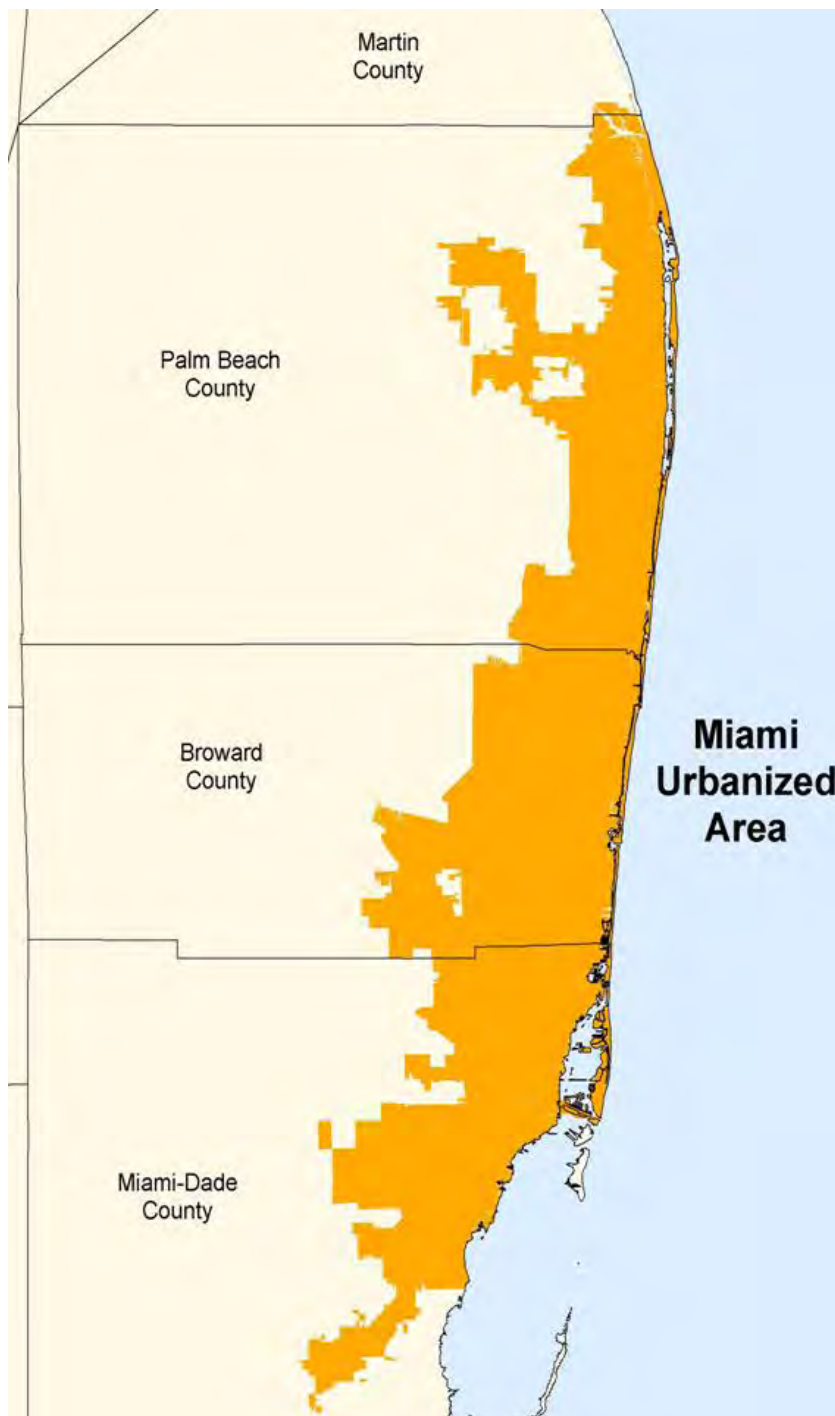
The Southeast Florida Transportation Council (SEFTC) was created, per section 334.175(s)(i)(2) F.S., to coordinate and communicate the regional transportation planning initiatives of the Metropolitan Planning Organizations (MPOs) of Broward, Palm Beach, and Miami-Dade counties.

The Miami-Dade MPO has been closely coordinating the 2035 transportation planning process with its neighboring counties Broward and Palm Beach from the development of goals to the preparation of the cost feasible plan. As a result of these coordination efforts, southeast Florida will have produced in the year 2010, the first fully integrated Southeast Florida Regional Long Range Transportation Plan (RLRTP). As implied, the 2035 RLRTP is the tool linking Palm Beach, Broward and Miami-Dade counties MPOs' long range plans together into one vision (**Table 7-1**).

Table 7-1 | Main Components of the 2035 Regional Long Range Transportation Plan

Overview of Regional/Statewide Studies and Plans <i>Thirty (30) documents that pertain to the regional transportation system and existing and forecast travel activities in the three-county area were reviewed. For each document reviewed, the relevancies and inconsistencies to the 2035 RLRTP were summarized and documented into one technical memorandum.</i>	Regional Needs Plan <i>All local MPO Needs Plans were collected, reviewed and compiled to prepare the Regional Needs Plan. Only projects affiliated with the Regional Transportation Network will be in the Regional Needs Plan.</i>
Regional Goals, Objectives and Measures of Effectiveness <i>Regional goals, objectives, and measures of effectiveness were developed to ensure the plan is in-line with the Federal guidelines, State guidelines, and local MPO 2035 Long Range Transportation Plan's (LRTP's).</i>	Regional Finance Plan <i>Regional revenue projections for transportation funding that will be available over the next 25 years to support the region's cost-feasible plan were developed for the counties of Palm Beach, Broward and Miami-Dade. Essentially, the three local MPO revenue forecasts were reviewed and compiled to obtain a regional revenue forecast along with regional funding sources.</i>
Regional Public Involvement <i>Regional public involvement (PI) activities were coordinated through the public involvement activities of the three MPO LRTP updates. Regional information and materials were included during local activities and were designed to solicit input on regional transportation concerns and proposals.</i>	Regional Cost Feasible Plan <i>All local MPO Cost Feasible Plans were collected, reviewed and compiled to prepare the Regional Cost Feasible Plan. Only projects affiliated with the Regional Transportation Network will be in the Regional Cost Feasible Plan.</i>
Regional Transportation Network <i>The Corridors of Regional Significance were revised and updated based on a revised set of criteria. The updated network is titled the Regional Transportation Network.</i>	Regional Interim Year Plans <i>Interim year plans were reviewed for consistency across the three local MPO plans for projects identified on the Regional Transportation Network.</i>
Regional Modeling <i>Through the Regional LRTP efforts, the modeling activities for each MPO plan were coordinated to ensure a consistent methodology was applied across the region. The end product was one coded network in the regional model (SERPM). The regional-level modeling reviews generally focused on regional corridors, external travel, and travel between the three counties.</i>	Regional Transit Quality of Service Assessment <i>A Regional Transit Quality of Service Assessment was conducted for the three county area. Twenty origin-destination pairs were selected within the region for measuring the existing quality of transit service. The three measures quantified included: Service frequency, Hours of service, and Transit-auto travel time. Level of service ratings were reported for these three measures for each of the twenty origin-destination pairs.</i>

Figure 7-1 | Miami Urbanized Area



This document will provide a prioritized set of highway and transit improvements for the region in recognition of the regional characteristics of many travel needs. With the continuous interaction throughout the three southern counties, the intent is that this plan will provide additional opportunities for funding and transportation projects that would otherwise not have been available.

The Regional LRTP summary in **Appendix E** provides more information about the regional coordination process.

The Regional Transportation Technical Advisory Committee (RTTAC) committee responsible for the 2035 RL RTP development process includes representatives from the following agencies:

- Broward County Transit (BCT)
- Broward MPO
- Florida Department of Transportation – Districts IV and VI
- Florida’s Turnpike Enterprise
- Miami-Dade Expressway Authority
- Miami-Dade MPO
- Miami-Dade Transit (MDT)
- Palm Beach MPO
- Palm Tran
- South Florida Regional Planning Council (SFRPC)
- South Florida Regional Transportation Authority (SFRTA)
- Treasure Coast Regional Planning Council (TCRPC)

Corridors of Regional Significance

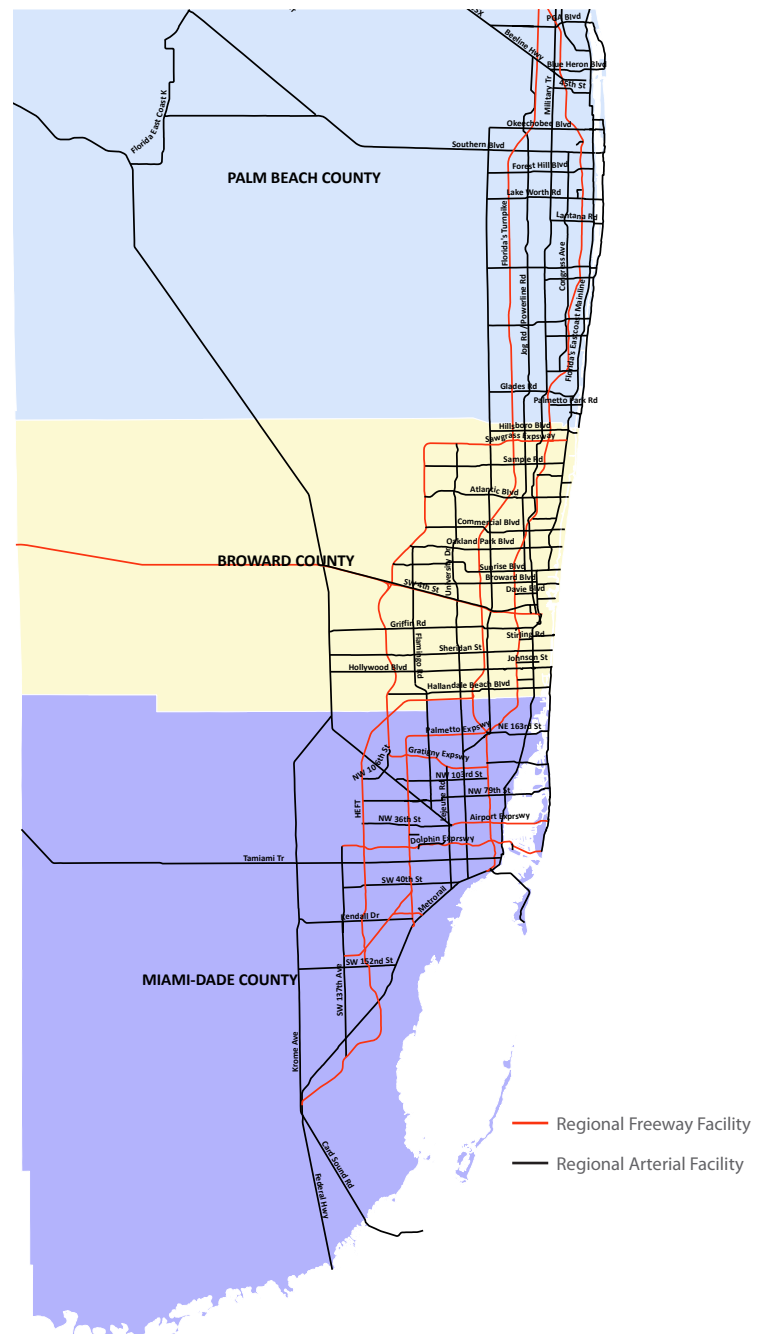
In 2006, the RL RTP Committee defined the Corridors of Regional Significance. The criteria for these corridors are listed below:

- Urban or Rural Principal Arterials – Interstate and Expressway
- Urban or Rural Principal Arterials – Others that Cross County Lines
- Urban or Rural Principal Arterials - with Two or more Connections to Regional Interstate and Expressway Facilities
- Rail Corridors Identified by FDOT as a portion of the Florida Strategic Intermodal System (SIS)

There are a total 66 regionally significant corridors spanning the three southeast counties. The 2035 LRTP will emphasize transportation improvements that occur along Corridors of Regional Significance. The Corridors of Regional Significance funnel transportation investments that will support the goals by determining which projects are of highest priority from a regional perspective.

As identified in Chapter 4 – *Plan Development Process*, there are several transportation improvements/projects presented in the 2035 Cost Feasible Plan that are located on or near regionally significant corridors. The criteria for Corridors of Regional Significance include: regional interstate and expressway facilities; major regional facilities, regional connector facilities, and SIS rail corridors. **Figure 7-2** illustrates the Corridors of Regional Significance spanning the tri-county area.

Figure 7-2 | Corridors of Regional Significance





8 Environment and Sustainability

Chapter Highlights

- Global Warming/Greenhouse Gas Emissions (GHG)
 - County Legislation
- Climate Change Emission Calculation Guidelines
- Vehicle Emissions Testing Methodology
- Environmental Mitigation Strategies



Sustainability is a relatively new term for many, and agreement as to what it means or how to achieve it remains an issue for debate. The Urban Land Institute (ULI) District Council in San Francisco is currently developing a succinct statement of what sustainability is and how to accomplish it in an effort to help focus the efforts of developers, public officials, environmentalists, citizens and businesses on how to build better places to live. In March 2009, Miami-Dade County was selected as one of three communities nationwide to participate in a sustainability planning toolkit pilot program through ICLEI-Local Governments for Sustainability (ICLEI), the aim of which is to develop an overarching Sustainability Plan. The Plan is intended to be integrated with the County's Strategic Plan, Comprehensive Development Master Plan, Aesthetic Master Plan, Water Use Efficiency Plan, as well as the Long Range Transportation Plan and Solid Waste Master Plan. It will leverage existing sustainability goals and initiatives, and develop new ones where needed. A central component of the plan will be the performance measures and targets associated with each initiative.

The goal of the Miami-Dade County plan, branded GreenPrint -- Our Design for a Sustainable Future, is to reaffirm, establish and synchronize the County government and community goals, initiatives and measures. The Core Planning Team acknowledges that the assessment includes gaps, unanswered questions and open issues; from County operations to municipal input. The plan was available for public comment and input for a 30-day period, from December 18, 2009 to January 18, 2010, to collect and ultimately reconcile the input from a broad base of stakeholders.

GreenPrint will be used as a model to replicate throughout local communities worldwide. It is quite an honor to have been chosen as a pilot community but, with it comes great responsibility. For years the Miami-Dade Board of County Commissioners (Board) and County departments have implemented policies and initiatives to address climate change and other important sustainability issues. The goal of the current effort is to better coordinate County plans and resources and raise awareness in the community for a sustainable future. The GreenPrint plan will serve as the framework to evaluate and integrate environmental, social and economic benefits in the policy decisions, programs and initiatives, and services Miami-Dade County delivers. The planning process and GreenPrint will adhere to the following guiding principles:

- The County will lead by example.
- The concept of sustainability will guide County policy and decision-making.
- Metrics and targets will be used to define goals and measure progress.
- The County will collaborate with local municipalities to create a sustainability movement among all jurisdictions in the County.
- Partnerships between jurisdictions and between the public and private sector are necessary to achieve sustainability goals.

- Transparency and accountability will guide the County's sustainability actions.
- Initiatives in the plan will be designed to be aggressive but achievable.
- The County will ensure the benefits of sustainability policies are equitably distributed to County residents.
- The plan will reflect community demographics and the economy and include the following key sustainability components addressing both County operations and the community as a whole:

Air quality	Land use
Biscayne Aquifer and Bay water quality	Local food sources
Climate change mitigation/adaptation	Parks and open space
Civic engagement	Public safety
Ecosystems and habitat	Public health
Energy supply and demand	Schools and education
Government operations	Transportation fleets and transit
Green businesses and jobs	Water and sewer capacity
Green procurement	Water-use efficiency
Housing affordability	Waste capacity and recycling

The Mayor's Sustainability Advisory Board was established to serve as a key stakeholder group contributing to the development and implementation of GreenPrint. The Board represents diverse constituents, which include: elected officials, business and real estate leaders, community designers, environmental and advocacy groups, academia, and regional planners. The role of the Board is to provide expertise on the sustainability challenges facing the County and offer strategic direction and advice for GreenPrint's development.

Global Warming/Greenhouse Gas (GHG) Emissions

In July 2006, the Miami-Dade County Board of County Commissioners passed an ordinance that established the Miami-Dade Climate Change Advisory Task Force (CCATF) for future policy creation and advice on building sustainable communities. The purpose of the CCATF is to serve as an advisory board to provide climate change-related technical assistance and advice to the Board of County Commissioners. The CCATF is charged with identifying potential future climate change impacts to Miami-Dade County and providing ongoing recommendations regarding mitigation and adaptation measures to respond to climate change.

The MPO has coordinated closely with the CCATF Greenhouse Gas Reduction Alternative Fuels and Transportation Subcommittee during the 2035 LRTP development process. This diverse group of knowledgeable and engaged individuals from various sectors of the community is charged with reviewing and analyzing climate change data and information, and subsequently providing recommendations to the Board of County Commissioners for actions that would further reduce greenhouse gas emissions, avoid or reduce the severity of anticipated climate change impacts. These recommendations and efforts will be developed, along with additional GHG emissions reduction initiatives, into an overall climate action strategy, which will become an integral component of GreenPrint.

County Legislation

MPO Resolution-38-09: Resolution directing staff to investigate climate emission calculation tools and incorporate climate change emission calculations in transportation studies, analysis and recommendations (Figure 8-1) directs the MPO to include greenhouse gas emissions analysis as part of planning multimodal transportation improvements in the Miami Urbanized Area. It requires research of climate emission calculation tools available through the International Council for Local Environmental Initiatives, the US Environmental Protection Agency, Miami-Dade County Department of Environmental Resources Management and the Miami-Dade County Planning & Zoning Department.

The resolution requires that analysis and associated recommendations be made regarding proposed transportation improvements such as road projects and transit alternatives and their impacts on the quantity of greenhouse gas emissions caused by each alternative.

It is important to understand that one critical piece of the formula, the efficiency of vehicles operating on our roads, is set by federal fuel efficiency standards. While these standards set the minimum allowable fuel efficiency, opportunities remain to influence the purchase of more efficient vehicles for both government and personal use. Other elements of a strong network, such as the structure and functioning of our roadways and public transportation, are directly addressed by the County through the institution of policies, goals, objectives, and measures set forth in several County Plans. Specifically, the four plans considered in this effort are the 2035 Long Range Transportation Plan (LRTP), the Draft Transit Development Plan FY2010 to 2019 (TDP), the 2009 Freight Plan, and the Transportation and Land Use Elements of the Comprehensive Development Master Plan (CDMP). A brief description of these plans is provided in **Table 8-1**.

Table 8-1 | Miami-Dade County Plans

Name of Plan	Responsible Entity	Aligns with	Brief Description
Comprehensive Development Master Plan (CDMP)	Miami-Dade County – Planning and Zoning Department	Other plans listed below are supposed to align with the CDMP	It sets the County's general objectives and policies addressing where and how it intends development or conservation of land and natural resources will occur during the next ten to twenty years, and the delivery of County services to accomplish the Plan's objectives.
2035 Long Range Transportation Plan (LRTP)	Metropolitan Planning Organization—established via interlocal agreement by County and Florida Department of Transportation which follows rules and regulations established by the US Department of Transportation	CDMP	Guides transportation investments in Miami-Dade County. Because there is only a limited amount of funding available for transportation the LRTP is used to prioritize funding allocated to transportation projects for all modes (roadways, public transportation, nonmotorized transportation, etc.)
Draft Transit Development Plan FY2010 to 2019 (TDP)	Miami-Dade County – Transit Department	LRTP	It is a strategic development and operational guide for public transportation used by Miami-Dade Transit for the next 10 year planning horizon.
2009 Freight Plan (Freight Plan)	Metropolitan Planning Organization	LRTP	The Miami-Dade Freight Plan has a goal of promoting regional goods movement that are socially and environmentally responsible.

Figure 8-1 | MPO Resolution-38-09

Agenda Item 4.B.2

MPO RESOLUTION #38-09

**RESOLUTION DIRECTING STAFF TO INVESTIGATE CLIMATE
EMISSION CALCULATION TOOLS AND INCORPORATE CLIMATE
CHANGE EMISSION CALCULATIONS IN TRANSPORTATION
STUDIES, ANALYSIS AND RECOMMENDATIONS**

WHEREAS, the Miami-Dade County Climate Change Advisory Task Force has recommended in a report accepted by the Board of County Commissioners that the County begin to plan for a 1.5 to 3 foot rise in sea level by 2050 due to human-induced climate change; and

WHEREAS, the County has been working to reduce our contribution to climate change since 1993 and is currently developing a new plan for local climate change mitigation; and

WHEREAS, transportation is widely acknowledged as a top contributor to greenhouse gas emissions leading to climate change, accounting for 38% of emissions in 1988, and 43% as of 2005; and

WHEREAS, the Miami-Dade County Board of County Commissioners adopted the “Cool Counties” goal of reducing our climate change emissions 80% by 2050; and

WHEREAS, the Miami-Dade Metropolitan Planning Organization should include as part of its analysis when planning multimodal transportation improvements in the Miami Urbanized Area the quantity of greenhouse gas emissions caused by different transportation scenarios,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA, that Board directs staff to: (1) investigate climate emission calculation tools available through the International Council for Local Environmental Initiatives, the United States Environmental Protection Agency, Miami-Dade County Department of Environmental Resources Management and the Miami-Dade County Planning & Zoning Department; and (2) include as part of MPO studies, analysis and recommendations regarding proposed transportation improvements in the Miami Urbanized Area such as proposed road projects and transit alternatives the quantity of greenhouse gas emissions caused by each transit or transportation option.

The adoption of the foregoing resolution was moved by Board Member Katy Sorenson. The motion was seconded by Board Member Sally A. Heyman, and upon being put to a vote, the vote was as follows:

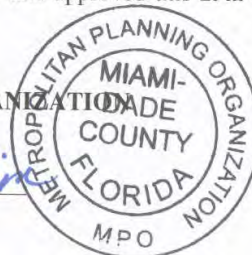
Chairman Dennis C. Moss-Aye
Vice Chairwoman Perla Tabares Hantman-Aye

Board Member Bruno A. Barreiro	-Absent	Board Member William H. Kerdyk	-Aye
Board Member Lynda Bell	-Absent	Board Member Joe A. Martinez	-Absent
Board Member Matti Herrera Bower	-Absent	Board Member Andre D. Pierre	-Absent
Board Member Jose “Pepe” Diaz	-Absent	Board Member Julio Robaina	-Absent
Board Member Audrey M. Edmonson	-Aye	Board Member Dorrin D. Rolle	-Aye
Board Member Shirley M. Gibson	-Aye	Board Member Marc D. Sarnoff	-Aye
Board Member Carlos A. Gimenez	-Aye	Board Member Natacha Seijas	-Absent
Board Member Maritza Gutierrez	-Aye	Board Member Katy Sorenson	-Aye
Board Member Sally A. Heyman	-Aye	Board Member Rebeca Sosa	-Absent
Board Member Barbara J. Jordan	-Aye	Board Member Javier D. Souto	-Absent

The Chairperson thereupon declared the resolution duly passed and approved this 29th day of October 2009.

**METROPOLITAN PLANNING ORGANIZATION
M.P.O.**

By Zainab Salim
Zainab Salim, Clerk
MPO Secretariat



The Miami-Dade 2035 Long Range Transportation Plan (LRTP) is guided by eight goals, including one to “protect and preserve the environment and quality of life and promote energy conservation.” The LRTP goals are specified by objectives, all of which are measured, either qualitatively or quantitatively, to assess the performance of the LRTP. The objectives listed under the environmental protection goal include the following:

- Minimize and mitigate air and water quality impacts of transportation facilities, services, and operations;
- Reduce fossil fuels use; and
- Promote the use of alternative vehicle technologies.

The 2035 LRTP Cost Feasible Plan includes several types of improvements and strategies that address these objectives, including:

- Managed lanes projects that include incentives for hybrid and high occupancy vehicles;
- Non-motorized financial set aside that includes funding for the development of bicycle paths and sidewalks to encourage non-motorized transportation;
- Express bus and bus rapid transit projects along Kendall, Biscayne and I-95 to provide alternatives to automobile travel;
- Park-and-ride lot development and expansion projects to provided improved access to transit services; and
- Congestion Management financial set aside that includes funding for the construction of multimodal facilities and transportation demand management programs.

Climate Change Emission Calculation Guidelines

Emissions analysis was conducted for the following four transportation infrastructure scenarios, which are described in detail below:

- 2005 Base Year
- 2035 Existing plus Committed (E+C)
- 2035 Candidate Improvements
- 2035 Cost Feasible Plan

The base year network represents the County’s highway and transit infrastructure in the year 2005. The 2005 network was utilized to validate and calibrate the SERPM (version 6.5) travel demand forecasting model used to simulate future demand on the transportation network.

The E+C network includes improvements to the network since 2005 plus short term committed improvements listed in the 2010 Transportation Improvement Program (TIP) (including improvements through 2014). The E+C network is simulated against 2035 population and employment projections, representing a no-build scenario for the LRTP between the years 2015 and 2035.

The Needs Plan network incorporates all projects identified as future needs through the year 2035, representing a vision network that is not financially-constrained. Finally, the Cost Feasible Plan network includes only the subset of Needs Plan improvements that the county can afford through 2035, representing a cost-constrained scenario.



Vehicle Emissions Testing Methodology

Vehicle emissions of the following pollutants were estimated for the scenarios previously listed. In the absence of updated Environmental Protection Agency (EPA) guidelines, an off-model technique was utilized, as described below, to forecast emissions.

Emissions rates were obtained from EPA's Mobile 6.2 guidelines for the following pollutants:

- Volatile Organic Compounds (VOC)
- Carbon Monoxide (CO)
- Nitrogen Oxide (NOx)
- Carbon Dioxide (CO₂)

The VOC, CO and NOx emissions were estimated by using EPA's emissions rates in conjunction with the results of the travel demand model (Figure 8-2). The following methodology was used to forecast emissions for the various scenarios:

- Vehicle emission rates, defined as grams of emissions produced per vehicle mile of travel, for 14 different speed ranges were estimated using Mobile6. These rates were developed separately for VOC, CO, and NOx.
- Daily countywide Vehicle Miles Traveled (VMT) for the same 14 speed categories were estimated from the travel demand model.

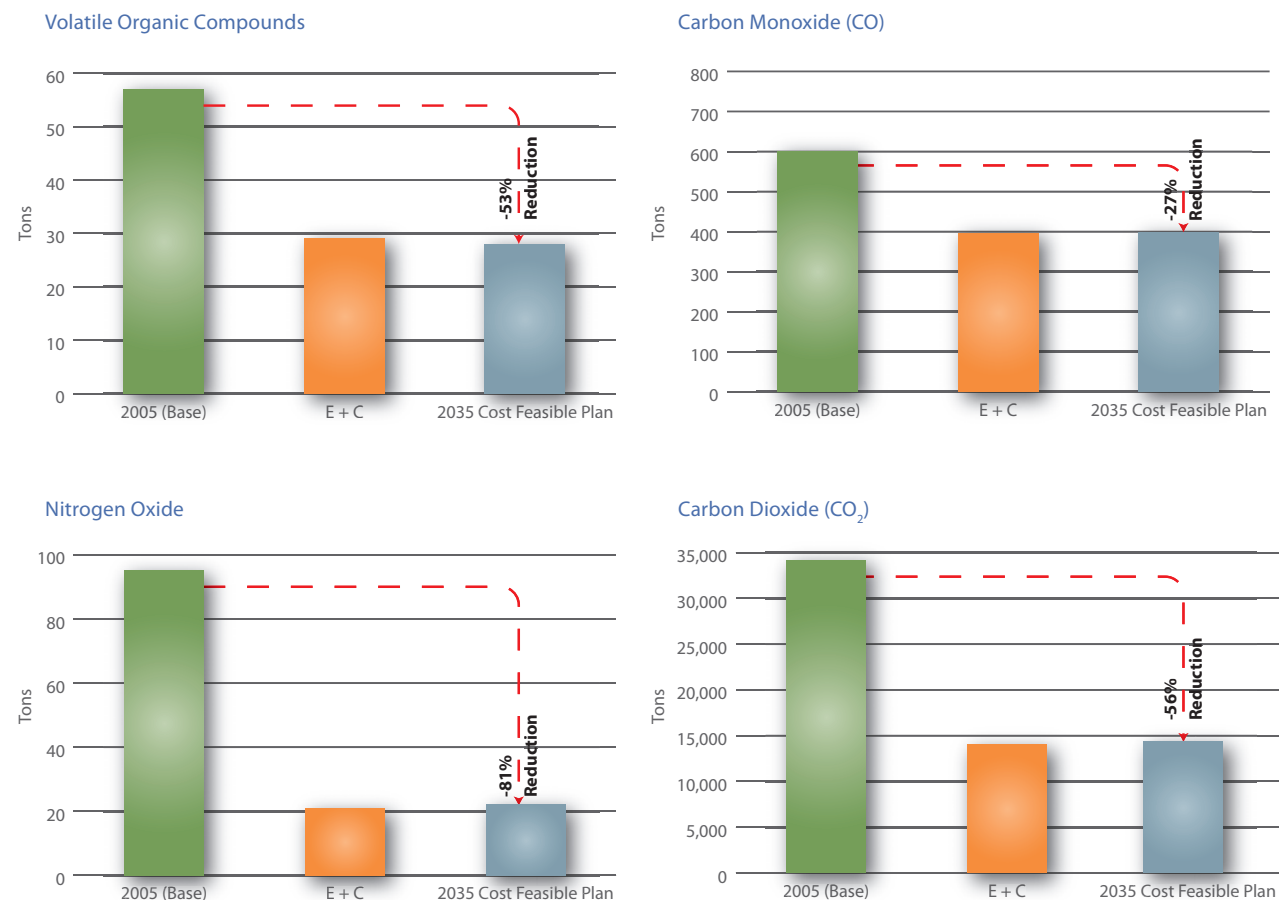
- The product of vehicle emission rates and VMT produce an estimate of daily countywide emissions of VOC, CO, and NOx for each of the 14 speed categories. The sum of the emissions across the speed categories yield the daily total countywide emissions.

Estimation of CO₂ emissions was also completed as follows:

- Estimate of gallons of gasoline/diesel consumed by an average vehicle (per mile) was developed utilizing the *Transportation Energy Data Book*.
- Countywide VMT was estimated from the travel demand model. Factors were estimated to distinguish VMT by gasoline and diesel vehicles.
- Estimate of pounds of CO₂ emission per gallon of gasoline/diesel was developed using *RENEW Northfield*.
- Daily countywide emissions of CO₂ were estimated by taking the product of the VMT, fuel efficiency rates, and emission rates.

Figure 8-2 includes charts that depict the emissions forecasts based on this methodology. Reductions are projected for all four pollutants tested, ranging between -27% and -81%. The reductions are based on EPA's assumed emissions rates in future years, which assume significant improvements in technology, leading to reduced rates.

Figure 8-2 | Emissions Summary by Scenario



Environmental Mitigation Strategies

Miami-Dade County currently engages in a myriad of sustainability practices and is constantly working to expand the use of practices to become a “Green Government”. These practices consist of a range of activities that include, but are not limited to:

- Reduction of greenhouse gases and other air polluting emissions.
- Reductions in energy consumption.
- Improvement of environmental standards for County vehicle fleet and equipment.
- Land preservation.

The County’s sustainability practices included a number of strategies and programs aimed at reducing the environmental damage caused by its activities and operations. These practices involve the participation of multiple Miami-Dade County agencies, including:

- Aviation Department (MDAD)
- Corrections and Rehabilitation Department (MDCR)
- Department of Environmental Resources Management (DERM)
- Department of Procurement Management (DPM)
- Department of Solid Waste Management (DSWM)
- Enterprise Technology Services Department (ETSD)
- Jackson Memorial Hospital (JMH)
- Metropolitan Planning Organization for the Miami Urbanized Area (MPO)
- Miami-Dade Transit (MDT)
- Parks and Recreation Department (PRD)
- Police Department (MDPD)
- Public Works Department (PWD)
- Seaport Department
- Water and Sewer Department (WASD)

Wetlands account for a significant portion of the land area in the northwest and southeast fringes of the County, as depicted in **Figure 8-3** (page 8-8). In an effort to mitigate adverse impacts to wetlands, Miami-Dade County adheres to the Uniform

Mitigation Assessment Methodology (UMAM), per Section 373.414(18), Florida Statutes, which directs state agencies, in cooperation with local governments and the relevant federal agencies, to develop a state-wide method to determine the amount of mitigation required for regulatory permits. The Uniform Wetland Assessment Method (UMAM) rule (Chapter 62-

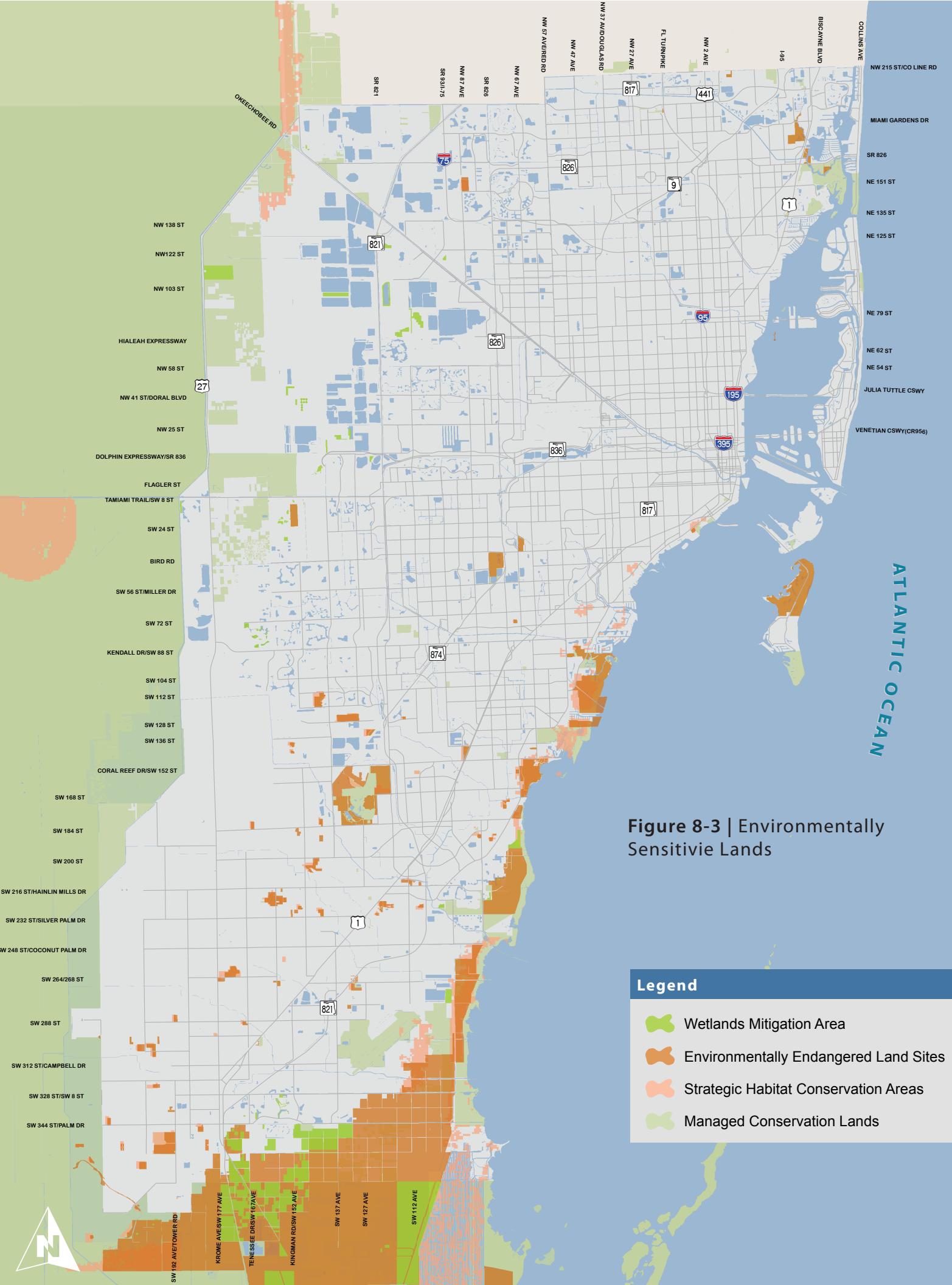


345, F.A.C.) went into effect on February 2, 2004 and is currently the standard for all state entities (DEP, Water Management Districts, local governments and other governmental entities) to determine the amount of mitigation needed to offset adverse impacts to wetlands and other surface waters and to determine mitigation bank credits awarded and debited. The rule is not intended to affect other aspects of wetland regulation that remain intact in current rules, such as determination of reduction or elimination of direct and secondary impacts, that unacceptable cumulative impacts do not result from the project, the appropriateness of the mitigation, and other aspects. Although the state directive does not require action of the US Army Corps of Engineers (COE), the COE Jacksonville office conducted a study of the method and recommended UMAM be used for federal wetland regulatory purposes starting August 1, 2005.

An example of Miami-Dade County’s environmental mitigation activities is the Hole-in-the-Donut Mitigation Bank, dedicated to the restoration of large parcels of land near present-day Paradise Key. Long before the establishment of Everglades National Park, these parcels were heavily farmed. These operations continued until 1975 when 6,600 acres of old fields were abandoned. Shortly thereafter, owing to the disturbed soil in these areas, these lands harbored the growth of Brazilian pepper, *Schinus terebinthifolius*. An aggressive, non-native species, the plant outcompeted native vegetation for resources and soon grew in vast monocultures. Because this highly disturbed acreage was surrounded by native communities, the area was dubbed the “Hole-in-the-Donut”.

In a cooperative effort between Everglades National Park, the National Park Foundation, Miami-Dade County and the private sector, a massive project is currently underway to restore this area. Since 1997, county wetland mitigation bank funds have been used to perform large-scale restoration. The goal of this work is to permanently remove the Brazilian pepper and return these areas to a marl prairie wetland community with its associated wildlife.

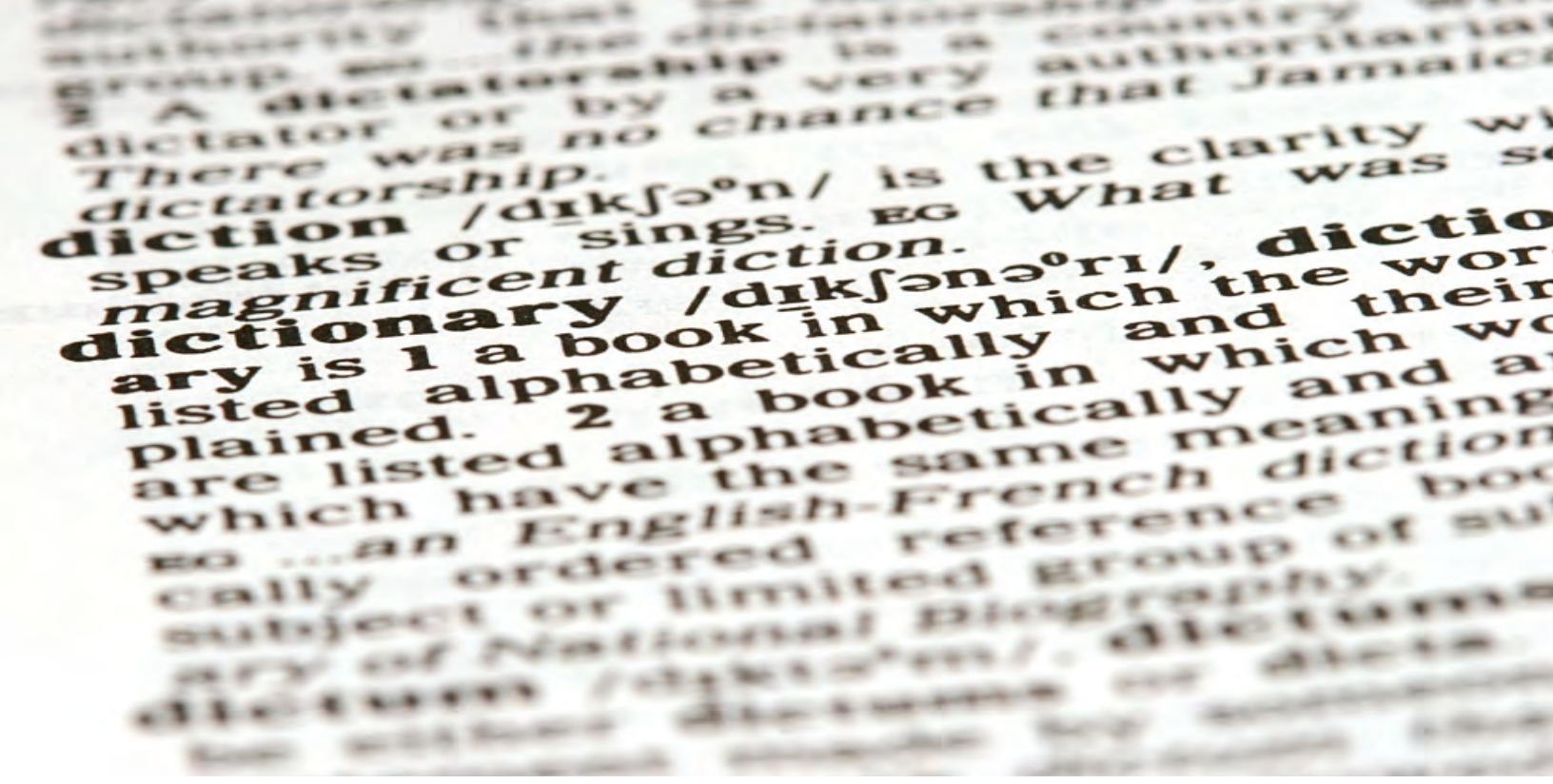
Another large active mitigation bank in Miami-Dade County is the Florida Power & Light Company’s Everglades Mitigation Bank (EMB), which was created to return more than 13,000 acres of wetlands to their natural, historical condition. As a result, FPL can offer developers and private land owners mitigation credits in one of Florida’s most environmentally important areas.



Appendices

Miami-Dade 2035 Long Range Transportation Plan

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A Glossary of Terms

Activity Centers

Places that contain a concentration of business, civic and cultural activities, creating conditions that facilitate interaction. Special generators, as identified in the travel demand model, were utilized as activity centers for measures of effectiveness computations.

Active Traffic Management Systems

Intelligent Transportation System (ITS) improvements designed to manage congestion based on prevailing conditions.

Bus Rapid Transit (BRT)

A flexible, rubber-tired form of rapid transit that combines stations, vehicles, running way, and ITS elements into an integrated system with a strong identity. BRT applications are designed to be appropriate to the market they serve and to their physical surroundings.

Capacity

The maximum traffic flow designation for a segment of roadway or a lane, within the control conditions for that particular segment of roadway or lane, usually expressed in “persons per hour” or “vehicles per hour”.

Centerline Highway Miles

The actual length of roadway in one direction of travel.

Central Areas

The central district of a city. Typified by a concentration of retail and commercial buildings.

Community

A physical or cultural grouping of stakeholders with common interests created by shared proximity or use. Community can be defined at various levels within a larger context (e.g., neighborhood or city or metropolitan area or region).

Commuter Rail

Passenger rail service between a city center, outer suburbs and commuter towns or other locations that draw large numbers of commuters—people who travel on a daily basis for work or school.

Congestion

The reduction in travel speed, reliability, or maneuverability that occurs when traffic demand approaches or exceeds the available capacity of the transportation facility(ies).

Congestion Management Process (CMP)

A systematic approach required in transportation management areas (TMAs) that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. through the use of operational management strategies. Provides information on transportation

system performance and finds alternative ways to alleviate congestion and enhance the mobility of people and goods.

Congestion Pricing

Variable road tolls (higher prices under congested conditions and lower prices at less congested times and locations) intended to reduce peak-period traffic volumes to optimal levels.

Corridors

Highways, rail lines, waterways and other exclusive-use facilities that connect major origin/destination markets within Florida or between Florida and other states/nations.

Cost Feasible Plan

A phased plan of transportation improvements that is based on (and constrained by) estimates of future revenues.

Efficient Transportation Decision Making

A FDOT initiative to improve and streamline the environmental review and permitting process by involving resource protection agencies and concerned communities from the first step of planning. Agency interaction continues throughout the life of the project, leading to better quality decisions and an improved linkage of transportation decisions with social, land use and ecosystem preservation decisions.

Fixed Guideway

A form of transit consisting of vehicles that can operate only on a guideway constructed for a specific purpose (e.g., rapid rail, light rail). Federal usage in funding legislation also includes exclusive right-of-way bus operations, trolley coaches and ferryboats as “fixed guideway transit.”

Grade Separation

The raising or lowering of a road or highway grade to bridge over/under another road or highway to eliminate traffic movement conflicts.

Intelligent Transportation System

A wide range of advanced technologies and ideas, which, in combination, can improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects.

Intermodal Center

An existing or planned transportation facility providing an interface between more than one mode of transportation [at least one of which must provide interstate or interregional service to be designated as Strategic Intermodal System (SIS) or Emerging SIS]. An example of an intermodal center is the planned Miami Intermodal Center (MIC).

Level of Service

A qualitative assessment of a road's operating conditions. For local government comprehensive planning purposes, level of service means an indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. Level of Service indicates the capacity per unit of demand for each public facility.

Light Rail Transit (LRT)

Transit systems that provide convenient local Public Transit service on busy urban corridors, connecting major destinations such as central business districts, medical centers, campuses and entertainment centers. LRT vehicles tend to have relatively smooth and comfortable operation, easy boarding, attractive stations, Transit-oriented Development (TOD), and easy-to-understand routes and schedules.

Livable Community

A neighborhood, community or region with compact, multidimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling and transit access to employment, education, recreation, entertainment, shopping and services.

Long Range Transportation Plan (LRTP)

A long range (20-year) strategy and capital improvement program developed to guide the effective investment of public funds in transportation facilities.

Managed Lanes

Designated roadway lanes that employ operational strategies to efficiently manage traffic.

Measure of Effectiveness (MOE)

A quantitative or qualitative indicator used to assess state agency performance. Input means the quantities of resources used to produce goods or services and the demand for those goods and services. Outcome means an indicator of the actual impact or public benefit of a service. Output means the actual service or product delivered by a state agency.

Metropolitan Planning Organization (MPO)

An organization made up of local elected and appointed officials responsible for developing, in cooperation with the state, transportation plans and programs in metropolitan areas containing 50,000 or more residents. MPOs are responsible for the development of transportation facilities that will function as an intermodal transportation system and the coordination of transportation planning and funding decisions.

Mobility

The degree to which the demand for the movement of people and goods can be satisfied. Mobility is measured in Florida by the quantity, quality, accessibility and utilization of transportation facilities and services.

Mode

Any one of the following means of moving people or goods: aviation, bicycle, highway, paratransit, pedestrian, pipeline, rail (commuter, intercity passenger and freight), transit, space and water.

Multimodal Transportation

Denotes the use of more than one mode to serve transportation needs in a given area.

Non-motorized Transportation

Includes walking, bicycling, and pedestrian-oriented modes of travel.

Open-Road Tolling (ORT)

The electronic collection of tolls on toll roads without the use of toll booths. The major advantage to ORT is that users are able to drive through the toll plaza at highway speeds without having to slow down to pay the toll.

Paratransit

Forms of transportation service that are more flexible and personalized than conventional fixed route, fixed schedule service; often utilized to accommodate the elderly and disabled passengers unable to use the fixed route service.

Project Development and Environment (PD&E)

Florida Department of Transportation process for design and environmental assessment of transportation projects.

Quality of Life

All of the characteristics of an area's living conditions, including such things as housing, education, transportation infrastructure, leisure time offerings, climate, employment opportunities, medical and health care infrastructure and environmental resources.

Redevelopment Areas

Redevelopment areas are those areas designated for redevelopment to address a wide range of issues, including downtown, waterfront, road corridor, and neighborhood redevelopment. There are currently 18 designated redevelopment areas in Miami-Dade County.

SAFETEA-LU

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).SAFETEA-LU authorized the federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009.

Strategic Intermodal System (SIS)

A transportation system comprised of facilities and services of statewide and interregional significance, including appropriate components of all modes.

Sustainability

Meeting the needs of the present without compromising the ability to meet the needs of the future.

Total Hours of Delay

Total hours of additional travel time during periods of traffic congestion.

Transit Route Miles

The mileage in each direction over which public transportation vehicles travel while in revenue service.

Transit Supportive Areas (TSA)

Areas that could reasonably have transit service based on a household density of 3 units per gross acre or an employment density of at least 4 jobs per gross acre.

Transit

Mass transportation by bus, rail or other conveyance that provides general or special services to the public on a regular and continuing basis. Transit does not include school buses or charter or sightseeing services.

Transportation Equity Act for the 21st Century (TEA-21)

An Act of the U.S. Congress authorizing federal highway and transit programs for the fiscal years 1998 through 2003. The core federal programs established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) are continued in TEA-21.

Transportation Management Areas (TMA)

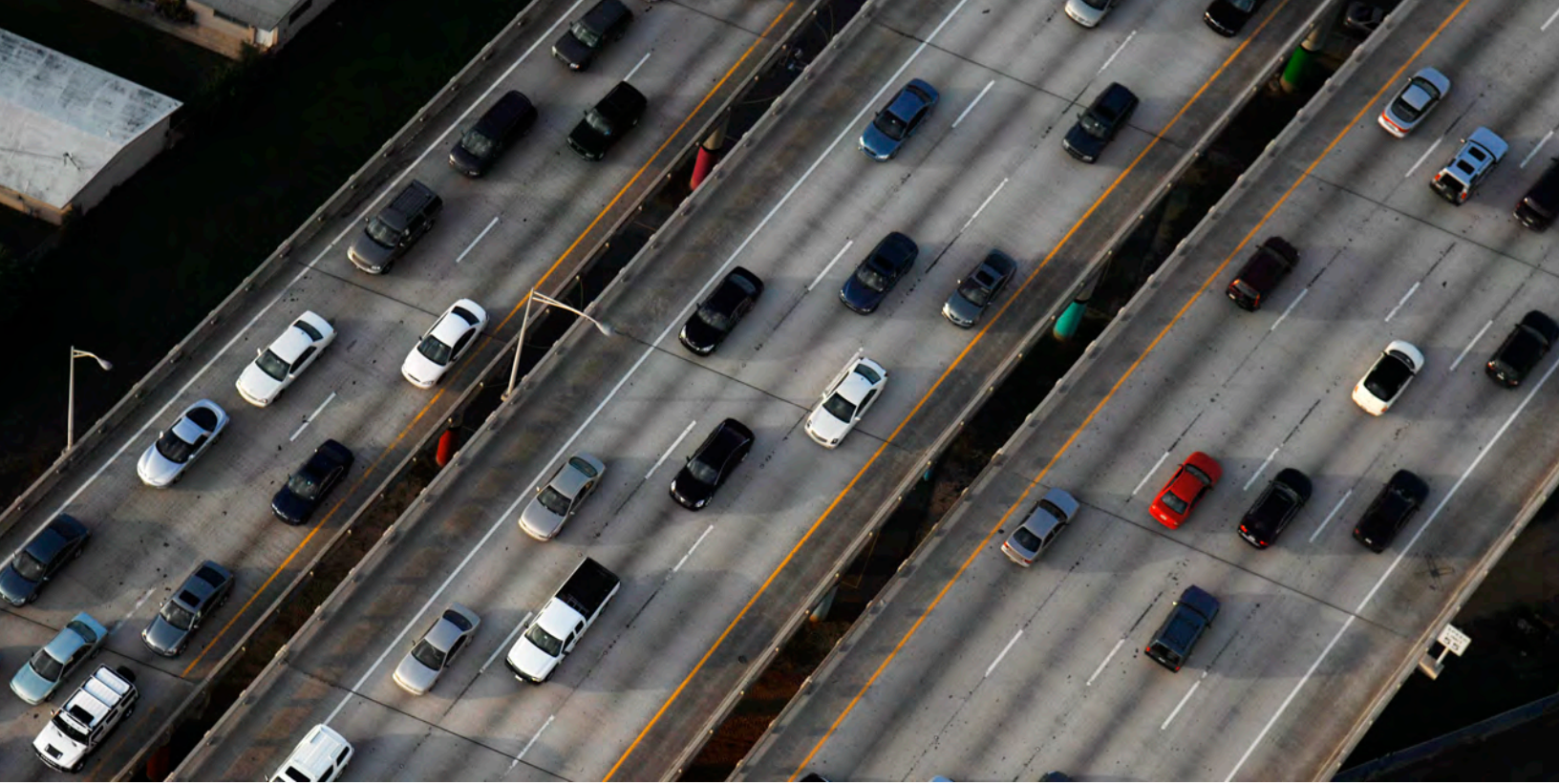
An urbanized area with a population of 200,000 or more, as defined by the U.S. Bureau of the Census and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the U.S. Secretary of Transportation.

Travel Demand Management (TDM)

An Act of the U.S. Congress authorizing federal highway and transit programs for the fiscal years 1998 through 2003. The core federal programs established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) are continued in TEA-21.

Visualization Techniques

Methods used in the development of transportation plans and programs with the public, elected and appointed officials, and other stakeholders in a clear and easily accessible format such as maps, pictures, and/or other displays to promote improved understanding of existing or proposed transportation plans and programs.



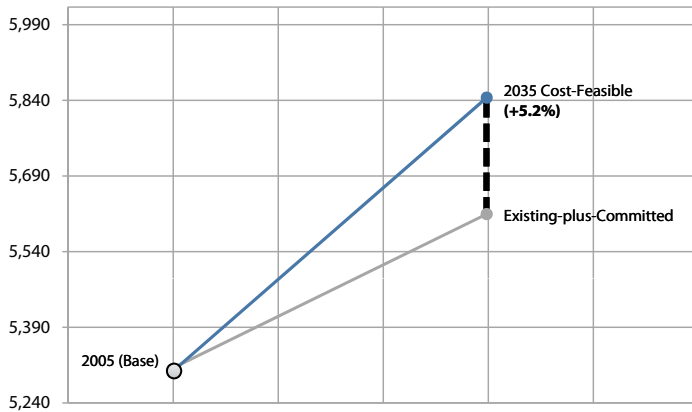
B Measures of Effectiveness (MOE)

Objective 1.1: Improve accessibility to major health care, recreation, education, employment and cultural facilities.

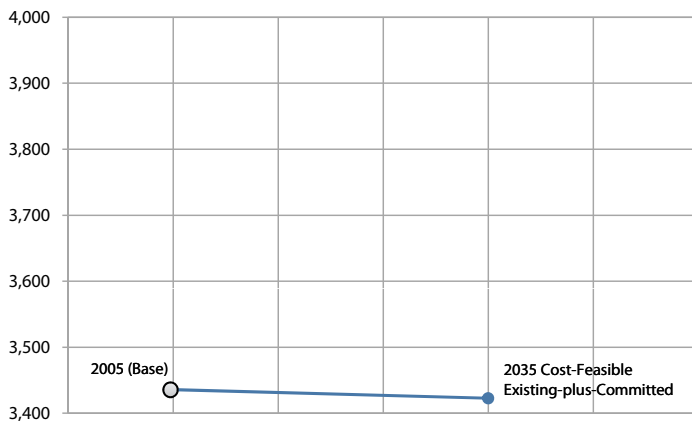
Measure:

- Highway lane and centerline miles within 1-mile of major health care facilities, recreation, education, employment, and cultural facilities.
- Transit route miles within 0.5-mile of major health care facilities, recreation, education, employment, and cultural facilities.

Highway lane miles (1.1)



Transit route miles (1.1)

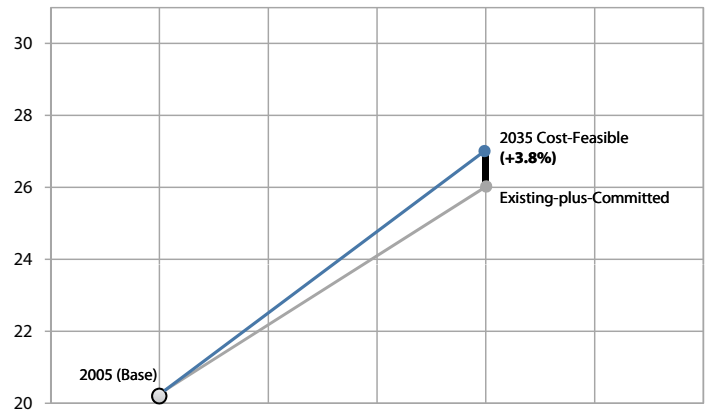


Objective 1.2: Enhance mobility for people and freight.

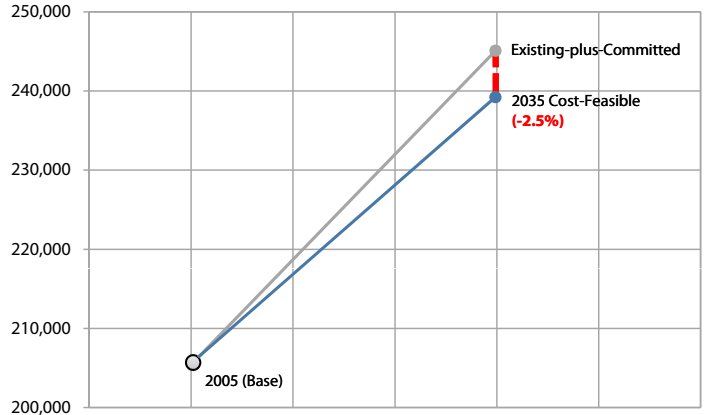
Measure:

- Average travel time (all purposes)
- Number of daily passengers on public transit

Average travel time (1.2)



Number of daily passengers on public transit (1.2)

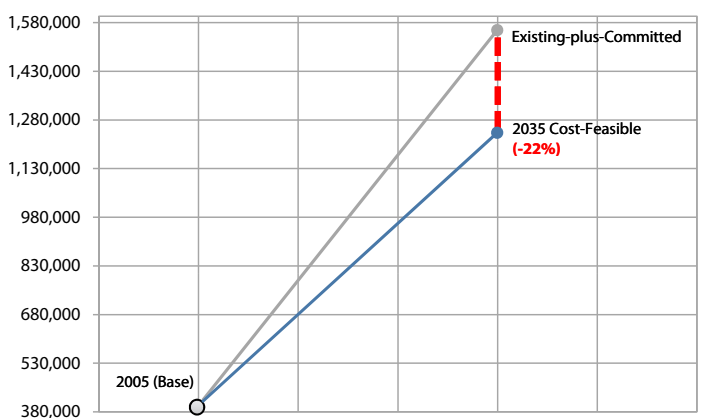


Objective 1.3: Reduce Congestion

Measure:

- Hours of delay

Hours of Delay (1.3)



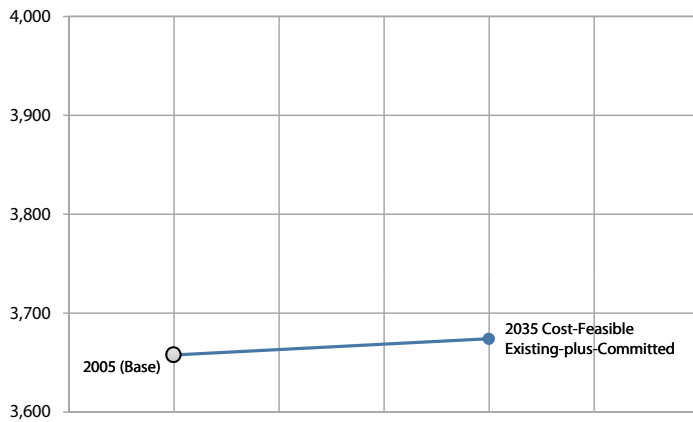
(+) Positive Growth/Increase
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Objective 1.4: Maximize multimodal travel options and provide travel choices

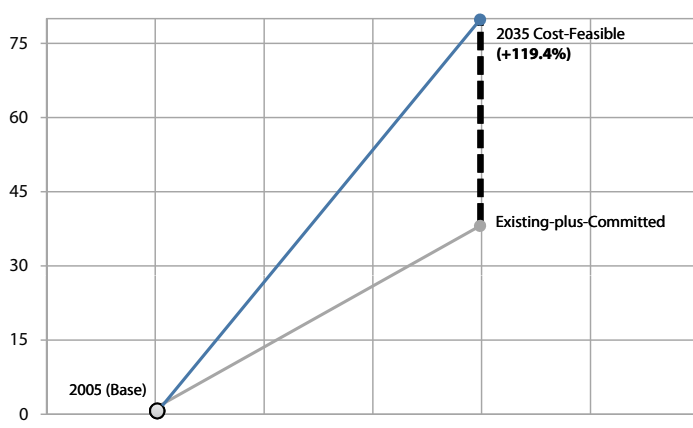
Measure:

- Transit service route miles
- HOV/HOT lane miles

Transit service route miles (1.4)



HOV/HOT lane miles (1.4)

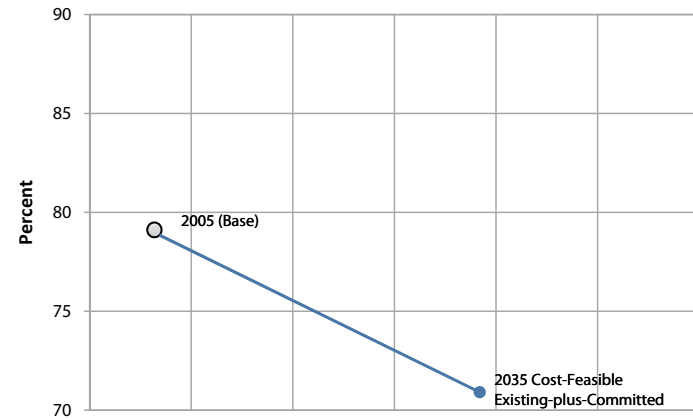


Objective 1.5: Fill transit service gaps

Measure:

- Service coverage in transit supportive areas

Service coverage in transit supportive areas (1.5)

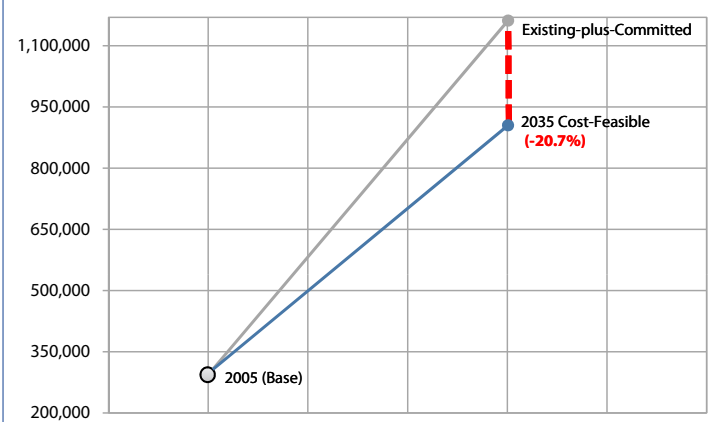


Objective 1.6: Promote transit reliability

Measure:

- Total hours of delay on highway facilities with transit service

Hours of delay on highway facilities with transit service (1.6)

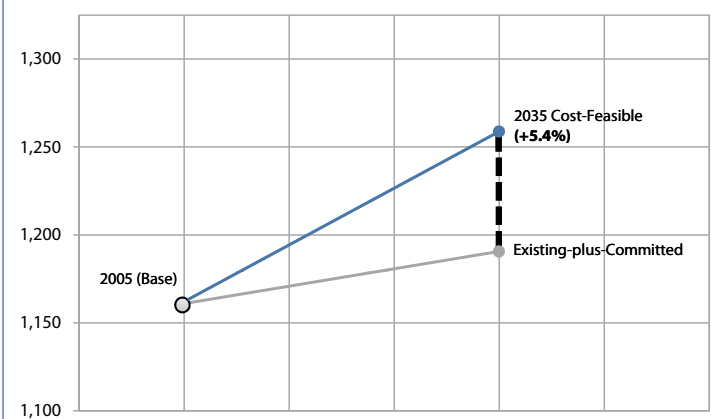


Objective 1.7: Improve transportation facilities' and services' regional connectivity

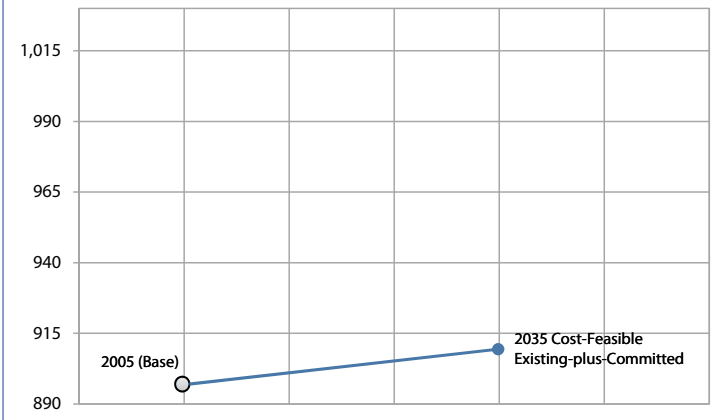
Measure:

- Highway miles in corridors of regional significance
- Transit service route miles in corridors of regional significance

Highway miles (1.7)



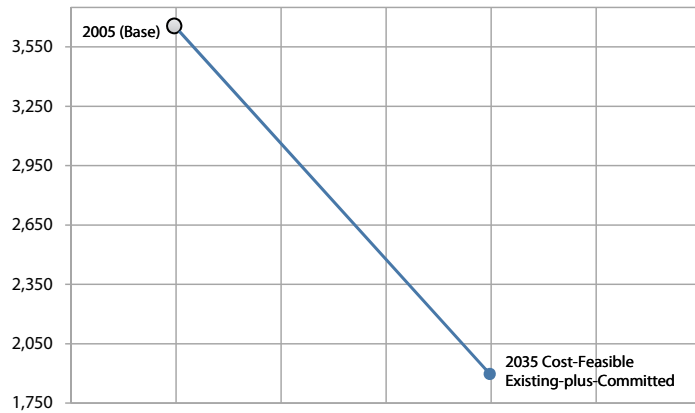
Transit service route miles (1.7)



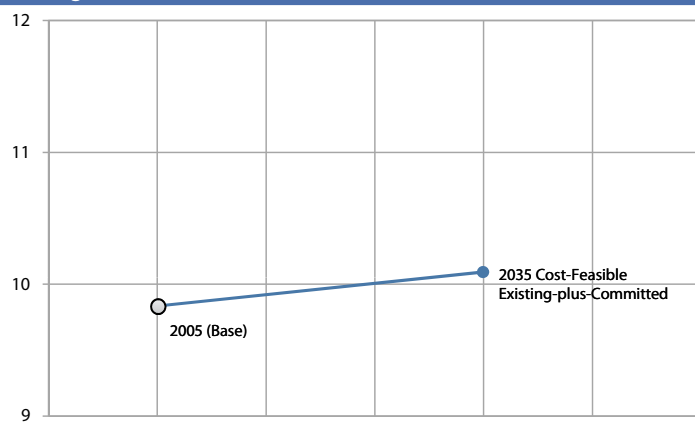
(+) Positive Growth/Increase
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Objective 1.10: Increase reverse commute opportunities for disadvantaged communities*Measure:*

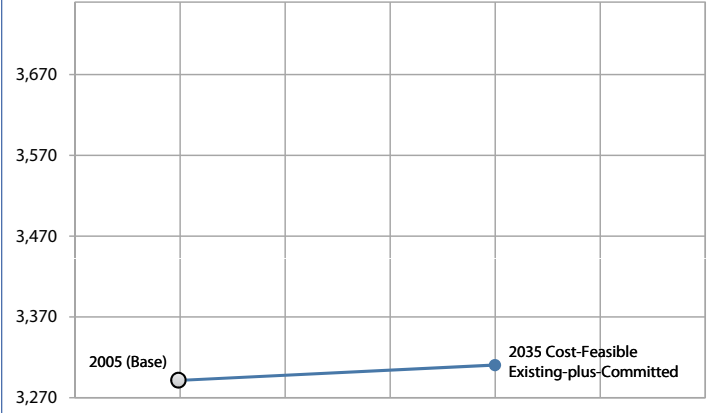
- Transit service route miles from cities and central areas in the AM Peak period

Transit service route miles from cities and central areas (1.10)**Objective 1.11: Promote transportation improvements that provide for the needs of the elderly and disabled***Measure:*

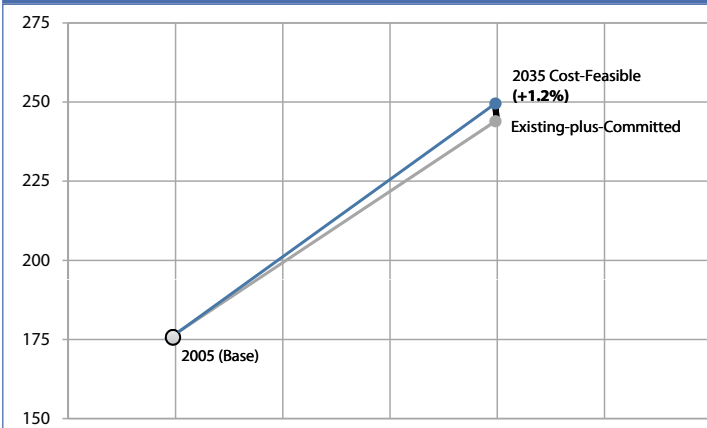
- Average highway and transit travel time to/from TAZs with a high proportion of elderly population

Average travel time [minutes] (1.11)**Objective 1.12: Improve transit services that provide access to educational facilities***Measure:*

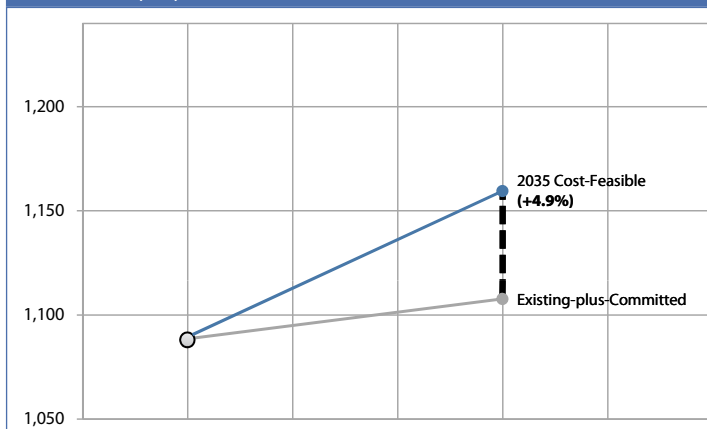
- Transit service route miles within 0.5 miles of educational facilities

Transit service route miles (1.12)**Objective 2.2: Reduce roadway and multimodal crashes***Measure:*

- Number of accidents

Accidents (2.2)**Objective 3.1: Enhance the capacity of evacuation corridors***Measure:*

- Total lane miles within evacuation travel corridors

Lane miles (3.1)

(+) Positive Growth/Increase

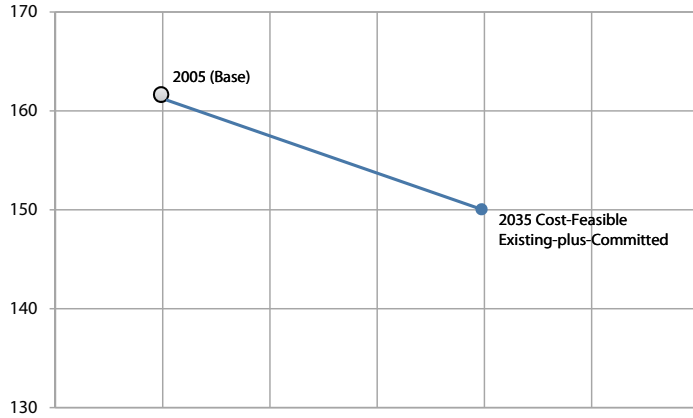
(-) Negative Growth/Decrease

Objective 3.3: Ensure transportation options are available during emergency evacuations for the elderly and persons with disabilities

Measure:

- Transit service route miles within 0.5 miles of TAZs with a high proportion of elderly population

Transit route miles (3.3)

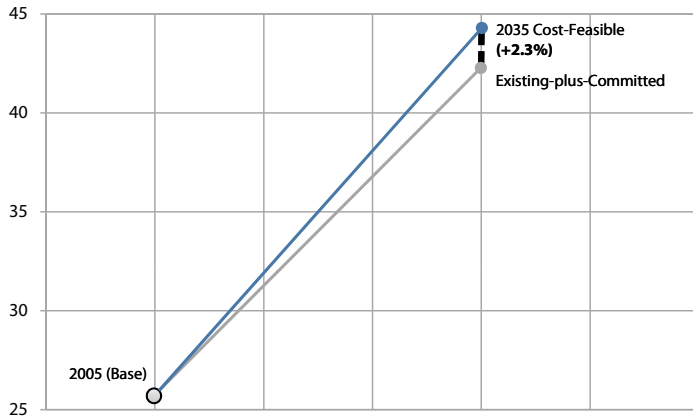


Objective 4.1: Increase access to employment and sites

Measure:

- Average home-based work travel time

Average home-based work travel time (4.1)

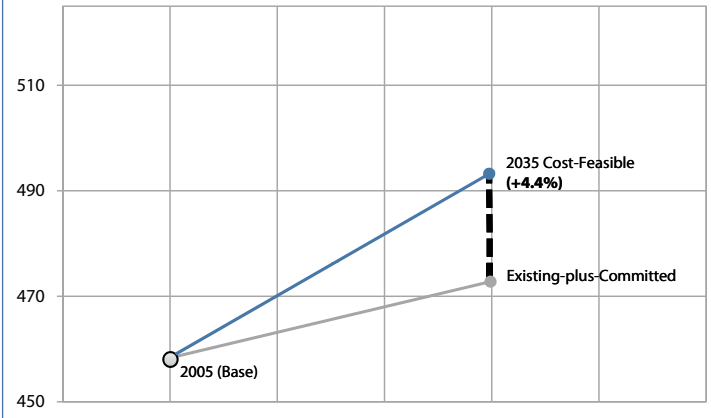


Objective 4.2: Enhance tourist travel and access opportunities

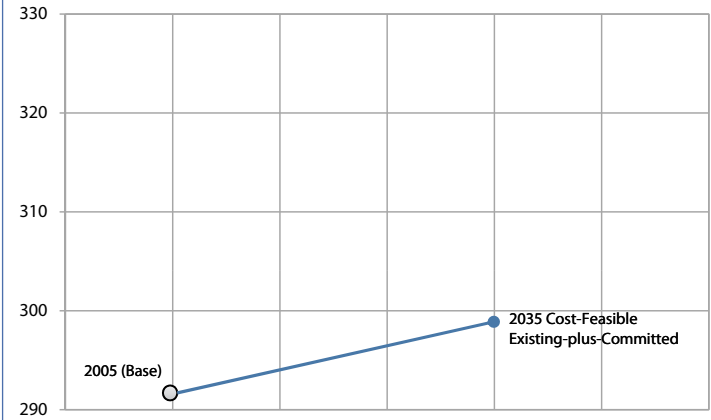
Measure:

- Highway lane miles within 1-mile of tourist attractions
- Transit service route miles within 0.5-mile of tourist attractions

Highway lane miles (4.2)

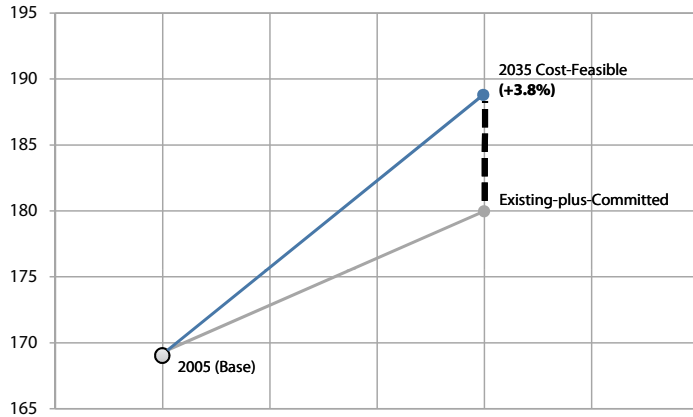
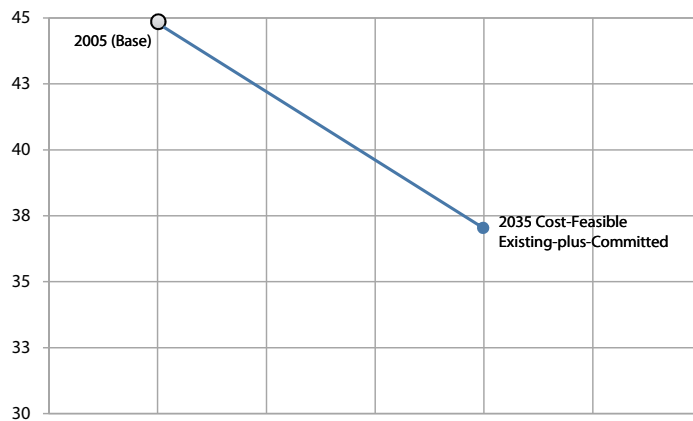
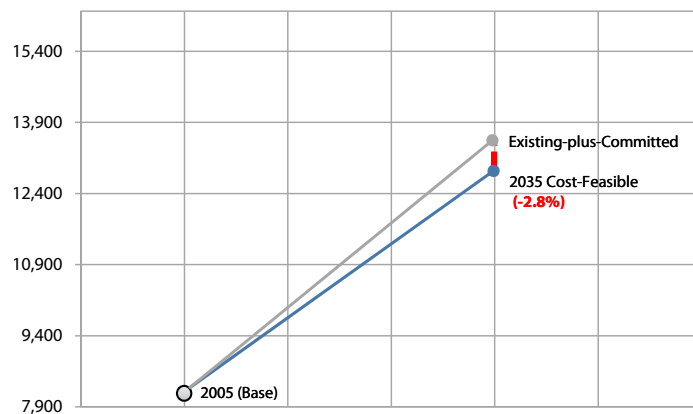


Transit service route miles (4.2)

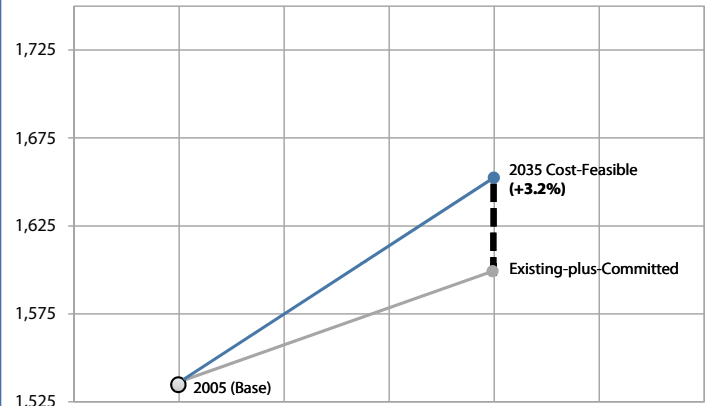
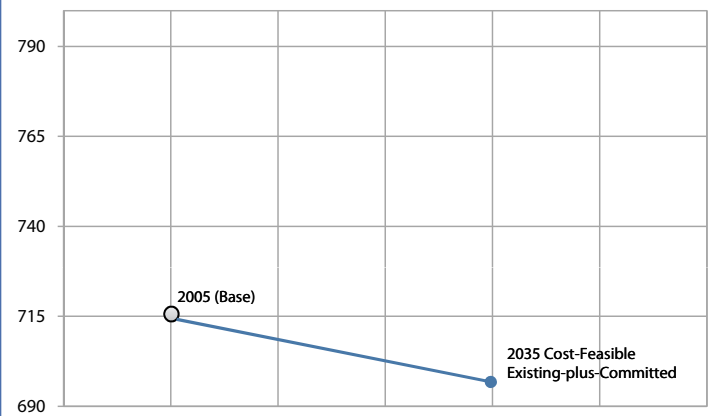


Objective 4.3: Increase and improve passenger and good access to airports and seaports*Measure:*

- Highway lane within 1-mile of MIA, Opa Locka, HGAA, and Port of Miami
- Transit service route miles within 0.5-mile of MIA, Opa Locka, HGAA, and Port of Miami
- Number of transit patrons going to/from the airports and seaport

Highway lane miles (4.3)**Transit service route miles (4.3)****Number of transit patrons (4.3)****Objective 4.4: Augment multimodal access to major activity centers***Measure:*

- Highway lane miles within 1-mile of major activity centers
- Transit service route miles within 0.5-mile of major activity centers

Highway lane miles (4.4)**Transit service route miles (4.4)**

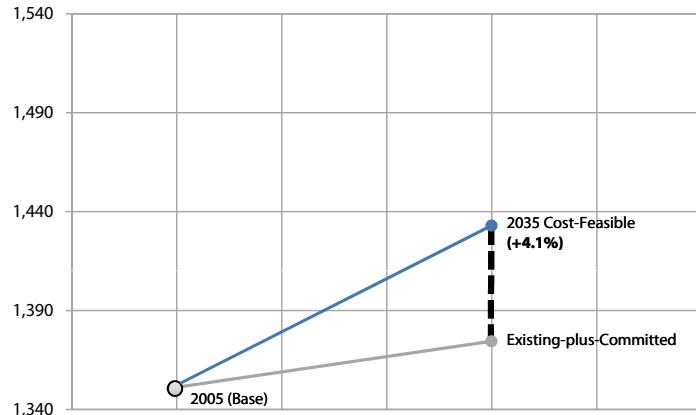
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Objective 4.6: Implement projects that support economic development and redevelopment areas

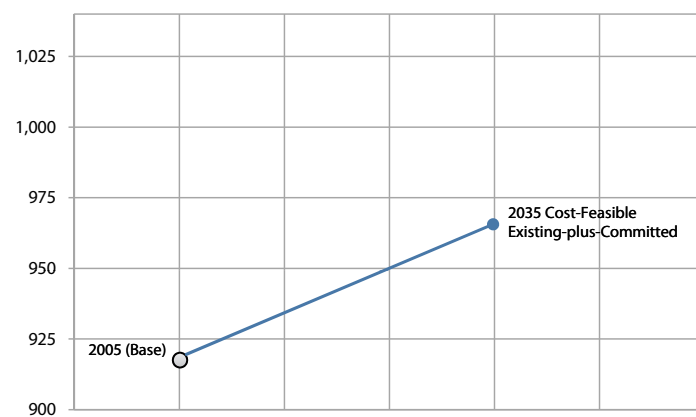
Measure:

- Highway lane within 1-mile of redevelopment areas
- Transit service route miles within 0.5-mile of redevelopment areas

Highway lane miles (4.6)



Transit service route miles (4.6)

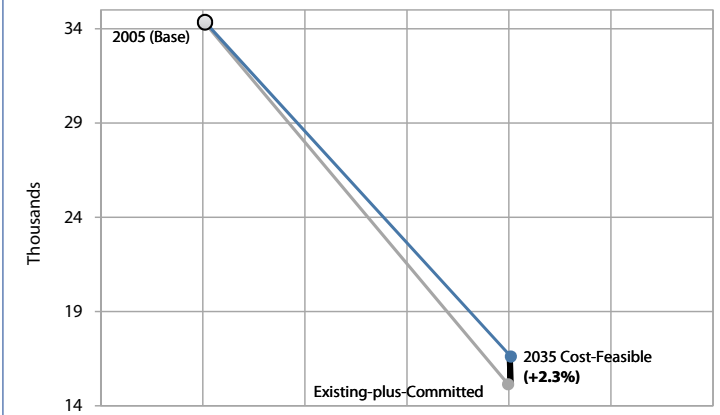


Objective 5.1: Minimize and mitigate air and water quality impacts of transportation facilities, services, and operations

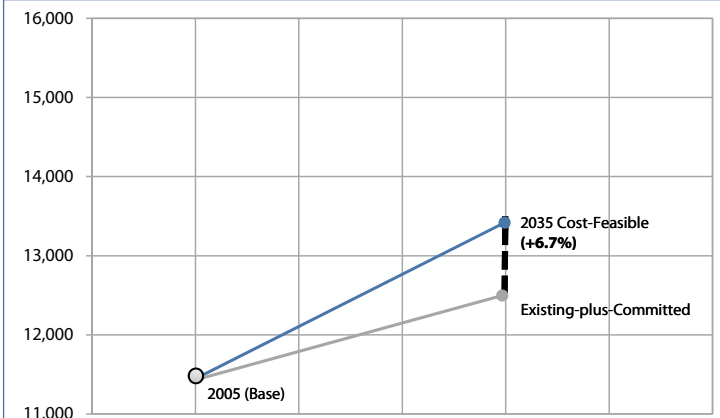
Measure:

- Tons per day of emissions (NOx, CO, VOC)
- Surface coverage of transportation system on acres of wetlands

Tons per day of emissions (5.1)



Surface Coverage [acres] (5.1)

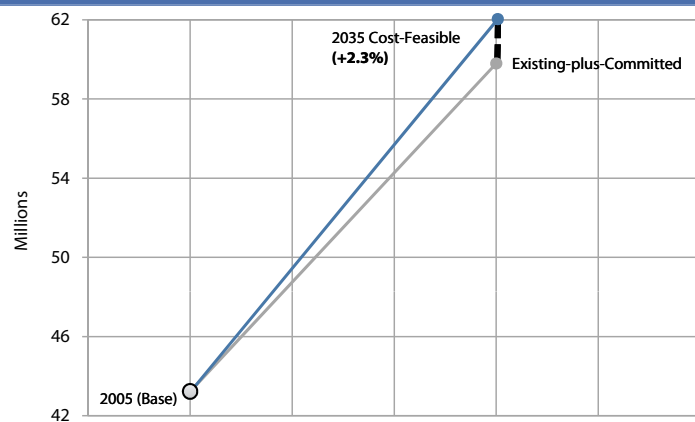
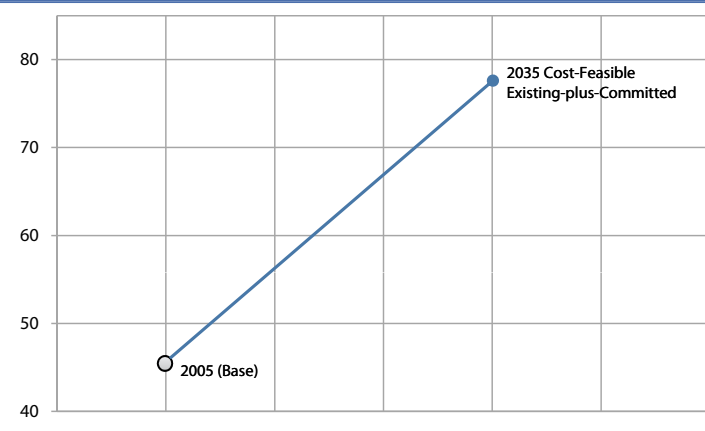


(+) Positive Growth/Increase
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Objective 5.2: Reduce fossil fuels use

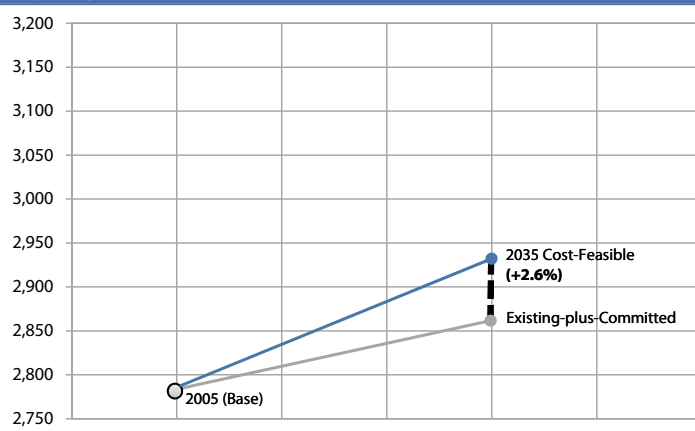
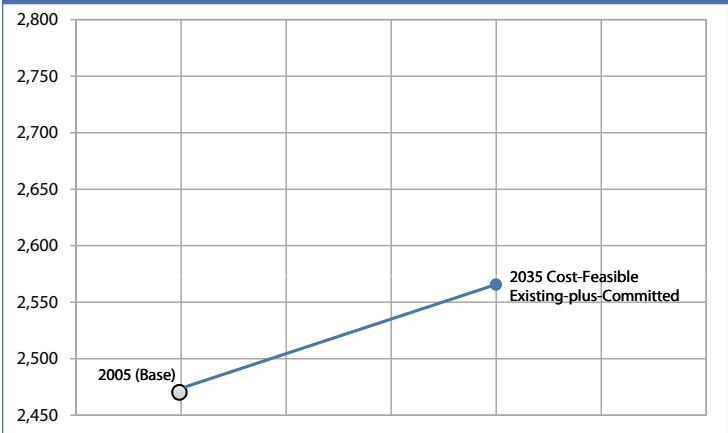
Measure:

- Vehicle Miles of Travel
- Non fossil fuel burning daily transit service route miles

Vehicle Miles of Travel (5.2)**Non fossil fuel burning (5.2)****Objective 5.3: Promote projects that support urban infill and densification**

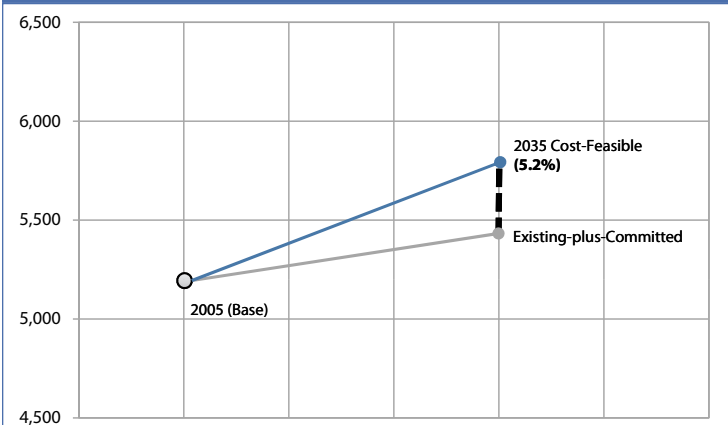
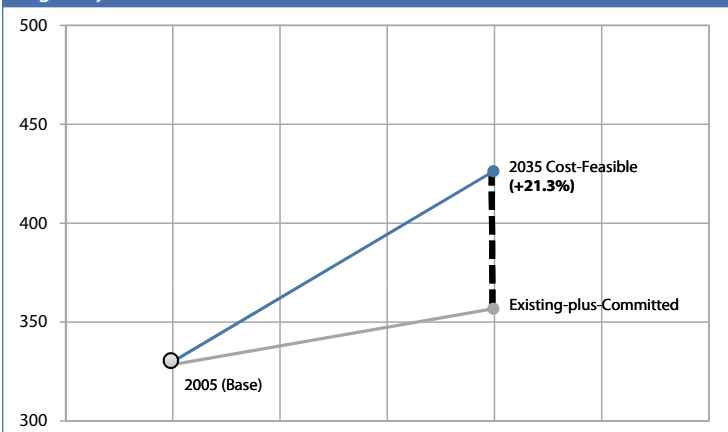
Measure:

- Highway lane miles within Urban Infill Area
- Transit service route miles within Urban Infill Area

Highway lane miles (5.3)**Transit service route miles (5.3)****Objective 5.6: Prioritize funding to favor intra-urban (within UDB) improvements**

Measure:

- Ratio of highway lane miles inside/outside UDB boundaries
- Ratio of transit service route miles inside/outside UDB boundaries - *no transit route miles outside UDB

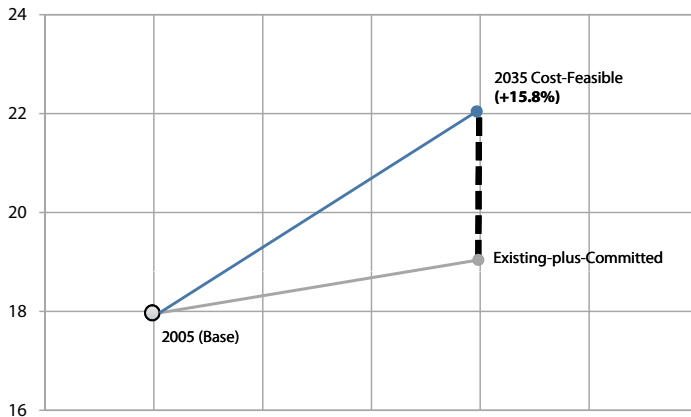
Highway lane miles inside UDB (5.6)**Highway lane miles outside UDB (5.6)**

Objective 6.1: Improve connectivity to Strategic Intermodal System (SIS) and intermodal facilities

Measure:

- Highway centerline miles on SIS connectors

Highway centerline miles (6.1)

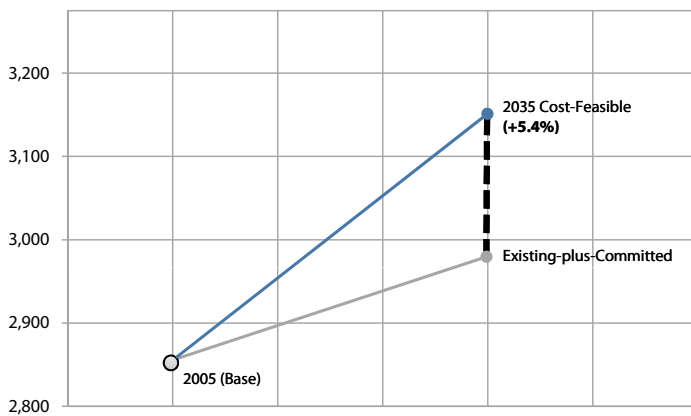


Objective 6.4: Improve goods movement by enhanced intermodal access and other infrastructure that serve major freight origins and destinations in Miami-Dade County

Measure:

- Highway lane miles within 1-mile of major freight origins and destinations

Highway lane miles (6.4)

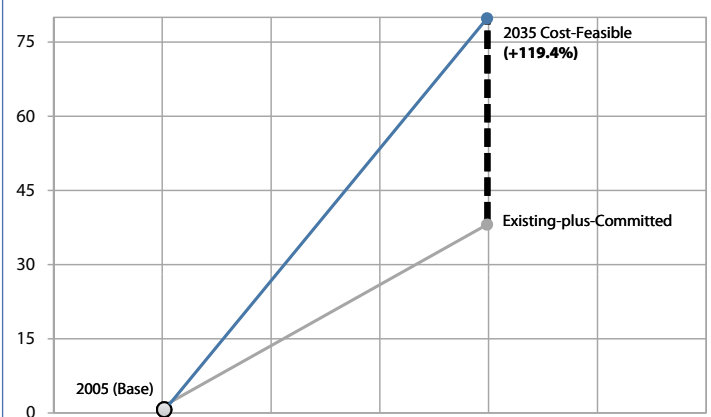


Objective 8.1: Continue to examine the provision and utilization of special-use lanes on the existing system

Measure:

- Lane miles of special use/managed lanes

Lane miles of special use/managed lanes (8.1)



(+) Positive Growth/Increase
(-) Negative Growth/Decrease

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Financial Resources Review and Update



Table of Contents

1.0	Introduction
2.0	Federal Funding
3.0	State of Florida Department of Transportation Funding
4.0	Fuel Taxes and Road Impact Fees
5.0	Local and Regional Agencies
6.0	Summary of Forecasted Revenues
7.0	Potential New Local Funding Options

1.0 Introduction

1.1 Purpose

The Miami-Dade Metropolitan Planning Organization (MPO) is updating its Long Range Transportation Plan (LRTP) to a 2035 horizon year. This updated LRTP will demonstrate Miami-Dade County's plans for future capital investment in transportation infrastructure as well as ongoing operating and maintenance expenses. This Financial Resources Review is a key component of the overall LRTP, as it provides a review of the financial resources that are projected to be available to the County through 2035. The identification of these resources will then be used to prioritize future highway and transit investments in a 'constrained' scenario which is limited to existing and reasonably likely funding sources. In addition, the review will discuss potential new funding sources which could be used to fund additional transportation investments in an 'unconstrained' scenario. It is important to note, however, that some of the revenues identified in this review have already been programmed by their respective agencies, and thus these funds are not available to be prioritized by the MPO for use on identified transportation needs in the County. Revenues of the Miami-Dade Expressway (MDX) and Florida's Turnpike Enterprise fall into this category.

The principal federal, state, and local funding programs which support transportation investment in Miami-Dade County are described and forecasted through 2035 in this review. This review includes information on:

- Federal funding programs for both highways and public transportation
- State of Florida Department of Transportation (FDOT) funding programs and revenue estimates
- Fuel tax revenues and road impact fees
- Local agency revenues, including MDX, Miami-Dade Transit (MDT), and the South Florida Regional Transportation Authority (SFRTA)
- Potential new local/regional funding sources

1.2 Methodology and Changes From the Previous Plan

The most significant change in methodology from the prior LRTP relates to the treatment of inflation. Federal planning regulations which were adopted in 2007 and corresponding MPO Advisory Council (MPOAC) guidelines now require that both cost and revenue forecasts be presented in year-of-expenditure (YOE) dollars, rather than in base year dollars as had been the methodology previously. FDOT revenue forecasts are now given in YOE dollars, and FDOT provides inflation forecasts which can be used to estimate YOE project costs.

Aside from this significant change, the overall approach is similar to that in the previous plan. FDOT's guidelines for estimating and presenting future revenues are followed in this review, as laid out in the *2035 Revenue Forecast Handbook* and subsequent supplements, revisions, and workshops. FDOT currently provides its revenue forecasts for the period 2014 through 2018 as the "2nd Five Years Plan" and then the period 2019 through 2035 as the "2035 Cost Feasible Plan." Funding in the FDOT "2035 Cost Feasible Plan" is provided for 2019 and 2020 and then in five-year aggregates for the periods 2021 to 2025, 2026 to 2030, and 2031 to 2035. The updated 2009-2013 Miami-Dade Transportation Improvement Program (TIP) is used for near-term revenue forecasts prior to the "2nd Five Years Plan" in the LRTP, but those TIP revenues are not presented in this memorandum.

Based on guidance from County staff, forecasts of Miami-Dade Transit (MDT) revenues are based on the People's Transportation Plan (PTP) Pro Forma that was presented to the Board of County Commissioners (BCC) in the fall of 2008 as part of the process of applying to the Federal Transit Administration (FTA) for New Starts funding for the North Corridor Metrorail Extension. However, the entire MDT operating budget and capital program are currently under review by the County, and significant changes were recently enacted by the BCC regarding allowable uses for the revenues from the PTP dedicated surtax. Therefore, the information on MDT revenues being used in this review is the best available at this time, but these projections may change materially in the future.

Revenue growth rates for key local revenue sources – including gas taxes, *ad valorem* (property) taxes, and sales taxes – are also taken from the Pro Forma, and these growth rates were developed in consultation with the County's Office of Strategic Business Management (OSBM).

1.3 Limitations of the Analysis

This analysis describes only State FDOT revenues forecasted to flow to Miami-Dade County for capital improvement purposes – that is, for the State Capacity Program. The review does not include FDOT operating and maintenance funds (i.e., the State Non-Capacity Program) that would be applied to facilities in Miami-Dade County. FDOT implements the Non-Capacity Program throughout the state and does not provide district-level revenue estimates for the Non-Capacity Program. According to FDOT, the Department has estimated sufficient revenues to meet the Non-Capacity safety, preservation, and support objectives in each metropolitan area in the state.

More generally, revenue estimates provided by local agencies (such as MDT or MDX) were not independently verified, but were accepted as accurate. In addition, the revenue and expense projections presented in Section 3 for Florida's Turnpike Enterprise in Miami-Dade County were estimated by the MPO and were not provided by Turnpike staff, although they are based on publicly available financial information from the Turnpike.

1.4 Policy Statement

More than at any time in recent memory, Miami-Dade County is facing an extremely challenging environment for long-range planning. The challenges include:

- Major cost increases over the past five years for projects that were programmed in previous Plans, due to substantial increases in costs for right-of-way, labor, and key commodities such as steel and concrete.
- A deep and sustained recession across the nation, with Florida being particularly hard-hit, and all transportation funding sources – gas taxes, property taxes, sales taxes, tolls, rental car taxes, and more – experiencing stagnation or decline.
- Volatility in petroleum prices causing significant changes in transit ridership, vehicle miles traveled (VMT), gas tax revenues, and other key travel indicators, making estimation of future travel patterns difficult.
- The potential for substantial long-term changes in federal transportation policy and funding following the reauthorization of the SAFETEA-LU.

In short, the past five years have been difficult for Miami-Dade County and its planned transportation investments, and the constrained 2035 Plan will reflect this difficulty. Based on the revenues projected in this review, many worthwhile projects will not be included in the constrained Plan. However, the 2035 Plan can also serve as an important policy statement for the County about its transportation future and how it hopes to get there.

2.0 Federal Funding

This section describes the federal revenue sources (i.e., the Highway Trust Fund) and federal funding programs whose revenues flow to Miami-Dade County, either directly or through FDOT. Federal revenues include both Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funds, and these federal revenues may be either formula-based or discretionary depending on the program.

At the time of this 2035 LRTP update, the current federal surface transportation legislation – the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, or SAFETEA-LU – is approaching its expiration and will need to be reauthorized.¹ This reauthorization will set funding levels and specify changes in the various transportation funding programs. Given the recent change in administration as well as a general dissatisfaction with the previous reauthorization process which produced SAFETEA-LU, there exists the potential for major policy changes in the next iteration of the surface transportation legislation.

In addition, the Highway Trust Fund is facing insolvency (i.e., an inability to meet committed formula payments to states). Insolvency was averted in 2008 by an ‘emergency’ transfer of \$8 billion from the general fund to the highway trust fund. A combination of stagnation/reduction in vehicle miles traveled, increased fuel-efficiency of vehicles, and no change in federal gas tax since 1993 (i.e., inability to keep up with cost increases) has created this funding crisis. The National Surface Transportation Policy and Revenue Commission recommended an increase in the gas tax (plus indexing for inflation) as one of a set of policy options. However, none of this will be known until late 2009 at the earliest, and absent that information, states and MPOs must continue to refer to SAFETEA-LU for a description of funding programs and authorized funding levels.

2.1 Federal Trust Fund Revenues and SAFETEA-LU Programs

As noted above, the following description of federal funding sources and programs is prepared within the current SAFETEA-LU legislative framework. Funding programs for transportation may change and authorized funding levels for each program will change when Congress reauthorizes the transportation legislation. Presented below is a general description of current federal transportation funds.

The Highway Trust Fund (HTF) was created by the Highway Revenue Act of 1956 (Pub. L. 84-627) to ensure a dependable source of funding for the National System of Interstate and Defense Highways and to serve as the source of funding for the remainder of the Federal-aid Highway Program. Like other Federal trust funds, the HTF is a financing mechanism established by law to account for tax receipts that are collected by the Federal Government and are dedicated or “earmarked” for expenditure on special purposes. Originally, the HTF focused solely on highways, but later Congress determined that some revenues from the highway-user taxes dedicated to the HTF should be used to fund transit needs. As a result, the Mass Transit Account was created within the HTF effective April 1, 1983. Since that time, a portion of the revenues earmarked for the HTF has been credited specifically to the Mass Transit Account.

Tax revenues directed to the HTF are derived from excise taxes on highway motor fuel and truck related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use. The Mass Transit Account receives a portion of the motor fuel taxes (2.86 cents per gallon), as does the Leaking Underground Storage Tank Trust Fund (0.1 cent per gallon). The General Fund receives 2.5 cents per gallon of the tax on gasoline and some other alcohol fuels plus an additional 0.6 cent per gallon for fuels that are at least 10 percent ethanol. The Highway Account receives the remaining portion of the fuel tax proceeds. For example, as of October 1, 1997, the 18.4 cents per gallon gasoline tax was split as follows: 2.86 cents per gallon to the Mass Transit Account, 0.1 cent per gallon to the Leaking Underground Storage Tank Trust Fund, and 15.44 cents to the Highway Account. All of the receipts from the non-fuel taxes are deposited in the Highway Account.

SAFETEA-LU established funding authorization levels (i.e., funding levels which may be used for the respective programs) and obligation limitations (i.e., a restriction on the amount of federal assistance that may be promised

¹ Congress was originally set to begin the process of reauthorization in the second half of 2009. However, it now appears likely that SAFETEA-LU will be extended in its current form for up to 18 months, with

or obligated during a specific period—a given year, for example) for highway and transit programs for fiscal years 2005 through 2009. SAFETEA-LU extended the practice of establishing separate budget categories for highway and mass transit discretionary spending, thus establishing a budgetary “firewall” between each of those programs and all other discretionary programs. The firewall ensures that the protected highway and transit programs no longer have to compete with other domestic discretionary programs (e.g. housing or education) for a place in the annual federal budget. The budgetary firewall was instrumental in establishing “guaranteed” annual funding levels (or more accurately, obligation limitations) for both highway and transit programs. Any authorizations in excess of the guaranteed levels are in the budgetary “red zone” and remain part of the general discretionary budget category. Red zone funds may be made available through the annual budget and appropriations process and must compete with other budget priorities for their place in the budget each year. Presented below are the guaranteed funding levels available for obligation as authorized in SAFETEA-LU.

Year	2005	2006	2007	2008	2009	Total
Guaranteed Available for Obligation						
Highway Category						
Firewall	\$35,164M	\$37,221M	\$39,461M	\$40,824M	\$42,470M	\$195,892M
Exempt	\$739M	\$739M	\$739M	\$739M	\$739M	\$3,6954M
Total	\$35,903M	\$37,960M	\$40,199M	\$41,563M	\$43,209M	\$198,834M
Mass Transit Category						
Firewall	\$7,646M	\$8,623M	\$8,975M	\$9,731M	\$10,338M	\$45,313M
TOTAL	\$43,550M	\$46,583M	\$49,174M	\$51,294M	\$53,547M	\$244,148M

Figure 1: Authorized Federal Funding Levels

2.2 Federal Highway Administration Programs

The Florida Department of Transportation (FDOT) receives federal revenues from five major programs (along with a number of smaller programs) and allocates the applicable funds to the regional MPOs through specific FDOT funding programs. FDOT’s major programs can be divided into two general categories: Capacity Programs and Non-Capacity Programs. Capacity Programs include each major FDOT program that expands the capacity of existing transportation systems, while Non-Capacity Programs include the remaining FDOT programs that are designed to support, operate, and maintain the state transportation system. MPOs are responsible for planning, and receive revenue estimates, only for those FDOT programs that are part of the Capacity Program. Thus, only those federal funding programs that are part of the FDOT Capacity Program are described in this review. The major FHWA federal funding programs, whose funds flow through the FDOT Capacity Program are: National Highway System Program (NHS), Surface Transportation Program (STP), and Congestion Mitigation and Air Quality Improvement Program (CMAQ). Miami-Dade County is no longer a non-attainment area for air quality, and thus is no longer allocated any federal CMAQ funds. The other two major FHWA funding programs, Interstate Maintenance Program (IM) and the Highway Bridge Replacement and Rehabilitation Program (HBRRP), provide funds that largely flow through the FDOT’s Non-Capacity Program.

- National Highway System Program (NHS):** The NHS Program provides funding for improvements to rural and urban roads that are part of the National Highway System, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors. The federal share of project costs, under the NHS program, is 80 percent. If the funds are used for projects on the Interstate System, the federal share of project costs will be 90 percent (unless the project adds lanes that are not high occupancy-vehicle or auxiliary lanes, in which case the federal share will revert to the 80 percent level).
- Surface Transportation Program (STP):** The STP provides flexible funding that may be used by states and localities for projects on any Federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. A portion of funds

reserved for rural areas may be spent on rural minor collectors. Within the STP program there exists a 10 percent set-aside of STP funds for safety improvement projects including railway/highway crossings and a 10 percent set-aside for transportation enhancements. The federal share of project costs, under STP, is 80 percent. If the funds are used for projects on the Interstate System, the federal share of project costs will be 90 percent (unless the project adds lanes that are not high-occupancy-vehicle or auxiliary lanes, in which case the federal share will revert to the 80 percent level).

2.3 Federal Transit Administration Programs

There are four primary FTA funding programs that flow directly to the MPO or the local transit agency. Two of the programs (Section 5307 Urbanized Area funds and Section 5309 Fixed Guideway Modernization funds) are formula-based, while Section 5309 Bus and Bus-Related funds are generally earmarked and Section 5309 “New Starts” funds are allocated on a competitive basis through a multi-year application process. This section briefly describes each program and the pertinent project eligibility requirements.

- Section 5307 Urbanized Area:** The 5307 formula grants program provides transit capital and operating assistance to urbanized areas with populations of more than 50,000. Annual grant funds are based on various demographic, level of service, and ridership variables. SAFETEA-LU limits the application of these grants to capital purposes (e.g., bus and rail vehicle replacement and facility rehabilitation and replacement), but preventative maintenance expenses in the operating budget may be considered as “capital” for this purpose. This broad definition of “capital” expense effectively allows transit agencies the option of funding operations from Section 5307 funds, thereby providing great flexibility from this funding source. Also, SAFETEA-LU continued the transit enhancement program established in TEA-21 under the Section 5307 program where, in urbanized areas with populations of 200,000 or more, at least one percent of the Section 5307 funds apportioned each fiscal year shall be used for activities defined as transit enhancements. Miami-Dade Transit (MDT) receives Section 5307 funds directly from the FTA and applies them to their capital and operating programs. MDT has forecasted the amount of Section 5307 funds that they plan to receive through 2035 in the current PTP Pro Forma.
- Section 5309 Fixed Guideway Modernization:** This program provides capital funds for existing fixed guideway systems, based on revenue miles and route miles of service that have been in operation for seven years. MDT is eligible for this funding and has forecasted these funds through 2035 in the Pro Forma.
- Section 5309 Bus and Bus-Related:** This discretionary program provides project-specific capital grants for the purchase of bus vehicles and other bus-related assets. MDT has projected its expected 5309 Bus funding through 2035 as part of the Pro Forma.
- Section 5309 New Starts:** Fixed guideway transit projects from across the country compete for capital assistance grants from FTA through the New Starts process, which is the country’s primary mechanism for funding major new transit capacity projects. New Starts is a highly competitive and time-intensive process where projects must meet stringent requirements for both cost-effectiveness and implementing agencies must show that they have the long-term financial capacity to successfully build, operate, and maintain the proposed project. Projects generally receive much less than the statutory maximum Federal participation of 80%. MDT is currently applying for New Starts funding for the North Corridor Metrorail Extension and has plans to apply for New Starts funding for other major fixed guideway transit projects. If the New Starts application is successful, the estimated federal share of capital costs for the North Corridor will be approximately 50%. This funding is included, along with additional New Starts funding for the East-West Corridor Metrorail Extension, in the current version of the PTP Pro Forma.

3.0 State of Florida Department of Transportation Funding

This section describes the State transportation funding programs and the forecasted revenues developed by FDOT that are projected to flow to Miami-Dade County through the year 2035. Revenues that are distributed by FDOT are comprised of three major funding-source categories: federal, state, and turnpike. The total forecasted revenues for the state over the plan period are shown in Figure 2 below.

Source	2007-10	2011-15	2016-20	2021-25	2026-30	2031-35	29-Year Total
Federal	\$8,208 23%	\$9,904 26%	\$10,137 26%	\$10,836 25%	\$11,417 24%	\$11,912 23%	\$62,414 24%
State	22,650 65%	24,442 65%	25,431 66%	28,530 66%	31,978 67%	35,531 68%	168,542 66%
Turnpike	4,131 12%	3,159 8%	3,027 8%	4,149 10%	4,514 9%	4,921 9%	23,901 9%
Total	\$34,989	\$37,485	\$38,594	\$43,514	\$47,910	\$52,365	\$254,857

Figure 2: Projected Total State Revenues (millions of dollars)
 (source: FDOT 2035 Revenue Forecast Handbook, May 2008, Table 1, page 6)

3.1 State Program Revenue Estimates

Beginning in 2008, FDOT prepared long-range revenue projections for the state's major funding categories based upon the state's Adopted Work Program, current federal and state legislation, forecasts of federal funding, and internal FDOT policies. Due to the severe economic downturn nationally and in Florida, these projections continue to change and have been revised downward from their initial estimates. As the recession continues, the state's revenue estimates may continue to decline, but this review presents the most current available estimates from FDOT.

FDOT combines the Department's major programs into two general categories: Capacity Programs and Non-Capacity Programs.

- Capacity Programs include each major FDOT program that expands the capacity of existing transportation systems.
- Non-Capacity Programs include the remaining FDOT programs that are designed to support, operate and maintain the state transportation system. FDOT, based upon input from local MPOs, takes the lead in developing and administering a statewide Non-Capacity Program. According to FDOT, the Department has estimated sufficient revenues to meet safety, preservation and support objectives through 2035 throughout the state, including each metropolitan area. It is not necessary for MPOs to identify projects for these programs, so revenue estimates for these activities have not been developed for metropolitan areas.

Accordingly, with regard to state programs and state funding, MPOs need only identify projects that are funded through state Capacity Programs. The major elements of the Capacity and Non-Capacity Programs and eligible projects are detailed in the table below, taken from the current *2035 Revenue Forecast Handbook*.

Capacity Programs	Non-Capacity Programs
<u>SIS Highways/ FIHS Construction & ROW</u> - Construction, improvements, and associated right of way on SIS highways and the FIHS (i.e., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors).	<u>Safety</u> - Includes the Highway Safety Improvement Program, the Traffic Safety Grant Program, Bicycle/Pedestrian Safety activities, the Industrial Safety Program, and general safety issues on a Department-wide basis.
<u>Aviation</u> - Financial and technical assistance to Florida's airports in the areas of safety, capacity improvements, land acquisition, planning, economic development, and preservation.	<u>Resurfacing</u> - Resurfacing of pavements on the State Highway System and local roads as provided by state law.
<u>Rail</u> - Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	<u>Bridge</u> - Repair and replace deficient bridges on the state highway system. In addition, 15% of federal bridge funds must be expended off the federal highway system (e.g., on local bridges not on the State Highway System).
<u>Intermodal Access</u> - Improving access to intermodal facilities and acquisition of associated rights of way.	<u>Product Support</u> - Planning and engineering required to "produce" FDOT products and services (i.e., each capacity program; Safety, Resurfacing, and Bridge Programs).
<u>Seaport Development</u> - Funding for the development of eligible ports, including projects such as land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers.	<u>Operations & Maintenance</u> - Activities to support and maintain transportation infrastructure once it is constructed and in place.
<u>Other Arterial Construction/ROW</u> - Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS or FIHS. Also includes funding for the Economic Development Program, the County Incentive Grant Program, and the Small County Outreach Program.	<u>Administration</u> - Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non-highway fixed assets (e.g., offices, maintenance yards).
<u>Transit</u> - Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.	<u>Other</u> - Technically, this category is not a "program." It primarily represents FDOT financial commitments such as debt service and reimbursements to local governments.

Figure 3: FDOT Transportation Programs
(source: 2035 Revenue Forecast Handbook)

Figure 4 below summarizes FDOT's current revenue forecasts for its major program areas for Miami-Dade County.

FDOT Capacity Program Revenue Forecast FY 2015 - 2035 Estimates for Miami-Dade County (Millions of YOE Dollars)						
Capacity Program Areas	FY 2015 Subtotal	FY 2016-20 Subtotal	FY 2021-25 Subtotal	FY 2026-30 Subtotal	FY 2031-35 Subtotal	21-Year Total
SIS/FIHS Construction/ROW	\$117	\$259	\$277	\$317	\$287	\$1,257
Other Arterial Construction/ROW	\$58	\$355	\$398	\$427	\$465	\$1,702
Transit	\$12	\$58	\$58	\$56	\$47	\$230
Total Capacity Programs	\$186	\$671	\$733	\$800	\$798	\$3,190
TMA Funds	\$46	\$243	\$257	\$265	\$266	\$1,077
Districtwide TRIP Funds	\$17	\$77	\$74	\$74	\$74	\$317
Port of Miami Tunnel & SR-836/I-95	\$0	\$325	\$798	\$798	\$798	\$2,720
TOTAL	\$250	\$1,317	\$1,863	\$1,937	\$1,937	\$7,304

Figure 4: FDOT Program Funding Estimates

(sources: FDOT 2035 Revenue Forecast Handbook Supplement for Broward County
FDOT SIS/FIHS Second Five Years and Cost Feasible Plan as of Nov. 2009)

In the 2035 Revenue Forecast Handbook, FDOT offers the following guidance for planning for the use of TMA funds:

The estimates of TMA Funds developed from the analysis should be added to the amounts provided by FDOT for the appropriate Capacity Program (Other Arterials Construction & ROW, Transit, etc.) for each time period. Estimates of TMA Funds for non-Capacity Programs (Product Support, Resurfacing, etc.) should be documented, but should not be added to estimates of Non-Capacity Program funds provided by FDOT because those estimates are statewide estimates.

FDOT also notes that all TMA funds may be used on "off-system" roads. The TMA funds are presented here as a separate line-item, but they will be added to the other capacity program areas (as described above) when creating the cost-feasible plan.

3.2 State Program Descriptions and Project Eligibility

This section presents a brief description of each major sub-program under the State Capacity Program and describes what types of planned projects and programs are eligible for funding across the different major sub-programs.

FDOT subdivides the state Capacity Programs into two additional areas of focus: Economic Competitiveness and Quality of Life goals. Planning and project identification responsibilities are divided between the State and the MPO across the two programs. The Economic Competitiveness program includes projects that help strengthen the State's comparative economic position and include the following major programs: FIHS Construction/ROW, Aviation, Rail, and Intermodal Access. FDOT has "taken the lead" in identification of planned projects and programs that support the Economic Competitiveness Goal and provides detailed information to MPOs.

As a result, metropolitan plans and programs that include state and federal funds for these major programs should be coordinated and consistent with state long range plans and programs. MPOs have been requested to

“take the lead” in identification of planned projects and programs for the major programs that support the Quality of Life Goal. These programs include: Other Arterial Construction and Right of Way (ROW), and Transit. The programs described below are presented under the subcategories of Economic Competitiveness, and Quality of Life goals.

Economic Competitiveness Goals

- **FIHS Construction and Right-of-Way:** As a statewide Economic Competitiveness Goal, FDOT “takes the lead” in identifying projects that are consistent with the FIHS Construction and ROW Program. The Florida Intrastate Highway System (FIHS) is a component of the State Highway System. Its primary purpose is to serve interstate and regional commerce and long distance trips. Metropolitan plans and programs for the FIHS should be consistent with the current FIHS Cost Feasible Plan, as provided to each MPO. Public transportation, intermodal access, and seaport development projects may be funded under this program, provided that they are included in the current FIHS Cost Feasible Plan. Capacity improvement projects eligible for funding in the current plan include:
 - Construction of additional lanes;
 - The capacity improvement component of interchange modifications;
 - New interchanges;
 - Exclusive lanes for through traffic, public transportation vehicles, and other high occupancy vehicles;
 - Bridge replacement for which the essential purpose is to provide increased capacity;
 - Other construction to improve traffic flow, such as intelligent transportation system (ITS), incident management systems, and vehicle control and surveillance systems;
 - The preferred alternative defined by an approved multimodal Interstate Master Plan; and
 - New weight and weigh-in-motion stations and rest areas.
- **Rail:** The state provides funding for acquisition of rail corridors and assistance in developing intercity passenger and commuter rail service, fixed guideway system development, rehabilitation of rail facilities and high speed transportation. Projects and programs eligible for funding include:
 - Assistance with acquisition of rail corridors;
 - Assistance with development of fixed guideway systems;
 - Assistance with rail passenger services including all aspects of intercity, and commuter rail development;
 - Rehabilitation of rail branch lines where economically justified; and
 - Improvement of warning devices at public rail-highway grade crossings.
- **Intermodal Access:** The state provides assistance in improving access to intermodal facilities and the acquiring of associated rights of way. Projects and programs eligible for funding include:
 - Assistance with improving access to seaports and airports, particularly through highway and rail improvements; and
 - Assistance with development of intermodal terminals and facilities.
- **Strategic Intermodal System:** The 2003 Florida Legislature enacted Sections 339.61-64, Florida Statutes that created the Florida Strategic Intermodal System, and adopted by reference the SIS Steering Committee's recommendations for designation criteria that established the initial statewide system of SIS hubs and corridors. The statutes also directed FDOT to develop a strategic plan for funding and managing the SIS, with input from external transportation partners. The need for a Strategic Intermodal System was identified by various entities with an interest in the funding of key transportation systems throughout the state. Among these entities were the Stakeholders Task Force, the Florida Chamber Foundation and the Transportation and Land Use Committee. The Strategic Intermodal System calls for a transportation system that is made up of statewide and regionally significant facilities and services (strategic); contains all forms of transportation for moving both people and goods, including linkages that provide for smooth and efficient; transfers between modes and major facilities (intermodal); and integrates individual facilities, services, forms of transportation (modes) and linkages into a single, integrated transportation network (system).

Quality of Life Goals

- **Other Arterial Construction and Right of Way:** The primary purpose of this major program is to fund improvements on the part of the State Highway System, or SHS, that is not designated as the FIHS. The approximately 8,000 miles (statewide) of non-FIHS highways represent about 68% of the current SHS. Projects and programs eligible for funding include:
 - Construction and traffic operations improvements on the SHS that add capacity, reconstruct existing facilities, improve highway geometrics (e.g., curvature), provide grade separations, and improve turning movements through signalization improvements and adding storage capacity within turn lanes;
 - Acquisition of land necessary to support the SHS construction and bridge programs;
 - Acquisition of land in SHS corridors on an advanced basis (before construction is funded in the 5-year Work Program);
 - Construction and traffic operations improvements on certain local government roads² that add capacity, reconstruct existing facilities, improve highway geometrics (e.g., curvature), provide grade separations, and improve turning movements through signalization improvements and adding storage capacity within turn lanes; and
 - Acquisition of land necessary to support the construction program for certain local government roads, as discussed immediately above.

There exists a great deal of local discretion and flexibility in how funds from the Other Arterial Construction and Right-of-Way program are applied. For example, all of the funds may be applied to transit improvements (either capital improvements or operations). If a District decided to use all Other Arterial Construction and Right-of-Way program funds on transit, they would effectively be transferring those funds to the Transit program and the funds would then be subject to the eligibility requirements under the Transit program. Conversely, all funds may be applied to roadway improvements. Use of these funds for road projects not on the SHS will effectively reduce the amount of funds planned for the SHS and public transportation in the metropolitan area, the District and the State.

- **Transit:** The state provides technical and operating/capital assistance to transit, paratransit and ridesharing systems. Projects and programs eligible for funding include:
 - Capital and operating assistance to public transit systems and Community Transportation Coordinators, through the Public Transit Block Grant Program;
 - Service Development projects, which are special projects that can receive initial funding from the state;
 - Transit corridor projects that are shown to be the most cost effective method of relieving congesting and improving congestion in the corridor;
 - Commuter assistance programs that encourage transportation demand management strategies, ridesharing and public/private partnerships to provide services and systems designed to increase vehicle occupancy; and
 - Assistance with acquisition, construction, promotion and monitoring of park-and-ride lots.

3.3 Florida's Turnpike Enterprise Program

Florida's Turnpike has played a major role in meeting the transportation needs of South Florida since its opening in 1957. Today, the Turnpike annually serves over 400 million patrons, or more than one million users per day, and about half of these are in South Florida. In order to provide quality service in this important travel market, the Turnpike continues to fund major projects in South Florida.

The Turnpike's "net revenues" are defined as gross revenues (i.e., tolls and concessions) less operating and maintenance expenses. Net revenues are used for a number of projects such as capacity improvements (widening and interchange improvements), safety, SunPass improvements, ITS development, preservation activities such as resurfacing and rehabilitation, and annual debt service. The Turnpike has a coordinated process

² By law, state funds cannot be used on local government roads except under certain subprograms subject to annual legislative appropriations. FDOT has directed that long range plans should not assume that state funds

in place to appropriate the revenues to needed transportation projects in Miami-Dade County. However, as with other state and local revenue sources, the recession has had a negative impact on Turnpike traffic and revenues. As of the writing of this plan, given the economic difficulties facing the state, Turnpike officials are facing great uncertainty over long-term projections of future revenues that will be available for capital projects. Therefore, the constrained plan shows only the revenues and expenses associated with those projects that are already included the Turnpike's current ten-year finance plan, and there are no major capital improvements currently projected for the system beyond 2018.

In addition, the MPO has estimated the amount of revenue that will be available for capital projects that derives from Turnpike operations in Miami-Dade County. (It should be noted again that this estimate was not provided by Turnpike, although it is based on publicly available Turnpike financial data.) This analysis includes only a single facility – the Homestead Extension of Florida's Turnpike, or HEFT. The Turnpike has forecasted toll revenues for the next ten years for each facility and has projected its annual system-wide O&M costs through 2019. These operating costs depend on both the number of miles of roadway being maintained and the number of transactions that occur (i.e., the number of travelers). By weighting the number of miles in each facility or section of the Turnpike by the number of transactions that occur on that facility/section, the MPO is able to create a reasonable allocation factor that can be used to attribute O&M costs to the HEFT. In addition, the MPO has estimated the Miami-Dade County share of Turnpike debt payments by assuming net revenues (i.e., gross revenues less operating costs) will provide 1.6x coverage on debt. Any funds remaining after those debt payments are available for capital projects. However, this analysis does not account for expenditures on mandatory resurfacing and rehabilitation ("3R") projects, and those investments would occur before any expansion projects and would utilize that available funding. Figure 5 below shows the projected Turnpike revenues available for capital in Miami-Dade County.

Turnpike Net Revenue Forecast FY 2015 - 2035 HEFT Only (Millions of YOY Dollars)						
	FY 2015 Subtotal	FY 2016- 20 Subtotal	FY 2021- 25 Subtotal	FY 2026-30 Subtotal	FY 2031- 35 Subtotal	21-Year Total
Gross Toll Revenues	\$100	\$532	\$587	\$647	\$713	\$2,580
Estimated Share of O&M Expenses	\$60	\$329	\$382	\$443	\$513	\$1,727
Net Revenues	\$40	\$203	\$205	\$204	\$200	\$853
Estimated Share of Debt Service	\$25	\$127	\$128	\$128	\$125	\$533
Revenues Available for Capital	\$15	\$76	\$77	\$77	\$75	\$320

Figure 5: Turnpike Revenues Available for Capital (millions of dollars)
(note: Turnpike revenue and expense projections by Miami-Dade MPO – not provided by Turnpike)

Finally, it should be noted that Turnpike may choose to allocate system-wide revenues collected outside of Miami-Dade County to projects on the HEFT. If Turnpike chooses to allocate these system-wide revenues within the County, then additional widening or improvement projects would be possible.

4.0 Fuel Taxes and Road Impact Fees

There are a number of separate fuel taxes in the State of Florida which can provide revenue for transportation improvements to Florida cities and counties. These fuel taxes are:

- Constitutional Gas Tax (also known as the “Secondary Gas Tax”)
- County Gas Tax
- Local Option Six-Cent Gas Tax (the “6-Cent LOGT”)
- Capital Improvement Local Option Gas Tax (the “5-Cent LOGT”)
- Ninth-Cent Gas Tax

The first two taxes are imposed by the State and distributed to the Counties, while the last three taxes are local option gas taxes which can be imposed by each county, respectively, according to its discretion. This section describes the uses of each gas tax by county governments and the projected revenues within Miami-Dade County.

4.1 State Motor Fuel Taxes Distributed to the County

- **Constitutional Gas Tax (Secondary Gas Tax):** Florida levies a two-cent tax per gallon on motor fuels sold known as the Constitutional Gas Tax (also referred to as the Secondary Gas Tax). Twenty percent of the Constitutional Gas Tax is directly returned to the county in which it was collected, while the remaining eighty percent is pledged to the State’s road and bridge bonds, which are administered by the State Board of Administration. If no such State bonds exist within a given county, then the eighty percent of the Constitutional Gas Tax revenues are remitted to the county in which it was collected. Any excess of the eighty percent portion not needed for State bonds is also remitted. In Miami-Dade County, the eighty percent portion is administered by the Public Works Department (the “PWD”) while the initial twenty percent portion flows to the County’s General Fund. Both portions are bondable sources of revenue for the County. By statute, the Constitutional Gas Tax must be used for the acquisition, construction and maintenance of roads.
- **County Gas Tax:** The County Gas Tax, formerly the Seventh-Cent Gas Tax, is a tax of one cent on every gallon of motor fuel sold in a county at the wholesale level. The State Department of Revenue administers the tax and redistributes net proceeds to the counties. County Gas Tax proceeds are to be used for transportation related capital and operating expenditures, and may be used as security for revenue bond financing. Revenue from the County Gas Tax currently flows to support both MDT and PWD countywide operations.

4.2 Locally Imposed Gas Taxes

There are three local option gas taxes imposed in Miami-Dade County; (i) the up to six cents Local Option Gas Tax (the “6-Cent LOGT”), (ii) the Ninth-Cent Gas Tax, and (iii) the Capital Improvement Local Option Gas Tax (the “5-Cent LOGT”). All three local option gas taxes are authorized by the State Legislature and are imposed, with local discretion, by Miami-Dade County.

- **6-Cent Local Option Gas Tax:** The 6-Cent LOGT is a tax of 1 to 6 cents on every gallon of motor fuel and special fuel sold at retail in a county. It may be levied by a majority vote of the governing body or by referendum. The proceeds may be used for transportation expenditures, both capital and operating, including public transportation. The 6-Cent LOGT may be used as security for revenue bond financing. Municipalities within each county receive a portion of the total tax proceeds. Miami-Dade County currently levies the full 6 cents, and revenue from the 6-cent LOGT currently supports countywide operations for both the PWD and MDT. This distribution to the County has been reduced in recent years because the inter-local agreement between the County and the County’s 34 municipalities adjusts for new incorporations.
- **Ninth-Cent Gas Tax:** The Ninth-Cent Gas Tax, formerly the Voted Gas Tax, is a tax of one cent on every

be levied on special fuels in every county beginning January 1, 1994. The proceeds are to be used for establishing, operating and maintaining a transportation system, including both capital and operating expenditures. Counties are authorized to expend funds in conjunction with the state or federal government for joint transportation projects. The Ninth-Cent Gas Tax may be used as security for revenue bond financing. Revenue from the Ninth-Cent Gas Tax currently supports countywide operations for PWD and MDT.

- **5-Cent Capital Improvement Local Option Gas Tax:** Passed during the 1993 legislative session, the 5-Cent LOGT is a tax of 1 to 5 cents on every gallon of motor fuel, but not special fuel, sold at retail in a county. It may be levied by a majority plus one vote of the governing body or by referendum. The proceeds may be used for transportation expenditures needed to meet the requirements of the capital improvements element of an adopted comprehensive plan, including public transportation. The proceeds may not, however, be used for operations. The 5-Cent LOGT may be used as security for revenue bond financing. Miami Dade County began levying 5-cents per gallon in 1994. The levy was reduced to 3 cents per gallon in 1996, and revenue from the 5-Cent LOGT flows to the Local Option Gas Tax Program, which is administered by the PWD.

4.3 Fuel Tax Revenues

Projecting gasoline tax revenues in the current environment of volatile petroleum prices and unprecedented drops in vehicle miles traveled (VMT) is very difficult. According to the 2009 Transportation Improvement Program (TIP), Miami-Dade County will receive approximately \$16.8 million in funding from the Secondary Gas Tax (SGT) in FY 2009, and this amount will grow modestly over the near term. These SGT revenues will be used for a range of highway and bridge improvement projects in the County. At the same time, the estimated net revenue for the 5-cent LOGT in FY 2009 is \$28.4 million. Of that figure, 26% (\$7.4 million) will go to the individual municipalities, while the remaining \$21 million will flow to the County. Of that \$21 million, approximately \$2.3 million will be used for roadways and traffic safety and \$1.8 million for debt service on Public Improvement Bonds. The remaining funding will flow to Miami-Dade Transit (see following chapter). The projected near-term funding from all the gas tax funding sources is presented in Figure 6 below.

Fuel Tax Revenue Forecast FY 2015 - 2035 (Millions of YOE Dollars)						
	FY 2015 Subtotal	FY 2016-20 Subtotal	FY 2021-25 Subtotal	FY 2026-30 Subtotal	FY 2031-35 Subtotal	21-Year Total
Secondary Gas Tax	\$20	\$103	\$111	\$119	\$128	\$481
County Fuel Tax	\$9	\$47	\$50	\$54	\$59	\$219
6-cent LOGT	\$44	\$230	\$248	\$267	\$288	\$1,077
5-cent LOGT	\$20	\$104	\$112	\$121	\$130	\$488
Ninth Cent Gas Tax	\$11	\$58	\$62	\$67	\$72	\$271
Total Gas Taxes	\$104	\$542	\$584	\$629	\$678	\$2,536

Figure 6: Projected Gas Tax Revenues in the County (millions)

The most recent PTP Pro Forma also includes long-term projections of growth in gasoline tax revenues as one of the many sources of funding for MDT. Based on the economic concerns cited above, as well as a projected long-term shift towards more fuel-efficient cars, the projected growth in gasoline tax revenues is well below the rate of inflation, at only 1.5% per year. The final summary of expected revenues in Section 6 will also show the portion of these fuel taxes that will be allocated to the County's Department of Public Works (DPW).

4.4 Road Impact Fees

Road impact fees are assessed in Miami-Dade County by the Department of Planning and Zoning and transferred to the Department of Public Works (DPW). These fees are imposed at the district level against developers and new development for the purposes of financing required infrastructure, such as roads, that are necessary to support the new development. All road impact fees flow to the Road Impact Fee Program and are applied to a variety of projects including road and bridge capacity improvements, road widening and resurfacing, traffic control device installation and intersection and safety improvements.

Based on the 2009 TIP, at this time, a significant reduction from the current level is expected in road impact fees in the County. (See Figure 7 below for the proposed expenditure of road impact fees by County district.) These fees will fund over \$31 million in projects in FY 2009, but this figure is projected to fall to under \$13 million in the coming years, and the long-term growth prospects for this funding source are currently poor. This review will project the road impact fees to have zero nominal growth over the Plan period, thus declining in real terms.

District	Proposed		Tentative			5-Year Total
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
1	\$1,770	\$1,770	\$1,770	\$1,770	\$1,770	\$8,850
2	4,771	3,040	3,040	3,040	3,040	16,931
3	2,997	2,722	1,130	1,130	1,130	9,109
4	921	250	250	250	250	1,921
5	1,492	1,320	1,320	1,320	1,320	6,772
6	12,741	3,760	3,760	3,760	3,760	27,781
7	1,151	240	240	240	240	2,111
8	5,599	1,240	1,240	1,240	1,240	10,559
9	110	110	110	110	110	550
Total	\$31,552	\$14,452	\$12,860	\$12,860	\$12,860	\$84,584

Figure 7: Projected Expenditure of Road Impact Fees by District (thousands)

Road Impact Fee Revenue Forecast FY 2015 - 2035 (Millions of YOE Dollars)						
	FY 2015 Subtotal	FY 2016-20 Subtotal	FY 2021-25 Subtotal	FY 2026-30 Subtotal	FY 2031-35 Subtotal	21-Year Total
Road Impact Fees	\$13	\$64	\$64	\$64	\$64	\$270

Figure 8: Projected Road Impact Fee Revenues (millions)

5.0 Local and Regional Agencies

5.1 Miami-Dade Transit (MDT)

Miami-Dade Transit is the 12th largest public transit system in the United States, the largest transit agency in the state of Florida, and one of the largest departments of the Miami-Dade County government. MDT is responsible for planning for and providing all public transit services in the County. MDT's integrated transportation system consists of four major components: Metrobus, which provides the broadest and most basic service coverage for most areas of Miami-Dade County; Metrorail, an elevated rapid-transit system stretching 22 miles from Kendall to Medley; Metromover, a 4.4-mile elevated people mover serving the downtown central business district of Miami, including Omni and Brickell; and Special Transportation Service (STS), designed to meet the needs of people with disabilities unable to use regular transit services. Currently, MDT records over 326,000 daily (weekday) boardings on this unified system, and STS has a daily average of over 4,000 trips.

MDT's capital and operating expenses are funded by a wide range of local, state, and federal sources. The projected future levels of these funding sources are summarized regularly by the County in the *People's Transportation Plan Pro Forma*, which serves as the basis for MDT's revenue projections in the long range plan. The People's Transportation Plan (PTP) is the package of transit improvements that was approved by County voters in 2002 and funded by a new half-cent dedicated sales tax (the Charter County Transit Surtax). The *Pro Forma* undergoes regular revisions as revenue forecasts are updated, modifications to services are considered, and operating costs change, but the projections included here are based on the most current *Pro Forma* available to the MPO.

The two biggest service changes included in the current *Pro Forma* are the completion and opening of the MIC-Earlinton Heights Metrorail Connector in 2012, and the ongoing Metrobus route restructuring, which is expected to save over \$15 million annually as compared to the current structure. On the revenue side, the *Pro Forma* reflects the significant reduction in PTP surtax growth that has occurred over the past three years and that is expected to continue for the immediate future. To support the future transit service needs of the County in the face of insufficient revenue growth, the *Pro Forma* envisions increases to two important existing funding sources. First, it assumes that the remaining 2 cents of the 1-to-5 cents LOGT that are not currently being imposed in Miami-Dade County will be imposed beginning in 2014. Second, it assumes that the current County maintenance-of-effort funding will be supplemented by an additional dedicated millage, also beginning in 2014. These new funding sources are highlighted in the funding table below.

MDT's projected revenues are summarized in Figure 9 below. The current *Pro Forma* does not include the proposed North Corridor or East-West Corridor Metrorail projects, and so the federal and state New Starts money that had previously been projected for those projects is also not included.

Miami-Dade Transit (MDT) Revenue & Expense Forecast FY 2015 - 2035						
(Millions of YOY Dollars)						
	FY15	FY16-20	FY21-25	FY26-30	FY31-35	21-Year Total
Revenue						
Operating Revenues (Farebox and other)	\$166	\$924	\$1,083	\$1,269	\$1,457	\$4,898
Federal Grants	\$83	\$432	\$489	\$553	\$626	\$2,183
State Grants	\$31	\$162	\$178	\$196	\$216	\$782
PTP Surtax	\$210	\$1,221	\$1,558	\$1,989	\$2,538	\$7,517
GF Support - Existing (includes SFRTA funding)	\$170	\$941	\$1,116	\$1,324	\$1,424	\$4,976
CI-LOGT - Existing	\$22	\$115	\$124	\$133	\$144	\$537
All Other Local Revenues	\$22	\$128	\$160	\$204	\$261	\$774
GF Support - New (Starts 2014)	\$47	\$274	\$349	\$446	\$569	\$1,684
CI-LOGT - New (Starts 2014)	\$14	\$74	\$79	\$85	\$92	\$345
Total Revenues	\$765	\$4,269	\$5,136	\$6,200	\$7,326	\$23,697
Expenses						
Existing System O&M	\$546	\$3,021	\$3,594	\$4,334	\$5,257	\$16,752
SFRTA Contribution	\$4	\$21	\$21	\$21	\$21	\$89
Municipal Contribution	\$42	\$244	\$312	\$398	\$508	\$1,503
Debt Service	\$101	\$1,009	\$1,270	\$1,341	\$1,470	\$5,192
All Other Operating Expenses	\$11	\$34	\$32	\$37	\$43	\$158
PAYGO (Cash) Capital Expenses	\$3	\$0	\$0	\$0	\$0	\$3
Total Expenses	\$707	\$4,330	\$5,229	\$6,132	\$7,299	\$23,697

Figure 9: Miami-Dade Transit Projected Revenues (millions)
 (source: July 2009 PTP Pro Forma; projected expenses also provided for comparison)

5.2 Miami-Dade Expressway Authority (MDX)

The Miami-Dade Expressway Authority (MDX) is a State-sanctioned, locally administered, independent agency responsible for the operation and maintenance of five major expressway facilities in Miami-Dade County. MDX's purposes and powers include, among others, the power to (1) acquire, hold, construct, improve, maintain, operate, own and lease an expressway system; (2) fix, alter, change, establish, and collect tolls, rates fees rentals, and other charges for the services and facilities of its expressway system; and (3) borrow funds to finance the expressway system. More than 95 percent of MDX revenues are estimated to come from tolls collected on MDX expressways, with the remaining revenues deriving from violations and other miscellaneous sources.

Toll revenues projected in the financing plan are based on a traffic and revenue analysis that considered future toll increases, elasticity impacts, system expansions, new regional roadway facilities, network improvements and increased traffic volumes. For the purposes of the LRTP update, the capital cost of the MDX projects will be fully funded by the Authority based on its financing plan. In addition, the financing plan generally assumes that the system toll revenues during this period are fully spent in the implementation of MDX capital improvement projects, debt service and operation and maintenance of the MDX facilities. However, MDX does have the statutory authority, but not the responsibility, to use any 'excess revenues' it collects from tolls to support other transportation investments within the County. (That is, any revenue left over after all bond payments and all expressway operating and maintenance expenses.) MDX is currently supporting a study of express bus service on the Dolphin Expressway (SR 836)

MDX gave the MPO a financial projection covering the years FY09 to FY22. Using basic assumptions, the MPO extended this projection out to the plan horizon of 2035. The key indicator of interest to the MPO is net revenues – that is, funds remaining after all operating expenses are covered. These are the funds that will be available to make capital investments in MDX. MDX also included transfers from the Rate Stabilization Fund in their forecast. However, the MPO is interested in net revenues absent these transfers – that is, funds generated by the expressway facilities on an ongoing basis.

MDX is anticipating that operating costs will grow faster than toll revenues in the later years of its projection. As a result, during the later years of the projection, the funding available for capital essentially stays flat. During the final five years of the projection, Net Revenues (without rate stabilization fund transfers) are flat at approximately \$122 million. The MPO has simply continued this \$122 million estimate out through 2035. This means that funding available for MDX capital projects is flat in nominal terms and declining substantially in real terms.

	MDX Net Revenue Forecast FY 2015 - 2035 (Millions of YOE Dollars)					21-Year Total
	FY 2015 Subtotal	FY 2016- 20 Subtotal	FY 2021- 25 Subtotal	FY 2026- 30 Subtotal	FY 2031- 35 Subtotal	
Gross Toll Revenues and Interest Earnings	\$170	\$896	\$969	\$1,040	\$1,117	\$4,192
Total Operations & Maintenance Expenses	\$52	\$292	\$358	\$430	\$507	\$1,639
Net Revenues Available for Capital	\$118	\$604	\$611	\$611	\$611	\$2,553

Figure 10: MDX Projected Net Revenues (millions)

Note that MDX revenue estimates in Figure 10 do not account for increased revenue anticipated from the Open Road Tolling (ORT) improvements on SR 836 and SR 112. As a result, MDX projects' priorities in the 2035 cost feasible plan can potentially be advanced based on anticipated additional funds from the system wide ORT conversion and other sources.

5.3 South Florida Regional Transportation Authority (SFRTA)

SFRTA provides the Tri-Rail commuter rail service along a 70-mile rail corridor connecting Palm Beach, Broward, and Miami-Dade Counties. Tri-Rail serves 18 stations along the corridor and connects with the Metrorail in Miami to provide access to downtown Miami. Tri-Rail was initially created by FDOT in 1987 to provide supplementary commuter access during the widenings of I-95 and the Turnpike, and it was intended to be temporary. However, the service proved popular and has been retained ever since, and line extensions and additional fleet purchases have extended Tri-Rail's reach and service quality. Most recently, Tri-Rail completed a major double-tracking project (supported by federal New Starts funds), which included construction of a high-level fixed bridge over the New River near Ft. Lauderdale.

SFRTA is supported by annual capital and operating contributions from each of the three counties, in addition to state and federal grant support and fare revenues. SFRTA has been seeking a dedicated stream of funding, with a rental car surcharge as the most likely funding source, but it has not yet achieved that goal. Due to the recession and the lack of available local funding, all three counties are currently contributing the statutory minimum amount (\$4.2 million per year) to SFRTA, and the Plan projects that this funding level will continue unchanged into the future. If the legislation governing SFRTA contributions by the counties is changed or if a dedicated funding source for SFRTA is created, then the Plan can be updated accordingly.

Funding from Miami-Dade County to SFRTA passes through Miami-Dade Transit and is included as an expense item in MDT's budget. Therefore, the revenues that go to SFRTA are not shown as a separate line item in this revenue forecast, but are included in the MDT figures.

6.0 Summary of Forecasted Revenues

A summary of the forecasted revenues described above is presented in Figure 11 below. While the MPO does not have direct decision-making influence over all the revenues shown here (in particular, Turnpike and MDX have their own long-range capital planning process and controls their funds), it is important to show the full range of highway and transit funds that will be available for use within the County over the coming years.

Of the \$35.5 billion in total projected revenues identified in the table, approximately \$25.5 billion, or 72 percent, is generated locally. This figure includes transit fares, PTP surtax revenues, County general funds, fuel taxes (both the local option taxes and the County's share of the state taxes), road impact fees, MDX revenues, and the County's estimated share of Turnpike revenues. The remaining \$10.0 billion in revenues, or 28 percent of the total, comes from either federal or state funding sources, including FDOT programs and FTA and FHWA grant programs.



Revenue Forecast FY 2015 - 2035 Estimates for Miami-Dade County (Millions of YOE Dollars)						
	FY 2015 Subtotal	FY 2016-20 Subtotal	FY 2021-25 Subtotal	FY 2026-30 Subtotal	FY 2031-35 Subtotal	21-Year Total
CAPITAL REVENUES						
FDOT						
SIS/FIHS Construction/ROW	\$117	\$259	\$277	\$317	\$287	\$1,257
Other Arterial Construction/ROW	\$58	\$355	\$398	\$427	\$465	\$1,702
TMA Funds	\$46	\$243	\$257	\$265	\$266	\$1,077
Districtwide TRIP Funds	\$17	\$77	\$74	\$74	\$74	\$317
Port of Miami Tunnel & SR-836/I-95	\$0	\$325	\$798	\$798	\$798	\$2,720
Turnpike						
Revenues for Capital	\$15	\$76	\$77	\$77	\$75	\$320
MDX						
Net Revenues	\$118	\$604	\$611	\$611	\$611	\$2,553
Dept. of Public Works (DPW)						
Secondary Gas Tax	\$16	\$82	\$89	\$95	\$102	\$384
5-cent LOGT	\$2	\$7	\$8	\$9	\$9	\$35
Road Impact Fees	\$13	\$64	\$64	\$64	\$64	\$269
MDT						
PTP Surtax (debt service for capital)	\$101	\$1,009	\$1,270	\$1,341	\$1,470	\$5,192
Federal Grants	\$3	\$0	\$0	\$0	\$0	\$3
OPERATING REVENUES						
Dept. of Public Works (DPW)						
6-cent LOGT	\$22	\$115	\$124	\$134	\$144	\$539
County Fuel Tax	\$9	\$47	\$50	\$54	\$59	\$219
9th Cent Gas Tax	\$11	\$58	\$62	\$67	\$72	\$270
MDT						
Direct Operating Revenues	\$166	\$924	\$1,083	\$1,269	\$1,457	\$4,898
Federal/State Grants (incl. FDOT Transit)	\$111	\$594	\$667	\$749	\$842	\$2,962
PTP Surtax (for operations)	\$109	\$212	\$288	\$648	\$1,069	\$2,325
All Other Existing (incl GF and LOGT)	\$214	\$1,184	\$1,400	\$1,662	\$1,829	\$6,287
Proposed New GF and LOGT	\$61	\$347	\$429	\$531	\$661	\$2,029
TOTAL REVENUES	\$1,210	\$6,582	\$8,025	\$9,191	\$10,352	\$35,359

Figure 11: Summary of Projected Revenues (millions)

7.0 Potential New Local Funding Sources

7.1 Introduction

The Miami-Dade MPO is facing a difficult set of choices as it attempts to prioritize important highway and transit projects across the County in the face of major reductions in projected future revenues. These revenue reductions are a direct result of the deep recession being experienced in the state and particularly in South Florida, which is now bearing a triple burden of significantly reduced funding support from FDOT; major losses in property tax revenue that support transit and roadway operating expenses; and significant drops in sales tax and local option gasoline tax revenues that support both capital and operating expenses for a range of transportation projects. These revenue declines will result in a “cost feasible” long range transportation plan with fewer committed projects than previous plans, and many important and popular projects will likely end up being deferred.

In order to revive some of these deferred projects, Miami-Dade County will need to examine new or alternative funding sources. There are many funding sources which possess considerable potential to contribute to the County’s capital or operating expenses for transportation. This memorandum will examine and assess a range of these funding options, considering such dimensions as future revenue potential, legal and political viability, equity and local acceptance, and administrative burdens.

7.2 Evaluation of Potential Funding Sources

When evaluating new revenue sources or augmenting existing sources, a number of important criteria should be considered. These can be generally organized into four major factors:

- Financial:** This factor addresses the fundamental question of the expected yield from the revenue source. Generally, this is judged on the basis of a “reasonable” rate of taxation given the size of the tax base. For example, if a sales tax is under consideration, a tax rate of 0.1 percent or 1.0 percent would be judged in the “reasonable” range, while a tax rate of 10.0 percent would be well outside the reasonable range. However, for narrower taxes such as a hotel/motel or rental car tax, the reasonable range might be higher. A related factor is stability – a source that could experience significant annual fluctuations would be judged less suitable than a source with less likelihood of year-to-year variance. For example, the employer-paid tax on total payroll (or “head tax”) in Portland, Oregon, has resulted in a much more stable source of funding than a retail sales tax, which would have been more subject to economic cycles. Finally, this factor addresses the extent to which the revenue stream can be indexed to inflation. This is important because many elements of transportation expenses to be funded are closely tied to inflation.
- Political:** This factor addresses equity, or the extent to which the incidence (or burden) of a funding source matches the provision (or benefit) of the services that the source funds. For example, if a jurisdiction or geographic area funds 10 percent of a project’s revenues, it should (over a reasonable time horizon) receive approximately 10 percent of service provision. This factor also addresses differential impacts among demographic groups. Retail sales taxes, for example, have been criticized as inequitable because they are regressive, burdening lower income households more than upper income households. Finally, the source should ideally have a tie to a transportation purpose. Taxes on motor vehicle sales, motor vehicle registration, driver licensing, parking, rental cars, and motor fuels and highway tolls all have a direct connection to transportation, which is often viewed more favorably by the public than a general tax with no link to the region’s transportation network.
- Legal:** Any dedicated source of funding must of course adhere to various State constitutional, statutory, and regulatory limitations. In Florida, there are strict limitations on both local option motor fuels taxes and local option sales taxes, two of the more popular transportation funding mechanisms, and the state has no income tax from which to draw any additional funds for transportation. Thus, when existing funding sources are fully utilized, major state legislative action may be required to effect any further change.
- Administrative:** This factor addresses the actual methodology of revenue collection and the ease and cost of administration. Revenue sources that rely on existing collection mechanisms are generally preferred. For

example, in most states with a pre-existing state sales tax, the state will act as the collection agent for a local sales tax. Unique new taxes may require that the benefiting agency directly collect the revenues and conduct enforcement. One example of the latter is the Triangle Transit Authority in North Carolina, which collects its own rental car tax and performs its own enforcement, including audits of taxpayers (i.e., rental car companies). Unless the proposed new source performs very strongly on the other evaluation dimensions, the creation of an entirely new collection mechanism is usually to be avoided.

Appendix A summarizes a review of alternative dedicated revenue sources for public transportation that AECOM recently performed. As noted in the legend accompanying the table, the far right column provides a qualitative overall “ranking” of the appropriateness of the revenue source for Miami-Dade County, based on the factors described above. A full circle indicates a source that is already in use or under strong consideration. A half circle indicates a source that could be considered, but that might face significant financial, political, or legal barriers to implementation. An empty circle indicates a source that appears to be highly unlikely to ever be implemented in the County.

7.3 Revenue Sources Under Consideration in Miami-Dade County

As part of the 2035 LRTP planning process, the MPO has reviewed a range of potential revenue sources for the County. The potential public sector funding sources (that is, government-imposed taxes or fees) can be usefully divided into existing sources and new sources. The existing sources can generally be increased either by Board action (such as the Board of County Commissioners or the MDX Board of Directors) or by countywide referendum, with no approval or new legislation required from the State legislature. The new funding sources, by contrast, would generally require that the legislature grant significant new authority to the County, and in some cases a state constitutional amendment might be required. (However, changes to some of the “smaller” existing fees could also require state legislative approval.)

The existing and new local public sector sources under consideration in the county have included:

Existing Sources	New Sources
1. Additional ½-cent sales tax (to maximum allowable under Charter County Transit Surtax)	5. Additional LOGT beyond current authority
2. Additional 2-cent fuel tax (to maximum allowable under existing 1-to-5 cent LOGT)	6. Tolling (managed lanes) on currently un-tolled roadways
3. Increased tolls on MDX expressways	7. Vehicle miles traveled (VMT) tax
4. Increases in “smaller” taxes/fees, such as hotels, car rentals, and car registration	

Of these eight sources, four have been largely eliminated from further consideration, for the following reasons:

- *4. Increases in smaller fees:* These fees (such as hotel and car rental taxes) do not provide enough “bang for the buck” given their already high rates of taxation and relatively small revenue bases, and the potential political difficulty involved in raising these taxation rates is high, given the desire to encourage tourist and business travel in the current economy.
- *5. Additional LOGT:* Additional gas taxes (beyond the levels currently authorized) would require a constitutional amendment.
- *6. Tolling on un-tolled roads:* Authority to institute new tolling on currently free roadways may require major state legislative action and might encounter political opposition from affected areas of the County.

The remaining four public sector options are summarized in greater detail in Figure 12 below.

Source	Rate	Annual Revenue Potential (\$2009)	Positive Factors	Negative Factors
Sales tax (charter county transit surtax)	0.5% (half-cent)	\$170 million	FIN - Generates significant funding off of broad base. LEG - Authority already in place, though referendum required. ADM - Collection structure in place.	FIN - Evidence suggesting future growth rates will not match historical experience. POL - Experience with current PTP 0.5% surtax may make passage of additional surtax very difficult.
Existing local option gas tax (LOGT)	2¢ per gallon	\$19 million	LEG - Authority in place, can be passed by Board ordinance. ADM - Collection structure in place.	FIN - Revenue generated per penny of gas tax is modest. POL - Gas tax increase generally unpopular and seen as regressive.
Tolls	50% toll increase on MDX facilities	\$40 million	LEG - Authority in place, can be implemented by MDX Board. ADM - Essentially zero additional admin costs.	FIN - Raises a moderate amount of funding, but may deter users. POL - Statute allows "excess" toll revenues to be used on other projects, but so far that has not been pursued – would be a major policy change.
Vehicle miles traveled (VMT) tax	1¢ per mile	\$200 million	FIN - Could generate major new funding at a low rate on a very broad base. POL - Could be used for congestion management as well as raising revenue.	LEG - No current authority in Florida for such a tax (or in U.S., except for pilot programs). ADM - Entirely new collection structure would be required. POL - Major opposition likely, and would have to address privacy concerns.

FIN = Financial POL = Political
 LEG = Legal ADM = Administrative

Notes: Rate shown and resulting annual revenue potential are hypothetical. Potential revenues assume minimal elasticity impacts for sales/gas/VMT taxes. Assumes elasticity of -0.2 for toll increases, with existing MDX revenues of \$112 million. Assumes weekday VMT of ~66 million and annualization factor of 300.

Figure 12: Potential New Public Sector Funding Sources for Miami-Dade County

Private sector funding and financing options also exist for the County, but they are much more difficult to project with any confidence, particularly given the current economic situation. Possible private sector involvement can also be broken down into two main types:

- **Concessions:** Although the public-private partnership (PPP) market is currently in turmoil due to the credit market crisis, some projects are still proceeding successfully. On the highway side, there appears to be a shift developing towards availability payments (such as on I-595 in Broward County) and away from private sector firms taking on revenue risk in the form of actual or shadow tolls. On the transit side, there continues to be interest in design-build and DBOM (design-build-operate-maintain) partnerships for delivering new transit projects.

- *Joint Development:* The potential for joint development efforts around fixed guideway transit stations continues to hold promise, provided that zoning, parking, and other land use regulations are supportive of transit. These joint development efforts could include air rights development, parking structures, donation of right-of-way, stations integrated into existing buildings, and other in-kind donations.

7.4 Conclusions

Miami-Dade County faces far-reaching decisions in the coming months and years about the funding of its transportation needs. Many potential funding options exist that could supplement existing transportation revenues and prevent the deferral of important investments, but each of these options presents challenges for the County that must be overcome. In light of its revenue potential and the existing regulatory and administrative structure surrounding it, the additional half-cent of the Charter County Transit Surtax may be the most feasible new funding source for the County in the near- and medium-term. However, given the recession and the fact that the County is behind schedule on delivering the promised projects from the original half-cent surtax (as part of the People's Transportation Plan), a referendum on an additional half-cent seems unlikely in the immediate future. In the long-term, the VMT tax holds promise as a robust, stable funding source, but it seems likely that other states and/or the federal government will have to join in this approach before Florida will consider its use at the state or local level.

Appendix A: Evaluation of Potential Revenue Sources

Source	Example(s)	Financial	Revenue Yield	Indexing	Political	Legal	Administrative	Overall Rating for Miami-Dade
		Revenue Growth/ Stability			Public Perception/ Equity	Legality/ Tie to Transportation	Assessment & Collection	
Local Option Sales Tax	Atlanta, GA Charlotte, NC Chicago, IL Dallas, TX Houston, TX Santa Clara, CA San Diego, CA	- Tax revenue is affected by economic conditions. - Provides reliable revenue flow if State economy remains strong.	There is potential for large revenue yield, especially as population and median income levels grow.	Sales tax revenues have a direct relationship to price levels and inflation.	- Tax is regressive; lower income individuals spend greater portion of disposable income. - Tax is unpopular with local retailers who fear a negative impact business.	- Sales tax has no direct tie to transportation. - Legislation would be required to impose new sales tax rates.	Mechanism in-place to collect the local-generated tax revenue.	
Corporate Income Tax	New York, NY	Revenue growth can be affected by economic conditions and existing industry mix.	Corporate income tax revenue is cyclical and follows state and local business patterns.	Tax has an indirect tie to inflation because corporate income reflects price levels over longer time periods.	Indirect negative impact on investment and corporate growth.	No direct tie to transportation.	Mechanism in-place at state level to collect the local-generated tax revenue.	
Employer Payroll Tax	Portland, OR	Tax paid by employers and is based on gross payroll paid to employees.	Potential for sufficient long-term yield if employment levels continue to grow.	Inflation has indirect effect if payrolls try to keep pace with increasing costs of living.	Tax may face opposition from local business community.	No tie to transportation.	No collection mechanism at either the State or local level.	
Personal Income Tax		- Salary and wage distributions account for majority of the revenue collected. - Tax normally produces stable revenue flow.	Traditionally, personal income tax has reliable revenue yield.	Inflation has an indirect effect in so far as salaries and wages keep pace with inflation.	- Raising the tax is politically unpopular. - Opponents claim increasing the tax has a negative economic impact and inhibits income generation and resulting productivity.	- Constitutional amendment and legislation would be required to impose new income tax rates – very unlikely. - No direct tie to transportation.	No mechanism in place for personal income tax collection.	
Real Estate Property Tax	San Francisco, CA	- Stable revenue source, but fluctuates with real estate trends and property values. - Revenue growth contingent on property trends.	Sufficient revenue yield, but any increase would tend to reduce municipal revenue potential.	Property values do not always follow inflationary trends.	Tax is already heavily burdened, potential for stiff public opposition.	No direct tie to transportation.	Collection mechanism in place.	
Personal Property Tax (Auto)	Hillsborough County, FL	Revenue stability affected by personal property value fluctuations.	Adding intangible property increases yield and progressivity.	Some personal property values will track price levels.	Tax is a major local revenue source and is already heavily burdened	Tax has direct tie to transportation if levied against auto values.	Complex tax that is difficult to enforce.	
Motor Fuel Gallonage Tax	Cleveland, OH Miami, FL Washington, DC	- Stable revenue flow as long as economic conditions remain strong. - Limited revenue growth potential as technical advances improve fuel efficiency.	A local option fuel tax tends to reduce statewide tax increase potential.	- Must be indexed to inflation because tax is based on a gallonage method. - Potential long run yield not as reliable as a % of motor fuel tax or other indexed bases. Larger revenue output if consumers were taxed on the % of fuel purchased.	- Reinstating a recently reduced tax may generate negative reactions. - Opportunity to promote the tax as pro-environment (i.e.: represents effort to achieve clean air goals).	- Tax has a direct tie to transportation. - Levy is actually a user charge rather than a “traditional” tax.	State collection mechanism in place.	
Motor Vehicle Registration Fees	Seattle, WA	Stable revenue if the per capita growth of automobiles grows with the State's economy.	Potential exists for low revenue yield.	Fee would have to be indexed for inflation.		- Registration fees have a direct tie to transportation. - The levy is a user charge not a tax.	State collection mechanism in place.	
Parking Receipt Tax		- Reliable revenue (i.e. will have inflationary growth) if single-occupancy drivers continue to grow. - Growth contingent on businesses remaining in CBD.	Revenue yield is low and costs to enforce and collect may exceed revenue gain.	Tax is not related to current price levels.	- Not visible to commuters, tax is embedded in parking price. - Directly affects parking providers who will likely oppose the tax as anti-business.	Relationship to transportation in that tax revenue is generated by commuters.	No collection process in place at either State or local level.	

 = In use or strongly considered  = Possible, but would face barriers  = Highly unlikely

Surface Parking Surcharge		- Reliable revenue if single-occupancy commuters grow. - Growth contingent on businesses remaining in CBD. - If successful, revenues diminish over time.	Yield affected if businesses decide to relocate to outlying communities.	- Levied as a flat fee surcharge priced as an absolute dollar amount. - Not indexed to increase with the cost of parking.	- Parking rates currently low. - Downtown commercial occupants may relocate if parking rates increased.	Tie to transportation in that tax revenue is generated by commuters.	Implementation will require coordinating with private parking vendors and businesses located in the CBD.	
Rental Car Tax	Raleigh-Durham, NC	- Tax levied on amount charged for auto rental. - Small tax base, limited growth potential. - Revenue flow affected more by non-resident traffic.	Low yield may be deterrent.	Tax may be levied on a per day basis or as % of the total rental charge.	Considered more of a burden to non-residents.	Tax has a tie to transportation.	State level collection mechanism in place.	
Vehicle Emissions Fee		Normally paid as an annual flat fee but may be levied based on vehicle miles traveled.	Limited revenue growth; revenue yield may be a disincentive.	Levied as a flat fee priced as an absolute dollar amount.	- May limit other auto usage revenue, such as gas tax increase. - Palatable to public if tax achieves clean air standards and improves quality of life.	Emissions tax has a direct link to transportation. Will require legislation to change existing emission standards.	State level collection mechanism in place.	
Vehicle Privilege Fee	Charlotte, NC	Fee levied on the number of cars per household and is paid as an annual flat fee.	Limited revenue growth; yield may be a disincentive.	Levied as a flat fee priced as an absolute dollar amount.	Fee is a user charge; may be unpopular and viewed as an unnecessary public burden.	Fee has a tie to transportation.	No in place collection mechanism, could be collected with personal property or vehicle registration fee.	
Real Estate Transfer Tax	Washington, DC	- Tax that applies to the transfer value of real property deeds. - Unreliable growth, collections infrequent and unpredictable.	Revenue yield may not be sufficient due to infrequency of transfers.	Tax values are contingent on the value of transferred property.	Opposition from real estate partnerships, realtors or other ventures managing extensive property holdings.	- No tie to transportation. - State already imposes documentary stamp fees to fund transportation.	State currently levies a real estate conveyance tax assessed on the purchase price of conveyed property. Seller pays the tax.	
Mortgage Recordation Tax	Albany, NY	- Excise tax on recorded mortgages. - Low revenue growth since tax is one-time levy on mortgage recording.	Low yields where property purchases and mortgage recordings are below the national average and/or declining.	- Tax collections are based on the recorded liens. - Inflation has no direct affect	Tax could be unpopular with general public; a real estate property tax is already collected at the local level.	- No tie to transportation. - State already imposes documentary stamp fees to fund transportation	No collection mechanism at either the State or local level.	
Fund Balance Transfers	New York, NY San Francisco, CA	- Inter-fund transfers among municipal agencies. - Growth depends on volume of municipal revenues collected.	- Low revenue yield and uncertain revenue source. - Many variables affect a municipality's ability to run fund surpluses.	Fees collected from the general public are not indexed to price levels.	Revenue transfers are not visible to the public.	No tie to transportation.	No transfer process in place.	
Incremental Tax Financing District		- Surcharge on the incremental increase of selected property values. - Revenue growth affected by property value fluctuations.	Low revenue yield.	Property values are not indexed to current price levels.	Surcharge may face opposition from property owners and developers.	If the assessment district is based on transportation benefits, then tie to transportation.	Modifications are needed to govern the set-up of new districts.	
Benefit Assessment District	Rt. 28 / Dulles, VA	Surcharge levied on property within defined areas that has benefited from local improvements.	Low revenue yield.	Property values are not indexed to current price levels.	Surcharge may face opposition from property owners and developers.	If the assessment district is based on transportation benefits, then tie to transportation	District must be defined and collection mechanism put into place.	
Value Capture	Atlanta, GA St. Louis, MO Washington, DC	Public/private partnership where private sector compensates public agency for transit development costs that generate economic value.	Yield dependent upon the economic value of the completed transit facility or project.	Value capture is not indexed to current price levels.	Can be a popular way to enlist private investment.	If facility or project involves transportation, then there is a tie to transportation.	Projects would have to be identified and developed to assess value capture opportunities.	



= In use or strongly considered



= Possible, but would face barriers



= Highly unlikely

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D Efficient Transportation Decision Making

Efficient Transportation Decision Making Overview

This appendix provides a detailed account of the Efficient Transportation Decision Making (ETDM) process and its application to the 2035 LRTP. ETDM is an environmental streamlining process developed by the Florida Department of Transportation to facilitate early and on-going communication among regulatory and resource agencies, planning agencies and the general public to assess and provide input on planned major transportation improvements; initially, it was developed to supplement the Project Development and Environmental (PD&E) phase. ETDM is comprised of three (3) primary phases, referred to as screens: planning, programming, and project development. Florida's ETDM process is consistent with the requirements set forth in SAFETEA-LU, Section 6002, Efficient Environmental Reviews for Project Decisionmaking, which calls for an inclusive transportation planning process and creating an efficient environmental review process. This appendix documents the planning screen activities of the ETDM process as it relates to the Miami-Dade 2035 LRTP update. Overall, the ETDM process promotes:

- Improved Agency Coordination and Problem Solving
- Improved Long Range Transportation Planning
- Focused Evaluations during Project Development
- Improved Dispute Resolution Process
- Less Costly Environmental Studies and Documentation
- Shortened Project Delivery
- Better Access to Information
- Enhanced Coordination between FDOT and Resource Agencies

ETDM Process

Before ETDM was introduced in Florida, agency interaction did not occur until projects reached the Project Development and Environment (PD&E) stage. By then, if an adverse effect had been identified it would have required additional effort to reconfigure the initial design of the project to minimize the impact, which inherently, resulted in additional delays and depletion of financial resources. As previously mentioned, ETDM is comprised of three primary functional areas, which are formulated in a manner to reduce the degree of negative effects on Florida's natural and human environments by bridging the divide between agency interaction; thereby, providing an efficient project delivery mechanism. **Table 1** lists the ETDM participants; as part of FDOT's project development process ETDM participation is required, however, external agencies are encouraged to participate.

Table 1. ETDM Participants

Advisory Council on Historic Preservation	Federal Highway Administration	Federal Transit Administration	Florida Department of Agriculture and Consumer Services
Florida Department of Community Affairs	Florida Department of Environmental Protection	Florida Department of State	Florida Department of Transportation
Florida Fish and Wildlife Conservation Commission	Florida Metropolitan Planning Organization Advisory Council	The Miccosukee Tribe of Indians of Florida	National Marine Fisheries Service
National Park Service	Natural Resources Conservation Service	Northwest Florida Water Management District	The Seminole Tribe of Florida
South Florida Water Management District	Southwest Florida Water Management District	St. Johns River Water Management District	Suwannee River Water Management District
U.S. Army Corps of Engineers	U.S. Coast Guard	U.S. Environmental Protection Agency	U.S. Fish and Wildlife Service
U.S. Forest Service			

Environmental Screening Tool (EST)

The Environmental Screening Tool (EST) is a web-based application that serves as the core of the ETDM system; it is used extensively throughout the process by supporting agency and community participation. EST supplies the analytical and visualization tools necessary to synthesize information regarding a proposed project. It enables agencies to input/update project information, perform analyses, and keeps the affected community aware of pertinent information. **Figure 1** illustrates the utility of information within the EST environment.

Figure 1. Environmental Screening Tool (EST) Diagram

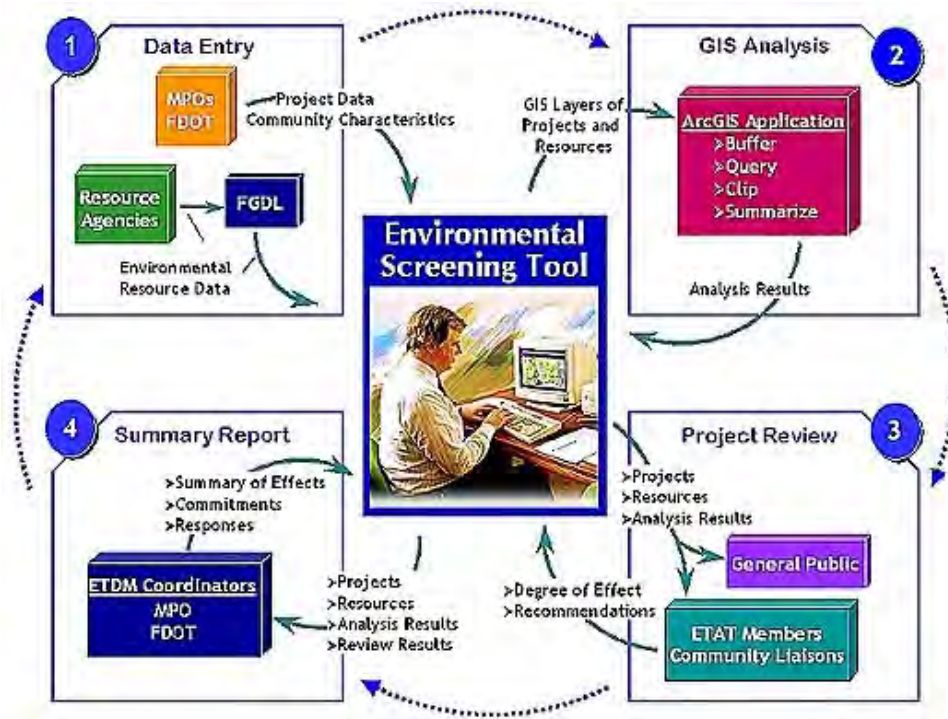


Table 2 summarizes EST's role in facilitating the ETDM process.

Table 2 . EST's Role in ETDM

Integrates data from multiple sources into an easy to use, standard format
Analyzes the effects of proposed projects on the human and natural environment
Communicates information effectively among Environmental Technical Advisory Team (ETAT) representatives and to the public
Stores and reports results of the ETAT review effectively and efficiently
Maintains project records, including commitments and responses, throughout the project life cycle

Planning Screen

The planning screen was initiated simultaneously with the development of the 2035 LRTP Cost-Feasible Plan (CFP). The planning screen creates a forum for interaction between agencies and the affected communities earlier in the planning process. It provides the framework for analyzing potential environmental and sociocultural impacts of a proposed transportation improvement. Once the project parameters are entered into EST, regulatory and resource agencies provide their input regarding the potential negative impacts imposed by the project-in-question. Project planners from the sponsoring agency utilize this information to adjust the project's current configuration to reduce adverse effects; in some cases, projects may fall out entirely if cost estimates change to reflect the revised configuration, resulting in the project-

in-question to no longer qualify as cost-feasible. Direct and indirect effects of the proposed project are documented in the EST.

The programming phase takes place after the conclusion of the planning phase, but before projects are funded through the FDOT Five-Year Work Program. This phase generally requires comprehensive technical information, supplied by agencies, utilized by engineers and planners to adjust project parameters. The FDOT Matrix for ETDM Programming Screen is included in the Appendix to this report.

Figure 2 (page D-5) provides an overview of the entire ETDM process.

Candidate Projects

The criteria to determine which projects are to be screened in the ETDM process is based on guidance in the FDOT Matrix for ETDM Programming Screen for Major Transportation Projects, depicted in **Figure 3** (page D-6). The guidelines are based on a number of factors, including:

- Funding Source (Federal, State, Local)
- Responsible Agency
- Ownership of Facility (State Highway System or County/Local)
- Passenger Facilities vs. Freight or other Non-Passenger Facilities

A total of 62 proposed transportation improvements in Priorities II-IV of the Miami-Dade 2035 LRTP Cost Feasible Plan have gone or will go through the ETDM planning screening process, as listed in **Table 4** (page D-7 through D-10). These projects were selected for ETDM based on the FDOT guidelines.

Sociocultural Effects (SCE)

One of the components of the ETDM screening process is the sociocultural effects (SCE) evaluation. SCE consists of six issues that must be addressed during the screening process. These issues along with their evaluation criteria are listed in **Table 3**. The Miami-Dade MPO currently maintains an interactive web application where users can generate reports on socioeconomic characteristics on any community within the County. The web application, *Miami-Dade Transportation and Community Mapping*, can be accessed at <http://mpoportal.fiu.edu/>.

Table 3. SCE Evaluation Criteria

Social	Quality of Life · Community Cohesion · Community Goals · Demographics
Economic	Effects on Businesses · Regional Employment · Travel Patterns · Traffic Levels · Business Visibility · Special Needs Patrons · Tax Base
Land Use	Consistency with Future Land Use Plan · Character of Land Use/Urban Form · Effect on Open Space · Potential for Sprawl
Mobility	Accessibility · Pedestrian/Bicycle · Transit · Transportation Disadvantaged · Connectivity · Traffic Patterns · Public Parking · Emergency Facilities/Evacuation Safety
Aesthetics	Noise · Vibration · Viewshed · Proximity to Community Focal Point · Community Aesthetic Compatibility · Landscaping
Relocation	Residential · Business · Public Facilities

Source: ETDM Manual, Chapter 4 – Planning Phase, March 2006

The Appendix to this report contains guidance developed by the FDOT's Central Environmental Management Office on evaluating sociocultural effects.

Figure 2. ETDM Process Diagram

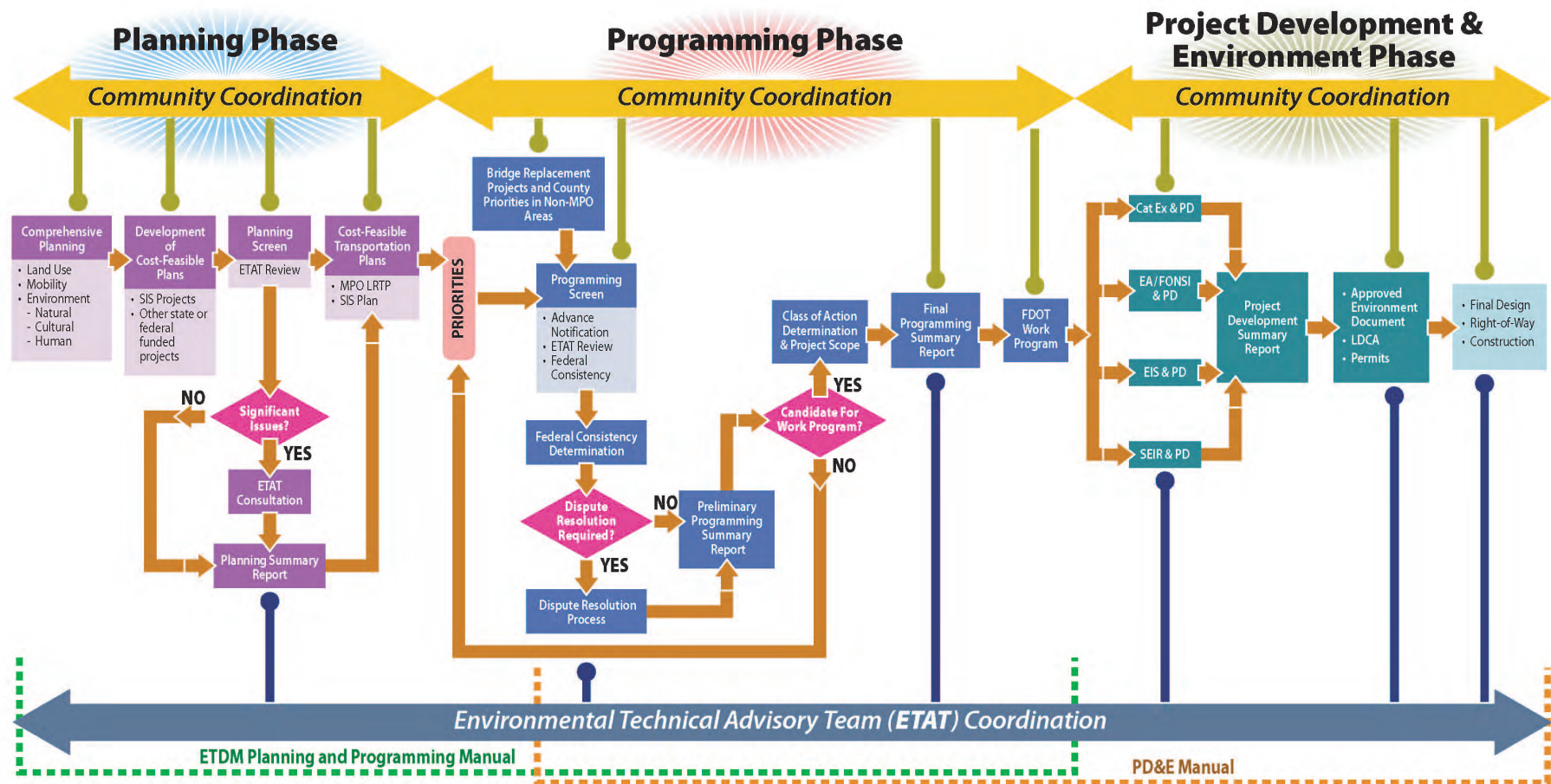


Figure 3. Matrix for ETDM Programming Screen for Major Transportation Projects Including Capacity Additions and Bridge Replacements

Responsible Agency/ETDM Involvement/Environmental Documentation								
System	Federal Dollars (FHWA or FTA transportation funds or required FHWA approval)			State Dollars (TRIP, Transit/Intermodal System Grants, etc)			Local Dollars Only	
	Responsible Agency (1)	ETDM Screening	Type of Environmental Document	Responsible Agency (1)	ETDM Screening	Type of Environmental Document	Responsible Agency (1)	ETDM Screening Type of Environmental Document
State Highway System (SHS) on the Strategic Intermodal System (SIS)	FDOT	YES	NEPA	FDOT	YES	SEIR	FDOT	YES SEIR
							Local (2)	YES (3) SEIR
State Highway System (SHS) not on the Strategic Intermodal System (SIS)	FDOT	YES	NEPA	FDOT	YES	SEIR	FDOT	YES SEIR
				Local (2)	YES	SEIR	Local (2)	YES (3) SEIR
Highways not on State Highway System (SHS) but on the Strategic Intermodal System (SIS)	FDOT	YES	NEPA	FDOT	YES	SEIR	FDOT	YES SEIR
	Local (2)	YES	NEPA	Local (2)	Local Option	Fed/State/ Local Regulations (5)	Local (2)	N/A (4) Fed/State/ Local Regulations
Highways not on State Highway System (SHS) and not on the Strategic Intermodal System (SIS)	FDOT	YES	NEPA	FDOT	YES	SEIR	Local (2)	N/A (4) Fed/State/ Local Regulations
	Local (2)	YES	NEPA	Local (2)	Local Option	Fed/State/ Local Regulations (5)		
Major Public Transit Projects (intermodal center, passenger rail, etc.) on or off the Strategic Intermodal System (SIS)	FDOT	YES	NEPA	FDOT	YES	SEIR	Local (2)	N/A (4) Fed/State/ Local Regulations
	Local (2)	Local Option	NEPA	Local (2)	Local Option	Fed/State/ Local Regulations (5)		
Non-Passenger Rail Projects, and non- highway Port and Airport Projects on the Strategic Intermodal System (SIS)	Local (2)	N/A (4)	NEPA	Local (2)	N/A (4)	Fed/State/ Local Regulations (5)	Local (2)	N/A (4) Fed/State/ Local Regulations

(1) The Responsible Agency is the agency that develops project concepts and preliminary engineering and evaluates and documents compliance with federal, state, and local environmental requirements.

• FDOT will be responsible agency on all projects funded with federal-aid highway funds (FHWA). FDOT is viewed as the responsible agency on FHWA funded LAP projects.

• A local agency may be the responsible agency on a Federal Transit Administration funded project.

• FDOT will be the responsible agency for all state funded projects located on the State Highway System

• An agency other than FDOT will usually be the responsible agency for any locally funded project; however, there may be circumstances that could be worked out on a project-by-project basis where FDOT agrees to serve as the responsible agency.

(2) Local applies to any local government agency, other state agency, expressway authority, bridge authority or private entity

(3) Expressway authorities have the option of using the ETDM process based on consultation with FDOT

(4) The formal ETDM Programming screening process (including agency review) is not applicable; however, the environmental screening tool may be used at the local agency option to evaluate the project.

(5) Federal, State and local regulations apply unless JPA specifies otherwise

* All bridge replacement projects that do not qualify as a Programmatic Categorical Exclusion should be screened.

Exceptions must be approved by the Assistant Secretary for Intermodal Systems Development

Table 4. Priority II-IV Projects Required for ETDM Planning Screen

Corridor/Facility	From	To	Description	ETDM Screening Status	ETDM Screening Complete
I-75		At 154th St	New Interchange	ETDM Screening Completed prior to LRTP dvlpt.	
SR 826	NW 103rd St	I-75	Transit Way	ETDM Screening Completed prior to LRTP dvlpt.	
SR 826	Palmetto Station	NW 103rd St	Transit Way	ETDM Screening Completed prior to LRTP dvlpt.	
Krome Ave/SR 997	US 1	Okeechobee Rd/US 27	2 to 4 lanes	ETDM Screening Completed prior to LRTP dvlpt.	
NW 25th St Viaduct	SR 826	NW 87th Ct	Phase 2 Complete construction of Viaduct and road Widening from SR 826 to NW 87th Ct.	ETDM Screening Completed prior to LRTP dvlpt.	
Miami Port Tunnel	Port Blvd.	I-395	Tunnel (port alternative access)	ETDM Screening Completed prior to LRTP dvlpt.	
SR 823/NW 57th Ave	W 65th St	W 84th St	Add 2-lanes to existing 4-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
SR 823/NW 57th Ave	W 23rd St	W 46th St	Add 2-lanes to existing 4-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
SR 823/NW 57th Ave	W 53rd St	W 65th St	Add 2-lanes to existing 4-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
SR 836	NW 12th Ave	Ramp to I-95	RAMP TO I-95	ETDM Screening Completed prior to LRTP dvlpt.	
Golden Glades Multi-modal Terminal		Tri-Rail/MDT Terminal	Facility Improvements	ETDM Screening Completed prior to LRTP dvlpt.	
Miami Streetcar	Miami Design District	Downtown Miami	LRT from the Design District to Downtown Miami	ETDM Screening Completed prior to LRTP dvlpt.	
FEC Corridor	Downtown Miami	Broward County Line	Passenger rail on the FEC corridor	ETDM Screening Completed prior to LRTP dvlpt.	
SR 836/I-95 Corridor	W of NW 17th Ave	I-95	Corridor Improvements (MDX project #83611)	ETDM Screening Completed prior to LRTP dvlpt.	
SW 107 Ave	SW 8th St	Flagler St	4 to 6 lanes	ETDM Screening Completed prior to LRTP dvlpt.	
I-95	Golden Glades Interchange	Broward County Line	Special Use Lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	I-75	Turnpike Mainline	Widen to 8-lanes	ETDM Screening Completed prior to LRTP dvlpt.	

Table 4 cont'd. Priority II-IV Projects Required for ETDM Planning Screen

Corridor/Facility	From	To	Description	ETDM Screening Status	
HEFT	SW 117th Ave	SR 874	Widen to 12-lanes plus C-D roads	ETDM Screening Completed prior to LRTP dvlpt.	ETDM Screening Complete
HEFT	SR 874	Kendall Dr	Widen to 8-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	NW 170th St		New Interchange	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	US 1	Turnpike Mainline	All-Electronic Toll Conversion	ETDM Screening Completed prior to LRTP dvlpt.	
Turnpike	Goldens Glades	Broward County Line	All-Electronic Toll Conversion	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	SR 836	I-75	Widen to 8-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	Biscayne Dr (SW 288th St)	SW 216th St	Widen to 8-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	Campbell Dr	Biscayne Dr (SW 288th St)	Widen to 6-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	Lucy St		New Half-Interchange (to/ from N.)	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	Kendall Dr (SW 88th St)	SR 836	Widen to 10-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	Eureka Dr (SW 184th St)	SW 117th Ave	Widen to 12-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	SW 216th St	Eureka Dr	Widen to 10-lanes	ETDM Screening Completed prior to LRTP dvlpt.	
HEFT	I-75		Interchange Modification	ETDM Screening Completed prior to LRTP dvlpt.	
I-75 (incl. Transitway & SUL)	SR 826	Dade / Broward County Line	Provide for an envelope for future transit service	Summary Report Published 1/17/08	ETDM Screening in Progress
SW 8th St			Grade Separations at SW 8th St/SW 87th Ave, SW 8th St/SW 107th Ave	Summary Report Published 12/16/08	
NW 138th St	NW 57th Ave	NW 67th Ave	Add 2-lanes (3 to 5)	Summary Report Published 12/23/08	
I-75	SR 826	Broward County Line	Add special use lanes	Summary Report Published 1/6/09	
1st St Bridge	Over Miami River		Bridge Replacement	Summary report Published 7/17/09	

Table 4 cont'd. Priority II-IV Projects Required for ETDM Planning Screen

Corridor/Facility	From	To	Description	ETDM Screening Status	ETDM Screening in Progress
SR 826	I-75	Golden Glades Interchange	Add Special Use Lanes	Summary report Published 7/15/09	
I-95 (NB)		Turnpike/SR 826	Operational improvement add 1 aux/acceleration lane (per FDOT)	Summary report Published 7/31/09	
SW 152nd St/Coral Reef/ SR 992	HEFT	US 1	4 to 6 lanes	Summary report Published 8/3/09	
NE 125th St/NE 6th Ave/W Dixie Hwy			Intersection Improvements	Summary report Published 8/4/09	
Okeechobee Rd/US 27	79th Ave	Krome Ave	Expressway Conversion - Construct Grade Separated Overpasses at Major Intersections	Summary report Published 8/4/09	
West Ave	N of Lincoln Rd	S of 18th St	New Connector Bridge	Summary report Published 8/10/09	
US 1	Dadeland South	I-95	Corridor improvements and managed lanes	Summary report Published 8/21/09	
US 1 Busway	FL City	Dadeland South	Managed Lanes	Summary report Published 8/25/09	
Golden Glades Interchange	SR 826 (EB)	I-95 (NB)	Ramp Improvements to provide direct system to system connection	Summary report Published 8/27/09	
SR 836 Southwest Extension	NW 137th Ave	SW Miami-Dade	Multi-modal transportation corridor	Summary report Published 9/8/09	
Krome Truck By Pass	Along Flagler Ave/ Civic Court	NW 6th St	New Road (2 lanes)	Summary Report Published 9/9/09	
I-395	East of I-95	MacArthur Causeway Bridge	Major capital improvement	Summary Report Published 9/18/09	
SR 826	SR 836	NW 87th Ave on I-75	Special Use Lanes	Summary report Published 9/18/09	
SR 836/SR112	SR 826	I-95/I-395	Managed Lanes	Summary report Published 11/13/09	
US 27	SR 826	Krome Ave	Conversion to limited access toll facility	Summary report Published 11/13/09	
SR 836	HEFT	SR 826/836 Interchange	Managed Lanes	Summary report Published 11/13/09	

Table 4 cont'd. Priority II-IV Projects Required for ETDM Planning Screen

Corridor/Facility	From	To	Description	ETDM Screening Status	
SR 874	Kendall Dr	SR 826	Mainline reconstruction - 4-to 8-lanes and new ramps at SW 72nd St (MDX project #87409)	Summary report Published 01/18/10	ETDM Screening in Progress
SR 836		NW 87th Ave	Interchange Improvement	Summary report Published 01/14/10	
SR 874 Ramp Connector	SW 136th St	SR 874	Ramp Connection	Preliminary Summary report Published 10/27/09	
SR 924 Extension (east)	NW 32nd Ave	I-95	Limited access facility providing E/W mobility to I-95	Preliminary Summary report Published 12/3/09	
SR 924 Extension (west)	SR 826/I-75	HEFT	Provide a connection between HEFT, I-75, SR 924, SR 826	Preliminary Summary report Published 12/3/09	
SR 826 at 57th Ave			Interchange Improvements - reconstruct as SPUI interchange	FDOT to send Purpose and Need/Proj Desc Info	ETDM Screening to be Completed
SR 826 at 67th Ave			Interchange Improvements - reconstruct as SPUI interchange	FDOT to send Purpose and Need/Proj Desc Info	
Campbell Dr			Turnpike access ramps (west-to-north and south-to-west)	Screening to be completed by Florida Turnpike Enterprise	
Connect 4Xpress	Central Miami-Dade County	North Miami-Dade County	Limited access N/S facility connecting the northern and central portion of the County. Multimodal Corridor	Screen in February 2010; Reviewing Combined P&N; Need Cover Letter, Trans List, SF-424(?)	
SR 836/SR 112 Interconnector	SR 836/Lejeune interchange	SR 112/37th Ave interchange	Express connection between SR 836 and SR 112 in the general alignment of 37th/42nd avenues		
Golden Glades Interchange			Ramp and/or operational improvements. Series of low cost operational improvements within the Golden Glades (per FDOT)	P&N Received; Enter project into EST	

Appendix D-1. Revised SCE Evaluation Guidance

REVISED SCE EVALUATION GUIDANCE

Social Effects - Changes in Demographics

- 1.1 Define demographics of the potentially affected population.
- 1.2 What displacements of population, if any, would be expected as a result of the project?
- 1.3 Would any increases or decreases in population be expected as a result of the project?
- 1.4 Would any displacement of minority populations be expected as a result of the project?
- 1.5 Are there any disproportionate effects on special populations?
- 1.6 Have minority populations previously been affected by other public projects in the area?

Social Effects - Community Cohesion

- 1.7 Would the project result in any barriers dividing an established neighborhood(s) or would it increase neighborhood interaction?
- 1.8 What changes, if any, in traffic patterns through an established neighborhood(s) would be expected as a result of the project?
- 1.9 Would any changes to social relationships and patterns be expected as a result of the project?
- 1.10 Would the project result in any loss, reduction or enhancement of connectivity to a community or neighborhood activity center(s)?
- 1.11 Would the project affect community cohesion?

Social Effects - Safety/Emergency Response

- 1.12 Would the project result in the creation of isolated areas?
- 1.13 Would any increase or decrease in emergency services response time (fire, police and EMS) be expected as a result of the project?
- 1.14 Does the project affect safe access to community facilities?

Social Effects - Compatibility With Community Goals and Issues

- 1.15 Would any changes in social value be expected as a result of the project?
- 1.16 Would the project be perceived as having a positive or negative effect on quality of life?
- 1.17 Have community leaders/residents had opportunities to provide input to the project decision-making process in the present or past?
- 1.18 Have previous projects in this area been compatible with or conflicted with the plans, goals and objectives of the community?
- 1.19 Is the proposed project consistent with the community vision?
- 1.20 Are transportation investments equitably serving all populations?

Economic Effects – Business and Employment

- 2.1 Would any changes to travel patterns be expected that would eliminate or enhance access to any businesses?
- 2.2 Would any increases or decreases in traffic through traffic-based business areas be expected?
- 2.3 Would any changes in travel patterns be expected that would result in a business/district being bypassed?
- 2.4 Would access for special needs patrons increase or decrease as a result of the project?
- 2.5 Would any increase or decrease in business visibility for traffic-based businesses be expected as a result of the project?
- 2.6 Would the loss of any businesses be expected as a result of the project?
- 2.7 Would any increases or reductions in employment opportunities in the local economy be expected as a result of the project?

Appendix D-1 cont'd. Revised SCE Evaluation Guidance

Economic Effects – Business and Employment, Continued

- 2.8 Would regional employment opportunities be enhanced or diminished as a result of the project?
- 2.9 What is the effect of the project on military installations?

Economic Effects – Tax Base

- 2.10 Would any real property be removed from the tax roles as a result of the project?
- 2.11 Is it likely that taxable property values would increase or decline as a result of the project?
- 2.12 Would changes in business activities increase or decrease the tax base?

Land Use Effects – Land Use Patterns

- 3.1 Would the project result in a change in the character or aesthetics of the existing landscape?
- 3.2 Would the amount of recreation/open space be expected to increase or decrease as a result of the project?

Land Use Effects – Compatibility with Local Growth Management Plans

- 3.3 Would the project be compatible with local growth management policies?
- 3.4 Would the project be compatible with adopted land use plans?

Mobility Effects

- 4.1 Would access to public transportation facilities be increased or reduced as a result of the project?
- 4.2 Would pedestrian mobility be increased or decreased as a result of the project?
- 4.3 Would non-motorist access to business and service facilities be increased or reduced as a result of the project?
- 4.4 How does the project affect intermodal connectivity?
- 4.5 Would any change in connectivity between residential and non-residential areas be expected as a result of the project?
- 4.6 What are the expected changes to existing traffic patterns as a result of the project?
- 4.7 Would a change in any public parking areas be expected as a result of the project?
- 4.8 Would access for transportation disadvantaged populations be affected?

Aesthetics

- 5.1 Are there noise or vibration sensitive sites near the project?
- 5.2 Is the project likely to affect a vista or viewshed?
- 5.3 Does the project blend visually with the area?
- 5.4 Is the project adjacent to any community focal point?
- 5.5 Is the project likely to be perceived as being compatible and in character with the community's aesthetic values?
- 5.6 What feature(s), if any, of the project might be perceived by the community as inconsistent with the character of that community?

Relocation Effects

- 6.1 Would any displacement of residences/dwellings be expected as a result of the project?
- 6.2 Would any displacement of non-residential land uses be expected as a result of the project?
- 6.3 Do any potentially displaced non-residential uses have any unique or special characteristics that are not likely to be reestablished in the community?
- 6.4 Would any displacement of community or institutional facilities be expected as a result of the project?



E Regional LRTP



Regional LRTP Overview

This appendix provides a detailed summary of the 2035 Southeast Florida Regional Long Range Transportation Plan (RLRTP). Southeast Florida's economic connectivity necessitates a collaborative regional transportation system. In 2005, there were approximately 5.4 million people residing within the tri-county area; it is projected that this number will increase to more than 7.2 million by 2035. Approximately 50% of the projected regional population in 2035 is expected to reside in Miami-Dade County.

Figure 1. Miami Urbanized Area



Miami-Dade County has been closely coordinating the 2035 transportation planning process with its neighboring counties of Broward and Palm Beach from the development of goals to the preparation of the cost feasible plan.

As a result of these coordination efforts, southeast Florida will have produced in the year 2010, the first fully integrated Southeast Florida Regional Long Range Transportation Plan (RLRTP). As implied, the 2035 RLRTP is the tool linking Palm Beach, Broward and Miami-Dade counties Metropolitan Planning Organizations (MPO's) long range plans together into one vision. This document provides a prioritized set of highway and transit improvements for the region in recognition of the regional characteristics of many travel needs. With the continuous interaction throughout the three southern counties, the intent is that this plan will provide additional opportunities for funding and transportation projects that would otherwise not have been available.

This appendix documents the Southeast Florida 2035 Regional Long Range Transportation Plan (RLRTP) process with regard to the Miami-Dade MPO's participation. The 2035 RLRTP will be utilized to channel transportation investments that will address the regional needs of Broward, Palm Beach, and Miami-Dade Counties. The 2035 RLRTP development process included the participation of several agencies representing the three southeast Florida counties. The agencies involved in the development of the 2035 RLRTP are listed in Table 1.

Table 1 . Agency Participation List - 2035 Regional Long Range Transportation Plan

Broward MPO	Miami-Dade MPO	Palm Beach MPO
Florida Department of Transportation, Districts IV and VI	South Florida Regional Transportation Authority (SFRTA)	South Florida Regional Planning Council (SFRPC)
Treasure Coast Regional Planning Council (TCRPC)	Broward County Transit (BCT)	Miami-Dade Transit (MDT)
Palm Tran	Florida Turnpike Enterprise	Miami-Dade Expressway Authority (MDX)

The 2035 RLRTP represents the second regional transportation plan developed by the three MPO's in southeast Florida. In 2006, the *Regional Long Range Transportation Plan for Southeast Florida* was developed to strengthen the regional transportation planning process. The 2006 plan consisted of a post-LRTP adoption coordination process, whereby the adopted plans of the three MPO's were reviewed, regional facilities were defined, and the projects from the three respective MPO plans on those facilities were referenced in a regional LRTP. The 2035 RLRTP builds on this previous effort with an enhanced coordination process throughout the plan development. The RLRTP consultant team coordinated a planning effort that began with the establishment of Goals and Objectives, and closely mirrored the LRTP update processes for the three counties through the entire process. The Regional LRTP Goals and Objectives are listed in Table 2 (page E-3).

Table 2. 2035 RL RTP Goals and Objectives

1. Improve Regional Transportation Systems and Travel
• Provide adequate capacity for regional travel demands. • Improve transportation facilities’ and services’ regional connectivity.
2. Improve Regional Transportation Systems and Travel
• Provide adequate capacity for regional travel demands. • Improve transportation facilities’ and services’ regional connectivity.
3. Support Regional Economic Vitality
• Increase access to regionally significant employment areas and sites. • Enhance access to intermodal facilities for tourists, passengers and goods.
4. Enhance Regional Social Benefits
• Provide equitable and environmentally-just travel facilities and services. • Increase accessibility to major health care, recreation, education, and cultural facilities. • Improve techniques for the management of auto/truck conflict.
5. Mitigate Regional Environmental Impacts
• Minimize environmental impacts of transportation facilities, services, and operations.
6. Integrate Regional Transportation with Land Use and Development Considerations
• Provide for linkage of urban centers and intermodal facilities in the region. • Endorse transportation improvement projects that improve sustainability. • Promote transit-oriented development (TOD). • Promote efficient transportation access to key regional, industrial and commercial areas.
7. Optimize Sound Regional Investment Strategies
• Optimize use of existing funding sources. • Identify new funding sources.
8. Provide for a safer and more secure transportation system for residents, businesses and visitors
• Ensure that evacuation plans for disasters are in place and up-to-date. • Consider and improve the safety and security of seaports, transit, and airport facilities.

Coordination Process

The RL RTP coordination process was overseen by the South East Florida Transportation Council (SEFTC), established in Chapter 334.175(5)(i)(2), Florida Statutes, to guide regional transportation planning initiatives among the tri-county MPO’s. The SEFTC has provided the region with a formal forum for policy coordination and communication to carry out regional initiatives agreed upon by the three involved MPO’s. An interlocal agreement between the MPO’s was executed in 2005, paving the way for the first SEFTC meeting in January 2006. Since its inception, the SEFTC has adopted:

- Regional goals and objectives
- Regional corridor of significance criteria
- Regional long range transportation plan
- Project lists for Transportation Regional Incentive Program (TRIP)

The SEFTC is comprised of elected officials from the three counties. **Table 3** lists the SEFTC membership as of January, 2010.

Table 3. SEFTC Membership

Mayor Richard J. Kaplan Broward MPO	Chairman
Bruno A. Barreiro Miami-Dade MPO	Vice-Chairman
Robert Friedman Palm Beach MPO	Member
Matti H. Bowers Miami-Dade MPO	Alternate Member
Daniel J. Stermer Broward MPO	Alternate Member
Susan Haynie Palm Beach MPO	Alternate Member

Staff support to the SEFTC is provided by the respective MPO's in a rotating fashion. The Regional Long Range Transportation Planning (RLRTP) Committee is a staff-level working group tasked to address many of the issues brought before the SEFTC. The RLRTP Committee is made up of the major transportation planning agencies within the region including the three MPO's. The SEFTC is also supported by two formal committees: Regional Transportation Technical Advisory Committee (RTTAC) and RTTAC Modeling Subcommittee.

Regional Transportation Technical Advisory Committee (RTTAC)

The primary responsibility of the Regional Transportation Technical Advisory Committee (RTTAC) is to guide the development and coordination process for the 2035 RL RTP. The RTTAC membership is composed of representatives from various agencies within southeast Florida. **Table 4** lists the RTTAC membership.

Table 4. RTTAC Membership

Randy Whitfield (Chair) Palm Beach MPO	Lois Bush FDOT D4	Jonathan Roberson Broward Office of Transportation
Roger Del Rio Broward MPO	Shi-Chiang Li FDOT – District IV	Susanna Guzman-Arean Miami-Dade Transit
Ossama Al Aschkar Broward MPO	Joe Quinty SFRTA	Kent Rice Florida Turnpike Enterprise
Wilson Fernandez Miami-Dade MPO	William Cross SFRTA	Mayra Diaz Miami-Dade Expressway Authority
Carlos Roa Miami-Dade MPO	Larry Allen SFRPC	Jonathan Roberson Broward Office of Transportation
Phil Steinmiller FDOT – District VI	Kim DeLaney TCRPC	

The RTTAC convened a total of 11 times throughout the RL RTP development process. The RTTAC tackled a number of issues from the Regional Public Involvement Plan, which was developed at the beginning of the RL RTP update process, to the final regional project prioritization culminating in a Cost Feasible Plan. Among the issues discussed by the RTTAC throughout the process are the following:

- Regional Public Involvement Plan
- Transit Capacity and Quality of Service standards
- RL RTP Goals, Objectives, and Measures of Effectiveness
- Regional Corridors Designation
- Regional Freight Plan
- RL RTP Needs Plan Assumptions
- Regional and Local Revenue Forecasts
- Regional Project Prioritization Process
- Regional Cost Feasible Plan
- RL RTP Documentation and Website

RTTAC Modeling Subcommittee

In past LRTP updates, each of the Southeast Florida MPO's utilized a county model respective to each county area. The 2035 LRTP update marks the first time that a coordinated regional travel demand modeling effort was undertaken for both the respective LRTP's and the RL RTP. The result of this coordination effort is the adoption and release to the modeling community of a regional model, version 6.5 of the Southeast Florida Regional Planning Model (SERPMv65), which includes coordinated regional project definitions and network coding conventions.

The RTTAC Modeling Subcommittee is charged with developing and administering travel demand modeling standards for the entire region. Their primary focus is to ensure that best modeling practices are in place to support the region's planning activities and to maintain consistency in modeling processes across the region. Members of the RTTAC Modeling Subcommittee are listed in **Table 5**.

Table 5. RTTAC Modeling Subcommittee Membership

<i>Wilson Fernandez (Chair)</i> Miami-Dade MPO	<i>Paul Larsen</i> Palm Beach MPO
<i>Ossama Al Aschkar (Vice-Chair)</i> Broward MPO	<i>Shi-Chiang Li</i> FDOT – District IV
<i>Phil Steinmiller</i> FDOT – District VI	<i>Ed Sirianni</i> Broward MPO
<i>Randy Whitfield</i> Palm Beach MPO	<i>Min-Tang Li</i> FDOT – District IV

The RTTAC Modeling Subcommittee met on a quarterly basis during the LRTP update process to reach consensus on all LRTP-related model issues as they arose. Some of the critical topics that were discussed and handled by the RTTAC Modeling Subcommittee include:

- Overview of Southeast Florida Socioeconomic Data
- Existing plus Committed Project Review by County
- Coding Assumptions for Managed Lanes Projects
- Coding Assumptions for Transit Speeds by Mode
- Highway Capacity and Volume to Capacity Ratio Reporting
- Model Performance Measuring Tools and Statistics
- Needs Plan Development Methodology
- Modeling Metrics for use in Project Prioritization
- Cost Feasible Plan Network Coding and Coordination

RL RTP Projects in Miami-Dade County

The 2035 RL RTP is scheduled for adoption in April 2010. The RL RTP includes a list of regionally significant transportation improvements consistent with the designated Corridors of Regional Significance, a designation that was initially developed as part of the 2030 RL RTP development. Corridors of Regional Significance include those corridors within the tri-county area that meet an established set of criteria, as outlined in **Table 6**.

Table 6. Corridors of Regional Significance Criteria

Regional Corridor Facility Criteria	Facility Functional Classification
Regional Interstate and Expressway Facilities	Urban or Rural Principal Arterials – Interstate and Expressway
Major Regional Facilities	Urban or Rural Principal Arterials – Others that Cross County Lines
Regional Connector Facilities	Urban or Rural Principal Arterials - with Two or more Connections to Regional Interstate and Expressway Facilities
SIS Rail Corridors	Rail Corridors Identified by FDOT as a portion of the Florida Strategic Intermodal System (SIS)

Figure 2. Corridors of Regional Significance Map



There are 52 projects in priorities II-IV of the Miami-Dade LRTP Cost Feasible Plan that satisfy the criteria for regional projects, as defined in the RL RTP. These projects will be prioritized in the RL RTP along with other regional projects in the Broward and Palm Beach LRTP's. The draft prioritization (for RL RTP) of the 52 Miami-Dade regional projects are listed in **Table 7** and depicted in **Figure 3** (page E-10).

Table 7. Regional Cost Feasible Improvements for Miami-Dade County[2035 Southeast Regional Long Range Transportation Plan] - DRAFT FINAL

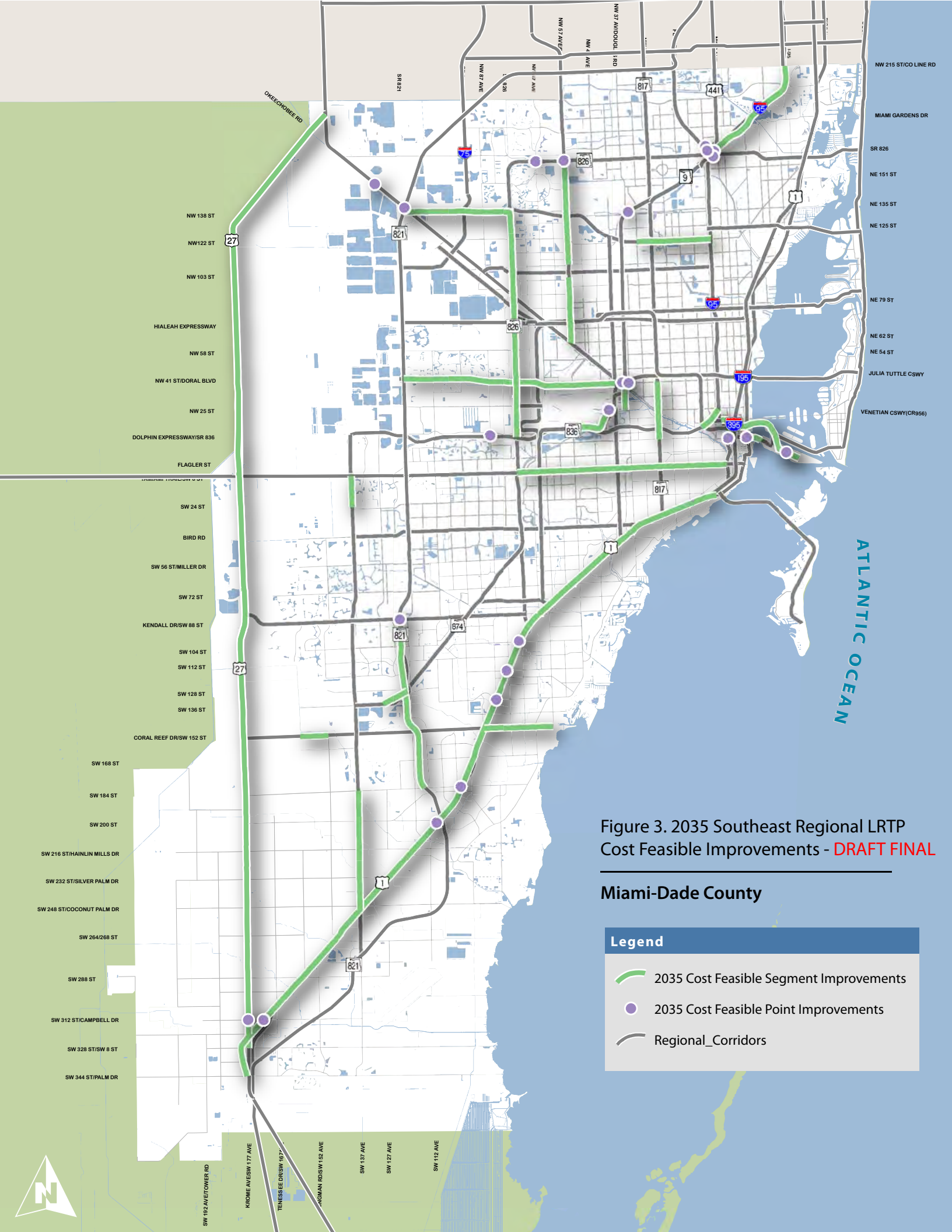
Facility/Corridor	From	To	Description	Priority
I-95 (NB) Ramp to Turnpike/SR 826			Add 1 auxiliary/acceleration lane	II
SR 25/Okeechobee Road	at NW 154th Street		Traffic signals	II
Truck Parking Improvement		Okeechobee Road	Provide a location in the area of Okeechobee and the HEFT for long-term truck parking and staging.	II
SR 997/Krome Avenue	SR 94/Kendall Drive	SR 90/SW 8th Street	Widen to 4 lanes (2 to 4)	II
SR 823/NW 57th Avenue/Red Road	W 19th Street	W 23rd Street	Widen to 6 lanes (4 to 6)	II
SR 823/NW 57th Avenue/Red Road	Okeechobee Road	W 19th Street	Widen to 5 lanes (4 to 5)	II
SR 823/NW 57th Avenue/Red Road	W 53rd Street	W 65th Street	Widen to 6 lanes (4 to 6)	II
SR 823/NW 57th Avenue /Red Road	W 23rd Street	W 46th Street	Widen to 6 lanes (4 to 6)	II
Golden Glades Multi-modal Terminal		Tri-Rail/MDT Terminal	1,000 space deck, intermodal center with improved bus circulation and improved ADA, Replace multiple existing pedestrian bridges with a single-level bridge	II
Golden Glades Multi-modal Facility Upgrade			Capacity improvement, including a pedestrian overpass to connect Golden Glades intermodal center to business park west of CSX tracks	II
Miami Intermodal Center (MIC)	(MIC) Bus Plaza Road	NW 25th Street	New road construction	II
Port of Miami			Construct parking garage - intermodal hub capacity	II
Truck Parking Improvement			Develop a truck staging area near NW 36th Street and NW 37th Avenue for the Port of Miami River.	II
SW 137th Avenue	US-1	SW 184th Street	Widen to 4 lanes (2 to 4)	II
SW 137th Avenue	SW 24th Street	SW 8th Street	Widen to 6 lanes (4 to 6)	II
Parking expansion at Opa-Locka Tri-Rail station	Opa-Locka Tri-Rail Station		Opa-Locka Tri-Rail station parking improvements	II
I-95	Golden Glades Interchange	Broward County Line	Special use lanes (managed lanes)	III
SR 821/HEFT	Eureka Drive	Kendall Drive	Widen to 8-, 10-, 12-lanes plus auxiliary lanes	III
SR 826/Palmetto Expressway	SR 836	NW 87th Avenue on I-75	Special use lanes	III
SR 826/Palmetto Expressway @ 67th Avenue			Interchange improvements - reconstruct as SPUI interchange	III
SR 886/Port Bridge			Repairs to bascule rail and vehicle bridge	III
SR 924/Gratigny Parkway Extension (west)	SR 826/I-75	HEFT	Limited access facility providing a connection between HEFT, I-75, SR 924, SR 826	III

Table 7 cont'd. Regional Cost Feasible Improvements for Miami-Dade County[2035 Southeast Regional Long Range Transportation Plan] - DRAFT FINAL

Facility/Corridor	From	To	Description	Priority
Downtown/Port Access			Construct I-95 NB Slip Ramp on NW 6th St; Implement NE/NW 5th/6th St/ Port Blvd. improvements for access between POM and I-95 slip ramp	III
SR 836/Dolphin Expressway	NW 12th Avenue	Ramp to I-95	Ramp to I-95	III
SW 152nd Street	SW 147th Avenue	SW 157th Avenue	Widen to 4 lanes (2 to 4)	III
SR 826/Palmetto Expressway @ 57th Avenue			Interchange Improvements - reconstruct as SPUI interchange	IV
US-1 (Busway)	SW 88th Street	Florida City	Additional park-and-ride lots at selected locations	IV
SR 5/US-1/ Biscayne Boulevard			Expand SB left turn lane for trucks entering Port	IV
US-1 (Busway)	SW 88th Street	Florida City	Bus signal priority	IV
South Florida Rail Corridor	North of Hialeah Market	North of MIC	Double tracking of the remaining single track of Tri-Rail	IV
SR 997/Krome Avenue	North of SW 8th Street	Mile post 2.754	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	SR-5/US-1	SW 328th Street (Lucy Street)	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	SW 296th Street	SW 136th Street	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	SW 328th Street (Lucy Street)	SW 296th Street	Widen to 4 lanes (2 to 4) (Companion project with Krome truck by-pass)	IV
SR 997/Krome Truck By-Pass	Along Flagler Avenue/ Civic Court	NW 6th Street	New 2 lanes (Companion project with Krome widening SW 328th Street to SW 296th Street)	IV
SR 997/Krome Avenue	SW 88th Street/ Kendall Drive	SW 136th Street	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	MP 2.754	MP 5.122	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	MM 5.122	MM 8.151	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	MM 8.151	MM 10.626	Widen to 4 lanes (2 to 4)	IV
SR 997/Krome Avenue	MM 10.626	MM 14.184	Widen to 4 lanes (2 to 4)	IV
SR 823/NW 57th Avenue/Red Road	W 65th Street	W 84th Street	Widen to 6 lanes (4 to 6)	IV
SR 826/Palmetto Expressway (EB) to I-95 (NB)			Operational improvement within the Golden Glades Interchange	IV
SR 826/Palmetto Expressway (NB)	Okeechobee Road	NW 103rd Street	Addition of 1 auxiliary lane	IV
SR 826/Palmetto Expressway (EB) to NW 167th Street			Operational improvement within the Golden Glades Interchange	IV
SR 924/Gratigny Parkway Extension (east)	NW 32nd Avenue	I-95	Limited access facility providing E/W mobility to I-95	IV

Table 7 cont'd. Regional Cost Feasible Improvements for Miami-Dade County[2035 Southeast Regional Long Range Transportation Plan] - **DRAFT FINAL**

Facility/Corridor	From	To	Description	Priority
Perimeter Road	NW 20th Street	NW 57th Avenue	Widen to 4 lanes (2 to 4)	IV
SR 836/Dolphin Expressway		NW 87th Avenue	Interchange improvement	IV
I-395	East of I-95	MacArthur Causeway Bridge	Major capital improvement	IV
SR 874/Don Shula Expressway Ramp Connector	SW 136th Street	SR 874	Ramp connection to SW 136th Street	IV





F Strategic Intermodal System Documentation



2035 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans

Overview

This appendix documents the current Florida Department of Transportation (FDOT) state and federal transportation revenue forecast through 2035. Funding estimates for major state programs for this metropolitan area and Florida are included. The forecast is based upon recent federal and state legislation, changes in factors affecting state revenue sources, and current policies. This information will be used for the updates of metropolitan long range transportation plans, the Florida Transportation Plan and the Strategic Intermodal System (SIS) Highways Cost Feasible Plan.

Background

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), the Transportation Equity Act for the 21st Century (TEA-21) enacted in 1998, and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) enacted in 2005 have provided the impetus to enhance the cooperative relationship between FDOT and metropolitan planning organizations (MPOs) in planning for and providing transportation facilities and services. The 2025 Florida Transportation Plan (FTP), developed with the assistance of Florida's 26 MPOs and other transportation partners, established long range goals and program emphases for the expenditure of state and federal funds expected from current revenue sources.

The Department developed a long range revenue forecast through 2035. The forecast was based upon recent federal and state legislation (e.g., SAFETEA-LU, Florida's 2005 Growth Management legislation), changes in factors affecting state revenue sources (e.g., population growth rates) and current policies. This information is being used for updates of metropolitan plans and the SIS Highways Cost Feasible Plan.

This 2035 forecast incorporates (1) amounts contained in the Department's Work Program for 2009 through 2013, (2) the impact of the Department's objectives and investment policies, and (3) the current Statutory Formula (equal parts of population and motor fuel tax collections) for distribution of certain program funds, and expresses the estimates in year of expenditure dollars.

Intent

This appendix is intended to provide the public and interested parties with clear documentation of the state and federal financial issues related to each MPO plan and to facilitate reconciliation of statewide and metropolitan plans. This appendix does not address financial issues related to funds that do not "flow through" the state work program. Information on financial issues related to local and regional revenue sources – what those resources are and how the metropolitan areas plan to spend them – is contained in other documentation of the metropolitan plan.

This appendix describes how the statewide 2035 Revenue Forecast was developed. Also, metropolitan estimates are identified for certain major FDOT programs that expand the capacity of existing transportation systems, and are referred to as "capacity programs." "Metropolitan estimates" are the share of the state capacity programs that are planned for this metropolitan area. They can be used to fund planned improvements to major elements of the transportation system.

This appendix also includes estimates of funds required for other FDOT programs designed to support, operate, and maintain the state transportation system. The FDOT has set aside sufficient funds in the 2035 Revenue Forecast for these programs, referred to as "non-capacity programs" in this document, to meet statewide objectives and program needs in all metropolitan and non-metropolitan areas. Funding for these programs is not included in the metropolitan estimates.

2035 Revenue Forecast (State and Federal Funds)

The 2035 Revenue Forecast is the result of a three-step process:

1. State and federal revenues from current sources were estimated.
2. Those revenues were then distributed among statewide capacity and non-capacity programs in concert with statewide priorities.
3. Estimates for certain capacity programs were developed for each of Florida's 26 metropolitan areas.

Forecast of State and Federal Revenues

The 2035 Revenue Forecast includes program estimates for the expenditure of state and federal funds expected from current revenue sources (i.e., new revenue sources were not added). The forecast estimated revenues from federal, state, and Turnpike sources that are included in the Department's 5-Year Work Program. The forecast did not estimate revenue from other sources (i.e., local government/authority taxes, fees, and bond proceeds; private sector participation; and innovative finance sources). Estimates of state revenue sources were based on estimates prepared by the State Revenue Estimating Conference in March 2008 for state fiscal years 2009 through 2018. Estimates of federal revenue sources were based on the Department's Federal Aid Forecast for the same fiscal years. Assumptions about revenue growth were as follows:

Revenue Sources	Years	Assumptions
State Fuel Taxes	2009-2018	Florida Revenue Estimating Conference Estimates
	2019-2035	Annual 3.84% increase in 2019, gradually decreasing to 1.89% in 2035
State Tourism-Driven Sources (Rental Car Surcharge, Aviation Fuel Tax)	2009-2018	Florida Revenue Estimating Conference Estimates
	2019-2035	Annual 1.86% increase in 2019, gradually decreasing to 1.46% in 2035
State Vehicle-Related Taxes (Vehicle License, Initial Registration, and Incremental Title fees)	2009-2018	Florida Revenue Estimating Conference Estimates
	2019-2035	Annual 2.39% increase in 2019, gradually decreasing to 1.83% in 2035
Federal Distributions (Total Obligating Authority)	2009-2018	FDOT Federal Aid Forecast
	2019-2035	Annual 1.22% increase in 2019, gradually decreasing to 0.00% in 2031 and beyond
Turnpike	2009-2018	Existing and programmed projects, cap on outstanding debt, and planned toll increases on expansion projects

Revenue forecasts by FDOT typically estimate the value of money at the time it will be collected (e.g., 2020) and reflect future growth in revenue and inflation, sometimes referred to as “current” or “year of expenditure” dollars. Unlike previous long range revenue forecasts by FDOT for statewide and metropolitan plans, the 2035 Revenue Forecast is expressed in “year of expenditure” dollars. A summary of the forecast of state, federal and Turnpike revenues is shown in Table 1. The *2035 Revenue Forecast Handbook* contains inflation factors that can be used to adjust project costs expressed in “present day cost” to “year of expenditure” dollars.

Table 1
Forecast of Revenues
2035 Revenue Forecast (Millions of Dollars)

Major Revenue Sources	Time Period						27-Year Total ² 2009-2035
	2009-10 ¹	2011-15 ¹	2016-20	2021-25	2026-30	2031-35	
Federal ³	4,984 26%	9,914 27%	10,137 26%	10,836 25%	11,417 24%	11,912 23%	59,200 25%
State	11,502 61%	23,964 65%	25,431 66%	28,530 66%	31,978 67%	35,531 68%	156,936 66%
Turnpike	2,365 13%	3,237 9%	3,027 8%	4,149 10%	4,515 9%	4,921 9%	22,214 9%
Total ²	18,852	37,114	38,594	43,514	47,910	52,365	238,350

¹ Based on the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013.

² Columns and rows sometimes do not equal the totals due to rounding.

³ Federal revenues also include state dollars used to match federal aid.

Estimates for State Programs

Long range revenue forecasts assist in determining which needed transportation improvements are financially feasible and in identifying funding priorities. As directed by FDOT policy, the Department places primary emphasis on safety and preservation by first providing adequate funding in the Revenue Forecast to meet established goals and objectives in these important areas. Remaining funding has been planned for new or expanded statewide, metropolitan/regional, and local facilities and services (i.e., capacity programs). As Florida moves into the 21st Century, safety and preservation will continue to be emphasized.

The 2035 Revenue Forecast includes the program funding levels contained in the July 1, 2008 Adopted Work Program for 2009 through 2013. The forecast of funding levels for FDOT programs for 2014-2035 was developed based on the Program and Resource Plan (PRP) for fiscal years 2009-2017. The remainder of this Appendix provides forecast information for “Capacity,” “Non-Capacity,” and “Other” state programs. The information is consistent with “Financial Guidelines for MPO Long Range Plans” adopted by the Metropolitan Planning Organization Advisory Council in October 2007, as amended in October 2008.

Capacity Programs

Capacity programs include each major FDOT program that expands the capacity of existing transportation systems (e.g., highways, transit). Table 2 includes a brief description of each major capacity program and the linkage to the program categories used in the PRP.

Statewide Forecast for Capacity Programs

Table 3 identifies the statewide estimates for capacity programs in the 2035 Revenue Forecast in year of expenditure dollars. About \$238 billion is forecast for the entire state transportation program from 2009 through 2035; about \$108 billion (45%) is forecast for capacity programs.

Metropolitan Forecast for Capacity Programs

As the first step in preparing metropolitan estimates, the Department prepared district and metropolitan estimates for the capacity programs from the statewide forecast consistent with provisions in state and federal law. Pursuant to federal law, transportation management area (TMA) funds were distributed based on 2000 population. District estimates for the following programs were developed using the current statutory formula¹: other arterials construction/right-of-way (net of TMA funds); enhancements; and the transit program.

Estimates for SIS/FIHS Construction and ROW were based on the Draft 2035 SIS Highway Component Cost Feasible Plan dated August 2008. Because of the evolving nature of the SIS, estimates for the Rail, Aviation, Seaports and Intermodal Access programs will not be available until a SIS Cost Feasible Plan for all SIS modes is completed.

FDOT districts developed the metropolitan estimates consistent with district shares of the statewide forecast, adjusted as needed to account for issues such as metropolitan area boundaries (e.g., differences between metropolitan area boundaries and county boundaries). The estimates for this metropolitan area are included in Table 4 in year of expenditure dollars. Table 4a contains estimates of TMA funds.

Senate Bill 360 (Chapter 2005-290, Laws of Florida) established recurring appropriations to several major state transportation programs in 2005. Annually, \$541.75 million was to be appropriated from proceeds from the Documentary Stamp Tax². These funds are distributed – according to formulas defined in Senate Bill 360 – to the SIS, the Transportation Regional Incentive Program (TRIP), the New Starts Transit Program, and the Small County Outreach Program. The 2035 Revenue Forecast contains estimates of Growth Management funds not included in an Adopted Work Program. Because some MPOs may desire to include projects partially funded by the TRIP and/or New Starts programs in their long range plans as “illustrative projects,” the Department provided separate estimates of these funds. Districtwide estimates of TRIP funds are included in Table 5. Statewide estimates of New Starts Funds are included in Table 6.

For information purposes only, estimates of Enhancement Funds are shown in Table 7. These funds are included in the estimates for Other Arterials Construction & ROW in Table 4.

¹ The statutory formula is based on 50% population and 50% motor fuel tax collections.

² Subsequent to the 2035 Revenue Forecast, 2008 Legislation altered the formula for transportation revenues from Documentary Stamp Tax proceeds from \$541.75 million annually to a percentage of Documentary Stamp Tax proceeds with an annual cap of \$541.75 million. This change is not reflected in the 2035 Revenue Forecast.

TABLE 2
Major Capacity Programs Included in the 2035 Revenue Forecast
and Corresponding Program Categories in the Program and Resource Plan (PRP)

2035 Revenue Forecast Programs	PRP Program Categories
<u>SIS/Florida Intrastate Highway System (FIHS) Construction/ROW</u> – Construction, improvements, and associated right of way on the Strategic Intermodal System and the Intrastate Highway System (e.g., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors).	Interstate Construction Turnpike Construction Other SIS/Intrastate Construction Toll Facilities Revolving Trust Fund SIS/Intrastate Right of Way SIS/Intrastate Advance Corridor Acquisition
<u>Other Arterial Construction/ROW</u> – Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS or FIHS. The program also includes funding for the Economic Development program, the County Incentive Grant Program, and the Small County Outreach Program.	Traffic Operations Construction County Transportation Programs Economic Development Other Arterial & Bridge Right of Way Other Arterial Advance Corridor Acquisition
<u>Aviation</u> – Financial and technical assistance to Florida's airports in the areas of safety, capacity improvements, land acquisition, planning, economic development, and preservation.	Airport Improvement Land Acquisition Planning Discretionary Capacity Improvements
<u>Transit</u> – Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.	Transit Systems Transportation Disadvantaged – Department Transportation Disadvantaged – Commission Other Block Grants New Starts Transit
<u>Rail</u> – Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	Fixed Guideway Passenger Service Rail/Highway Crossings Rail Capacity Improvement/Rehabilitation
<u>Intermodal Access</u> – Improving access to intermodal facilities and acquisition of associated rights of way.	Intermodal Access
<u>Seaport Development</u> – Funding for development of eligible ports, including such projects as land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers.	Seaport Development
<u>Growth Management</u> – Improving access to intermodal facilities and acquisition of associated rights of way.	No Subprograms; Total Growth Management Funds not in Adopted Work Programs by July 1, 2008.

Table 3
Statewide Capacity Program Estimates
State and Federal Funds from the 2035 Revenue Forecast (Millions of Dollars)

Major Programs	5-Year Period (Fiscal Years)						27-Year Total ²
	2009-10 ¹	2011-15 ¹	2016-20	2021-25	2025-30	2031-35	2009-2035
SIS/FIHS Construction & ROW	4,892	8,444	7,306	8,473	9,218	9,816	48,149
Other Arterials Construction & ROW	2,684	3,901	3,503	3,885	4,142	4,453	22,568
Aviation	428	711	745	868	991	1,107	4,850
Transit	970	1,736	1,504	1,692	1,889	2,067	9,859
Rail	647	815	688	788	895	995	4,829
Intermodal Access	189	186	230	266	302	335	1,508
Seaport Development	106	243	228	265	302	338	1,482
Growth Management ³	0	1,730	3,493	3,285	3,285	3,285	15,077
Total Capacity Programs	9,916	17,768	17,698	19,521	21,024	22,395	108,322
Statewide Total Forecast	18,852	37,115	38,594	43,514	47,910	52,365	238,350

¹ Based on the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013.

² Columns and rows sometimes do not equal the totals due to rounding.

³ Growth Management funds not programmed in FDOT Work Programs as of July 1, 2008.

⁴ "Other" is primarily for debt service.

Table 4
Metropolitan Area Capacity Program Estimates
State and Federal Funds from the 2035 Revenue Forecast (Millions of Dollars)

Estimates for Miami-Dade Metropolitan Area

Capacity Programs*	5-Year Period (Fiscal Years)					22-Year Total
	2014-2015	2016-20	2021-25	2025-30	2031-35	2014-2035
SIS Highways/FIHS Construction & ROW	232.7	583.5	1,075.5	1,092.5	1,012.5	3,996.6
Other Arterials Construction & ROW	116.3	354.6	397.5	426.9	464.9	1,760.2
Transit	23.0	57.5	58.3	56.3	46.8	241.9
Aviation	N/A	N/A	N/A	N/A	N/A	N/A
Rail	N/A	N/A	N/A	N/A	N/A	N/A
Seaports	N/A	N/A	N/A	N/A	N/A	N/A
Intermodal Access	N/A	N/A	N/A	N/A	N/A	N/A
Total Capacity Programs	372.0	995.6	1,531.3	1,575.7	1,524.2	5,998.7

* Notes:

- Estimates for 2009 through 2013 are contained in the Adopted Work Program.
- Information on projects and revenue estimates for Aviation, Rail, Seaports and Intermodal Access will be provided upon completion of the Strategic Intermodal System (SIS) Cost Feasible Plan.

Table 4a
Transportation Management Area (TMA) Funds Estimates
State and Federal Funds from the 2035 Revenue Forecast (Millions of Dollars)

Miami-Dade Metropolitan Area	5-Year Period (Fiscal Years)					22-Year Total ²
	2014-15 ¹	2016-20	2021-25	2025-30	2031-35	2014-2035
TMA Funds	92	243	257	265	266	1,123

¹ TMA Funds are included in the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013; amounts in this table are for 2014 and beyond.

² Rows sometimes do not equal the totals due to rounding.

Table 5
Districtwide Transportation Regional Incentive Program Estimates
State Funds from the 2035 Revenue Forecast (Millions of Dollars)

FDOT District	5-Year Period (Fiscal Years)					22-Year Total ²
	2014-15 ¹	2016-20	2021-25	2025-30	2031-35	2014-2035
District 1	38	83	81	81	81	363
District 2	30	67	65	65	65	292
District 3	21	47	45	45	45	205
District 4	50	111	108	108	108	485
District 5	55	121	117	117	117	525
District 6	35	77	74	74	74	335
District 7	40	89	86	86	86	387
Statewide Total Forecast	270	595	576	576	576	2,592

¹ TRIP Funds are included in the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013 in the statewide program categories in which they have been programmed (e.g., Other Arterials Construction & ROW, Transit); amounts in this table are for 2014 and beyond.

² Columns and rows sometimes do not equal the totals due to rounding.

Table 6
Statewide New Starts Program Estimates
State Funds from the 2035 Revenue Forecast (Millions of Dollars)

Statewide Program	5-Year Period (Fiscal Years)					22-Year Total ²
	2014-15 ¹	2016-20	2021-25	2025-30	2031-35	2014-2035
Statewide Total Forecast	150	292	271	271	271	1,254

¹ New Starts Funds are included in the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013 in the Transit Program; amounts in this table are for 2014 and beyond.

² Rows sometimes do not equal the totals due to rounding.

Table 7
Enhancement Funds¹ Estimates
State and Federal Funds from the 2035 Revenue Forecast (Millions of Dollars)

Miami-Dade Metropolitan Area	5-Year Period (Fiscal Years)					22-Year Total ³
	2014-15 ²	2016-20	2021-25	2025-30	2031-35	2014-2035
Enhancement Funds	9	25	26	27	27	114

¹ For information purposes only; these estimates are included in estimates for Other Arterials & ROW in Table 4.

² Enhancement Funds are included in the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013; amounts in this table are for 2014 and beyond.

³ Rows sometimes do not equal the totals due to rounding.

Non-Capacity Programs

Non-capacity programs refer to FDOT programs designed to support, operate and maintain the state highway system: safety, resurfacing, bridge, product support, operations and maintenance, and administration. Table 8 includes a description of each non-capacity program and the linkage to the program categories used in the Program and Resource Plan.

Metropolitan estimates have not been developed for these programs. Instead, the FDOT has included sufficient funding in the 2035 Revenue Forecast to meet the following statewide objectives:

- **Resurfacing program:** Ensure that 80% of state highway system pavement meets Department standards;
- **Bridge program:** Ensure that 90% of FDOT-maintained bridges meet Department standards while keeping all FDOT-maintained bridges open to the public safe;
- **Operations and maintenance program:** Achieve 100% of acceptable maintenance condition standard on the state highway system;
- **Product Support:** Reserve funds for Product Support required to construct improvements (funded with the forecast's capacity funds) in each district and metropolitan area; and
- **Administration:** Administer the state transportation program.

The Department has reserved funds in the 2035 Revenue Forecast to carry out its responsibilities and achieve its objectives for the non-capacity programs on the state highway system in each district and metropolitan area. Table 9 identifies the statewide estimates for non-capacity programs. About \$120 billion (50% of total revenues) is forecast for the non-capacity programs.

Other

The Department is responsible for certain expenditures that are not included in major programs discussed above. Primarily, these expenditures are for debt service and, where appropriate, reimbursements to local governments. About \$10 billion (4% of total revenues) is forecast for these expenditures. These funds are not available for statewide or metropolitan system plans.

TABLE 8
Major Non-Capacity Programs Included in the 2035 Revenue Forecast
and Corresponding Program Categories in the Program and Resource Plan (PRP)

2035 Revenue Forecast Programs	PRP Program Categories
<u>Safety</u> - Includes the Highway Safety Improvement Program, the Traffic Safety Grant Program, Bicycle/Pedestrian Safety activities, the Industrial Safety Program, and general safety issues on a Department-wide basis.	Highway Safety Grants
<u>Resurfacing</u> - Resurfacing of pavements on the State Highway System and local roads as provided by state law.	Interstate Arterial and Freeway Off-System Turnpike
<u>Bridge</u> - Repair and replace deficient bridges on the state highway system. In addition, 15% of federal bridge funds must be expended off the federal highway system (i.e., on local government bridges not on the state highway system).	Repair - On System Replace - On System Local Bridge Replacement Turnpike
<u>Product Support</u> - Planning and engineering activities required to "produce" the Department's products and services (i.e., Capacity, Safety, Resurfacing, and Bridge programs).	Preliminary Engineering Construction Engineering Inspection Right of Way Support Environmental Mitigation Materials & Research Planning Public Transportation Operations
<u>Operations & Maintenance</u> - Activities to support and maintain transportation infrastructure once it is constructed and in place.	Routine Maintenance Traffic Engineering Toll Operations Motor Carrier Compliance
<u>Administration</u> - Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also, includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non-highway fixed assets (e.g., offices, maintenance yards).	Administration Fixed Capital Outlay

Table 9
Statewide Non-Capacity Program Estimates
State and Federal Funds from the 2035 Revenue Forecast (Millions of Dollars)

Major Programs	5-Year Period (Fiscal Years)						27-Year Total ²
	2009-10 ¹	2011-15 ¹	2016-20	2021-25	2025-30	2031-35	2009-2035
Safety	252	531	580	613	631	635	3,242
Resurfacing	2,136	4,473	4,368	5,015	5,481	5,912	27,383
Bridge	735	1,188	1,013	1,132	1,241	1,334	6,644
Product Support	2,961	5,707	5,863	6,784	7,787	8,821	37,923
Operations and Maintenance	2,025	4,937	5,868	6,962	7,955	9,076	36,823
Administration	330	942	1,201	1,446	1,737	2,084	7,740
Total Non-Capacity Programs	8,440	17,776	18,892	21,952	24,833	27,863	119,756
Other³	495	1,571	2,004	2,042	2,053	2,106	10,272
Statewide Total Forecast	18,852	37,115	38,594	43,514	47,910	52,365	238,350

¹ Based on the FDOT July 1, 2008 Adopted Work Program for 2009 through 2013.

² Columns and rows sometimes do not equal the totals due to rounding.

³ "Other" is primarily for debt service.

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Blocks & Ribbons - Survey Results Report

METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA



BLOCKS & RIBBONS EXERCISE

Participant's Workbook

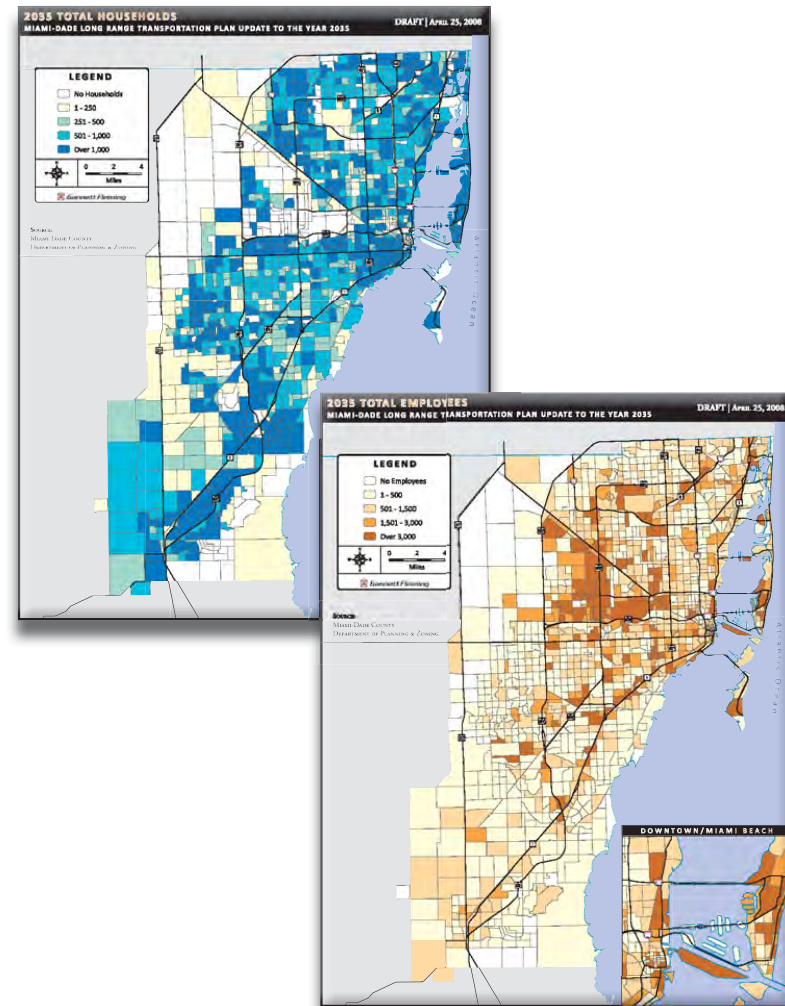
Welcome and thank you for making the decision to take part in the 2035 Miami-Dade Long Range Transportation Plan (LRTP) planning process. Based on forecasts from the Miami-Dade County Department of Planning and Zoning, the county is expected to grow by 323,000 households and 615,000 jobs by the year 2035. How will this growth impact our transportation system, and more importantly, how will we improve the system to adapt to the growth?

One of the first steps in the LRTP development process is to formulate goals and objectives that will guide the plan development. Your input into the survey administered today and the following exercise will help us refine the goals and objectives in accordance with your opinions and knowledge. The draft goals and objectives, which address federal and state law and planning provisions, are included on the next page.

The 2035 Miami-Dade LRTP Blocks & Ribbons exercise also serves as a forum for education and discussion regarding the long range transportation planning process for the Miami urbanized area over the next 20 to 25 years. You will be tasked with looking at the county, in its entirety, to identify transportation solutions to address the projected growth. By participating in this exercise, you will have the opportunity to voice your concerns, share your opinions, and offer solutions to the transportation challenges that the county will face in the coming 25 years.

OBJECTIVES OF THIS EXERCISE

- Raise awareness about the growth that is headed to your county by 2035
- Discuss the impact this growth will have on your **transportation infrastructure**
- Incorporate your opinions and priorities in the LRTP goals and objectives
- Stimulate dialogue about the transportation challenges facing Miami-Dade County



2035 MIAMI-DADE LRTP PROPOSED GOALS & OBJECTIVES**1. Improve Transportation Systems and Travel**

- Improve accessibility to major health care, recreation, education, employment and cultural facilities
- Enhance mobility for people and freight
- Reduce congestion
- Maximize multimodal travel options and provide travel choices
- Complete arterial grid roadway network
- Fill transit service gaps
- Promote transit reliability
- Improve transportation facilities' and services' regional connectivity
- Include provisions for non-motorized modes in new projects and in reconstructions
- Encourage the implementation of new non-motorized (bicycle, pedestrian, greenways) projects
- Increase reverse commute opportunities for disadvantaged communities

2. Increase the Safety of the Transportation System for Motorized and Non-motorized Users

- Improve safety on facilities and in operations
- Reduce roadway and multimodal crashes
- Increase safety at transit stops and intermodal stations and connections
- Implement safe routes to schools

3. Increase the Security of the Transportation System for Motorized and Non-motorized Users

- Enhance the capacity of evacuation corridors
- Improve transportation security for facilities and in operations
- Ensure transportation options are available during emergency evacuations for the elderly and persons with disabilities
- Ensure security at ports, airports and major intermodal centers/terminals

4. Support Economic Vitality

- Increase access to employment areas and sites
- Enhance tourist travel and access opportunities
- Increase and improve passenger and goods access to airports and seaports
- Augment multimodal access to major activity centers
- Enhance the efficient movement of freight and goods
- Implement projects that support economic development and redevelopment areas

5. Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation

- Minimize and mitigate air and water quality impacts of transportation facilities, services, and operations
- Reduce fossil fuels use
- Promote projects that support urban infill and densification
- Minimize, avoid and/or mitigate impacts to environmentally sensitive areas
- Provide equitable and environmentally just transportation facilities and services
- Minimize adverse impacts to established neighborhoods
- Promote consistency between transportation improvements and local planned growth and economic development patterns
- Prioritize funding to favor intra-UDB (Urban Development Boundary) improvements followed by those in the UEA (Urban Expansion Area)

6. Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight

- Improve connectivity to the Strategic Intermodal System (SIS) and intermodal facilities
- Provide multimodal options (bicycle, pedestrian, transit) consistent with the local government comprehensive plan
- Facilitate connections between transportation modes
- Apply transportation and land use planning techniques, such as transit oriented development, that support intermodal connections and coordination
- Improve goods movement by enhanced intermodal access and other infrastructure improvements that serve major freight origins and destinations in Miami-Dade County
- Improve freight movement operations and reliability by promoting expedient and cooperative practices across all modes

7. Optimize Sound Investment Strategies for System Management and Operation

- Optimize benefits of capital expenditures
- Optimize operations and maintenance expenses
- Optimize applications of People's Transportation Plan funding
- Optimize use of private sector funding sources
- Maximize use of State and Federal funding sources
- Promote local improvement projects within the systems improvement context

8. Maximize and Preserve the Existing Transportation System

- Continue to examine the provision and utilization of special-use lanes (SU) on the existing system
- Identify and implement the best available technologies and innovations to improve the reliability and efficiency of the transportation system
- Identify and reserve corridors and right-of-way (on roadways, railways, and waterways) for future transportation facilities and services
- Expand the use of Transportation Demand Management (TDM) strategies

EXERCISE GUIDE

You will have **60 minutes** to complete this exercise. You will be placed into groups of 8 to 10 people with large-scale growth scenario base map (projected growth 2005 - 2035) of Miami-Dade County. Each group should address the following issues, in the following order:

1. **Legos® Allocation (15 minutes).** Your table has been provided with 253 yellow Legos® representing residential growth and 160 red Legos® representing employment growth.
 - Using the growth scenario base map, place your group's Legos® in accordance with the Miami-Dade County Department of Planning & Zoning land use allocations. *See below for specific instructions. The 253 yellow Legos® and 160 red Legos® represent projected growth only. They do not include existing households and employment.*
2. **Ribbons Allocation (15 minutes).** In addition, you have been given two colored spools of ribbon for transportation improvements. You may use as much ribbon as you deem necessary to address the county's transportation needs.
 - Utilizing the purple (roads) and orange (transit) ribbons provided to your group, place the ribbons on the map to indicate the group's preferences for the types transportation improvements needed throughout the county. *Refer to section on transportation corridors.*
3. **Priorities (15 minutes).** Given the cost of transportation improvements and limited funding availability, only X inches of ribbon are available: purple (X in) and orange (X in). Each group will be instructed to rank their improvements in accordance with the allowable lengths of ribbon using the provided tape measure and markers.
4. **Implications (15 minutes).** Review and finalize your transportation improvement priorities. Discuss the principles and guidelines that affected your decision making, and the impact your scenario will have on the county as a whole.

Legos® Placement

To visualize the level of development expected to occur within the next 25 years, each group will be given Legos® in two different colors: yellow Legos® will be used to represent household growth, and the red Legos® will delineate employment growth. Depictions of various levels of residential and employment densities are provided on pages 6 - 9 as a point of reference.



= 1,280 Households



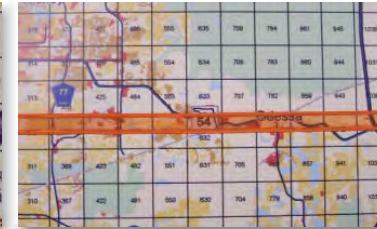
= 3,840 Jobs

Transportation Corridors: Ribbons Placement

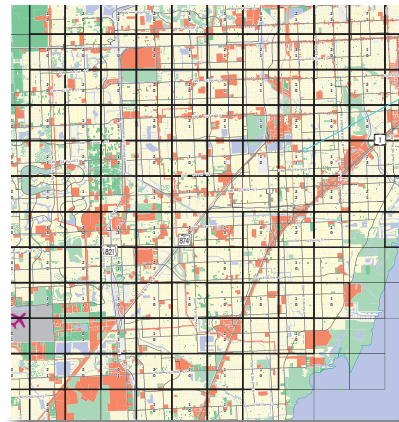
As mentioned earlier, in addition to the Legos®, you will also be given two spools of ribbon to serve as representation for transportation improvements. Also, you can combine the two ribbons to form shared corridors; these are corridors where both roadway and transit improvements are needed.



Utilize the **purple ribbon** to locate new, or enhance current roadway/highway corridors.



Utilize the **orange ribbon** to locate new transit corridors, such as Bus Rapid Transit (BRT), Commuter Rail, and High Speed Rail.



Legos® will be placed onto the Miami-Dade County Existing Land Use Map; each grid on the map represents 1-square mile (640 acres) Growth allocations are represented in each grid as depicted below.

2	Number of Household Legos®
3	Number of Employment Legos®

METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA

EXERCISE RULES

- The growth projections – 323,000 households and 615,000 jobs – are not negotiable. While these numbers could be debated, experts in the region agree that they are reasonable projections for the county's growth.
- All growth allocations are additive; that is, the growth that you are allocating must be considered as an addition to what already exists. Base year conditions representing the year 2005 can be studied on the existing conditions map (2005).
- **Everyone has an equal voice.** This is an exercise in collective decision making. Acknowledge that every participant has a valid perspective from which you can learn. No one should dominate the discussion.
- **Think big.** Remember that this is a regional exercise with a tight timeline. Keep it at "10,000 feet" and avoid getting bogged down in too much specificity at a local level.
- **Keep an open mind.** Don't discount any ideas without discussing and evaluating them. Build upon each other's ideas in a positive way.
- **Be bold.** Don't try to avoid controversy; welcome it. Regional planning processes that avoid controversial issues and decisions produce little.
- **Examine alternatives.** One good way of resolving opposing ideas is to develop alternatives to them and then evaluate the results.
- **Compromise.** Accept that making decisions often means making trade-offs.
- **Additional input.** Feel free to note your thoughts on the tablets provided at your table.

THE FACILITATOR'S ROLE

Each table will be assigned a facilitator. Your facilitator will begin by having everyone introduce themselves. He/She then will explain the exercise, guide the brainstorming and discussion process, answer questions, clarify the group's decision and, finally summarize the group's progress and accomplishments.

Intensity of growth will be represented vertically by stacking the Legos® within each 1-mile square grid by number of households and jobs anticipated: when doing so, place yellow on top of red.



City of Miami 2005 Conditions

Density Visualization
RESIDENTIAL

LOW DENSITY RESIDENTIAL



1 Yellow Block:
1,280 Households or 3,160 Residents



LOW-MEDIUM DENSITY RESIDENTIAL



2 Yellow Blocks:
2,560 Households or 6,320 Residents



Density Visualization
RESIDENTIAL

MEDIUM DENSITY RESIDENTIAL



3 Yellow Blocks:
 2,840 Households or 9,840 Residents



MEDIUM-HIGH DENSITY RESIDENTIAL



4 Yellow Blocks:
 5,120 Households or 13,000 Residents



Density Visualization
EMPLOYMENT

LOW DENSITY JOBS



1 Red Block:
3,840 jobs/sq. mile (6 jobs/acre)



LOW-MEDIUM DENSITY JOBS



2 Red Blocks:
7,680 jobs/sq. mile (12 jobs/acre)



Density Visualization
EMPLOYMENT

MEDIUM DENSITY JOBS



3 Red Blocks:
 11,520 jobs/sq. mile (18 jobs/acre)



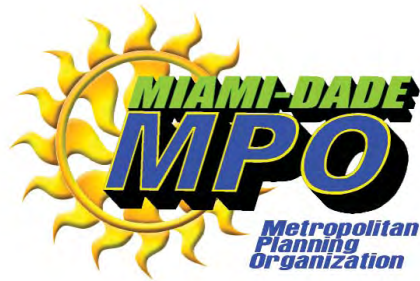
HIGH DENSITY JOBS



4 Red Blocks:
 15,360 jobs/sq. mile (24 jobs/acre)



METROPOLITAN PLANNING ORGANIZATION FOR THE MIAMI URBANIZED AREA



MIAMI-DADE MPO
111 NW 1ST STREET
MIAMI, FL 33128
MIAMIDADE.GOV/MPO
P 305-375-4507



Background

For the 2035 Miami-Dade Transportation Plan, Strategy Solutions, Inc., as a subcontractor to Gannett Fleming, received public feedback through both an online survey and the use of the OptionFinder Technology during public involvement sessions held throughout the County. The survey was published on the Internet on July 10, 2008. At the close of the survey on September 30, 2008, a total of 417 responses were collected. During the public involvement sessions in June/July, 2008, a total of 294 responses were collected. Responses from the survey and public involvement sessions have been combined in this report to provide an aggregate view of the results. The figures included in the Appendix compare the responses from the survey to the responses from the public involvement sessions.

Demographics

Participants first answered two demographic questions that could be used to cross-tabulate responses to other questions. **Figure 1** shows that the largest percentage of respondents (21%) live in the Beach/CDB area. Many of the respondents live in the Central (18.6%) and South (18.8%) areas as well.

Figure 1

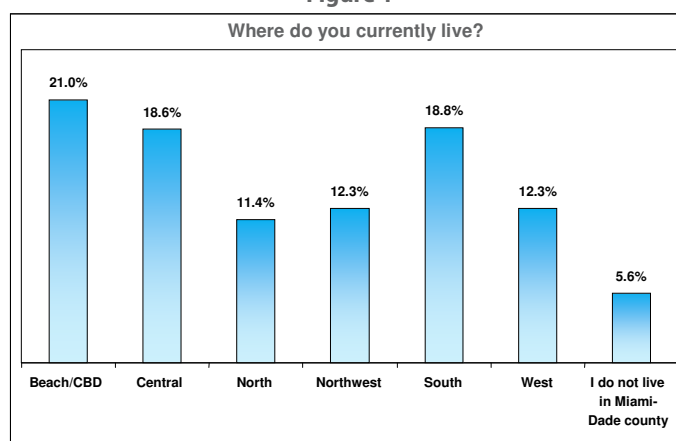
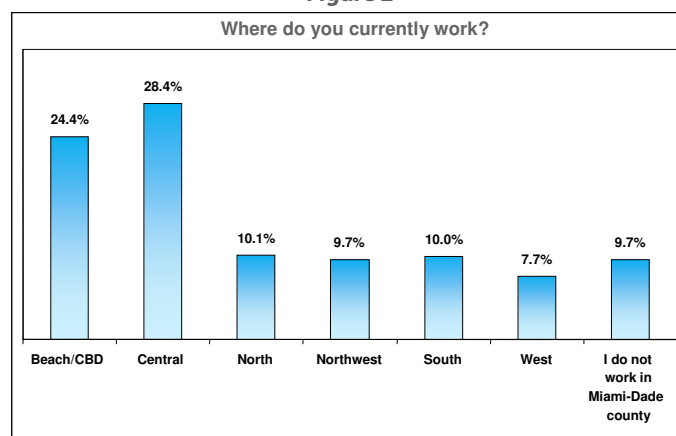
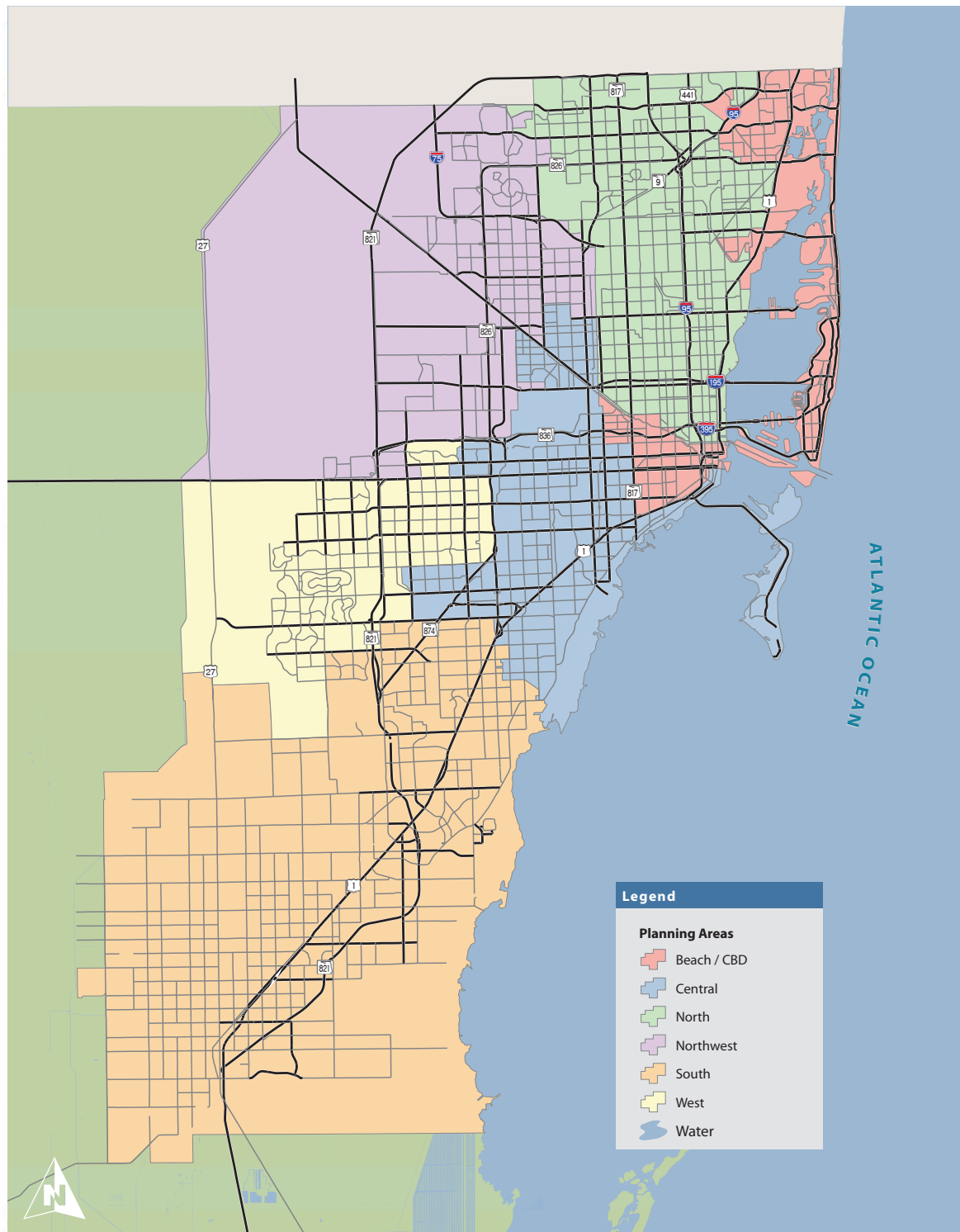


Figure 2 shows that the largest percentage of respondents work in the Central area (28.4%). Many respondents also work in the Beach/CBD area (24.4%).

Figure 2



For reference, the following map shows the response divisions for the two demographic questions.



Travel Preferences

This section of the survey was designed to understand participants' primary travel modes. **Table 1** shows the response counts for various modes of travel to work, shopping, and places other than work or shopping. **Figures 3 through 5** show the percentage breakdowns of the responses to each of the three questions. The majority of respondents selected drive a car as their most frequently used mode of transportation for each question.

Table 1

	Get to Work?	Travel to Shop?	Get where you are going when not working or shopping?
Walk	29	44	55
Ride a bicycle	57	36	72
Drive a car	424	531	483
Carpool	10	4	8
Metrorail	67	5	12
Metrobus	38	20	24
US-1 Busway	5	10	0
Downtown Metro Mover	0	1	0
Tri-Rail	11	0	0
Friend or family member gives me a ride	14	12	10
Total	655	663	664

Figure 3

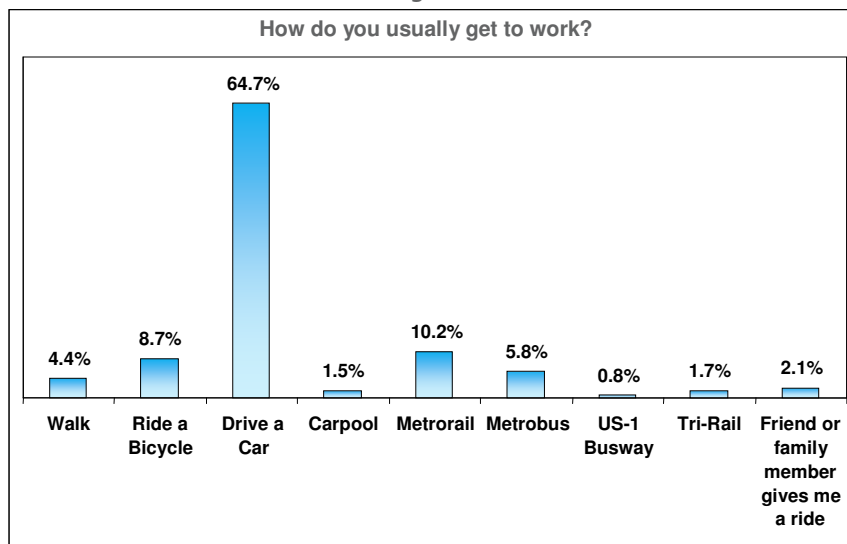


Figure 4

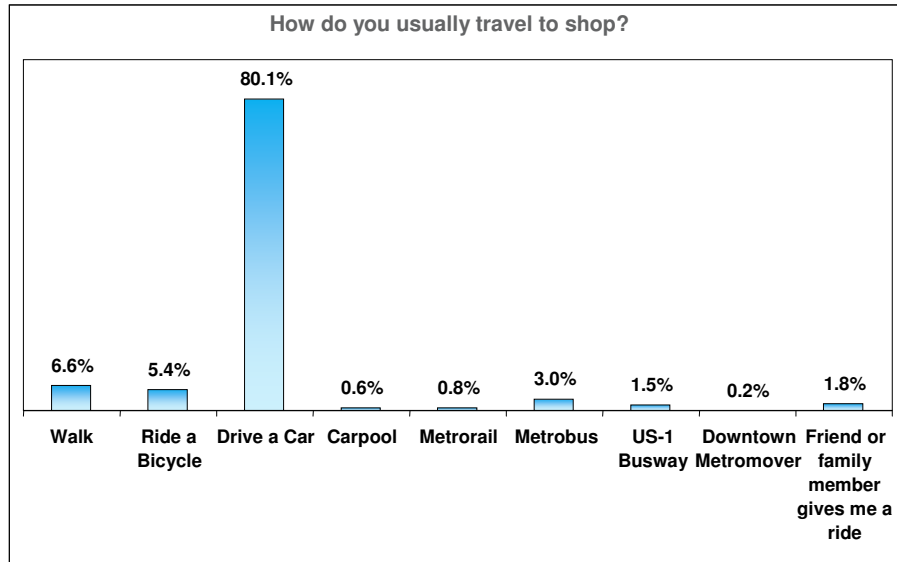
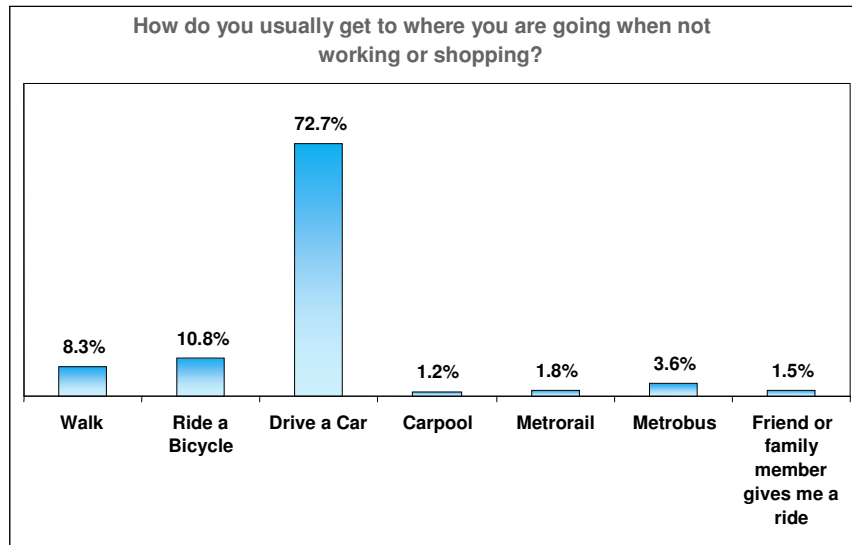


Figure 5



Ease, Safety, and Security

This section of the survey asked respondents to rate their agreement with statements relating to the ease, safety, and security of different forms of transportation. Respondents rated each statement on a four-point rating scale, where 1=Strongly Disagree, 2=Disagree, 3=Agree and 4=Strongly Agree. Respondents also had the option of saying that they “don’t know” or that they “don’t use transit”. **Table 2** lists each of the statements and the response counts for each of the agreement ratings. The statements are listed in rank order from highest to lowest level of agreement.

According to **Table 2**, the statement about feeling safe while using public transit received the highest average rating (2.9), meaning that more respondents were in agreement with that statement than the other statements. The statement about feeling safe utilizing existing bicycle and pedestrian facilities received the lowest average rating (1.8), meaning that more respondents were in disagreement with that statement than the other statements. **Figures 6 through 10** show the percentage breakdowns of the responses to each of the individual statements.

Table 2

	Frequency of Responses					Total Responses	Average
Item	1	2	3	4	Don't know/ I don't use transit		
	Strongly Disagree	Disagree	Agree	Strongly Agree			
Feel safe while using public transit	42	98	326	115	54	635	2.9
Feel secure while using public transit	68	187	274	47	52	628	2.5
Feel secure utilizing existing bicycle and pedestrian facilities	143	175	219	23	67	627	2.2
Feel that it's easy to get to a variety of places using public transportation	263	198	117	34	25	637	1.9
Feel safe utilizing existing bicycle and pedestrian facilities	232	216	104	12	63	627	1.8

Figure 6

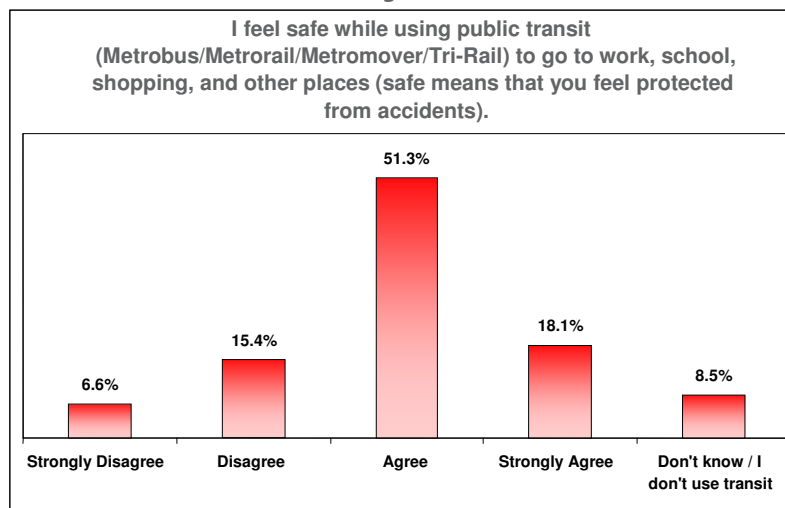


Figure 7

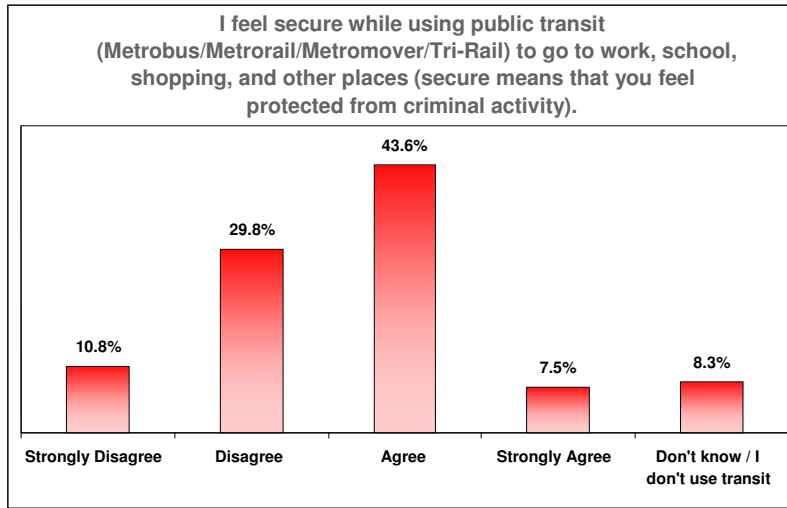


Figure 8

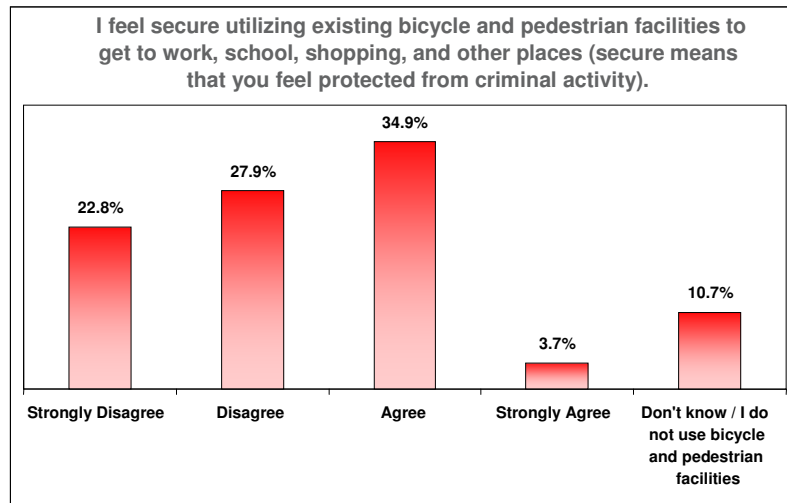
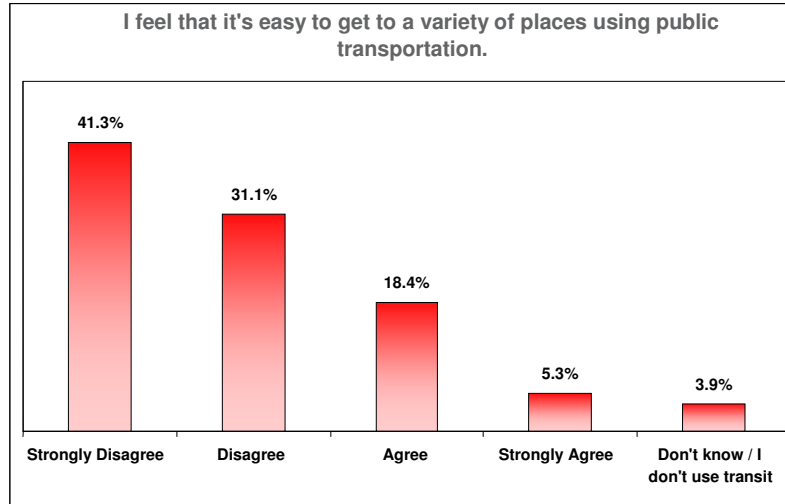
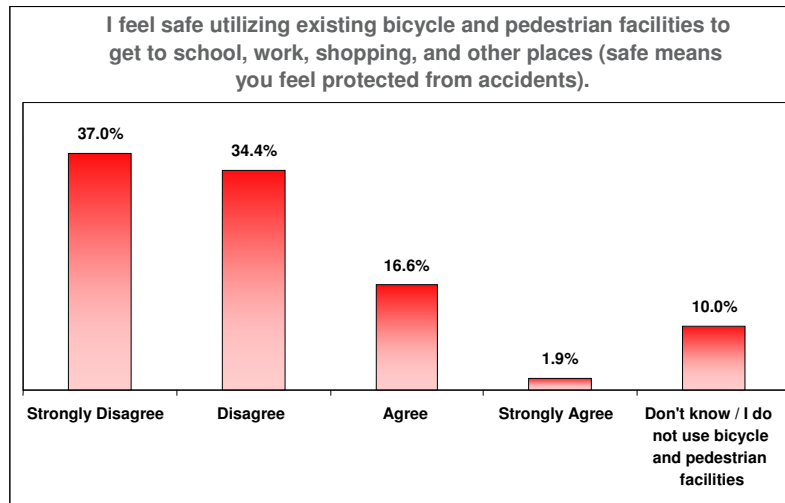


Figure 9**Figure 10**

L RTP Process and Priorities

This section of the survey focused on establishing priorities and assessing levels of agreement with transportation-related issues that would influence the development of the 2035 Transportation Plan. Respondents rated each item in a list of potential areas that could improve the transportation system on a four-point rating scale, where 1=Strongly Disagree, 2=Disagree, 3=Agree and 4=Strongly Agree. **Table 3** shows the list in rank order from highest to lowest level of agreement.

According to **Table 3**, expanding Metrorail, bus, and other transit services had the highest average rating (3.7). Building sidewalks and bicycle lanes also had a high average rating (3.3), while building new roads had the lowest average rating (2.1). **Figures 11 through 15** show the percentage breakdowns of the responses to each of the individual items.

Table 3

Item	Frequency of Responses				Total Responses	Average
	1	2	3	4		
	Strongly Disagree	Disagree	Agree	Strongly Agree		
Expand Metrorail, bus, and other transit services	24	11	135	487	657	3.7
Build sidewalks and bicycle lanes	46	76	177	365	664	3.3
Reduce congestion with alternatives that do not include road construction like improved signage, signal improvements, and car-pool parking lots	40	77	312	220	649	3.1
Add new lanes to existing roads	172	161	207	104	644	2.4
Build new roads	223	201	149	77	650	2.1

Figure 11

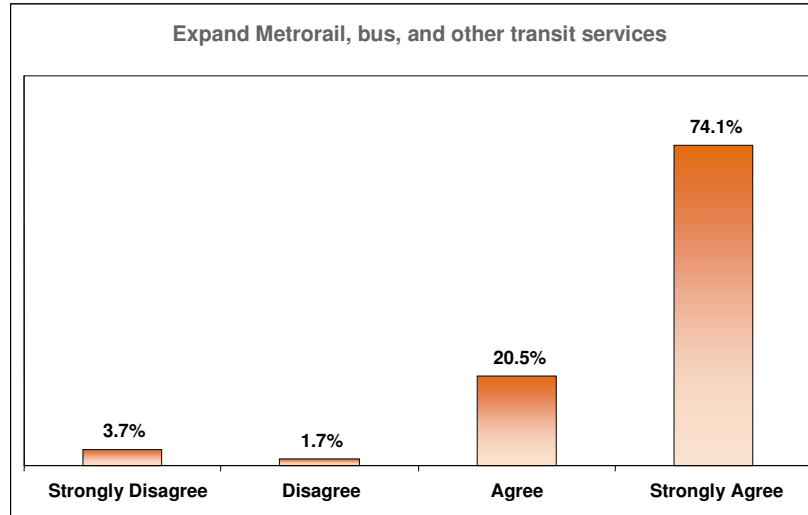


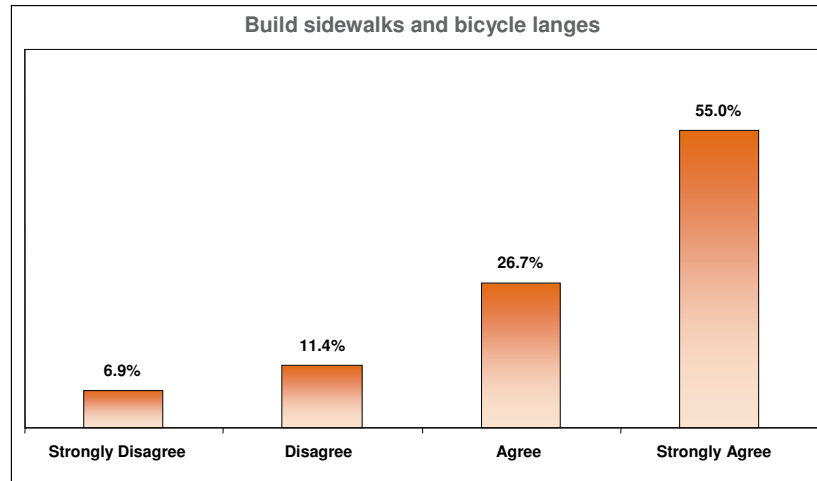
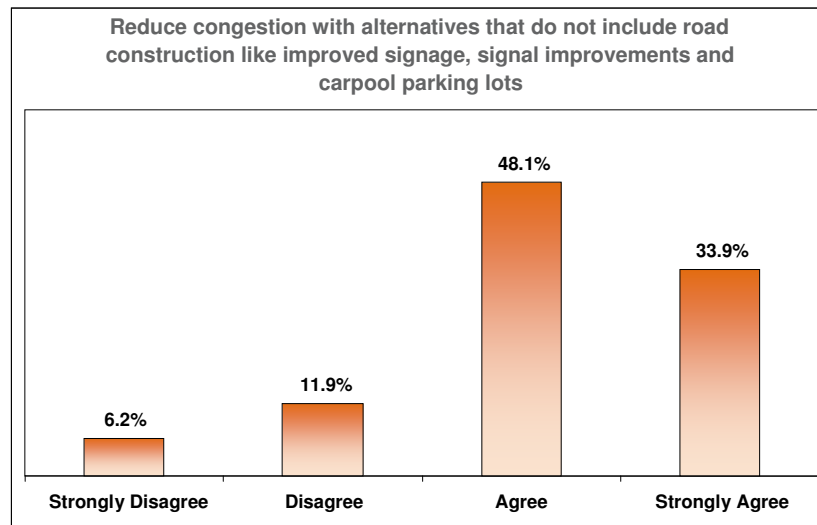
Figure 12**Figure 13**

Figure 14

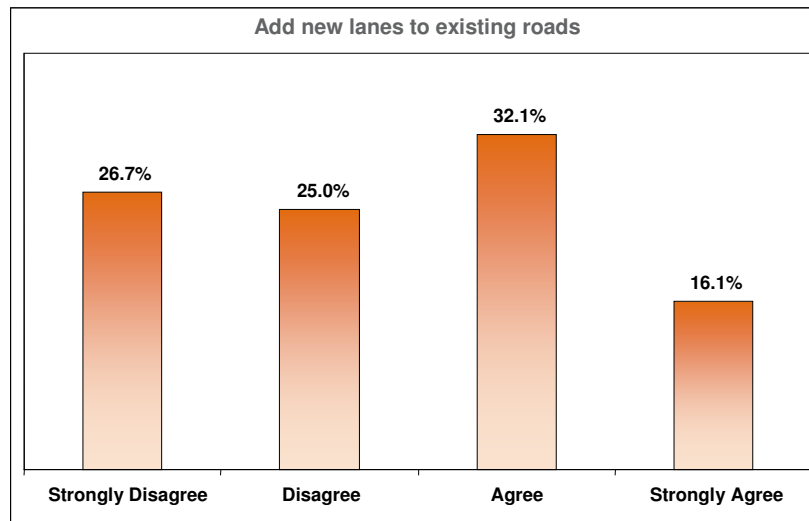
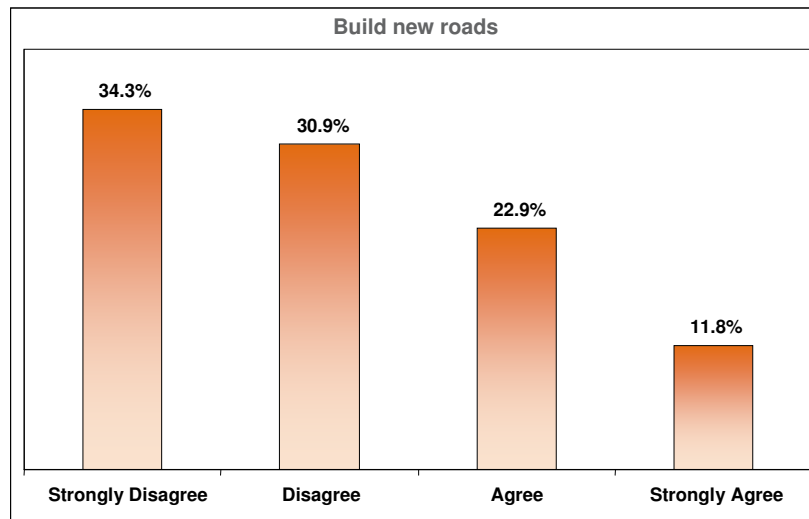


Figure 15



Environment

When asked about environmental issues, respondents were asked to rate the importance of each in a list of concerns that could be impacted by future transportation improvements on a four-point rating scale, where 1=Not At All Important, 2=Somewhat Important, 3=Important, and 4=Very Important. **Table 4** shows the list in rank order from highest to lowest level of importance.

According to **Table 4**, each of the four environmental issues received a high average rating, ranging from 3.4 to 3.6. This shows that respondents believe that these issues are all important. **Figures 16 through 19** show the percentage breakdowns of the responses to each of the individual issues.

Table 4

Item	Frequency of Responses				Total Responses	Average
	1 Not At All Important	2 Somewhat Important	3 Important	4 Very Important		
Decrease of water quality and supply	15	35	129	485	664	3.6
Decline of air quality	16	61	133	456	666	3.5
Loss of wildlife habitat, open space and wetlands	18	66	160	416	660	3.5
Global warming	47	63	154	408	672	3.4

Figure 16

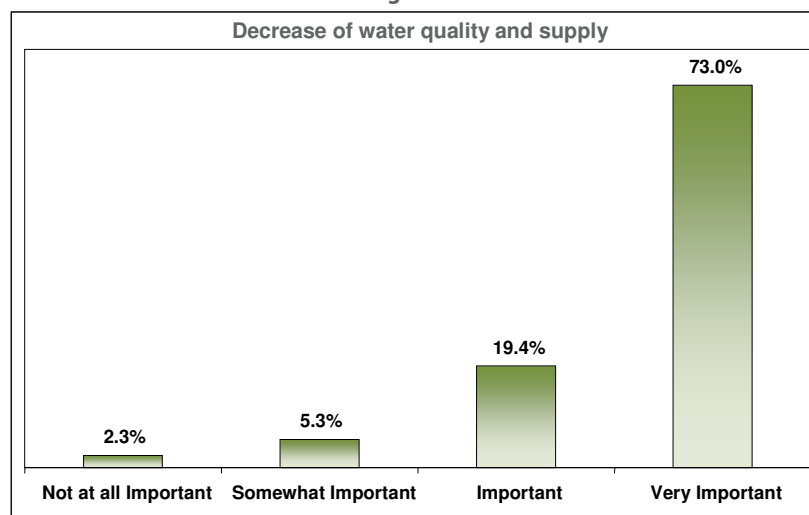


Figure 17

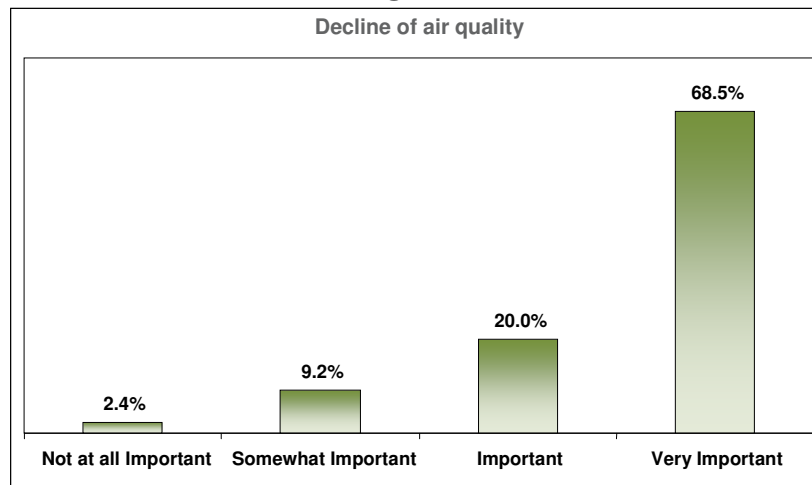


Figure 18

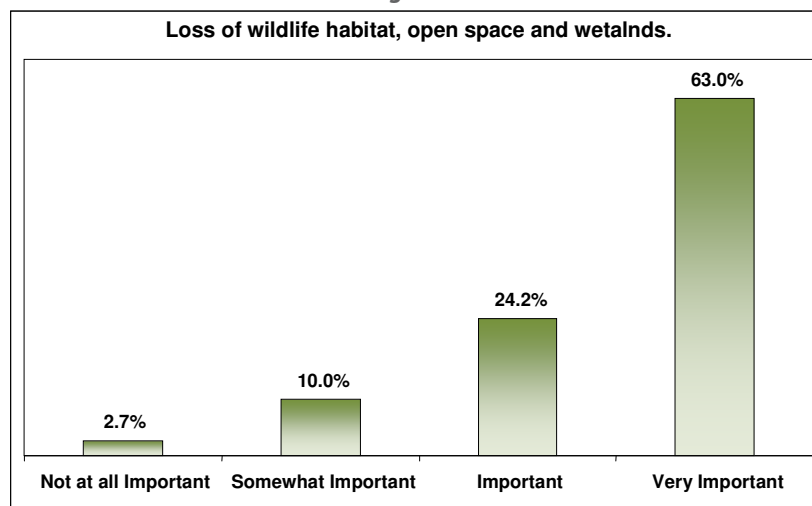
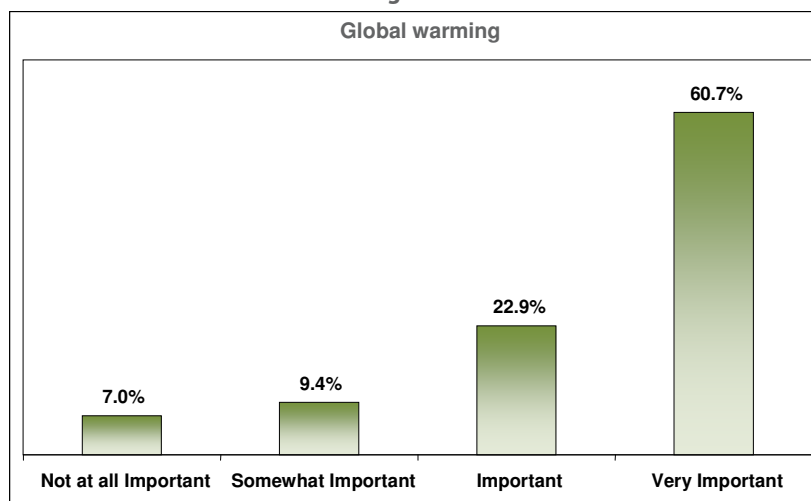


Figure 19


Future Transportation Needs and Concerns

The objective of this section of the survey was to examine future transportation needs and concerns. According to **Figure 20**, the largest percentage of respondents (40.1%) believe that the focus of future transportation improvements should be mostly transit. A large percentage (31.6%) believe that future improvements should have an emphasis on transit with some additional roads. The smallest percentage of respondents (2.6%) believed that the focus should be mostly roads.

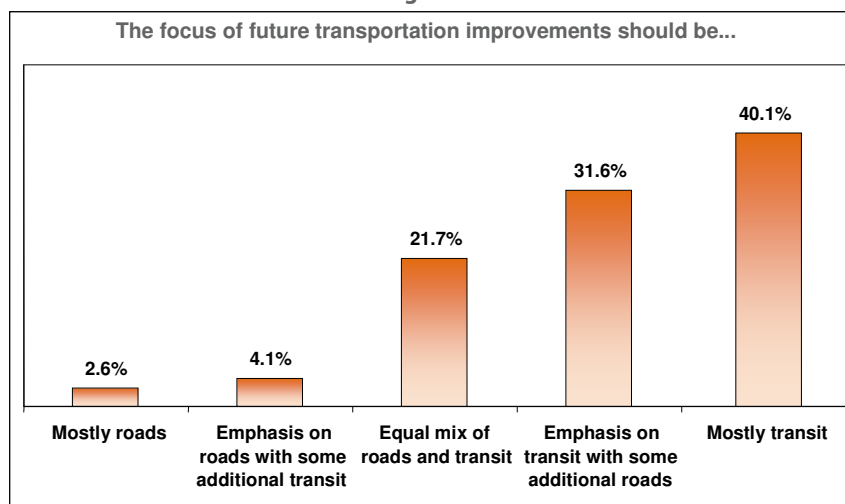
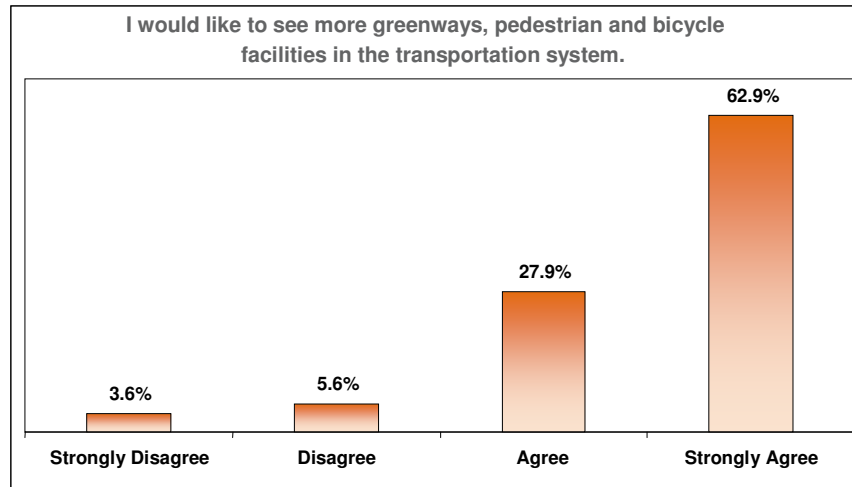
Figure 20


Figure 21 shows that the majority of respondents (62.9%) would like to see more greenways, pedestrian and bicycle facilities in the transportation system. Only 9.2% of respondents disagree (5.6%) or strongly disagree (3.6%) with this statement.

Figure 21



The last section of the survey measured respondents' level of agreement with a series of statements related to existing and future transportation concerns. Respondents rated each statement on a four-point rating scale, where 1=Strongly Disagree, 2=Disagree, 3=Agree and 4=Strongly Agree. **Table 5** shows the list in rank order from highest to lowest level of agreement.

According to **Table 5**, the statement that said future transportation improvements should focus on making connections across the system received the highest average rating (3.5). The statements regarding transportation improvements needing to improve the connection between Miami-Dade and Broward counties and needing to provide better access to Miami-Dade county airports and seaports each received an average rating of 3.3. The lowest rating (2.2) went to the statement that said some existing roads should be partially converted into toll roads. **Figures 22 through 30** show the percentage breakdowns of the responses to each of the individual statements.

Table 5

Item	Frequency of Responses				Total Responses	Average
	1	2	3	4		
	Strongly Disagree	Disagree	Agree	Strongly Agree		
Future transportation improvements should focus on making connections across the system	29	24	193	431	677	3.5
Transportation improvements are needed to improve the connection between Miami-Dade and Broward counties	26	73	245	328	672	3.3
Transportation improvements are needed to provide better access to Miami-Dade county airports and seaports	31	70	237	327	665	3.3
Transportation improvements are needed to provide better freight access to Miami-Dade County	44	108	265	255	672	3.1
Transportation projects should be focused in areas needing economic development	62	194	271	139	666	2.7
Future transportation improvements should focus on improving the existing system rather than building new roads and transit facilities	73	227	204	165	669	2.7
HOV lanes to help keep traffic moving	86	196	276	93	651	2.6
Pay tolls to avoid traffic congestion	231	139	207	98	675	2.3
Some existing roads should be partially converted into toll roads	224	175	203	70	672	2.2

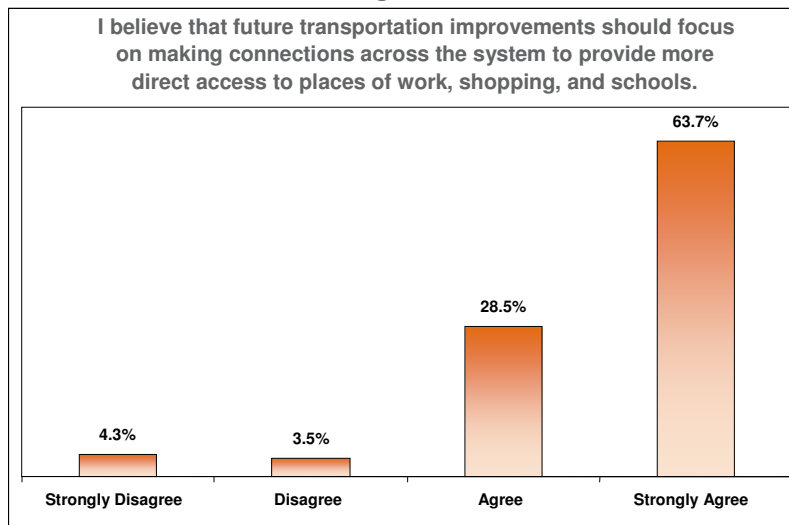
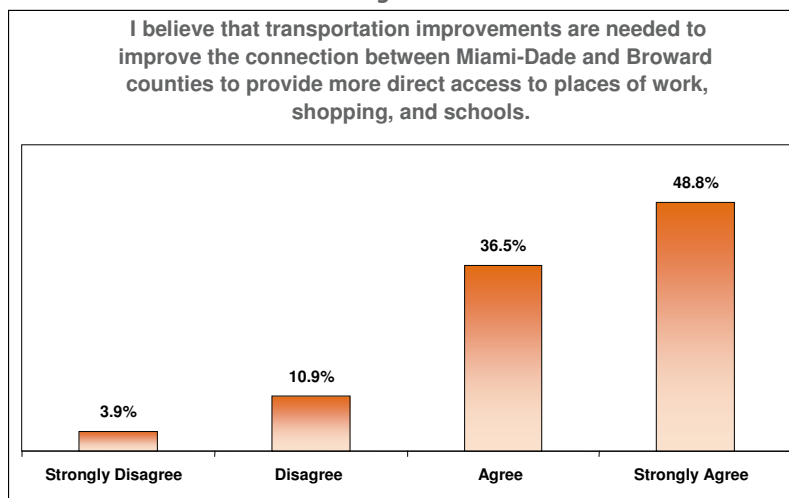
Figure 22**Figure 23**

Figure 24

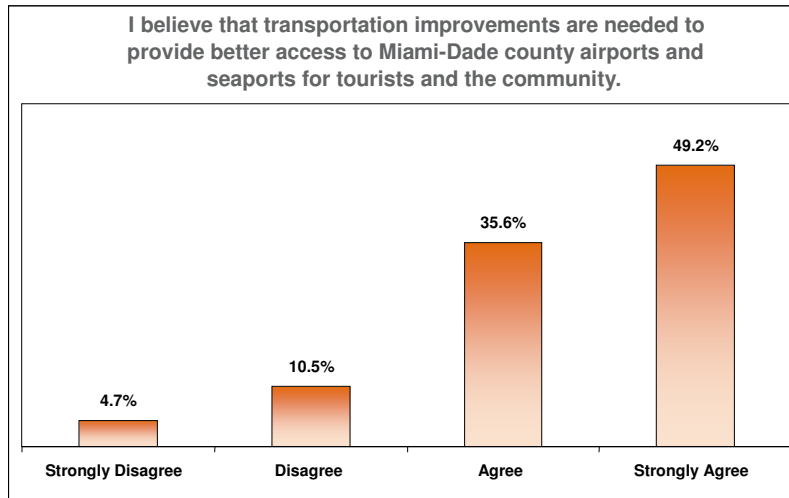


Figure 25

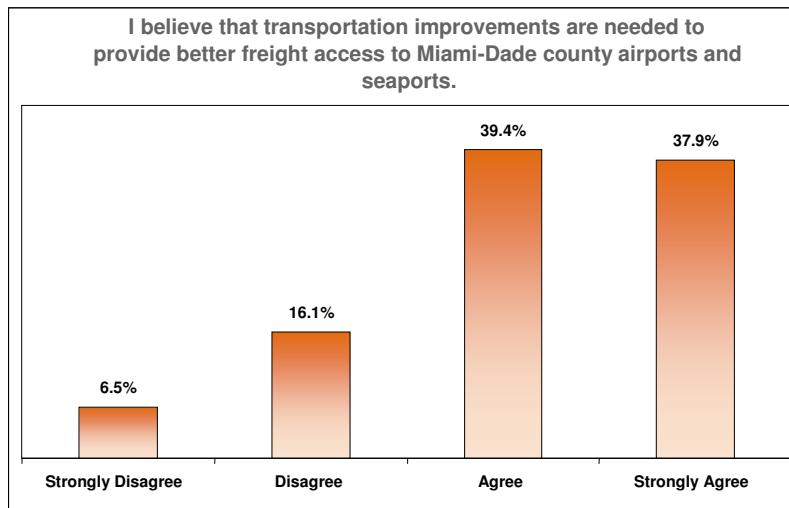


Figure 26

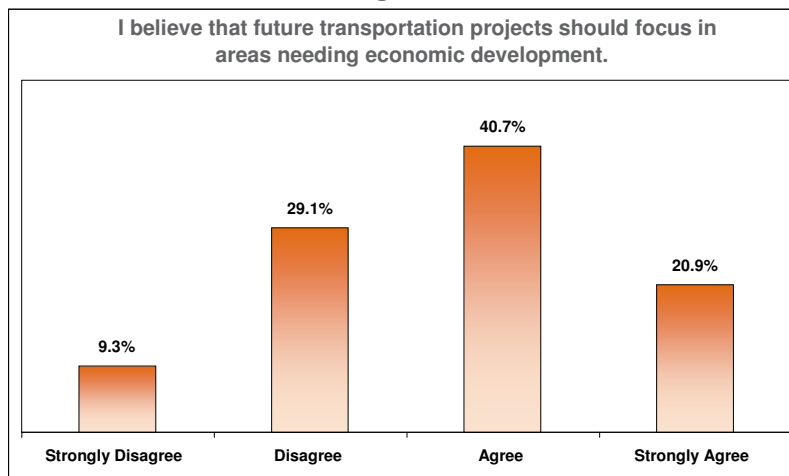


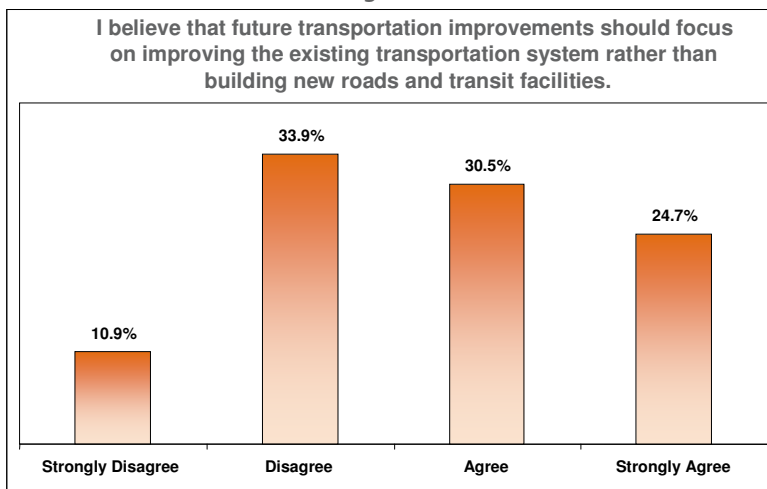
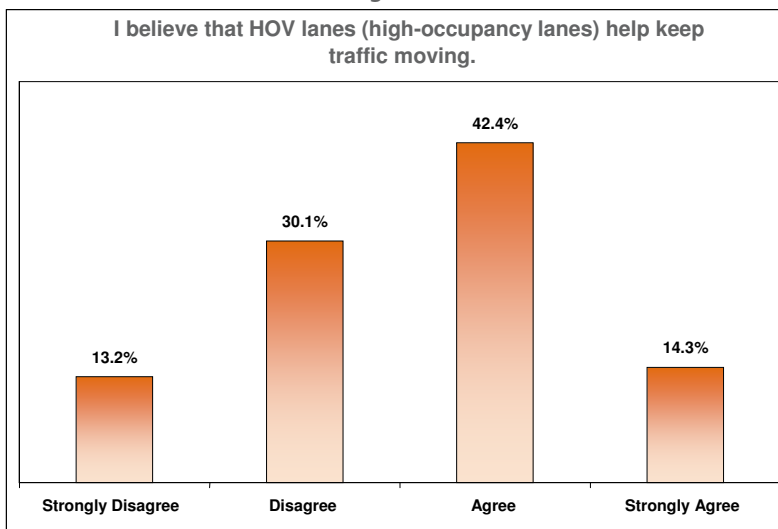
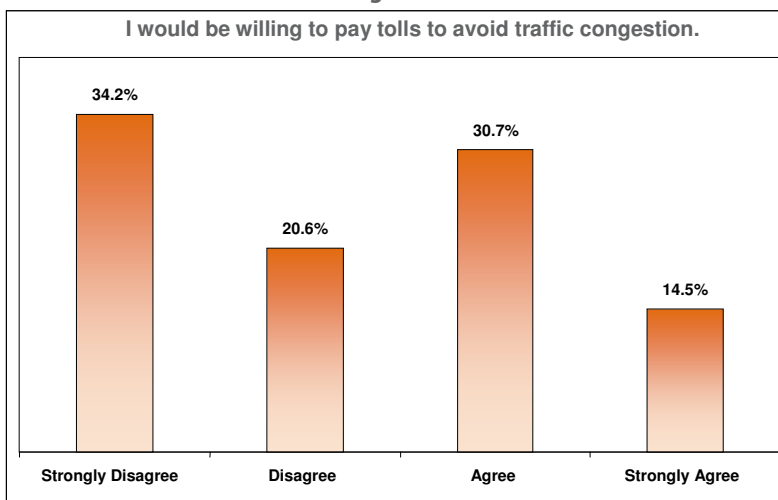
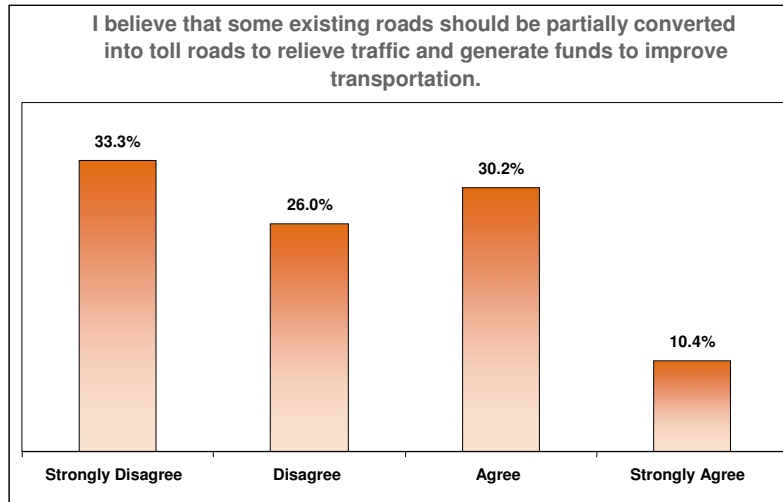
Figure 27**Figure 28****Figure 29**

Figure 30



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Project Purpose and Need Statements

Facility/Corridor	From	To	Description	Purpose and Need Statement
Priority II Improvements				
1st Street Bridge	over Miami River	US-1	Bridge replacement	This project will replace the 1st Street bridge across the Miami River, which was originally constructed in 1929.
Golden Glades Multi-modal Facility Upgrade			Capacity improvement, including a pedestrian overpass to connect Golden Glades intermodal center to business park west of CSX tracks	This project will provided needed improvements to the existing multimodal facility which includes park-and-ride lots that are overcapacity and transit facilities that are substandard and not user-friendly. Upgrades will include a 1,000 space parking deck, a new intermodal center and a new single-level pedestrian bridge providing improved direct pedestrian access between the Tri-Rail station and intermodal center.
Golden Glades Multi-modal Terminal		Tri-Rail/MDT Terminal	1,000 space deck, intermodal center with improved bus circulation and improved ADA, Replace multiple existing pedestrian bridges with a single-level bridge	This project will include various improvements to the existing Golden Glades multimodal terminal. The project is needed to address multimodal connectivity, transfer efficiency, accessibility, comfort, safety, and security deficiencies at this regional facility which supports Miami-Dade Transit, Broward County Transit, Tri-Rail, and Greyhound transit services.
I-95 (NB) Ramp to Turnpike/ SR 826			Add 1 auxiliary/acceleration lane	This project will construct an auxiliary lane between the US 441 loop on ramp and the SR 826 loop off ramp on the northbound connector between I-95 and the Turnpike. This project is needed to relieve congestion and improve traffic flow and safety on NB I-95, the NB I-95 HOT lane egress at Golden Glades and the NB connector (I-95 to Turnpike).
Miami Beach Intermodal Center	63rd Street Collins Avenue	87th Street West Bay Drive	New North Beach bus transfer station	This project will construct a North Beach bus transfer station. This station will be critical to the efficient restructuring of the MDT bus routes in Miami Beach. In addition, the coastal communities have a strong need for an improved sub-regional transit system that includes intermodal transit centers at key locations, including the North Beach neighborhood. This project will improve the LOS along the major roadways in North Beach by providing improved transit service and increasing options for modes other than personal vehicles.
NW 14th Street	Civic Center	Biscayne Boulevard	Widen to 3 lanes (2 to 3)	This project will add one lane to NW 14th Street from the Civic Center to Biscayne Boulevard. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.

Facility/Corridor	From	To	Description	Purpose and Need Statement
NW 25th Street	NW 89th Court	HEFT	Traffic signal improvements; improve intersections to accommodate truck movements.	This project will provide signal, other intersection improvements to NW 25th Street from 89th Court to the HEFT. This corridor connects Doral's freight center with MIA and the regional transportation system. Signal and intersection improvements and a direct connection of NW 25th Street to the HEFT are needed to ease congestion.
NW 25th Street	NW 89th Court	SR 826	Widen to 6 lanes (4 to 6)	This project will widen NW 25th Street from NW 89th Court to SR 826 from 4 to 6 lanes.
NW 25th Street Viaduct	SR 826	NW 87th Court	Phase 2 - construction of Viaduct from SR 826 to NW 87th Court	This project will construct phase II of the NW 25th Street Viaduct, from SR 826 to NW 87th Court. This project is needed to alleviate existing and projected congestion on NW 25th Street and the entire west side of the Miami International Airport.
NW 87th Avenue	NW 36th Street	NW 58th Street	Widen to 6 lanes (4 to 6)	This project will widen NW 87th Avenue from NW 36th Street to NW 58th Street from 4 to 6 lanes providing needed mobility improvements on NW 87th Avenue.
NW 87th Avenue extension	NW 58th Street	NW 95th Street	Extend to connect the freight hubs of Doral and Medley	This project will extend NW 87th Avenue from NW 58th Street to NW 95th Street. The truck route between Doral and Medley is via the Palmetto Expressway. A direct connection via an extension of NW 87th Avenue will ease congestion on the higher order roadways and provide a critical link between these two freight centers.
NW 107th Avenue	NW 41st Street	NW 25th Street	Widen to 6 lanes (4 to 6)	This project is to widen NW 107th Avenue from NW 25th Street to NW 41st Street from 4 to 6 providing needed mobility improvements on NW 107th Avenue.
NW 107th Avenue	1000ft N of NW 122nd Street	Okeechobee Road	Widen bridge over Miami Canal	This project will widen/reconstruct the roadway from NW 127 Street to Okeechobee Road; mill/resurface the roadway from NW 127 Street south for approximately 400 feet and corner turning-radii improvements; intersection improvements and signalization at NW 107 Avenue and Okeechobee Road and widen the bridge over the Miami Canal. This project will provide needed mobility and safety improvements on NW 107 Ave.
NW South River Drive	NW 19th Street	NW 23rd Avenue	Widen Tamiami Swing Bridge to 4 lanes (2 to 4)	This project will widen the Tamiami Swing Bridge from 2 to 4 lanes providing needed mobility improvements on NW South River Drive.
Parking expansion at Opa-Locka Tri-Rail station	Opa-Locka Tri-Rail Station		Opa-Locka Tri-Rail station parking improvements	This project will provide needed parking expansion at Tri-Rail's Opa-Locka Station. Park and Ride access at this station has increased sharply in recent years, reaching capacity on most weekdays. Surface parking lot expansion will address current and future needs. The project also includes pedestrian, bus circulation, shelter and bicycle improvements.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Port of Miami			Construct parking garage - intermodal hub capacity	This project will provide additional parking at the Port. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.
South Beach bus transfer station			New South Beach bus transfer station	This project will construct a new South Beach Bus Transfer Station. This station will be critical to the efficient restructuring of the MDT bus routes in Miami Beach. In addition, the coastal communities have a strong need for an improved sub-regional transit system that includes intermodal transit centers at key locations, including the South Beach neighborhood. This project will improve the LOS along the major roadways in South Beach by providing improved transit service and increasing options for modes other than personal vehicles.
SR 25/Okeechobee Road	at NW 154th Street		Traffic signals	This project will provide signalization improvements at the intersection of SR 25 and NW 154th Street. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.
SR 823/NW 57th Avenue/ Red Road	W 19th Street	W 23rd Street	Widen to 6 lanes (4 to 6)	This project will widen NW 57th Avenue from Okeechobee Road to W 23rd Street. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.
SR 823/NW 57th Avenue/ Red Road	Okeechobee Road	W 19th Street	Widen to 5 lanes (4 to 5)	
SR 823/NW 57th Avenue/ Red Road	W 53rd Street	W 65th Street	Widen to 6 lanes (4 to 6)	This project will widen NW 57th Avenue from W 53rd Street to W 65th Street from 4 to 6 lanes.
SR 823/NW 57th Avenue / Red Road	W 23rd Street	W 46th Street	Widen to 6 lanes (4 to 6)	This project will widen NW 57th Avenue from W 23rd Street to W 46th Street from 4 to 6 lanes.
SR 860/NW 186th Street/ Miami Gardens Drive	NW 97th Avenue	I-75	New 4 lanes	This project will provide a connection to I-75 for the development west of I-75. This project is also needed to provide a connection between developments east and west of I-75.
SR 997/Krome Avenue	SW 136th Street	Kendall Drive	Widen to 4 lanes (2 to 4)	This project will widen Krome Avenue from US-1 to US 27 from 2 to 4 lanes.
SR 997/Krome Avenue	SR 94/Kendall Drive	SR 90/SW 8th Street	Widen to 4 lanes (2 to 4)	This project will widen Krome Avenue from US-1 to US 27 from 2 to 4 lanes.
SW 137th Avenue	US-1	SW 184th Street	Widen to 4 lanes (2 to 4)	This project will widen SW 137th Avenue from US-1 to SW 184th Street.
SW 137th Avenue	SW 24th Street	SW 8th Street	Widen to 6 lanes (4 to 6)	This project is to widen SW 137th Avenue from SW 24th Street to SW 8th Street from 4 to 6 lanes providing needed mobility improvements on SW 137th Avenue.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SW 264th Street	US-1	SW 147th Avenue	New 2-lane	This project will construct a new 2-lane road in the alignment of SW 264th Street from US-1 to SW 147th Avenue. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.
SW 264th/SW 268th Street	SW 147th Avenue	SW 112th Avenue	Roadway improvements	This project will provide operational improvements on SW 264th/SW 268th Street from SW 147th Avenue to SW 112th Avenue. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.
SW 320th Street/Mowry Drive	S. Dixie Highway	SW 187th Avenue	Widen to 4 lanes with continuous left turn lanes (2 to 4)	This project will add continuous left turn lanes, providing needed mobility improvements on Mowry Drive.
SW 328th Street/North Canal Drive		US-1	Intersection improvements - add turn lanes	This project will improve the intersection at SW 328th Street and US-1, providing needed safety and capacity improvements. Project HS-9 will widen the section of SW 328th Street to the west of this intersection, requiring a reconstruction of the intersection.
Truck Parking Improvement		Okeechobee Road	Provide a location in the area of Okeechobee and the HEFT for long-term truck parking and staging.	This project will provide a long-term truck parking and staging lot in the area of Okeechobee Road and the HEFT. This project is needed due to the lack of sites within Miami-Dade County where truck drivers can safely stage for pick-up/delivery or rest as part of their federally required rest time. A parking area in this location will provide for this need within an area close to the regional transportation network and freight hubs.
Truck Parking Improvement			Develop a truck staging area near NW 36th Street and NW 37th Avenue for the Port of Miami River.	This project will provide a long-term truck parking and staging lot in the area of NW 36th Street and the NW 37th Avenue. This project is needed due to the lack of sites within Miami-Dade County where truck drivers can safely stage for pick-up/delivery or rest as part of their federally required rest time. A parking area in this location will provide for this need within an area close to the regional transportation network and freight hubs.
West 24th Avenue	W 52nd Street	W 76th Street	Widen to 5 lanes (2 to 5)	This project will widen West 24th Avenue from W 52nd Street to W 76th Street from 2 to 5 lanes. This project was formally funded in the 2009 TIP but was removed from the TIP due to funding limitations.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Priority III Improvements				
Downtown/Port Access			Construct I-95 NB Slip Ramp on NW 6th St; Implement NE/NW 5th/6th St/Port Blvd. improvements for access between POM and I-95 slip ramp	This project will improve access to/from the port to/from downtown Miami, alleviating congestion along NW 6th Street and providing direct access to I-95.
I-95	Golden Glades Interchange	Broward County Line	Special use lanes (managed lanes)	This project will complete the portion Miami-Dade portion of the I-95 Express special use lanes project that has already been (or is currently) constructed from SR 112 to the Golden Glades Interchange. This improvement is needed to improve mobility on I-95 and to provide mobility options to users of I-95. The project will also improve regional connectivity and add capacity to an emergency evacuation corridor.
SR 821/HEFT	Eureka Drive	Kendall Drive	Widen to 8-, 10-, 12-lanes plus auxiliary lanes	This project will add travel lanes to a 2-mile section of the HEFT, increasing capacity from 8- to 12-lanes. This project will add travel lanes to a 1-mile section of the HEFT, increasing capacity from 10- to 12-lanes plus 6-lane C-D roads. This project will add travel lanes to a 3-mile section of the HEFT, increasing capacity from 6- to 8-lanes. This project will be an important part of capacity improvements to the full length of the HEFT, urgently needed in response to existing congestion and anticipated continued growth in traffic demand.
SR 826/Palmetto Expressway	SR 836	NW 87th Avenue on I-75	Special use lanes	This project will construct special use lanes on SR 826 from SR 836 to I-75, providing needed mobility improvements and mobility options for users of SR 826.
SR 826/Palmetto Expressway @ 67th Avenue			Interchange improvements - reconstruct as SPUI interchange	This project will reconstruct the existing interchange at SR 826 and NW 67th Avenue to address current and projected congestion in peak traffic conditions. The off ramps at the existing interchange currently queue back to the mainline and impede through traffic on SR 826. The signalized intersections within this interchange also operate deficiently in PM peak conditions.
SR 836/Dolphin Expressway	NW 12th Avenue	Ramp to I-95	Ramp to I-95	This project will include realignment, capacity and geometric improvements to SR 836 between NW 12th Street and I-95, including modification of the SR 836/I-95 interchange ramps. The project is needed to address existing and future operational, access, capacity, and safety deficiencies on this major E/W expressway connecting the HEFT, SR 826 and I-95.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 886/Port Bridge			Repairs to bascule rail and vehicle bridge	This project will repair the existing bascule bridge, which is currently out of service. Repairs are needed in order to move cargo.
SR 924/Gratigny Parkway Extension (west)	SR 826/I-75	HEFT	Limited access facility providing a connection between HEFT, I-75, SR 924, SR 826	This project will extend the existing SR 924 west to the HEFT, enhancing mobility in northwest Miami-Dade County by interconnecting four major highways: HEFT, I-75, SR 826 and SR 924. This highway interconnection will reduce travel times by capturing through traffic that is currently using local roads. The local roads in the area are currently operating at deficient levels of service and include Okeechobee Road as well as local streets in the urban communities of Hialeah Gardens, Miami Lakes, and Hialeah.
SW 127th Avenue	SW 120th Street	SW 144th Street	New 4 lanes / Widen to 4 lanes	This project will widen SW 127th Avenue from SW 144th Street SW 120th Street to 4 lanes providing needed mobility improvements on SW 127th Avenue.
SW 152nd Street	SW 147th Avenue	SW 157th Avenue	Widen to 4 lanes (2 to 4)	This project will widen SW 152nd Street from SW 157th Avenue to SW 147th Avenue from 2 to 4 lanes providing needed mobility improvements on SW 152nd Street.
Venetian Causeway Bridge	Bayshore Drive	Purdy Avenue	Bridge replacement	This project will replace a bridge that is currently in a state of disrepair, providing a necessary safety improvement to a vital bridge connecting downtown Miami and Miami Beach.
Priority IV Improvements				
Farmlife Roadway Expansion	SW 312th Street (Campbell Drive)	SW 328th (Lucy Street)	Widen to 4 lanes with left turn lanes (2 to 4)	This project will add to lanes to SW 162nd Avenue from Lucy Street to approximately SW 328th Street to complete the widening that has already occurred south of SW 328th Street, providing needed mobility improvements on this facility. The improvement is also needed to address substandard roadway conditions and add sidewalks and curb and gutter to improve pedestrian safety issues.
Freight Rail Safety and Security			Safety and security enhancements of freight transportation system, including grade crossing improvements and signal upgrades	This project will provide safety and security improvements for freight movements, including grade crossing, grade separation, and signal improvements. This project is needed to address the many grade crossings in the County that represent a hazard that can be mitigated. These improvements will benefit both freight and automobile movements by providing a safer transportation system.
I-395	East of I-95	MacArthur Causeway Bridge	Major capital improvement	This project will include realignment, capacity and geometric improvements to I-395 between I-95 and the MacArthur Causeway, including modification of the I-95/I-395 interchange ramps. The project is needed to address existing and future operational, access, capacity, and safety deficiencies on this major E/W expressway connecting I-95 to Miami Beach and the Port of Miami.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Medley Bridge/Canal Improvement Program	NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave		Improve the connections between Okeechobee Rd and Medley through a combination of bridge widening and canal improvements (NW 121 Way, NW 116 Way, NW 105 Way, NW 79 Ave)	This project will improve the connections between Okeechobee Road and Medley by widening existing bridges and improving the canals along Okeechobee Road. The project is needed to address the inadequate nature of the current bridges, in terms of the number and size of trucks using them. The structures are narrow and many have been damaged by trucks with wider turning requirements than the bridges are currently able to accommodate.
NW 82nd Avenue	NW 8th Street	NW 12th Street	New 4 lanes	This project will add a new 4 lane road from NW 8th Street to NW 12th Street providing needed mobility improvements on NW 82nd Avenue.
NW 97th Avenue	NW 58th Street	NW 74th Street	New 4 lanes / Widen to 4 lanes	This project will complete the construction of a 4-lane segment on NW 97th Avenue from NW 58th Street to NW 74th Street.
NW 170th Street	HEFT	NW 97th Avenue	New 6 lanes	This project will construct a section line road to provide a needed east/west connection in the northwest corner of the county between I-75 and the HEFT, where a new interchange at NW 170th St is also a project in the LRTP Needs Plan. This improvement is needed to serve the travel needs of the residents in the Hialeah Annexation Area.
Perimeter Road	NW 20th Street	NW 57th Avenue	Widen to 4 lanes (2 to 4)	This project will widen Perimeter Road from NW 20th Street to NW 57th Avenue from 2 to 4 lanes.
South Florida Rail Corridor	North of Hialeah Market	North of MIC	Double tracking of the remaining single track of Tri-Rail	This project will add a second track between the MIC and Hialeah Market stations, including a new rail bridge over the Miami River. This heavily traveled segment serves as a bottleneck, as it is utilized by freight trains, regularly scheduled Tri-Rail trains, and deadhead Tri-Rail trains moving to and from the Hialeah Yard. The project will relieve train delays and add needed corridor capacity in future years for additional Tri-Rail service and eventual extension of Amtrak service to the MIC.
SR 5/US-1/ Biscayne Boulevard			Expand SB left turn lane for trucks entering Port	This project will expand the southbound left turn lane on Biscayne Blvd for trucks entering the port, reducing the overflow of vehicle backup stacking in turning lane.
SR 823/NW 57th Avenue/ Red Road	W 65th Street	W 84th Street	Widen to 6 lanes (4 to 6)	This project will widen NW 57th Avenue from W 65th Street to W 84th Street from 4 to 6 lanes.
SR 826/Palmetto Expressway (EB) to I-95 (NB)			Operational improvement within the Golden Glades Interchange	This project will include operational improvements to the Golden Glades Interchange, a regional node that includes the confluence of five state roadways. The project is needed to address a deficiency in the movement from SR 826 eastbound to NW 167th Street, a heavily traveled route for motorists leaving western Miami-Dade County heading north into Broward County.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 826/Palmetto Expressway @ 57th Avenue			Interchange Improvements - reconstruct as SPUI interchange	This project will reconstruct the existing interchange at SR 826 and NW 57th Avenue to address current and projected congestion in peak traffic conditions. The off ramps at the existing interchange currently queue back to the mainline and impede through traffic on SR 826. The signalized intersections within this interchange also operate deficiently in PM peak conditions.
SR 826/Palmetto Expressway (NB)	Okeechobee Road	NW 103rd Street	Addition of 1 auxiliary lane	This project will construct an auxiliary lane on SR 826 northbound between Okeechobee Road and NW 103rd Street.
SR 826/Palmetto Expressway (EB) to NW 167th Street			Operational improvement within the Golden Glades Interchange	This project will include operational improvements to the Golden Glades Interchange, a regional node that includes the confluence of five state roadways. The project is needed to address a deficiency in the movement from SR 826 eastbound to NW 167th Street, a heavily traveled route for motorists leaving western Miami-Dade County heading north into Broward County.
SR 836/Dolphin Expressway		NW 87th Avenue	Interchange improvement	This project will improve the interchange at SR 836 and NW 87th Avenue. The project is needed to add capacity to meet projected demand. Also, the proposed interchange configuration will be consistent with the roadway improvements being implemented for the SR836/SR 826 Interchange.
SR 874/Don Shula Expressway Ramp Connector	SW 136th Street	SR 874	Ramp connection to SW 136th Street	This project will construct a SR 874 Ramp Connector to SW 136th Street, providing access to an alternate east/west route within the study area, significantly reducing congestion on the HEFT at the SW 152nd Street and SW 120th Street interchanges, as well as improving connectivity to residents and operations throughout the entire study area.
SR 924/Gratigny Parkway Extension (east)	NW 32nd Avenue	I-95	Limited access facility providing E/W mobility to I-95	This project will extend the existing SR 924 east to connect to I-95, enhancing mobility in northern Miami-Dade County by providing interconnection of the County's major highways: SR 826, SR 924, I-75, HEFT, and I-95. This project is needed to reduce travel times by separating through traffic from local traffic in the area. This east extension in combination with the western extension of SR 924 to the HEFT will provide a needed east-west corridor in northern Miami-Dade County that could alleviate traffic along the local roadway network, and provide an alternate to SR 836 and SR 826.
SR 985/SW 107th Avenue	SW 8th Street	Flagler Street	Widen to 6 lanes (4 to 6)	This project will widen SW 107th Ave from SW 8th Street to Flagler Street from 4 to 6 lanes, making this section consistent with the 6-lane typical sections that exist to the north and the south. This project is needed to alleviate the congestion caused by the bottleneck on this section.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 997/Krome Avenue	North of SW 8th Street	Mile post 2.754	Widen to 4 lanes (2 to 4)	This project will widen Krome Avenue from US-1 to US 27 from 2 to 4 lanes.
SR 997/Krome Avenue	SR-5/US-1	SW 328th Street (Lucy Street)	Widen to 4 lanes (2 to 4)	
SR 997/Krome Avenue	SW 296th Street	SW 136th Street	Widen to 4 lanes (2 to 4)	
SR 997/Krome Truck By-Pass	Along Flagler Avenue/ Civic Court	NW 6th Street	New 2 lanes (Companion project with Krome widening SW 328th Street to SW 296th Street)	This project will redirect truck traffic from the Homestead
SR 997/Krome Avenue	SW 328th Street (Lucy Street)	SW 296th Street	Widen to 4 lanes (2 to 4) (Companion project with Krome truck by-pass)	This project will widen Krome Avenue from US-1 to US 27 from 2 to 4 lanes.
SR 997/Krome Avenue	Mile post 2.754	Mile post 5.122	Widen to 4 lanes (2 to 4)	
SR 997/Krome Avenue	Mile post 5.122	Mile post 8.151	Widen to 4 lanes (2 to 4)	
SR 997/Krome Avenue	Mile post 8.151	Mile post 10.626	Widen to 4 lanes (2 to 4)	This project will widen Krome Avenue from US-1 to US 27 from 2 to 4 lanes
SR 997/Krome Avenue	Mile post 10.626	Mile post 14.184	Widen to 4 lanes (2 to 4)	
SW 72nd Street/Sunset Drive	SW 117th Avenue	SW 157th Avenue	Widen to 6 lanes (4 to 6)	This project will widen SW 72nd Street from SW 157th Avenue to SW 117th Avenue from 4 to 6 lanes providing needed mobility improvements on SW 72nd Street.
SW 104th Street/Killian Parkway	SW 160th Avenue	SW 167th Avenue	New 4 lanes / Widen to 4 lanes	This project will widen SW 104th Street from SW 167th Avenue to SW 160th Avenue to 4 lanes providing needed mobility improvements on SW 104th Street.
SW 157th Avenue	SW 8th Street	SW 42nd Street	New 4 lanes / Widen to 4 lanes	This project will widen SW 157th Avenue from SW 42nd Street SW 8th Street to 4 lanes providing needed mobility improvements on SW 157th Avenue.
SW 157th Avenue	SW 184th Street	SW 216th Street	New 2 lanes	This project will add a new 2 lane road from SW 216th Street to SW 184th Street providing a needed connection and mobility improvements on SW 157th Avenue. (PW)
SW 200th Street	US-1	Quail Roost Drive	Widen to 4 lanes (2 to 4)	This project will widen SW 200th Street from Quail Roost Drive to US-1 from 2 to 4 lanes providing needed mobility improvements on SW 200th Street.
SW 312th Street/Campbell Drive			Turnpike access ramps (west-to-north and south-to-west)	This project will construct exclusive ramps at Campbell Drive and the HEFT for the WB to NB and SB to WB movements, providing mobility improvements on Campbell Drive.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SW 312th Street/Campbell Drive	SW 152nd Avenue	SW 137th Avenue	Widen to 6 lanes with left turn lanes (4 to 6)	This project will add 2 lanes to Campbell Drive and provide turn lanes from SW 152nd Avenue to SW 162nd Avenue, providing needed mobility improvements to a roadway that is currently experiencing LOS F and is expected to get worse in the future.
SW 312th Street/Campbell Drive	NW 14th Avenue/SW 176th Avenue	SW 197th Ave/ HEFT	Widen to 6 lanes (4 to 6)	This project will widen SW 312th Street from SW 197th Avenue to NW 14th Avenue and from SW 176th Avenue to HEFT to 6 lanes providing needed mobility improvements on SW 312th Street.
US-1 (Busway)	SW 88th Street	Florida City	Additional park-and-ride lots at selected locations	This project will provide park-and-ride lots along the US-1 corridor from SW 88th Street to Florida City. The project is needed to support existing and planned transit services in south Miami-Dade County.
US-1 (Busway)	SW 88th Street	Florida City	Bus signal priority	This project will provide signal prioritization for bus services along the US-1 corridor from SW 88th Street to Florida City. The project is needed to support the South Dade Busway transit services.
West Avenue	North of Lincoln Road	South of 18th Street	New connector bridge	This project will provide a new bridge on West Avenue between Lincoln Road and 18th Street. The proposed bridge is needed to help alleviate traffic congestion along Alton Road and along 17th Street, provide a better connection along West Avenue north and south of Dade Boulevard, and will improve transit, bicycle, and pedestrian mobility and safety in the South Beach Neighborhood.
Congestion Management Improvements				
41st Street	Atlon Road	Collins Avenue	Corridor improvements	This project will provide increased capacity on the 41st Street Corridor, while also improving bicycle and pedestrian safety and calm traffic in residential areas. The 41st St. Corridor is the most intense employment center in the coastal communities, employing over 14,000 people. It also represents the major sub regional conduit of traffic, as motorists heavily use the Julia Tuttle Causeway to enter and exit the coastal community transportation network.
Coral Way/SW 22nd Street	SR 826	US-1	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non-highway expansion improvement to alleviate future congestion on Coral Way.
Freight Rail Landside Access			Projects that enhance landside access, including intermodal ramps and truck access to railroad terminals	This project will enhance landside freight access, including intermodal ramps and truck access to railroad terminals. This project is needed to supplement the FEC Hialeah Yard, which is currently the only rail intermodal container facility in the County.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Golden Glades Interchange			Ramp and/or operational improvements. Series of low cost operational improvements within the Golden Glades	This project will include ramp reconstruction, realignment, and widening in the Golden Glades interchange, a regional node that includes the confluence of five state roadways. The project is needed to provide short range improvements to address existing and projected deficiencies that cause mobility issues.
Granada Boulevard	Bird Road		Intersection improvement	This project will provide operational improvements to the intersection at Granada Blvd. and Bird Road.
Integration of Truck Route System and Regional ITS Network			Implementation of ITS improvements specifically geared toward trucks	This project will include improvements to the County's ITS system geared specifically toward freight movement needs. This project is needed to provide information on congestion to truck drivers, which is critical for them to estimate their time of arrival so as not to miss a scheduled pick-up or delivery time. In addition, truck related information such as truck parking, weigh-in-motion, and vehicle tracking systems will add efficiency to the freight network and overall transportation system.
Ives Dairy Road	Florida Turnpike	Biscayne Boulevard	Congestion management	This project was suggested as a needs project by a citizen at the North Planning Area public meeting on February 5, 2009.
Medley freight hub streetlight and local roadway improvements			Improve the local infrastructure to and from businesses in the Medley area-pavement, turning radii. 15 miles of roadway	This project will provide streetlights and other local roadway infrastructure improvements in the Medley area. This project is needed to provide streetlights for nighttime operations which will improve safety. In addition, pavement conditions from heavy vehicles have deteriorated and the 1950s designed intersections can not safely accommodate larger standard 53' trailers.
Medley Gateway Establishment			Provide business and wayfinding signing, including a Medley area business inventory	This project will provide business and way-finding signage and a Medley area business inventory at strategic intersections to provide the necessary information for truck drivers to find pick up and delivery locations. The project is needed to prevent unnecessary truck movements due to lack of driver information in the area.
Miami Ave/2nd Avenue/NW 5th Street/Flagler (1st Street)	Bridge over Miami River		ITS/advance warning signals	Advance warning signals to be located at strategic locations along Miami Avenue, 2nd Avenue, NW 5th Street, and Flagler/1st St. to advise motorists of impending drawbridge activity and potential detour routes to reduce congestion and improve the efficiency of roadway network in the vicinity of bridges over the Miami River.
NE 125th Street/NE 6th Avenue/W Dixie Highway			Intersection improvements	This project will make improvements to the intersection of NW 125th Street/NW 6th Avenue, and W Dixie Highway. The project is needed to address mobility and safety issues at this intersection of three roadways.

Facility/Corridor	From	To	Description	Purpose and Need Statement
North River Drive	NW 107th Avenue	NW 74th Avenue	Widen North River Drive to include shoulders and improved access management	This project will include operational and access improvements to Okeechobee Road between NW 138th Avenue and 79th Avenue. This project is needed to improve access for trucks to and from the roadway in the Medley area by increasing truck movement efficiency and expediting truck movements to County businesses.
NW 12th Street		NW 87th Avenue	Signal Improvements	This project will include signal improvements at NW 12th Street and NW 87th Avenue. The project is needed to alleviate congestion at this intersection and to address safety issues caused by the proximity to the SR836/NW87th Ave interchange and railroad tracks that cross NW87th Ave between NW12th St and NW13th Ct. The signal at NW12th St and NW87th Ave at times causes traffic to back up with vehicles stopping on the railroad tracks.
NW 20th Street	NW 27th Avenue	I-95	Roadway infrastructure improvements	This project will construct a median on NW 20th Street from NW 27th Avenue to I-95. The project is needed to manage congestion on NW 20th Street by limiting access to the facility.
NW 36th St/41st Street	NW 42nd Avenue	HEFT	Express Street (ITS, grade separations, etc.)	This project will include needed congestion management improvements to alleviate projected future congestion on NW 36th/41st Streets.
NW 58th Street	NW 107th Avenue	SR 826	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on NW 58th Street.
NW 87th Avenue	SR 836	NW 58th Street	Improve SR 836/NW 12th Street/ NW 87th Avenue interconnections; improve intersections to accommodate truck movements	This project will improve the interconnections between SR 836, NW 12th Street and NW 87th Avenue. Congestion along NW 87th Avenue, a critical north-south corridor within Doral, should be addressed to ease congestion. In addition, this project is aimed at easing congestion on the Palmetto Expressway by reducing the number of trucks that use it as a local route. These local movements should be accommodated by the local roadway network.
NW 154th Street/Miami Lakes Boulevard	NW 87th Avenue	NW 67th Avenue	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on NW 154th Street/Miami Lakes Boulevard.
Park-and-Ride Lot Program			MDT program to identify potential sites and construct park & ride lots	This project will enable expansion of the County's intermodal infrastructure, providing transit users with better and more access to transit.
Port of Miami Operations			PierPass Feasibility Study to examine the impact of implementing congestion mitigation incentives for off-peak operations	This project will include a feasibility study of implementing congestion management incentives for off-peak operations, including vehicle/driver pre-screening, expedited customs, off-peak terminal/warehouse hours, and other logistics improvements. This project is needed to expedite truck movements to and from the Port of Miami and increase goods movement efficiency.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Old Cutler Road	SW 216th Street	SW 37th Avenue	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on Old Cutler Road.
One-waying of South Beach Local Streets			Capacity improvements	This project will convert two-way streets into one-way streets to improve mobility, provide bicycle and pedestrian facilities on streets that currently do not have sufficient width for them, and increase the number of on-street parking spaces.
SR 5/US-1	SW 88th Street (Kendall Drive)	I-95	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non highway expansion improvement to alleviate future congestion US-1.
SR 9/SW/NW 27th Avenue	SW 8th Street	NW 36th Street	Median/access improvements	This project will provide access management improvements to SR 9 from SW 8th Street to NW 36th Street. This project is needed to manage congestion on SR 9 by limiting access to the facility.
SR 25/Okeechobee Road Operations/Access Improvements	NW 138th Avenue	79th Avenue	Signal timing improvements, improve access and improve signing to provide better flow along Okeechobee and access from side roads and access by trucks to and from Medley	This project will include operational and access improvements to Okeechobee Road between NW 138th Avenue and 79th Avenue. This project is needed to improve access for trucks to and from the roadway in the Medley area by increasing truck movement efficiency and expediting truck movements to County businesses.
SR 90/Tamiami Trail	SR 826	I-95	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non highway expansion improvement to alleviate future congestion on Tamiami Trail.
SR 112/Airport Expressway (WB)		NW 36th Street/Okeechobee Road	Reconstruct intersection	This project will reconstruct the existing intersection at SR 112/ NW 36th Street/LeJeune Road/Okeechobee Road to improve the operations of the SR 112 off ramps onto NW 36th Street, LeJeune and Okeechobee Road, and the receiving traffic flows along these streets. These off ramps currently experience backups onto SR 112 during PM peak conditions. This project is needed to address this traffic operation and safety issue.
SR 823/Red Road/NW 57th Avenue	SR 826	NW 135th Street	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non highway expansion improvement to alleviate future congestion on Red Road.
SR 826/SR 9/I-95 Interchange			Congestion improvements; improve turning radius/speeds on ramp from Turnpike to WB SR 826	This project will include needed operational improvements to the ramp from the Turnpike to SR 826 westbound.
SR 847/NW 47th Avenue	SR 826	NW 215th Street	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SR 847/NW 47th Avenue.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 860/Miami Gardens Drive	Florida Turnpike	Biscayne Boulevard	Congestion management	This project was suggested as a needs project by a citizen at the North Planning Area public meeting on February 5, 2009.
SR 916/NW 135th Street	NW Red Road	Douglas Road	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non highway expansion improvement to alleviate future congestion on NW 135th Street.
SR 997/Krome Avenue		SW 312th Street	Intersection improvements	This project will improve the intersection at Krome Avenue and SW 312th Street, providing needed safety and capacity improvements. This intersection is in the heart of the City of Homestead and is in serious need of improvement to address both congestion and safety issues.
SR 997/Krome Avenue	SR 90/Tamiami Trail	US-1	Improve intersections to accommodate truck movements	This project will improve Krome Avenue intersection from SW 8th Street to US-1. Krome Ave provides access to quarries in western Miami-Dade County. This 2-lane arterial is designed for through movements only making access to freight hubs difficult as a result of inadequate turning radii at intersections and the lack of signalization.
SW 56th Street/Miller Drive	SW 127th Avenue	SW 57th Avenue	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 56th Street/Miller Drive.
SW 57th Avenue	Old Cutler Road	SW 56th Street	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 57th Avenue.
SW 67th Avenue	SW 152nd Street	Flagler Street	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 67th Avenue.
SW 88th Street / HEFT			Multimodal terminal	This project was identified in the Needs Development Workshop (10/24/09) as a multimodal terminal in south Miami-Dade County to support existing and planned transit services and travel demand in this area, including the Kendall KAT and projects NC-38 and NC-41.
SW 104th/SW 112th Street	SR 821	US-1	Congestion management	This project was identified in the Needs Development Workshop (10/24/09) as a non highway expansion improvement to alleviate future congestion on SW 104th/SW 112th Streets.
SW 136th Street	US-1	SW 67th Avenue	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 136th Street.
SW 152nd Avenue	US-1	Old Cutler Road	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 152nd Avenue.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SW 200th St/Caribbean Boulevard	SW 127th Avenue	Coral Sea Road	Congestion management	This project was identified in the 2009 Congestion Management Process as a non highway expansion improvement to alleviate future congestion on SW 200th St/Caribbean Boulevard.
SW 200th Street / US-1 (South Dixie Highway)			Multimodal terminal	This project was identified in the Needs Development Workshop (10/24/09) as a multimodal terminal in south Miami-Dade County to support existing and planned transit services and travel demand in this area, including the South Dade busway and projects NC-38 and NC-54.
Way-Finding Sign Improvement Program			Improve county-wide for movements to/from regional freight hub	This project will provide way-finding sign improvements countywide for movements to/from regional freight hubs. This project is needed to assist drivers unfamiliar with the area, who have been observed turning around their large trucks in parking lots or following circuitous routes because of poor signing. There are several freight hubs in Miami-Dade County which could be accessed more efficiently if proper signing were in place.
Partially Funded Improvements				
SR 826/Palmetto Expressway	I-75	Golden Glades Interchange	Add special use lanes	This project will add special use lanes on SR 826 from I-75 to the Golden Glades Interchange. This project is needed to address current and projected congestion in the corridor, which operates at an LOS F in the peak periods. The project will also address highway design and traffic operations deficiencies in the corridor.
East-West/Dolphin Corridor Premium Transit	MIC	Vicinity of FIU	Premium transit service	This project will provide premium transit service within and through the heavily congested East-West Corridor, improving accessibility to major activity centers in the corridor and in the region. The project is needed to improve mobility between residential suburbs to the south and west and the employment, cultural and tourism centers to the east, including MIA, downtown Miami, the Port of Miami, and Miami Beach.
FEC Corridor	Downtown Miami	Broward County Line	Premium transit service	This project will provide passenger rail service connecting many of the region's major employment centers, educational facilities, seaports, airports, and arts and entertainment destinations. The project will provide improved transit access and decreased travel times to residents of densely populated areas. The project will also encourage smart growth by allowing for transit-oriented development opportunities at numerous locations.

Facility/Corridor	From	To	Description	Purpose and Need Statement
Additional Tracks at Miami Intermodal Center*	Miami Intermodal Center		Construct passenger rail tracks to allow Amtrak service at the MIC and/or commuter rail	This project will build two additional passenger rail tracks at the MIC, along with center platform canpoies, elevators and escalators. The additional tracks will allow for Amtrak service at the MIC and/or passenger rail expansion to the west or south, furthering the MIC's envisioned role as Miami's central station.
SR 25/Okeechobee Road/ US 27	79th Avenue	Krome Avenue	Expressway conversion - Construct grade separated overpasses at major intersections	This project will grade separate major intersections along SR 25 from 79th Avenue to Krome Avenue, alleviating congestion and minimizing traffic movement conflicts at those intersections.
Metrorail North Corridor extension	Martin Luther King Jr. Metrorail station	NW 215th Street/ NW 27th Avenue	Premium transit service along NW 27th Avenue	This project will provide enhanced corridor, countywide, and regional mobility, promote economic development along NW 27th Avenue and serve as an alternate mode of travel to disadvantaged residents and other commuters in north Miami-Dade County. This project is needed to enhance mobility in the corridor and to downtown Miami from north Miami-Dade County.
SW 82nd Avenue	Tamiami Canal		Bridge construction	This project will provide a north/south connection across the Tamiami Canal at SW 82nd Avenue. This project is funded for planning/design in the 2010 TIP.
SW 102nd Avenue	Tamiami Canal		Bridge construction	This project will provide a north/south connection across the Tamiami Canal at SW 102nd Avenue. This project is funded for planning/design in the 2010 TIP.
SR 836/Dolphin Expressway	NW 42nd Avenue/NW 27th Avenue	NW 17th Avenue/ NW 57th Avenue	EB Auxiliary Lane from NW 42nd Avenue to NW 17th Avenue; WB Auxiliary Lane from NW 27th Avenue to NW 57th Avenue and associated interchange improvements at NW 42nd Avenue and NW 27th Avenue	This project will construct auxiliary lanes on SR 836 between NW 17th Ave and NW 57th Avenue, providing needed improvements to enhance mobility in the corridor and improve substandard roadway conditions. The project is needed to increase capacity and mobility while preventing existing and future traffic congestion, improving safety by alleviating existing deficiencies such as merge and weave deficiencies.
SR 836/I-95 Corridor	West of NW 17th Avenue	I-95	Corridor Improvements	This project will provide corridor improvements to SR 836 from NW 17th Avenue to I-95. The project is needed to address a combination of substandard traffic conditions, urban planning objectives and the interaction with other planned facility improvements impacting the project area. The project will increase capacity to prevent existing and future traffic congestion, improve safety by alleviating existing deficiencies, correct access issues and establish proper continuity.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 836/Dolphin Expressway	HEFT	SR 826/836 Interchange	Conversion of general purpose lanes to managed lanes	This project will convert existing SR 836 general purpose lanes to managed lanes from SR 826 to the HEFT. Together with the project on the eastern portion of SR 836 (MDX-7), this project will provide needed enhancements to east/west mobility in the County to address the demand associated with the growing employment centers at Miami International Airport, the Port of Miami and downtown Miami. Providing for managed lanes along this facility will enhance level of service for all modes along the corridors.
SR 836/SR 112 Interconnector	SR 836/Lejeune interchange	SR 112/37th Avenue interchange	Express connection between SR 836 and SR 112 in the general alignment of 37th/42nd avenues	This proposed interconnector will provide a direct and alternate access to the Miami International Airport and employment centers surrounding the area. Along with the proposed Connect 4Xpress project, the new alignment will create a much needed north south limited access facility as an alternate to I-95.
SR 836/SR 112	SR 826	I-95/I-395	Conversion of general purpose lanes to managed lanes	This project will convert the existing SR 836 and SR 112 general purpose lanes to managed lanes from I-95/I-395 to SR 826. The project will enhance east/west mobility in the County necessary to address the demand associated with the growing employment centers at Miami International Airport and the Port of Miami and downtown Miami. Providing for managed lanes along these facilities will enhance level of service for all modes along the corridors.
Connect 4Xpress	Central Miami-Dade County	North Miami-Dade County	Limited access N/S facility connecting the northern and central portion of the County. Multimodal Corridor	This project will provide a new segment to a comprehensive regional expressway network that will connect central and northern Miami-Dade County to major employment centers including Miami International Airport (MIA). It will also provide a direct connection from MIA to the Opa-Locka Airport. This project is needed to relieve congestion on the arterial roads in the central areas of Miami-Dade County. By providing opportunities for transit it will also help reduce the congestion along I-95 and SR-826 (Palmetto Expressway).
SR 836 Southwest Extension**	NW 137th Avenue	SW Miami-Dade	Multimodal transportation corridor	This project will construct an extension of SR 836 to the south to southwest Miami-Dade County. The project will provide mobility improvements to heavily congested east-west arterial roadways in Southwest Kendall by providing an alternate north-south option in the study area, enabling motorists to avoid traveling east to access other north/south facilities. The proposed extension will also provided needed connections of major commercial and industrial centers such as MIA, the future MIC, the Port of Miami, Downtown Miami, and proposed industrial parks such as Beacon Trade Port.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 5/US-1	Dadeland South	I-95	Corridor improvements and managed lanes	This project will provide an express lane system or a queue bypass lane system on US-1 from Dadeland South to I-95. This project is needed to enhance mobility along the corridor, which experiences congestion during the peak periods from Kendall Drive to downtown Miami.
SR 25/Okeechobee Road	SR 826	Krome Avenue	Conversion to limited access toll facility	This project will convert US 27/Okeechobee Road to a limited access toll facility from SR 826 to Krome Avenue. US 27 is an important facility within Miami-Dade County that provides a vital link in the roadway network connecting three counties on the western limits. This corridor also serves as an important truck route for trans shipments from the Port of Miami to the Medley warehouse areas and as a link between SR 112 (the Airport Expressway), SR 826 (the Palmetto Expressway), and the HEFT. This project will enhance mobility and capacity on this facility and on parallel facilities.
US-1 Busway**	Florida City	Dadeland South	Managed lanes	This project will use the existing and proposed busway as a managed lane facility, enabling regular traffic to travel with the buses for the length of the corridor. This project will help mitigate the growing traffic demand in the region by providing an alternate route to commuters who regularly use US-1. The managed lanes will provide needed improvements to the express bus transit service by maximizing operational conditions along the corridor.
SR 821/HEFT	SR 836	I-75	Widen to 10 lanes	This project will add travel lanes (and auxiliary lanes) to a 13-mile section of the HEFT which is currently 6- and 8-lanes. This project will be an important part of capacity improvements to the full length of the HEFT, urgently needed in response to existing congestion and anticipated continued growth in traffic demand.
SR 821/HEFT	I-75		Interchange modification	This project will expand the existing partial interchange between the HEFT and I-75 to include fully-directional ramps. The full interchange concept was developed in response to the significant growth that has occurred in Broward County and Miami-Dade County, particularly in the western areas of the counties. In addition to fully-directional ramps, the interchange concept also includes reversible express lanes and an envelope for transit within the I-75 corridor.
SR 821/HEFT	I-75	Turnpike Mainline	Widen to 8 lanes	This project will construct two additional travel lanes in each direction along the northernmost 8-mile section of the HEFT, increasing capacity from 4-lanes to 8-lanes. This project will be an important part of capacity improvements to the full length of the HEFT, urgently needed in response to existing congestion and anticipated continued growth in traffic demand.

Facility/Corridor	From	To	Description	Purpose and Need Statement
SR 821/HEFT	Campbell Drive	Biscayne Drive (SW 288th Street)	Widen to 6 lanes	This project will add one travel lane in each direction to a three-mile section of the southern HEFT, increasing capacity from 4-lanes to 6-lanes. This project will be an important part of capacity improvements to the full length of the HEFT, urgently needed in response to existing congestion and anticipated continued growth in traffic demand.
SR 821/HEFT	Biscayne Drive (SW 288th Street)	SW 216th Street	Widen to 8 lanes	This project will add two travel lanes in each direction to a six-mile section of the southern HEFT, increasing capacity from 4-lanes to 8-lanes. This project will be an important part of capacity improvements to the full length of the HEFT, urgently needed in response to existing congestion and anticipated continued growth in traffic demand.
Golden Glades Interchange	SR 826 (EB)	I-95 (NB)	Ramp improvements to provide direct system to system connection	This project will construct a direct system to system connection between SR 826 (EB) and I-95 (NB), one of the main movements within this regional interchange that includes the confluence of five state roadways. The project is needed to address deficiencies caused by the need for people to use the local road system to make this movement. The project will address the extreme congestion associated with this deficiency.
I-75	SR 826	Broward County Line	Add special use lanes and provide an envelope for future transit service	This project will provide an envelope for future premium transit service in the I-75 right of way. The improvement is needed to address growing congestion in the corridor resulting from the explosive growth that has occurred in Southwest Broward and Northwest Miami-Dade, which is expected to continue. This project is needed to support a premium transit service project also in the Needs Plan (NC-31).
SR 826/Palmetto Expressway	NW 103rd Street	I-75	Provide transit envelope for future transit service	This project will ensure a future transit component to a special use lanes project.



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