



MIAMI-DADE-



LONG RANGE TRANSPORTATION PLAN (LRTP) EXECUTIVE SUMMARY

PREPARED FOR:

Transportation Planning Organization for the Miami Urbanized Area

Learn More by Visiting: www.miamidadetpo.org/

PREPARED BY:

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SEPTEMBER 26, 2019

MIAMI-DADE TRANSPORTATION PLANNING ORGANIZATION (TPO)

On March 23,1977, the Miami-Dade Metropolitan Planning Organization, doing business as the Miami-Dade Transportation Planning Organization (TPO), was established to guide the transportation planning process in the (USDOT) requires the TPO Governing Board to ensure a continuous examination of transportation plans and programs.

Chairman: Oliver G. Gilbert III Vice Chairman: Esteban L. Bovo Jr.

Daniella Levine Cava

Vince Lago

Philippe Bien-Aime

TPO Executive Director

MEMBERS AT TIME OF PLAN ADOPTION



TABLE OF CONTENTS



INTRODUCTION

GOALS & OBJECTIVES



PLAN PROCESS-UPDATE



SMART PLAN









FINANCIAL RESOURCES











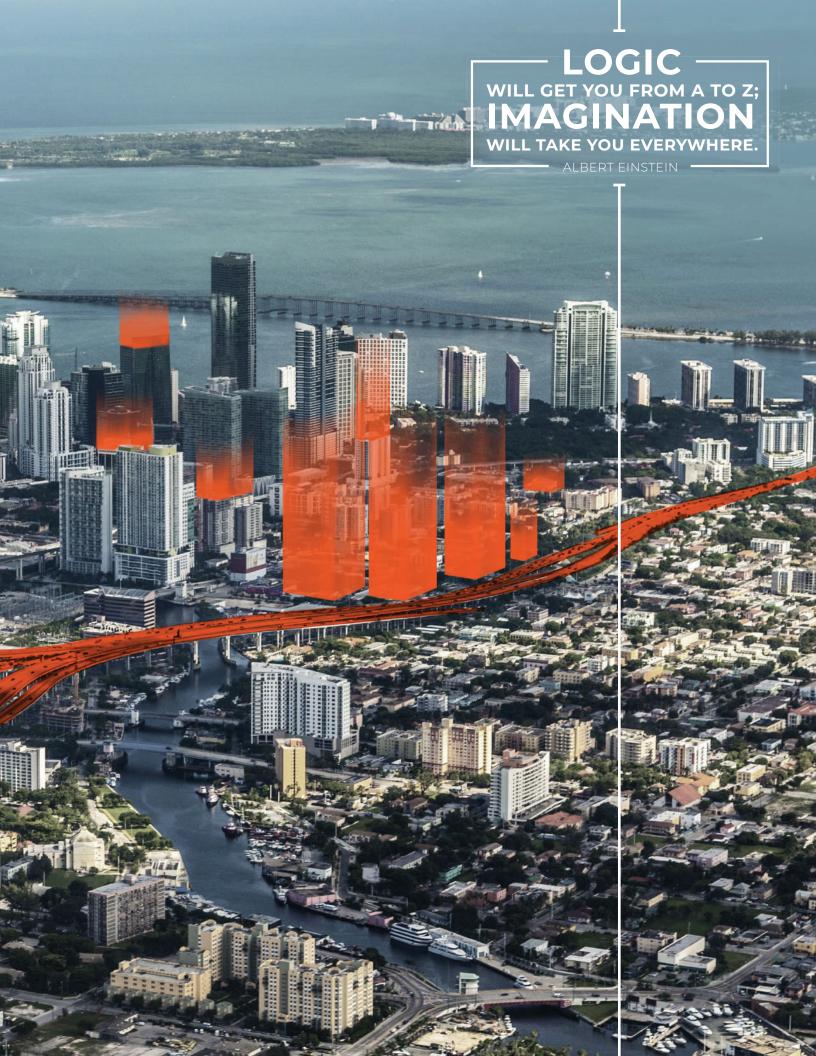




REGIONAL COORDINATION



PLAN IMPLEMENTATION





The LRTP is a strategic and comprehensive transportation plan that identifies highway, transit, freight, and non-motorized transportation improvements for the County. The LRTP has a planning horizon of at least twenty years and is required to address mobility, safety, security, resiliency, and sustainability. The LRTP also considers the impact of emerging technologies and innovation on the County's existing and future transportation infrastructure.

The need to positively impact transportation mobility of people and goods by increasing travel options, is a clear priority and focus of the LRTP. A connected and efficient multi-modal transportation system in Miami-Dade County is the backbone to a thriving economy.

The Miami-Dade TPO has adopted a policy identifying the advancement of rapid transit projects, the Strategic Miami Area Rapid Transit (SMART) Plan, is its highest priority. This policy was adopted through TPO Resolution #06-16 on February 18, 2016. The 2045 LRTP Vision reinforces this priority, through the incorporation of the SMART Plan as a systematic approach.

Miami-Dade County is the most populous county in Florida, with a population of approximately 2.58 million residents in 2015. The population in Miami-Dade County is expected to continue to grow to 3.5 million by the year 2045, representing a growth of 34 percent. The employment growth is projected to keep pace with the population with a growth of 38 percent between 2015 and 2045.

The projected growth in the number of residents and visitors of Miami-Dade County will increase demand and congestion on the transportation system. As a major national and international tourist destination, and the Cruise Capital of the world, Miami-Dade County attracts millions of visitors each year.

GROWTH THROUGH THE YEARS (IN MILLIONS)







Miami-Dade County is seeing more growth in employment, development, and tourism as Florida's population increases. Miami-Dade must prepare for future demand and capacity on the overall transportation network. This requires a plan that has performance driven goals and objectives to address the demands within the County.

The Miami-Dade 2045 LRTP is guided by Federal and State Planning Requirements and Expectations. The Fixing America's Surface Transportation (FAST) Act carried forward many planning initiatives from the Moving Ahead for Progress in the 21 st Century Act (MAP-21) and added new requirements to the LRTP process. This chapter identifies the required policies and processes, and the plans reviewed, to guide the development of the 2045 LRTP.

THE 2045 LRTP GOALS ARE:

- Maximize Mobility Choices Systemwide,
- Increase the Safety of the Transportation System for All Users,
- Increase the Security of the Transportation System for All Users,
- 4 Support Economic Vitality,
- 5 Protect and Preserve the Environment and Quality of Life and Promote Energy Conservation,
- 6 Enhance the Integration & Connectivity of the System, Across & Between Modes, for People and Freight,
- 7 Optimize Sound Investment Strategies for System Improvement and Management/Operations, and
- 8 Improve and Preserve the Existing Transportation System.

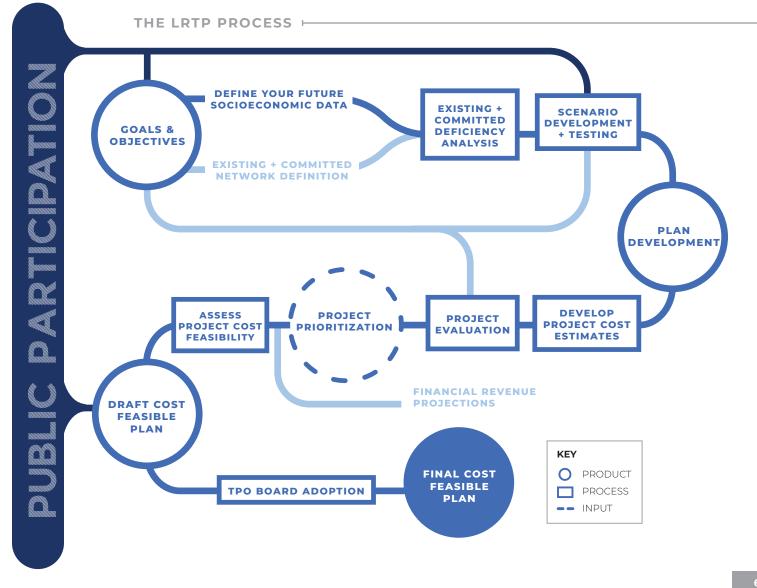
THE NATIONAL PERFORMANCE MANAGEMENT MEASURES ARE:

- Safety,
- 2 Pavement and Bridge, and
- 3 Systems and Freight.



PROCESS PLAN UPDATE

The 2045 LRTP was a collaborative process that used innovative strategies for plan development and public involvement. This collaborative process is guided by federal and state requirements and involves input and coordination with key stakeholders, partnering agencies, and the public. The LRTP plans for projected growth and development and considers the economic and financial state of the County in planning for the ways in which people and goods travel. The LRTP serves as the financial strategy for the County to invest in projects and infrastructure development to promote the Plan's goals and objectives.







The highest priorities of the TPO Governing Board are transit and projects that support transit services. These priorities are supported by the Strategic Miami Area Rapid Transit (SMART) Plan. The SMART Plan is a bold infrastructure program of projects that will improve transportation mobility in Miami-Dade County. The SMART Plan consists of six Rapid Transit Corridors and a network of Bus Express Rapid Transit (BERT) Corridors. The SMART Plan will provide a world-class transit system that promotes economic growth and job creation, as well as increase the region's international competitiveness.

The SMART Plan will enhance our economy and improve the quality of life for our **Communities**, provide accessibility and **Connectivity** for a more comprehensive transportation network for all users, and provide reliable mobility **Choices** to our residents and tourists.

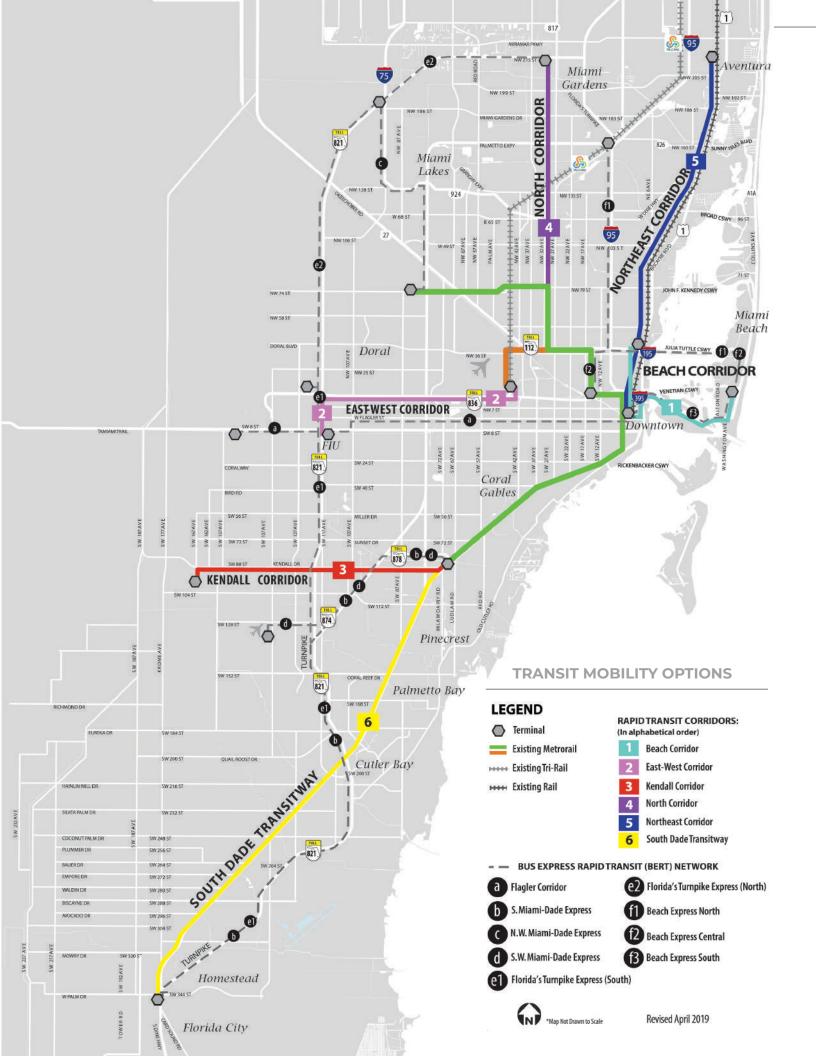
THE THREE PILLARS

CHOICE

COMMUNITY

CONNECTIVITY

THE SMART PLAN



WHY IS THE SMART PLAN SO CRITICAL?

The SMART Plan includes rapid transit corridors and express bus routes to increase connectivity for approximately

77%

of Miami-Dade County residents that travel outside their residential district for employment to other areas of the County.

SMART PLAN FACTS

7 MILLION RESIDENTS

More than half of the County's population live within 2-miles of SMART Plan Corridors. **855,000**JOBS —

Are located within a 2-mile radius of SMART Plan Corridors.

Miami-Dade County is a global center for commerce, culture, entertainment, the arts, and international trade. It has a growing creative class and economy where forces of innovation and entrepreneurship sustain a continuous process of reinvention and transformation. The SMART Plan provides innovative options to address the mobility needs in Miami-Dade County.







Public Involvement is on-going and continuous throughout the development of the LRTP. The public involvement activities for this LRTP update were developed in accordance with the Miami-Dade TPO Public Participation Plan (PPP), approved by the TPO Governing Board on April 26, 2018, Resolution #16-18.

The public outreach activities conducted for the 2045 LRTP were developed to inform and engage interested stakeholders and the general public in the LRTP process. The strategies required traditional and non-traditional outreach methods to reach Miami-Dade County's diverse populations. It also ensured that millennials, aging population, Limited English Proficiency (LEP) residents, and transit-dependent populations were given an opportunity to participate in the process. The public outreach techniques included the following:

WEBSITE - The Miami-Dade 2045 LRTP interactive website, https://miamidade2045lrtp.com, was developed during the on-set of the 2045 LRTP process to disseminate information to the general public and transportation partners.

CIVIC DINNERS – Over 100 people participated in Civic Dinners, a platform that brings a small group of diverse people together to have a conversation/discussion that matters to them.

TELEPHONE TOWN HALL MEETINGS – Over 159,000 phone call were made which resulted in 6,299 people participating in two Telephone Town Hall Meetings (TTHM). TTHMs are an innovative way to conduct traditional, location-specific town hall meetings by reaching out to potential participants through the telephone.

POP-UP SHOPS - Pop-Up-Shops were implemented to reach Miami-Dade County residents in places where they shop, work, and play.

STAKEHOLDERS' MEETINGS - Specialized outreach meetings were held for partner agency stakeholders. The Miami-Dade TPO invited guests to assist in the development the right transportation solutions for all Miami-Dade County.

SURVEY - A survey was developed to obtain public input on how people travel in Miami-Dade County, transportation investments and resources, technologies, and future transportation projects. This survey was offered in English, Spanish, and Creole and was available through the LRTP and TPO public outreach events, on-line and social media, and by US mail.





Financial resources are required to maintain the existing transportation system and build and maintain new transportation infrastructure and services. A detailed financial analysis was performed to identify the projected available revenues after existing commitments are accounted for in order to fund prioritized projects in the development of the Cost Feasible Plan. The forecast is based on current federal, state, and local laws, funding sources, and policies. Revenue forecasts are also based on assumptions concerning factors affecting all revenue sources (e.g., population growth rates, motor fuel consumption, transit ridership, sales tax, and Florida Revenue Estimating Conference tax rates).

The financial analysis provides the projected available revenue by agency for 21 years beyond the TIP. Some revenues are already programmed or allocated to specific programs. The operating and maintenance (O&M) cost for county roads must be covered by the projected revenue and therefore, subtracted from the forecast revenues. The operating and maintenance cost for the existing transit system is accounted for in the Proforma and are reflected in the Contributions to the SMART Plan. The Miami-Dade TPO is dedicating \$30 million a year towards the SMART Plan and are reflected in the Proforma and in turn the Contributions to the SMART Plan. The table on the next page is a summary of the projected revenue available (forecast revenues minus committed revenues) for new capital projects and new O&M and shown by allocation source.

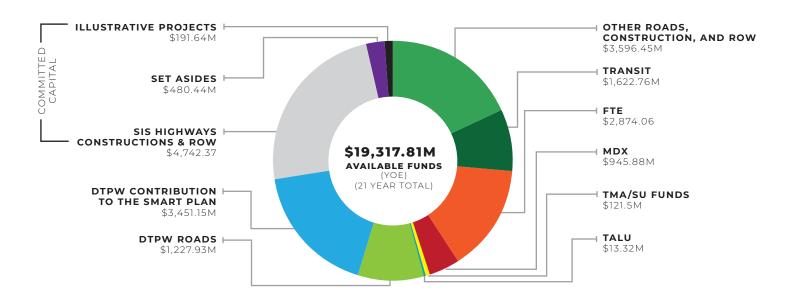


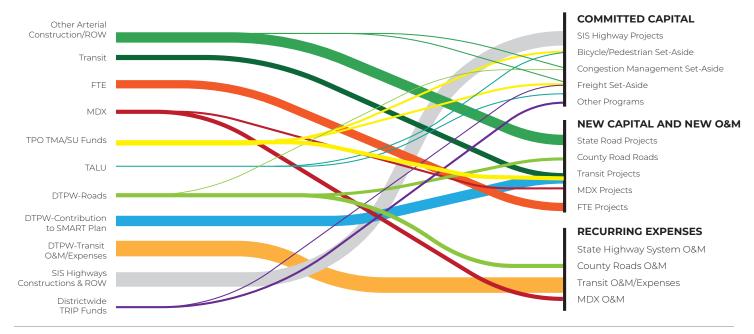
AVAILABLE REVENUE FOR NEW CAPITAL AND NEW O&M ├─

SOURCE	FY 2025 SUBTOTAL	FY 2026-2030 SUBTOTAL	FY 2031-2035 SUBTOTAL	FY 2036-2045 SUBTOTAL	21 YEAR TOTAL
REVENUES FOR NEW CAPITAL AND NEW O&M					
Other Roads, Construction, and ROW	\$112.62	\$741.77	\$819.82	\$1,922.24	\$3,596.45
Transit	\$56.68	\$356.64	\$391.03	\$818.41	\$1,622.76
FTE	\$0.00	\$331.90	\$676.26	\$1,865.90	\$2,874.06
MDX	\$166.15	\$145.19	\$279.44	\$355.11	\$945.88
TMA/SU Funds	\$5.79	\$28.93	\$28.93	\$57.85	\$121.50
Transportation Alternatives (TALU)	\$0.65	\$3.24	\$3.24	\$6.49	\$13.62
DTPW - Roads	\$68.13	\$341.49	\$320.05	\$548.26	\$1,277.93
DTPW: Contributions to the SMART Plan (PTP)	\$58.81	\$507.18	\$728.33	\$2,156.83	\$3,451.15
SUBTOTAL	\$468.84	\$2,456.33	\$3,247.10	\$7,731.09	\$13,903.36
SIS HIGHWAYS CONSTRUCTION & ROW	\$360.83	\$1,703.34	\$563.40	\$2,114.80	\$4,742.37
SET ASIDES					
Bike/Ped Set Aside	\$5.01	\$25.03	\$25.03	\$50.07	\$105.14
2045 Congestion Management Set Aside	\$9.59	\$58.72	\$63.95	\$-	\$132.26
2045 Freight Set Aside	\$8.46	\$52.73	\$57.23	\$124.62	\$243.04
SUBTOTAL	\$23.06	\$136.48	\$146.21	\$174.69	\$480.44
ILLUSTRATIVE PROJECTS					
Transportation Alternatives Funds (TALT) Districtwide	\$3.11	\$15.54	\$15.54	\$31.07	\$65.26
Districtwide TRIP Funds	\$3.74	\$27.93	\$31.06	\$63.65	\$126.38
SUBTOTAL FOR ILLUSTRATIVE PROJECTS	\$6.85	\$43.47	\$46.60	\$94.72	\$191.64
TOTAL AVAILABLE COSTS	\$859.58	\$4,339.62	\$4,003.31	\$10,115.30	\$19,317.81

Note: Totals may not add due to rounding.

AVAILABLE FUNDS AND REVENUE ALLOCATION +





COMMITTED DTPW TRANSIT O&M, REOCCURRING COST \$22,705M

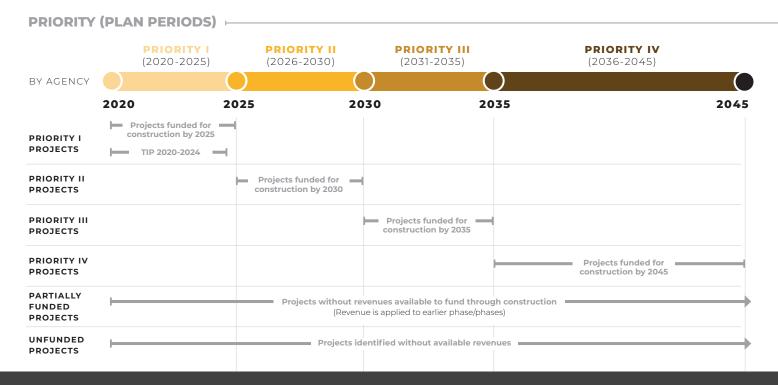
DTPW ROAD O&M, REOCCURRING COST \$1,772M





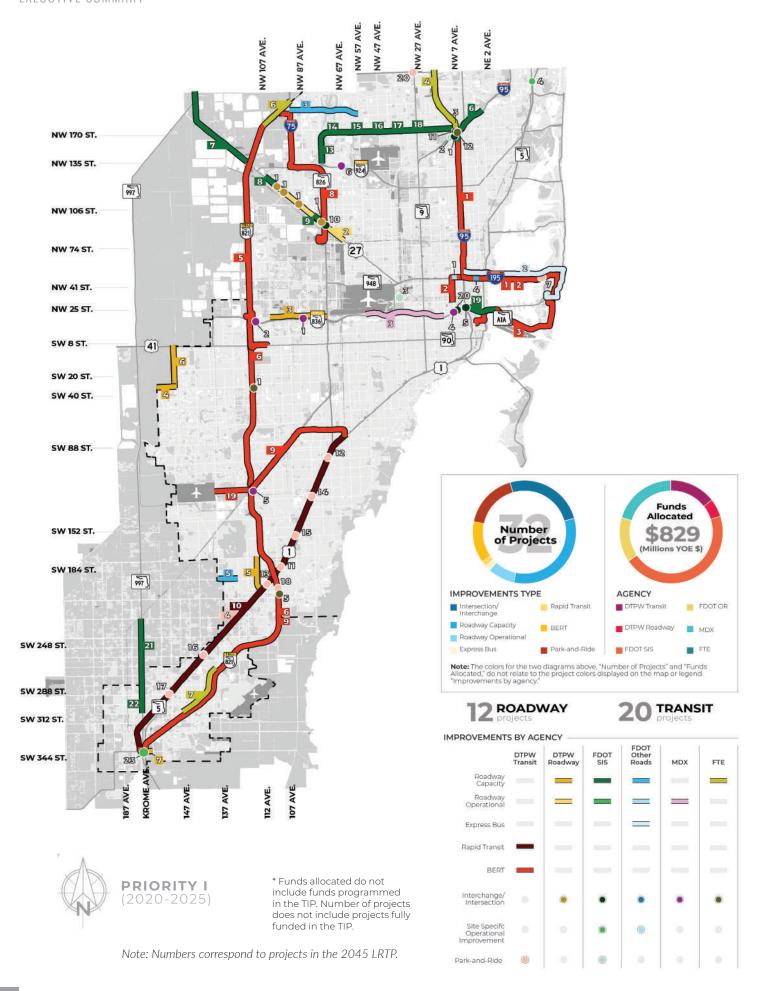
The 2045 LRTP was developed to guide the transportation investments in Miami-Dade County. Multimodal solutions were developed to address the transportation deficiencies and to enhance the multimodal transportation system. The development of the Cost Feasible Plan allocates federal, state, and local revenues to prioritized transportation improvements demonstrating how the LRTP can be implemented. A cost feasible set of prioritized transportation improvements is essential to satisfy the growing travel demand and to provide reliable mobility options for Miami-Dade residents and visitors.

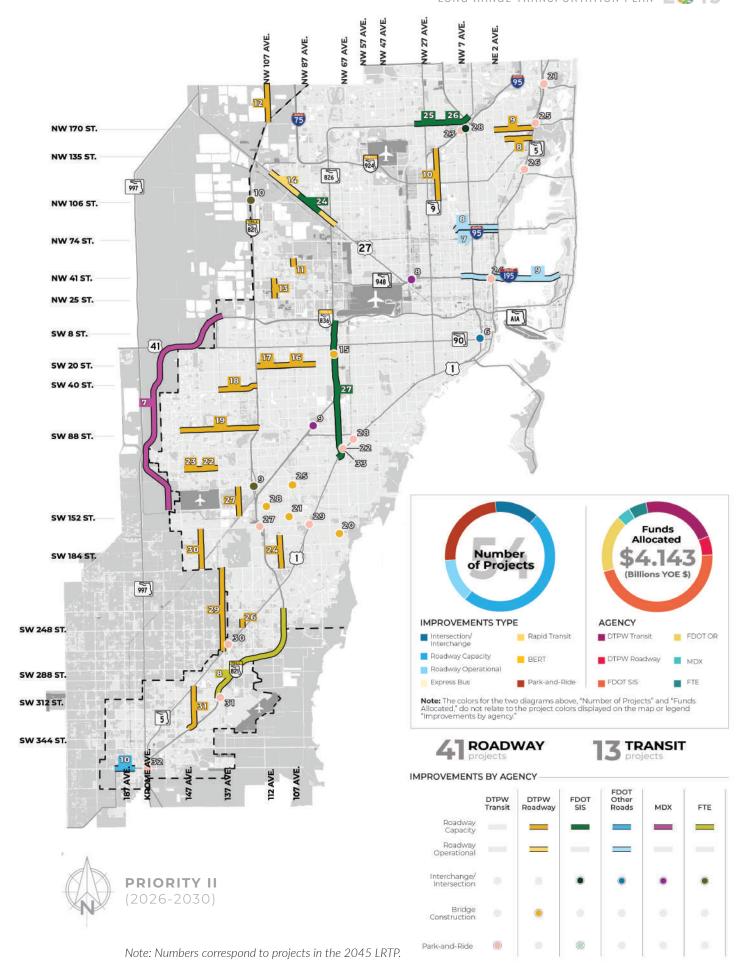
Proposed projects are eligible for funding from different sources depending on the type and jurisdiction of the project. Funding was allocated to projects based on priority and eligibility of funding source. Projects were grouped into incremental priorities:

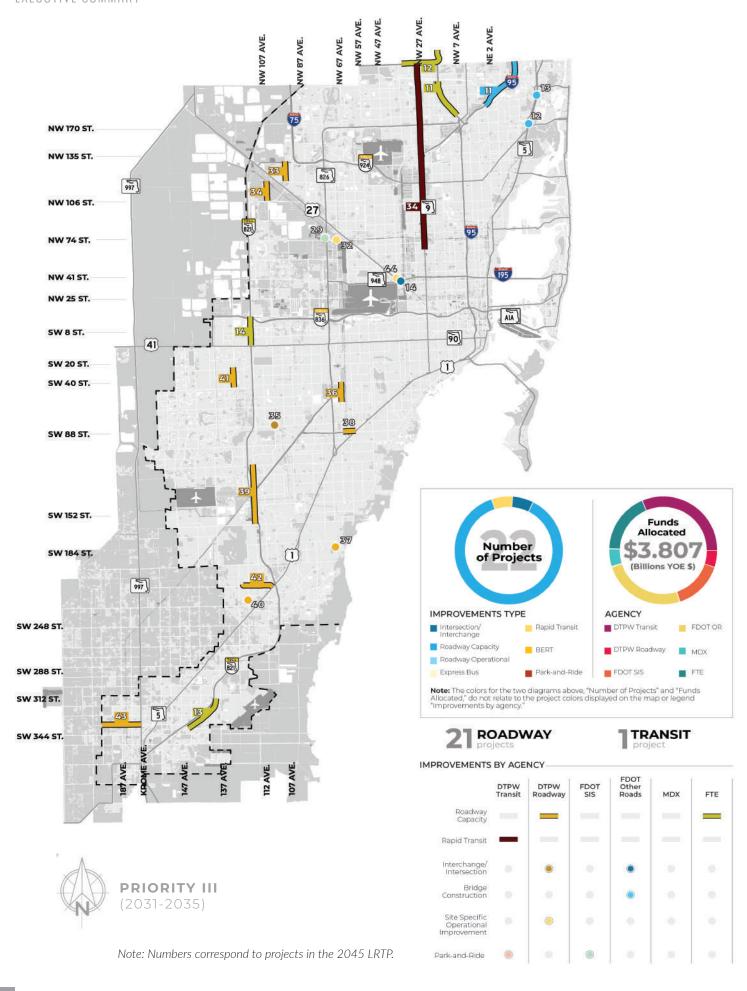


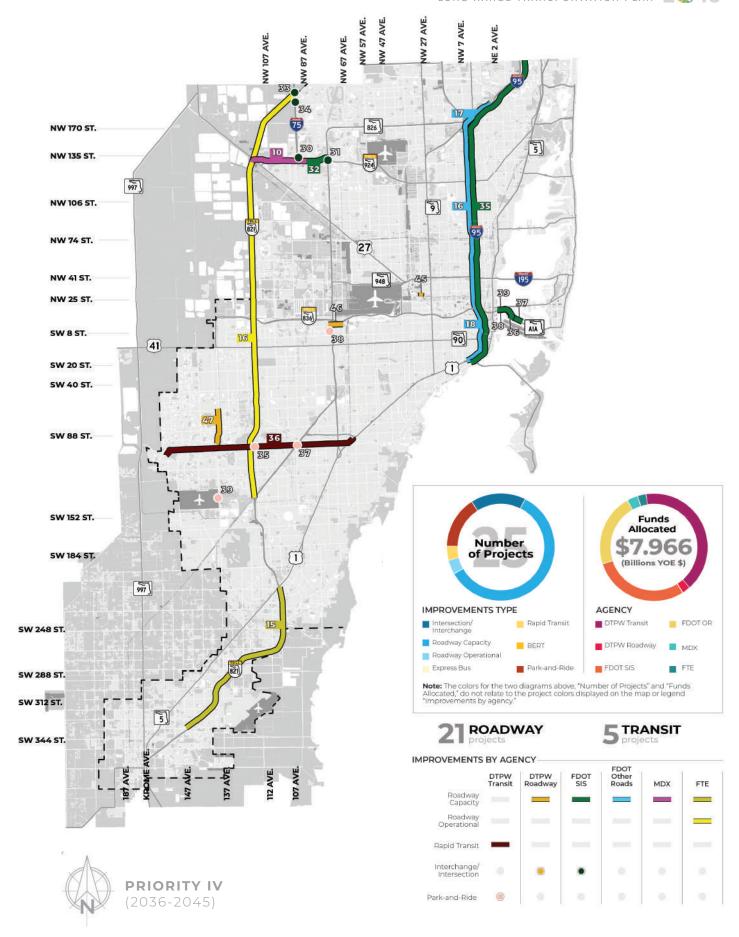


Transit projects and projects that support transit services were prioritized since they are the highest priority of the TPO Governing Board. Transit projects in Miami-Dade County have a dedicated funding source through the People's Transportation Plan (PTP). An evolution of the PTP is the Strategic Miami Area Rapid Transit (SMART) Plan, signifying the County's largest and most intensive capital expansion initiative.









Note: Numbers correspond to projects in the 2045 LRTP.

BICYCLE AND PEDESTRIAN

The Miami-Dade 2045 Bicycle and Pedestrian Plan, the non-motorized element for the 2045 LRTP, vision is to strengthen the symbiotic relationship between the non-motorized and transit trips, by providing transit users with mobility options to connect their stop to their destination. This vision of the future is geared towards aligning itself with the Miami-Dade TPO SMART Plan, and more specifically, the proposed terminals within that plan.

BICYCLE AND PEDESTRIAN PROJECTS

CONGESTION MANAGEMENT PROCESS

Congestion management relies on the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods through demand reduction and operational improvements. The congestion management process is focused on the short-term, seeking to implement lower-cost strategies to enhance travel conditions in the interim before larger and more costly transportation projects can be built to improve travel capacity.

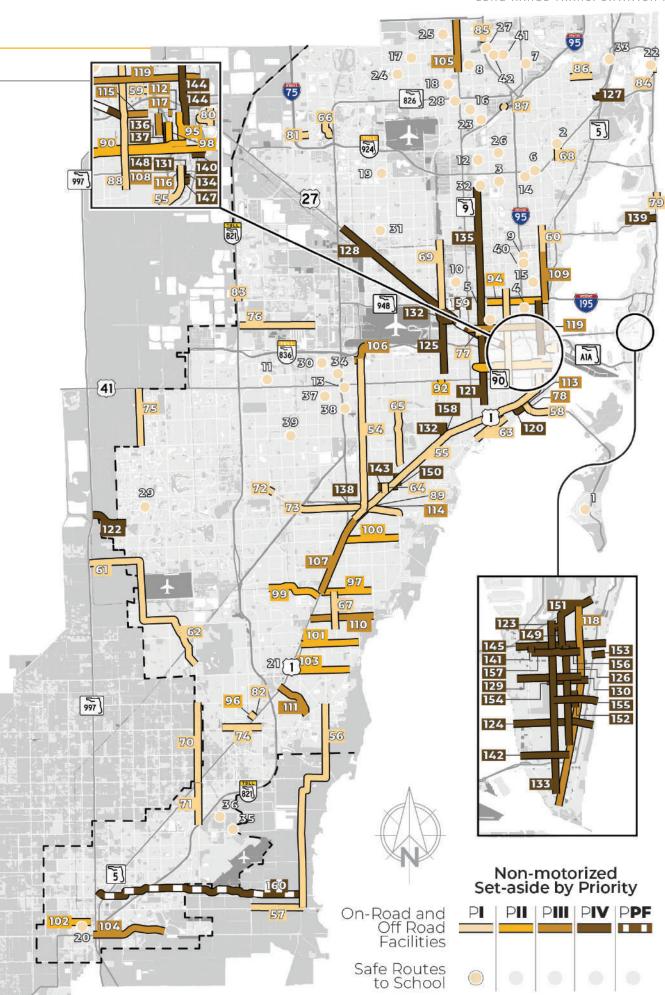
FREIGHT

Miami-Dade County is home to a well-established and expanding freight transportation system. This system is the cornerstone of the regional and statewide economy and provides goods and services to Florida's largest consumer market through major sea and air gateway connections to the global economy. Miami-Dade's freight infrastructure has undergone significant improvement and expansion that has strategically positioned the region for future growth opportunities.

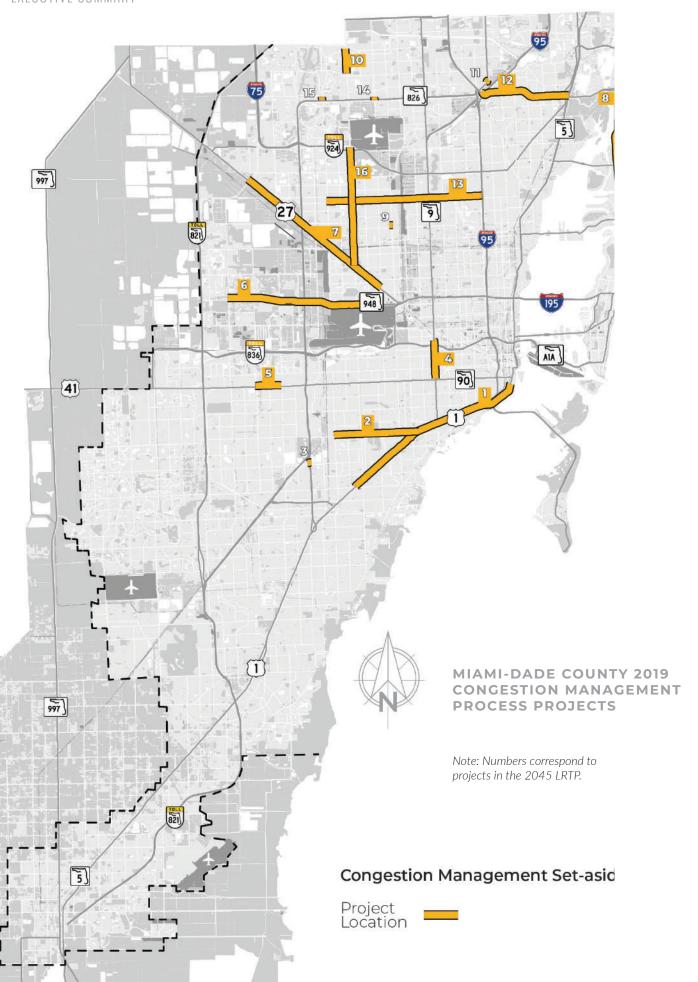


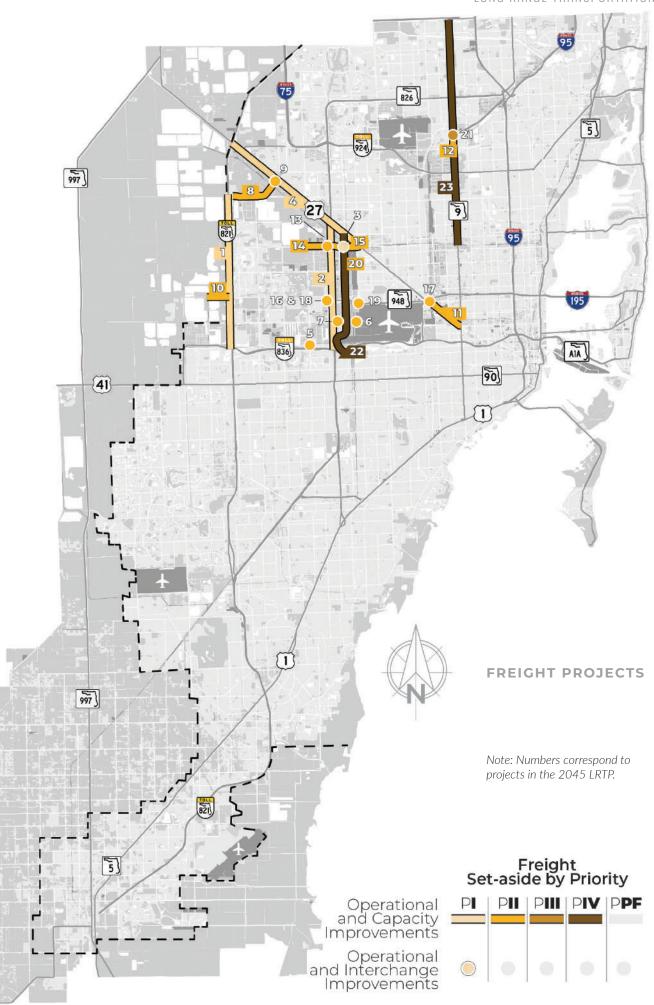






Note: Numbers correspond to projects in the 2045 LRTP.









The Federal Highway Administration (FHWA) describes sustainability as a, "commitment that encompasses economic, environmental, and social considerations." ¹

The major sustainability initiatives in Miami-Dade County are:

RESILIENT305:

Miami's Strategy to Effectively Tackle Emerging Global Challenges and Trends.

The Resilient305 Strategy was developed by Greater Miami & the Beaches (GM&B), a unique partnership of Miami-Dade County, the City of Miami and the City of Miami Beach. It was created with support from the 100 Resilient Cities, an organization pioneered by the Rockefeller Foundation, and The Miami Foundation. The Strategy is a living document created to address resilience challenges prioritized through intergovernmental and community collaboration. Resilience is about being better prepared for an increasing occurrence of shocks, such as hurricanes, and infrastructure failures, as well as better mitigating stresses, such as sea level rise and sunny day flooding, crippling traffic, and severe economic inequities.

MIAMI-DADE GREENPRINT:

Our Design for a Sustainable Future GreenPrint, Miami-Dade County's collaborative big picture plan for a sustainable future, is a community-wide action plan with 5-year cycles, focused on measurable goals. This plan is divided into three "pillars" of sustainability: economic vitality, environmental stability, and social responsibility that correspond to FHWA's pillars.

FHWA CLIMATE RESILIENCE PILOT PROGRAM: South Florida

The Area's Significant Transportation System and its Vulnerability to Climate Stressors.

The U.S. Department of Transportation (DOT) Federal Highway Administration's Climate Resilience Pilot Program conducted a detailed vulnerability assessment of transportation infrastructure in the four-county region (Miami-Dade, Broward, Palm Beach and Monroe) in South Florida, that is extremely vulnerable to the effects of sea level rise, storm surge, and rain-driven flooding to determine vulnerability scores for individual segments of the roads and rail lines and then recommended several adaption strategies based on these scores.

¹ Success in Stewardship. U.S. Department of Transportation Federal Highway Administration. https://www.environment.fhwa.dot.gov/Pubs_resoures tools/publications/newsletters/nov12nl.aspx



EMERGING TECHNOLOGY

As technology continues to influence society, Miami-Dade County is evolving into an interconnected, global gateway to the world. The technological changes that the world is experiencing have a direct impact on the transportation system and society as a whole. We are currently in the Fourth Industrial Revolution; the emerging technological advancements of the next decade will drastically alter the way we live, work, travel, and relate to one another. The future of transportation planning will feature increased automation, optimization, and connectivity through the Internet of Things (IoT). Technological changes are shaping the ways in which transportation infrastructure is developed and used as well as affecting the mobility decisions people make.

Technological innovations will have a significant impact on transportation systems. Disruptive technology will change the way people travel and will influence traditional transportation modes such as Transportation Network Companies (TNCs). Connectivity, communication, and automation are three core concepts common to emerging future technologies. Two-way communication and data sharing, otherwise referred to as the IoT, will allow for increased productivity and efficiency. Currently, there are many opportunities and ideas related to innovative transportation improvements.





REGIONAL COORDINATION

The Southeast Florida Transportation Council (SEFTC) was created in 2006 to formalize regional coordination while maintaining their individual county MPO. As a result of growth in South Florida, the Miami Urbanized Area was defined in the 2000 Census as the tri-county area of Palm Beach, Broward, and Miami-Dade Counties which solidified their relationship. An interlocal agreement under Florida Statutes Chapter 339.175 was enacted by the three counties and serves as the regional transportation planning framework for South Florida.

REGIONAL TRANSPORTATION PLAN (RTP)

The Southeast Florida region is projected to grow by about 1,000 people per week over the next 20 years. To plan for this growth, MPOs in Southeast Florida are working together to identify projects and funding sources to ensure that the future transportation system in the area includes mobility choices that are safe, efficient, and accessible.

The RTP identifies the most significant transportation investments needed to meet growing travel demands throughout the Southeast Florida region (Broward, Miami-Dade, Palm Beach Counties). The RTP is updated every five years to incorporate regional population changes. The 2045 RTP is currently being updated and is expected to be completed in 2020.

SEFTC (MIAMI-DADE TPO, BROWARD MPO, PALM BEACH TPA)



MODELING SUBCOMMITTEE PUBLIC PARTICIPATION SUBCOMMITTEE

TRANSPORTATION
SYSTEM MANAGEMENT
& OPERATIONS
SUBCOMMITTEE



PLAN IMPLEMENTATION

The 2045 LRTP emphasizes strategic rapid transit, land use, increased population density, connectivity, multimodal shared mobility, and innovative financing throughout the long range transportation planning process. This LRTP is visionary as it fully embraces and incorporates the SMART Plan that supports the Miami-Dade TPO's adopted policy identifying the advancement of rapid transit corridor projects, the Strategic Miami Area Rapid Transit (SMART) Plan, as its highest priority. Coordinating the SMART Plan with highway, bicycle/pedestrian, congestion management, and freight projects advances an integrated multimodal system that addresses the current and future travel demand for Miami-Dade County. The outcomes of this document lay the groundwork for identifying where strategic investments ought to be made to protect and enhance the quality of life for the communities of Miami-Dade County.

Post LRTP adoption, implementation of recommended projects within the LRTP occurs through the programming of transportation improvements. In consultation with transportation planning partners, which include the Florida Department of Transportation, airport, seaport, transit, and local government agencies, the TPO determines which funded or regionally significant projects within the planning area advance from the LRTP into the TPO's short-term Transportation Improvement Program (TIP). The Miami-Dade TPO, in tandem with transportation partners in the region, are responsible for monitoring the progress and performance of the system and the overall plan implementation process.

ILLUSTRATIVE PROJECTS |

The goals of this LRTP are to provide mobility choices, enable connectivity, and advance the SMART Plan to facilitate safe and efficient travel for people and good while enhancing Miami-Dade County's position as a Global Gateway. To prepare for the future, Plan implementations must begin immediately.

Illustrative projects highlight opportunities for positive new approaches to agency partnerships and for agencies to work together in non-traditional ways. The financial plan may include, for illustrative purposes, additional transportation projects that will be included and adopted in the transportation plan if reasonable additional resources beyond those identified in the financial plan become available.

Several critical projects for Miami-Dade County are highlighted as illustrative projects. To facilitate the implementation of these projects, collaboration between a coalition of agencies is crucial. These agencies include:

Miami-Dade TPO

Miami-Dade Department of Transportation & Public Works

Miami-Dade Expressway Authority Florida's Turnpike Enterprise Florida Department of Transportation

