

2017 ANNUAL REPORT OF THE MIAMI-DADE TRANSPORTATION PLANNING ORGANIZATION

MART STRATEGIC MIAMI AREA RAPID TRANSIT PLAN

MiamiCentral Brightline Train Station Currently Under Construction

GOVERNING ORGANIZATION BLANNING ORGANIZATION



Bruno A. Barreiro Miami-Dade County



Audrey M. Edmonson Miami-Dade County



Perla T. Hantman School Board



Vince Lago City of Coral Gables



Dennis C. Moss Miami-Dade County



Juan Carlos Bermudez City of Doral



Dan Gelber City of Miami Beach



Carlos Hernandez City of Hialeah



Daniella Levine Cava Miami-Dade County



Jeff Porter City of Homestead



Jose "Pepe" Diaz Miami-Dade County



Oliver G. Gilbert III City of Miami Gardens



Sally A. Heyman Miami-Dade County



Roberto Martell Municipal Representative



Rebeca Sosa Miami-Dade County



CHAIRMAN Esteban L. Bovo, Jr. Miami-Dade County



VICE CHAIRMAN Francis Suarez City of Miami

The Miami-Dade Transportation Planning Organization (TPO) Governing Board is comprised of 25 voting members representing a diverse governing body within Miami-Dade County, including the Miami-Dade Board of County Commissioners, eight elected officials from municipalities with a population over 50,000 and four Governor appointees that represent the Miami-Dade Expressway Authority, Miami-Dade County School Board, a municipality representative, and a non-elected official that resides in unincorporated Miami-Dade County.

The Miami-Dade TPO Governing Board is responsible for approving federally required transportation plans, as well as establishing the transportation vision for Miami-Dade County.



Barbara J. Jordan Miami-Dade County



Joe A. Martinez Miami-Dade County



Sen. Javier D. Souto Miami-Dade County



Smith Joseph City of North Miami



Jean Monestime Miami-Dade County



Xavier L. Suarez Miami-Dade County

Message from the Executive Director



The Miami-Dade TPO Governing Board took several bold steps in 2017 to increase momentum and establish directives that are critical to the success of the Strategic Miami Area Rapid Transit (SMART) Plan. Board action ranged from allocation of funding

to the SMART Plan, adoption of a financial framework, and expansion of the Bus Express Rapid Transit (BERT) network. Additionally, the North and South Corridors were prioritized to advance in the Long Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP).

In addition to the highlights identified on this page, several important steps were realized, including the kick-off construction of the Dolphin Station Terminal. This project is a park-and-ride facility that will directly link Phase I SMART Plan Express Bus service along the East/West Corridor. Completion of the facility and initiation of new Express Bus service on SR-836 is expected in 2018. Another significant step was the roll-out of Miami-Dade County's first new Metrorail cars in 2017. A new fleet of 136 vehicles will be incrementally placed into service and will be fully operating by 2020, representing the modernization of the entire fleet.

In the area of economic development, Phase 2 of the NW 7th Avenue Transit Village was completed. This development provides an enhanced transit facility with mixed-use development including space for housing, communityserving activities, commercial, and retail space. Other TODs advancing in Miami-Dade County include the Douglas Road, South Miami, and Coconut Grove Metrorail Stations. These developments will significantly enhance accessibility and integration of several modes of public transportation while promoting economic development. And this is just the beginning. Each SMART Plan corridor is being evaluated for similar efforts. In 2017, TPO staff conducted multiple public charrettes focused on the land-use and zoning along each of the SMART Plan corridors. These efforts are the building blocks of a transit vision to improve mobility and sustain economic development.

Thank you for your interest in the Miami-Dade TPO Governing Board, and we look forward to working with you to improve transportation in our region.

Executive Director Aileen Bouclé, AICP

2017 MIAMI-DADE TPO HIGHLIGHTS

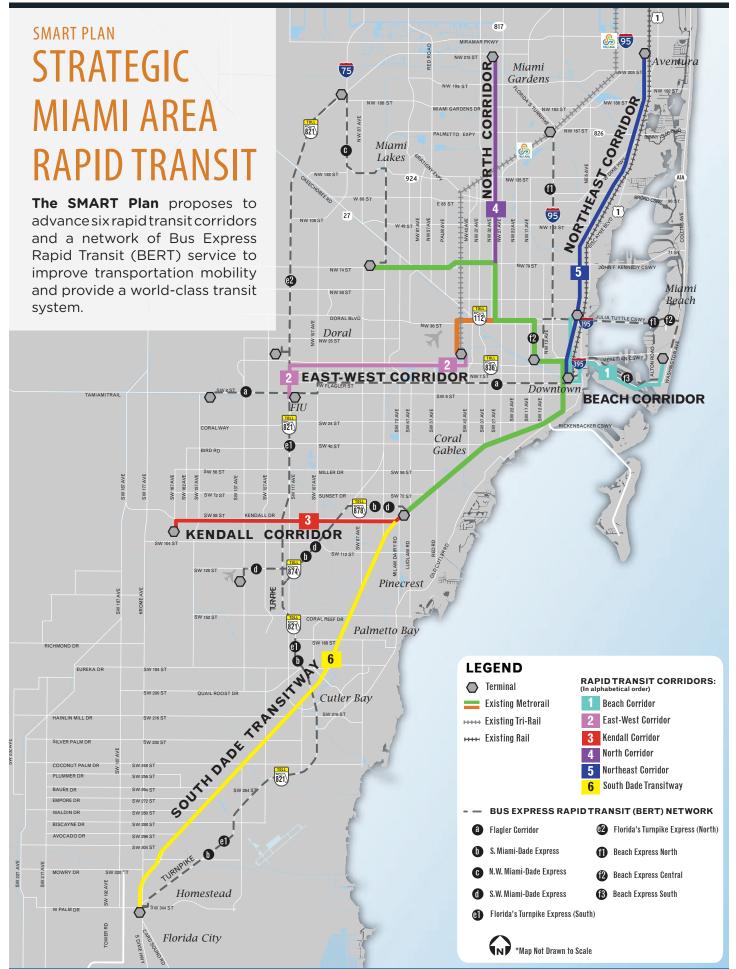
- Election of TPO Chairman Esteban L. Bovo Jr.
- Election of TPO Vice Chairman Francis Suarez
- Adoption of new logo and agency name:



Top 2017 TPO Actions and Recommendations:

- ✓ 30-year funding allocation of \$975 Million for SMART Plan
- Establishment of Financial Framework for SMART Plan
- Approval of \$9 Billion in the TIP for Fiscal Years 2018-2022
- Allocation of \$800,000 for First/Last mile on-demand pilot demonstration project in Miami-Dade County
- Prioritization of advancement of North and South Corridors
- Funding match request to Florida Legislature and Florida Department of Transportation (FDOT) for North and South Corridors
- Expansion of SMART Plan BERT network from SR-836 to I-75
- Endorsed Miami-Dade County's USDOT TIGER Grant application for the South Dade Transitway Corridor
- Funding request to Florida Legislature and FDOT for Tri-Rail Downtown Miami Link and Coastal Link Projects
- Designation request to Federal Transit Administration (FTA) for SMART Plan Program of Interrelated Projects
- Approval of City of Homestead Multimodal Transit Center
- Approval of Miami-Dade Expressway Authority (MDX) commitment for East/West Phase I Express Bus service on SR-836
- Initiated request to State of Florida to update policies allowing funding of express bus service on FTE express lanes
- Approved 2017 Transportation Alternatives and Safe Routes to School program priorities
- ✓ Co-hosted the 2017 Regional Safe Streets Summit





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MAKING THE SMART PLAN

Advancing the SMART Plan

Funding Allocation and Framework

In June 2017, the Miami-Dade TPO Governing Board approved the flexing of Federal "Urban" funds for transit capital improvement projects. This resulted in an allocation of \$975 million over 30 years for the SMART Plan. The TPO also supported the County's application for a USDOT Tiger Grant for the South Dade Transitway Corridor.

The TPO Board adopted a resolution establishing the initial financial framework for the SMART Plan. A complementary resolution was also adopted by the Miami-Dade County Board of County Commissioners (BCC). Funding involves requesting federal, state, and local funds to design, construct, and implement the SMART Plan.

Projects and Initiatives

SMART Plan segments representing station development, first/last mile connectivity, transit-oriented development, and modernization of the public transportation fleet advanced as follows:

Kick-off of the Dolphin Station This project is a partnership with the County and Miami-Dade Expressway Authority (MDX). The new facility will include a park-and-ride terminal that will directly link Phase I SMART Plan Express Bus service. This station is anticipated to be in service in 2018. In 2017, the Miami-Dade TPO allocated \$975 million to the Smart Plan over 30 years. This funding commitment represents the first step of making the SMART Plan a reality.

Miami-Dade County rollout of a new fleet of metrorail vehicles with two new rail cars in 2017. A complete fleet of 136 new rail cars will be in service by spring 2020. In addition, 20 new forty-foot buses, and 10 new sixty-foot articulated buses were also replaced.

NW 7th Avenue Transit Village Phase Il completion in 2017, representing an enhanced transit facility with mixeduse development, including 100 residential units and commercial space.

Transit-Oriented Development is planned at the Douglas Road, South Miami, and Coconut Grove Metrorail stations.

University Metrorail Station Pedestrian Overpass was completed and provides for safe pedestrian passage above US-1. The new bridge connects the commercial area to the Metrorail station and the University of Miami. It is a single span bridge covered with a translucent roof. **Panther Station** is a new bus terminal facility that will be located on Florida International University's (FIU) Modesto A. Maidique Campus. It will provide capacity for future routes such as the SR-836 Express bus, the Flagler Street premium route, and BERT routes operating on the HEFT. Completion of the facility is scheduled for summer 2020.

Tamiami Station is a new park-andride/bus terminal facility that will be located on the southwest quadrant of SW 8th Street and SW 147th Avenue. The facility will support the SR-836 Express Bus Service as well as several other local bus routes. Completion of the facility is scheduled for summer 2020.

Golden Glades Intermodal Terminal Center is a new proposed multistory parking garage that will include improved bicycle parking, air conditioned waiting area, security cameras, and covered walkways. Completion of the facility is expected by the end of 2020.

Prioritization of North and South Corridors

The Miami-Dade TPO Governing Board approved Resolution #47-17, which authorized the advancement of the North Corridor and South Dade Transitway Corridor to Priority I in the Long Range Transportation Plan (LRTP) and Transportation Improvement Plan (TIP).

The BERT Network

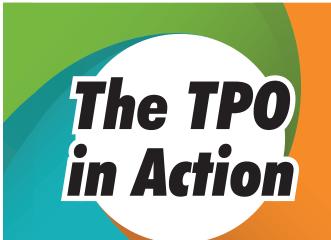
A Bus Express Rapid Transit (BERT) network has been designed to meet the needs of commuter travel patterns within Miami-Dade County. This network will operate along expressways, express lanes, and hard shoulders, as shown on the opposite page.

SR-836 Express Bus Service

In June 2017, the TPO passed Resolution #21-17 urging MDX to formalize a commitment to the SMART Plan. As a result, the MDX Board approved funding for an express bus service along the Dolphin Expressway (SR-836). This represents a new express service along the East-West corridor, while MDX continues to work with the County and the TPO to develop future mobility options for SR-836.

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TPO MILESTONES

Miami-Dade TPO Turns 40 with a new Name and Logo

After 40 years of service the Miami-Dade Metropolitan Planning Organization (MPO) transitioned to a new name and logo, now known as the Miami-Dade Transportation Planning Organization.



Miami-Dade Transportation Planning Organization

The anniversary celebration was held at Brickell City Center, a new Transit Oriented Development (TOD) located on the Metromover system. The following special guests conducted presentations at the event:

- State of Florida Governor Rick Scott provided a Congratulatory video
- Honorable Carlos A. Gimenez, Mayor, Miami-Dade County
- James Christian, Division Administrator, Federal Highway Administration (FHWA)
- Jim Wolfe, P.E., Secretary, Florida Department of Transportation (FDOT) District Six
- Jose M. Rivera, P.E., Executive Director, New York Metropolitan Transportation Council (NYMTC)
- Kieran Bowers, President, Swire Properties Inc. – Brickell City Centre TOD

A Transportation Fair was also held that showcased the various transportation agency partners in Miami-Dade County.

The TPO Committees

The TPO Governing Board is structured with three Board Member Committees that advise the Board on a range of transportation issues. Highlighted below are some of the initiatives from 2017.

Executive Policy Committee (EPC)

- Rebeca Sosa, Chairwoman
- Jeff Porter, Vice Chairman
- Members:
- Juan Carlos Bermudez
- Sally A. Heyman
- Vince Lago
- Jean Monestime

This committee advises the Board on policy direction and legislative proposals, including development of transportation policies for the TPO. One of the most significant 2017 Best Practice recommendations was a directive to conduct a General Assembly. This event will gather countywide officials and transportation experts to facilitate discussion on the advancement of the SMART Plan.

Transportation and Mobility Committee (TMC)

- Francis Suarez, Chairman
- Bruno A. Barreiro, Vice Chairman Members:
- Daniella Levine Cava
- Audrey M. Edmonson
- Oliver G. Gilbert III
- Smith Joseph
- Jeff Porter

This committee is responsible for identifying opportunities to increase the integration, utilization, and connectivity of the existing and proposed transportation network. In 2017, the TMC favorably recommended a request to amend the SMART Plan in order to extend the Bus Express Rapid Transit (BERT) corridors in the northern areas of the county. In addition, the TMC recommended the allocation of \$800,000 in congestion mitigation and air quality funding for the implementation of First/Last mile on-demand transit solutions demonstration project in the county.

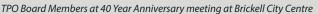
Fiscal Priorities Committee (FPC)

- Dennis C. Moss, Chairman
- Roberto Martell, Vice Chairman Members:
- Bruno A. Barreiro
- Perla T. Hantman
- Carlos Hernandez
- Barbara J. Jordan
- Xavier L. Suarez

The FPC committee concentrates on the programming of transportation dollars to reflect the needs and priorities of the community. During 2017, the FPC planned and developed the SMART Plan Financial Framework, which was adopted by the TPO Governing Board on September 26, 2017. The financial framework includes an allocation of \$975 million over the next 30 years to advance the SMART Plan.

Other initiatives advanced by the FPC included a recommendation and urging to the Federal Transit Administration for the designation of the SMART Plan as a Program of Interrelated Projects, as well as a recommendation to seek matching funds for the SMART Plan from FDOT.







MAKING A DIFFERENCE

Miami-Dade County Age-Friendly Initiative

The Miami-Dade TPO is a lead agency supporting the Miami-Dade Age-Friendly Initiative, a collaborative effort focused on sustainable changes to create a community where older adults can stay active, engaged, and healthy.

In 2017, the Age-Friendly Initiative resulted in Miami-Dade County being accepted by AARP Florida into the Network of Age-Friendly Communities.

Miami-Dade County is the fifth largest community to join this network, which includes over 380 cities and communities around the world. This designation empowers the community as Miami-Dade County connects to a global network of like-minded communities who can share strategies, resources, and insight into making places livable for all ages.

APTA / FTA Performance-Based Peer Exchange Roundtable

TPO staff presented the topic of Performance Management, the processes and criteria used to measure and report on the efficiency and effectiveness of the transit system in Miami-Dade County. These metrics are used to develop planning goals for federal reporting, enable agency coordination, and empower public participation.

As a result of this presentation, the Miami-Dade TPO was invited to be part of the final nationwide roundtable to take place in 2018.

Miami-Dade County Book Fair Connected & Autonomous Vehicles Exhibition

The connected & autonomous vehicles exhibit at the County Book Fair was presented by the TPO in coordination with the Department of Transportation and Public Works (DTPW) in November 2017. The exhibit included a demonstration of the Mobileye + Shields System, which was installed on a DTPW bus running on a closed section of NE 1st Avenue. This system is now being evaluated on high-demand Metrobus routes in a sixmonth demonstration project, which began in December 2017.

The TPO also partnered with Florida Atlantic University (FAU) to present a simulator demonstrating a Green Light Optimal Speed Advisor (GLOSA) system. GLOSA systems connect traffic signals and networked vehicles to avoid red lights by moderating midblock speed.

Florida Commission for the Transportation Disadvantaged

The Miami-Dade TPO and DTPW hosted the Florida Commission for the Transportation Disadvantaged's (CTD) quarterly meeting and Strategic Workshop session. The CTD administers the Transportation Disadvantaged Trust Fund and implements all provisions in Chapter 427.013 F.S.

AASHTO's Environmental Justice Peer Exchange: Implementation Plan

The Environmental Justice (EJ) Peer Exchange was a two-day collaborative

event held to circulate best practices and lessons learned among metropolitan planning organizations and State DOTs all across the country. The goal of this effort was to develop a roadmap that guides EJ considerations of planning projects over the next two to three years. The resultant implementation plan document includes key take-aways from the exchange, technical assistance needs, research gaps, and recommendations.

FDOT TransPlex / Focus on Community Conference

TransPlex and Focus on Community: Best Practices in Transportation are yearly forums held to exchange ideas about transportation planning in Florida. Miami-Dade TPO staff were invited by FDOT to present at the conference during the following sessions:

- Engaging the Public in Early, Large-Scale, or Complex Transportation Planning- This interactive workshop provided table-top discussions about six recent planning processes in Florida, including Miami-Dade County's SMART Plan.
- **TPO Communication Techniques**-Challenges encountered and techniques used to communicate successfully with the public about the SMART Plan were emphasized during this session.
- **Desktop Tools for Identifying Populations-** The Transportation Outreach Planner tool was featured to help participants understand where the people live, work, and frequent areas based upon a review of available socio-demographic information.



TPO Staff participating at the FDOT TransPlex Conference



TPO Staff educating residents at the Miami-Dade County Book Fair



Bike Friendly Miami-Dade Program

2017 Bicycle Friendly Community Award Designations

Miami-Dade County was selected as a Bronze-level Bike Friendly Community (BFC). To accomplish this effort, the Miami-Dade TPO coordinated with agency partners, held a Bike Friendly Summit, prepared the Miami-Dade County BFC application, and provided technical assistance to other interested communities. With the announcement of 65 new and renewing BFCs, Miami-Dade County joins a leading group of communities that are transforming our neighborhoods.

Municipalities within Miami-Dade County were also designated as BFCs:

- Silver: Key Biscayne and Miami Beach
- Bronze: Doral, Miami, Miami Shores, and South Miami
- Honorable Mention: Cutler Bay and Palmetto Bay

The BFC award recognizes Miami-Dade County's commitment to improving conditions for bicycling through investment in bicycling promotion, education programs, infrastructure, and pro-bicycling policies.

Miami-Dade Bike Friendly Summit

The Miami-Dade TPO conducted a Miami-Dade Bike-Friendly Summit where participants learned:

- How to become designated a Bicycle Friendly Community, Business, or University.
- The many benefits that come with being designated as Bicycle Friendly.
- How to help make bicycling an option for residents, visitors, employees, and customers.

As a result of the summit numerous Miami-Dade County entities applied to the LAB's Bicycle Friendly America program.



Bicyclists in Miami-Dade County attending the "Critical Mass" ride

SMART PUBLIC INVOLVEMENT

2017 was a big year for the SMART Plan, and obtaining public input has been an important part of the process. The TPO held numerous meetings, interviews, and other outreach efforts to ensure that the public is fully informed about the SMART Plan.

Meetings

To facilitate efficient implementation of the SMART Plan, the TPO held meetings throughout the year with industry experts and transportation professionals such as:

- U.S. DOT Secretary Elaine L. Chao
- •Federal Highway Administration (FHWA) Region 4
- Federal Transit Administration (FTA)
- Florida Department of Transportation (FDOT) Secretary Mike Dew
- •Consul General Ken Okaniwa, Consulate-General of Japan in Miami
- Florida Transportation Commission



USDOT Secretary Elaine L. Chao discussing Miami-Dade County transportation issues

Events

The Miami-Dade TPO hosted, supported, and participated in various events to promote the SMART Plan. Some of these events were:

- Haitian American Community Fair
- · Live.Ride.Share Miami Summit
- Miami Public Transit Day Event
- National Association of Black Women in Construction (NABWIC)
- West Central Miami-Dade Freight Mobility Summit



Plan Z Copenhagenize Miami Event

Outreach

The TPO took part in over 65 outreach activities to increase awareness and stakeholder participation in the SMART Plan process. TPO staff reached out to many groups to receive input and build community support for the SMART Plan, including:

- •American Society for Public Administration (ASPA), South Florida Chapter
- •Florida International University's Real Estate Alumni Affinity Council (REAAC)
- Gold Coast Chapter of Institute of Transportation Engineers (GCCITE)
- International Council of Shopping Centers (ICSC) Association
- •Community Action Agencies representing the communities of: Coconut Grove, Edison, Goulds, the Hammocks, Miami Beach, Naranja, Northside Station, and Wynwood.

Peer Exchanges

Miami-Dade TPO Governing Board Members and staff conducted peer exchanges with transportation agencies in other parts of the country. The goal was to identify Best Practices and Lessons Learned from other transit systems in large metropolitan areas. Peer exchanges included:

- Southern California Association of Governments (SCAG), California
- Puget Sound Regional Council (PSRC), Washington
- Atlanta Regional Commission (ARC), Georgia
- Metropolitan Atlanta Rapid Transit Authority (MARTA), Georgia



Charles Drew Elementary School Career Day

SMART Media

To help inform the public about the SMART Plan in 2017, TPO staff engaged in broadcast interviews with the following media outlets :

- Acualidad 1040 AM with Roberto Rodriguez Tejera
- •HOT 105.1 on the Tom Joyner Morning Show
- Lite 101.5 FM with Gayle Garton
- Radio Caracol 1260 AM
- Radio Mambi WAQI 710 AM
- •The New Tropic/Prism Group Facebook Live: "What's It Take to Make Great Transit Happen?"
- WPBT South Florida PBS "Your South Florida" Weekly Show
- •WLRN Topical Currents: "The Copenhagen Experience"
- WLRN Topical Currents: "The SMART Plan"



WLRN Topical Currents Interview



Facebook Live event for The Underline



Endorsements

Support for the SMART Plan has grown in the past year. Since 2016,

the following municipalities, boards, and organizations have issued

City of North Miami Beach



City of Sunny Isles Beach



DDA - Miami Downtown **Development Authority**



MDCLC - Miami-Dade County League of Cities



GMCC - Greater Miami Chamber of Commerce

RFSID

Town of Surfside



MDX - Miami-Dade Expressway Authority



Village of Palmetto Bay



City of Sweetwater



LBA - Latin Builders Association



Sky Lake - Highland Lakes Area HOA



BCC - Miami-Dade County Board of County Commissioners



Town of Cutler Bay



City of Homestead



Town of Miami Lakes



Village of Pinecrest



CITT - Citizens Independent Transportation Trust



Miami-Dade Beacon Council



SFRTA - South Florida Regional Transportation Authority



SEFTC - Southeast Florida Transportation Council



City of Doral



Town of Medley



City of North Miami



City of South Miami



CTAC - Citizens Transportation Advisory Committee



Miami Beach Chamber of Commerce



SFRC - South Florida **Regional Council**



City of Opa-Locka





MUNICIPAL GRANT PROGRAM

The Municipal Grant Program (MGP) offers Miami-Dade County municipalities the opportunity to submit transportation planning proposals to the Miami-Dade TPO on a biannual basis. The MGP is a competitive funding program, and requires a minimum 20% funding commitment from the municipality. Every two years, the TPO makes \$300,000 in federal transportation planning funds available for the MGP. Projects awarded and implemented in 2017 include:

•Town of Cutler Bay: Caribbean Boulevard bicycle lanes from the HEFT to the Bel-Aire Canal (this facility was initially proposed in the Town of Cutler Bay's 2011 Bicycle-Pedestrian Master Plan). Caribbean Boulevard in Cutler Bay is a "Main Street" type of facility; the project is intended to improve multimodal mobility, including new bus shelters, improved pedestrian facilities, and the construction of bicycle lanes.

- •City of South Miami: Developed a Complete Streets Manual that serves as a guideline and reference document for South Miami to design their streets for people of all ages and physical abilities, regardless of the travel mode taken. Complete Streets, as envisioned by this document, are context-sensitive, and vary based on surrounding neighborhoods and functions.
- Town of Miami Lakes: Completed an "Alternative to Concurrency" study that aims to implement a multimodal concurrency program to incentivize high quality multimodal oriented

development and design. Through this proposal, developers in Miami Lakes will contribute funds based upon the number of trips their developments will generate. Miami Lakes master planned projects will in turn be funded with these multimodal mobility fees.

• City of North Miami: Utilized MGP funding to complete an "Optimizing NoMI Express Routes, Connections, and Technology" study that examined the existing NoMI Express, a four-route transit service operating within North Miami city limits. Recommendations from this study include: establish additional linkages to Metrobus and other municipal circulator networks, implement a new web based app to keep riders informed, and expand service hours and days.

TRANSPORTATION ALTERNATIVES

Each year the Miami-Dade TPO solicits project proposals from eligible sponsors for funding through the federal Transportation Alternatives Program (TAP). Projects eligible for TAP funding include bicycle and pedestrian facilities, vegetation management, environmental mitigation, and rehabilitation of historic transportation facilities, among others.

For the 2017 TAP application cycle, 23 projects were submitted. The Miami-Dade TPO and FDOT District Six coordinated on the review and prioritization of project applications that included: technical evaluations, TAP Review Committee scoring, input from the TPO's citizens committees, the applicant's presentation, and the applicant's history delivering federally-funded projects.

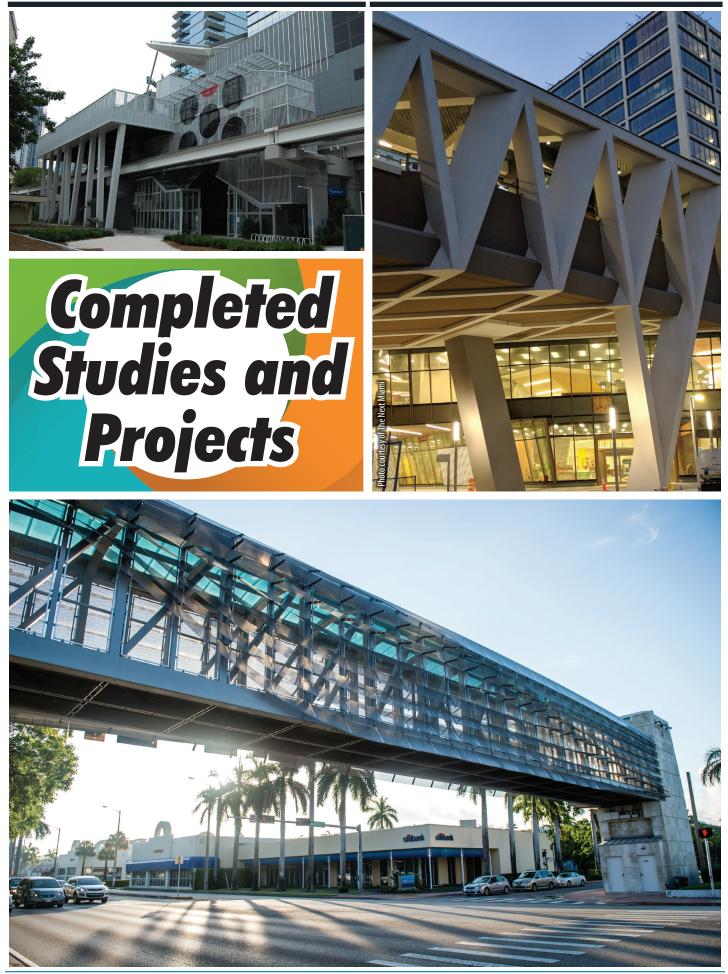
Thirteen projects totaling \$9.9M were prioritized for funding as follows:

Projects constructed in 2017 from TAP awards included:

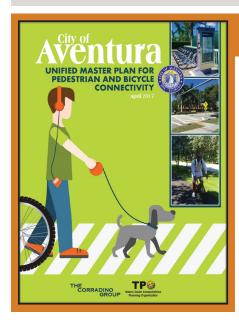
- Miami-Dade DTPW: Old Cutler Trail Reconstruction from SW136th Street to Cartagena Plaza
- Doral: Bike lanes along NW 52nd Street from NW 107th Avenue to NW 97th Avenue and along NW 102nd Avenue from NW 41st Street to NW 58th Street
- City of Miami springs: Westward Paved Path along Westward Drive from Flamingo Circle to Hammond Drive

Project	Sponsor
NW 79th Court Transportation Improvements Project	Town of Miami Lakes
Government Center/Beach Access Pedestrian Bridge	City of Sunny Isles Beach
School Age Pedestrian/Bicycle Education and Injury Prevention Programs in Miami-Dade County	University of Miami
Gulfstream Elementary Complete Street Project	Town of Cutler Bay
NW 59th Avenue Transportation Improvements Project	Town of Miami Lakes
Turnpike Trail Bicycle/Pedestrian Bridge over Doral Boulevard	City of Doral
Biscayne Everglades Greenway	City of Homestead
Roberta Hunter Park – South Dade Trail Connection	Miami-Dade PROS
Last Mile Transit Stop Improvements	City of Coral Gables
Ludlam Trail Segment B Phase 1	Miami-Dade PROS
Snapper Creek Trail Segment B Phase 1	Miami-Dade PROS
Multimodal Mobility Improvements	Miami Shores Village
SW 82nd Avenue Commuter Access	Village of Palmetto Bay

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COMPLETED STUDIES



City of Aventura Unified Master Plan for Pedestrian and Bicycle Connectivity

This Master Plan identifies bicycle and pedestrian mobility improvement projects that have the potential to increase connectivity within the City of Aventura. This includes identification of connections to neighboring municipalities, impediments in the sidewalk network, pedestrian crossing strategies, linking the Turnberry Isle Resort Golf Course multi-use path with the rest of the City, expanding bike share kiosks, and expanding the overall bicycle lane network. In all, this document serves as a tool to guide Aventura's short and long term intermodal transportation improvements.

2017 Bicycle Facilities Map Update

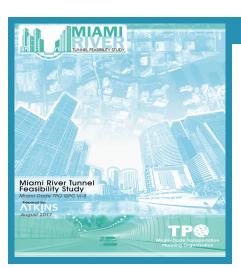
The Miami-Dade TPO Bicycle Facilties Map is updated on a yearly basis. This map catalogues more than a hundred miles of paved paths, bike lanes, and unpaved trails that exist in Miami-Dade County. The 2017 update also includes sidewalks, which can be found on most major streets and many neighborhood streets for safe walking.





Protected Bike Lanes Master Plan

This study coordinated and developed a Protected Bike Lanes (PBL) Demonstration Plan for Miami-Dade County. The plan's focus was to identify demonstrationfriendly segments that possess most of the following attributes: connectivity to the SMART Plan corridors, low Annual Average Daily Traffic (AADT), Low Volume to Capacity (V/C) ratios, ample right-of-way, existing on-street parking; existing bike facilities, and connectivity to numerous destinations. The result of this analysis was to provide the County with two alternative PBL concept designs which may be implemented as a fast-track demonstration projects. The first concept is a downtown network connecting N Miami Avenue, NE 1st Avenue, NE/NW 6th Street, and NE/NW 5th Street, as well as segments of SE/SW 1st Street and Biscayne Boulevard. The second concept would be applied to SW 211th Street between US-1 and the Homestead Extension of Florida's Turnpike (HEFT).

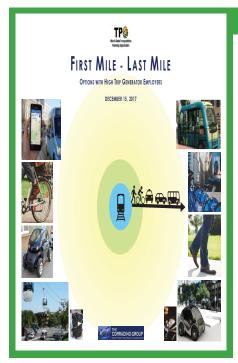


Miami River Tunnel Feasibility Study

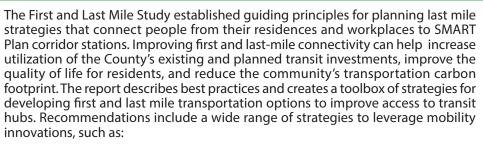
The opening of the Brickell Avenue Bridge for maritime traffic is a significant contributor to traffic in Downtown Miami. The Miami-Dade TPO commissioned this study to investigate the feasibility of implementing a tunnel under the Miami River to connect Brickell Avenue and Biscayne Boulevard in Downtown Miami.

The study objective was to identify alternatives that were technically feasible based on geometric alignment and construction methods. While the study touches upon environmental and traffic circulation elements associated with a tunnel in this area, those elements were limited in their scope.

The primary focus was to develop conceptual tunnel configurations that could be implemented, and further investigated in subsequent, more detailed studies. Both build alternatives envision a tunnel that would run from Brickell Avenue in a northeast direction, and approach Biscayne Boulevard near or under Bayfront Park.



First and Last Mile Study



- Expand modal options (e-bike, low emissions vehicles, and micro-transit circulators)
- Foster innovative business model options (car and bike share programs)
- Embrace new technology (smart-phone based info apps, electric, and autonomous vehicles)
- Infrastructure improvements (modal infrastructure, complete streets, and wayfinding)
- Transit oriented development land use planning

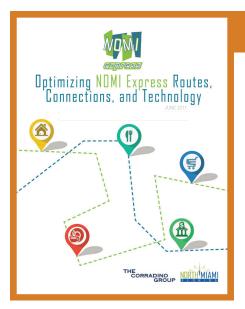
Moving forward, two SMART Plan transit stations will be selected as part of a demonstration project to receive some of the toolbox strategies from this study in an effort to improve first and last mile connections.



Impact of Future Technology in the 2045 LRTP

The Miami-Dade TPO evaluated existing and future technologies that will impact and transform Miami-Dade County's transportation planning process. Technology advancements are causing a shift in the way vehicles are manufactured, as well as the way we will plan, design, and construct our infrastructure (roads, bridges, and transit systems) to accommodate future technological advances. Traditional modes of transportation are being reinvented by technology, and, as with everything else technology-driven, the future of transportation is evolving at a rapid pace. This study offers steps necessary to incorporate these technologies in the 2045 Long Range Transportation Plan (LRTP), and seeks to address the question:

"What will our community look like in 20-25 years?"

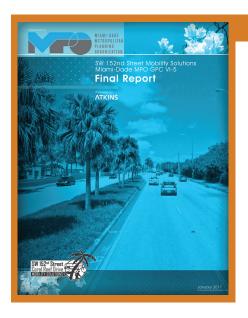


Optimizing NoMI Express Routes, Connections, and Technology

This City of North Miami study, funded through the Miami-Dade TPO's Municipal Grant Program (MGP), examined opportunities to link their four (4) route local circulator system with other transit systems through a comprehensive service and operations analysis of existing routes and technology.

The study made recommendations based on local needs, input obtained from an on-board survey administered in January/February 2017, and a review of technology options available to enhance local service. Based on this review, the NoMi Express service should invest in on-board WiFi to enhance rider experience as well as an online application for mobile devices which provides transit riders with real time information for their next bus. Existing signal priority systems intended for emergency services may also potentially be utilized by the NoMi Express to improve service speed and reliability.

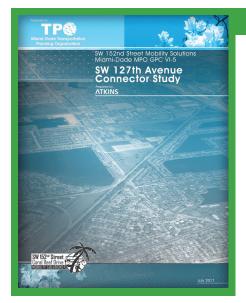
The implementation of recommended new technologies and route alternatives will ultimately increase system efficiencies, improve safety, and create new transit linkages that will result in North Miami developing a more effective transit system for its residents and visitors.



SW 152nd Street Mobility Solutions Study

This study defines key transportation issues along Coral Reef Drive between SW 162nd Avenue and SW 89th Court, just east of U.S. 1. This effort considers a range of solutions through a combination of transit, roadway, and bike/pedestrian improvements while accounting for the future of land use and development along the corridor. Through stakeholder participation and technical analyses, a recommended program of multimodal transportation improvements is presented for consideration by the Miami-Dade TPO.

The study recommendations recognize that many related regional and local corridor improvements are either being studied or already underway. Roadway widening, a program of pedestrian and bicycle improvements, intersection upgrades, and possible transit service refinements are examples of the ongoing improvements being carried out in the study corridor by MDX, FDOT District 6, and DTPW.



SW 127th Avenue Connector Study

This study's purpose was to investigate the feasibility of connecting SW 127th Avenue across the CSX Railroad corridor north of SW 144th Street (Mitchell Drive). This connection was identified from a recommendation of the previous study titled SW 152nd Street Mobility Solutions. This connection would facilitate pedestrians and bicycle circulation throughout the area, as well as provide a new corridor for transit routes.

The analysis was undertaken at a conceptual level of detail, and recommendations were made based on the findings. In total, three alternatives were evaluated – one at-grade concept, and two overpass concepts. Each was found to have advantages and disadvantages which must be carefully weighed before arriving at a preferred alternative for implementation. The construction of any elevated option would preclude an intersection at SW 144th Street, and was found to be nearly triple the cost of the at-grade option which would require the opening of a railroad grade crossing.

Safe Routes to School (SRTS) and WalkSafe Education

The Miami-Dade TPO and partner implementing agencies are committed to providing school children with a safe, secure, and efficient transportation system. In 2017, the TPO continued to develop SRTS infrastructure plans for high-priority schools to guide the use of federal funds when they becomes available. Additonally, Miami-Dade County Public Schools in cooperation with the University of Miami provide WalkSafe education for school children. This program is funded through the Miami-Dade TPO Transportation Alternatives Program (TAP) as well as Federal grants.

The following schools submitted for, and received, SRTS funding during the 2017 application cycle:

- Benjamin Franklin K-8 Center
- Charles Hadley Elementary
- Dante Fascell Elementary
- Golden Glades Elementary
- Henry Reeves Elementary
- Lake Stevens Elementary
- Mae M. Walters Elementary
- North County K-8 Center
- Norwood Elementary
- Rainbow Park Elementary



REGIONAL TRANSPORTATION



Regional Safe Streets Summit

The 2017 Safe Streets Summit was co-hosted by the Miami-Dade TPO, Broward Metropolitan Planning Organization (MPO), and Palm Beach Transportation Planning Agency (TPA). The focus was on prioritizing and implementing Complete Streets throughout Southeast Florida. Complete Streets are roadways where the entire right-of-way is planned, designed, and operated for all modes of transportation and all users, regardless of age or ability.

Over the course of two days, conference sessions were held to highlight tools and building blocks that can help designers create safe transportation facilities for all modes of transportation. Speakers included Emiko Atherton (Director of the National Complete Streets Coalition), Kate Kraft (Executive Director of America Walks), Dale Bracewell (Manager of Transportation Planning, City of Vancouver), and Rebecca Crowe (Transportation Specialist, FHWA).



BROWARD - MIAMI-DADE - PALM BEACH

Regional Travel Survey for Southeast Florida

Every five years the Southeast Florida Transportation Council (SEFTC) sponsors a regional travel survey in cooperation with FDOT, Miami-Dade TPO, Broward MPO, and Palm-Beach TPA. This survey sampled more than 2,000 households from around the Southeast Florida region to understand their daily travel behavior. Evaluating the transportation needs of residents helps state and local officials understand how to reduce congestion and improve roadways, sidewalks, bike paths, and public transportation.

The current regional travel survey was conducted over the course of a year, beginning in the fall of 2016 and concluding in the spring of 2017. Households were identified at random according to household size, auto ownership, and number of households, representing a comprehensive sampling of South Florida residents. The recruitment and trip diary surveys were administered online, with the option of paper options upon request. The second phase of survey recruitment was kicked-off with an extensive media campaign, including print, radio, and online advertising. Ten percent of participating households were asked to carry GPS devices, which recorded their travel over a twoday period. The survey was expanded using multi-dimensional balancing to account for possible sample bias.



TPO Staff presenting at the Regional Safe Streets Summit

TRANSPORTATION PARTNERS

DTPW

Miami-Dade Department of Transportation and Public Works

Overseeing transit and transportation operations in Miami-Dade County,



DTPW administers a fleet of over 800 buses, 130 Metrorail and 20 Metromover vehicles, and provides nearly 100 million passenger trips per year. DTPW was the 14th largest transit system in the country in 2017, providing service to an area of over 300 square miles. In 2017, DTPW accomplished the following:

- Made significant strides towards completion of the Dolphin Station Park-and-Ride facility at the intersection of NW 12th Street and the Florida Turnpike west of Dolphin Mall, which is scheduled to open in mid 2018.
- Tested and received delivery of the first new Metrorail vehicle since the system's inception in 1984. Continues to test new vehicles as they are assembled in Medley.
- Began operations of the Kendall Parkand-Ride facility at SW 88th Street (Kendall Drive) and SW 127th Avenue. The facility provides direct access for commuters to transfer to the Kendall Cruiser (Route 288) and provides 183 parking spaces.

PortMiami

Miami-Dade Seaport Department

PortMiami is a major economic activity center for Miami-Dade County. The facility experienced an increase of cargo



PORT/MA/M

activity by two percent in Fiscal Year 2016, and anticipates a further increase in 2017. Of the cargo arriving in Miami, 46 percent originated in the Americas (13 percent from the Caribbean, 9 percent from South America, and 24 percent from Central America and Mexico), 36 percent from the far east and Asia, and 18 percent from the rest of the world, including North America, Europe, and Africa.

FTE

Florida's Turnpike Enterprise

FTE operates the Florida Turnpike, a facility that runs over 300 miles from Wildwood, FL to Florida City. FTE operates the Homestead Extension

to the Florida Turnpike (HEFT) within Miami-Dade County, which stretches 48 miles from the Broward County Line to its southern terminus. FTE projects completed in 2017 included:

- More than \$250 million in major projects systemwide
- Widening of the HEFT (including the construction of express lanes) from SW 216th Street to north of Eureka Drive
- Continued with the advancement of major improvement projects along HEFT, which will ultimately widen the facility to include express lanes. These capacity improvements will improve service on the facility that serves the west and northern limits of the county. Overall, these projects are scheduled for completion in 2019.

FDOT

Florida Department of Transportation District Six

FDOT D6 is responsible for overseeing nearly 3,000 miles of state



highway facilities in Miami-Dade and Monroe Counties. They are responsible for the maintenance of over 450 fixed bridges and 15 movable bridges, administering facilities in two counties with 2.5 million residents. 30.8 million miles are driven on state facilities daily.

FDOT D6 continues to work in close partnership with the TPO, DTPW, and other stakeholders to advance the SMART Plan. FDOT is the project owner for two SMART Corridor PD&Es (Kendall Drive and NW 27th Avenue), and the Flagler Street BRT PD&E. These studies continue to move forward, and are anticipated to be completed in 2018.

MDAD

FLORIDA'S

TURNPIKE

Florida's Main Street

Miami-Dade Aviation Department

Miami International Airport (MIA) received 2.2 million



tons of freight, and welcomed 44.6 million passengers to South Florida in 2017. MIA offered nonstop service to 59 domestic and 107 international destinations. Airlines commenced new non-stop service to Reykjavik, Iceland, Dublin, Ireland, and Tel Aviv, Israel. MIA is the second-busiest airport for international flights in the country, and the biggest international freight airport.

MIA was ranked as the most transitaccessible airport in the United States in 2017. The rankings were developed by TransitScreen, and assessed public transit options, ride hailing wait times, and approximate walk times from airport baggage claims at the largest airports in the country. MIA was recognized as the most transit accessible airport thanks to the high level of transit service at the Miami Intermodal Center, which is served by Metrorail, Tri-Rail, Amtrak, Greyhound, and nine DTPW bus routes.

MDX

Miami-Dade Expressway Authority

MDX oversees several tolled facilities in the



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County, including SR 836 (Dolphin Expressway), SR 924 (Gratigny Expressway), SR 112, SR 874 (Don Shula Expressway), and SR 878 (Snapper Creek Expressway). MDX is in the process of implementing operational, capacity, and interchange improvements along the Dolphin Expressway (SR 836) between NW 57th Avenue (Red Road) and NW 17th Avenue. The project is anticipated to be completed in 2019.

In addition, MDX is finalizing interchange modifications at NW 87th Avenue, which includes adding a fourth westbound lane to the mainline of the highway. This project is under construction and will be finalized in 2019.

SFRTA

South Florida Regional Transportation Authority

SFRTA is an agency of the State of Florida. SFRTA is



authorized to own, operate, maintain, and manage a transit system in the tricounty area of Miami-Dade, Broward, and Palm Beach. SFRTA's purpose is to facilitate cooperation between Tri-Rail commuter rail services and the county transit operators and planning agencies to coordinate, develop, and implement a regional transportation system in South Florida.

SFRTA operates Tri-Rail commuter service along 72-miles of the South Florida Rail Corridor (SFRC) to serve 18 stations throughout Miami, Broward, and Palm Beach Counties. Tri-Rail provides more than four million passenger trips annually. Five (5) stations are located within Miami-Dade County (Golden Glades, Opa-Locka, Metrorail Transfer, Hialeah Market, and Miami Airport). SFRTA operates a free shuttle bus program to and from Tri-Rail stations with local transit operators also providing connections.

In 2017, SFRTA continued to advance efforts to establish a Downtown Miami Link service into the new MiamiCentral Station. This will provide the Tri-Rail system with a direct connection to serve the new market in Miami's rapidly developing core. In 2017, SFRTA accomplished the following:

• Advanced capacity improvements to add a second track between the Hialeah Market and the Miami Airport Tri-Rail stations to improve connectivity for passenger rail and freight service.

• The commuter bus fleet was replaced and upgraded with 26 new and two refurbished vehicles.

•Completed infrastructure improvements at the IRIS NE Connection that allow Tri-Rail trains on the SFRC to access the new MiamiCentral Station which will serve as the intermodal terminus for Tri-Rail and Brightline service. SFRTA intends to split service at the south end of its line to continue service to Miami International Airport as well as to MiamiCentral Station. Service is anticipated to begin in 2018.

CITT

Citizens Independent Transportation Trust

The CITT oversees the People's Transportation Plan, a half-penny surtax approved in 2002 to fund transportation

improvements. In 2017 the CITT approved \$375 million to fund a new Metrorail fleet. The SMART Plan also received \$3.7 million for the Beach Corridor, \$9 million for the East-West Corridor, and \$7 million for the South Dade Transitway Corridor.

















111 NW 1st Street. Suite 920 Miami, FL 33128-1916 305-375-4507 **#MiamiSMARTPlan**

The Miami-Dade TPO has set a policy that assures that no person shall on the basis of race, color, national origin, sex, age, disability, family, or religious status, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and the Florida Civil Rights Act of 1992, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination or retaliation under any program or activity. It is the policy of the Miami-Dade TPO to comply with all of the requirements of the Americans with Disabilities Act (ADA). To request this document in accessible format, please call (305) 375-1881. If you are interested in participating in the transportation planning process, please contact the Miami-Dade TPO at 305-375-4507.

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