



Miami-Dade Transportation
Planning Organization



Fiscal Priorities Committee SMART Plan Financial Report



MIAMI-DADE
SMART
PLAN

Executive Summary

The 2020 Fiscal Year (State Fiscal Year July 2019 through June 2020) has been a year of action and progress for the Miami-Dade Transportation Planning Organization (TPO) on the SMART Plan.

North Corridor

- *October 2019 – Locally Preferred Alternative (LPA) for North Corridor updated based on further analysis by the Florida Department of Transportation (FDOT) – adopted by TPO.*
- *April 2020 – Miami-Dade County Department of Transportation and Public Works (DTPW) presented updates on technology options for North Corridor that are accepted by the TPO Board. Subsequently, the County issued a procurement process for the North Corridor that should receive proposals in 2021.*

Beach Corridor

- *January 2020 – Recommended Locally Preferred Alternative for Beach Corridor presented by DTPW – adopted by the TPO. County received one proposal in March 2020 for the Trunkline of the Beach Corridor that is under evaluation as of June 2020.*

East-West Corridor

- *April 2020 – Recommended Locally Preferred Alternative for East-West Corridor presented by DTPW – TPO requested additional follow up analysis by DTPW.*

Fiscal Priorities Committee

- *The SMART Finance Plan has incorporated all of these changes into the model. Model updates are provided periodically to the Fiscal Priorities Committee to assist in evaluating the SMART Plan corridors for financial feasibility.*

On July 10, 2020 the Fiscal Priorities Committee called a special meeting to conduct a SMART Plan financial discussion. The PowerPoint presentation for this discussion is included in the appendix of this report. The report that follows documents the Fiscal Priorities Committee discussions during Fiscal Year 2019-20 including the committee meeting on July 10, 2020.

The key assumptions for the Finance Plan for the SMART Plan are outlined in Chapters 2 (SMART Plan Funding Allocation and Assumptions), 4 (SMART Plan Corridors Presented to TPO and Under Analysis) and 5 (Finance Plan Updates During Fiscal Year 2019-20). The combined TPO and Consultant Team partner on discussing all the major assumptions and gain input from the County

and other partners as appropriate to update and validate the assumptions.

Major finance plan updates were completed this fiscal year as described in Chapter 5. These included: Carry over from the 2018-19 period added to revenues; Updated Miami-Dade County Office of Management and Budget (OMB) Forecast; Revised North Corridor Costs; Beach Corridor LPA; North Corridor DTPW Alternatives and Preliminary East-West Corridor options; and Fiscal Priorities Committee requested an updated on the funding for all corridors.

Based on the data and assumptions outlined in this report, it is feasible to deliver the SMART Plan as presented. This includes the following SMART Plan corridors:

- South Corridor – Bus Rapid Transit for South Transitway
- North Corridor – Elevated Rubber Tire Rapid Transit along 27 Avenue
- Beach Corridor – Elevated Rubber Tire Transit for the Trunkline from downtown to Miami Beach along MacArthur Causeway
- East-West Corridor – Bus Rapid Transit for the western segment: Tamiami Station to the Turnpike to SR-836 to downtown and Miami Intermodal Center (MIC)
- Kendall Corridor – Bus Rapid Transit east and west of Florida’s Turnpike along Kendall Drive

These results are based on the current assumptions and revenues. Changes can and will occur on a periodic basis related to funding, costs, schedules, and related major assumptions. For example, the Finance Plan could experience challenges such as:

- Local funding allocated for the SMART Plan is reduced due to impacts of COVID-19 which is likely to occur. The amounts are not yet known as the pandemic remains active as of June 2020.
- Partnership funding from the Federal or state governments are less than anticipated. Cost of the corridors are higher than currently estimated for one or more corridors. Please note the Finance Plan assumes an extra 15% contingency for capital costs and 12.5% for operating costs.
- The addition of the Northeast Corridor at the levels proposed by Brightline would exceed the available remaining funding in the Finance Plan.
- Advancing corridors to much earlier beginning dates would be cost prohibitive.
- Finance cost to advance capital costs become cost prohibitive or unavailable.

The TPO staff and Consultant Team will continually update the Finance Plan for the SMART Plan as new data and assumptions are provided for timely decision-making by the TPO and its partners.



Table of Contents

01

**Introduction
(p.1)**

02

**SMART Plan
Funding
Allocation and
Assumptions
(p.5)**

03

**Project
Delivery (p.8)**

04

**SMART Plan
Corridors
Presented to
TPO and Under
Analysis (p.14)**

05

**Finance Plan
Updates During
Fiscal Year
2019-20 (p.21)**

06

**Fiscal Year
2019-20
Summary (p.25)**

07

**Appendix:
Fiscal Priorities
Committee July 10,
2020 PowerPoint
Presentation**

01

Introduction

01 Introduction

In 2002, Miami-Dade County voters approved a one-half percent local surtax with the purpose of improving, among other things, rapid transit corridors within the county through the People’s Transportation Plan (PTP). While the PTP is a locally funded initiative administered by the Citizens Independent Transportation Trust (CITT), the Miami-Dade Transportation Planning Organization (TPO) remains committed to assisting in the development of these rapid transit corridors today.

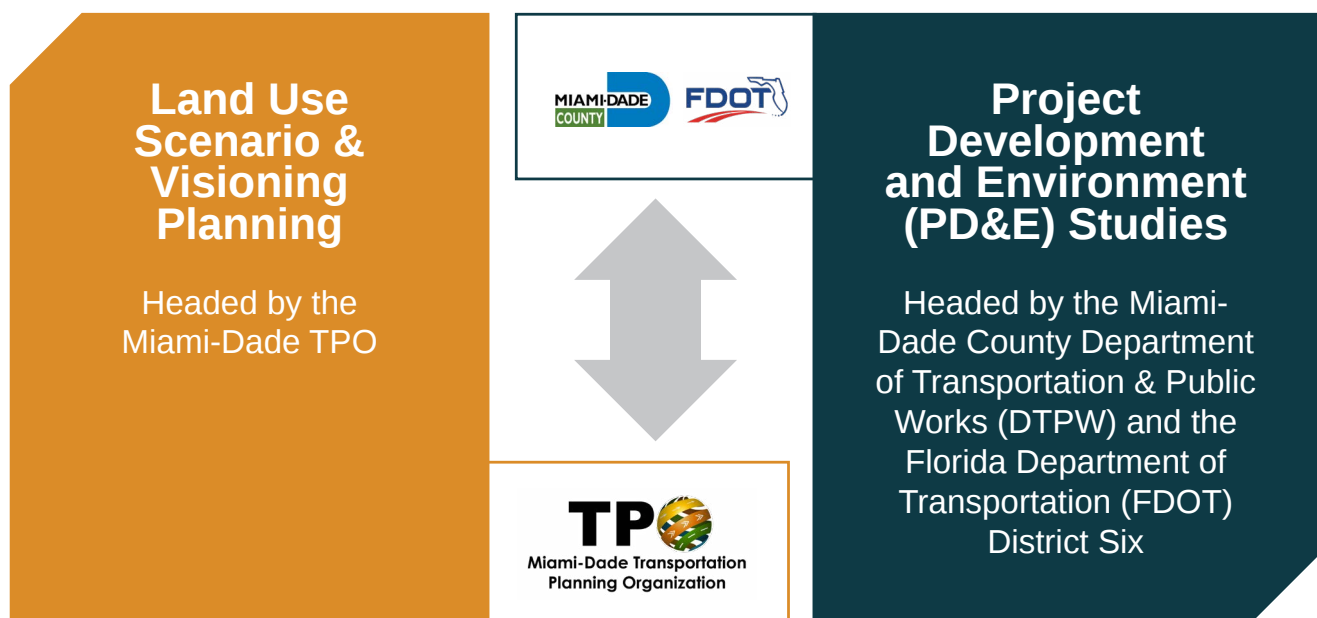
In fact, on February 16, 2016, the TPO Governing Board unanimously approved a policy to set as “highest priority” the advancement of rapid transit corridors and transit supportive projects for the county. Then, on April 21, 2016, the Miami-Dade

TPO Governing Board officially adopted and endorsed the proposed Strategic Miami Area Rapid Transit (SMART) Plan.

The SMART Plan intends to advance six of the PTP’s rapid transit corridors, along with a network system of Bus Express Rapid Transit (BERT) service, in order to implement mass transit projects in Miami-Dade County. To ensure the SMART Plan moves forward, the TPO Governing Board directed the Miami-Dade TPO Executive Director to work with the TPO Fiscal Priorities Committee (FPC) to determine the costs and potential sources of funding for Project Development and Environment (PD&E) studies for the projects, and to also take all necessary steps to implement the SMART Plan.

TWO MAJOR ACTIVITIES MOVING THE SMART PLAN FORWARD

To ensure the community is included in the planning and visioning process to select the best technology and highest, best land uses along each corridor, there are two separate major activities occurring for each corridor as follows:





NEW SERVICE OPENINGS, CONSTRUCTION DATES, & PROJECT MILESTONES

The SMART Plan

- Existing Metrorail
- Existing Tri-Rail
- Existing Rail
- Miami Intermodal Center
- SMART/BERT Hub

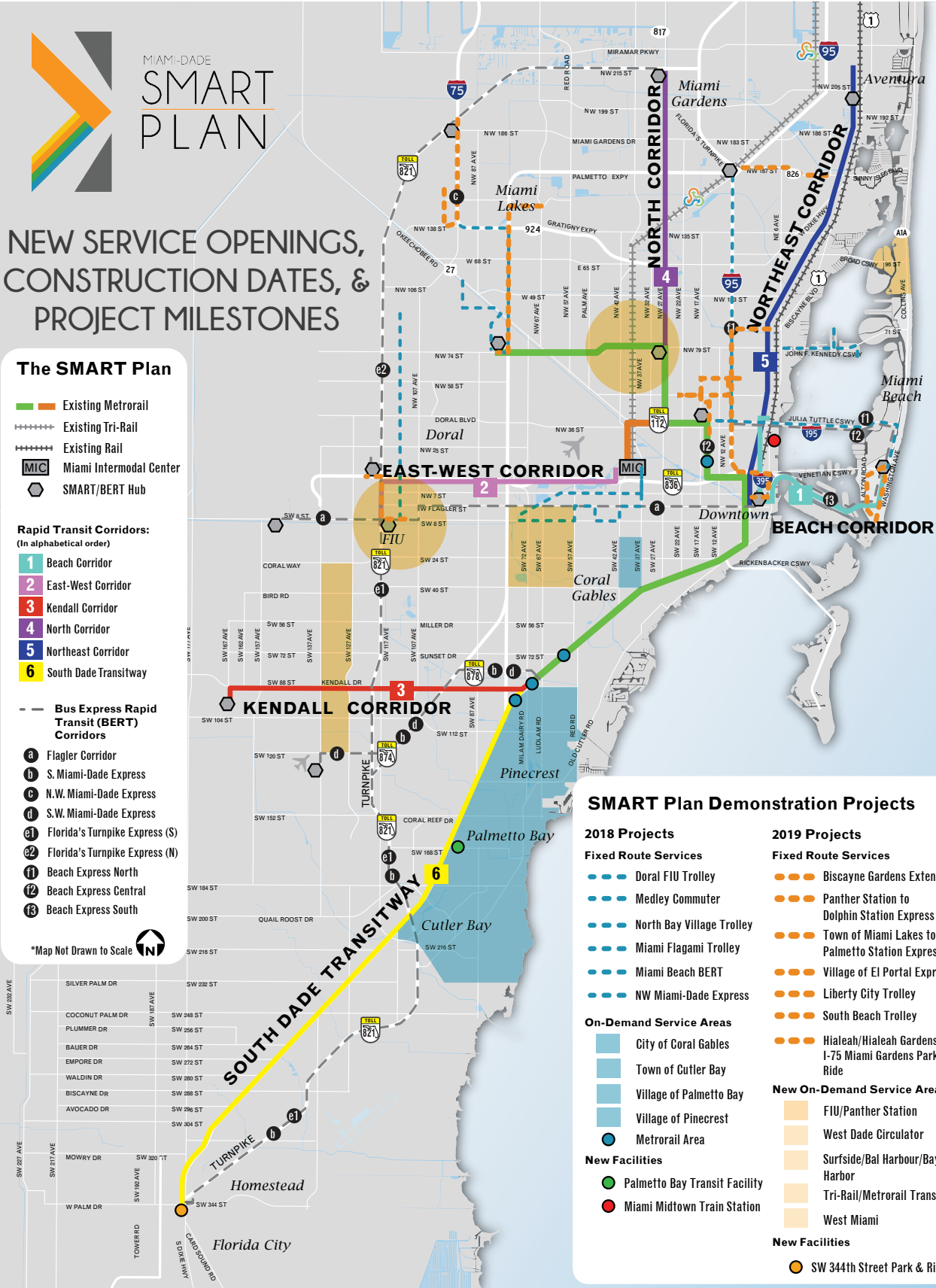
Rapid Transit Corridors: (In alphabetical order)

- Beach Corridor
- East-West Corridor
- Kendall Corridor
- North Corridor
- Northeast Corridor
- South Dade Transitway

Bus Express Rapid Transit (BERT) Corridors

- Flagler Corridor
- S. Miami-Dade Express
- N.W. Miami-Dade Express
- S.W. Miami-Dade Express
- Florida's Turnpike Express (S)
- Florida's Turnpike Express (N)
- Beach Express North
- Beach Express Central
- Beach Express South

*Map Not Drawn to Scale



SMART Plan Demonstration Projects

2018 Projects

Fixed Route Services

- Doral FIU Trolley
- Medley Commuter
- North Bay Village Trolley
- Miami Flagami Trolley
- Miami Beach BERT
- NW Miami-Dade Express

On-Demand Service Areas

- City of Coral Gables
- Town of Cutler Bay
- Village of Palmetto Bay
- Village of Pinecrest
- Metrorail Area

New Facilities

- Palmetto Bay Transit Facility
- Miami Midtown Train Station

2019 Projects

Fixed Route Services

- Biscayne Gardens Extension
- Panther Station to Dolphin Station Express
- Town of Miami Lakes to Palmetto Station Express
- Village of El Portal Express
- Liberty City Trolley
- South Beach Trolley

New On-Demand Service Areas

- FIU/Panther Station
- West Dade Circulator
- Surfside/Bal Harbour/Bay Harbor
- Tri-Rail/Metrorail Transfer
- West Miami

New Facilities

- SW 344th Street Park & Ride

STATUS OF SMART PLAN CORRIDORS

South Corridor

On August 30, 2018, the TPO Governing Board voted on the Locally Preferred Alternative (LPA) for the South Dade TransitWay corridor and selected Bus Rapid Transit (BRT) as the most feasible mode of transportation for this corridor. Once completed, BRT will provide rail-like travel time, iconic stations, level boarding through all doors, and pre-paid fares for speedy access. BRT will also provide enhanced safety features and other upgrades along dedicated lanes with multi-layered service lines on the TransitWay. BRT is scheduled to begin operation by 2022. The South Corridor has received recommended grant funding of \$100 million from FDOT and \$100 million from the Federal Transit Administration (FTA) in 2020 to complete the funding of the South Corridor.

North Corridor

On December 6, 2018, the Miami-Dade TPO selected an elevated fixed guideway transit system for the LPA for the North Corridor. In January 2019, DTPW sent a letter to FDOT requesting that the department evaluate alternative transit technologies including Maglev, Monorail and Automated Guideway Transit. On October 31, 2019, the TPO Governing Board selected elevated heavy rail transit as the LPA for the North Corridor. On April 23, 2020, the TPO Governing Board accepted a report by DTPW on alternative transit technologies for NW 27 Avenue. The County has initiated a procurement process that should conclude in 2021 to see if transit technologies (other than Heavy Rail) are viable for the corridor.

Beach Corridor

On January 30, 2020, the TPO Governing Board selected the LPA as elevated rubber tire technology for the Beach Corridor Trunkline; extension of the Metromover along Miami Avenue to NW 41st Street for the Beach Corridor Design District extension; and dedicated lanes for bus/trolley along Washington Avenue for the Beach

Corridor Convention Center extension. The County received an unsolicited proposal for the Trunkline and subsequently advertised for Request for Proposals for the Trunkline with one proposal being received in March 2020 for Monorail Technology that is currently in the evaluation stage of the procurement as of June 2020.

East-West Corridor

The Tier II evaluation is in progress and has narrowed the alternatives down to BRT and Heavy Rail Transit (HRT) for final analysis. The final recommendation is expected to be presented to the TPO for a recommended LPA in the early fall of 2020. The DTPW provided a preliminary discussion for the TPO Board focused on BRT in April 2020. The first hub of the East-West Corridor, the Dolphin Station Park-and-Ride Transit Terminal Facility, located off NW 12 Street just west of Florida's Turnpike, opened for service on March 2, 2020. The Panther Station, which will be located at Florida International University's Modesto Maidique Campus, and the Tamiami Station, which will be located at the corner of SW 8 Street and 147 Avenue, will also service the East-West Corridor.

Kendall Corridor

This study is focusing on improving Kendall Drive through the implementation of a cost-effective, high-ridership, new premium transit service supporting pedestrian and bicycle facilities. Premium transit modes to be evaluated include BRT and HRT (elevated, hybrid elevated and at-grade) on exclusive lanes. The study will result in a presentation to the TPO likely in late 2020 or early 2021 of the recommended LPA.

Northeast Corridor

The Northeast Corridor proposes reintroducing passenger service along the Florida East Coast (FEC) Railway corridor between Downtown

Miami and Aventura for the Northeast Corridor. FDOT has completed Phases I and II of this study which is about to enter the Federal environmental process. In the interim, the South Florida Regional Transportation Authority (SFRTA) and Florida East Coast Industries (FECI)/Brightline negotiated Tri-Rail Commuter Rail running from the South Florida Rail Corridor (used by Tri-Rail) onto a small section of the FEC line and ending at the new Downtown Miami Central Station. It is anticipated this service will begin later in 2020 or 2021.

Miami-Dade County negotiated with FECI/Brightline for the construction of the Aventura Station and for Brightline to provide a stop at the Aventura Station. In June 2020, Brightline provided a proposal to provide commuter rail service on the FEC Railway corridor from Aventura to the Downtown Miami Central Station with up to five stations that is in negotiations as of June 2020. It should also be noted that the SMART Plan includes additional elements underway or in service as outlined below:

SMART DEMONSTRATION PROJECTS

Demonstration Projects – 2018

In Service:

- City of Miami Flagami Trolley – **July 2018**
- Doral FIU Trolley Service – **September 2018**
- Coral Gables Flex Service – **January 2019**
- Pinecrest Transitway Circulator – **January 2019**
- North Bay Village SMART Feeder Route – **July 2019**
- Palmetto Bay Transit Service – **July 2019**
- Palmetto Bay Transit Facility – **July 2019**

Scheduled:

- Medley Central Commuter Route – **Fall 2020**
- Cutler Bay Express Service – **Fall 2020**
- Area On-Demand Services:
 - Civic Center Metrorail Station – **Fall 2020**
 - South Miami Metrorail Station – **Fall 2020**
 - Dadeland North Metrorail Station – **Fall 2020**
 - Dadeland South Metrorail Station – **Fall 2020**
- NE Corridor Demonstration Station (Capital Funding) – **FY 2021**
- NE Corridor Demonstration Train Service – **FY 2022**

Discontinued via Agency Consensus:

- Miami Shores SMART Feeder Route

Demonstration Projects – 2019

- Biscayne Gardens Transit Extension
- Tri-Rail/Metrorail Transfer Station On-Demand Service
- West Dade Circulator On-Demand Service
- SW 344th Park and Ride Station (Construction)
- Panther Station to Dolphin Station Express Service
- Town of Miami Lakes Express Service to Palmetto Metrorail Station
- Surfside/Bal Harbour/Bay Harbor On-Demand Service
- Village of El Portal to Brightline Express Service
- FIU/Panther Station On-Demand Service
- City of Hialeah/Hialeah Gardens to I-75 Miami Gardens Park & Ride
- City of Miami Liberty City Trolley Service
- City of Miami Beach South Beach Trolley Service
- West Miami On-Demand Service

SERVICE OPENINGS

Bus Express Rapid Transit (BERT)

- NW Miami-Dade Express & Station – **Began November 2019**
- South Miami-Dade Express – **2020**
- Miami Beach North Express – **2023**
- Miami Beach Central Express – **2023**
- Miami Beach South Express – **2023**
- SW Miami-Dade Express – **2023**
- Turnpike South Express – **TBD**
- Turnpike North Express – **TBD**

Express Bus Service

- East-West Phase I Express Bus Line C – **Began operating March 2020**
- East-West Phase I Express Bus Line A – **2021**
- East-West Phase I Express Bus Line B – **2022**

Facilities

- Miami Gardens Drive Park & Ride – **Opened April 2019**
- Golden Glades Multimodal Transportation Facility – **Fall 2021**

PROJECT MILESTONES

LPA Selection Dates

- South Dade Transitway – **August 2018**
- North Corridor – **December 2018/October 2019**
- Beach Corridor – **January 2020**
- East-West Corridor – **Fall 2020**
- Flagler BERT – **Fall 2020**
- Kendall Corridor – **Fall 2020**

Station Location Selection

- NE Corridor – Negotiations with SFRTA, FECI & DTPW

CONSTRUCTION DATES

- South Dade Transitway – **Begin in 2020**
- Miami Beach North Express – **To be completed in 2022**
- Tamiami Station – **To be completed in 2021**
- Panther Station – **To be completed in 2022**

02

SMART Plan Funding Allocation and Assumptions

02 SMART Plan Funding Allocation and Assumptions

Local Funding

The SMART Plan has a dedicated local funding allocation that is comprised of four major sources. These sources are briefly outlined below and are updated by the Miami-Dade County Office of Management and Budget (OMB) at least twice each year. It is expected the next update will be in July 2020 for the Miami-Dade Mayor's recommended budget for fiscal year 2020-21.

TPO URBAN FUNDS

The Federal Highway (FHWA) Surface Transportation Block Grant Program (STBG) contains what is commonly called "Urban Funds" that are allocated to urbanized areas over 200,000 and to State annually based on formulas in law. As prescribed in Federal law (see [23 U.S.C. 133 (d)]), the State, which would correspond to FDOT in Florida, then sub-allocates the "Urban Funds" to each Metropolitan Planning Organization (MPO) in Florida, including the Miami-Dade TPO primarily based on population. These funds are prioritized by the TPO under Federal law and can be flexed to public transit capital uses. The TPO, in 2017, prioritized \$900 million in future dollars of FHWA "Urban Funds" to be flexed over a 30-year period to the Miami-Dade County Department of Transportation and Public Works (DTPW) for transit capital projects. The County in turn plans to use these funds on projects previously planned to be funded from People's Transportation Plan (PTP) funds, thus freeing up PTP funds in the same amount for future "local funds" for the SMART Plan. The amount has been updated to \$976 million as of January 2020.

PTP SMART PLAN ALLOCATION

In 2002, Miami-Dade County voters approved a one-half percent local surtax with the purpose

of improving, among other things, rapid transit corridors within the county through what is commonly termed the People's Transportation Plan or PTP. In 2017, the County Mayor recommended, and County Commission directed over \$6,125 million of current and future PTP funds over a 40-year period for the SMART Plan. This amount is updated routinely and as of January 2020 was \$6,126 million in future dollars (\$2,296 million net present value) over the updated 40-year period. Please note this estimate is prior to the COVID-19 impacts that will reduce the amount in the early years of the allocation. An updated estimate is normally provided as part of the Miami-Dade Mayor's recommended budget in July 2020.

SMART PLAN TIID

In 2018, the County Commission and County Mayor created a new ordinance for the SMART Plan Transportation Infrastructure Improvement District (TIID), which is comprised of the geographic area 1/2 mile to each side of five of the SMART Plan rapid transit corridors and one-mile to each side of the East-West Corridor rapid transit corridor. Further, the property taxes that are generated by the growth in property values greater than 5.5% annually will be deposited into the SMART Plan TIID trust fund for the SMART Plan. The County estimates this will generate approximately \$1,831 million in future dollars (\$847 million net present value) for the SMART Plan and the estimate had remained constant as of January 2020. Please note this estimate is prior to the COVID-19 impacts which will likely slow down development and reduce the growth in property values that will impact the expected revenues in the early years of the 40-year forecast period. An updated estimate is normally provided as part of the Miami-Dade Mayor's recommended budget in July 2020.

JOINT DEVELOPMENT REVENUES FROM THE TRANSIT OPERATING FUND

The County Commission has created a series of “Rapid Transit Zones” or RTZ that promote higher density for properties generally within a half-mile to a mile of each Metrorail station. Projects are already under development at several of the Metrorail Stations including Douglas Station and Coconut Grove Station, and request for proposals have been issued for other stations such as Vizcaya. The developers will pay a “ground lease” for the use of the land adjacent to the Metrorail station that is owned by the County such as the park-and-ride sites. The County estimates this will generate approximately \$131 million in future dollars (\$59 million net present value) over the next forty years for the SMART Plan.

These overall local revenue sources total \$9,064 million (\$3,733 net present value) for the SMART Plan over a 40-year period. It is anticipated that the Local Funds will cover between 25% and 40% of the capital cost and 100% of the operations and maintenance and state of good repair costs on the SMART Plan rapid transit corridors.

SMART Plan Matching Funds from Federal and State Government

The assumption for the SMART Plan rapid transit corridors is:

Miami-Dade County will pursue Federal and State matching funds for capital costs for each SMART Plan corridor.

Federal Funding

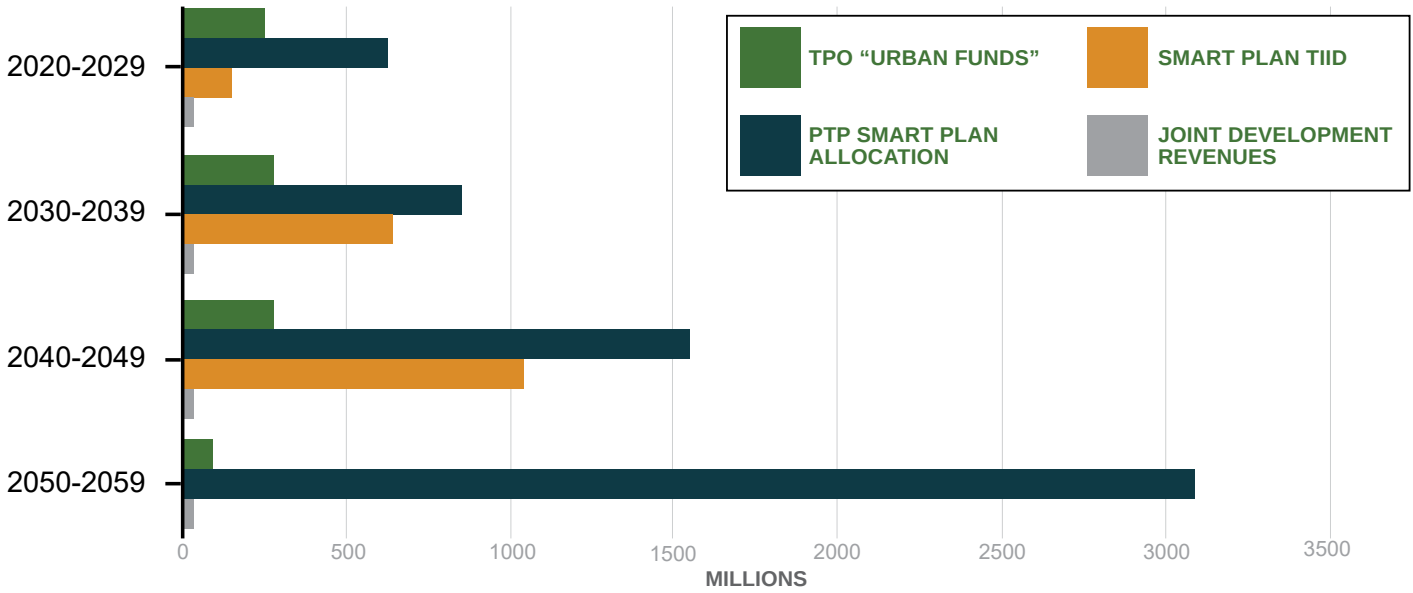
The Federal Transit Administration (FTA) has transit capital grant programs commonly called “New Starts” or “Small Starts” for major rapid transit projects. There is an extensive development and review process before funding projects that will be recommended to Congress for consideration of a Federal appropriation. These funds are highly competitive and the match percentage varies by corridor based on the final recommendation from FTA. The TPO assumes between 30% and 50% Federal funding share for the capital costs for each SMART Plan rapid transit corridor. The South Corridor was awarded the expected \$100 million grant from the FTA in June 2020, as an example, which funds 33.3% of the capital costs for the rapid transit project.

State Funding

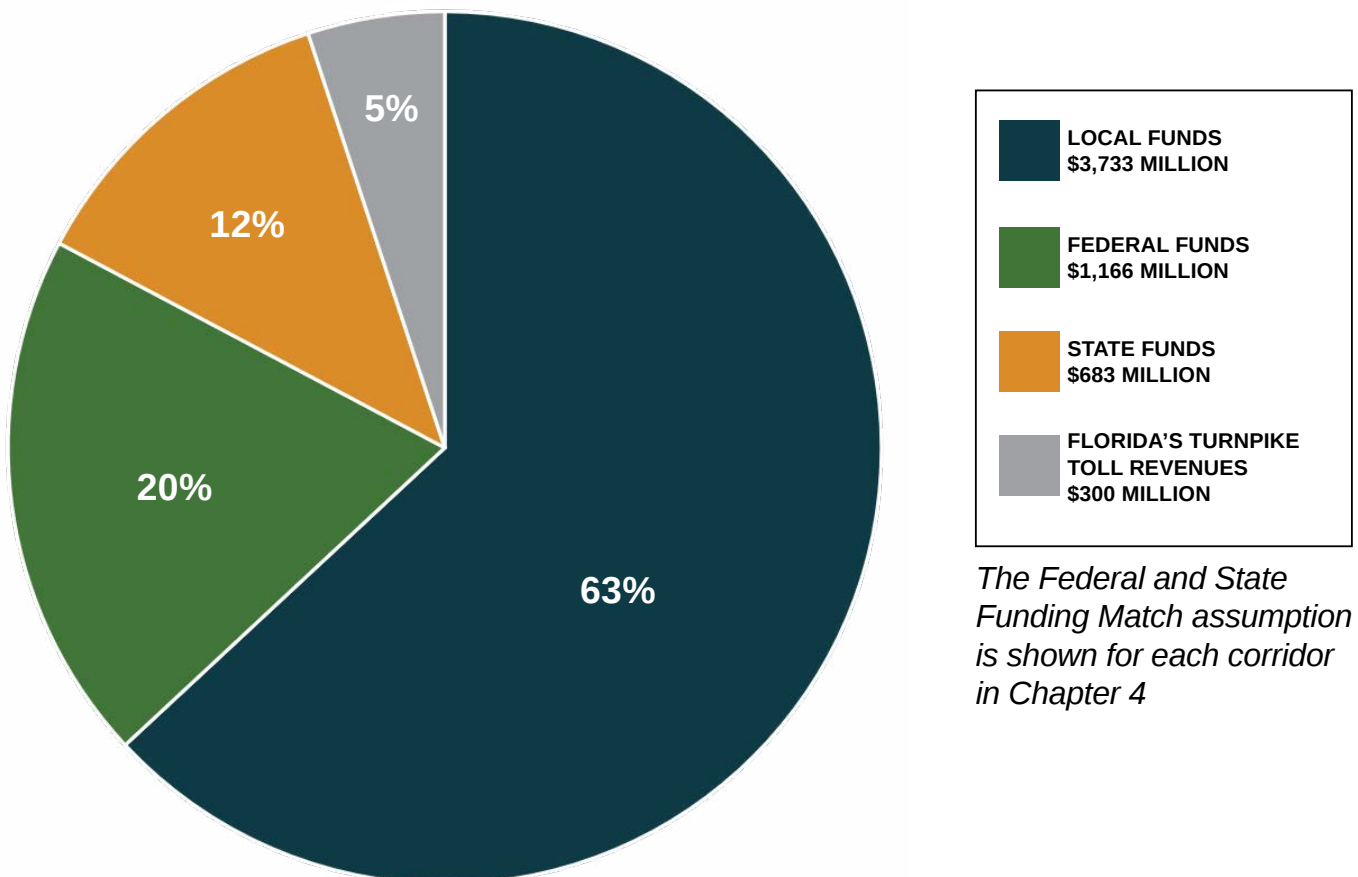
State law provides FDOT may fund 50% of the “non-federal” share of capital cost for rapid transit projects. FDOT has dedicated funding programs for rapid transit projects in the Five-Year Work Program and the 20-Year Long Range Transportation Plan, both of which are developed in a partnership between the TPO, FDOT and local governments. The TPO assumes State funding will represent 50% of the non-federal share for the capital costs for each SMART Plan corridor. The South Corridor was granted \$100 million from FDOT in the Department’s Five-Year Work Program for the fiscal year 2019-20, as an example, which funds 33.3% of the capital costs for the rapid transit project.



Dolphin Station Ribbon Cutting



REVENUES



The Federal and State Funding Match assumption is shown for each corridor in Chapter 4

03

Project Delivery

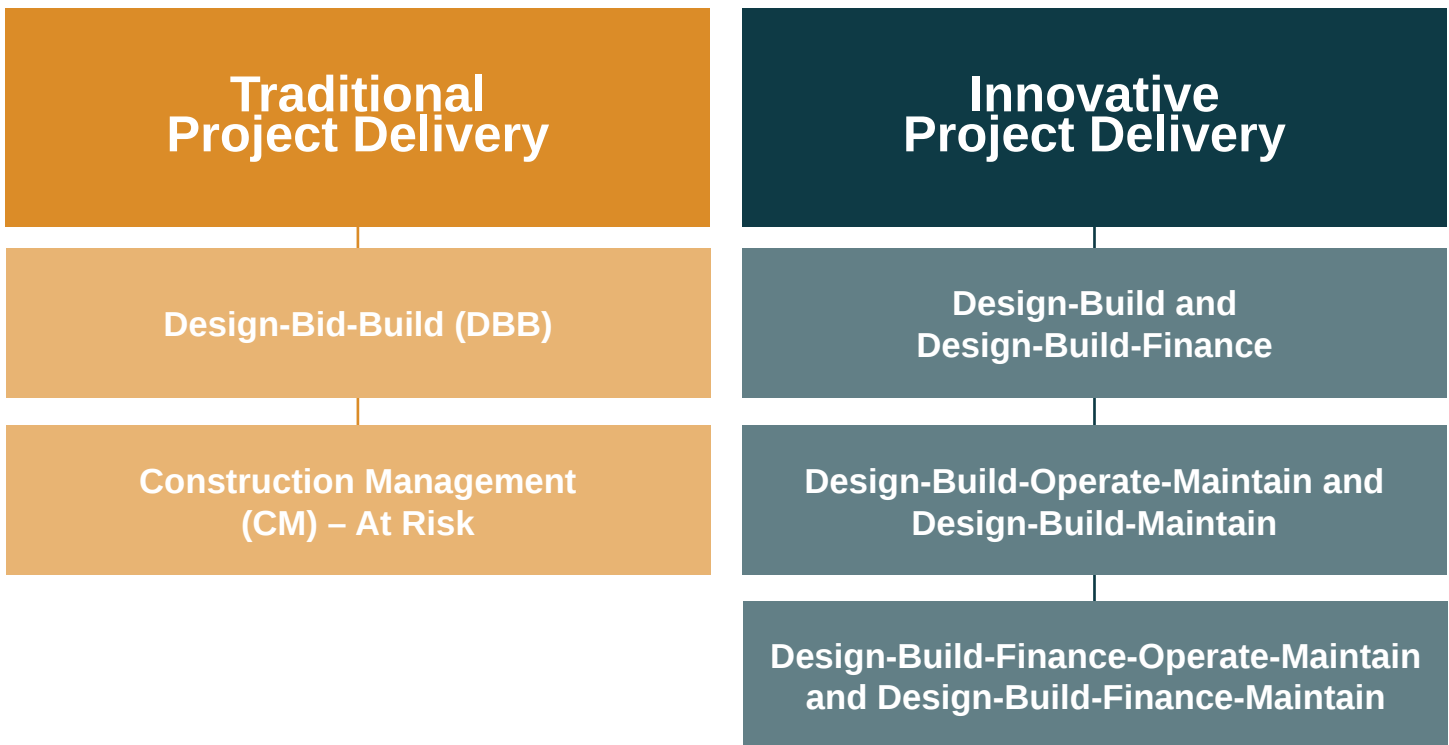
03 Project Delivery

Project delivery is defined as the process used to move a project from concept to construction and implementation. Typically, project delivery occurs after environmental review and approvals are received. It also includes design and construction and may also involve funding and financing. The operation and maintenance of a project can also be included in the project delivery approach based on project type and needs. Key considerations in the selection of a project delivery approach can include but are not limited to size and complexity of the project, risk transfer, delivery time demands, funding and financing needs, and long-term operation and maintenance of the project. These project delivery options should be evaluated for each SMART Plan corridor to provide the most

cost effective approach. The vast majority of public projects are delivered under traditional project delivery methods because these are well understood by both the public owner and private industry. The consideration of innovative project delivery takes careful thought and analysis that normally includes outside experts to assist the public owner in the evaluation of the most effective and cost efficient project delivery approach.

Innovative project delivery can be effective in advancing much needed large scale transit projects when the value for the money is most efficient. Detailed on the following pages are multiple approaches that have been and can be utilized by a project owner to deliver a project.

TRANSIT PROJECT DELIVERY OPTIONS



Traditional Project Delivery

Design-Bid-Build (DBB)

The project owner develops 100 percent design and specifications, competitively bids this in the open market and normally selects the low-price bid. The selected contractor builds the project in accordance with the owner developed design and specifications. Project owner approves final construction and then operates and maintains the completed project. The contractor is paid monthly progress estimates.

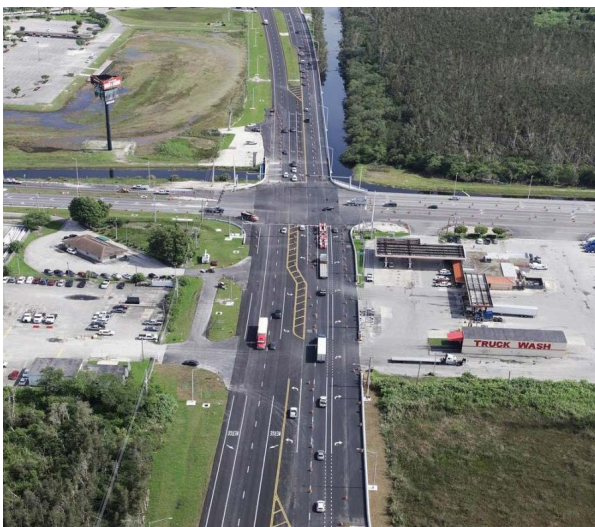
Pros:

- ✓ Project owner controls the complete design and specifications
- ✓ Lowest price for the project
- ✓ Simple and most common approach used in the market, so contractors understand it
- ✓ Normally a higher level of competition

Cons:

- ✗ Any changes in the field in design or specifications such as quantities, conditions or errors are the responsibility of the project owner and increases bid price in the range of 10% plus or minus.
- ✗ Time to design, bid, and build collectively can be a slower method for project delivery.
- ✗ Low bid price selection may not consider quality of the contractor team selected.
- ✗ Build quality is warranted for a short period – typically one to three years, may be longer for special items like rolling stock and technology for manufacture warranties. Project owner takes the full risk of the cost of operations and maintenance.

DBB Project Example:



KROME AVENUE CONSTRUCTION PROJECTS



NW 25TH STREET VIADUCT

Construction Manager At Risk (CMAR)

The project owner develops conceptual design and selects a construction manager or sometimes termed contract manager (CM) based on qualifications. During the design stage, at 50 percent or higher design plans, the contract manager will propose a Guaranteed Maximum Price (GMP) for major packages of work or the entire project, and will provide the subcontracts under their contract and the GMP. The project owner, design team and contract manager collectively develop the design and specifications for the most effective and efficient project. The contract manager bids out packages of work such as structures, roadway/paving, rolling stock, landscaping and packages are subject to review by the project owner. The contract manager implements the build packages. Project owner approves the construction and then operates and maintains the completed project. The contract manager may be paid based on milestones or paid monthly progress estimates.

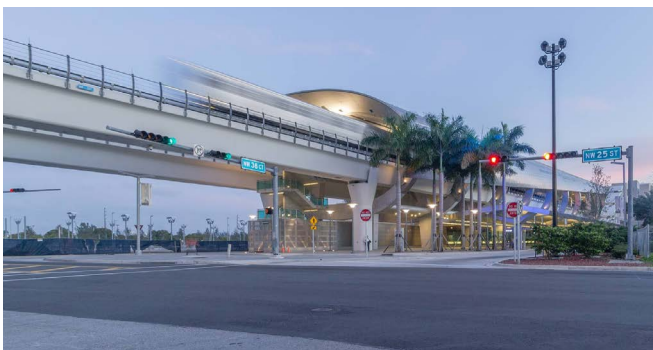
Pros:

- ✓ Project owner controls the complete design and specifications
- ✓ Project owner, design team and contract manager form a team to develop most effective and efficient project. Including the contractor during the design phase can help:
 - ✓ Reduce project cost and phase the project to match funding availability
 - ✓ Identify risk early and address these during design
 - ✓ Sequence project to be most time efficient
- ✓ Commonly used by local governments and private developers so contractors understand it
- ✓ Normally a higher level of competition

Cons:

- ✗ Negotiating price with only one contractor can lead to price “surprises” as GMP is negotiated for major packages and/or the entire project.
- ✗ Without strong project owner oversight the time to develop the design and build collectively can be a slower method for project delivery.
- ✗ Build quality is warranted for a short period – typically one to three years - may be longer for special items like rolling stock and technology for manufacture warranties. Project owner takes the full risk of the cost of operations and maintenance.

CMAR Project Example:



MIAMI INTERMODAL CENTER

Innovative Project Delivery

Design-Build and Design-Build-Finance

The project owner develops conceptual design between 30 and 60 percent plans and performance specifications, then selects a design-build team based on a combination of qualifications, project approach and price to complete the design and build the project. The project owner signs off on design “packages” generally at 60, 90 and 100 percent plans developed by the design-build team. Once project owner signs off on the design plans, the design-build team implements the construction of the project. Project owner approves the construction and then operates and maintains the completed project. The design-build team is paid monthly progress estimates. Note that you can add a “finance element” where part of payments to the design-build team are made after completion of the work which is commonly termed design-build-finance.

Pros:

- ✓ Combination of quality and price used for selection of design-build team, who assume the responsibility for the design and construction of the project. Tends to limit price changes.
- ✓ Generally, a faster delivery method where elements of design and construction are concurrent.
- ✓ Less common approach, understood by medium/large design and contractor firms.
- ✓ Normally a higher level of competition.

Cons:

- ✗ Less project owner control, can approve design packages. The more “control” over these approvals leads to more risk transfer back to the project owner.
- ✗ Project owner must be comfortable with project innovation, risk transfer and the development of performance specifications to be successful.
- ✗ Build quality is warranted for a short period – typically one to three years - may be longer for special items like rolling stock and technology for manufacture warranties. Project owner takes the full risk of the cost of operations and maintenance.

Design-Build and Design-Build-Finance Project Examples:



I-395/SR 836/I-95 DESIGN-BUILD PROJECT



95 EXPRESS DESIGN-BUILD-FINANCE

Design-Build-Operate-Maintain and Design-Build-Maintain

The project owner develops conceptual design between 30% and 60% design and performance specifications to build, operate and maintain the project, then selects a design-build-operate-maintain (DBOM) team based on a combination of qualifications, project approach and price. The DBOM team operates the project for an extended period such as 20 or 30 years. The project owner signs off on design packages generally at 60%, 90% and 100% plans developed by the DBOM team. Once the project owner signs off on the design plans, the DBOM team implements the construction of the project. Once the project owner signs off on the construction of the project, the DBOM team operates and maintains the project. Some projects have kept the operations with the project owner and the design-build-maintain (DBM) team was responsible for maintenance of the project, but not operations. The project owner takes care of any financing for the capital costs. The DBOM team is normally paid at completion steps such as design complete, major phases of construction complete and then such as quarterly each year of operations.

Pros:

- ✓ Combination of quality and price used for selection of DBOM team, who assume the responsibility for the design, construction, operations and maintenance of the project. Tends to limit price changes for an extended period such as 20 or 30 years.
- ✓ Ability to advance projects through the DBOM team where the project owner may have short term funding and debt issuance limitations.
- ✓ Long-term warranty on the entire project for the 20 to 30-year term of the contract and DBOM team takes the risk of the cost of operations and maintenance.

Cons:

- ✗ Much less project owner control. Can approve design packages, and elements of construction, operation and maintenance depending on the structure of the project contract. Critical to select a solid DBOM partner and to have solid performance specifications in the project contract that allow the project owner to monitor and apply appropriate penalties for non-performance.
- ✗ Project owner must be comfortable with project innovation, risk transfer, life-cycle cost, and the development of performance specifications to be successful.
- ✗ Generally limited to a few large projects so only large designer, contractor, operator firms which can limit competition.

DBOM and DBM Project Examples:



HUDSON-BERGEN LINE – NJ TRANSIT



TREN-URBANO - SAN JUAN, PUERTO RICO

Design-Build-Finance-Operate-Maintain and Design-Build-Finance-Maintain

The project owner develops conceptual design between 30% and 60% design and performance specifications for build, operate and maintain for the project. They then select a design-build-finance-operate-maintain (DBFOM) team based on a combination of qualifications, project approach, price and finance plan. The DBFOM team will operate and maintain the project for an extended period as defined in a master agreement such as 30 years. The project owner signs off on design packages generally at 60%, 90% and 100% plans developed by the DBFOM team. Once the project owner signs off on the design plans, the DBFOM team implements the construction of the project. Once the project owner signs off on the construction of the project, the DBFOM team operates and maintains the project. Some projects have kept the operations with the project owner and the design-build-finance-maintain (DBFM) team was responsible for maintenance of the project, but not operations. The DBFOM team takes care of financing for the capital costs. The DBFOM Team is normally paid at milestone payments (not always required) during construction and then annual availability payments (for transit projects) during the operating period (may be paid quarterly each year).

Pros:

- ✓ Combination of quality, price, and financing used for selection of DBFOM team, who assume the responsibility for the design, finance, construction, operations and maintenance of the project. Tends to limit price changes for an extended period such as 30 years.
- ✓ Ability to advance projects where the project owner may have short-term limits on debt issuance with the DBFOM team advancing the funds to be paid later by the project owner.
- ✓ Generally faster/quality delivery approach where elements of design and construction are concurrent, and operations/maintenance are considered during the design and construction.
- ✓ Long-term warranty on the entire project for the 30-year term of the contract with the DBFOM team taking the risk of the cost of operations and maintenance.

Cons:

- ✗ Much less project owner control. Can approve design packages, and elements of construction, operation and maintenance depending on the structure of the project contract. Critical to select a solid DBFOM partner and to have solid performance specifications in the project contract that allow the project owner to monitor and apply appropriate penalties for non-performance.
- ✗ Project owner must be comfortable with project innovation, risk transfer, life-cycle cost, value for money and the development of performance specifications to be successful.
- ✗ Generally limited to a few large projects so only large investor, designer, contractor, operator firms which can limit competition.

DBFOM and DBFM Project Examples:



PORT OF MIAMI TUNNEL



I-595 EXPRESS, BROWARD COUNTY

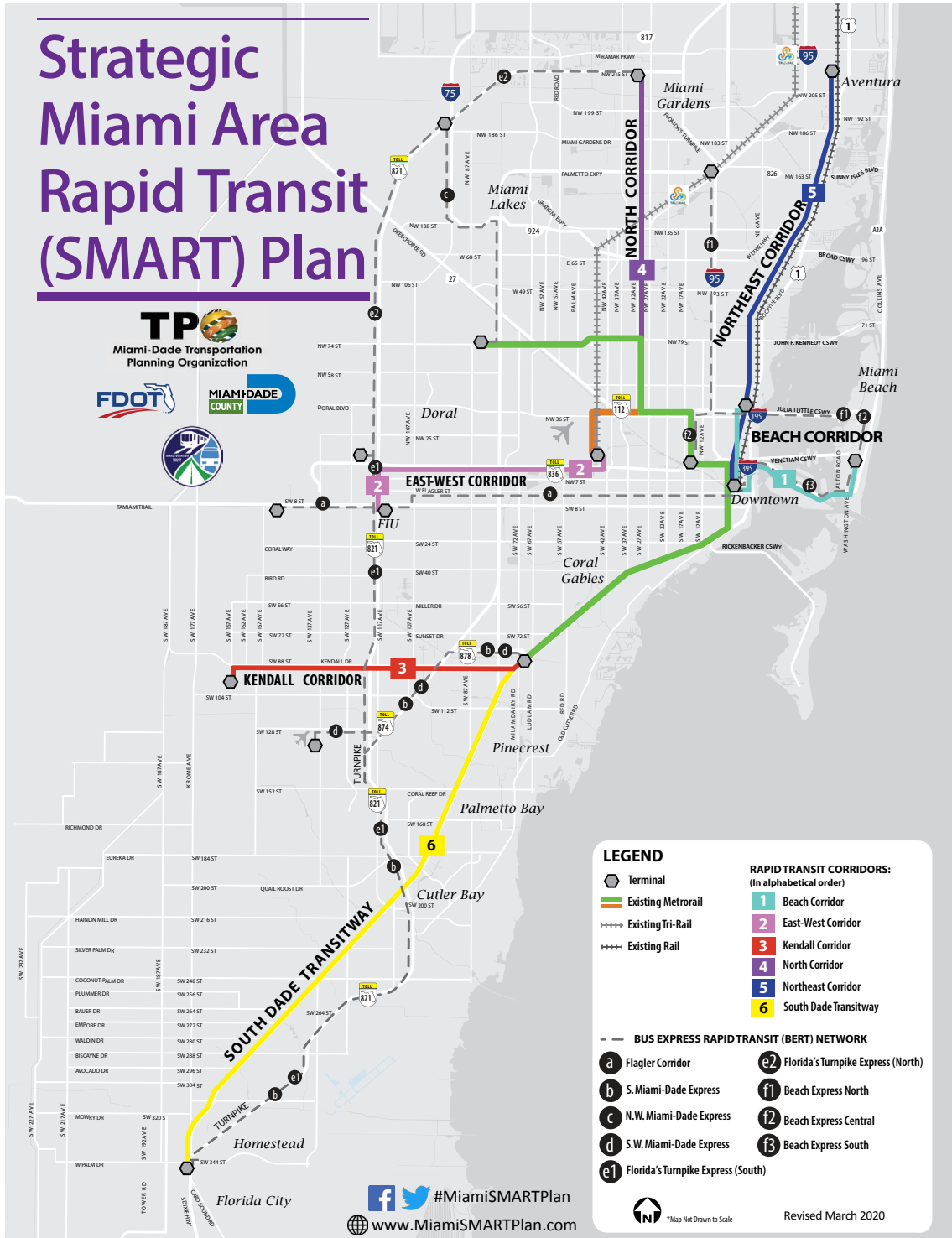


EAGLE P3, COLORADO

04

**SMART Plan Corridors
Presented to TPO and
Under Analysis**

04 SMART Plan Corridors Presented to TPO and Under Analysis



South Corridor

TPO approved the South Corridor Locally Preferred Alternative (LPA) - Bus Rapid Transit

Capital Cost Funding Percentages

The TPO endorsed the Locally Preferred Alternative for the South Corridor of the SMART Plan in 2018 as Bus Rapid Transit. FDOT has committed \$100 million and FTA has granted \$100 million for the South Corridor.



FEDERAL FUNDS

Federal Transit Administration awarded the funds

**\$100
MILLION**



STATE FUNDS

Committed to the project in the FDOT 5-Year Work Program

**\$100
MILLION**



LOCAL FUNDS

Committed to the project

**\$100
MILLION**

TOTAL CAPITAL COST ESTIMATE

**\$300
MILLION**



Operating Assumptions

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be **funded from local share**.
- The **present-day cost** for the average annual O&M cost is **\$12.19 million** net operating cost.
- **O&M cost fluctuations** for the first 15 years followed by a 20-year period of straight-line growth at 2.5%.
- There is an assumed 10-year State of Good Repair replacement cycle with a **cost distribution of five years**.
- The South Corridor can be funded locally via pay-as-you go from **SMART Plan allocation**. **State and Federal fund grants** have been programmed and awarded with final grant agreements in process.
- Assumes the South Corridor is operational in **late 2022**.



Rendering is representative and not actual

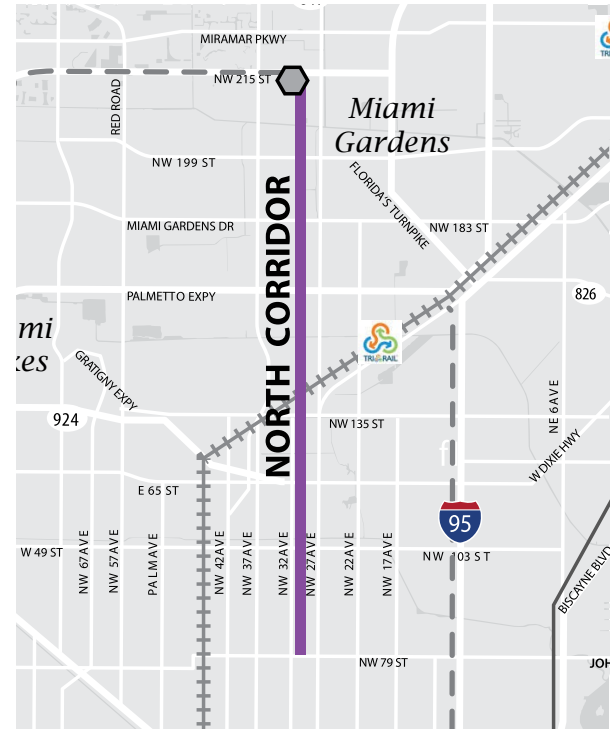
North Corridor

TPO approved the North Corridor Locally Preferred Alternative (LPA) - elevated fixed guideway rapid transit

Capital Cost Funding Percentages

Miami-Dade DTPW presented updated options for elevated fixed guideway rapid transit to the TPO in April 2020 for rubber tire technology as more cost-effective. Capital cost is \$1,300 million (2018) for rubber tire technology based on the mid-point of the two options of monorail and automated guideway transit. **The County is in procurement** for a Public Private Partnership (P3) approach that will continue into 2021, with the amounts to be determined. The County is pursuing implementation of the North Corridor based on the following key assumptions:

	<p>FEDERAL FUNDS Subject to Federal Transit Administration recommendation and Congressional appropriation</p>	<p>50 PERCENT</p>
	<p>STATE FUNDS Subject to future FDOT allocation in the Work Program</p>	<p>25 PERCENT</p>
	<p>LOCAL FUNDS PTP Revenues; Assumed from PTP SMART Plan allocation</p>	<p>25 PERCENT</p>



Operating Assumptions

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be funded from **100% local share**.
- The **present-day cost** for average O&M cost is **\$30.0 million (2018)** under an updated option for rubber tire technology based on the mid-point of the DTPW April 2020 Presentation to the TPO.



Heavy Rail



Monorail



Automated Guideway Transit

Beach Corridor

TPO approved the Beach Corridor Locally Preferred Alternative - Elevated rubber tire rapid transit (Trunkline) and BRT from 5th/Washington to the Miami Beach Convention Center

Capital Cost Funding Percentages

The modeled assumption for this corridor includes elevated rubber tire rapid transit for the trunkline from downtown Miami to Miami Beach and Bus Rapid Transit in dedicated lanes on Washington Avenue to the Miami Beach Convention Center on Miami Beach – estimated capital cost is \$631.6 million based on the January 2020 consultant estimate presented to the TPO. **The County is in procurement** for a P3 approach with the amounts to be determined. The extension of Metromover to the Design District is under evaluation with the amount and funding plan to be determined. The Beach Corridor is based on the following key assumptions:



FEDERAL FUNDS

Subject to Federal Transit Administration recommendation and Congressional appropriation

50 PERCENT



STATE FUNDS

Subject to future FDOT allocation in the Work Program

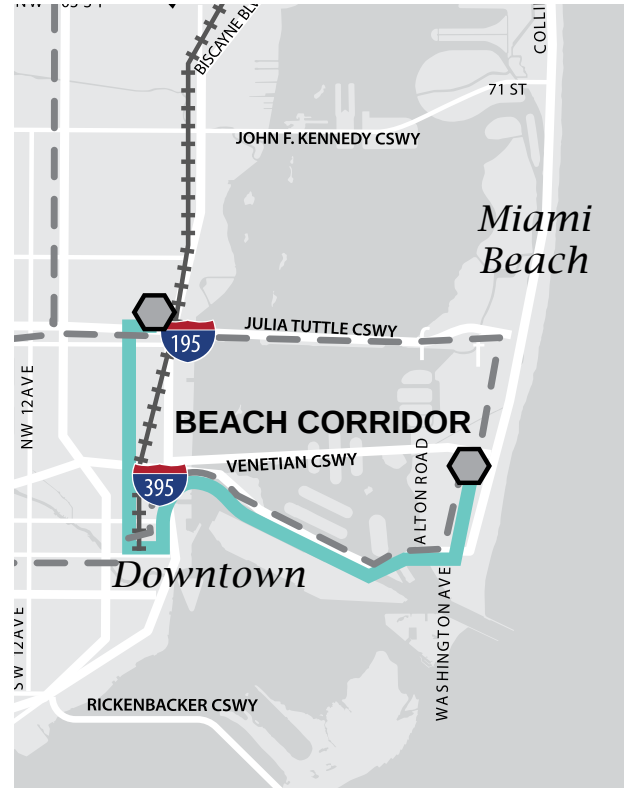
25 PERCENT



LOCAL FUNDS

PTP Revenues; Assumed from PTP SMART Plan allocation

25 PERCENT



Operating Assumptions

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be funded from **100% local share**.
- The **present-day cost** for average annual O&M cost is **\$9.8 million (2018)** for rubber tire technology based on the January 2020 consultant estimate presented to the TPO.



Monorail renderings are representative and not actual

East-West Corridor

East-West Corridor Locally Preferred Alternative is under study

Capital Cost Funding Percentages

Miami-Dade DTPW is in the final stages of evaluating a Bus Rapid Transit option from Tamiami and Dolphin Stations to the Miami Intermodal Center (MIC) and Downtown Miami along Florida's Turnpike and SR 836; estimated capital cost is \$300 million for the western portion of the corridor. The amount and funding plan for the eastern portion along 7th Street to the MIC is under development. The County plans to pursue implementation of the East-West Corridor based on the following key assumptions:



Tamiami Station rendering/construction photo



Dolphin Station ribbon cutting

	FEDERAL FUNDS	Subject to Federal Transit Administration recommendation and Congressional appropriation	<div style="background-color: #2c3e50; color: white; padding: 5px; text-align: center;">33 PERCENT</div> <div style="background-color: #95a5a6; color: white; padding: 5px; text-align: center;">33 PERCENT</div> <div style="background-color: #7f8c8d; color: white; padding: 5px; text-align: center;">33 PERCENT</div>
	STATE FUNDS	Subject to future FDOT allocation in the Work Program	
	LOCAL FUNDS	Current plan assumes PTP SMART Plan allocation	

Operating Assumptions

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be funded from local sources.
- The **present-day cost** for average O&M cost is **\$22.8 million (2018)** for various bus rapid transit routes along Florida's Turnpike and SR 836.

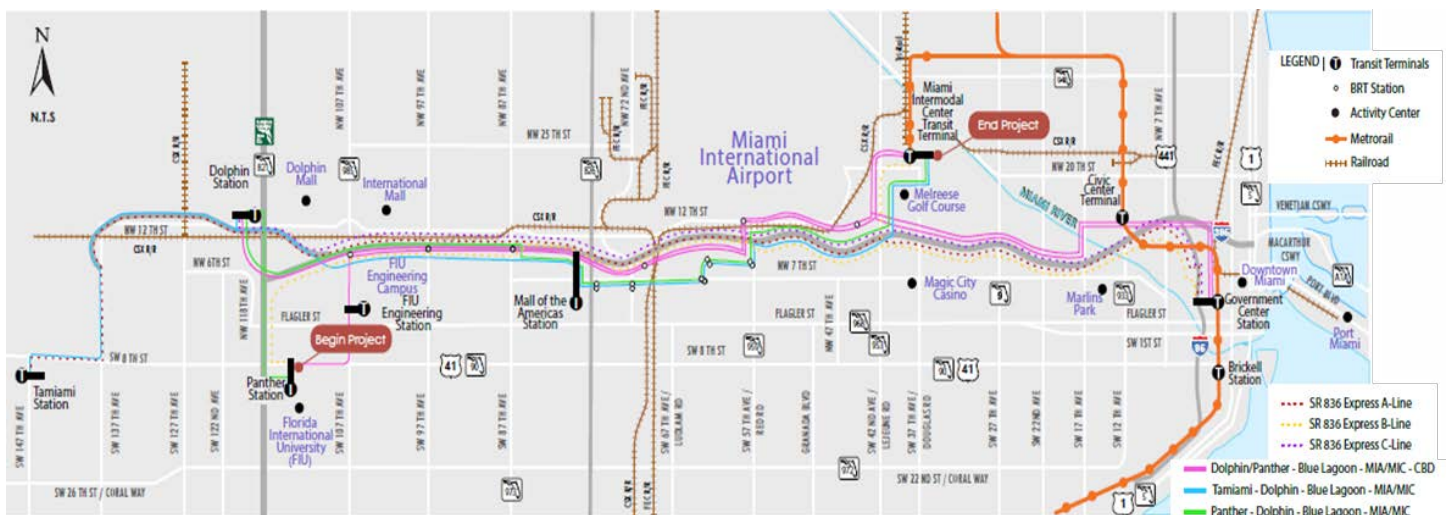


Image from Miami-Dade County DTPW

Kendall Corridor

Kendall Corridor Locally Preferred Alternative is under study

Capital Cost Funding Percentages

Miami-Dade DTPW and FDOT are considering options (not yet reviewed and adopted by the TPO) and this analysis assumes a limited Bus Rapid Transit option along Kendall Drive to Florida's Turnpike— estimated capital cost is \$300 million. The County plans to pursue implementation of the Kendall Corridor based on the following key assumption:

STATE FUNDS (FLORIDA'S TURNPIKE)
Assumes Florida's Turnpike Feeder Road Funding

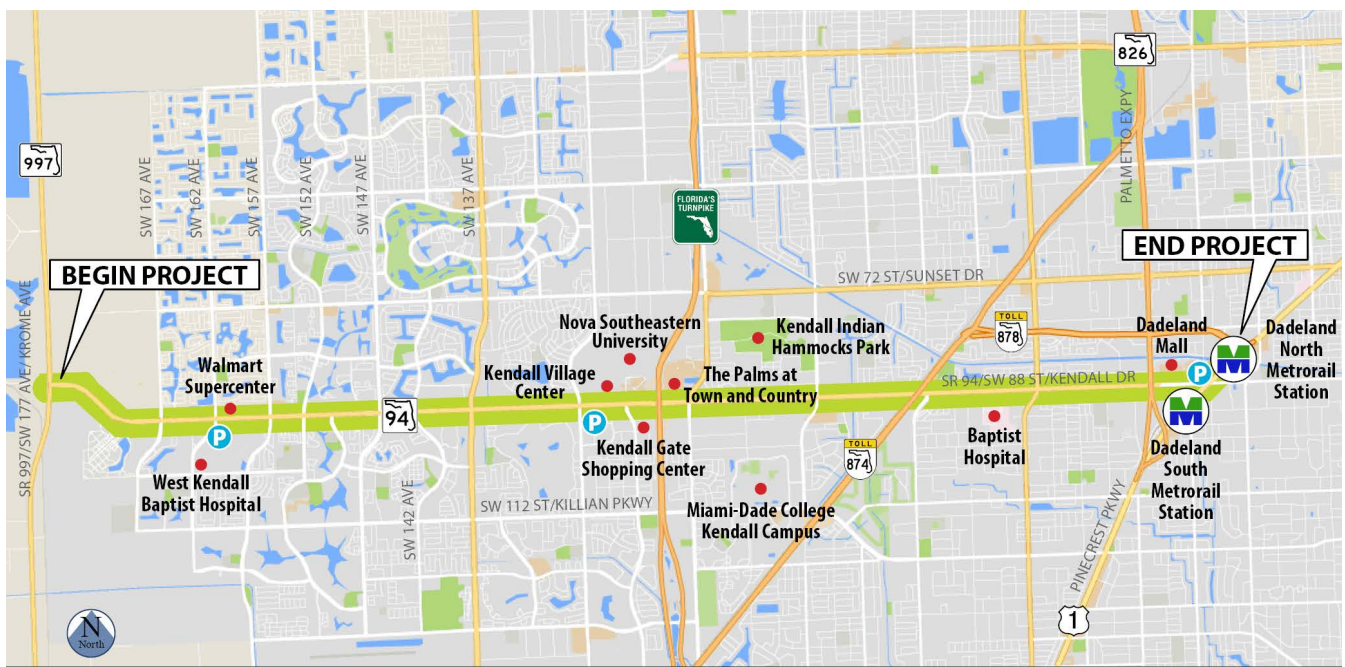
100 PERCENT



Rendering of one of the build alternatives. Image provided by FDOT District Six.

Operating Assumptions

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs are assumed to be **funded from local sources**.
- The **present-day cost** for average O&M cost is **\$8 million (2018)** for limited Bus Rapid Transit routes along Kendall Drive to Florida's Turnpike.
- The Kendall Corridor capital costs assume **reinvestment of Turnpike toll revenues collected in South Florida (Turnpike feeder road)** to be **funded at the time of the capital costs**.



LEGEND | Kendall Corridor Activity Center Park-and-Ride Metrorail Station

Image provided by FDOT District Six

Northeast Corridor

TPO approved the Northeast Corridor Locally Preferred Alternative - Tri-Rail

Capital Cost Funding Percentages

County and FECI/Brightline/Virgin are in negotiations for commuter rail along the FEC line from Aventura to Downtown Miami. Key assumptions:

	STATE FUNDS Subject to future FDOT allocation in the Work Program	50 PERCENT
	LOCAL FUNDS Current plan assumes PTP SMART Plan allocation	50 PERCENT

Operating Assumptions

- **Operations and Maintenance (O&M) and State of Good Repair** costs are assumed to be **funded from local sources**. In addition, there is a proposed "Access Fee" for commuter rail to operate on the FEC line.
- **Phase 2 and 3 of capital costs** assume pursuit of **federal stimulus funds**.



MiamiCentral Station



05

**Finance Plan Updates During
Fiscal Year 2019-20**

05 Finance Plan Updates During Fiscal Year 2019-20

The TPO Financial Plan updates are guided by the Fiscal Priorities Committee of the TPO and the TPO Governing Board. The TPO adopted overall principles and guidance for the financial plan for the SMART Plan. These are outlined in Resolution 41-17, adopted in 2016 as shown below.

Establishing the SMART Financial Framework

- Approved on September 26, 2017
- Establishes the framework for funding and financing the SMART Plan
- Revenue Streams Developed

Agenda Item 5.A.7

TPO RESOLUTION #41-17

RESOLUTION ESTABLISHING THE FINANCIAL PLAN FRAMEWORK FOR THE STRATEGIC MIAMI AREA RAPID TRANSIT (SMART) PLAN

WHEREAS, the Transportation Planning Organization (TPO), on February 18, 2016, adopted Resolution #06-16, which established transit as the “highest priority” for Miami-Dade County; and

WHEREAS, under Resolution #26-16, the TPO Governing Board endorsed the Strategic Miami Area Rapid Transit (SMART) Plan, which includes six (6) rapid transit corridors; and

WHEREAS, the development of the six rapid transit corridors will likely need the infusion of various funding sources, including federal, state, County, and municipal participation; and

WHEREAS, funds allocated to the SMART Plan from the Charter County Transportation Surtax should have a dedicated budgetary line(s) and a “category” within the Transit program that ensures these funds are protected and can carry forward until used for SMART Plan projects; and

WHEREAS, the Charter County Transportation Surtax and other local funding sources can be leveraged for capital projects using the most cost effective sources including government loan programs, such as the Transportation Infrastructure Finance and Innovation Act (TIFIA), Railroad Rehabilitation and Improvement Financing, and the Florida State Infrastructure Bank; and

WHEREAS, the above referenced programs can provide infrastructure loans subordinate to the Charter County Transportation Surtax senior bonds and other funding sources that may be bonded at cost effective rates,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that this Board establishes the Strategic Miami Area Rapid Transit (SMART) Financial Plan Framework as follows:

- 1) Pursue financing through the Transportation Infrastructure Finance and Innovation Act (TIFIA); and
- 2) Pursue 50/50 funding partnership with the Florida Department of Transportation for capital costs of SMART Plan projects that are federal-aid eligible and locally funded; and
- 3) Pursue federal funding partnerships via Federal Transit Administration Capital Grant programs commonly known as New Starts and/or Small Starts for eligible SMART Plan projects, with a local funding partnership with the Florida Department of Transportation for 50 percent share of the Non-Federal funding for projects that achieve Federal Transit Capital Grants; and
- 4) Local funds will be committed for the annual operating costs for SMART Plan projects for a minimum 30-year period; and
- 5) Local funds will be committed for the State of Good Repair for SMART Plan projects for a minimum 30-year period; and
- 6) Pursue remaining funding amounts necessary to fully fund the advancement of SMART Plan projects in a timely manner via other local funding sources, including, but not limited to:
 - a. Tax Increment Financing District
 - b. Local Option Gas Tax
 - c. Developer Contributions
 - d. State Match
 - e. Federal Match
 - f. Special Taxing District
 - g. Municipal Contribution
 - h. Miami-Dade County General Fund Allocation
- 7) Directs the TPO Executive Director or designee, to coordinate with appropriate individuals and/or agencies to effectuate this financial framework.

The major assumptions for the Financial Plan are outlined in Chapter 2 of this report SMART Plan Funding Allocation and Assumptions, and Chapter 4 on the SMART Plan Corridors Presented to the TPO and Under Analysis. To recap, the following key areas and source of information include:

Local Funding Allocation

- Provided by Miami-Dade County Office of Management and Budget (OMB) – generally updated at least twice a year normally July and January

State Match

- Resolution 41-17, actual grant allocations and guidance from the Miami-Dade County OMB and DTPW

Federal Match

- Resolution 41-17, actual grant allocations and guidance from the Miami-Dade County OMB and DTPW

SMART Plan Corridor costs

- PD&E Study – Locally Preferred Alternative if adopted by the TPO – from study documents provided by applicable entity (FDOT or DTPW) - North Corridor, Beach Corridor
- Project Development (advanced beyond PD&E) – DTPW – South Corridor
- Prior to completion of PD&E - DTPW – East-West Corridor, Kendall Corridor

Additional Contingency

- The Federal Transit Administration has a thorough evaluation process prior to recommended funding for a new transit corridor. This normally includes an added level of contingency for capital costs and operating costs to “stress test” the finance plan. Based on this, in coordination with DTPW, a 15% capital costs and 12.5% operating costs additional contingency has been included in the Finance Plan for each corridor. This also helps to protect against future increase in costs beyond normal inflation.

The TPO and Consultant Team discuss all the major assumptions and gain input from the County and other partners as appropriate to update and validate the assumptions.

There are other key assumptions that help develop the overall finance plan for the SMART Plan. *Note: this is not all the assumptions, but the major items required to produce the finance plan for the SMART Plan.*

Inflation rates

- Costs are inflated to the year of expenditure/use – inflation rates are consistent with the County for capital and operating costs.

Discount rate

- Costs are also “discounted” to present day costs or net present value for ease of use by converting all funding and costs to current dollar amounts. The rate is set at 4% discount for both funding and costs.

Financing

- At times, select capital costs are more than available funding and a portion of these costs must be advanced through financing. As outlined in Resolution 41-17, the finance plan assumes the use of a cost-effective Federal loan program termed, Transportation Infrastructure and Finance Innovation Act (TIFIA). More information can be found on TIFIA at www.transportation.gov/buildamerica/financing/tifia. TIFIA loans have helped advance key projects such as the Miami Intermodal Center, PortMiami Tunnel, and I-595 in the South Florida area.

State of Good Repair cycles

- The cycle for state of good repair was discussed with DTPW and includes:
 - Bus Rapid Transit Vehicles – every 10 years
 - Rail Vehicles – every 15 years

Finance Plan Model

- The Finance Plan model operates in a complex excel spreadsheet that has been updated during the year to accommodate the added corridors and revised inputs.

DURING THE 2019-20 PERIOD, THE FOLLOWING MAJOR FINANCE PLAN UPDATES WERE PROVIDED:

1. Carry over from the 2018-19 period included the following SMART Plan corridors – note: the prior Finance Plan reflected these corridors “funded” based on the LPA assumptions.

- South Corridor
- North Corridor

2. Updated OMB Forecast - The Finance Plan was updated in July/August 2019 for revised OMB forecast of the SMART Plan allocation of local funding and also the South Corridor costs were updated for the Project Development stage (beyond the PD&E cost estimates). The Finance Plan continued to show the South and North corridors “funded” based on the assumptions (North LPA and South Project Development).

3. Revised North Corridor Costs – The costs for the North Corridor were revised and the Finance Plan was updated in the fall of 2019. The Finance Plan continued to show the South and North corridors “funded” based on the assumptions (North Corridor - updated LPA and South Corridor - Project Development stage).

4. Beach Corridor LPA – DTPW presented the Beach Corridor recommended Locally Preferred Alternative in January 2020. The Finance Plan was updated starting in December 2019 through February 2020 with multiple funding match assumptions for the Beach Corridor. The Finance Plan reflected the South Corridor, North

Corridor and Beach Corridor as “funded” based on the assumptions (North Corridor – updated LPA, South Corridor – Project Development stage, Beach Corridor – LPA). However, the three corridors were using a larger share of the SMART Plan local funding allocation with a remaining balance of \$841 million in future dollars over the 40-year funding plan period. DTPW was reviewing alternatives for the North Corridor and Beach Corridor concurrently.

5. North Corridor Alternatives and Preliminary East-West Corridor options – DTPW presented alternatives to the TPO in April 2020 for the North Corridor that were more cost effective than the LPA option. At the same meeting, DTPW presented an initial recommendation for the East-West Corridor. The Finance Plan was updated numerous times in April, May and June to reflect options to fund the SMART Plan corridors. The final assumptions are included for the corridors in Chapter 4 of this report. After discussions between TPO and DTPW staff, the assumptions were finalized. The Finance Plan shows the South Corridor, North Corridor, Beach Corridor Trunkline and East-West Corridor (western segment – phase 1) are “funded” based on these assumptions (North Corridor – revised DTPW LPA option, South Corridor – Project Development stage, Beach Corridor Trunkline – LPA, East-West Corridor western segment – preliminary LPA not approved by TPO at this stage).

6. Fiscal Priorities Committee requested an update on the funding for all corridors – The Finance Plan options were updated in May and June 2020 to add the Kendall Corridor to number 5, on the previous page. DTPW provided a cost updated and this was integrated into the Finance Plan. The Finance Plan shows the South Corridor, North Corridor, Beach Corridor Trunkline, East-West Corridor (western segment), and Kendall Corridor are “funded” based on these assumptions (North Corridor – revised DTPW LPA option, South Corridor – Project Development stage, Beach Corridor Trunkline – LPA, East-West Corridor western segment – preliminary LPA (not approved by TPO at this stage), Kendall Corridor – PD&E study still active). Please note that the Northeast Corridor proposal by Brightline is in negotiation and the amounts are to be determined so these are not included in the Finance Plan.

The information included in the Table shows the present day amounts for funding and costs for the items included in the final Finance Plan for 2020.

SMART Funding (*NPV) (Pre-Covid 19 revenues) in millions	
Local Revenues (estimated)	\$3,733
Federal Match (assumption)	\$973 to \$1,166
State Match (assumption)	\$683 to \$780
Florida's Turnpike (assumption)	\$300
Total Revenues (estimated and assumed)	\$5,932 to \$6,107

SMART Corridors (^Present Day Cost) in millions			
SMART Corridors	Capital	O&M (40 years)	Notes
Committed			
Dolphin/Aventura Stations	\$120.0	\$70.8	Capital cost approved, Aventura Fare subsidy estimated as O&M costs
South Corridor	\$300.0	\$239.6	Small Starts approved May 2020
Subtotal Committed	\$420.0	\$310.4	
Locally Preferred Alternative (LPA) Approved			
North Corridor	\$1,300.0	\$731.4	April 2020 County Estimate for LPA
Beach Corridor- Trunkline	\$631.6	\$221.7	January 2020 LPA consultant cost estimate; currently under county procurement
Subtotal of Approved LPA's	\$1,931.60	\$1,263.5	
Under Analysis (conceptual cost estimates)			
East-West Corridor	\$300.0	\$570.5	LPA pending, cost estimates for western portion, eastern portion TBD
Kendall Corridor	\$300.0	\$205.8	LPA pending
Northeast Corridor	TBD	TBD	Pending negotiations
Subtotal Under Analysis	\$600 + TBD	\$776.3 + TBD	
Total All Corridors	\$2,951.6 + TBD	\$ 2,039.8+TBD	

*Revenues are discounted back at 4% to net present value (NPV).

^Capital cost are in present day cost and O&M costs are for the 40-year period discounted back at 4% to present day cost.

06

**Fiscal Year
2019-20 Summary**

06 Fiscal Year 2019-20 Summary

The TPO Financial Plan Updates are guided by the Fiscal Priorities Committee of the TPO and the TPO Governing Board. The TPO adopted overall principles and guidance for the financial plan for the SMART Plan. These are outlined in Resolution 41-17 shown in Chapter 5.

The key assumptions for the Finance Plan for the SMART Plan are outlined in Chapters 2 (SMART Plan Funding Allocation and Assumptions), 4 (SMART Plan Corridors Presented to TPO and Under Analysis) and 5 (Finance Plan Updates During 2019-20). The combined TPO and consultant team partner discuss all the major assumptions, gain input from the County and other partners as appropriate to update and validate the assumptions.

Major Finance Plan updates during the 2019 to 2020 period were completed this fiscal year as described in Chapter 5. These included: Carry over from the 2018-19 period added to revenues; Updated OMB Forecast; Revised North Corridor Costs; Beach Corridor LPA; North Corridor DTPW Alternatives and Preliminary East-West Corridor options; and Fiscal Priorities Committee requested an update on the funding for all corridors.

The information included in the table in Chapter 5 shows the present-day amounts for funding and costs for the items included in the final Finance Plan for 2020.

These results are based on the current assumptions and revenues. Changes can and will occur on a periodic basis related to funding, costs, schedules, and related major assumptions. For example, the Finance Plan could experience challenges such as:

- Local Funding allocated for the SMART Plan is reduced due to impacts of COVID-19 which is likely to occur. The amounts are not yet known as the pandemic remains active as of June 2020.
- Partnership funding from the Federal or State governments are less than anticipated.
- Cost of the corridors are higher than currently estimated for one or more corridors. Please note the Finance Plan assumes an extra 15% contingency for capital costs and 12.5% for operating costs.
- The addition of the Northeast Corridor at the levels proposed by Brightline would exceed the available remaining funding in the Finance Plan.
- Advancing corridors to much earlier beginning dates would be cost prohibitive.
- Finance cost to advance capital costs become cost prohibitive or unavailable.

It is critical to continually update the Finance Plan for the SMART Plan to reflect the latest data for timely decision-making by the TPO and its partners.

Based on the data and assumptions outlined in this report, it is feasible to deliver the SMART Plan as presented. Please note, the local revenue forecast is pre-COVID-19 impacts. The TPO staff and consultant team will continually update the Finance Plan for the SMART Plan as new data and assumptions are provided for timely decision-making by the TPO and partners.

07

**Appendix
Fiscal Priorities Committee
July 10, 2020
PowerPoint Presentation**

SMART Plan Financial Discussion

Fiscal Priorities Committee
July 10, 2020



Federal Transit
Administration



TP
Miami-Dade Transportation
Planning Organization





Establishing the SMART Financial Framework

- Approved on September 26, 2017
- Establishes the framework for funding and financing the SMART Plan
- Revenue Streams Developed

TPO RESOLUTION #41-17

RESOLUTION ESTABLISHING THE FINANCIAL PLAN FRAMEWORK FOR THE STRATEGIC MIAMI AREA RAPID TRANSIT (SMART) PLAN

WHEREAS, the Transportation Planning Organization (TPO), on February 18, 2016, adopted Resolution #06-16, which established transit as the “highest priority” for Miami-Dade County; and

WHEREAS, under Resolution #26-16, the TPO Governing Board endorsed the Strategic Miami Area Rapid Transit (SMART) Plan, which includes six (6) rapid transit corridors; and

WHEREAS, the development of the six rapid transit corridors will likely need the infusion of various funding sources, including federal, state, County, and municipal participation; and

WHEREAS, funds allocated to the SMART Plan from the Charter County Transportation Surtax should have a dedicated budgetary line(s) and a “category” within the Transit program that ensures these funds are protected and can carry forward until used for SMART Plan projects; and

WHEREAS, the Charter County Transportation Surtax and other local funding sources can be leveraged for capital projects using the most cost effective sources including government loan programs, such as the Transportation Infrastructure Finance and Innovation Act (TIFIA), Railroad Rehabilitation and Improvement Financing, and the Florida State Infrastructure Bank; and

WHEREAS, the above referenced programs can provide infrastructure loans subordinate to the Charter County Transportation Surtax senior bonds and other funding sources that may be bonded at cost effective rates,

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE TRANSPORTATION PLANNING ORGANIZATION IN ITS ROLE AS THE MPO FOR THE MIAMI URBANIZED AREA, that this Board establishes the Strategic Miami Area Rapid Transit (SMART) Financial Plan Framework as follows:

- 1) Pursue financing through the Transportation Infrastructure Finance and Innovation Act (TIFIA); and
- 2) Pursue 50/50 funding partnership with the Florida Department of Transportation for capital costs of SMART Plan projects that are federal-aid eligible and locally funded; and
- 3) Pursue federal funding partnerships via Federal Transit Administration Capital Grant programs commonly known as New Starts and/or Small Starts for eligible SMART Plan projects, with a local funding partnership with the Florida Department of Transportation for 50 percent share of the Non-Federal funding for projects that achieve Federal Transit Capital Grants; and
- 4) Local funds will be committed for the annual operating costs for SMART Plan projects for a minimum 30-year period; and
- 5) Local funds will be committed for the State of Good Repair for SMART Plan projects for a minimum 30-year period; and
- 6) Pursue remaining funding amounts necessary to fully fund the advancement of SMART Plan projects in a timely manner via other local funding sources, including, but not limited to:
 - a. Tax Increment Financing District
 - b. Local Option Gas Tax
 - c. Developer Contributions
 - d. State Match
 - e. Federal Match
 - f. Special Taxing District
 - g. Municipal Contribution
 - h. Miami-Dade County General Fund Allocation
- 7) Directs the TPO Executive Director or designee, to coordinate with appropriate individuals and/or agencies to effectuate this financial framework.

South Corridor

CAPITAL COST FUNDING PERCENTAGES

The TPO endorsed the Locally Preferred Alternative for the South Corridor of the SMART Plan in 2018 as Bus Rapid Transit. FDOT has committed \$100 million and FTA has granted \$100 million for the South Corridor.



FEDERAL FUNDS

Federal Transit Administration awarded the funds

**\$100
MILLION**



STATE FUNDS

Committed to the project in the FDOT 5-Year Work Program

**\$100
MILLION**



LOCAL FUNDS

Committed to the project

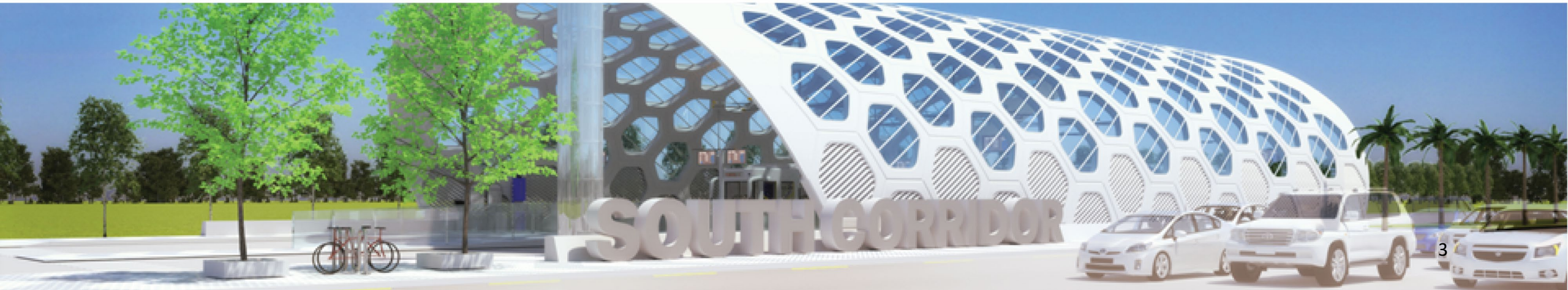
**\$100
MILLION**

**\$300
MILLION**

TOTAL CAPITAL COST ESTIMATE

OPERATING ASSUMPTIONS

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be **funded from local share**.
- The **present-day cost** for the average annual O&M cost is **\$12.19 million** net operating cost.
- **O&M cost fluctuations** for the first 15 years followed by a 20-year period of straight-line growth at **2.5%**.
- There is an **assumed 10-year** State of Good Repair replacement cycle with a **cost distribution of five years**.
- The South Corridor can be **funded locally** via pay-as-you go from **SMART Plan allocation**. **State and Federal fund grants** have been programmed and awarded with final grant agreements in process.
- Assumes the South Corridor is operational in **late 2022**.



North Corridor

CAPITAL COST FUNDING PERCENTAGES

Miami-Dade DTPW presented updated options for elevated fixed guideway rapid transit to the TPO in April 2020 for rubber tire technology as more cost-effective. Capital cost is \$1,300 million (2018) for rubber tire technology based on the mid-point of the two options of monorail and automated guideway transit. The County is in procurement for a Public Private Partnership (P3) approach that will continue into 2021, with the amounts to be determined. The County is pursuing implementation of the North Corridor based on the following key assumptions:



FEDERAL FUNDS

Subject to Federal Transit Administration recommendation and Congressional appropriation

50
PERCENT



STATE FUNDS

Subject to future FDOT allocation in the Work Program

25
PERCENT



LOCAL FUNDS

PTP Revenues; Assumed from PTP SMART Plan allocation

25
PERCENT

OPERATING ASSUMPTIONS

- **Operations and Maintenance (O&M) and State of Good Repair** costs will be **funded from 100% local share**.
- The **present-day cost** for average O&M cost is **\$30.0 million (2018) under an updated option for rubber tire technology** based on the mid-point of the DTPW April 2020 Presentation to the TPO.



Heavy Rail



Monorail



Automated Guideway Transit

Beach Corridor

CAPITAL COST FUNDING PERCENTAGES

The modeled assumption for this corridor includes elevated rubber tire rapid transit for the trunkline from downtown Miami to Miami Beach and Bus Rapid Transit in dedicated lanes on Washington Avenue to the Miami Beach Convention Center on Miami Beach – estimated capital cost is \$631.6 million based on the January 2020 consultant estimate presented to the TPO. The County is in procurement for a P3 approach with the amounts to be determined. The extension of Metromover to the Design District is under evaluation with the amount and funding plan to be determined. The Beach Corridor is based on the following key assumptions:



FEDERAL FUNDS

Subject to Federal Transit Administration recommendation and Congressional appropriation



STATE FUNDS

Subject to future FDOT allocation in the Work Program



LOCAL FUNDS

PTP Revenues; Assumed from PTP SMART Plan allocation

50
PERCENT

25
PERCENT

25
PERCENT

OPERATING ASSUMPTIONS

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be **funded from 100% local share**.
- The **present-day cost** for average annual O&M cost is **\$9.8 million (2018) for rubber tire technology** based on the January 2020 consultant estimate presented to the TPO.



Monorail Miami Beach (5th Street Median)



APM Bay Crossing (MacArthur Causeway)



Monorail Bay Crossing (MacArthur Causeway)

East-West Corridor

CAPITAL COST FUNDING PERCENTAGES

Miami-Dade DTPW is in the final stages of evaluating a Bus Rapid Transit option from Tamiami and Dolphin Stations to the Miami Intermodal Center (MIC) and Downtown Miami along Florida's Turnpike and SR 836; estimated capital cost is \$300 million for the western portion of the corridor. The amount and funding plan for the eastern portion along 7th Street to the MIC is under development. The County plans to pursue implementation of the East-West Corridor based on the following key assumptions:



FEDERAL FUNDS

Subject to Federal Transit Administration recommendation and Congressional appropriation



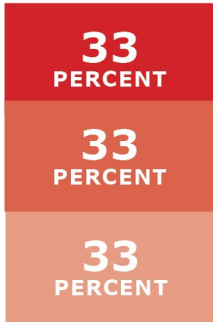
STATE FUNDS

Subject to future FDOT allocation in the Work Program



LOCAL FUNDS

Current plan assumes PTP SMART Plan allocation



OPERATING ASSUMPTIONS

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs will be funded from local sources.
- The **present-day cost** for average O&M cost is **\$22.8 million (2018)** for various bus rapid transit routes along Florida's Turnpike and SR 836.



Tamiami Station rendering/construction photo

Dolphin Station ribbon cutting

Kendall Corridor

CAPITAL COST FUNDING PERCENTAGES

Miami-Dade DTPW and FDOT are considering options (not yet reviewed and adopted by the TPO) and this analysis assumes a limited Bus Rapid Transit option along Kendall Drive to Florida's Turnpike- estimated capital cost is \$300 million. The County plans to pursue implementation of the Kendall Corridor based on the following key assumption:



STATE FUNDS (FLORIDA'S TURNPIKE)

Assumes reinvestment of Turnpike toll revenues collected in South Florida (Turnpike feeder road)

100
PERCENT

OPERATING ASSUMPTIONS

- **Operations and Maintenance (O&M)** and **State of Good Repair** costs are assumed to be **funded from local sources**.
- The **present-day cost** for average O&M cost is **\$8 million (2018)** for limited **Bus Rapid Transit routes** along **Kendall Drive to Florida's Turnpike**.
- The Kendall Corridor capital costs are assumed **reinvestment of Turnpike toll revenues collected in South Florida (Turnpike feeder road)** to be funded at the time of the capital costs.



Rendering of one of the build alternatives. Image provided by FDOT District Six.

Northeast Corridor

CAPITAL COST FUNDING PERCENTAGES

County and FECI/Brightline/Virgin are in negotiations for commuter rail along the FEC line from Aventura to Downtown Miami. Key assumptions:



STATE FUNDS

Subject to future FDOT allocation in the Work Program

50
PERCENT



LOCAL FUNDS

Current plan assumes PTP SMART Plan allocation

50
PERCENT

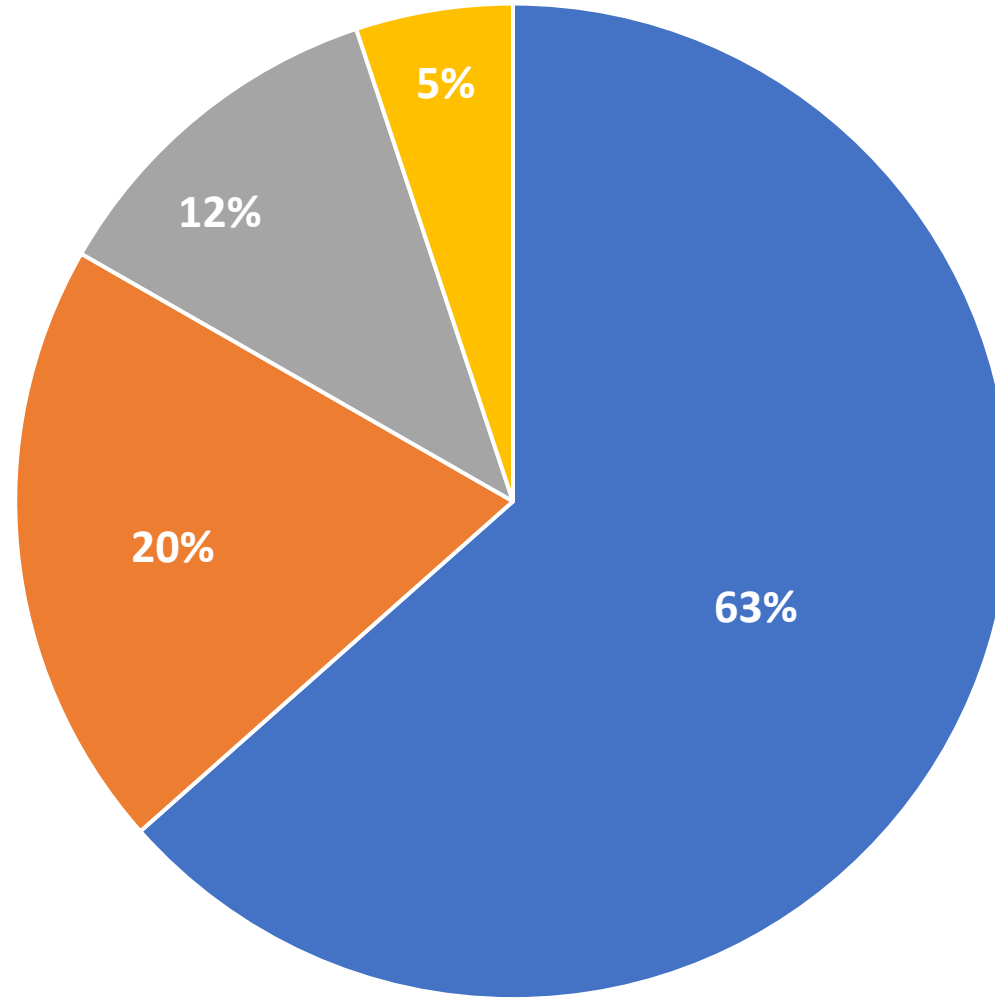
OPERATING ASSUMPTIONS

- Operations and Maintenance (O&M) and State of Good Repair costs are assumed to be **funded from local sources**. In addition, there is a proposed "Access Fee" for commuter rail to operate on the FEC line.
- Phase 2 and 3 of capital costs assumes pursuit of **federal stimulus funds**.



MiamiCentral Station

Revenues



■ Local Revenues ■ Federal Match ■ State Match ■ Florida's Turnpike

SMART Plan Financial Discussion (in millions)

Federal Approach

SMART Funding (*NPV) (Pre-Covid 19 revenues) in millions	
Local Revenues (estimated)	\$3,733
Federal Match (assumption)	\$973 to \$1,166
State Match (assumption)	\$683 to \$780
Florida's Turnpike (assumption)	\$300
Total Revenues (estimated and assumed)	\$5,932 to \$6,107

SMART Corridors (^Present Day Cost) in millions			
SMART Corridors	Capital	O&M (40 years)	Notes
Committed			
Dolphin/Aventura Stations	\$120.0	\$70.8	Capital cost approved, Aventura Fare subsidy estimated as O&M costs
South Corridor	\$300.0	\$239.6	Small Starts approved May 2020
Subtotal Committed	\$420.0	\$310.4	
Locally Preferred Alternative (LPA) Approved			
North Corridor	\$1,300.0	\$731.4	April 2020 County Estimate for LPA
Beach Corridor- Trunkline	\$631.6	\$221.7	January 2020 LPA consultant cost estimate; currently under county procurement
Subtotal of Approved LPA's	\$1,931.60	\$1,263.5	
Under Analysis (conceptual cost estimates)			
East-West Corridor	\$300.0	\$570.5	LPA pending, cost estimates for western portion, eastern portion TBD
Kendall Corridor	\$300.0	\$205.8	LPA pending, Turnpike funds assumed
Northeast Corridor	TBD	TBD	Pending negotiations
Subtotal Under Analysis	\$600 + TBD	\$776.3 + TBD	O&M Does not include State of Good Repair
Total All Corridors	\$2,951.6 + TBD	\$ 2,039.8+TBD	

*Revenues are discounted back at 4% to net present value (NPV).

^ Capital cost are in present day cost and O&M costs are for the 40-year period discounted back at 4% to present day cost.

Questions?