# Strategic Miami Area Rapid Transit

# SMART Plan Update

# Citizen's Independent Trust (CITT) Annual Municipal Workshop

Aileen Bouclé, AICP, Executive Director Miami-Dade Transportation Planning Organization October 16, 2020



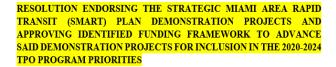
# Milestone: Approval of the SMART Plan "Demonstration Program"

June 21, 2018

RESOLUTION ENDORSING THE STRATEGIC MIAMI AREA RAPID TRANSIT PLAN DEMONSTRATION PROJECTS AND APPROVING IDENTIFIED FUNDING FRAMEWORK TO ADVANCE SAID DEMONSTRATION PROJECTS FOR INCLUSION IN THE 2020-2024 TPO PROGRAM PRIORITIES

UPON COMPLETION OF THE THREE-YEAR PILOT PERIOD, IF THE SMART DEMONSTRATION PROJECT IS DEEMED SUCCESSFUL, THE APPROPRIATE SPONSOR ENTITY SHALL BEAR ALL COSTS ASSOCIATED WITH PROJECT CONTINUATION.





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 a network of nine (9) bus express rapid transit (BERT) services; and

WHEREAS, the TPO Governing Board adopted Resolution #27-17, which designated specific funds for the implementation of the SMART Plan; and

WHEREAS, the TPO Governing Board adopted Resolution #14-18, which endorsed the identification and implementation of Demonstration projects that advance elements of the SMART Plan; and

WHEREAS, the TPO Transportation and Mobility Committee (TMC) reviewed the attached list (Exhibit A) of eleven (11) SMART Plan Demonstration projects and recommended favorably the endorsement of same;

WHEREAS, the TPO Fiscal Priorities Committee (FPC) established the funding framework to advance said demonstration projects, as noted in Exhibit A. Upon completion of the three-year pilot period, if the SMART Demonstration Project is deemed successful, the appropriate sponsor entity shall bear all costs associated with project continuation; and

WHEREAS, it is the desire of the TPO Governing Board to encourage innovation and flexibility to help expedite demonstration projects that advance part or all of a SMART Plan corridor,

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 endorses the Strategic Miami Area Rapid Transit (SMART) Plan Demonstration Projects and approves the identified funding framework to advance said Demonstration Projects, for inclusion in the 2020-2024 TPO Program Priorities.



## **Approval of CITT Funds for SMART Demonstration Projects**

#### AGENDA ITEM 5H

#### RESOLUTION NO. 18-025

RESOLUTION BY THE CITIZENS' INDEPENDENT TRANSPORTATION TRUST: ENDORSING THE MIAMIDADE TRANSPORTATION PLANNING ORGANIZATION'S ("TPO") 2018 SMART PLAN DEMONSTRATION PROJECTS; AND FURTHER SUPPORTING THE USE OF MUNICIPAL SURTAX DOLLARS AS NEEDED AND DESRIED BY A MUNICIPALITY TO ACT AS THEIR LOCAL MATCH FOR ATTRACTING FEDERAL/STATE DOLLARS THAT WILL HELP FUND THE DEMONSTRATION PROJECTS.

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

WHEREAS, under Resolution R-26-16, the TPO Governing Board endorsed the Strategic Miami Area Rapid Transit (SMART) Plan, which includes six (6) rapid transit corridors and (9) bus express rapid transit (BERT) corridors; and

WHEREAS, the TPO Governing Board subsequently adopted Resolution R-14-18, which endorsed the identification and implementation of Demonstration Projects that advance elements of the SMART Plan; and

WHEREAS, the TPO Transportation and Mobility Committee (TMC) reviewed the attached list (Exhibit  $\Lambda$ ) of eleven (11) SMART Plan Demonstration Projects and recommended favorably the endorsement of same; and

WHEREAS, many of the Demonstration Project applicants have identified the use of municipal surtax dollars as the local match necessary for attracting federal/state dollars that will help fund the projects; and

WHEREAS, it is the desire of the CITT to help expedite demonstration projects that advance part or all of a SMART Plan corridor.

#### AGENDA ITEM 5H

NOW, THEREFORE, BE IT RESOLVED BY THE CITT, that this Trust: endorses the TPO's 2018 SMART Plan Demonstration Projects; and further supports the use of municipal surtax dollars as needed and desired by a municipality to act as their local match for attracting federal/state dollars that will help fund the Demonstration Projects.

The foregoing resolution was offered by Marilyn Smith, who moved its adoption. The motion was seconded by Oscar Braynon and upon being put to vote, the vote was as follows:

> Glenn J. Downing, CFP® Chairperson – Aye Joseph Curbelo, 1<sup>st</sup> Vice Chairperson – Absent Alfred J. Holzman, 2<sup>nd</sup> Vice Chairperson – Aye

Oscar Braynon – Aye
Evan Fancher – Aye
Hon. Anna E. Lightfoot-Ward, Ph.D., – Aye
Miles E. Moss, P.E. – Aye
Marilyn Smith – Aye
L. Elijah Stiers, Esq. – Aye

Eric Diaz-Padron – Aye Prakash Kumar – Aye Jonathan Martinez – Absent Paul J. Schwiep, Esq. – Absent Amy Steele-Donner – Absent

The Chairman thereupon declared the resolution duly passed and adopted this 20th day of June,

2018.

Approved by the County Attorney as to form and legal sufficiency

By: Executive Director

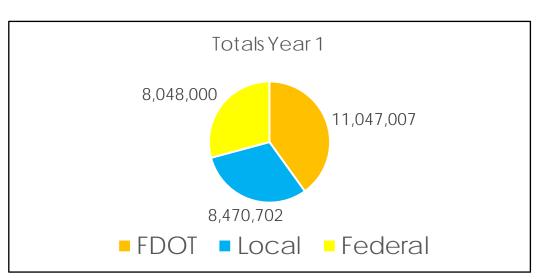
## **SMART Plan Demonstration Program Funding**

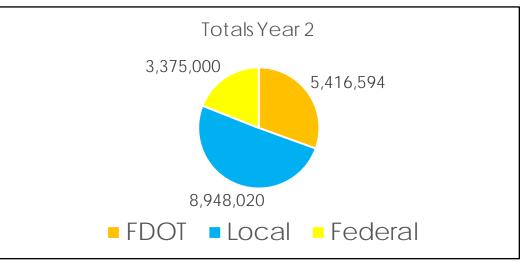
## **Total Program Funding:**

✓ Year 1 (FYs 2019 through 2024): \$27.6 million in projects

✓ Year 2 (FYs 2021 through 2025): \$17.7 million in projects

✓ Year 3 (FYs 2022 through 2026): \$7.3 in projects (pending funds approval)







## SMART Demonstration Program

- Recognize disruptioninvestments & operations
- Encourage innovation at local level
- Capture wide range of stakeholders
- Form new Public/Private Partnerships
- Emphasize flexibility, adaptability and integration
- Urban mobility test-ground



# 2018 SMART Demonstration Program Projects

- City of Miami Flagami Trolley
- Doral FIU Trolley Service
- Coral Gables Flex Service
- Pinecrest Transitway Circulator
- North Bay Village SMART Feeder Route
- Palmetto Bay Transit Service
- Palmetto Bay Transit Facility
- Medley Central Commuter Route Cutler Bay Express Service
- Civic Center Metrorail Station Area On-Demand
- South Miami Metrorail Station Area On-Demand
- Dadeland North Metrorail Station Area On-Demand
- Dadeland South Metrorail Station Area On-Demand
- NE Corridor Demonstration Station (Capital Funding)
- NE Corridor Demonstration Train Service
- Miami Shores SMART Feeder Route (discontinued via agency consensus)



## 2019 SMART Demonstration Program Projects

- City of West Miami On-Demand Responsive Service
- City of Miami Liberty City Trolley Service
- City of Miami Beach South Beach Trolley Service
- FIU/Panther Station On-Demand Service
- 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 Express Service
- City of Hialeah/Hialeah Gardens to I-75 Miami Gardens Park & Ride



## 2020 SMART Demonstration Program Projects

- Aventura Mall/Brightline Station First-Last Mile Connection
- Town of Cutler Bay Counterclockwise Service around town serving South-Dade Transitway
- City of South Miami Freebee
- Town of Medley Continue Transit Circulator serving Palmetto Metrorail Station (Year 4)
- City of Miami Beach South Beach Trolley Service (Year 3)
- City of Coral Gables Trolley Fixed Route: Extension of services to include Saturdays & Evening Hours
- City of West Miami On-Demand Responsive Service (Year 2)







# SMART Plan SMART Region

## Six (6) Rapid Transit Corridors

- ✓ Beach
- ✓ East-West
- √ Kendall
- ✓ North
- ✓ Northeast
- ✓ South

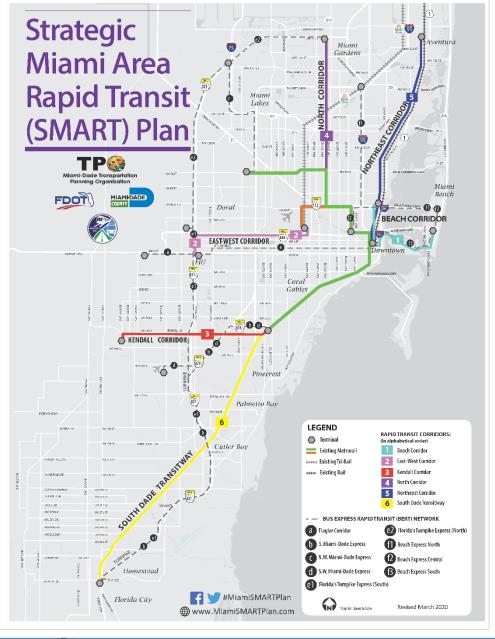
- (1) Project Development & Environment Phase
- (2) Implementation Plan for each corridor

## Six (6) Bus Express Rapid Transit Corridors

- √ Beach Express
- √ Flagler Street
- √ Florida Turnpike
- √ NW Miami-Dade Express
- √ S Miami-Dade Express
- ✓ SW Miami-Dade Express

Over 90 miles of express bus network

Supported by the TPO Governing Board, Miami-Dade County, Municipalities, State and multiple entities





## 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 \$100 MILLION



LOCAL FUNDS Committed to the project

\$300 MILLION

TOTAL CAPITAL COST ESTIMATE

- Operations and Maintenance (OSM) 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
- ocal cost illustrations 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 MART 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 1969 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: 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



25 PERCENT

25

### **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

50



**STATE FUNDS**Subject to future FDOT allocation in the Work Program



### LOCAL FUNDS

PTP Revenues; Assumed from PTP SMART Plan

- 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 generally along SR 836 classified as Phase 1 with a Capital Cost estimate of approximately \$265 million. Additionally, the capital cost for Phase 2 has recently developed, which covers the eastern portion of the project, and it is approximately \$153 million. 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



33 PERCENT

- 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 \$23.2 million (2019) for various bus rapid transit routes along 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:



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



- 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 assumes 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



**LOCAL FUNDS**Current plan assumes PTP SMART Plan allocation

50 PERCENT

> 50 PERCENT

- 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

## Best Practice in Collaboration SMART Plan Support from State, Regional & Local





























































































# Thank you



# Aileen Bouclé, AICP Executive Director

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