



# FLORIDA DEPARTMENT OF TRANSPORTATION

*Safety, Mobility, Innovation, Talent*

## MOBILITY WEEK: SMART PLAN PROJECT OVERVIEW



Fall 2020

# Strategic Miami Area Rapid Transit (SMART) Plan

## TPO Resolution #26-16

Resolution endorsing the SMART plan and directing the MPO Executive Director to work with the Metropolitan Planning Organization fiscal priorities committee to determine the costs and potential sources of funding for Project Development and Environment study for said projects.

### FDOT Led PD&E Studies:

- 1) North Corridor
- 2) Kendall Corridor
- 3) Flagler Corridor (BERT Route)



# North Corridor Rapid Transit Study

## Project Facts:

- **Study Limits:** NW 27th Avenue from NW 215th Street to NW 38th Street and SR-112  
From NW 27th Avenue to the Miami Intermodal Center (MIC)
- **Length:** 12 Miles
- **Unique Markets:** Intercounty, colleges, special event venues

## Project Goals:

- **Maximize mobility** by offering an alternate transportation mode with competitive travel times, which improves the corridor's people carrying capacity.
- **Enhance connectivity** with local and other regional transit systems that improves transportation systems efficiency.
- Realize **economic opportunities** within the project corridor through transit-oriented development.
- **Improve access** to regional attractors in Miami-Dade and Broward.



## Miami-Dade County and TPO Action

- **December 2018** –Miami-Dade TPO Governing Board selected an elevated fixed guideway transit system as the LPA for the North Corridor.
- **January 2019** – DTPW Letter to FDOT requesting the Department evaluate alternative transit technologies: Maglev, Monorail, Automated Guideway Transit.
- **October 2019** –Miami-Dade TPO Governing Board selected an elevated HRT as the LPA for the North Corridor with a motion directing TPO to coordinate with FDOT and Miami Dade to further refine technology analysis and report back at the March 2020 meeting.
- **April 2020** – TPO accepted DTPW’s optimization report considering alternative transit technologies
- **June 2020**- Miami -Dade Department of Transportation and Public Works (DTPW) released RFP for the North corridor.



**Metrorail**

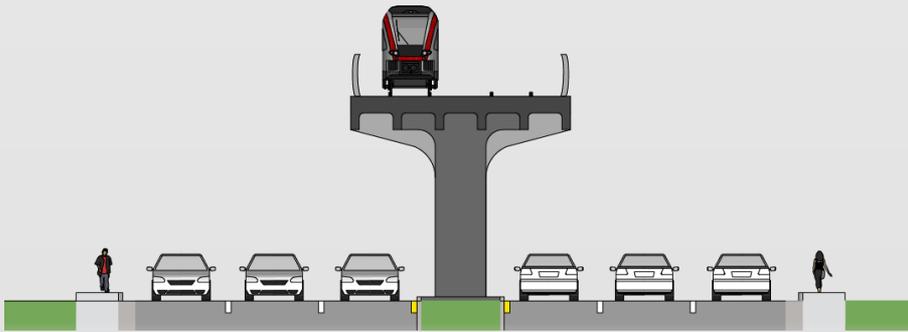
**WHEREAS**, on October 31, 2019, the TPO Governing Board adopted Resolution #55-19 selecting Elevated Heavy Rail as the preferred transit technology for the North Corridor of the SMART Plan; and

**WHEREAS**, at the same meeting the Governing Board directed the TPO Executive Director to coordinate with the Florida Department of Transportation and Miami-Dade County staff to further refine the analysis for the various technological modes for the North Corridor to include localized financial, operations and maintenance data and to report the revised analysis to the TPO Governing Board at its March 2020 meeting; and

## FDOT's Analysis Results To Date

### Recommended Alternative:

#### Elevated HRT



- Provides seamless connection between the neighborhoods along the corridor and Downtown Miami as major economic engine
- Fastest, most efficient travel time option to Downtown Miami
- Seamless interoperability with existing transit system/maintenance facility
- Transit travel time savings: Up to 34 mins

**Note:** travel time estimated between Unity Station & Brickell Metrorail Station

Technology	New Riders	Average Daily Riders
HRT Elevated Rail (Alternative 2)	7,500	16,200
AGT/APM	2,300	5,400
Maglev	3,700	8,600
Monorail	3,500	8,200

*Average daily riders:* includes trips starting or ending at a project station  
*New riders:* removes trips that would use transit in the No-Build

Technology	Capital Conceptual Costs (billions)	Conceptual Annual Operating and Maintenance Costs (millions)
Elevated Heavy Rail	\$1.90	\$49.41
Automated Guideway Transit	\$1.73	\$51.63
Urban Maglev	\$1.77	\$44.50
Monorail	\$1.95	\$45.94

Capital Cost includes right-of-way costs

## Project Milestones

- ✓ **November 2018**- Identified Recommended Alternative
- ✓ **December 2018** – Miami-Dade TPO selected an elevated fixed guideway transit system as the LPA for the North Corridor
- ✓ **March 2019**- FTA issued class action of determination for an Environmental Assessment (EA)
- ✓ **October 2019**- Miami-Dade TPO selected elevated HRT as the LPA with motion to refine analysis and present results back in March 2020
- ✓ **February 2020**- Value engineering workshop held

## Project Status

- FDOT PD&E project on hold- Pending completion of procurement process by the Miami-Dade DTPW, and final selection of transit technology by the Miami- Dade TPO.



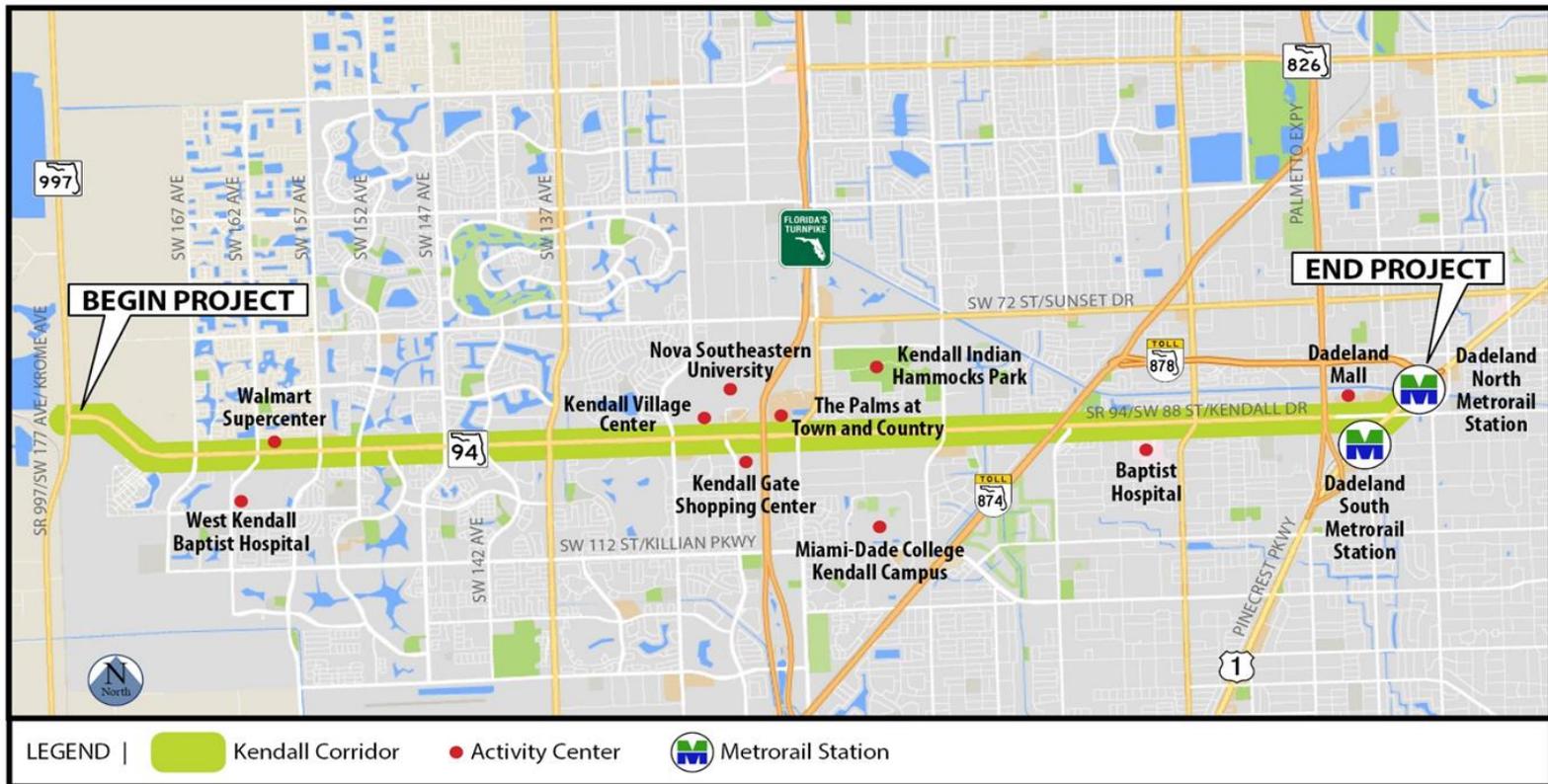
# Kendall Corridor Rapid Transit Study

## Project Facts:

- **Study Limits:** SR-94/Kendall Drive/SW 88th Street from SR 997/Krome Avenue/SW 177th Avenue to Dadeland North Metrorail Station
- **Length:** 10 Miles
- **Unique Markets:** Local communities, major malls, hospitals

## Project Goal:

**Improve travel options, increase mobility, improve connectivity** along Kendall Drive through the implementation of cost-effective, high-ridership, new rapid transit service with supporting pedestrian and bicycle facilities.



## FDOT's Analysis Results To Date

### Recommended Alternative



### Curbside lanes BRT

- Provides cost effective transit solution along Kendall Drive
- Maintain curbside access to businesses/residences
- High capacity, frequent transit service
- Maintains left turns
- Transit travel time savings: Up to **14 minutes**

### Design Year (2042) Ridership

ALTERNATIVE	TRIPS ON PROJECT	NEW TRANSIT TRIPS
CURBSIDE BRT	8,900	3,400

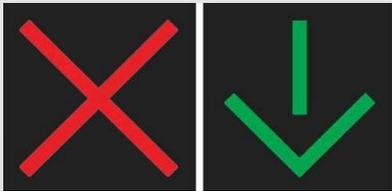
*Trips on Project:* includes trips starting or ending at a project station  
*New Transit Trips:* removes trips that would use transit in the No-Build

\*\*Values shown current as Oct. 2019

ALTERNATIVE	CAPITAL COST (millions, 2018 dollars)	OPERATIONS & MAINTENANCE (O&M) COST (millions, 2018 dollars)
NO BUILD	None	None
TSM&O	\$60	\$3.3
CURBSIDE BRT	\$262	\$7.7
MEDIAN BRT	\$262	\$5.9
BRT WITH REVERSIBLE LANE	\$356	\$8.1
ELEVATED HRT	\$2,125	\$25.2
HYBRID HRT	\$1,867	\$23.5

## Project Milestones

- ✓ **November 2019**- Identified recommended alternative
- ✓ **December 2019**- Public workshops held (3)
- ✓ **February 2020**- TPO Executive Director requested FDOT evaluate implementation of reversible lanes along the Kendall corridor (Tier 2.1 analysis)



## Next Steps

- **Fall 2020** –
  - Reversible lanes analysis results presentation to Miami-Dade TPO and DTPW Staff
  - TPO Committee and CITT Meetings
  - Miami-Dade TPO endorsement of recommended alternative
- **Winter 2021**- Complete NEPA checklist
- **Winter 2021**- Class of action determination by FTA



Bus Rapid Transit (BRT)

# Flagler Corridor Rapid Transit Study



## Project Facts:

- **Study Limits:** SR-968/Flagler Street from SR 821/HEFT to SR 5/US 1/Biscayne Blvd.
- **Length:** 20 Miles
- **Unique Markets:** Local communities, major malls, educational facilities, central business district, major attractions

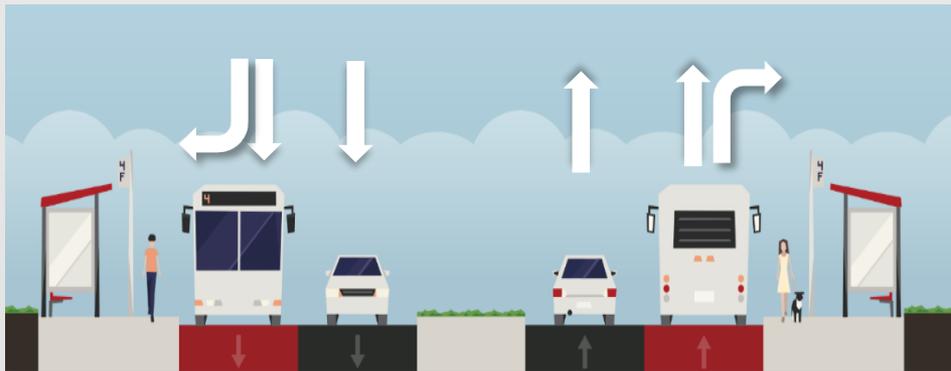
## Project Goals:

- Enhance **mobility choices** by offering alternate transportation options with competitive travel times.
- **Enhance transit service** and better connections with existing Metrorail and Metrobus routes.
- Provide **better transit access** to major activity centers including, but not limited to transit centers, education facilities, hospitals, major shopping malls, recreational attractions, and major employment centers.
- Increase potential for **economic development** and **employment opportunities**.



## FDOT's Analysis Results To Date

### Recommended Alternative:

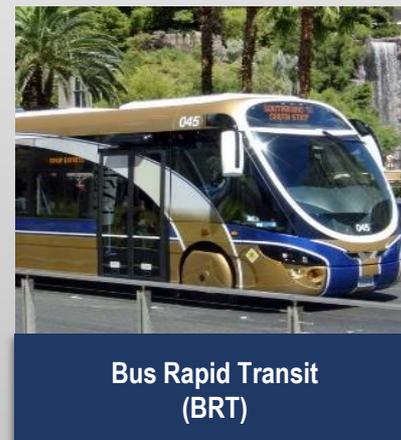


**Curbside with Business Access and Transit (BAT) Lanes**

- Transit travel time savings greater than 30 mins
- Increases ridership on the Corridor by 8,000 riders per day
- Has strong community support
- Serves as a catalyst for potential economic development/transit-oriented development
- Offers shorter travel time to Downtown
- Encourages the highest mode shift from auto to transit.

Alternative	Estimated Total Capital Cost Including Right-of-Way (millions)	Estimated Operating and Maintenance Costs (millions)
No-Build	\$0	\$20
TSM&O	\$90	\$33
Alternative 1: BRT with Business Access and Transit (BAT) Lane	\$478	\$55
Alternative 2: BRT with Exclusive Reversible Car Center Lane	\$656	\$55
Alternative 3: BRT with Exclusive Bus Center Lanes	\$511	\$56

\*\*Values shown current as July 2019



**Bus Rapid Transit (BRT)**

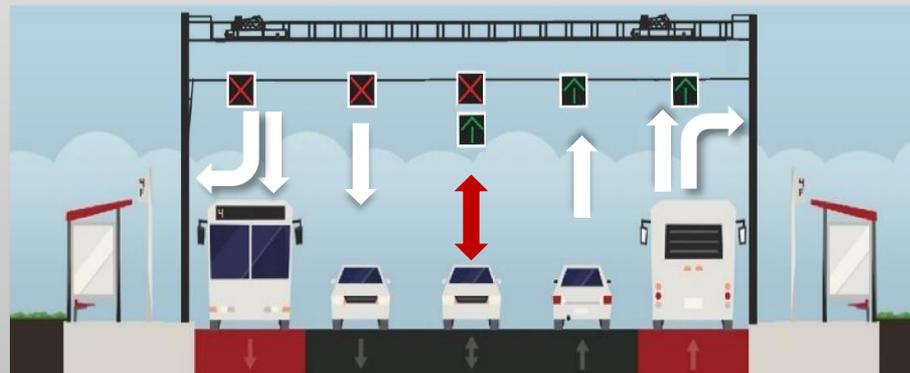
**Note:** Travel time estimated between NW/SW 72<sup>nd</sup> Avenue and NW/SW 2<sup>nd</sup> Avenue(Vissim model).  
Travel times are approximate and subject to further refinement in Tier 2.1.

## Project Milestones

- ✓ **April 2019**– Identified Recommended Alternative
- ✓ **July 2019**– Miami-Dade TPO requested a sunshine meeting to further discuss alternatives including the application of reversible lanes
- ✓ **January 2020**– Cost risk analysis workshop held
- ✓ **January 2020**– Sunshine meeting held, TPO Board requested FDOT evaluate the implementation of reversible lanes along the Flagler corridor (Tier 2.1 analysis)

## Next Steps

- **January 2021**-
  - Reversible lanes analysis results presentation to Miami-Dade TPO and DTPW Staff
  - TPO Committee and CITT Meetings
  - Miami-Dade TPO endorsement of recommended alternative
- **February 2021** - Complete NEPA checklist
- **March 2021**- Class of action determination by FTA





Improve Safety



Enhance Mobility



Inspire Innovation



Foster Talent



*Safety, Mobility, Innovation, Talent*

**For more information contact:**

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