

# City of Miami Beach Bus Express Rapid Transit - BERT

**DRAFT**



Presentation to Neighborhoods Committee  
June 20, 2018



# TRANSPORTATION MASTER PLAN

## A PUBLIC PROCESS

### BACKGROUND

- ✓ **Commission Workshops:**

March 18, 2015

December 16, 2015

- ✓ **Public Workshops:**

June 16, 2015

January 12, 2016

**Adopted by Commission in concert with a Bicycle Pedestrian Master Plan and Street Design Guide**

- ✓ April 13, 2016



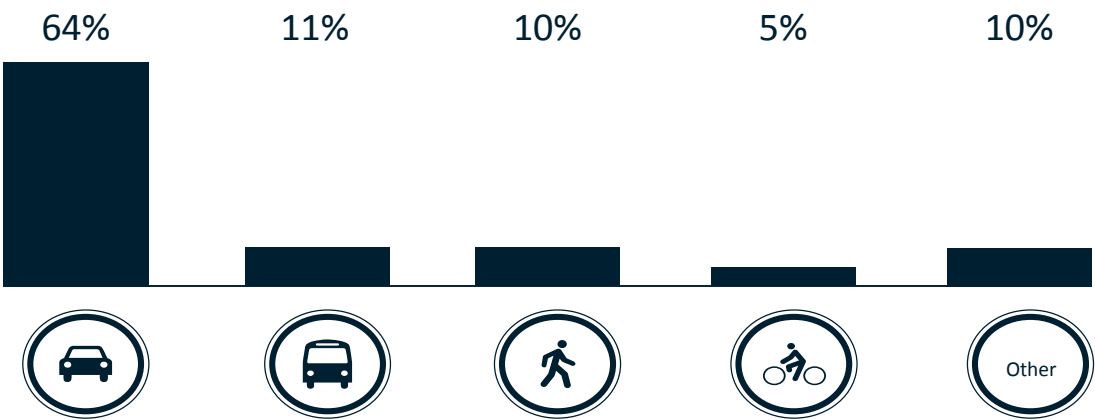
# TRANSPORTATION MASTER PLAN

# THE TRANSPORTATION MASTER PLAN CONTAINS STRONG GOALS TO SHIFT HOW PEOPLE TRAVEL

*Goals are to prioritize pedestrians, improve transit service and infrastructure, develop a bicycle network that is safe, connected, and consistent, provide off street parking facilities that are accessible and convenient, plan for efficient freight mobility and delivery of goods, and provide policies for the future.*

Existing

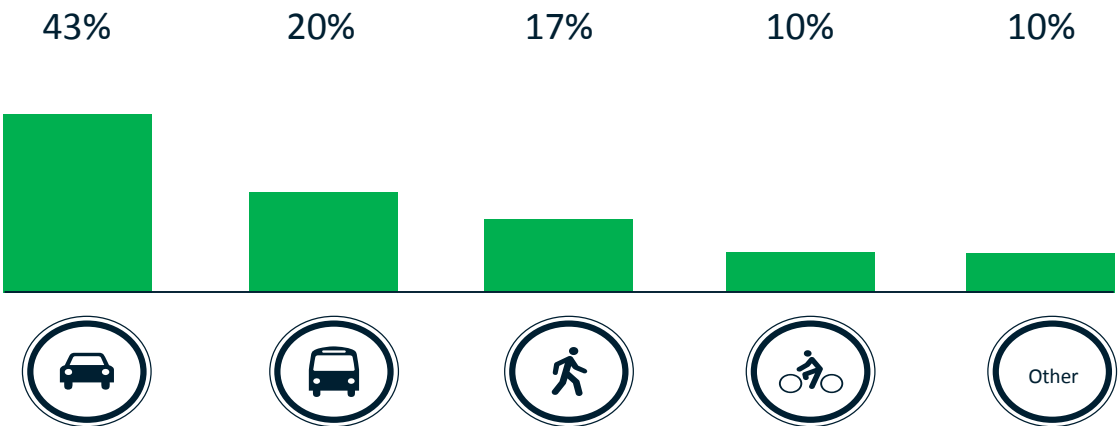
overall mode share



How people Travel (Mode Share)

2035

overall mode share vision



Represents a reduction of approximately **99.2 Metric Tons** of Greenhouse Gases per day

## Commission Resolution Adopting Modal Priority July 8, 2015

1. Pedestrians
2. Transit
2. Bicyclists
2. Freight
3. Private Vehicles

RESOLUTION NO. 2015-29083

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, ADOPTING THE MODE HIERARCHY PRESENTED AT THE MARCH 18, 2015 CITY COMMISSION WORKSHOP ON TRANSPORTATION.

WHEREAS, given the existing traffic congestion, the high number of special events, and the limited capacity in the City of Miami Beach's transportation network, residents and visitors have experienced an increased level of difficulty moving through the City; and

WHEREAS, the City has not completed a Transportation Master Plan since 1999; and

WHEREAS, in 2014, the City engaged Gannett Fleming to complete a new City of Miami Beach Transportation Master Plan; and

WHEREAS, Gannett Fleming evaluated existing conditions and collected data for transit, traffic, and pedestrians throughout the City; and

WHEREAS, on March 18, 2015, the City held a Commission Workshop on Transportation which included an overview of the Transportation Master Plan prepared by Gannett Fleming and a proposal for a transportation mode hierarchy; and

WHEREAS, based on analytical contrasts of vehicular throughput and people throughput, the Administration recommended a transportation mode hierarchy consisting of: 1- Pedestrians, 2- Transit, Bicycles, Freight (depending on the corridor), 3- Private Vehicles; and

WHEREAS, the Administration believes that the proposed mode hierarchy will change the paradigm of transportation in Miami Beach and appropriately respond to growth in population and tourism; and


WHEREAS, based on the proposed mode hierarchy, Gannett Fleming will generate projects focusing on enhancing alternative modes of transportation and reducing traffic congestion; and

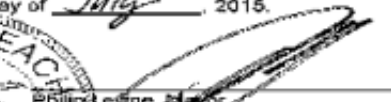
WHEREAS, City Commissioners present at the March 18, 2015 Commission Workshop on Transportation supported the proposed mode hierarchy presented by the Administration.


NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby adopt the mode hierarchy presented at the March 18, 2015 City of Miami Beach Commission Transportation Workshop consisting of: 1- Pedestrians, 2- Transit, Bicycles, Freight (depending on the corridor), and 3- Private Vehicles.

PASSED and ADOPTED this 8 day of July, 2015.


ATTEST:

  
Rafael E. Granado, City Clerk

  
Philip Levine, Mayor



APPROVED AS TO FORM & LANGUAGE & FOR EXECUTION

  
City Attorney

7/1/15  
Date

# TRANSIT PRIORITIZED CORRIDORS

**Transit Priority Corridors** are planned to provide **exclusive right-of-way for transit** and provide full and continuous multimodal connectivity and include:

- 5<sup>th</sup> Street
- Washington Avenue
- 41<sup>st</sup> Street
- Indian Creek/Collins Avenue – North of 17<sup>th</sup> Street
- Harding/Abbot
- Alton Road
- 71st Street/Normandy Drive
- All Causeways

There is a large market for commuter transit service:

- There are 19,000 transit trips per day on the causeways.
- 40,000 workers commute into Miami Beach per day
- 26,000 workers commute out of Miami Beach per day

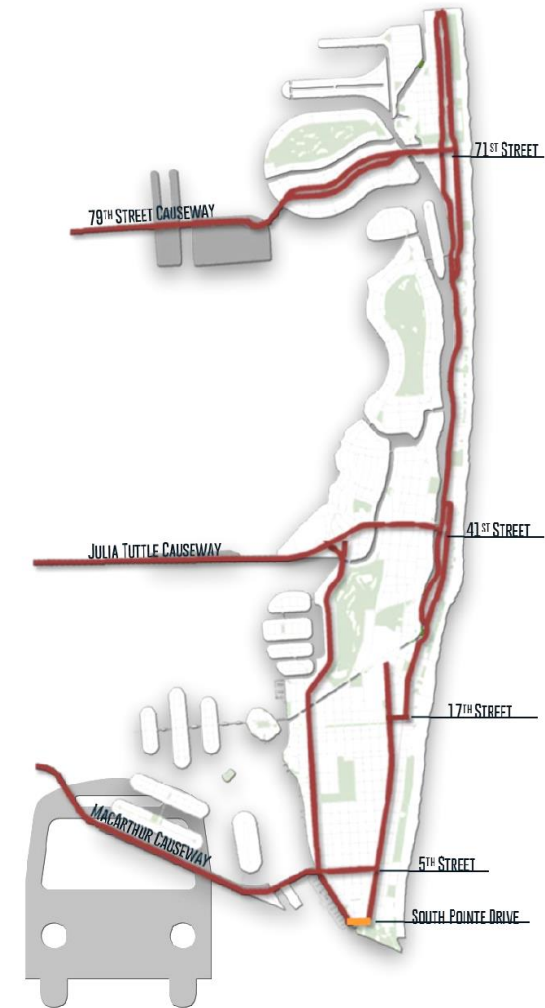


Figure 100: TMP Recommended Transit Priority Corridors

# SMART Plan

(STRATEGIC MIAMI AREA RAPID TRANSIT PLAN)

- Six (6) Rapid Transit Corridors**

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

(1) Project Development  
& Environment Phase

(2) Implementation Plan  
for each corridor

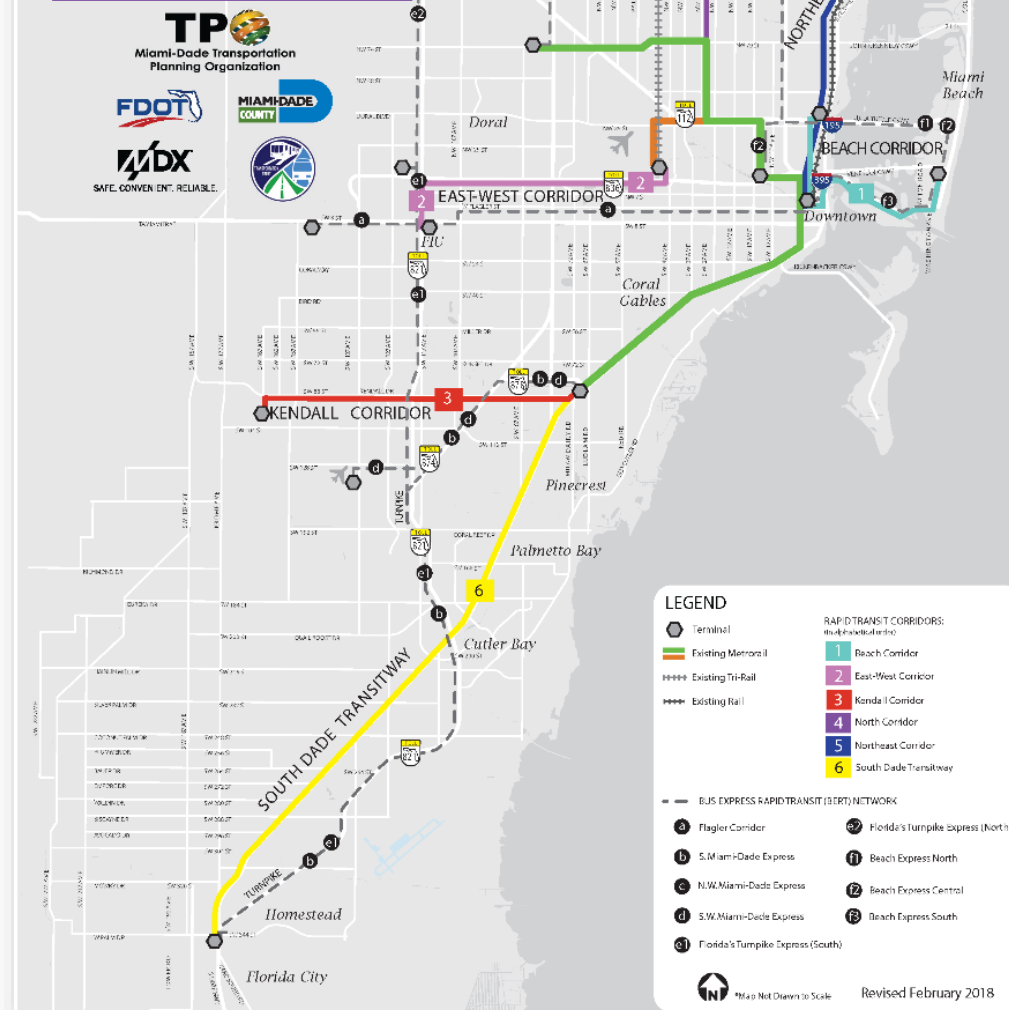
- Six (6) Bus Express Rapid Transit Corridors**

- ✓ 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 Transportation Planning Organization (TPO) Governing Board, Miami-Dade County, Municipalities, State and multiple entities**

## Strategic Miami Area Rapid Transit (SMART) Plan



# RECENT REGIONAL TRANSIT RESOLUTIONS

SMART PLAN VIDEO



# RECENT REGIONAL TRANSIT RESOLUTIONS

## December 14, 2016 Resolution 2016-29690

- Directed Administration to **advance short-term transit initiatives such as BERT** service and long-term for a light rail/modern streetcar connection across the MacArthur Causeway
- Suspend approval of an Interim Agreement for the top-ranked Proposer until Miami-Dade County takes formal action on commitment to the Beach Corridor Project (across the MacArthur Causeway);
- Pursue federal, state and local funding for the Miami Beach Project; and
- Require approval of any final Comprehensive Agreement for the rail project by a majority of the voters voting in a City-wide referendum.

Pursuant to the above direction, Transportation staff is participating in the County's Beach Corridor project and coordinating with regarding BERT Service.

## July 28, 2017 Resolution 2017-30008

- City staff and FDOT staff met several times regarding a solution to **improve accessibility between the I-95 Express Lanes and the Julia Tuttle Causeway**.
- The best short-term solution provides southbound access from the I-95 Express Lanes to the Julia Tuttle Causeway via a Texas U-Turn. FDOT staff believes this could be accomplished in a 2-3 year timeframe.
- City Commission strongly supported the Texas U-turn effort in July of 2017.



# RECENT REGIONAL TRANSIT RESOLUTIONS

## February 14, 2018 Resolution 2018-30179

- Supports the SMART Plan
- Supports smart transit between downtown Miami and Miami Beach
- **Urges the TPO and Miami-Dade County to find creative funding solutions to implement rapid transit efforts.**

## February 14, 2018 Resolution 30180

- Supports the SMART Plan
- Urges the TPO to **additionally consider the Julia Tuttle Causeway** for the Beach Corridor
- Urges use of real world data on Bus Rapid Transit

## February 14, 2018 Resolution 2018-30192

- Urges the City of Miami to support the Beach's efforts to secure services from Miami-Dade County for the reinstatement of the route and service plan for county bus route "A" that was in effect prior to the venetian causeway bridge restrictions went into effect.

# RECENT REGIONAL TRANSIT RESOLUTIONS

April 11, 2018 Resolution Number Pending

- **Supports the SMART Plan and Bus Express Rapid Transit Service**
- Work with Miami-Dade County to identify potential terminal/turnaround sites

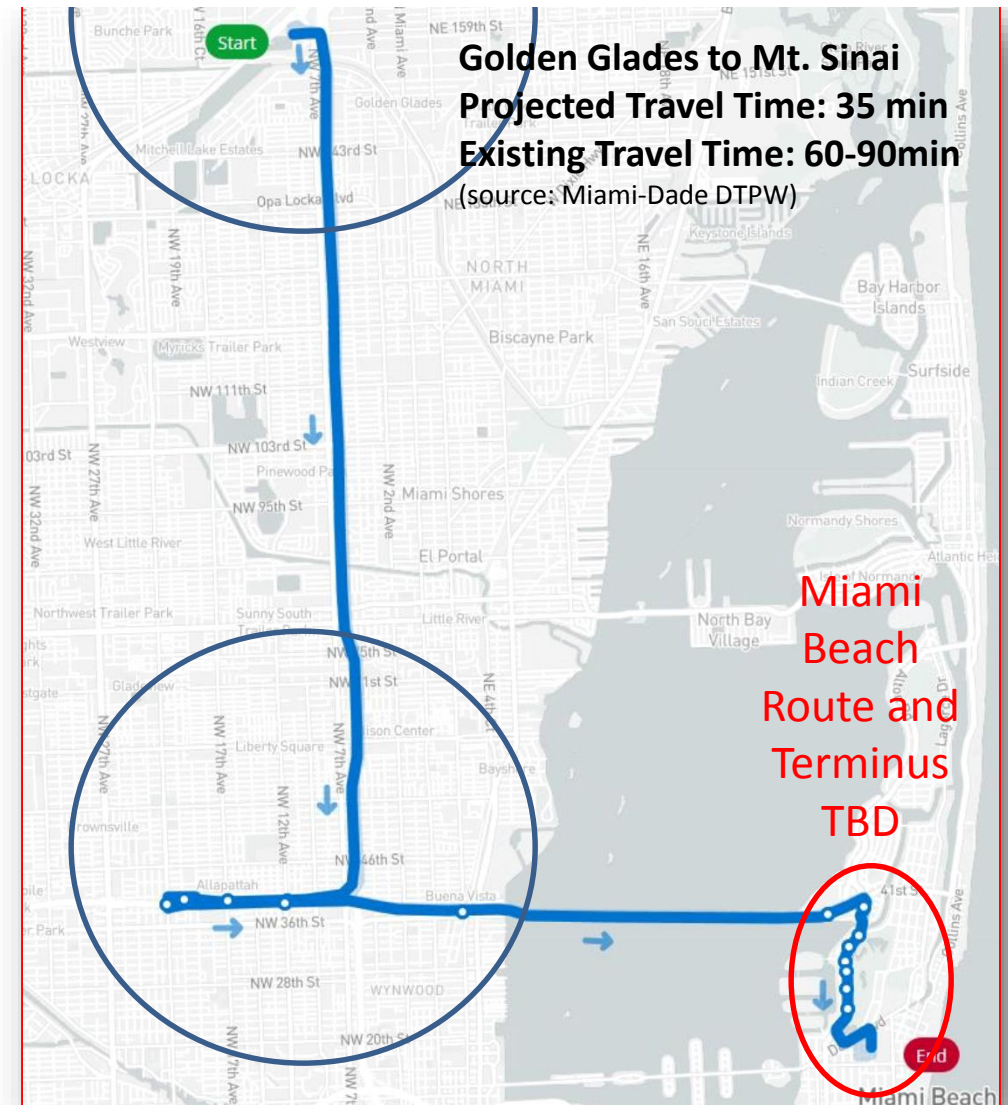
# SMART Demonstration Project Grant

- **The demonstration Grant Program Was Approved by Miami-Dade TPO on April 26, 2018.**
  - **Three year demonstration projects for new service.**
  - **Discussed at the April 27, 2018 Miami Beach Transportation Workshop**
- **At the May 16, 2018 Miami Beach City Commission meeting, staff was directed to:**
  - ✓ **Jointly apply with Miami-Dade County for the Beach Express North route**
  - ✓ **Operate the service on the shoulders of the Julia Tuttle Causeway**

# SMART Demonstration Project Grant

## MIAMI-DADE COUNTY PROPOSED ROUTE

- **Miami-Dade County Proposed BERT route**
  - **Golden Glades Intermodal Facility to**
  - **Earlington Heights Metrorail Station to**
  - **Miami Beach**
- **Major driver of route development was Mount Sinai hospital employment patterns**
- **Route is subject to refinement on Miami Beach based on additional market evaluation**
- **Applications submitted May 21, 2018.**
- **Award is expected at the June 21, 2018 TPO meeting**

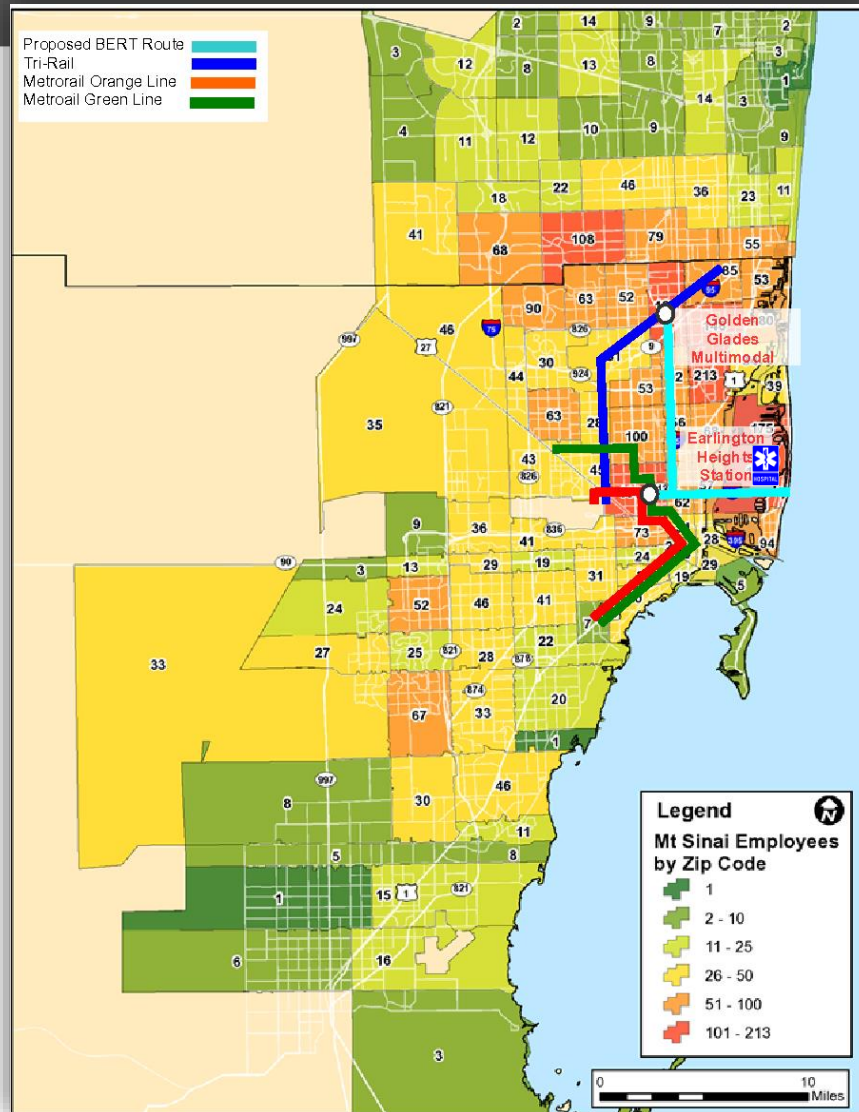






# SMART Demonstration Project Grant

## TARGET MARKETS Mount Sinai Medical Center

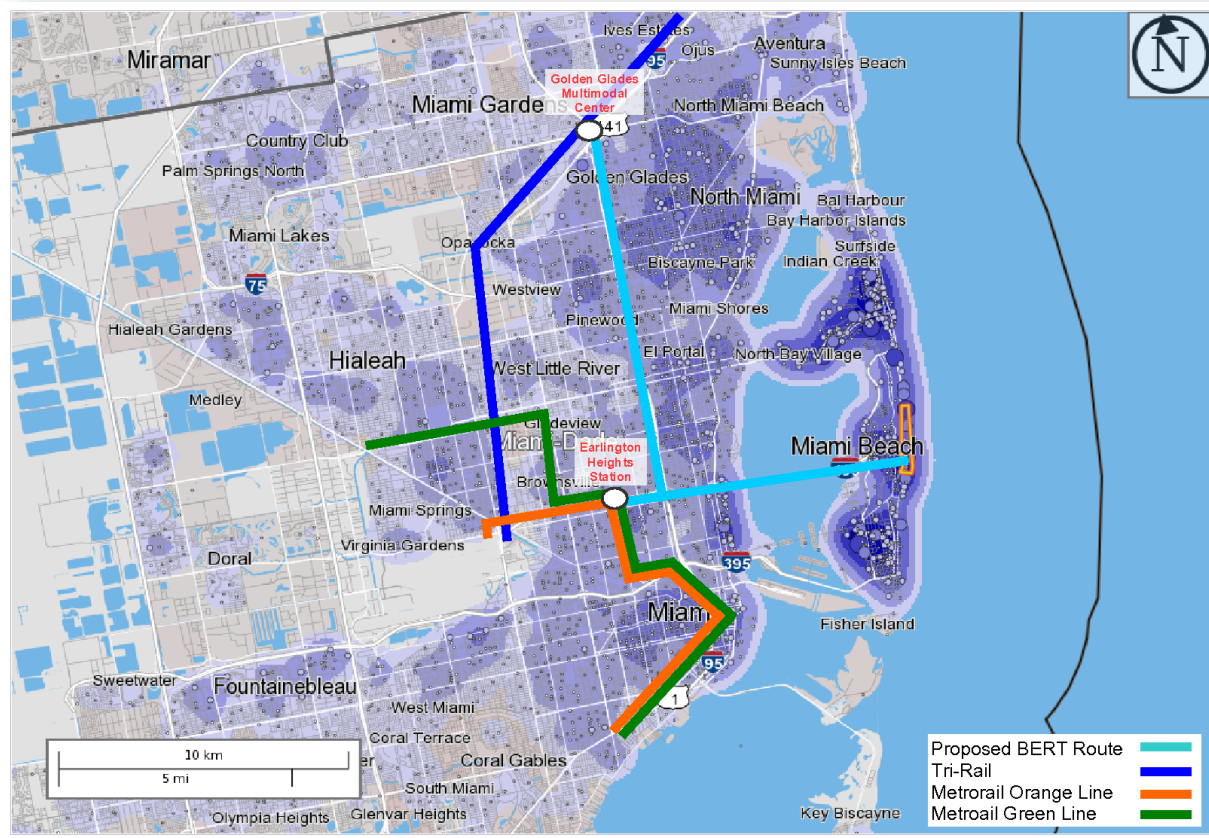


- **6<sup>th</sup> largest private employer in Miami-Dade County** (Beacon Council, 2016)
- **3,321 employees** (Beacon Council, 2016)
- **Approximately 36,900 employees per square mile**
- **Employees are clustered near:**
  - ✓ Eastern Miramar
  - ✓ Golden Glades
  - ✓ North Miami
  - ✓ Miami Shores
  - ✓ Miami Springs
  - ✓ Middle Beach

**All of the areas outside of Miami Beach would benefit from the new BERT route.**

# SMART Demonstration Project Grant

## TARGET MARKETS Collins Avenue, 30<sup>th</sup> to 50<sup>th</sup>



- 50<sup>th</sup> to 30<sup>th</sup> Street - east of the Intracoastal Waterway
- Total employees 6,064
- Approximately 24,256 employees per square mile
- Employees live near:

- |                 |               |
|-----------------|---------------|
| ✓ North Miami   | ✓ Wynwood     |
| ✓ Biscayne Park | ✓ Edgewater   |
| ✓ El Portal     | ✓ Miami Beach |
| ✓ Little Havana |               |

These area outside of Miami Beach would benefit from the new BERT route, particularly those north of I-395



# SMART Demonstration Project Grant

## TARGET MARKETS Collins Avenue, 17<sup>th</sup> to 30<sup>th</sup>



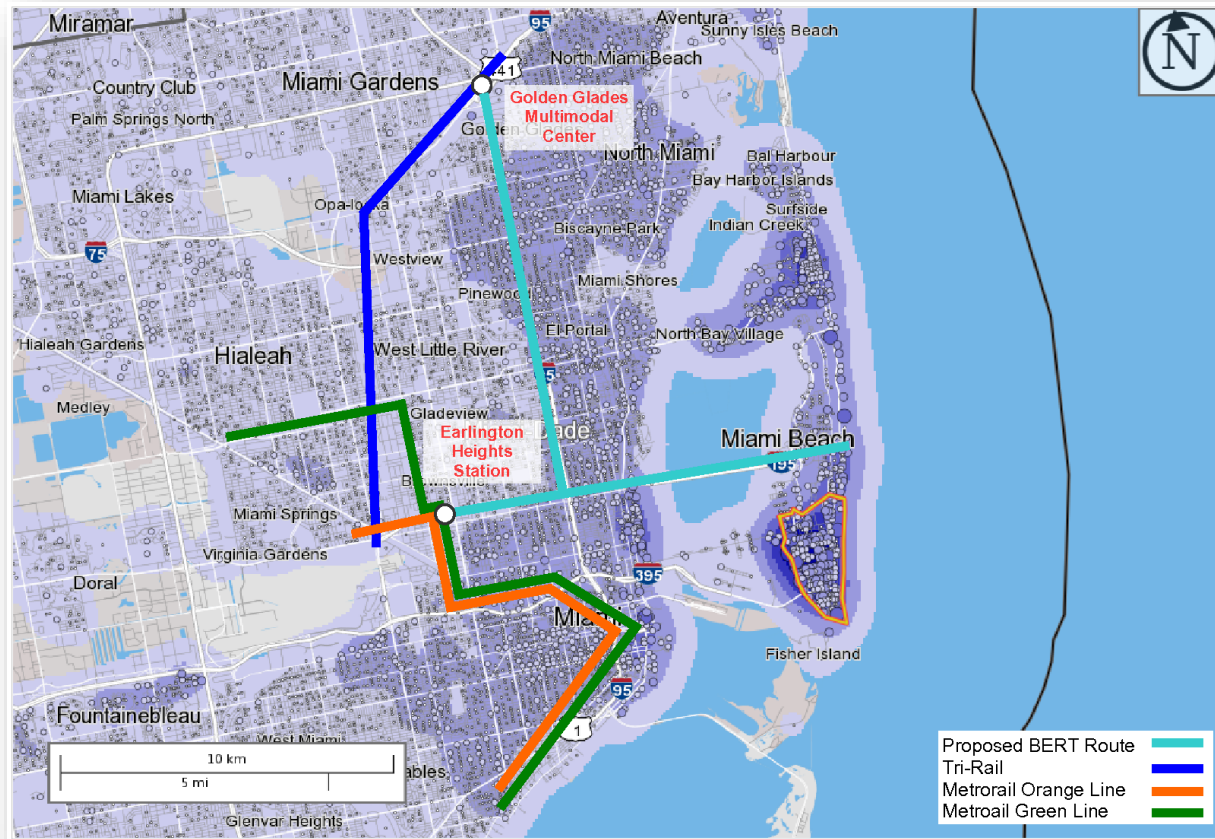
- 17<sup>th</sup> Street north to 30<sup>th</sup> Street, Washington Avenue west
- Total employees 8,496
- Approximately 33,984 employees per square miles
- Employees are clustered near:
  - ✓ North Beach
  - ✓ South Beach
  - ✓ East of I-95 – between downtown and SR 112

All of the areas outside of Miami Beach would benefit from the new BERT route.



# SMART Demonstration Project Grant

## TARGET MARKETS South Beach

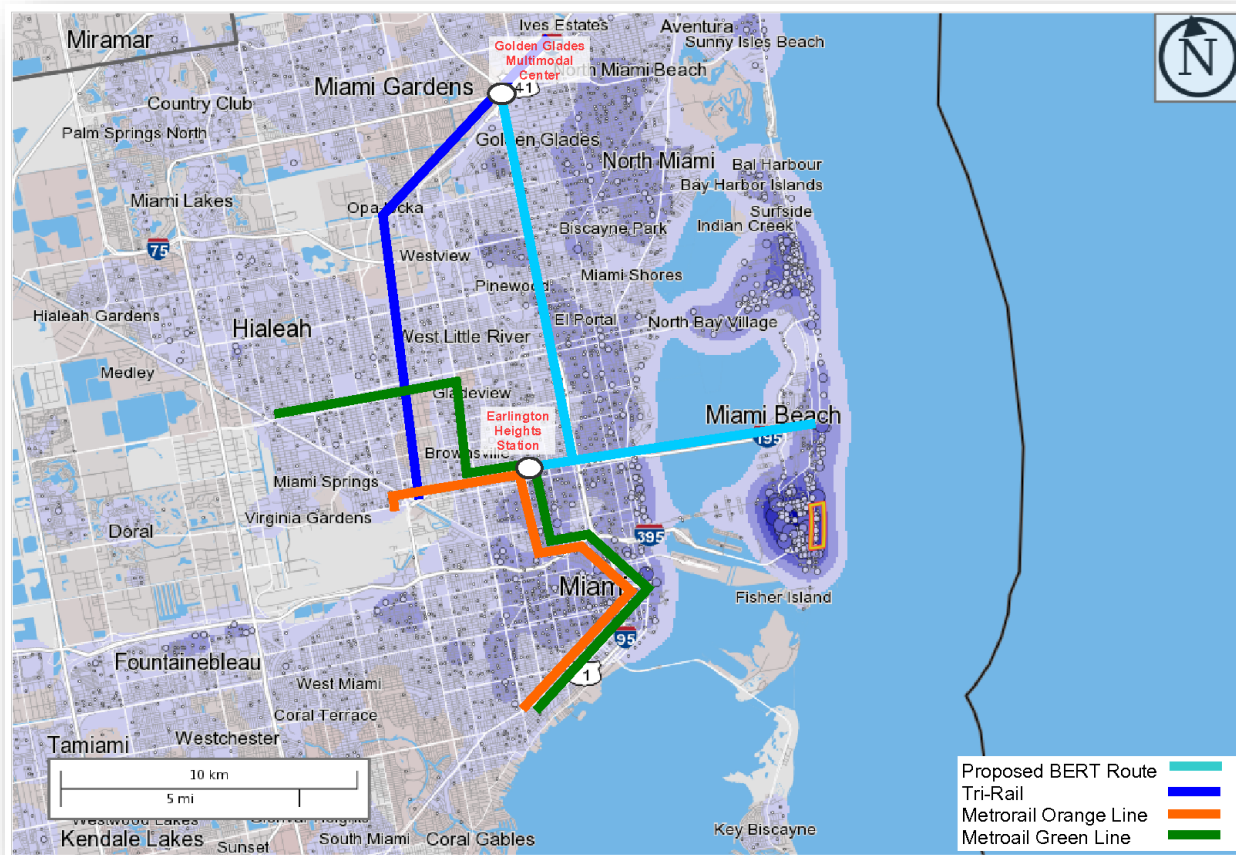


- 23<sup>rd</sup> Street south to South Pointe Drive, West Avenue east to Ocean Drive
- Total employees in South Beach area 33,464
- Approximately 17,249 Employees per square mile
- Outside of Miami Beach, most live north of I-395 and East of I-95

All of the areas outside of Miami Beach would benefit from the new BERT route, however those south of I-395 are more directly served by existing routes

# SMART Demonstration Project Grant

## TARGET MARKETS Entertainment District



- 16<sup>th</sup> Street south to 5<sup>th</sup> Street - east from Washington Avenue
- Total employees in the Entertainment District area 6,444
- Approximately 28,388 employees per square miles
- Employees are clustered near:

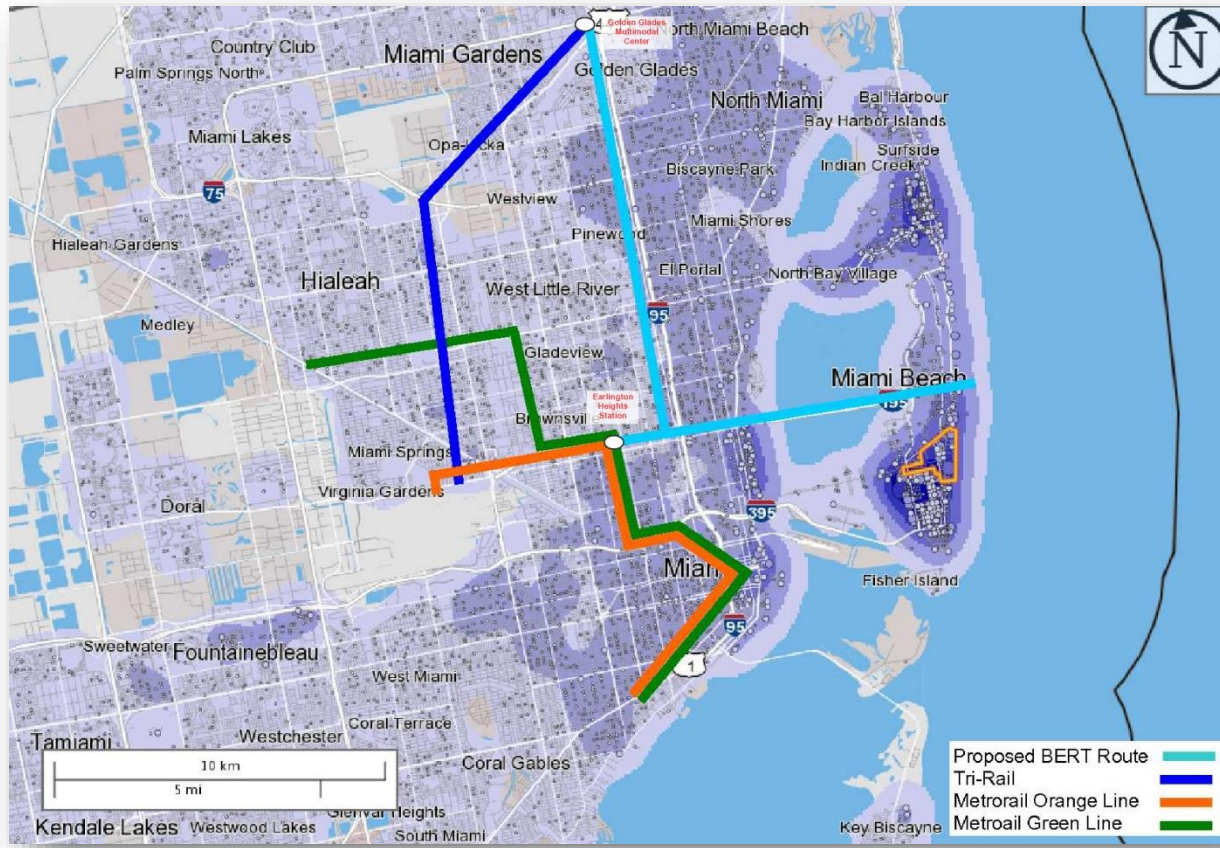
- |                 |                  |
|-----------------|------------------|
| ✓ South Beach   | ✓ Downtown Miami |
| ✓ North Beach   | ✓ North Miami    |
| ✓ Little Havana |                  |

Only North Miami would benefit from the new BERT route and those south of I-395 are more directly served by existing routes



# SMART Demonstration Project Grant

## TARGET MARKETS City Center Redevelopment Area (RDA)

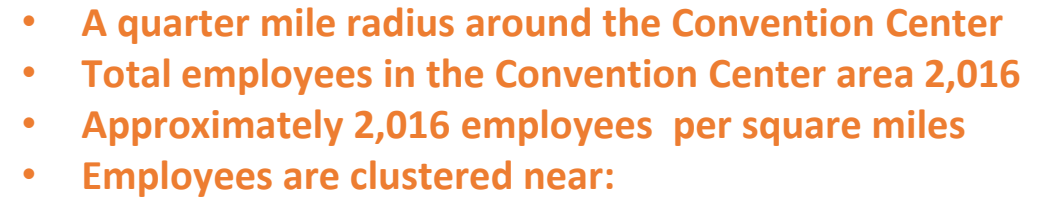


- The City Center RDA's Eastern boundary runs from 24<sup>th</sup> Street south the Espanola Way, along Collins Avenue. The Northern most boundary is the Collins Canal from 24<sup>th</sup> to Meridian Avenue. The Western boundary is Meridian Avenue, from Dade Boulevard, south to 17<sup>th</sup> Street. The RDA continues west along 17<sup>th</sup> Street to West Avenue, south to Lincoln Lane. The Southern boundary follows along Lincoln Lane to Drexel Avenue, south to 16<sup>th</sup> Street, then south along Washington Avenue.
- Total employees in the RDA 4,868
- Approximately 11,321 employees per square miles
- Employees are clustered near:
  - ✓ East of I-95
  - ✓ North Beach
  - ✓ South Beach
  - ✓ Miami
  - ✓ Midtown Miami
  - ✓ Downtown Miami

All of the areas outside of Miami Beach would benefit from the new BERT route, however those south of I-395 are more directly served by existing routes.

## TARGET MARKETS

### Convention Center



- All of the areas outside of Miami Beach would benefit from the new BERT route.**



# SMART Demonstration Project Grant

## TARGET MARKETS Summary Chart

Criteria	Miami Beach	Mt. Sinai	Collins Ave 30th to 50th	Collins Ave 17th to 30th	South Beach	Entertainment District	RDA	Convention Center
High Number of Employees	52,734	3,321	6,064	8,496	33,464	6,444	4,868	2,016
High Employees/Sq. Mile	7,533	36,900	24,256	33,984	17,249	28,388	11,321	2,016
Potential Choice Riders- GG	M	M	M	L	M	M	M	M
Potential Choice Riders- EH	M	M	M	H	M	M	H	H
Square Miles	7	0.09	0.25	0.25	1.94	0.227	0.43	1

Based upon Miami Beach employment data, a high ridership route would serve Mount Sinai Medical Center, continue east along 41<sup>st</sup> Street, and serve the hotel and entertainment destinations along Collins Avenue to the City Center vicinity.

## SMART Demonstration Project Grant

## PARTICIPATION IN OPERATION AND CAPITAL COSTS

Annual Operating Cost		
Total	Miami Beach	TPO
\$3,440,000.00	\$1,720,000.00	\$1,720,000.00

Three Year Operating Cost		
Total	Miami Beach	TPO
\$10,320,000.00	\$5,160,000.00	\$5,160,000.00

**Miami-Dade County Contribution: \$9.5 M capital soft match for purchase of new buses for Beach Express North BERT service.**

# SMART Demonstration Project Grant

## SOURCE OF FUNDING

Resolution No. 2017-29939 allocated \$36 million for Transportation Projects:

- \$10 million in Resort tax for tourism eligible projects.
- \$21 million in City Center Redevelopment(RDA) Non-Tax Increment Funding which is limited in use to within the RDA.
- \$5 million in Concurrency Mitigation Funding that can be used anywhere in Miami Beach to reduce traffic congestion.
- These are all considered one-time (non-recurring) sources of funds.

Resolution No. 2006-26341 states that one-time sources of funds can only be used for one-time (non-recurring) expenditures

- Capital projects and demonstration projects can be considered one-time uses of funds

On May 16, 2018, the Commission endorsed using the \$5 million in Concurrency Mitigation Funds for the Beach Express North BERT demonstration project.

The additional \$160,000 would need to be funded from the Transportation Department Operating Budget in Year 3 of the demonstration project grant.

# SMART Demonstration Project Grant

## Keys to Success

### Keys to Success

Successful public transit systems have a number of characteristics in common. Applying these concepts to the proposed Beach Express North BERT service will be the keys to short-term and long-term success.

### Characteristics Include:

- Comfortable, reliable vehicles with unique branding and technology amenities.
- Easily accessible information about the service route and schedule changes/problems.
- Drivers trained to provide courteous customer service.
- Convenient and comfortable stop locations.
- An experienced service provider.
- Exclusive lanes of travel to avoid traffic congestion. **Operation on the outside shoulders of the Julia Tuttle Causeway is critical to this service.**



# New CNG Buses



25

# SMART Demonstration Project Grant

## Other Keys to Success

### Information about service route and scheduling changes:

- **Miami-Dade County mobile app**
  - Route and Stop Locations
  - Schedule and Service Information
  - Next Bus Arrival in Real Time
  - Trip Planner
  - Real-Time Rider Alerts
- **Miami Beach E-Gov/Trolley Tracker mobile app**
  - Routes and Stop Locations, including “Closest Stop and My Favorite Stops”
  - Next Trolley Arrival in Real Time
  - Integration of BERT Schedule and Service Information
  - Real-Time Rider Alerts
  - Customer Service Feedback
- **Electronic “Next Bus Arrival” signs at major stops, transfer points, and termini locations.**

# SMART Demonstration Project Grant

## Pending Issue: Use of Shoulders

- Critical to the success of a BERT project is the ability to travel in an exclusive lane, thereby avoiding traffic congestion.
- The north/south portion of the route from Golden Glades intermodal facility to the Earlington Heights Metrorail station will operate in the dedicated I-95 Express lanes.
- The concept of the BERT demonstration route anticipated the use of shoulders as has been used on other Express routes in Miami-Dade County.
  - FDOT has expressed opposition to the use of the outside shoulder of the Julia Tuttle Causeway due to impacts to the existing bike lane.
  - FDOT recommends using the inside shoulder for the service, but only after reinforcement and widening of the inside shoulder and restriping of the causeway. This work may take up to two (2) years.
  - FDOT recommends that no BERT service begin until the required causeway work is done.

# SMART Demonstration Project Grant

## Pending Issue: Use of Shoulders

### Interim Use of Julia Tuttle Outside Shoulders

- Miami Beach is advocating for temporary use of the outside shoulder while expediting the required FDOT work to the inside shoulder.
  - Peak usage of the bike lanes occurred when the Venetian Causeway was closed.
  - Recent City-monitored bike usage shows minimal use during the peak hours.
  - Venetian Causeway and 79<sup>th</sup> Street Causeway provide alternate/better facilities to the north and south.
- This discussion is ongoing.

# SMART Demonstration Project Grant

## Next Steps

- Approval of interim use of the outside shoulder of the Julia Tuttle Causeway.
- If the interim use of the outside shoulder is approved, the next steps include:
  - Conduct outreach and refine route with Miami-Dade County.
  - Review and approval of the SMART Demonstration Project grant application.
  - Develop marketing and implementation Strategy for the new service.
  - Finalize Interlocal Agreement and associated Beach Express North BERT Business Plan with Miami-Dade County.
- If the interim use of the outside shoulder is not approved:
  - The Administration and Miami-Dade County recommend deferral of the grant application.
  - The Administration and Miami-Dade County would work to modify the existing Airport Express (Route 150) to serve Mount Sinai and the hotel and economic activity centers along Collins Avenue.



# SMART Demonstration Project Grant

## Transportation, Parking, and Bicycle-Pedestrian Facilities Committee Endorsement

### Endorsement by the Transportation, Parking and Bicycle-Pedestrian Facilities Committee (TPBPFC) :

- On May 14, 2018, the TPBPFC passed a motion supporting the SMART Demonstration Program application for the Beach Express North BERT 3-year demonstration service on the Julia Tuttle Causeway.
- On June 11, 2018, the TPBPFC discussed the Beach Express North BERT Pilot Program and made a motion recommending that the pilot program go across the Julia Tuttle Causeway, make a stop at Mt. Sinai, go east on 41<sup>st</sup> to Collins Ave, go north to 44<sup>th</sup> Street, and then south on Indian Creek Drive; route should go as far as 23<sup>rd</sup> Street and Collins Avenue.