## PHASING PLAN FOR TIER II ALTERNATIVES



A phasing plan has been developed to demonstrate how the three Tier II alternatives may be implemented. The BRT alternative has the shortest expected time-frame for full implementation while the LRT

alternative and the Metrorail alternative may take approximately five years longer to implement.

All of the build alternatives would undergo an Environmental Impact Statement (EIS) phase in the initial five years following identification of the Locally Preferred Alternative (LPA). Other activities that could occur in the first five years include acquiring right-of-way for parking facilities, reorienting bus routes, providing transit signal priority, and implementing an enhanced fare collection system.

Within ten years of the LPA, design and construction activities could take place for the extension of Metrorail to SW 104 St., (SW 124 St. for the Metrorail alternative). Other activities include opening the SW 184 St. grade separation (BRT and LRT alternatives only) and expanding park-ride capacity.

Beyond ten years is when the majority of the differences between the alternative phasing plans emerge. The BRT system to Florida City along with several high-priority grade separations could be implemented within 15 years. Lower priority BRT grade separations may be complete within 20 years. The LRT and Metrorail alternatives would likely have completed EIS work for the full build alternative within a 15-year timeframe along with ordering vehicles and acquiring rightof-way for a maintenance facility.

Phase II of the Metrorail alternative (SW 124 St. to Southland Mall) could be operational within 20 years along with the Metrorail maintenance facility. Phase III of the Metrorail (Southland Mall to Florida City) could be operational within 25 years. LRT implementation to Southland Mall (Phase I) and to Florida City (Phase II) is expected to follow a similar 20-year and 25-year time frame, respectively.

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South Link Alternatives Analysis

Miami Dade MPO 111 NW First Street, Suite 910 Miami, Florida 33128

You are invited!

South Corridor Citizen's Advisory Committee Meeting • Wednesday, March 8, 2006, 6:30pm South Dade Government Center, Room 203 • 10710 N.W. 211 Street, Cutler Ridge, Florida



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# South Miami-Dade Transit Corridor Alternative Analysis



Winter 2005 - 2006 Vol. 3



# **Citizen's Advisory Committee makes initial recommendations**

#### **CITIZEN'S COMMITTEE**

MARLENE K. PORTER Chairperson

CHARLEY MC GAREY Vice Chairperson

**REV. ERNEST ANDREWS JULIO BREA BEN GILBERT DEE DEE HEACOCK RENE INFANTE CURTIS LAWRENCE EUGENE LEON BENNIE LOVETT** ERNESTO MARTINEZ JR. DR. BARRY MATERSON **PAUL NEIDHART JEFF PORTER ALAN ROSENTHAL BENJAMIN SPARKS** DR. PAT WADE **ROBERT WILCOSKY RON WILLIAMS** 

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Study Update

More on Transit Routes

## **BACKGROUND**

At its August 10, 2005 meeting, the South Corridor Citizen's Advisory Committee (CAC) voted to recommend to the Metropolitan Planning Organization (MPO) Governing Board that the Planning Consultants move forward with further study of five of the seven proposed transit alternatives from Kendall to Florida City, along U.S.1/South Dixie Highway. They are:

- Alternative 1\*
  No-Build
- ...
- Alternative 2\*
  Transportation System
  Management (TSM)
  to Florida City
- 3 Alternative 3
  Light Rail Transit (LRT)
  - Alternative 5
    Metrorail Extension from
    Dadeland South Station
    to Florida City
- A Option 5A
  Hybrid Vehicle
  - Alternative 6
    Metrorail Extension/
    Bus Rapid Transit (BRT)
    with grade separation

## STUDY UPDATE

The MPO Governing Board supported the CAC's recommendation of eliminating two of the alternatives: Alternative 4 – Metrorail Extension

to Southland Mall area, and Alternative 7 – Diesel Multiple Unit (DMU) along the CSX railroad corridor.

The MPO Governing Board will have the final say on the alternatives studied and recommended for the South Corridor. However, the CAC serves to provide community consensus. At the MPO's January 26, 2006 meeting, Board Chairman Joe A. Martinez, Vice Chair Dennis C. Moss (District 9), and Commissioner Katy Sorenson (District 8) acknowledged the tenacity and diligence of the CAC in moving forward the South Corridor's agenda.

## **NEXT STEPS**

On Friday, February 24, 2006, the project team will host three (3) on-site informational sessions at locations along the South Corridor. This will provide the opportunity for residents to receive detailed specifics on selected alternatives and offer their input and comments. The public is invited to stop by.

9 am - 11 am **Walmart-Florida City** 33501 South Dixie Highway

12 pm -3 pm **Southland Mall** 

20505 South Dixie Highway

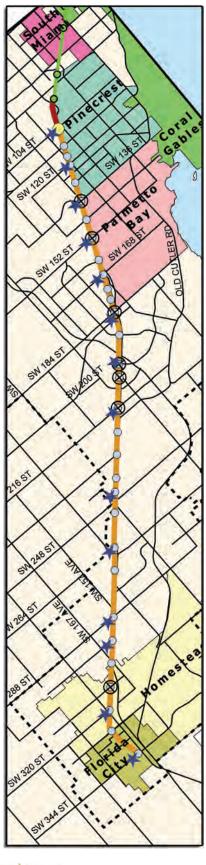
4 pm - 6 pm **Dadeland South Metrorail Station** (downstairs) 9150 Dadeland Boulevard

In March, the CAC will make a final recommendation on the preferred alternative for the South Link Corridor. After which, two public meetings will be held along the corridor to gain public opinion on which alternatives should be recommended. Following the public meetings, the various MPO committees will also recommend a preferred alternative.

At the end of April, the MPO Board will make a final selection of an alternative to be ultimately implemented in the corridor.

<sup>\*</sup> The No-Build and TSM alternatives are required by the Federal Transit Administration (FTA) to be studied.

**Legend:** The circles represent bus stops along the bus way. The stars are potential park and ride lots.



## **TIER II ALTERNATIVES**

The tier II projects being studied for the South Link Corridor include two low cost alternatives and four build alternatives. The No-Build Alternative is required for analysis by the federal government and its purpose is to examine what would happen in the corridor if no new projects were constructed, The TSM Alternative includes those projects in the corridor that would be relatively easy to implement and they include modification of local bus routes to better feed the busway, the construction of additional park and ride lots and the provision of bus priority signalization along the corridor.

## ALTERNATIVE 3: Light Rail Transit to Florida City

This alternative would provide light rail transit (LRT) service from the Dadeland area to Florida City. Access to Metrorail from the proposed South Link LRT service would require a transfer at the existing Dadeland South station.

Light rail transit technology uses electrical power delivered by an overhead contact system. Light rail vehicles would operate in an exclusive right-of-way, at-grade. Light rail vehicles can operate at maximum speeds up to 60 miles per hour

Two-car trains would be used in the peak period. Platforms would be 200 hundred feet in length. A new maintenance facility would need to be constructed to accommodate the light rail vehicle fleet.

Feeder bus service would be operated at 15-minute intervals (headways) during peak hours. Feeder bus service would be operated at 15-minute headways.

#### **Alignment**

The LRT tracks and stations would be located on the west side of the existing busway right-of-way to allow for future improvements such as the widening of U.S.1 or managed lanes in the corridor.

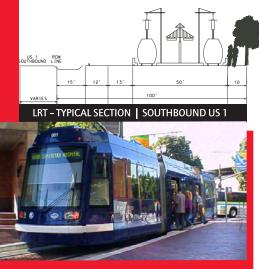
LRT service would be primarily at-grade. The LRT guideway would be approximately 19 miles long with the distance between stations generally ranging from one-half mile to one mile.

#### Stations

Stations and parking facilities would be provided at the following locations:

NO YES			NO YES		
	~	SW 104 St.		~	SW 216 St.
~		SW 112 St.	<b>~</b>		SW 232 St.
	~	SW 124 St.		<b>~</b>	SW 244 St.
	~	SW 136 St.		~	SW 264 St
<b>V</b>		SW 144 St.	<b>~</b>		SW 272 St.
	~	SW 152 St.		~	SW 288 St.
	~	Banyan St.		~	SW 304 St
	~	SW 184 St.		~	SW 320 St
	~	SW 200 St.	<b>~</b>		SW 328 St
<b>V</b>		SW 112 Ave.		~	SW 344 St.

Parking garages would be provided initially at SW 104, SW 136 and SW 344th Streets. Parking at the other stations would be at-grade until demand warrants construction of a garage.



LRT VEHICL

## **ALTERNATIVE 5:**

## Metrorail Extension from Dadeland South Station to Florida City

This alternative would provide fixed guideway rapid transit service from existing Dadeland South Metrorail station to Florida City. This line is an extension of the Phase I Metrorail and transfer would not be required at Dadeland South for a trip to downtown Miami.

The Metrorail vehicles and guideway would be similar to existing services in Miami. Station spacing would be approximately at one-mile intervals with easy access for bus riders, pedestrians, and passengers at stations. Service would be provided by six-car trains operated at six minute intervals during peak periods to all stations along the alignment. Fifteen (15) minute feeder bus service would also be provided at stations to allow access to the local bus system as well as key connections to activity centers throughout the region.

#### Alignment

The majority of the alignment would be built at an elevation to provide 16.5' clearance over local streets and roads.

The structure would return to the normal Metrorail elevation and would continue at this level until it reached the Homestead Extension of the Florida Tumpike, where the structure would climb over the Tumpike then return to its normal elevation all of the way to Florida City.

The structure would be built on the west side of the right-of-way to allow for future improvements such as widening of U.S.1 or provisions for local bus service in the corridor.

#### Stations

The stations along the South Corridor would match the platform length on the existing system – 580 feet. Stations and parking, serving specific areas (named below), would be provided at the following locations:

- SW 124 St. Pinecrest
- SW 136 St. Falls
- SW 152 St. Palmetto Bay
- SW 168 St.
- SW 184 St.
- SW 200 St. Cutler Ridge
- SW 216 St. South Dade Government Center
- SW 244 St.
- SW 264 St.
- SW 288 St.
- SW 320 St. Miami-Dade College
- SW 344 St. Florida City

All of the stations would be elevated with a center platform and would be accessible by stairs, elevators and escalators. Parking would be provided at every stop. Initially garages would only be constructed at SW 136 St.



METRORAIL

## **OPTION 5A** | Hybrid Vehicle

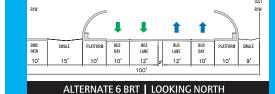
Option 5A would have the same operating characteristics as the main Alternative 5 with the same frequencies, train lengths, station locations, and platform lengths. This alternative would utilize a hybrid vehicle that could draw power from two different sources. The vehicle would operate in the existing Metrorail facilities drawing power from the electrified third rail. The vehicles would be retrofitted to enable them to also draw power from an over head power line, enabling the vehicle to operate at ground level. Thus the track work for the entire South Link corridor could be built at-grade saving millions of dollars.

## **ALTERNATIVE 6**

## Bus Rapid Transit (BRT) to Florida City

Alternative 6 of the South Miami-Dade Transit Corridor Alternative Analysis provides bus rapid transit (BRT) service to Florida City within the existing South Dade Busway corridor. BRT service would provide a higher level of transit service than is currently experienced within the Busway corridor and would provide the flexibility for buses to leave the BRT line to provide direct service to local neighborhoods and destinations such as the South Dade Government Center. Bus frequency in the northern portion of the corridor is expected to be approximately 90 seconds.

The BRT alignment length is approximately 19 miles for this alternative. Station spacing for Alternative 6 is approximately two stations per mile between Florida City and SW 104 St. To provide additional travel time benefit to the transit corridor and to enhance safety of the transportation system, a series of grade separations are recommended at critical intersections along the corridor as part of Alternative 6.



ALTERNATE O BITT | LOOKING

#### Stations

BRT stations would be designed for efficient pedestrian access to nearby neighborhoods, shopping centers, and employment areas. Several stations would have dedicated parking lots or parking garages connected to the BRT stations. Stations would be provided at the locations shown in the following graph.

STATION	PARKING	GRADE SEPARATION
	17414110	SEITHVITON
SW 104 St.		
SW 112 St.		
SW 117 St.		
SW 124 St.		
SW 128 St. SW 136 St.	• 1	
SW 136 St.		
SW 144 St.		
SW 160 St.		
SW 160 St.		
Banyan St. Hibiscus St.		
SW 184 St.		•
Marlin Road		
SW 200 St.		<u> </u>
SW 112 Ave.		
SW 216 St.		
SW 224 St.		
SW 232 St.		
SW 244 St.		
SW 264 St.		
SW 272 St.		
SW 288 St.		
SW 296 St.		
SW 304 St.		
SW 312 St.		
Miami-Dade C	olleae South	Campus
SW 320 St.	· 9 × · · ·	
SW 328 St.		
SW 336 St.		
SW 344 St.	✓ soutl	nern terminus of Bl

The stations that serve grade separation locations would be elevated to adjoin with the BRT alignment. This would provide opportunities to provide elevated pedestrian connections across major roadways and to make direct pedestrian access connections to parking garages. Elevated stations would also provide elevators and escalators to access the stations from street level.

#### **Grade Separation**

Grade separation is being studied for the South Link corridor from two perspectives – (1) elevating the BRT line over the surface streets and (2) elevating the surface streets over the BRT line.

#### **Metrorail Extension**

A 0.8-mile extension of Metrorail to SW 104 St. is proposed as part of Alternative 6. The SW 104 St. station would include a parking garage of approximately 1,000 – 1,500 spaces. The purpose of the Metrorail extension is to provide relief for the existing Dadeland stations that currently have limited accessibility because of constrained parking facilities and traffic congestion.



