



## PURPOSE

This effort focuses upon updating key information developed as part of the Miami-Dade MPO's South Miami-Dade Corridor Alternative Analysis (South Link) Study, completed in 2006. Key data that was updated include socioeconomic forecasts, cost estimates, ridership forecasts, and cost effective measures. These updates are intended to assist other transit related efforts for the South Miami-Dade area.

## BACKGROUND

The South Miami-Dade Busway is an at-grade 19.8 mile, 29 station, two-lane dedicated bus corridor that provides local and limited stop bus service between Florida City (SW 344th Street) and Dadeland South Metrorail Station. As part of the South Link Study, a locally preferred alternative was endorsed by the MPO Governing Board which called for a set of phased improvements for enhancing the BRT system from SW 104th Street to Florida City along the Busway corridor and a Metrorail extension from the Dadeland South Metrorail Station to SW 104th Street with a possible future extension as demand warrants.

## PROJECTED GROWTH

The 2006 South Link Study projected high socioeconomic (SE) growth rates for the future year 2030 in the corridor for housing, workers, and employment, based on the 2000 Census. Though South Miami-Dade County is one of the fastest growing areas in the County, the effects of economic downturn late 2000s slowed these growth rates. The updated projected SE data, based on the 2010 Census and for the future year 2040, still shows substantial projected growth from today but not at the same rates as in the South Link Study. A comparison of the projected growth between the forecasted years 2030 and 2040 for households, population, and employment are shown in the table below.

### Comparison of 2030 and 2040 SE data for South Link Corridor and Miami-Dade County

Study Area	2030 HH	2040 HH	2030 POP	2040 POP	2030 EMP	2040 EMP
Corridor	81,885	86,068	255,881	261,336	101,425	128,349
South County Portion	165,402	137,645	511,003	466,700	103,308	148,310
South County	247,287	223,713	766,884	728,036	204,733	276,659
Rest of County	837,603	933,089	2,382,407	2,374,102	1,385,504	1,328,898
Miami-Dade Totals	1,084,890	1,156,802	3,149,291	3,102,138	1,590,237	1,605,557

The growth in the Average Annual Daily Traffic (AADT) in the US 1 corridor is shown in the table below.

### Average Annual Daily Traffic (AADT) Growth

US 1 Intersection	1994 AADT	2003 AADT	% Growth 1994-2003	2014 AADT	% Growth 2003-2014
SR 826	90,000	94,000	4.44%	99,500	5.85%
SW 152 <sup>nd</sup> St	61,000	74,000	21.31%	76,500	3.38%
SW 288 <sup>th</sup> St	28,000	32,500	16.07%	*38,500	18.46%
SW 328 <sup>th</sup> St	11,800	30,000	154.24%	29,500	-1.67%

\*268th Street values were used

## STUDY RESULTS

The Summary Table below shows the updated costs, ridership forecasts, and effectiveness for each of the alternatives.

### South Miami-Dade Corridor Study (South Link Study) – Update Summary Table

Alternative	Capital Cost (in Millions)		O&M Cost Above No Build (in Millions)	
	2005	2014	2005	2014
2. TSM	\$126.5	\$154.3	8.2	14.4
3. LRT	\$853.9	\$1,041.8 - \$1,382.6	19.1	45.7
4. Metrorail + BRT	\$895.4	\$1,165.2 - \$1,633.5	N/A	N/A
5. Metrorail	\$1,649.8	\$2,012.7 - \$2,821.6	37.4	73.4
5A. Metrorail Hybrid	\$1,208.6	\$1,474.5	37.4	73.4
6. Enhanced BRT	\$423.3	\$516.3	10.8	18.9
7. DMU	\$325.5	\$397.1	N/A	N/A
Alternative	New Riders		Cost/New Rider	
	2005	2014	2005	2014
2. TSM	\$1,360	\$1,400	\$58.55	\$77.02
3. LRT	\$7,232	\$8,000	\$37.62	\$50.05 - \$66.20
4. Metrorail + BRT	N/A	N/A	N/A	N/A
5. Metrorail	\$5,827	\$6,500	\$89.70	\$110.28 - \$152.67
5A. Metrorail Hybrid	\$5,827	\$6,500	\$72.98	\$91.86 - \$100.00
6. Enhanced BRT	\$4,500	\$5,000	\$25.94	\$37.91 - \$42.18
7. DMU	N/A	N/A	N/A	N/A

## NEXT STEPS AND RECOMMENDATIONS

This study provided a cursory update based on available data and prior methods. These results still reflect that Alternative 6 (Enhanced Bus), the locally preferred alternative endorsed by the Miami-Dade MPO in 2006, remains very cost-effective in comparison to the other alternatives considered. Future studies for the South Miami-Dade area may provide additional multimodal options using new technologies or approaches. All current and future studies in South Miami-Dade County should be highly coordinated and a unified multimodal plan that addresses the lack of north-south mobility, failing levels of service, and high projected growth should be developed.

**\*Alternative maps are from:** *South Miami-Dade Corridor Alternative Analysis Report (South Link Study), June 2006, The Corradino Group, Inc.*

# South Miami-Dade Corridor Study (South Link Update) EXECUTIVE SUMMARY

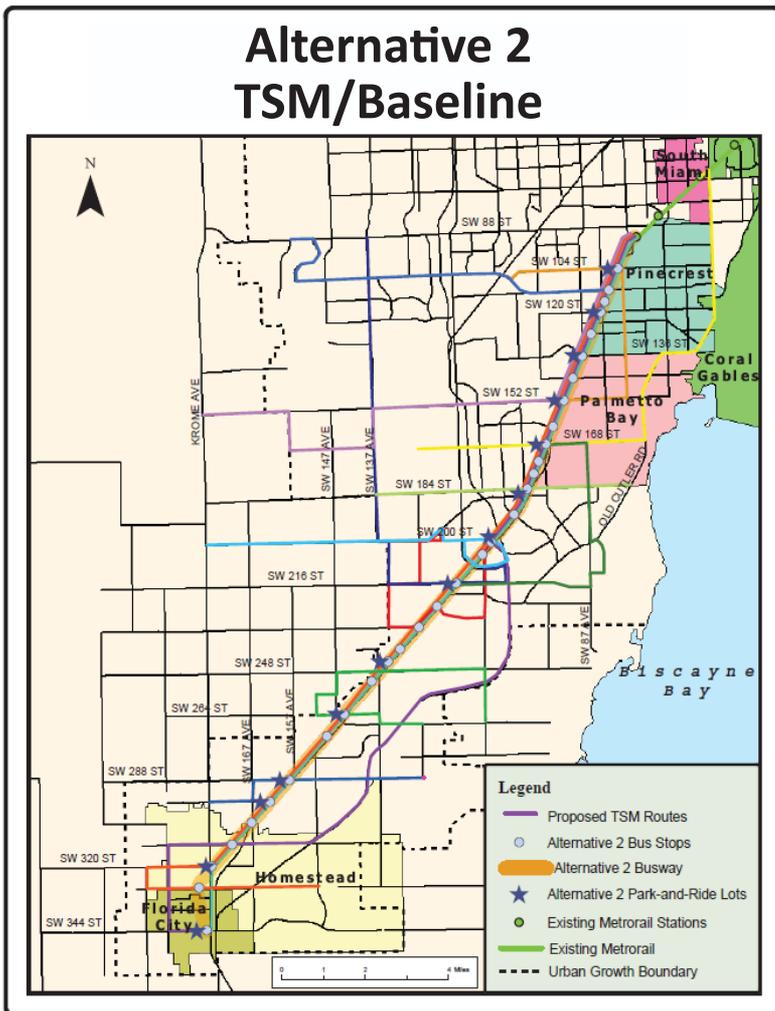
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## ALTERNATIVES CONSIDERED

Brief descriptions for all the alternatives developed as part of the South Link Study are described below, except for the No Build (Alternative 1).

### Alternative 2: Transportation Systems Management (TSM)

The TSM alternative would modify the existing bus service in the southern half of Miami-Dade County and provide substantially more park-and-ride facilities and signal prioritization.

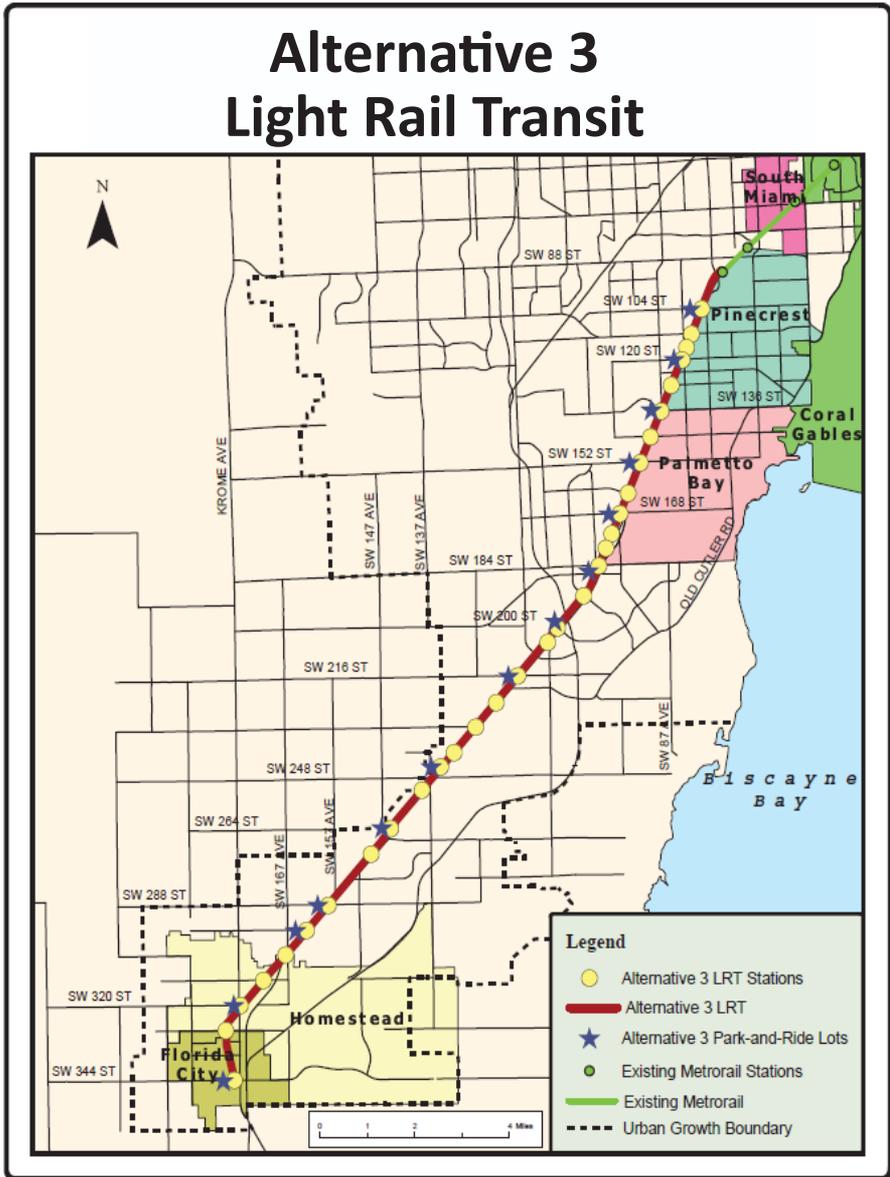


**Capital Costs : \$154 Million**

**Annual O&M Costs above the No Build: \$14.4 million**

### Alternative 3: Light Rail Transit (LRT) to Florida City

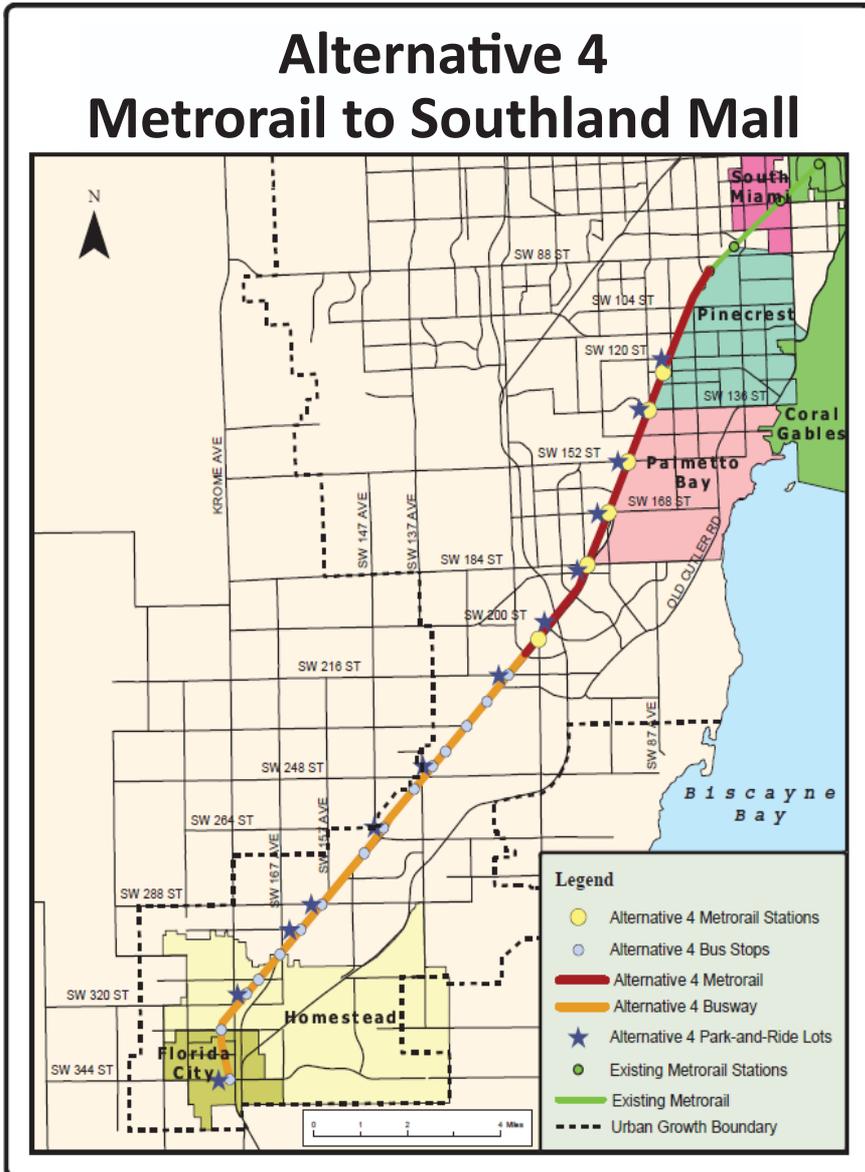
This alternative would provide at-grade light rail transit (LRT) service from SW 104th Street to Florida City and would have the same station spacing as the existing Busway.



**Capital Costs : \$1,040 - 1,090 Million**  
**Annual O&M Costs above the No Build: \$45.7 million**

## Alternative 4: Metrorail to Southland Mall/Bus Rapid Transit (BRT) from Dadeland South to Florida City

This alternative would provide an eight-mile extension of Metrorail to the Southland Mall area and assume the TSM improvements further south to Florida City.



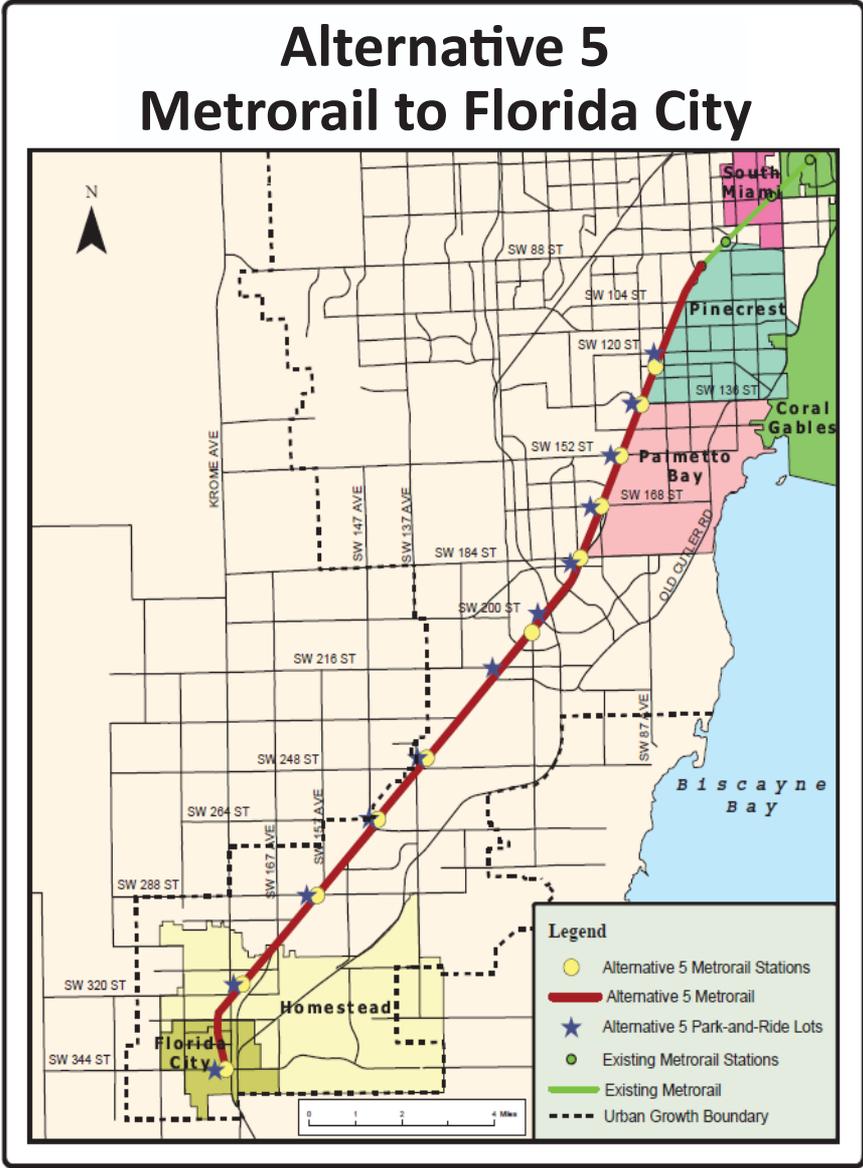
**Capital Costs : \$1,165 - 1,287 Million**  
**Annual O&M Costs above the No Build: N/A**

### Alternative 5: Metrorail to Florida City

This alternative would provide a 19-mile Metrorail extension to Florida City. The Metrorail tracks and stations would be within the existing Busway right-of-way.

### Alternative 5A: Hybrid

Same as Alternative 5, except that it would utilize Metrorail vehicles equipped to draw power from an overhead power line, enabling the vehicle to operate at ground level.



#### ALTERNATIVE 5: Metrorail to Florida City

Capital Costs : \$2,013 - 2,224 Million

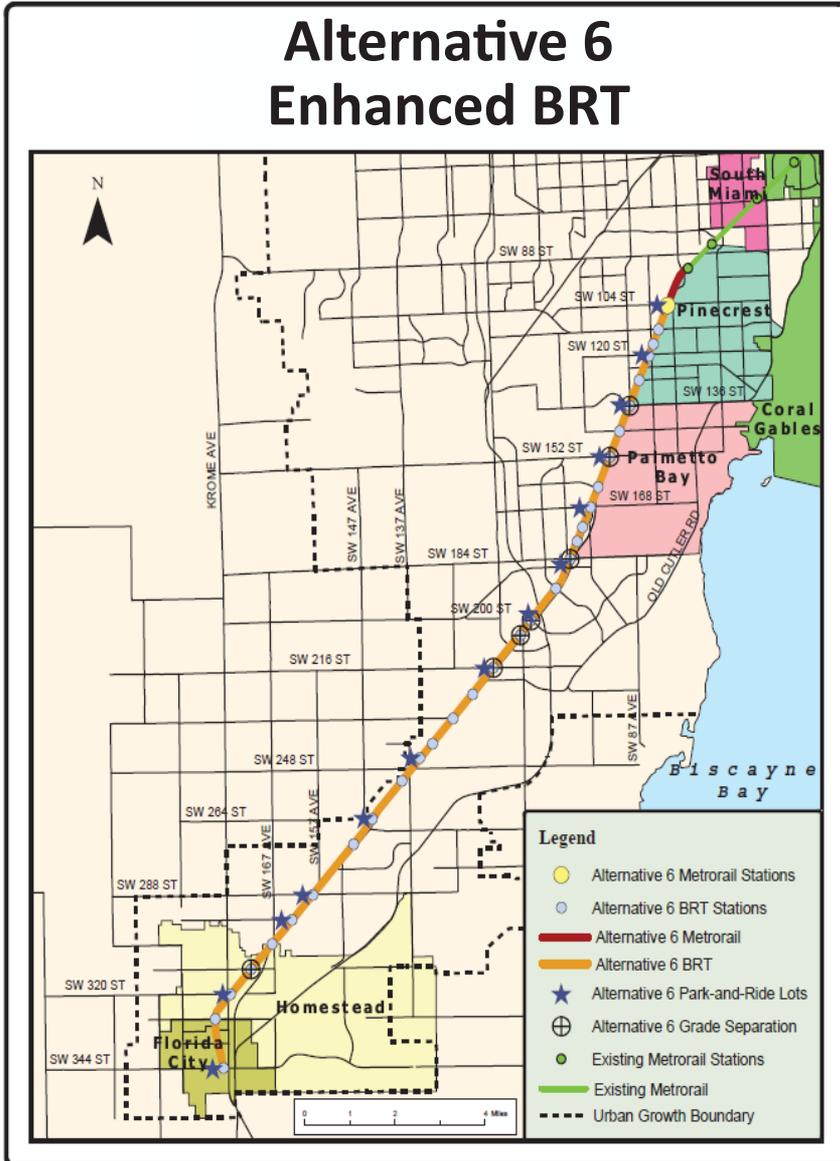
#### ALTERNATIVE 5A: Hybrid

Capital Costs : \$1,474 Million

Annual O&M Costs above the No Build: \$73.4 Million

## Alternative 6: Enhanced BRT (Metrorail to SW I04th Street/BRT from Dadeland South to Florida City)

This alternative includes a one-mile extension of Metrorail and continue with bus rapid service within the Busway right-of-way to Florida City.

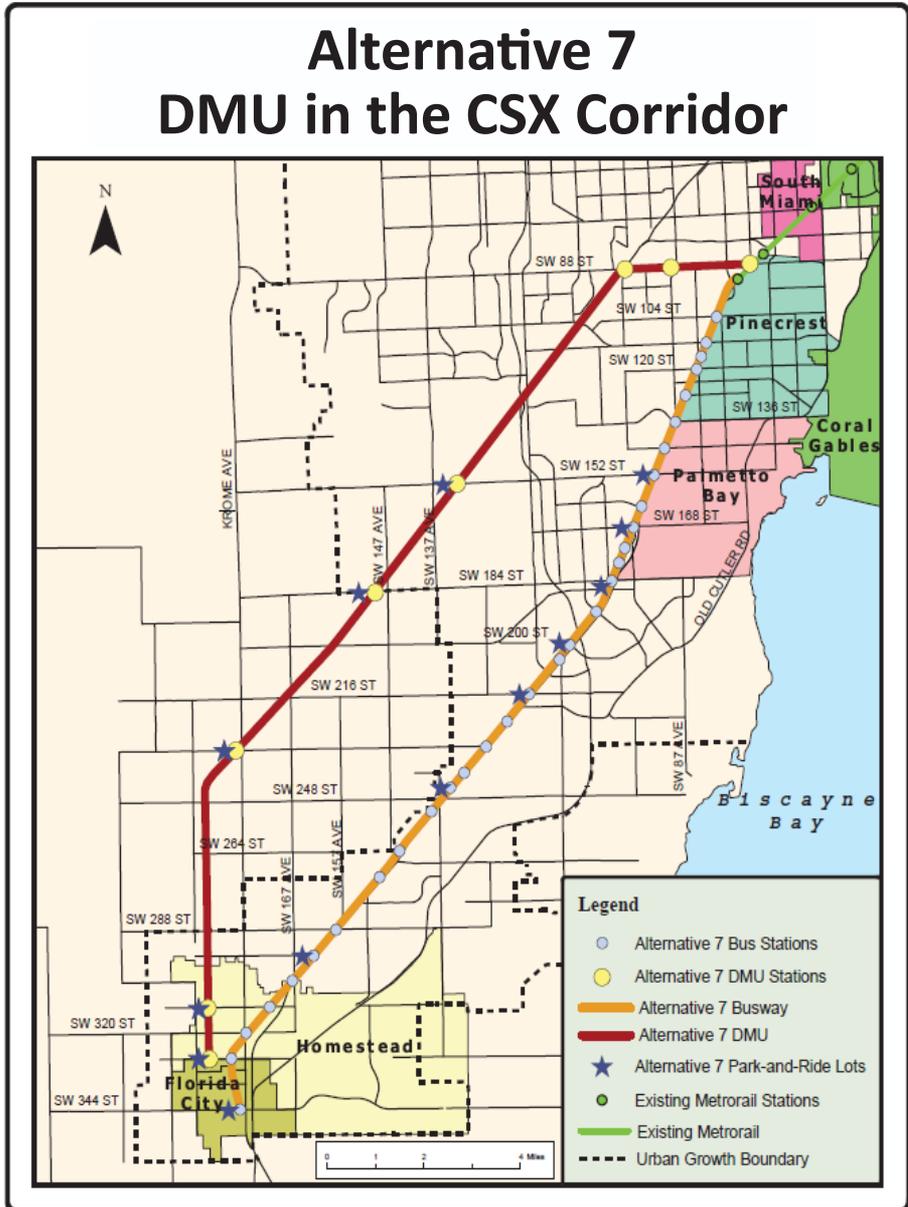


**Capital Costs : \$516 Million**

**Annual O&M Costs above the No Build: \$18.9 Million**

## Alternative 7: Diesel Multiple Unit (DMU) on CSX/Kendall Drive and Maintain Operation on Existing Busway

This alternative consists of diesel multiple unit (DMU) commuter rail service in the CSX corridor between Florida City and Dadeland, combined with the TSM alternative on the Busway.



**Capital Costs : \$397 Million**  
**Annual O&M Costs above the No Build: N/A**