

# North Corridor Metrorail Extension

Miami, Florida  
(November 2002)

## Description

The Miami-Dade Transit Agency (MDTA) has proposed to construct a Metrorail extension along a 9.5-mile section of NW 27<sup>th</sup> Avenue between the existing Dr. Martin Luther King Jr. Metrorail station and the Broward County line. The project has gone through several incarnations, originally starting out as a Metrorail extension when the project entered Preliminary Engineering, then changing to a lower cost Bus Rapid Transit (BRT) project when a one-cent sales tax referendum was rejected by voters in 1999, and reverting back to a Metrorail extension in the most recent submittal due to the passage of a new one-half cent sales tax referendum placed before voters in November 2002. The project includes seven stations and five park-and-ride lots providing a total of 2,650 spaces. No new vehicles will be needed for the project.

NW 27<sup>th</sup> Avenue is one of the few continuous north-south facilities in Miami-Dade County and serves as an alternative to the severely congested north-south I-95 and State Route 826. The project will help provide an additional travel alternative in the corridor and will have direct connections with the existing Metrorail system, Tri-Rail, the Miami Intermodal Center, and the Airport. The project would provide direct service to the Miami CBD and Medical Center, as well as provide service to Miami Dade Community College-North Campus and the Pro Player Stadium.

Summary Description	
<b>Proposed Project:</b>	North Corridor Metrorail Extension 9.5 Miles, 7 Stations
<b>Total Capital Cost (\$YOE):</b>	\$731.9 Million
<b>Section 5309 New Starts Share (\$YOE):</b>	\$365.9 Million (50%)
<b>Annual Operating Cost (2015 \$YOE):</b>	\$18.3 Million
<b>Ridership Forecast (2015):</b>	14,530 Average Weekday Boardings 6,770 Daily New Riders
<b>Opening Year Ridership Forecast (2009):</b>	12,150 Average Weekday Boardings
<b>FY 2004 Finance Rating:</b>	<b>Low-Medium</b>
<b>FY 2004 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2004 Overall Project Rating:</b>	<b>Not Recommended</b>

The overall project rating of *Not Recommended* is based upon the incomplete financial plan submitted by the project sponsor. The overall project rating applies to this *Annual Report on New Starts* and reflects the information available as of November 2002. The implications of increased funding resulting from passage of the November sales tax referendum have not yet been examined and documented in detail in an updated MDTA financial plan. When the project sponsor completes a revised financial plan, FTA will again rate the project and make that new information available to Congress and other interested parties.

## Status

The Miami-Dade Transit Agency completed a Major Investment Study (MIS) for the North Corridor in November 1995. The Metropolitan Planning Organization (MPO) Board selected the NW 27th Avenue alignment as the Locally Preferred Alternative in November 1995, and added the project to its fiscally constrained 2015 Long Range Transportation Plan. An Alternatives Analysis and the Draft Environmental Impact Statement (DEIS), including consideration of two busway alternatives and one heavy rail alternative, were completed with FTA participating as the lead Federal agency. In May 1998, the MPO selected the heavy rail alternative, a Metrorail Extension along NW 27th Avenue, as the Locally Preferred Alternative (LPA). The Preliminary Engineering/Final Environmental Impact Statement (PE/FEIS) phase is underway.

In July 1999, voters rejected a one-cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed North Corridor rail project. As a result, Metro-Dade re-evaluated other alternatives to improve transportation mobility in the Corridor. The Locally Preferred Alternative was changed to a lower cost BRT project.

The project has recently switched back to a Metrorail project due to the passage of a new sales tax referendum placed on the ballot for voter approval in November 2002. The referendum passed by a margin of 66 percent to 44 percent.

TEA-21 Section 3030 (a) (45) authorizes the Miami North 27<sup>th</sup> Avenue project for Final Design and construction. Through FY 2002, Congress has appropriated \$11.92 million in Section 5309 New Starts funds for this proposed project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. The project will be reevaluated when it is ready to advance to Final Design, and for next year's *Annual Report on New Starts*.

<b>Project Justification Quantitative Criteria</b>		
<b>Mobility Improvements Rating: Low-Medium</b>		
	<b><u>New Start vs. Baseline</u></b>	
<b>Average Employment Per Station</b>	1,727	
<b>Average Low Income Households Per Station</b>	198	
<b>Transportation System User Benefit Per Project Passenger Mile (Minutes)</b>	6.4	
<b>Environmental Benefits Rating: Medium</b>		
<b><u>Criteria Pollutant Reduced</u> (tons)</b>	<b><u>New Start vs. Baseline</u></b>	
<b>Carbon Monoxide (CO)</b>	560	
<b>Nitrogen Oxide (NO<sub>x</sub>)</b>	39	
<b>Hydrocarbons</b>	49	
<b>Particulate Matter (PM<sub>10</sub>)</b>	71	
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	15,519	
<b><u>Annual Energy Savings</u> (million) BTU</b>	197,549	
<b>Cost Effectiveness Rating: Medium</b>		
	<b><u>New Start vs. Baseline</u></b>	
<b>Cost per Transportation System User Benefit (current year dollars/hour)</b>	\$18.53	
<b>Operating Efficiencies Rating: Medium</b>		
	<b><u>Baseline</u></b>	<b><u>New Start</u></b>
<b>System Operating Cost per Passenger Mile (current year dollars)</b>	\$0.47	\$0.45

[ ] indicate an increase in emissions.

## **Project Justification**

### **Rating: Medium**

The *Medium* project justification rating reflects the marginally transit-supportive policies and existing land use along the proposed alignment and the average cost-effectiveness of the project. Based on 2000 Census data, there are an estimated 1,383 low-income households within a ½-mile radius of the proposed project, roughly 26 percent of the total households within a ½-mile of the proposed stations. There are approximately 12,086 jobs within a ½-mile of the proposed stations. The Miami-Fort Lauderdale-West Palm Beach metropolitan area is designated as a “moderate maintenance area” for ozone. The incremental cost per incremental trip for the North Corridor Metrorail Extension is \$20.15.

## **Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns**

### **Rating: Low-Medium**

The *Low-Medium* rating reflects the lack of demonstrated progress and the only marginally transit-supportive existing land uses along the proposed alignment.

**Existing Conditions:** The predominant land use along the proposed corridor is strip commercial that is bordered on the east and west by low and medium density residential land uses; however, there are several potential high-trip generators in the corridor including the Pro Player Stadium, St. Thomas University, the North Campus of the Miami-Dade Community College, and the Miami-Dade County Health Center. Population in the corridor is forecast to increase at a rate lower than that of the rest of the region, and will consequently represent a declining share of the metropolitan area population. Population and employment densities are currently fairly low and are forecast to remain low. In addition, existing land use patterns provide limited opportunities for pedestrian connections. There is also ample parking throughout the corridor.

**Future Plans, Policies and Performance:** The State of Florida and several regional planning councils have established an Urban Infill Strategy Task Force to encourage infill development and increase densities. State and regional policies promote infill development with implementation dependent on local jurisdictions. Miami-Dade County's Comprehensive Development Master Plan (CDMP) requires localities to accommodate new development around transit stations that incorporate certain physical design elements. The CDMP promotes pedestrian access and the provision of bus stops. Recent changes to Miami-Dade County's CDMP require a minimum density of housing units and employment based on distance from rail stations. Transit overlay zones exist to promote transit-oriented development in station areas and along the corridor. Currently there is no county-wide parking policy for Dade County, although a recent study proposes a schedule for development of a coordinated parking policy.

## **Other Factors**

Enterprise zone/empowerment communities are located within the corridor.

## **Local Financial Commitment**

### **Rating: Low-Medium**

The *Low-Medium* local financial commitment rating was determined by the *Low-Medium* rating for the capital financing plan and the *Low-Medium* rating for the operating finance plan.

## **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50%**

### **Rating: Medium**

MDTA plans to use Section 5309 New Starts funds, a State transit block grant, and revenues from a one-half cent proposed sales tax to construct the proposed project.

<b>Locally Proposed Financial Plan</b>		
<b><u>Proposed Source of Funds</u></b>	<b><u>Total Funding (Smillion)</u></b>	<b><u>Percent of Total</u></b>
<b>Federal:</b> Section 5309 New Starts	\$365.9	50.0 %
<b>State:</b> Public Transit Block Grant	\$183.0	25.0 %
<b>Local:</b> One-Half Cent Sales Tax	\$183.0	25.0 %
<b>Total:</b>	<b>\$731.9</b>	<b>100.0 %</b>

**NOTE:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

## **Stability and Reliability of Capital Financing Plan**

### **Rating: Low-Medium**

The *Low-Medium* rating is due to the incomplete capital plan submitted by MDTA and the uncertainty of the capital cost estimates.

**Agency Capital Financial Condition:** The capital condition of MDTA is fair. The average age of the bus fleet is 6.7 years. For rail vehicles, the average age is 18 and 9.9 years for Metrorail and Metromover vehicles, respectively. No information regarding current bond ratings for the agency was included in the submittal.

**Capital Cost Estimates and Contingencies:** The capital cost estimate submitted by MDTA is based on conceptual engineering performed in 1997, with a 3.5 percent inflation factor per year added to bring the estimate into current year dollars. The estimate includes an 11.3 percent overall contingency allowance, with additional line item “add on” factors of ten percent for conceptual contingency and ten percent for construction contingency.

**Existing and Committed Funding:** MDTA’s capital plan proposes two funding sources for the non-New Starts share – a Florida Department of Transportation Transit Block Grant and a new one-half cent sales tax, each providing 25 percent of the total project cost. According to the plan, the Transit Block Grant is an existing funding source, which remains uncommitted.

**New and Proposed Sources:** In November 2002, voters approved a referendum for a new one-half cent sales tax that will be levied for transit investments, including the North Corridor Metrorail Extension project. The tax will take affect January 1, 2003. This funding is considered committed.

## **Stability and Reliability of Operating Finance Plan**

### **Rating: Low-Medium**

The *Low-Medium* operating plan rating reflects the submittal of an incomplete plan including the lack of details on the operating and maintenance cost and revenue assumptions for the North Corridor Metrorail Extension project as well as for the existing MDTA system.

**Agency Operating Financial Condition:** The current operating financial condition was not assessed since MDTA did not provide recent historical information on operating and maintenance revenues and expenditures.

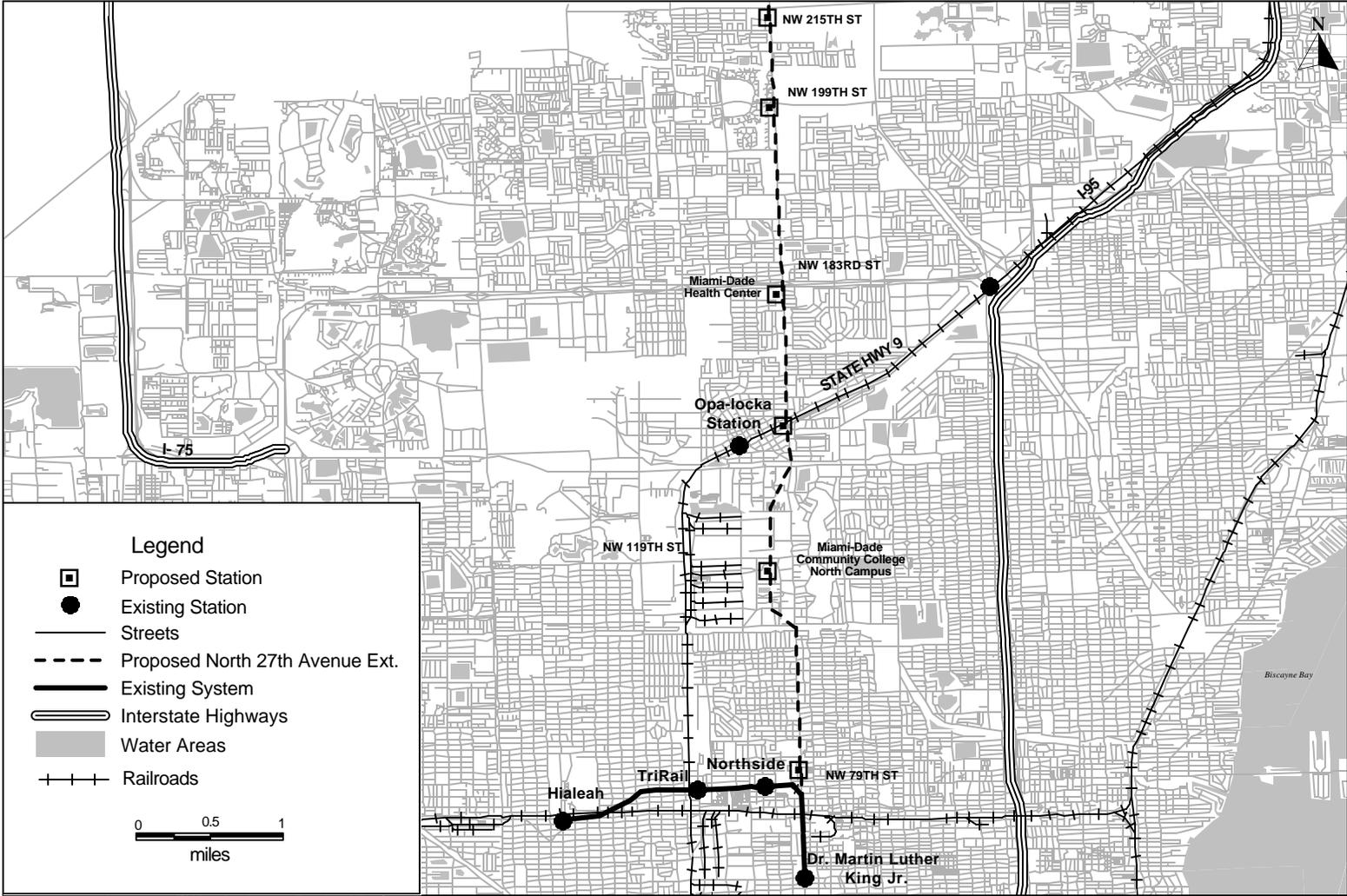
**Operating Cost Estimates and Contingencies:** The operating plan submitted by MDTA did not include details on the operating and maintenance cost assumptions or the cost estimation methodology for the North Corridor Metrorail Extension and the existing system. In addition, no information was provided on the assumptions used to estimate operating revenues.

**Existing and Committed Funding:** Operating revenues for the North Corridor Metrorail project are forecast to come from existing and committed funding sources including: fare revenues (27.1 percent of total operating funds), the General Fund transit subsidy (21.9 percent), gas tax levies (4.0 percent), and municipal reinvestment (1.7 percent) as well as a new funding source mentioned below.

**New and Proposed Funding Sources:** The recently approved one-half cent sales tax is a new operating funding source. It is projected to account for 43 percent of all operating revenues in the first year of revenue operations of the North Corridor Metrorail project.

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Miami, Florida



Federal Transit Administration, 2002

