

Rapid Transit Improvements

The following describes the progress of the rapid transit projects and programs included in the original PTP. It was initially contemplated that these projects (Project number 15 through 22) would be completed or be under development between 2003 and 2031 and included up to 88.9 miles of countywide rapid transit lines constructed in eight segments. The North Corridor, MIC-Earlington Heights Connector (AirportLink), and the western portion of the East-West Corridor were merged to form one project, the Orange Line comprised of three phases. The Airport Link was the Orange Line Phase 1, the North Corridor was the Orange Line Phase 2 and the East-West Corridor was the Orange Line Phase 3. The remaining 5 Corridors were all identified as needing to complete federal, state and local planning processes to determine feasibility, technology, and corridor alignment.

15. MIC- Earlington Heights/Airport Connector

The MIC-Earlington Heights Connector, rebranded as AirportLink, is a 2.4-mile heavy rail extension from the existing Earlington Heights Metrorail Station at NW 22nd Avenue and NW 41st Street to the concurrently constructed Miami Intermodal Center (MIC) at Miami International Airport. The project overall is 57% complete. Construction phase of AirportLink started April 2009, and is now 64% complete. It is on time for opening April 2012 and on budget.



The original estimate for this project was \$207 million; however, the current status is \$506 million. The increased project estimate is primarily attributable to the significant escalation in construction costs for labor and materials in recent years, the unprecedented increase in real estate property values that have increased right-of-way acquisition costs, and changes to the scope of work for the project. These scope changes include moving the MIC station and track segments to add approximately 500 feet to the length of the line, and increasing the power supply requirements. These changes also increased the utility relocation costs associated with the new alignment. Purchasing eight additional railcar vehicles is no longer being pursued for a \$20 million reduction from the budgeted level of \$526 million.



Corridor funding expended \$303,976,603 as of end of FY2010 is as follows: PTP, \$202,656,675; FDOT, 101,319,928. The Operating and Maintenance Costs are not included in this capital budget. Funding to complete project is \$202 million. Following is detailed information from 2010-2011 Approved Capital Plan. Note MDT's bond financing was reduced with the FDOT participation shown below increased by \$1.0 million in June 2010. BCC and CITT approved executing a State Joint Participation Agreement (SJPA) to reprogram funds from two other projects: the University Pedestrian Overpass (see page 89) and NW 7th Avenue Transit Hub (not PTP funded).

From 2010-2011 Approved Capital Plan

EARLINGTON HEIGHTS (EH)/MIAMI INTERMODAL CENTER (MIC) CONNECTOR

PROJECT # 6733210

LOCATION: Various Sites

DISTRICT LOCATED: 2, 3, 5, 6

ESTIMATED ANNUAL OPERATING IMPACT: \$7381

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FDOT Funds	59,377	31,600	9,342	0	0	0	0	0	100,319
PTP Bonds	267,513	118,224	20,473	0	0	0	0	0	406,210
Total Revenue:	326,890	149,824	29,815	0	0	0	0	0	506,529
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Land/Building Acquisition	55,000	353	0	0	0	0	0	0	55,353
Planning and Design	23,294	0	0	0	0	0	0	0	23,294
Construction	206,910	135,114	21,399	0	0	0	0	0	363,423
Equipment Acquisition	1,500	1,000	1,000	0	0	0	0	0	3,500
Construction Management	14,777	8,819	5,064	0	0	0	0	0	28,660
Project Administration	25,409	4,538	2,352	0	0	0	0	0	32,299
Total Expenditures:	326,890	149,824	29,815	0	0	0	0	0	506,529

Contracts: NCP004-TR06-CT2, TR05-EHT-PE and NCP004-TR07-CT1 (See Appendix for fuller listing of Trust-approved contracts)

16. North Corridor

The North Corridor has long been a priority transit corridor in Miami-Dade County. As initially approved, a 9.5-mile heavy rail extension of Metrorail was to open in 2016 from NW 27th Avenue at the existing Dr. Martin Luther King, Jr. Metrorail Station to the Broward/Miami-Dade County Line, including seven stations. This Locally Preferred Alternative (LPA) for the Corridor was estimated to be \$1.1 billion.

Funding for the project relied on federal participation. The Federal Transit Administration (FTA), after 10 years of participating in the New Starts process, had not yet entered into negotiations for a Full Funding Grant Agreement for the North Corridor after MDT's applications of 2007, 2008 and 2009 received a "Medium Low" rating from the FTA primarily because of an insufficient financial plan. It should be noted, any project receiving below "Medium" rating will not be recommended by the FTA for federal funding. The FTA published comments in 2010 that it would remove the project from the New Starts program if a robust financial plan was not provided, and subsequently communicated removal by FTA would be viewed as a negative action and could potentially affect future federal funding. The County voluntarily removed the heavy rail project, officially withdrawing from the FTA New Starts Process, and continues to work on the NW 27th Avenue Corridor. It has chosen to improve service incrementally until such time that the construction of heavy rail in the corridor is deemed feasible.

The Near-Term Transportation Plan for Miami-Dade County endeavors to program transit improvements within the priority transit corridors defined in the PTP and focuses on the next two-to-five year time frame. The purpose is to improve transit services and to develop transit ridership within the PTP corridors so that when a rail transit system is deemed feasible it can be implemented successfully. Enhanced bus service in the North and East-West Corridors is recommended, featuring incremental implementation of Bus Rapid Transit (BRT) which is a mode of public transportation that uses buses to provide faster, more efficient service than an ordinary bus line. This is achieved by making improvements to the existing infrastructure, vehicles and scheduling – thus providing the quality of rail service while maintaining the cost savings and flexibility of a bus.



Today two routes serve NW 27th Avenue. The proposal for enhanced bus service is beginning in June 2012 to modify the current Route 97 that has more limited accessibility (averages 2 stops per mile) but greatly improved running times compared to Route 27 (averages 6 stops per mile). Initial implementation features streamlined bus operations, park-and-ride lots at potential station areas, and improved passenger amenities. Streamlined operations are accomplished by adding six more buses to the current five for improving headways from 20 to 12 minutes peak, from 40 to 30 midday, and route restructuring. The routing would be extended south with opening of the MIA Mover to the MIC and completing the bus plaza in December 2012. The new alignment at the north end would incorporate the parcel at NW 215th Street (acquired in 2010, see item page 110) that is planned initial park-and-ride development and future transit oriented development. Streamlining is also via consolidating stops to eight (total of 14 stations) and benefiting from Traffic Signal Prioritization (TSP). The enhanced bus service also features

distinctive branding for the buses and for the stations (improved passenger amenities with large seating area, real time arrival information, power and lighting). Unique aspects of these buses include being equipped with CAD/AVL systems; they are initially 40-foot hybrids to be replaced in FY15 by 60-foot articulated hybrids funded by FDOT, for distinctive looks, low-floor design for faster loading/unloading, larger seating capacity and leg room, and tighter turning radius.

For this bus service project, capital costs currently estimated at \$25 million. Construction of the NW 215th Street P&R Lot is targeted Q4 2012-Q3 2013, delivery of five articulated buses for Q2 2015, and stations completed by Q3 2014. Operating costs will add \$1.0 million to MDT budget, funded in part via Job Access/Reverse Commute grant of \$500,000 at least the first two years.

North Corridor funding total \$66,152,830 expended is as follows: People's Transportation Plan (PTP), \$50,272,972; Federal Transit Administration (FTA), \$9,801,000; and Florida Department of Transportation (FDOT), \$6,078,858. The funding expended amount was spent on Planning, Preliminary Engineering and Right-of-Way Engineering services work which are federal requirements for capital projects, and did not include any Operating or Maintenance costs. The funding required to complete the project amount is \$1,342,769,558; it is the Year of Expenditure (YOE) Capital Project Budget and does not include Operating and Maintenance Costs. This project is currently shown in the 2010-2011 Capital Budget among Unfunded Projects as the first of the two items on the list for Transit.

Additionally, funding for the heavy rail project has to be reassessed because the FTA has limited funding support for this project to a maximum of \$700 million. The County anticipated that funding for this project will include \$870 million in FTA Section 5309 Discretionary Grants, \$290 million from the FDOT and \$290 million from the PTP.



17. East-West Corridor

The East-West Corridor was initially proposed to be a 17.2 mile heavy rail line constructed in two segments at a cost of \$2.8 billion and estimated to be completed by 2023. One segment was to be a six-mile rail line from the Florida Turnpike east to the Palmetto Expressway (SR 826) while the other segment (11.2 miles) was to extend from the Palmetto through Miami International Airport and through downtown Miami to the Port of Miami, with eleven stations total for the two segments.

A proposed new alignment constructed a 10.1-mile heavy rail corridor from the FIU campus along the Dolphin Expressway (SR 836) to the MIC. The project consisted of six Metrorail Stations and possibly a rail maintenance yard. The original portion from the MIC to Downtown Miami was deferred to a future date while the portion from Downtown Miami to the Seaport was eliminated.

Currently the heavy rail project is on hold (0.6% complete); however, MDT is pursuing incremental improvements along the same corridor in the interim.

The Near Term Transportation Plan, in addition to those for the North Corridor described above, includes recommendations for East-West. There are 4 MDT routes (7, 8, 11, 51) that currently run east-west through the corridor, plus east of NW 27th Avenue two MDT circulators (207, 208) enhance today's service. Enhanced bus service is proposed with two premium bus route services based upon results of analyzing origin/destination patterns. These two routes similarly feature incremental implementation of Bus Rapid Transit (BRT), with stations instead of merely shelters, branding, etc.

The first route, the "SW 8th Street Enhanced Bus/SR 836 Express", will operate from a proposed park-and-ride lot at SW 147th Avenue and SW 8th Street and would provide a couple of stops along SW 8th Street before heading north on NW 107th Avenue. The route services the transit hub at NW 12th Street and NW 107th Avenue (Dolphin Station), then accesses SR 836 running express to the MIC. Dolphin Station is being provided by a developer as part of a 2007 CDMP application, will be turned over to the County, and will initially provide a 189 space surface park-and-ride facility with 10 sawtoothed bays for the buses. Initially, starting in 2012, this route will operate between 5:30 AM and 8:00 PM, at a 12-minute headway. Ultimately, in 2016, the route will operate at a 10-minute headway. This route would be unique in that it has the potential to not only feed trips from the west to Metrorail and the Airport but also provide reverse commute services from the MIC to job rich areas in the west side of Doral. A total of eight stations are proposed. Eleven buses need to be acquired for the added service.

The "Flagler Enhanced Bus" will provide limited-stop bus service beginning FY2014 that will operate from the park-and-ride lot at SW 147th Avenue and SW 8th Street and would provide a couple of stops along SW 8th Street before heading north on NW 107th Avenue to West Flagler Street, from which it heads east to downtown. There would be a total of 27 stops along the modified route, which will operate at a 12-minute headway. Other BRT components include TSP, branding and streamlined operations (alignment, improved headway). Four buses need to be acquired.

A new park-and-ride facility at SW 147th Avenue and SW 8th Street should be developed to serve these new bus service operations, and the parcel is available to acquire from FDOT.

East-West Corridor funding expended is \$16,686,491, 100% PTP. The funding expended amount was spent on Planning (Alternative Analysis) services which are federal requirements for capital projects, and did not include any Operating or Maintenance costs. Funding required to complete heavy rail project is \$2,446,371,509; it is the Year of Expenditure (YOE) Capital Project Budget and does not include Operating and Maintenance Costs. This project is currently shown in the 2010-2011 Capital Budget among Unfunded Projects as the second of the two items on the list for Transit.

Operating costs are estimated at \$2 million for the proposed new express service additional to the MDT Budget, funded via Job Access/Reverse Commute of \$1 million for FY12 only. Other operating costs total \$613,000. Capital costs for both parts of the enhanced bus service are estimated at \$26,670,000; the \$10.25 million for additional express and Route 51 buses are available funding from working with FDOT to reprogram grant funds primarily TRIP (Transportation Regional Incentive Program) and CIGP (County Incentives Grant Program). Costs for the 8 stations for the express service and the SW 147th Avenue P&R are currently unfunded.



18. Bay Link (Future Project)

The Bay Link Corridor is proposed to be a 5.1-mile future light rail or streetcar segment from downtown Miami to South Miami Beach. This project was planned for completion after 2031 and was initially estimated to cost \$510 million.

Project is currently on hold. Corridor funding expended \$1,850,000 is 100% Congestion Mitigation and Air Quality (CMAQ). The funding expended amount was spent on Planning services work which is a federal requirement for capital projects, and did not include any Operating or Maintenance costs. The East-West Multimodal Corridor Study Draft Environmental Impact Statement (DEIS) completed in 1995 merged two high priority corridors from the 1994 Dade County Transit Corridors Transitional Study – the West Corridor and the Beach Corridor. The Metropolitan Planning Organization (MPO) Board selected a Locally Preferred Alternative (LPA) that excluded the portion of the project going to Miami Beach. Therefore, a stand-alone analysis of the transit connection between downtown Miami and Miami Beach was undertaken in 2002 as the Miami-Miami Beach Corridor (Bay Link) Supplemental Draft Environmental Impact Statement (SDEIS). The study examined a light rail connection between downtown Miami and the Miami Beach Convention Center along the McArthur Causeway. The study found that the corridor was already saturated with local bus service and the corridor was ready to evolve to the next higher form of transit – light rail service. An LPA was selected by the MPO Board in 2003. However, MPO Board was unwilling to program the funds to advance the project into the Preliminary Engineering/Final Environment Impact Statement stage due to other funding priorities in Miami-Dade County. Additionally, the City of Miami Beach did not support heavy rail. Funding required to complete project is \$482 million in 2004 dollars; it is the Year of Expenditure (YOE) Capital Project Budget and does not include Operating and Maintenance Costs.

19. Kendall Corridor (Future Project)

This project originally included a 15-mile Bus Rapid Transit (BRT) corridor from the Dadeland area to SW 157 Avenue and a North-South connection to the East-West Corridor described in Project #17 above. This project was anticipated to be implemented after 2031 and the original estimated cost was \$877 million (\$863 million for the rail segment and \$14 million for the BRT segment).

Corridor funding expended \$873,500 is 100% PTP, as an originally conceived heavy rail project which was never advanced beyond preliminary planning, as required by the FTA.

In June 2010 MDT implemented enhanced bus service operations with branded articulated hybrid buses, improved transit stops, Wi-Fi, Transit Signal Priority to communicate with traffic signal controllers, future park and ride lots and improved headways. The Kendall Enhanced Bus Service (KEBS) is branded as the Kendall Cruiser featuring 22 stops over the 9.5-mile alignment from Dadeland North to SW 167th Avenue along Kendall Drive, replaced the corridor's Kendall KAT and included purchase of nine hybrids. This is the first step in the evolution of the corridor toward Bus Rapid Transit (BRT) and sets a model for premium transit service. Phase 1 of project is 100% complete (implement the nine stylized buses for KEBS). Phase 2 includes the negotiation of additional leases, Park-N-Rides, and completion of bus shelters. This date is not connected to the delivery or procurement of buses. The \$11.04 million total cost includes ARRA and FDOT funding in addition to PTP, with \$7.2 million expended to date. Next year's budget will show cost increased to \$15.4 million estimated total, with \$3.4 million funded by FDOT, for capital items such as shelters.



Funding required to complete project is \$442 million in 2006 dollars for the original heavy rail option (full build out of rail/exclusive bus lanes beyond 2035).

The following presents more detailed information from 2010-2011 Approved Capital Budget for the Kendall Enhanced Bus Service. The project includes ARRA funding.

From 2010-2011 Approved Capital Plan

KENDALL ENHANCED BUS SERVICE

PROJECT # 675550

LOCATION: Various Sites

DISTRICT LOCATED: 5

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: 3, 5, 7

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	4,331	2,320	0	0	0	0	0	0	6,651
FDOT Funds	2,195	0	0	0	0	0	0	0	2,195
PTP Bonds	2,195	0	0	0	0	0	0	0	2,195
Total Revenue:	8,721	2,320	0	0	0	0	0	0	11,041
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Equipment Acquisition	8,721	2,320	0	0	0	0	0	0	11,041
Total Expenditures:	8,721	2,320	0	0	0	0	0	0	11,041

Contract FP-7038R/JWW (See Appendix for fuller listing of Trust-approved contracts)



20. Northeast Corridor (Future Project).

This project is now known as the South Florida East Coast (SFEC) Corridor Project. The project was planned to be a 13.6-mile heavy rail corridor from downtown Miami along Biscayne Boulevard and the Florida East Coast Corridor to the Broward County Line at NE 215th Street. This project was estimated to cost \$795 million. The project is being managed by the Florida Department of Transportation (FDOT) and was initially anticipated to be completed after 2031.

Corridor funding expended \$2,000,000 is 100% CMAQ. The funded expended amount was spent on Planning services work which is a federal requirement for capital projects, and did not include any Operating or Maintenance costs. FDOT District 4 is leading the effort for this corridor and is conducting an Alternatives Analysis/Programmatic Environmental Impact Statement for the FEC Corridor from Jupiter, in northern Palm Beach County to Downtown Miami. The study has examined heavy rail, light rail, commuter rail and bus rapid transit options along the corridor. No LPA has been selected to date (selection is expected in the fall of 2010). In the interim, MDT plans to implement enhanced bus service by 2014 along Biscayne Boulevard with improved headways, branded buses and improved bus stops, similar to what has been implemented in the Kendall Corridor.

Two bus routes currently serve Biscayne Boulevard between the Aventura Mall and Government Center in Miami. They are relatively direct and provide for ease of understanding for the passenger. Route 3 offers local bus service with about 6 stops per mile including the 163rd Street Mall. Route 93 (Biscayne MAX) operates limited-stop bus service averaging about 2 stops per mile which provides more limited accessibility but greatly improved running times.

In FY 2014 service on Route 93 is planned to increase during the peak period from 18 minutes to 15 and the off peak frequency from 30 minutes to 20. These modifications will require 7 additional buses (articulated buses will be used) at a cost \$6.65 million, which is fully funded in the TIP. There is nearly \$18 million in the TIP for funding buses for Biscayne Boulevard. Approximately \$11 million of that amount is planned to be reprogrammed to pay for buses for the East-West Corridor (enhanced bus service described on page 34), leaving sufficient funds for the purchase of the buses for this service. The O&M cost of this additional service will be \$1,092,000 annually. Funding required to complete SFEC project is \$2,553,000,000 for the 3 County area; it is the Year of Expenditure (YOE) Capital Project Budget and does not include Operating and Maintenance Costs.

21. Douglas Road Extension (Future Project)

The Douglas road extension consists of a 4.5-mile heavy rail corridor extension from the existing Douglas road Metrorail Station to the MIC along NW 37th Avenue/Douglas Road, originally estimated to cost \$280 million. This project is anticipated to be implemented after 2035, however it has not yet been studied. No funds expended yet and updated cost estimates are not available.

22. Rail Extension to Florida City (Future Project)

This project has been renamed the South Dade Corridor and will consist of a 21-mile heavy rail, two-segment corridor south along US 1. The first segment was planned from the Dadeland South Metrorail Station south to Cutler Ridge while the second segment will be constructed from Cutler Ridge south to Florida City. This project was planned for completion after 2031 and was originally estimated to cost \$946 million at time of passage of PTP.

Corridor funding expended \$1,500,000 is 100% FTA. The funded expended amount was spent on Planning services work which is a federal requirement for capital projects, and did not include any Operating or Maintenance costs. In 2006 the Miami Dade MPO Board selected an LPA for the South Link Corridor, which runs along the South Dade Busway/US-1 from the Dadeland South Metrorail Station to SW 344th Street in Florida City. The study examined several modes of transit along the corridor including grade separating key intersections along the Busway, light rail and a partial or full extension of the Metrorail along the corridor. The LPA for the South Link included a Metrorail extension to SW 104th Street and the construction of grade separations at key intersections along the Busway. Following the selection of the LPA, the MPO Board requested that the MPO staff look at the feasibility of providing managed toll lanes along the Busway to help fund transit improvements in this corridor. Subsequent to the completion of a feasibility study to convert the Busway, the Miami-Dade Expressway Authority (MDX) is conducting a Project Development & Environment (PD&E) study to determine if it is possible for that agency to proceed with implementation. Funding required to complete project is \$1.65 billion in 2005 dollars; it is the Year of Expenditure (YOE) Capital Project Budget and does not include Operating and Maintenance Costs.