

Miscellaneous Improvements Related to Rail Operations

6. Metromover Rehabilitation/Refurbishment (Phases I and II)

The Metromover Phase I Fleet of 12 rail cars went into service in 1986 with a life expectancy of 20 years. Continued use beyond the 20 year life would require extensive overhaul (remanufacturing); an engineering analysis determined that it was more cost effective to replace the Phase I cars in lieu of overhaul. In addition, during the contract negotiations with Bombardier, MDT determined that it would be technically and commercially advisable to replace the Phase 2 vehicles also in the same contract. The PTP amendment (R-1240-04) approved by the Board to replace the 12 Phase I cars was subsequently expanded by Board action (R-486-08) to include replacement of the remaining 17 Phase II vehicles.

The project is 100% complete overall (Phase I and II). All 12 Phase I replacement vehicles have been delivered, tested and commissioned to revenue service, February 2008 to April 2009. The option was included in the Phase I



contract with Bombardier for the 17 Phase II vehicles, and Notice to Proceed was issued effective July 17, 2008. Delivery of the first two vehicles was July 2010. All seventeen (17) vehicles have been delivered as of September 2012 (this is an additional fourthree since June 2011). The remaining cars are manufactured and the last was delivered by September 2012; previously Previously expected to complete delivery in April 2012 in FY12. Five Year Plan Update and mid-2011 in FY11 Initial Five Year Plan. Last vehicle is currently in acceptance testing. Expected acceptance completion is March 2013 with warranty projected to end March 2014. September 2012 last car delivered (March 2013 last car accepted)

Current estimate for total project cost remains at \$69.0 million (compared to \$75.4 million shown in FY11 Initial Plan) and \$64.67.9 million expended as of June August 2013. Balance to complete Phase II is \$4.1.1 million of the \$37.462 million budgeted (same cost estimate as shown in FY12 Plan Update and reduced from FY11 Initial Plan \$38.196 million). Project includes 1 year warranty period, which is excluded from above implementation date. Following is more detailed information from Approved Capital Plan, for Phase II currently in progress.

From 2013-2014 Adopted Capital Plan

MOVER VEHICLES REPLACEMENT PHASE II (17 CARS)

PROJECT # 675590

Description: Replace 17 Metromover vehicles

LOCATION: Various
Various Sites

DISTRICT LOCATED: 5
DISTRICT(s) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
PTP Bonds	36,616	846	0	0	0	0	0	0	37,462
TOTAL REVENUE:	36,616	846	0	0	0	0	0	0	37,462
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Equipment Acquisition	30,895	0	0	0	0	0	0	0	30,895
Project Administration	895	32	0	0	0	0	0	0	927
Project Contingency	754	814	0	0	0	0	0	0	1,568
Capital Maintenance	4,072	0	0	0	0	0	0	0	4,072
Total Expenditures:	36,616	846	0	0	0	0	0	0	37,462

Contract SS1908-0/7 (See Appendix for fuller listing of Trust-approved contracts)



7. Test Track for Metrorail

Due to budgetary constraints, the test track and additional storage tracks were not included in the Lehman Center facilities contract which was awarded prior to 1983. In 2002, the test track and storage tracks were included in MDT’s Capital Improvement Plan approved by the Board for financing by the PTP Bond Program. A Metrorail test track is critically important to test railcar reliability and for acceptance testing of replacement vehicles. A 2,500 ft. test track with the ability to accelerate Metrorail vehicles to 38 mph is planned for the William Lehman Center Maintenance Facility. The length of the test track was reduced from the previously planned 4,000 feet and the County no longer needs to acquire additional land adjacent to the Lehman Center for this track construction. Once completed, the track will be used to test automatic train operations, program station stops and door operations, test propulsion systems, diagnose electric brake faults and perform safe brake testing. Also, the acceptance testing for new vehicles can be accomplished without affecting normal rail service operations. This project is necessary to provide the required test facility in support of the procurement of the new Rail Vehicle fleet with delivery beginning in second quarter of 2014. After acceptance of the new vehicles, the test track will be used for ongoing maintenance.

This project is overall 5% complete (based on amount expended out of total estimated cost). It will be implemented using a Design/Build Procurement method in conjunction with the Lehman Yard Rehabilitation-Expansion (Phase I) project (page 117, including description of Design/Build project scope). Total estimated cost increased to \$18.287 million (was \$16.6 million in FY11 Plan Update), about \$937,371 expended as of June 2012, and 100% PTP funded. A Test Track S&I Building and a Siding Track were added to the project by MDT Operations to facilitate the movement of vehicles to the Test Track from both ends of the S&I Building. Thus the cost estimate increased from the previous 2009 budget of \$12.23 million with timing deferred from April 2012. The original \$4 million cost estimate was revised to account for inflation among other costs. Project is currently in procurement construction. Design is 100% complete. (RFP advertisement was scheduled February 2010, actual June 2010, contract award November 2012) and Design/Build Firm Selection Phase is approximately 59% complete (as of June 30, 2011). The BCC awarded this contract November 2012, with project completion including testing and startup by October 2014 (previously was April 2013 in last year’s Plan).

The following is more detailed information from 2013-2014 Adopted Capital Plan. The combined contract for Test Track and Yard Rehab is \$25.3 million and revised costs will be reflected in FY14 Capital budget.

From 2013-2014 Adopted Capital Plan									
TEST TRACK FOR METRORAIL							PROJECT # 678220		
DESCRIPTION: Construct a test track at the Lehman Center for Metrorail									
LOCATION: 6601 NW 72 Ave, Unincorporated Miami-Dade County									
ESTIMATED ANNUAL OPERATING IMPACT: \$685					DISTRICT LOCATED: 3				
					DISTRICT(S) SERVED: Countywide				
Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
PTP Bonds	13,787	4,500	0	0	0	0	0	0	18,287
TOTAL REVENUE:	13,787	4,500	0	0	0	0	0	0	18,287
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Construction	11,664	4,000	0	0	0	0	0	0	15,664
Construction Management	423	100	0	0	0	0	0	0	523
Project Administration	1,392	150	0	0	0	0	0	0	1,542
Project Contingency	308	250	0	0	0	0	0	0	558
Total Expenditures:	13,787	4,500	0	0	0	0	0	0	18,287
Contracts: (See Appendix for fuller listing of Trust-approved contracts)									
CIP028-CT1-TR09 Design-Build Services for the Lehman Center Test Track / Lehman Yard Rehabilitation - Expansion Phase 1									
CIP030-CT1-TR09 Construction Engineering and Inspection Services for the Lehman Center Test Track, Palmetto Station Traction Power Sub-Station, Metrorail Central Control Upgrade and Lehman Yard Rehabilitation & Expansion Phase 1									

MDT has identified the project’s annual electrical cost estimate is \$480,000 (\$360,000 for Test Track, \$120,000 for Yard Rehab-Expansion, and identified the annual preventive maintenance and repair cost estimate is \$585,000 (\$325,000 for Test Track, \$260,000 for Yard Rehab-Expansion).

8. Station refurbishment

The original project was completed in FY2007. Station refurbishments include emergency bench repairs and



refurbishment of station lighting, billboard lights, chain link fences, bathrooms, exit doors, roll-up gates, and automatic doors. The cost for this project was originally estimated at \$12 million, funded via \$3 million in Sunshine State Loans and \$9 million from the PTP. A total of \$12.2 million was expended on this project reflecting a \$6.122 million credit reconciling expenses in FY08.

Work is ongoing and includes repairs to damaged pole lights at bus bays, lighting in parking areas, fire sprinklers, Metromover tactile, Heating, Ventilation and Air Conditioning (HVAC) installation at train control and mechanical rooms, and miscellaneous repairs due to vandalism. The project is 5% complete

based on \$503,000 expended out of total \$12M estimated cost. The \$11.5 million remainder is currently an unfunded project as part of the Infrastructure Renewal Plan (page 120).

The following is from the Unfunded Priority Needs section of the 2010 TIP. The project is not listed as a line item of Transit projects in the 2010 Capital Budget’s Unfunded Needs.

MPO Project Num.	Facility/Project Name		Type of Work	Project Cost (\$000s)	Unfunded Projects	
Agency Project Num.	From/Location	To/Location	Remarks			
Detailed Project Description						
TA000080	Metrorail Station Refurbishment		Maintenance	20	Activity (Phase)	Required Project Funding by Phase (where available)
	Systemwide	Systemwide	This was an approved PTP project. Due to budgetary con			
0000000	Refurbish metrorail stations and Lehanan Center including emergency lighting, safety systems, restrooms, irrigation, landscape, benches, building systems and controls.				(in \$000s)	
					MNT	0

The PTP included a number of renovation and refurbishment projects at Metrorail and Metromover Stations. These stations are over 25 years old and in need of capital investment to replace escalators, elevators, etc. The work on these projects has only been partially completed and the remainder is unfunded. The Trust had recommended for the 2011 Plan that a group of Rail/Mover Capital Improvements (these Metrorail Station Refurbishments, along with Metromover Station Canopies and Escalator Replacement for remaining one Inner Loop Metromover and 21 Metrorail stations [page 101]; Facilities Painting for remaining 30 of 43 total stations [page 100]; Metrorail Piers Grounding [page 103]; and Facilities Roof Project [page 106]) be prioritized in the upcoming budgeting and planning cycle by funding as capital projects within bonding and cash flow capacity, with plan to complete by 2016. The surtax impact in this period would include adding \$42.9 million to capital program and beginning 2014 slightly higher debt service. The capital increase is offset by some expenditure shifted from Miami-Dade Transit operating expenses.



9. Paint Facilities

This project is now an ongoing effort to maintain the appearance of Metrorail and Metromover stations and maintenance facilities as a long term customer focused priority. A painting program was established using in-house painters and purchasing materials, and to date MDT has painted the following stations: Bayfront, Brownsville, Civic Center, College North, Financial District, Freedom Tower, Knight Center, Martin Luther King, Jr., Overtown, Park West, Riverwalk, Tenth Street, Wilkie D. Ferguson, Earlington Heights, Culmer and Third Street (about 42%, 18 complete of 43 total stations).

The cost for this project was originally estimated at \$4 million as a one-time effort. The total expended to date is \$1.4 million as of June 2011. As this is now an ongoing project, the annual cost is approximately \$250,000 and will be funded in the MDT Operating Budget requiring several years to complete a first pass for the remaining 65% of stations. PTP funding under the unified transit system represents a portion of overall funding for MDT operations and maintenance since the March 2009 BCC approval Resolution R-222-09. For FY 2012-13, the total PTP funding established during the budget process was \$99,204,000, which is approximately 20 percent of MDT's total operating budget.

The 2003 PTP Amendment also included Metrorail and Metromover maintenance facilities. However, painting MDT's administrative facilities and maintenance garages is currently an unfunded project.

The following is from the Unfunded Priority Needs section of the 2010 TIP. The project is not listed as a line item of Transit projects in the 2010 Capital Budget's Unfunded Needs.

MPO Project Num.	Facility/Project Name		Type of Work	Project Cost (\$000s)	Unfunded Projects	
	From/Location	To/Location	Remarks			
Agency Project Num.	Detailed Project Description					
TA000076	Paint/Refresh Transit Facilities Systemwide			4,000	Activity/Phase	Required Project Funding by Phase (where available)
	Systemwide	Systemwide	The project was initially an approved PTP project. Due to			(in \$000s)
0000076	Paint and refresh transit facilities				MNT	335

The PTP included a number of renovation and refurbishment projects at Metrorail and Metromover Stations. These stations are over 25 years old and in need of capital investment to replace escalators, elevators, etc. The work on these projects has only been partially completed and the remainder is unfunded. The Trust had recommended for the 2011 Plan that a group of Rail/Mover Capital Improvements (this Facilities Painting for remaining 30 of 43 total stations, along with Metrorail Station Refurbishments [page 99]; Metromover Station Canopies and Escalator Replacement for remaining one Inner Loop Metromover and 21 Metrorail stations [page 101]; Metrorail Piers Grounding [page 103]; and Facilities Roof Project [page 106]) be prioritized in the upcoming budgeting and planning cycle by funding as capital projects within bonding and cash flow capacity, with plan to complete by 2016. The surtax impact in this period would include adding \$42.9 million to capital program and beginning 2014 slightly higher debt service. The capital increase is offset by some expenditure shifted from Miami-Dade Transit operating expenses.

10. Replace Escalators (Mover and Rail)

The escalators in 21 Metrorail Stations and the nine inner loop Metromover Stations are on average 18 years old. While the useful life of an escalator is approximately 25 years, major components have begun to fail and it is no longer feasible or economical to continue to overhaul the units. The County is planning to implement a comprehensive escalator replacement program to include installation of 66 waterproof, heavy duty transit escalators with state-of-the-art safety devices and to upgrade existing electrical facilities and interfaces.



For the inner loop stations, the scope of work for the Metromover Escalator Covers Replacement and New Canopies Project consists of the preparation of a complete set of bid documents and construction work required for the replacement of escalators and the installation of canopy covers over existing escalators/stairs at seven Metromover stations to include:

Government Center Station, Miami Avenue Station, Bayfront Park Station, First Street Station, College/Bayside Station, College North Station and Wilkie D. Ferguson, Jr., Station. This subset of the project is funded by federal stimulus revenues as noted below.

The original cost for this project was \$4.7 million and has been revised to \$30 million (\$7.3 million funded for current phase at seven stations, \$22.7 million unfunded at 22 remaining stations) because of a change in project scope. The change in scope includes the installation of canopy covers and oil/water separators. Although the primary purpose of these canopies is to protect the mechanical components from the elements, they will also provide cover to commuters during inclement weather. Design is complete and construction Notice To Proceed issued January 2011 for the seven inner loop stations. The FY12 Capital Plan reflected project funding revised to be \$140,000 from PTP [IRP] and remainder ARRA. The project was 65 100%% complete overall and total expended to date \$3,680,693 \$ 5,591,318, as of July 2013. Canopy installation began with Miami Avenue station in July 2011, and the seven-station project is expected was completed by in July 2013 (previously was September 2012 in FY12 Plan and November 2012 in FY11 Plan). For the remaining Metromover inner loop station and the 21 Metrorail stations, it remains currently an unfunded project.

The following is from the Unfunded Priority Needs section of the 2011 TIP. The project is not listed as a line item of Transit projects in the 2010 Capital Budget's Unfunded Needs.

MPO Project Num.	Facility/Project Name		Type of Work	Project Cost (\$000s)	Unfunded Projects		
	From/Location	To/Location	Remarks				
Agency Project Num.	Detailed Project Description						
1A000056	Metrorail Canopies		Purchase and Installation of Metrorail Canopies	3,200	Activity/Phase	Required Project Funding by Phase (where available)	
	This project was defunded based on FDOT Variance Reg					(in \$000s)	
0000056	Plan and install canopies at metrorail stations which will extend to bus stops.				PLN	0	
					PLN	0	



The PTP included a number of renovation and refurbishment projects at Metrorail and Metromover Stations. These stations are over 25 years old and in need of capital investment to replace escalators, elevators, etc. The work on these projects has only been partially completed and the remainder is unfunded. The Trust had recommended for the 2011 Plan that a group of Rail/Mover Capital Improvements (these Metromover Station Canopies and Escalator Replacement for remaining one Inner Loop Metromover and 21 Metrorail stations, along with Metrorail Station Refurbishments [page 99]; Facilities Painting for remaining 30 of 43 total stations [page 100]; Metrorail Piers Grounding [page 103]; and Facilities Roof Project [page 106]) be prioritized in the upcoming budgeting and planning cycle by funding as capital projects within bonding and cash flow capacity, with plan to complete by 2016. The surtax impact in this period would include adding \$42.9 million to capital program and beginning 2014 slightly higher debt service. The capital increase is offset by some expenditure shifted from Miami-Dade Transit operating expenses.

11. Replace Elevators (Mover and Rail stations and at MDT’s bus facilities)

As with the escalators described above, it has become uneconomical to continue to overhaul these 18 year old units.



The planned elevator replacement program will include design and installation of state-of-the-art transit quality elevators and required electrical interface upgrades. The original estimate for this project was \$2.9 million, which has been revised to \$8.1 million as a result of rapidly increasing costs. When the PTP amendment was approved in 2003, the installation of a new elevator was estimated to cost \$100,000. The average replacement cost in FY 2009-10 was approximately \$400,000 per elevator. Therefore, to minimize cost while optimizing service life, the project now entails replacing major wear components such as the custom made cab, seals and motors, and refurbishing the shaft and other items.

Since 2003, the following cabs have been replaced: School Board, Omni, Eleventh Street, Park West, Freedom Tower, College/Bayside, Riverwalk, Bayfront Park and Douglas Road overpass #1 & #2. Since 2005, the following cab platforms

were replaced: First Street, Eighth Street, Financial District, Tenth Street, College North and Government Center #3. Project is approximately 10% complete and total amount expended to date is \$652,000. The new estimated project completion date is FY 2035. It is funded from MDT Operations budget instead of as a separate item in the Approved Capital Plan. For FY 2012-13, the total PTP funding established during the budget process was \$99,204,000, which is approximately 20 percent of MDT’s total operating budget.

The following is from the Unfunded Priority Needs section of the 2010 TIP. The project is not listed as a line item of Transit projects in the 2010 Capital Budget’s Unfunded Needs.

MPO Project Num.	Facility/Project Name		Type of Work	Project Cost (\$000s)	Unfunded Projects	
Agency Project Num.	From/Location	To/Location	Remarks			
Detailed Project Description						
TA000078	Replace Elevators		Procurement and installation	6,170	Activity Phase	Required Project Funding by Phase (where available)
000078	Systemwide	Systemwide	This project was a PTP approved project. Due to budget's			(in \$000s)
Replace and/or refurbish elevators at 21 metrorail stations, nine inner loop metromover stations, Coriway and North-east facilities.					OTHER	0

12. Guideway Painting

This includes painting of all steel girders on the Metrorail (total estimated cost \$17.4 million) and the entire original loop of the Metromover (\$12.7 million). These structures have been in service for more than 23 years and have only received remedial touch-up painting. The Long Term Painting for Metromover extensions (\$10.61 million for Brickell, \$9.68 million for Omni) are currently unfunded IRP projects, see page 120. The Short Term Painting for Metromover Brickell is included with the Metrorail Piers Coating component of the Track and Guideway Rehabilitation Subset, as discussed in following item.

13. Metrorail Piers Grounding

This project was originally a separate line item in the 2003 PTP Amendment. This is a system reliability issue. Metrorail train tracks and the guideway are electrically isolated. Testing needs to be performed to prevent deterioration of the guideway and the utilities (metal piping) to assure system integrity and lightning protection. Testing should be performed on a 4 to 6 year cycle and corrective work performed. The project is not yet started and total cost is now revised to \$5.0 million (previously estimated \$2.5 million). It is an unfunded item, Conduit Grounding Rebuild (Infrastructure Renewal Plan on page 120), estimated to take two years to implement.

The PTP included a number of renovation and refurbishment projects at Metrorail and Metromover Stations. These stations are over 25 years old and in need of capital investment to replace escalators, elevators, etc. The work on these projects has only been partially completed and the remainder is unfunded. The Trust had recommended for the 2011 Plan that a group of Rail/Mover Capital Improvements (this Metrorail Piers Grounding project, along with Metrorail Station Refurbishments [page 99]; Metromover Station Canopies and Escalator Replacement for remaining one Inner Loop Metromover and 21 Metrorail stations [page 101]; Facilities Painting for remaining 30 of 43 total stations [page 100]; and Facilities Roof Project [page 106]) be prioritized in the upcoming budgeting and planning cycle by funding as capital projects within bonding and cash flow capacity, with plan to complete by 2016. The surtax impact in this period would include adding \$42.9 million to capital program and beginning 2014 slightly higher debt service. The capital increase is offset by some expenditure shifted from Miami-Dade Transit operating expenses.

14. Track and Guideway Rehabilitation (formerly known as Guideway Painting/Refurbishment)

Several projects are now combined into a single grouping, which rehabilitates existing track and guideway equipment and fixtures. Total cost is \$45.699 million (revised slightly downward from previous \$46.786 million), funded solely by Surtax. Total expended as of June 2012 2013 is \$20.21.63 million (\$25.24.06 M balance to complete). There are several components of this subset, each described further below, and all work performed by MDT staff. Two were originally a separate line item in the 2003 PTP Amendment: Metrorail Piers Coating; and Replacement of Metal Acoustical Barrier Panels. The remaining components were the original Guideway Refurbishment item: Coverboard Replacement, Palmetto Yard Road Crossing & Mainline Replacement, Mainline Miter Joint Replacement, Rail Fastener Replacement and Seal Gland Rehabilitation. (Note, cost estimates for individual components may be reallocated year to year within the \$45.7 million total.)



Metrorail Piers Coating- This project was a separate Amendment line item and is now included as part of the Track & Guideway Rehabilitation Subset. It entails the cleaning and coating of Metrorail piers, which are the vertical concrete columns supporting the concrete or steel girders and rail tracks. Coating will restore and



improve the aesthetics of the structure and protect the concrete and reinforcement steel from deterioration. The Metrorail guideway has been in service since 1984 and is starting to weather and show its age. In addition to recoating the structure, drains will also be repaired to minimize guideway staining and facilitate easier removal of graffiti, mold and mildew. The long term project is not yet started and total cost is \$4.3 million (estimate revised downward from \$5.0 million shown in FY12 Plan Update and FY11 Initial Plan). Expected completion is FY2016.

In addition, this item includes the Metromover Brickell extension short term painting project, which is to repaint the exterior areas of the steel girders and piers of the guideway and achieve an aesthetically acceptable appearance that will last until the guideway is repainted by a contractor, which is expected in approximately three years. The Brickell painting began July 2010 and was completed February 2011. Total expended as of June 2012 2013 is about \$878,1.141 million (\$3.3.139 million balance to complete).

Acoustical Barrier Replacement- This project was originally a separate line item in the 2003 PTP Amendment and is now included as part of the Track & Guideway Rehabilitation Subset. There are approximately 12,000 feet of metal acoustic barrier panels on the Metrorail guideway that have been in place since the beginning of passenger service. These panels act as sound barriers between the train and adjacent properties to ensure sound levels are within the acceptable limits set by cities and the County. The metal barrier connections are rusting and the panels need to be replaced for aesthetic and safety reasons. Acoustic barriers and hardware will be upgraded and an additional 8,000 feet will be installed in specific areas identified by Planning and Development (P&D) noise study to bring to total length of the noise barrier to 20,000 feet. Project is 20% complete with \$10,65,925 expended as of June 2012 2013 of \$2.7 million total cost (\$2.2.636 m remaining). The cost estimate is slightly increased from \$2.5 million shown in FY12 Plan Update and FY11 Initial Plan.) Status is unchanged versus FY12 Plan: currently preparing bid package for materials, in house forces to perform the work. Scheduled completion remains September 2015.

Coverboard replacement - of safety items on curves that have deteriorated. Includes procurement of 53.3 miles of new coverboard and brackets, 28,150 insulators, and 800 hurricane anchors to be installed by in-house forces. Specification and bid package for material was completed March 17, 2007, and coverboard installation is underway (for example, completed Tracks 1 & 2 between I-95 and Culmer). Project remains 27% complete as shown in FY12 Plan Update (8 miles of 54 total), with \$3.3.284 million expended to date (\$13.13.113 million remaining) as of FY2013 and total cost revised estimate at \$16.4 million (revised downward slightly from \$17.0 million estimate shown in FY11 and FY12 Plans). Completion expected September 2014; completion was expected September 2013 in FY11 and FY12 Plans.



Palmetto Yard Road Crossing and Mainline Replacement – This project is to replace 32 at-grade road crossings, six mainline access crossings, and five concrete crossings in the Palmetto Yard. It was completed March 2011 (ahead of December 2011 expected per FY11 Plan), at \$2.1 million total cost (compared to previously estimated \$2.7 million in FY12 Plan Update and \$2.7M in FY11 Plan). All 32 road crossings in the Palmetto Yard are complete and the most cost effective material was selected and used for mainline crossing

Rail Fastener Replacement - Replacement of 50,000 rail fasteners and shims in mainline curves including core drilling and replacing anchor bolt inserts. This replacement is critical to maintain the mandated track safety standards established by MDT through FTA's approval. Material bid package completed December 2006 with in house forces performing the work. Replacement started August 2007 and is currently 78% complete (30,360 fasteners installed, or 6,478 more than reported in FY12 Plan). Of \$15.0 million total cost, \$11.11.621 million expended to date or

\$3.3.235 million remaining. Completion is anticipated for September 2014 as of April 2013 status (FY12 Plan showed September 2013 expected completion).

Seal Gland Rehabilitation - The primary objective of the seal gland rehabilitation project (currently 85% complete, same as reported in FY12 Plan Update) is to ensure that rainwater does not intrude into the stations. This is accomplished by replacing the seal glands and clearing drains. Once the stations are watertight, the guideway will require the same work. Material bid package completed September 2007. Work began in January 2007; employees were hired and trained including five Structural Repairers. To date, all guideway transverse seal glands have been cleaned; \$1.2.204 million expended as of June 2012 2013 (\$1.1.652 million remaining) of \$3.9 million total cost, as estimate increased from \$3.500 shown in FY11 Plan Update. Current completion date is December 2013 as of April 2013 project status; expected completion date was September 2012 in FY11 and FY12 Plans.

Mainline Miter Joint Replacement– This project was to replace (168) Standard Insulated Joints at stations with Mitered Insulated Joints to increase service life at joints including 56 to 60 rail fasteners and shims to level the joints. The standard joints required constant maintenance and are very noisy, while the mitered joints require no maintenance and create low noise. The mitered joints also increase the reliability of the system with fewer Train Control circuit problems. Total project cost was approximately \$601,000. This work was completed September 2008; replacement equipment also now on hand in inventory.

Following is detailed information for this subset from 2013-2014 Adopted Capital Plan.

From 2013-2014 Adopted Capital Plan

TRACK AND GUIDEWAY REHABILITATION

PROJECT # 6710900

DESCRIPTION: Rehabilitate existing track and guideway equipment and fixtures; replacement of safety items such as coverboard and fasteners on curves that have deteriorated, road crossings and insulated joints, metal acoustical barriers and replace, drains, piers painting, train control systems and communicators

LOCATIONS: Various Sites

DISTRICT LOCATED: 2, 3, 5, 6, 7, 12, 13

DISTRICT(S) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
PTP Bonds	28,266	14,649	13,412	10,372	7,000	7,000	7,000	7,000	94,699
Total Revenue:	28,266	14,649	13,412	10,372	7,000	7,000	7,000	7,000	94,699
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Planning and Design	1,864	0	0	0	0	0	0	0	1,864
Construction	12,611	9,124	7,827	6,310	4,200	4,200	4,200	4,200	52,672
Equipment Acquisition	666	3,160	3,151	2,950	2,800	2,800	2,800	2,800	21,127
Project Administration	13,125	2,365	2,434	1,112	0	0	0	0	19,036
Total Expenditures:	28,266	14,649	13,412	10,372	7,000	7,000	7,000	7,000	94,699

15. Replace Rail Vehicle Wash

This project has been completed. The project entailed replacement of the Metrorail vehicle wash system at the Lehman Center maintenance facility. The old automatic wash was inoperable and required extensive repairs. The project cost approximately \$150,000 (previously was identified as \$1 million), funded by the PTP Surtax.

16. Rail F & G Inspections

This project is considered complete. Thorough periodic maintenance inspection of the 136 railcars (68 married pairs) is required to increase reliability and ensure passenger comfort. F and G Inspections are comprehensive vehicle maintenance inspections that are required every four and eight years respectively. To date, 32 pairs of railcars have undergone a G-Inspection and 58 pairs of railcars have undergone an F-Inspection. Vehicles in the fleet have



exceeded the mileage and interval for the G-Inspection which includes braking systems; Heating, Ventilation and Air Conditioning (HVAC) equipment; couplers; gearboxes and wheels. Mean Distance between Disruptions for the 28-year old fleet was 43,041 miles in FY12.

Through MDT's regular maintenance cycles all the major components of the F & G inspection are addressed. The overhauls include the braking systems; doors; Heating, Ventilation and Air Conditioning (HVAC) equipment; couplers; draft gears; truck components including the gearboxes; traction motors; tread brake actuators; parking brake portions; axles; journal bearings and wheels. Equipment overhaul is performed by personnel at William Lehman Center with the assistance from selected outside vendors. Several campaigns that MDT has performed have also addressed F & G inspection components. Most recently the fleet has undergone an OEM vendor HVAC overhaul, performed to increase HVAC reliability and passenger comfort. Due to budget limitations the prescribed F & G inspections were halted after 58 pairs having undergone a complete four year, F-PM inspection and 32 pairs of rail cars having undergone a complete 8-10 year, G-PM inspection.

The cost of the project was \$2.7 million. Funding included \$54,250 in Sunshine State loans and \$2.6 million from the PTP Surtax revenues. The remaining 10 pairs of F-Inspections and 36 pairs of G-Inspections are not planned in light of improved maintenance results and approaching delivery of replacement rail vehicles (see page 108) in only a few years.

17. Facilities Roof Project

This project, now 77% complete (same as FY11 and FY12 Plans) based on amount expended of current estimated total cost, involved ongoing replacement of roofs, upgraded lightning protection and sealing of skylights at all Metrorail Stations and other facilities. The project was halted because of Hurricanes Katrina and Wilma after roof replacements except lightning protection were completed at several facilities. Primarily the lightning protection remains in process to complete all station post-hurricane roof repairs and replacements.

The original cost for this project was \$6.5 million which has since been revised to \$7 million. As of end of FY2010, \$5.4 million has been expended. Total of \$6.0 million is funded for this project (Sunshine State Loans totaling \$201,000 and \$5.8 million from the PTP Surtax). The remaining \$1.0 million is currently an unfunded need, however proposed for next year's IRP in addition to the following roof project.

Note the scope of the above project excludes the Bus Roofs project included in IRP (see page 120). The original scope of work for the IRP project was for a contractor to furnish and install new roofing at the Central Bus Garages and Offices; A/C and fan roof curbs to be resealed and insulated. Some roof ventilators and curbs may be necessary to replace as part of this project. The current cost estimate is \$300,000 and is currently 0% complete (both unchanged from FY11 and FY12 Plans). Scope of work is in the process of being evaluated and to match allocated funds. Currently, a work order is being processed to allow the Consultant to conduct a conditional assessment and after it will be determined which roofs will be repaired with the available funds

The following is from the Unfunded Priority Needs section of the 2010 TIP. The project is not listed as a line item of Transit projects in the 2010 Capital Budget's Unfunded Needs.

MPO Project Num.	Facility/Project Name		Type of Work	Project Cost (\$000s)	Unfunded Projects	
Agency Project Num.	From/Location	To/Location	Remarks			
Detailed Project Description						
TAD000075	Transit Facilities Roof Replacement		Construction	9,000	Activity Phase	Required Project Funding by Phase (where available)
	Systemwide	Systemwide	This project was an approved PTP project. Due to budget			
0000075	Replace roofs on transit facilities including metrorail, metromover and bus facilities.					
					(in \$000s)	
					CST	2,857

The PTP included a number of renovation and refurbishment projects at Metrorail and Metromover Stations. These stations are over 25 years old and in need of capital investment to replace escalators, elevators, etc. The work on these projects has only been partially completed and the remainder is unfunded. The Trust had recommended for the 2011 Plan that a group of Rail/Mover Capital Improvements (this Facilities Roof Project, along with Metrorail Station Refurbishments [page 99]; Metromover Station Canopies and Escalator Replacement for remaining one Inner Loop Metromover and 21 Metrorail stations [page 101]; Facilities Painting for remaining 30 of 43 total stations [page 100]; and Metrorail Piers Grounding [page 103]) be prioritized in the upcoming budgeting and planning cycle by funding as capital projects within bonding and cash flow capacity, with plan to complete by 2016. The surtax impact in this period would include adding \$42.9 million to capital program and beginning 2014 slightly higher debt service. The capital increase is offset by some expenditure shifted from Miami-Dade Transit operating expenses.

18. Fare Collection System Replacement

This project is complete (not including closeout installation of fire panels). The new Automated Fare Collection System (AFCS) – EASY Card, was implemented on October 1, 2009. The EASY Card is a smart-card based system installed on the Metrobus fleet and at the Metrorail Stations for significant customer convenience. The AFCS meets the needs of the present fare structure with sufficient flexibility for future service. More information



is available also about passenger movements, allowing MDT to refine its services, offer loyalty products and fight fraud. The system accepts cash and credit cards to purchase an EASYCard or EASY ticket at Ticket Vending Machines, Point of Sale locations or on-line. The new system utilizes new fareboxes for all Metrobuses, new faregates installed at all Metrorail stations, new revenue island equipment and computers at the garages and a new consolidated backend computer system. The system features open-ended architecture that will accommodate future integration with other local transportation agencies. The AFCS also has an Automatic Passenger Counter (APC) capability on all buses and at all Metromover stations. The system will also provide boarding and alighting data by bus stop. The AFCS ensures improved ridership data accuracy and enables MDT to better allocate resources and improve service planning. The new system is also expected to reduce fare evasion and fraud. Total cost was \$60.65 million, reflecting the fire panels now shown as a separate \$3.0 million Capital Budget project as reflected in the FY14 Capital Plan. Total expended is \$59.489 million, and remaining

balance reflects pending closeout items.



From 2012-2012 Adopted Capital Plan

FIRE ALARM INSTALLATION AT RAIL STATIONS

PROJECT #673050

Description: Upgrade and replace the existing fire alarm panels at all Metrorail Stations with new SIMPLEX NOTIFIER panels

LOCATION: Various-Miami-Dade County

DISTRICT LOCATED: 2,3,5,6,7,12,13

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
PTP Bonds	1,500	1,500	0	0	0	0	0	0	3,000
Total Revenue:	1,500	1,500	0	0	0	0	0	0	3,000
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Construction	1,285	1,285	0	0	0	0	0	0	2,570
Project Administration	34	34	0	0	0	0	0	0	69
Project Contingency	181	181	0	0	0	0	0	0	361
Total Expenditures:	1,500	1,500	0	0	0	0	0	0	3,000

Note:

The PTP allocation for the Fire Alarm Installation at Rail Stations was originally under the above Fare Collection Equipment Installation – PG109 of FY13 Budget – OMB Project 6730051. The project consists of upgrading and replacing the existing fire alarm panels at all rail stations with new Simplex Notifier Panels.

19. Upgrade Illumination

This project involves improvements to, and replacement of the lighting system for existing Metrorail stations and parking garages. Station and parking facility lighting will be upgraded to newer energy efficient systems that provide better illumination and require less maintenance. There are two phases to this project. Phase 1 was to install new lamps at all Metrorail Stations and was completed. Phase 2 of this project is included in the IRP (page120), and scope is full replacement of lamps with either Light Emitting Diode (LED) or induction lighting for four Metrorail garages (Okeechobee, Martin Luther King, Jr., Dadeland North, South Miami) and one Metrobus Park and Park-and-ride (SW 244th Street). This project is separate from another proposal for LED replacements of all the Metrorail lighting fixtures at an estimated cost of \$7.5 million, which continues as currently an unfunded need.

Originally, the project was estimated to cost \$2.9 million and has been revised to cost \$2.7 million. The project is 56% completed and total expenditure is \$1.5 million (statuses unchanged from FY12 5 Year Plan Update).

20. Rail Midlife Rehabilitation (now Rail Vehicle Replacement)

This project originally involved mid-life (15-year) rehabilitation of 136 Metrorail vehicles which is past due. The existing vehicles and subsystems are more than 20 years old and parts are becoming obsolete and more difficult to obtain. Fleet modernization will include rebuilding and/or replacement of existing components and systems with newer technology.

However, the County began evaluating whether to replace the rail cars as opposed to completing mid-life rehabilitation and opted to purchase new car as opposed to rehabilitating the older units. This was after a careful



review of the results of the Railcar Rehabilitation negotiations and undertaking a thorough assessment of the marketplace in regard to new versus rehabilitated vehicles. Factors considered in this analysis included: the impact on existing service; the need for additional new vehicles for the planned Metrorail extensions; market options for providing the County the best rail service possible; a life cycle cost comparison of new versus rehabilitated vehicles; and cost factors related to maintenance and parts inventory showed that the procurement of new vehicles in lieu of rehabilitation would represent the best value procurement option for the County.

The selection process for the Rail Midlife Rehabilitation project (RFP-439) included negotiations with the top ranked proposer to obtain a Best and Final Offer (BAFO), which concluded in 2006 with a final price offer of \$274,495,000 or \$2.018 million per vehicle. A careful review of the negotiations results was conducted, along with a thorough assessment of the rail industry marketplace. County staff also conducted an evaluation of Miami Dade Transit's (MDT) existing rail service performance, future requirements for rail vehicles for the planned Metrorail extensions, as well as a life cycle cost analysis to ascertain whether it was more cost effective to continue the rehabilitation or purchase new replacement vehicles. The results of these analyses were detailed in a memorandum to the Board and resulted in the Board's approval on March 18, 2008 to reject all bids received for RFP 439.

A PTP amendment to approve the procurement of new rail vehicles in lieu of rehabilitation was approved by the Board on May 6, 2008 with the requisite funding (a not to exceed ceiling of \$401.5 million). The Request for Proposals (RFP No. 654) was issued March 31, 2009. Railcar manufacturers Alstom, AnsaldoBreda, and CAF submitted proposals on September 25, 2009. MDT Project Team reviewed proposals, and a County Mayor award recommendation was scheduled to be presented to the Trust and the Board late 2011. The County recommendation was to award the contract to AnsaldoBreda (an Italian affiliated company). The second bidder, CAF-USA (a Spanish affiliated company) filed a protest against the then County Manager's recommendation. A hearing was held by the County and the Hearing Examiner ruled in favor of the County. CAF then appealed the Hearing Examiner's ruling to the FTA. In November 2011, the FTA ruled that the County violated Federal procurement rules when it considered the location of the final assembly plant and its local job creation benefits in the Railcar procurement. The Mayor mandated the reconvening of the Selection Committee to "consider the BAFO (Best and Final Offer) proposals, and instruct them to carefully review the BAFO in accordance with FTA instructions". The Selection Committee reconvened on December 6, 2011, and their recommendation to the Mayor after reviewing the BAFO proposals retained AnsaldoBreda for award.

The County will purchase a total of 136 new cars, as the eight additional cars are no longer operationally required that were part of the Orange Line extension (PTP Exhibit 1 project item 14 page 51). NTP was issued by MDT Director on 12/13/12. Project was 5% complete as of August 2013, based on \$45.0 million expended to date of total project cost. As of August 2013, the car builder is currently executing the first of three design phases. Delivery scheduled beginning with six pilot vehicles in the 2nd3rd Quarter of 2015, followed after acceptance of the pilot vehicles by six per month through the 1st quarter of 2018. Project completion including 5 year warranty period is 2nd quarter 2023, per August 2013 status. Timing later than shown in FY12 PTP Five Year Plan Update (deliver initial six



April 2014, six per month through March 2017, 5-year warranty period until May 2022) was due primarily to resolving bid protests, re-evaluation of BAFO submittals, and revisions to the award recommendation document as discussed above. The FY11 Plan showed vehicle delivery November 2013 to March 2019, and did not note the warranty period.

The MDT test track essential for overall rail operations will support vehicle acceptance testing and is discussed under PTP amendment project item 7 on page 98. The rehabilitation and expansion necessary to provide storage capacity and transition process facility supporting the vehicle procurement is discussed under PTP post-unification project item 2 on page 117. The new vehicles are more sensitive to the existing marginal third rail voltage and low power at the Palmetto Station, and PTP post-unification project item 6 on page 124 describes the Traction Power Substation required for correcting the low voltage situation.

Current \$375.8 million cost estimate (same as FY12 Plan Update and significant reduction from previous \$407 million budgeted amount shown in FY11 Initial Five Year Plan) with \$348.6 million. A Letter of No Prejudice for \$300 million, that is valid until November 19, 2014, has been received from the FTA and allows the County to apply for federal funding after contract award.

The original Orange Line project included eight additional Metrorail cars to be procured at the same time as the replacement of the existing 136 car Metrorail fleet. The Trust had recommended for the 2011 Plan that the County carefully consider adding the additional railcars as an option to the current railcar procurement (to hedge against potential long term risks such as capacity to handle increased ridership on operating characteristics), pending determination that this is legally permissible and will not adversely affect the current procurement process. The County Attorney’s Office advised that adding the option for eight additional cars is a material change to RFP specifications and thus not permissible. Lacking the option is a potential concern; adding the cars in the future may not be possible or possible only at a significant increase in cost.

From 2013-2014 Adopted Capital Plan

RAIL VEHICLE REPLACEMENT

PROJECT # 6733001

DESCRIPTION: Overhaul and modernize existing fleet and purchase 136 new heavy rail vehicles

LOCATION: Unincorporated Miami-Dade County

DISTRICT LOCATED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: \$500

DISTRICT(S) SERVED: Countywide

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
PTP Bonds	59,084	25,822	31,180	75,922	107,209	65,022	12,689	0	376,928
Total Revenue:	59,084	25,822	31,180	75,922	107,209	65,022	12,689	0	376,928
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Equipment Acquisition	25,904	20,237	24,098	62,567	97,337	59,777	8,967	0	298,887
Project Administration	16,361	4,042	5,536	9,950	4,858	2,206	3,273	0	46,226
Project Contingency	2,063	1,143	1,402	3,405	5,014	3,039	449	0	16,515
Capital Maintenance	14,756	400	144	0	0	0	0	0	15,300
Total Expenditures:	59,084	25,822	31,180	75,922	107,209	65,022	12,689	0	376,928

21. Enhancements (Central Control Modernization)

The existing Central Control facility consists of 20-year old obsolete electromechanical controls with no capacity for expansion. This modernization project will provide a modern, expandable Central Control facility with state-of-the-art computers and projection screens. The initial project was to cost the County \$14.5 million for Metrorail systems only. The revised scope includes installation of a system wide facility encompassing buses and Metromover which increased the project cost to \$32.4 million. Funding includes FDOT and PTP Funds. This project is currently 15% complete (\$3.48 million expended and \$28.3 million remaining as of June 2012 based on previous \$31.78 million budget). Advertisement was in May



2010. In November 2011, Board and Trust approved Mayor’s Recommendation to Award. Construction, testing and startup estimated to complete by July 2014 (previously anticipated June 2013).

This project is for the complete overhaul and modernization of the Metrorail Control Center (MRCC) with control and movement of the trains, control of power to the trains, and communications and data between the stations and Control Center. The upgrade will replace obsolete hardware and software, and add remote redundancy at Lehman Yard facility to minimize risk of failure which would impact the safety, management and supervision of the Metrorail System operation. This project will integrate the Orange Line (PTP Exhibit 1 project item 14-page 51) with the existing mainline (Green Line) as one unified system. A single system display showing the location of the trains will be provided. The new display will allow MDT to make changes or add additional lines without hardware expansion. Another upgrade feature is the ability of the trains to communicate with Central Control in real time. This feature is required since MDT will be operating multiple lines. Additionally it integrates with the public address and variable messaging sign systems at the stations. Also included is the development of existing office space to accommodate the modernization of the existing Central Control facility and systems. The modernization includes the heating, ventilation and air conditioning (HVAC) system on Government Center 3rd, 4th, and 5th floors, workstations, power distribution units, uninterruptible power supplies, electrical systems, existing systems hardware and software, design, construction and necessary equipment for the Control Center. The contract includes a three year warranty period, however excludes an option for a five-year renewal period identified in the solicitation (because the County will own the source code and perform its own maintenance and support – a significant cost savings). The updated project cost is now reflected in this year’s Capital Budget and PTP Five Year Plan.

From 2013-2014 Adopted Capital Plan

CENTRAL CONTROL OVERHAUL

PROJECT # 6733181

LOCATION: 111 NW 1 St
City of Miami

DISTRICT LOCATED: 5
DISTRICT(S) SERVED: Countywide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
FDOT Funds	2,686	0	0	0	0	0	0	0	2,686
PTP Bonds	18,140	8,821	1,443	0	0	0	0	0	28,404
Total Revenue:	20,826	8,821	1,443	0	0	0	0	0	31,090
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Construction	14,438	3,814	0	0	0	0	0	0	18,252
Furniture, Fixtures & Equip.	784	0	0	0	0	0	0	0	784
Equipment Acquisition	484	2,779	1,191	0	0	0	0	0	4,454
Construction Management	1,260	840	0	0	0	0	0	0	2,100
Project Administration	3,860	1,052	108	0	0	0	0	0	5,020
Project Contingency	0	336	144	0	0	0	0	0	480
Total Expenditures:	20,826	8,821	1,443	0	0	0	0	0	31,090

CIP030-CT1-TR09 Construction Engineering and Inspection Services for the Lehman Center Test Track, Palmetto Station Traction Power Sub-Station, Metrorail Central Control Upgrade and Lehman Yard Rehabilitation & Expansion Phase 1



22. Additional Pedestrian Overpass (4)

The PTP amendment passed on October 2003 identified four Pedestrian Overpasses along US-1 at the following Metrorail Stations: Dadeland South, South Miami, University and Coconut Grove for a total value of \$10 million. In 2006 MDT proceeded with conceptual studies to evaluate alternatives to determine the optimum location and configuration for the pedestrian structures over US-1. The preliminary cost estimates as part of these studies indicated the funding required was approximately three times the PTP amendment budget amount.

In 2007 MDT completed a warrant and prioritization study, the "Pedestrian/Bicycle Crossing Study-Metrorail Stations along US-1 Corridor".

The study established screening criteria including pedestrian counts and vehicle speeds to identify intersections that may justify the investigation of a pedestrian overpass as possible solutions to provide more pedestrian friendly crossing opportunities. Of the five locations studied – the four Amendment locations and one other proposed at Dadeland North – University and South Miami met the criteria. The other three did not and are currently not funded to move forward.



University Pedestrian Overpass: MDT moved forward with this overpass at Mariposa Court and US-1, the preferred alternative indicated in the March 2006 University Metrorail Station Conceptual Study. Miami-Dade County in coordination with FDOT and the University of Miami took short term corrective actions beginning the middle of 2006. Safety improvements included installing a fence to channel pedestrians to the signalized crosswalk to cross US-1, additional signage on the Metrorail parking lot side of the fence to direct pedestrians to the safe crossing location, and back plates on the traffic signal at the safe crossing location to bring more attention to the drivers; as well as modifying the traffic signal phasing at the Mariposa/US-1 intersection to provide a pedestrian crossing phase prior to the westbound left turn phase.

In September 2008, 100% of planning and approximately 40% of final design phases (approximately 45% the overall project) were complete for the overpass when it was placed on-hold due to reductions in FDOT funding sources and fiscal challenges faced by MDT. In April 2010, MDT in cooperation with FDOT has been able to reprogram funds for this project. The funds estimated to be required to complete the project is approximately \$5.8 million, with \$766,000 expended of current estimated \$6.6 million (reduced from previous \$7.5 million estimate) and thus approximately 10% complete; statuses are unchanged from FY11 Plan Update. The proposed new funding sources are as follows: 66% Federal, 17% State and 17% Local. In October 2010, the Metropolitan Planning Organization (MPO), via MPO Resolution #36-10, approved funding to complete the University Overpass project. This includes TIP amendments transferring funding from three other overpasses (South Miami and the two at Dadeland) as noted below. Revised funding sources and estimated cost are reflected in this year's Capital Plan.

FTA approval/concurrence of the re-evaluation of the project's 2007 Categorical Exclusion was received on February 2011. This allows MDT to apply for the federal component of the funds. Project resumed design October 2011. Design/permitting was anticipated by February 2013, Right of Way Acquisition was anticipated

by November 2012, however, in February 2013 the property owner informed the County in writing of being unwilling to sell. The County evaluated different alternatives to identify a new location. The new location is placing the bridge East Tower on Mariposa Court. Construction completion is anticipated for March 2016. (Completion was indicated as December 2013 in last year's Plan.)

This overpass features a low profile pedestrian bridge that spans US1 and connects two vertical circulation towers, each with elevator and stairs. Estimated annual on-going maintenance and operations cost is \$17,317.

South Miami Pedestrian Overpass: MDT moved forward with the overpass at its optimum location at SW 72nd Street/Sunset Drive and US-1, as identified by the study performed by the City of South Miami in 2001 and confirmed by the 2006 MDT Conceptual Study. Design Notice To Proceed and coordination with various entities began April 2007, however this location became no longer feasible in December 2007 when the property identified for acquisition was deemed historical by the City of South Miami Commission.

Other locations within the area were analyzed in coordination with the City of South Miami. None were found to be effective. Design activities were placed on-hold in September 2008, like the University Overpass due to reductions in FDOT funding sources and fiscal challenges faced by MDT.

The City of South Miami began evaluating intersection improvements along US-1 including SW 72nd Street/Sunset Drive. FDOT is currently working with the City to gain a full understanding of the scope and cost for the proposed intersection improvements and evaluate other funding options that may be appropriate and available. In June 2009, the City confirmed the pedestrian overpass at the South Miami Metrorail Station was no longer desired. The South Miami Pedestrian Overpass previous scope was estimated at \$6.9 million and is not currently a funded project under the Miami-Dade County Capital Plan. MPO amended the TIP in October 2010 to transfer funding for this project to the University Overpass.

From 2013-2014 Adopted Capital Plan

PEDESTRIAN OVERPASS AT THE UNIVERSITY METRORAIL STATION

PROJECT # 674220

DESCRIPTION: Construct a Pedestrian Overpass

LOCATION: US 1 and Mariposa Ave
Coral Gables

DISTRICT LOCATED: 7

ESTIMATED ANNUAL OPERATING IMPACT: will begin in FY 2015-16 @ \$17,000

DISTRICT(S) SERVED: 7

Revenue Schedule	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
FTA Section 5307/5309 Formula Grant	1,384	1,260	1,218	0	0	0	0	0	3,862
FDOT Funds	0	1,000	0	0	0	0	0	0	1,000
PTP Bonds	766	1,000	0	0	0	0	0	0	1,766
Total Revenue:	2,150	3,260	1,218	0	0	0	0	0	6,628
Expenditure Schedule:	Prior Years	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Future	Total
Land Acquisition	1,037	0	0	0	0	0	0	0	1,037
Planning and Design	315	199	0	0	0	0	0	0	514
Construction	0	2,793	850	0	0	0	0	0	3,643
Project Administration	798	191	368	0	0	0	0	0	1,357
Project Contingency	0	77	0	0	0	0	0	0	77
Total Expenditures:	2,150	3,260	1,218	0	0	0	0	0	6,628

Contract (See Appendix for fuller listing of Trust-approved contracts)



Dadeland South and North, and Coconut Grove Overpasses did not meet the 2007 warrant study's screening criteria. MPO amended the TIP in October 2010 to transfer funding for Dadeland projects to the University Overpass.

Total expenditures related to PTP Pedestrian Overpasses are \$1.495 million (\$766,000 University, \$729,000 all other such as South Miami). Funding has been primarily PTP (\$1.166 million), with the balance FDOT and FTA.

23. Additional Metrorail Crossovers

This project was for construction of two additional crossovers on the existing Metrorail line to facilitate system maintenance without impacting train schedules to support the Orange Line expansion. Due to increased passenger service and the anticipated increase in boarding once the now Orange Line became operational, these crossovers may have been required to help MDT maintain desired headways while maintaining rail facilities and allow multiple areas of rail tracks to be "single-tracked" without affecting service schedules. Because of the existing distance between crossovers, single tracking for maintenance could result in headways that were longer than desired. Constructing these additional crossovers between the Culmer and Earlington Heights Crossovers and Dadeland South and Douglas Road Crossovers could significantly improve service reliability and on-time performance.

However, revised estimates developed in 2007 indicated each crossover would cost \$50 million, or \$100 million total, which far exceeds the \$10 million budgeted for two crossovers in the PTP amendment as passed October 2003. Current operations for the Orange Line reduce the need for an additional crossover, however now that the extension is completed this project could be reevaluated and reinstated for the Capital Plan.

Additional Amendments

24. Patriot Passport Program; PTP Amendment (R-729-04)

See discussion for Golden Passport, page 31.

25. Discontinue overnight Metrorail and Metromover service (R-421-04)

Board adopted resolution in April 2004 to amend the PTP discontinuing the overnight Metrorail and Metromover service and implementing a replacement Metrobus route that would serve bus stops at or near Metrorail stations. Miami-Dade Transit (MDT) began 24-hour service on Metrorail and Metromover along with new 24-hour service on eleven bus routes serving Metrorail on May 25, 2003, as part of the implementation of the People's Transportation Plan. The Metrorail service which operated every 60 minutes between 1 am and 5am had an operating cost impact of \$2.0 million and security cost of \$1.3 million. Overnight Metromover service during these hours is \$145,973 per year of security cost for five guards. The average number of passengers during these four hours using the entire system of Metrorail was approximately 250 per night, and Metromover averaged 15 passengers per night. The cost of the new overnight Metrobus route would be approximately \$350,000 per year, for net savings of \$3.1 million.

26. Implement the December 7, 2003 bus service improvement lineup, 3 year service improvement plan; PTP Amendment; (R-64-04)

In January 2004, the PTP was amended to include the December transit line-up. The line-up included implementation of 52 improvements to 41 routes, acceleration of two other PTP bus route improvements, and introduction of twelve non-PTP bus service improvements. The improvements were completed and were funded as part of the total operational support received from PTP Surtax revenues.

27. PWD Two Year Plan, categories for Neighborhood Improvements, and district allocations (R-87-04, amended R-507-04 and R-1391-04)

Resolution R-87-04 approved the plan for FY2003-04 and FY2004-05 for Districts, Major Countywide, and Neighborhood Countywide projects in the two categories of the PTP Ordinance's Exhibit 1 that relate to PWD, as well as the operational needs for Traffic Signals and Signs (\$20.075 million). Further, to address the various non-site specific categories in the PTP ordinance Neighborhood Improvements in the most effective and efficient manner, the plan included PWD's (now PWWM) "Neighborhood Improvement Projects Formula" to utilize \$91.425 million over 10 years evenly distributed among the Commission Districts. (See Neighborhood Improvements on page 68 for further status discussion.) Resolution R-507-04 then amended the Neighborhood Improvements section in Exhibit 1 of the PTP to specifically identify Roadway Signage, Roadway Lighting, Pavement Markings, and Traffic Calming. Lastly, Resolution R-1391-04 removed school flashing signals from the commission districts' yearly allocation and reassigned it within the countywide neighborhood improvements section. FY13 is the seventh year of the amendment's 10 year scope.

28. Five-year service improvement plan; PTP Amendment (R-421-04 and R-422-04)

In April 2004, the PTP was amended to implement a five-year service improvement plan. Prior to this action, MDT accelerated improvements by adopting a Three-Year Plan that was not a part of the PTP. By reverting to the five-year plan, the implementation costs were reduced by approximately \$6.9 million. Among these improvements is the new Route 500, which is a bus service that replaces the discontinued Metrorail/Metromover overnight service. Route 500 runs from Dadeland South to the Government Center from 1 a.m. to 4 a.m. and serves approximately 250 customers.

29. Paratransit/Special Transportation Services (STS) project; PTP Amendment; (R-1365-04)

This project is complete. In November 2004, the PTP was amended to include Paratransit/Special Transportation as a PTP project to be funded in an amount not to exceed \$55.4 million over five years. This funding was to make up the budget deficit on the \$219 million STS contract executed in 2004. The contract was for \$55.4 million more than budgeted by MDT for STS through FY 2008-09. A total of \$6.3 million was reimbursed from Surtax funds through September 30, 2007. On November 8, 2012, The STS Contract was awarded to Super Nice STS, Inc, dba Transportation America. The contract was awarded for \$208,343,635.20 – Service started April 1, 2013

As reported in the FY12 Five Year Plan Update, an extension of the current STS contract was granted by the CITT and BCC in September 2011 until March 30, 2012 (with authority for Mayor to exercise up to six Options to Renew, up to September 2012) while procurement efforts continue for a successor contract. The extension amount was \$19,980,000 or \$39,960,000 if all Options to Renew exercised. In September 2012, the CITT and BCC granted a further extension to March 2013, on a month-to-month basis (Supplemental Agreement No. 5, \$19,980,000 if all options exercised), which incorporates time and process required for contract award, and the transition period required once a contractor is identified and estimated to take up to four months. With the most recent extension, if the County chooses to exercise the six, one-month OTRs, the cumulative contract value will be \$340, 320,000.



The Contract shall become effective on the date indicated on the first page of this agreement and shall be for the duration of five (5) years. The County, in its sole discretion, reserves the right to exercise the option to renew for this Contract for one (1) additional five-year period unless the Contractor notifies the County, at least one-year prior to



the expiration of the initial term, that the average of all price adjustments, applied to this contract in accordance with Article 8, has increased beyond 3%. Upon receipt of this notification, the County will renegotiate the contract with the Contractor for the option-to-renew period. The re-negotiated contract for the option-to-renew period will be presented to the Board of County Commissioners for approval.

The County reserves the right to exercise its option to extend this Contract for up to one hundred-eighty (180) calendar days beyond the current Contract period and will notify the Contractor in writing of the extension. This Contract may be extended beyond the initial one hundred-eighty (180) calendar day extension period by mutual agreement between the County and the Contractor, upon approval by the Board of County Commissioners.

30. Ordinance Amending Maintenance of Effort PTP Amendment; (R-148-05)

In July 2005, the PTP was amended to address issues related to the maintenance of effort for transit services that existed prior to the approval of the PTP (Existing Services). The amendment included three stipulations:

- a. An annual increase of 3.5% in the Countywide General Fund budget contribution to support Existing Services
- b. At least 1.5% annual increase in Local Option Gas Tax (LOGT) Revenues for Existing Services support
- c. Approval of a Line of Credit (Loan for Existing Services) for up to \$150 million in Surtax funds to support MDT Existing Services.

Item a is reflected in the FY 2012 Pro Forma as well as the Adopted FY 2010-11 Budget's Additional Comments for MDT: In FY 2010-11, the Countywide General Fund Maintenance of Effort (MOE) is \$151.346 million, a 3.5 percent increase above the FY 2009-10 MOE of \$146.228 million, as adopted in the People's Transportation Plan and as amended in May of 2005.

For Item b, the 2012 Pro Forma reflects the 1.5% annual increase in each Fiscal Year. Also per Adopted FY 2010-11 Budget's Additional Comments for MDT: "In FY 2010-11... MDT will utilize... \$16.720 million of Capital Improvement Local Option Gas Tax funds to support the capitalization of major preventive maintenance expenses in the operating budget."

Regarding Item c, MDT received \$83 million under the Line of Credit for the three fiscal years ending September 30, 2007. The following is included among Adopted FY 2010-11 Budget's Additional Comments for MDT: "In FY 2010-11, the Countywide General Fund support to MDT includes \$12.698 million towards repayment of the loan for existing services; total borrowing remains at \$150 million; the final installment payment will occur by FY 2017-18." (However this MDT Repayment of Loan for Existing Services is not shown separately in the current 2013 Draft Pro Forma.)

31. Public education campaign by GIC (R-308-07)

In 2007, the PTP was amended to provide for a public education campaign by the Government Information Center. Total cost was \$350,000.

32. Create Capital Reserve and unify system use of Surtax funds (R-222-09)

As a result of Board of County Commissioners (BCC) Resolution 222-09 adopted March 2009, which amended Exhibit 1 of the People's Transportation Plan by creating a capital expansion reserve fund and allowing for greater flexibility

in the use of Surtax funds for the operation and maintenance of the Transit system, Adopted Budgets including for FY 2012-13 to maintain a unified system.

For FY 2012-13, the total PTP funding established during the budget process was \$99,204,000, which is approximately 20 percent of MDT's total operating budget. In FY 2010-11, programmed surtax support for MDT was \$126.618 million and the \$91.968 million of PTP funding was approximately 24 percent of MDT's total operating budget. PTP funds approximately 20% of MDT budget in FY13, and ranged from 19% in 2012 to 32% in '09.

The Trust now reviews and approves contracts funded from MDT Operating budget in addition to contracts for Capital projects specifically funded by the Surtax. For example, Attachment 6 (Contracts Listing) includes the most recent uniform-related item before the Trust was within an item approved on June agenda for a package of 6 contract modifications for time and spending authority. They were uniforms with laundry service as required by TWU & GSAF CBAs (Collective Bargaining Agreements) and extending contract 6 months, \$185K. The Board amended Ordinance 02-116 in September 2010 to shift the sequence of approval of contracts utilizing Surtax funds and to require this Five Year Implementation Plan annually.

See page 130 for discussion on Detailed Capital Reserve Project Listing.

OTHER PROJECTS POST-UNIFICATION

1. Busway ADA Improvements

This project will provide accessibility to the Busway by constructing sidewalks, ramps and crosswalks, at those locations missing these pedestrian improvements in unincorporated areas identified in the Quarter Mile Accessibility Report. The project is no longer PTP funded (\$100,000 of PTP funding reflected in the previous Capital Budget Plan revised to Gas Tax funding) and since not included or directed as part of the Ballot Question, any Ordinance or Amendment, its implementation and budget now falls outside the scope of the PTP Five Year Plan.

2. Lehman Yard Rehab and Expand Phase 1

This project is about 5% complete (based on amount expended of total estimated cost). It will be implemented using a Design/Build Procurement method in conjunction with the Lehman Center Test Track (page 98). It consists of constructing 5 storage tracks and 2 maintenance-of-way tracks at the existing Lehman Center Metrorail Facility. Due to budgetary constraints, the test track and additional storage tracks were not included in the Lehman Center facilities contract which was awarded prior to 1983. In 2002, the test track and storage tracks were included in MDT's Capital Improvement Plan approved by the Board for financing by the PTP Bond Program. This rehabilitation and expansion is necessary to provide the required vehicle storage capacity and vehicle transition process facility in support of the procurement of the new Rail Vehicle (136) fleet with a delivery date beginning second quarter of 2014. Total estimated cost is \$8.713 million with \$332,000 expended to date (8.4 million remaining as of June 2012). Project RFP advertisement was scheduled February 2010, actual June 2010. Contract was awarded November 2012; project complete including testing



Test Track – southern portion looking north