

## 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.

A Supplemental JPA with FDOT was executed June 2010 and project is currently about 5% complete (now in design phase) with Design Notice to Proceed issued October 2010. Construction planned to begin September 2011, and complete by October 2012. Funding currently programmed at \$4.5 million, \$0 expended to date. The \$100,000 of PTP funding will be revised to Gas Tax funding, to be reflected in next fiscal year's Capital Budget Plan.

Following is more detail from 2010-2011 Approved Capital Plan.

#### From 2010-2011 Approved Capital Plan

#### BUSWAY ADA IMPROVEMENTS

PROJECT # 672310

LOCATIONS: Various Sites

DISTRICT LOCATED: 5

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: 5

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	694	0	337	0	0	0	0	0	1,031
FDOT Funds	344	1,506	0	0	0	0	0	0	1,850
PTP Bonds	0	100	0	0	0	0	0	0	100
Capital Impr. Local Option Gas Tax	0	108	1,742	0	0	0	0	0	1,850
<b>Total Revenue:</b>	<b>1,038</b>	<b>1,714</b>	<b>2,079</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,831</b>
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Land/Building Acquisition	218	191	0	0	0	0	0	0	409
Planning and Design	247	369	0	0	0	0	0	0	616
Construction	344	906	1,519	0	0	0	0	0	2,769
Construction Management	229	0	185	0	0	0	0	0	414
Project Administration	0	248	375	0	0	0	0	0	623
<b>Expenditure Schedule:</b>	<b>1,038</b>	<b>1,714</b>	<b>2,079</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,831</b>

Design contracts: EDP-PSA-2011D (Part I), EDP-PSA-2011A (Part II) EDP-PSA-2011A (Part III) [(See Appendix for fuller listing of Trust-approved contracts)]



## 2. Lehman Yard Rehab and Expand Phase 1

This project is about 1% 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 74). It consists of constructing 5 storage tracks and 2 maintenance-of-way tracks at the existing Lehman Center Metrorail Facility. 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 2013. Total estimated cost is \$8.713 million with \$128,000 expended to date. Project is currently in procurement (RFP advertisement was scheduled February 2010, actual June 2010) and the Design/Build Firm Selection Phase is approximately 59% complete. Construction Notice to Proceed scheduled October 2011 and project complete including testing and startup by April 2013.

The following is more detailed information from the 2010-2011 Approved Capital Plan.

### From 2010-2011 Approved Capital Plan

#### LEHMAN YARD REHABILITATION AND EXPANSION PHASE 1

PROJECT # 674560

DISTRICT LOCATED: 12

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
PTP Bonds	100	3,546	5,067	0	0	0	0	0	8,713
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Construction	0	2,958	4,636	0	0	0	0	0	7,594
Construction Management	0	171	120	0	0	0	0	0	291
Project Administration	100	316	226	0	0	0	0	0	642
Project Contingency	0	100	86	0	0	0	0	0	186
<b>Total Expenditures:</b>	<b>100</b>	<b>3,545</b>	<b>5,068</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,713</b>

Contract: CIP030-CT1-TR09 (combined under Test Track) [(See Appendix for fuller listing of Trust-approved contracts)]

### 3. TOS Replacement

This project replaces Miami-Dade Transit's current mission-critical Operator Workforce Management System with state-of-the-art technology automating current manual processes to provide enhanced operational efficiencies to critical functions. The Transit Operations System (TOS) performs critical operational functions such as, operator bidding, dispatching, work assignment, bus availability, time keeping and operator performance management. This system is over 20 years old with numerous software limitations. Miami-Dade Transit is the only transit property currently utilizing this software in production. The new system will be open in nature, mature and capable of interfacing with other MDT systems including its fixed-route scheduling system, Automated Fare Collection-Smart card system, Miami-Dade County Payroll System, Computer-Aided Dispatch/Automated Vehicle Location System (CAD/AVL), Consumer Information Network (CIN), Enterprise Asset Management System (EAMS), Random Drug and Alcohol Substance Abuse System, Disciplinary Action Reporting System and the Automatic Passenger Counter (APC) system. This new system will allow high number of concurrent operators bidding while complying with the Collective Bargaining Agreement with the local Transit Workers Union, as well as significantly improve operational effectiveness and efficiencies by reducing labor costs and increasing data accuracy.

Project overall is 1% complete and total project cost is \$6.2 million (both ARRA and PTP source of funds), with current anticipated completion is June 2014. MDT staff is currently reviewing the RFP document to correct the discrepancies and to ensure that the functionalities and requirements in the RFP are meeting the objectives of Transit. RFP advertisement is expected February 2011 and Notice To Proceed expected June 2011). The following is information from 2010-2011 Approved Capital Plan.

#### From 2010-2011 Approved Capital Plan

#### TRANSIT OPERATIONS SYSTEM (TOS) REPLACEMENT PROJECT

PROJECT # 671460

LOCATION: City of Miami

DISTRICT LOCATED: 5

ESTIMATED ANNUAL OPERATING IMPACT: \$424

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	1,028	3,821	0	0	0	0	0	0	4,849
PTP Bonds	0	938	413	0	0	0	0	0	1,351
<b>Total Revenue:</b>	1,028	4,759	413	0	0	0	0	0	6,200
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Equipment Acquisition	958	4,524	342	0	0	0	0	0	5,824
Project Administration	70	235	71	0	0	0	0	0	376
<b>Total Expenditures:</b>	1,028	4,759	413	0	0	0	0	0	6,200



#### 4. Infrastructure Renewal Plan

Maintain MDT's Infrastructure Replace and upgrade physical assets according to normal replacement cycles; the IRP focuses on such areas as bus overhauls, rehabilitation of bus and rail facilities, and systems and equipment. MDT's unfunded projects are included in this item. Note that many of the projects proposed are multi-year projects which subsequent funding will be required. The total expended in FY2009 and FY2010 capital budget was \$4.330 million and includes partial funding for PTP items such as Park West Metromover escalator replacement and the Traffic Signal Prioritization on the pilot for the Kendall Enhanced Bus Service. FY11 budgeted items include portion of 168<sup>th</sup> Street Park and Ride.

The following presents information from 2010-2011 Approved Capital Plan.

From 2010-2011 Approved Capital Plan									
INFRASTRUCTURE RENEWAL PLAN (IRP)						PROJECT # 677200			
DISTRICT LOCATED: Countywide									
ESTIMATED ANNUAL OPERATING IMPACT: \$0									
DISTRICT(s) SERVED: Countywide									
Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
PTP Bonds	0	7,080	7,500	7,500	12,500	12,500	12,500	0	59,580
Total Revenue:	0	7,080	7,500	7,500	12,500	12,500	12,500	0	59,580
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Equipment Acquisition	0	7,080	7,500	7,500	12,500	12,500	12,500	0	59,580
Total Expenditures:	0	7,080	7,500	7,500	12,500	12,500	12,500	0	59,580

The following presents descriptions of the 65 projects that were prioritized within the Approved Budget levels. The list of IRP projects is subject to change by MDT during the year, and may include items funded within the MDT Operating Budget.

IRP Project Name	Scope
Mover Fiber Emergency Project	<p>Fiber Replacement Project Scope involves the following components:</p> <ul style="list-style-type: none"> <li>- Replacing and installing Fiber Optic Cable throughout the Metro-Mover System.</li> <li>- Installing new Fiber Optic equipment at all stations and at Central Control.</li> <li>- Replacing PLC equipment at all stations and at Central Control.</li> <li>- Installing Giga-Bit Ethernet at all stations.</li> <li>- Add Wireless networking capability to all stations.</li> </ul> <p>The \$3.2 million cost is 100% federal funded. Complete by June 2013.</p> <p>Also now includes Replacement &amp; Installation of Metromover CCTV. It expands the Video System by installing new digital cameras at all Metromover Station Platforms as well as providing local Network Video recorders (NVR) for independent 24/7 recording. The cameras will be networked into the MDT Video System and new digital displays will be installed at the Mover Central Control. This project is being consolidated with the Fiber Project due to its dependency on the fiber installation. It is 5% complete with RFP expected March 2011 and Implementation complete by December 2012. The \$698K project is federally funded (ARRA).</p>
Mover 13kv Transformers	Systems Engineering: Mover 13kv Transformers
Chiller Unit Replacement	Replace Chiller units at Central Bus
Bus Garages: Roofs (CBF MO Garage)	Central Bus MO Garage and Offices: Contractor to furnish and install new roofing. Project to include (2) glass ply mopped down with modified and parapit to be capped with stainless steel. A/C and fan roof curbs to be resealed and insulated. Some roof ventilators and curbs may ne necessary to replace as part of this project.

IRP Project Name	Scope
Central & Northeast Bus Lot Lighting Upgrades	Installation of (8) eight Homophones 80 feet light poles model number HMS-80 with 12 480 volts luminaries, model number HMSTC10HP48S1, optical must be symmetrical with a lowering device model number LD5 or equal (4 at Central Bus & 4 at Northeast). The scope of work will include but not limited to the running of new rigid or IMC conduits for the new loads and utilization equipment, concrete cutting and patching. A light pole barrier shall be constructed or erected around every pole to safely protect the integrity of the poles. Installation of the light pole and luminaries shall meet the requirements of the FBC and any other applicable local code for the hurricane force wind velocity and submit calculations to Miami Dade Planning Development and Regulation Department. The calculation shall be prepared, signed, & sealed by a registered structural engineer in the State of Florida. This work shall include new service from FP&L vault at each location as shown.
Central O & I Garage Shop Floor Leveling	Project entails all required planning, design, and construction actions to level the shop floor at the Central Operations and Inspections (O&I) Garage. The floors are sloped towards the drains creating a problem when operating the portable electric lifts because theory require a level floor to operate.
ETS - Telephone Cable Replacement - Rail	Replace the Metrorail Telephone and ETS cable from the platform areas to the equipment rooms. Government Center will be the hardest location to replace on the mainline due to the routing into the control center from Government Center Station. This work also includes replacing the telephone and ETS cable at Palmetto Yard through the many manholes to the main equipment room and traction power substation. This is a 30 year life cycle.
Metrobus: A/C Replacement (CWF-TRB & Garage)	Coral Way Bus TRB: Contractor to furnish and install eight (8) rooftop A/C units and replace roof curbs. Project to include new electrical disconnects replaced on roof. Coral Way Bus O/I Garage and Offices: Contractor to furnish and install nine (9) roof top A/C units and replace roof curbs. Project to include new electrical disconnects replaced on roof.
Install Fuel Transfer Pump for Central Bus Facility	Provide and install one (1) fuel transfer pump cart at Central Bus Facility. Prepare mechanical and electrical design drawings and obtain permits and permit fees. Furnish 3 phase, 3 hp, 200 gpm 3" suction, 2" discharge UL listed Centrifugal Diesel Pump to be placed on a cart which will be placed immediately adjacent to the fuel island diesel tanks furthest from unleaded tanks. Mount new pump on existing carts that MDT currently uses for meters. Furnish up to 80 feet of 3 inch fuel transfer hose, including couplers, adapters, dust caps, and dust plugs. Furnish and install check valve and ball valves on pump as necessary. Furnish and install 1/2" aboveground galvanized air line from existing air line located immediately adjacent to Antifreeze tank, air filter-regulator-lubricator (FRL), and hose piping connections for the new pump and additional electrical panel and transformer as needed. Connect new system to existing emergency shut-off system.
Central and Northeast Metrobus Lot Lighting Upgrades Study	Procure the services of a design consultant to perform a study of the existing lighting conditions at the bus parking areas in the Central and Northeast Facilities. The scope is to include a proposal for at least two different lighting designs, each including the engineer's estimate of probable construction cost.
Parking Garages Relamping	Upgrade illumination at four Parking garages (OKEE, MLK, SMI, & DLN) and SW 296 Street Park & Ride: including re-wiring, breakers, contactors, fixtures, lamps and ballast.
Metromover Lighting	Replacement of existing Mercury Vapor luminaries at all Metromover Stations. Mercury vapor lamps are an old type of high intensity discharge (HID) lamp that is less efficient than the now widely used metal halide and high pressure sodium lamps. In 2005, Congress passed a law banning sale of mercury vapor ballasts as of 2008. No new fixtures can be sold, and as existing ballasts burn out, they must be replaced with other lamp types.
College Bayside Station Lighting	This is an electrical project where the electrical contractor shall provide and facilitate the installation of light poles on existing bases and all other exterior luminaries at the College Bayside Metromover Station (225 NE 3rd Street). The electrical contractor shall replace all existing light poles, light pole luminaries and all other station luminaries with LED luminaries equipped with all necessary attachments and options to pass all electrical and as required final inspections. The electrical contractor shall be responsible for permits required by local, federal and any other AHJ having jurisdiction on the project. The Electrical Contractor shall provide MDT and the AHJ an illumination certification by a P.E. Electrical Engineer or a R. A. Architect.



IRP Project Name	Scope
College North Station Lighting	This is an electrical project where the electrical contractor shall provide and facilitate the installation of light poles on existing bases and all other exterior luminaries at the College Bayside Metromover Station (100 NE 5th Street). The electrical contractor shall replace all existing light poles, light pole luminaries and all other station luminaries with LED luminaries equipped with all necessary attachments and options to pass all electrical and as required final inspections. The electrical contractor shall be responsible for permits required by local, federal and any other AHJ having jurisdiction on the project. The Electrical Contractor shall provide MDT and the AHJ an illumination certification by a P.E. Electrical Engineer or a R. A. Architect.
First Street Station Lighting	This is an electrical project where the electrical contractor shall provide and facilitate the installation of light poles on existing bases and all other exterior luminaries at the College Bayside Metromover Station (225 NE 1st Street). The electrical contractor shall replace all existing light poles, light pole luminaries and all other station luminaries with LED luminaries equipped with all necessary attachments and options to pass all electrical and as required final inspections. The electrical contractor shall be responsible for permits required by local, federal and any other AHJ having jurisdiction on the project. The Electrical Contractor shall provide MDT and the AHJ an illumination certification by a P.E. Electrical Engineer or a R. A. Architect.
Bus Maintenance Automatic Fire Suppression Retrofit	The project consists of the replacement of the Jomar automatic fire suppression systems supplied on the bus fleet with the Amerex system. The automatic fire suppression system on a bus is a safety feature that provides 24 hour fire detection through heat sensors and protects it from fires in the engine compartment by automatically actuating fire suppression chemicals through nozzles. Four hundred eighteen (418) NABI buses (9900-3100) are equipped with Jomar fire suppression system. The retrofit cost will be approximately \$ 5,000 per bus. It is recommended to retrofit 210 buses (2100, 3100 series) that will remain in service for the next 6 to 7 years at a cost of \$ 1,050,000.
Metromover Public Address System Replacement	The purpose of this project is to replace the existing Public Address System at all MetroMover Stations. The Scope of Work includes the replacement and upgrade of all electronic components in the Paging chain. The distribution wiring will also be upgraded.
Rail Public Address System Replacement	The purpose of this project is to replace the existing Public Address System at all Metrorail Stations. The Scope of Work includes the replacement and upgrade of all electronic components in the Paging chain. The distribution wiring will also be upgraded.
Lehman Facility - Fire Systems	Replace the fire system including sprinkler heads, flow switches, hoses, extinguishers, halon, pumps and other accessories including the replacement of the 8" fire pump line throughout the facility.
Metrorail: Fire Systems	Repair fire suppression piping systems at all Metrorail Stations. This includes all Halon with new FM200 panels, nozzles, hoses, and detectors.
Mover Maintenance Facility - Fire Systems	Repair and / or replace the fire suppression system for the facility including two fire pumps, halon, extinguishers, sprinklers, hoses and other accessories.
Emergency Plumbing Fixtures	Replacement of Emergency Plumbing Fixtures (emergency showers, eye washers) at Metrorail Maintenance, TPSS, Metromover Maintenance & Metrobus facilities.
William Lehman Site Lighting	Upgrade illumination; re-wiring, new 24 - 110 ft. high mast poles and fixtures (lamps and ballast).
Metromover Bridge Navigational Lights	Replace six (6) navigational luminaries and upgrade their lamps.
Existing Metrorail Stations Repair to Stair Railing (Part 2)	Scope of Work consists of bringing up to code the stair railings and other railings at the Platform level of the following Metrorail Stations: During FY 11-12 Brownsville, MLK, University, & Douglas; during FY 12/13 Coconut Grove, Viscaya, Brickell, & Culmer; during FY 13-14: Government Center; during FY 14/15 Santa Clara, Allapatah, & Earlington Heights; during FY 15/16 Okeechobee.
Mover Fire Alarm and Halon Replacement Project	The purpose of this project is to replace the existing halon / fire alarm system at all of the Metromover Stations. This will include the replacement of all the fire and halon panels, pull stations, smoke sensors, heat sensors, strobe lights, speakers, installing a fiber optic loop and associated wiring at each of the Stations. The system requires replacement because the existing fire alarm system is obsolete, no parts can be located to maintain equipment operations and to bring the existing installation to meet current Codes. The new equipment will report to the Central Control Facility through a U.L. listed fiber optic loop. This upgrade will bring the fire alarm system to meet current Life Safety Code requirements.

IRP Project Name	Scope
SPCC Fire Alarm and Halon Replacement Project	The purpose of this project is to replace the existing Halon/Fire Alarm Systems at SPCC 3rd, 4th 5th and 30th floors. This will include the replacement of all the Fire and Halon panels, pull stations, smoke sensors, heat sensors, strobes lights, speakers, installing a new connection to the main SPCC Fire Alarm panel and associated wiring. The systems requires replacement because the existing Fire Alarm System is obsolete, no parts can be located to main equipment operational and to bring the existing installation to meet current Codes. The new equipment will report to the SPCC Central Control room. This upgrade will bring the Fire Alarm System to meet the current Life Safety requirements. In addition to impacting the system safety, the new equipment will improve the quality of service that MDT is providing and it will greatly reduce the systems maintenance cost and false alarms.
Safety Walkway Sections for the Metromover Test Track	Prepare a set of biddable construction documents for the construction of two safety walkway sections at the Metromover Test Track. This is a safety concern, because when the Metromover vehicles doors open at the stations on the Test Track, there is no fall protection for the technicians. The anticipated scope of work includes construction documents, assistance during the dry run process, response to comments, review shop drawings send the necessary coordination with Miami-Dade Transit and all the appropriate agencies.
Uninterrupted Power Supplies - Mover	Replace the Mover Systems Uninterruptible Power Supplies at all the equipment rooms on the OMNI, Brickell, Inner, and Outer Loop. There are 28 UPS locations including Government Center. Parts are not available beyond the 10 year point and replacement of the equipment is necessary.
Traction Power Cable Requirement	A replacement program for Metrorail will be instituted to replace all 750 Volt DC power feed jumper cables at Traction Power substations, side platform stations, gap tie equipment and crossover (track switching areas) locations. Traction power repairs will be made at Gap Tie 3 and Dadeland South Metrorail locations due to previous cable damage that occurred.
Rebuild Switch Machines (M-3) - Mainline	Rebuild all track switch machines along the Metrorail mainline including the three machines at the entrance to Palmetto Yard. The switch machines are used for physically moving the alignment so a train can travel from one track to another at junction points that allow this.
Bus Garages Plumbing	Overhaul existing bathrooms at the Central Bus Facilities Procurement Office, Materials Management, Fuel Island and Warranty Administration.
Uninterrupted Power Supply - Government Center	Replace the Metrorail Central Control Computer Room Uninterrupted Power Supply. This location will be replaced with a dual redundant UPS for failure management and maintenance purposes. This is a critical UPS and MDT cannot afford to lose this piece of equipment due to maintenance and any other issue that may come up.
DLN Vehicle Containment Barriers	Vehicle Containment have determinate and failed. Immediate corrective action was required by Director of Building and Zoning.
Bus Garages: Northeast Rollup doors	Replace the garage's 32 rollup doors
Metromover Brickell Extension Guideway Painting	<p>Provide all the necessary labor, equipment, and materials to repaint all the existing steel girders supporting the guideway of Metromover's Brickell Extension. The scope of work will include surface preparation (removal of all loose coating material, water soluble salts and rust), furnishing and applying the selected coating system and subsequent testing thereof The existing steel girders will be repainted for the entire length of Metomover's Brickell Extension, which is approximately 1.1.miles long.</p> <p>The objective of this IRP project is to repaint the exterior areas 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 (3) years. Currently 60% of painting is complete.</p>
Voice / Data Communication	The Voice/ Data Communication project allows for the conversion of the traditional voice systems at Transit Facilities to employ Voice over IP (VoIP) for the reduction in overall maintenance and recurring costs. The move to VoIP is a natural progression of the county phone systems because it allows for the convergence of Voice and Data via a single medium. Cost reductions are created by the elimination of traditional PBX's at each Building / Campus thereby reducing amount of equipment needing to be maintained. Technical expertise of IT staff can be leveraged in order to minimize staff that would be needed to maintain two separate Voice and Data systems. Additional benefits include the future introduction of Video conferencing at the desktop.





IRP Project Name	Scope
Uninterrupted Power Supply for Network Equipment	This project involves the replacement of the Uninterrupted Power Supplies (UPS) that feed backup power to the network equipment in the network closets at MDT facilities. These UPS are essential to protect the network backbone. The initial replacement includes connection to generator circuit. The life cycle of this project is 3 years, assuming that the batteries in the UPS are replaced every year.
Mobile Technology Tools & Bus Driver Training System -Vigil	This project is to replace laptops to ensure updates and replacement of Transit's obsolete laptops that are used for bus diagnostic, maintenance, road supervisors, etc. By continuing to aggressively swap out older outdated and out-of -warranty equipment, IT will save time and money needed to service those antiquated equipment. This will provide less down time for operations users by replacing the inventory of laptops over a 5 year period, replacing 50 laptops per year.
Static Technology Tools	This project is to replace Personal Computers (PCs) to ensure updates and replacements of Transit's obsolete desktop use for supporting all Transit Divisions. By continuing to aggressively swap out older outdated and out-of-warranty equipment, ITSS will save time and money needed to service those antiquated equipment. This will provide less down time for operations users by replacing the inventory of PCs over a 5 year period, replacing 150 PCs per year.
Server Plan Upgrade/Strategy	This project ensures that MDT has the proper Operations infrastructure to support all projects. It also consolidates smaller projects to reduce costs and ensure Strategic Planning between the Department and Division goals.
Mover Wireless System	Project renews the existing wireless infrastructure on the Mover vehicles and updates the wireless infrastructure on the Mover Stations. The system is currently used for the onboard video equipment for live view. The new mover vehicles were purchased with a diagnostic data logger that will be converted to provide alarms and onboard vehicles and diagnostic data. The life cycle of this project is 5 years.
MDT Network Upgrade/Enhancements	The project upgrades MDT's Network infrastructure every 7 years. Network infrastructure has a typical industry life of 5 years, after that time the equipment is generally placed into a manufacture discontinues cycle where support terminates. The introduction of PCI requirement into MDT's network will now require keeping equipment under full manufacture support so that vulnerabilities can be addressed.
Replace air compressors at all bus locations	The air compressors at all Metrobus garages are beyond the equipments useful life and must be replaced before total failure occurs. The project entails the purchase and installation of new air compressors, air dryers, receiver tanks and piping. This work would include Central O & I (\$180,000) and Northeast (\$120,000).
Bus Garages: Bus Washers and Cyclones	Overhaul all existing Bus Washers at Northeast (2-lanes), Central (3-lanes) & Coral Way (2-lanes). Replacement of existing vacuum system (Cyclone) at all three facilities.
Currency Counters	Purchase and install 4 new high-speed jet sorter coin currency counters with software and 7 validating currency counters for the Money Room at Government Center station. This equipment was last replaced in 2002. At the end of the six year replacement period, the capability and reliability to handle extremely high volume daily coin / currency processing has greatly diminished. The repair and maintenance cost and down time will outweigh the price of new equipment.
Purchase Computer Equipment for Rail, Mover, & Bus Washes	Purchase control equipment needed to repair the master controls for the Rail, Mover, and Bus Washes. This equipment is needed to prevent the washes from failing, thus providing clean trains, buses, and mover cars for revenue service.



IRP Project Name	Scope
Hydraulic Mobile Bus Lifts	Provide thirty-six (36) individual hydraulic mobile lifts for the Miami-Dade Transit (MDT) Stertil-Koni model # ST -1072-SS or ALM Model # WE-18 (as modified to MDT specifications), or approved equal. Each mobile lift set shall consist of four (4) columns. Each set shall consist of four primary columns, each primary column shall operate as a primary of secondary column interchangeable without any modifications. The system shall be equipped with a selector interchangeable without any modifications. The system shall be equipped with a selector switch to permit the selection of four (4) columns when operating as a set of six (6) columns. Each mobile lift set shall be designed to permit combining columns in pairs to compose systems of up to six columns. Definition of set: A standard set of lifts consists of four (4) hydraulic mobile columns, all primary design operation, used to lift MDT buses as specified in Section 3. MDT sometimes uses 6 columns sets to lift the 60' buses. At least 15,000 lb. capacity per column. All columns shall be operated synchronously from any control panel on any column.
Bus Maintenance DEF Dispensing System	Installation of Diesel Exhaust Fluid (DEF) dispensing system at Central, Coral Way, and Northeast Divisions. Each Fuel Station will require a 500 gallon capacity aboveground double walled steel tank, dispensing equipment and interface with the EJ Ward fuel management system.
Waste Water Treatment System	To replace the existing oil water separators at all four (4) pressure cleaning operations with a more sophisticated and advance waste water treatment system at all three (3) Bus Maintenance Facilities.
Metrorail & Metromover Train Wash	Repair or replace the Metrorail and Metromover train washing system.
Metromover Bicentennial Park Station Rehabilitation	Replace 8 ft. high chain link fence around station perimeter, replace aluminum slats ceiling with new support system at ground level, replace recessed lamps at suspended ceiling, testing on electrical circuits to assure proper function, Install new light poles for exterior lights circuits and lamps, repair low voltage communication system, replace 3 signs / 2 maps cabinets, replace damaged Plexiglas panels at Canopies Entrances, replace stairs metal plates, rehabilitation of elevator and escalators, install fire cabinets, replace expansion joints between Platform and Elevator structure, replace tact tiles, Fare Collection system recovery, roof replacement at Electrical Room, repair cracks at exterior walls and Electrical room, general painting and landscaping.
Vehicle Replacement (P-Cars)	The use of these vehicles are significant to maintaining the required service level and the successful day to day operation of the Department and its ability to meet the County's challenges and expectations of delivering excellence everyday to its customers. The \$400K project cost to Replace Light Fleet vehicles that have been retired or have over 100,000 miles is 100% federally funded (ARRA) and expected complete by September 2011.
Bus Maintenance E Stroke Brake Monitoring System on Optima Buses	Retrofit 75 Optima buses currently equipped with the GEO brake monitoring system with the MGM brake monitoring system. Removal of existing brake monitoring system and installation of the MGM brake monitoring system components by bus maintenance staff.
Conduit Grounding Rebuild	Modify the corrosion control system to add shunt boxes at key location near Traction Power Substations and special track work areas. In this way, current monitoring will allow MDT to detect power problems with the traction power system before they occur. The grounding system will be tested and repaired for the entire Metrorail guideway structure. Testing of the track system will be performed to insure it is not grounded and meets present FTA standards. This will be performed by an outside testing service. Repairs and re-testing will also be accomplished using an outside contracting service.
Multi-Channel Voice Recorder	The purpose of this project is to replace the existing analog recorders within the Transit System with new digital voice recording systems. These recorders will replace the existing equipment which is now obsolete. The new system will include five digital voice recording units, network attached storage devices, personal computers, system software and miscellaneous hardware. The new system will streamline the method of retrieving recorded messages by enabling them to be accessed through the network.



IRP Project Name	Scope
Switch Logic Cabinet Overhaul (Metromover)	The scope of work is for replacing the high-cycle Switch Logic Control Cabinets (SLCC), these switches are used extensively during normal revenue service. These cabinets are in poor condition and in need of immediate replacement; They were not made of materials intended for outdoor use and corrosion has caused water to leak in to the cabinets. The South Florida environment causes the electrical components in the cabinets to deteriorate at an accelerated rate when exposed to moisture.
Train Control DC Power Source	Replace all existing Train Control DC power supplies at all Rail Stations, Central Control & Palmetto Yard.
Replacement Work Vehicles 10-15 Year Plan	This funding is for the Rail Services Heavy Equipment 10 & 15 Year Replacement Plan. This Plan is for the scheduled replacement of all equipment purchased since 1998. Currently this replacement plan is not funded.
Bus Maintenance Brake Dynos	Acquisition of three (3) Brake Dyno machines. Procurement of this equipment will improve the reliability of the bus brake system.
LED Signal Upgrades	Replace all the existing Train Control Incandescent style traffic signals with an LED alternative. The signals at all interlocking and the Yard area will be retrofitted with special kits made by the Daylight corporation.
Repair and Restoration of Existing Douglas Road Metrorail Station Park and Ride Lot Underneath Guideway	The scope of work is to provide safety and operational upgrades to the parking surfaces, landscaping, fencing, and illumination in the existing unused parking lot. The work will provide approximately an additional fifty parking spaces. The scope of work includes the preparation of complete contract documents for bidding, estimated construction cost, permits, inspections, construction administration, County administration and project contingency. The scope of work shall include all the necessary coordination with the Miami-Dade Public Works Department (PWD), Miami-Dade Transit (MDT), and the Miami-Dade Building Department. Any environmental mitigation work, which might be due to contamination issues that may arise during construction, is not included.
Lehman and Mover Facility Plumbing	Overhaul all existing bathrooms, and drains in industrial system. Upgrade industrial waste systems to met new code requirements.
Data Center Modernization	Project involves the continuous redesigning and modernizing of the Government Center 5th floor Data Center cabling and network equipment.
40 Year Re-Certification of Building #2 Located at 3300 NW 32 Ave.	The scope of work is to provide for the 40 year re-certification inspection/Repairs.

## 5. Bicentennial Park Station

This project, currently 25% complete, includes rehabilitative work necessary to reopen this Metromover Station, including rehabilitation of elevator/escalators, replacement of lamps, repair of communications system, etc. The total cost is currently estimated as \$2.410 million with ARRA, PTP and Gas Tax funding, and about \$53,000 expended to date. (IRP includes funding part of this project and further details included in description in above list, page 103.) It is currently under procurement (advertised January 2011), with construction expected to begin November 2011 and to complete March 2013.

Next year's Capital Plan will reflect the revised cost. Following is information from the current 2010-2011 Approved Capital Plan.

### From 2010-2011 Approved Capital Plan

#### METROMOVER BICENTENNIAL PARK STATION REFURBISHMENT

PROJECT # 6710860

Refurbish Bicentennial Park Metromover Station

LOCATION: Bicentennial Park Station, City of Miami

DISTRICT LOCATED: 5

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: 5

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	178	730	471	0	0	0	0	0	1,379
PTP Bonds	0	500	348	0	0	0	0	0	848
Capital Impr. Local Option Gas Tax	0	0	152	0	0	0	0	0	152
<b>Total Revenue:</b>	<b>178</b>	<b>1,230</b>	<b>971</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,379</b>
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Planning and Design	85	312	0	0	0	0	0	0	397
Construction	0	724	871	0	0	0	0	0	1,595
Construction Management	0	25	30	0	0	0	0	0	55
Project Administration	43	119	20	0	0	0	0	0	182
Project Contingency	50	50	50	0	0	0	0	0	150
<b>Total Expenditures:</b>	<b>178</b>	<b>1,230</b>	<b>971</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,379</b>



## 6. Palmetto Station Traction Power Substation

This project will be implemented using a Design/Build procurement method, and is 1% complete based on amount expended of total estimated cost. A new Traction Power Sub-Station will be built at the existing Palmetto Metrorail Station to reduce failures on the current transit vehicle. The sub-station will support the existing Palmetto Station facilities and support all traction power requirements between the Palmetto and Okeechobee Stations. In addition, it will interface with the communication system and Central Control. Presently, the power at the Palmetto Extension is marginal and at times insufficient for the existing operation. Since the new vehicles will be more sensitive to low voltage conditions and will be under warranty, it is imperative that this substation be built at this location to correct the low voltage situation. Two dedicated 13.2 Kilo Volts (KV) feeders from Florida Power and Light (FP&L) are



required. This sub-station must be in place before the delivery of the first prototype Metrorail vehicles scheduled to arrive by the third quarter of 2013. The total project cost estimate is \$16.8 million, of which \$16 million is ARRA funded. To date, \$649,000 has been expended. The Contract is scheduled to be re-advertised in March 2011. The Contract was previously advertised February 2010 and May 2010. No proposals were received after the first advertisement and one proposal was received after the second, but agreement with the price proposal was not achieved. The Notice to Proceed is scheduled for December 2011 with project completion including testing and startup by January 2013.

The following is more detailed information from 2010-2011 Approved Capital Plan.

### From 2010-2011 Approved Capital Plan

#### PALMETTO STATION TRACTION POWER SUBSTATION

PROJECT # 678280

LOCATION: 7701 NW 79 Avenue, Hialeah

DISTRICT LOCATED: 12

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	248	13,299	2,453	0	0	0	0	0	16,000
PTP Bonds	802	0	0	0	0	0	0	0	802
<b>Total Revenue:</b>	1,050	13,299	2,453	0	0	0	0	0	16,802
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Construction	317	11,904	1,550	0	0	0	0	0	13,771
Construction Management	311	490	285	0	0	0	0	0	1,086
Project Administration	422	420	203	0	0	0	0	0	1,045
Project Contingency	0	485	415	0	0	0	0	0	900
<b>Total Expenditures:</b>	1,050	13,299	2,453	0	0	0	0	0	16,802

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

CIP023-CT1-TR09-R Design-Build Services for the Palmetto Station Traction Power Sub-Station

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

## 7. Northeast Passenger Activity Center (now Northeast Transit Hub Enhancements)

The original scope of the Northeast Passenger Activity Center (NEPAC) project was to replace and/or supplement the existing bus terminal located in the vicinity of the Mall at 163rd Street. It would be an enhanced bus hub that would connect circulator, regional, and premium bus routes within the area.

However, extensive discussion with new leadership of the City of North Miami Beach determined this original scope as infeasible. MDT now proposes to make improvements for two existing transit hubs, at the NE 163<sup>rd</sup> Street mall and at Aventura mall. The proposed project will improve capacity, drainage, pavement, shelters, lighting, ADA, signage, and transit access at both sites which are major destinations with important bus connections and serve the northeast area. The new project will be known as "Northeast Transit Hub Enhancements (NETHE)" with total project cost reduced to \$3.130 million. Potential completion timing is FY2014 (or earlier if right of way acquisition is determined not required). Next year's Capital Plan will reflect revised project costs and sources of funding including reprogramming FDOT funds and closing out FTA grant.

Total cost for previous scope was \$6.099 million including PTP, State, Federal and Local Gas Tax funding. To date, \$128,980 was expended. The following presents information from the 2010-2011 Approved Capital Plan with previous NEPAC project scope.

**From 2010-2011 Approved Capital Plan**  
**NORTHEAST PASSENGER ACTIVITY CENTERS**  
 LOCATION: North Miami  
 DISTRICT LOCATED: Countywide  
 ESTIMATED ANNUAL OPERATING IMPACT: \$0  
 DISTRICT(s) SERVED: Countywide

**PROJECT # 678510**

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5309 Discretionary Grant	82	0	0	60	60	109	60	0	371
FDOT Funds	0	0	0	1,107	37	421	0	0	1,565
PTP Bonds	0	0	0	97	0	520	860	100	1,577
Capital Impr. Local Option Gas Tax	0	0	0	1,109	1,477	0	0	0	2,586
<b>Total Revenue:</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>2,373</b>	<b>1,574</b>	<b>1,050</b>	<b>920</b>	<b>100</b>	<b>6,099</b>
Donation Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FDOT Toll Revenue Credits	385	0	0	0	0	0	0	0	385
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Land/Building Acquisition	0	0	0	2,213	0	0	0	0	2,213
Planning and Design	76	0	0	100	74	0	0	100	350
Construction	0	0	0	0	1,440	900	560	0	2,900
Construction Management	0	0	0	0	0	90	300	0	390
Project Administration	6	0	0	60	60	60	60	0	246
<b>Total Expenditures:</b>	<b>82</b>	<b>0</b>	<b>0</b>	<b>2,373</b>	<b>1,574</b>	<b>1,050</b>	<b>920</b>	<b>100</b>	<b>6,099</b>



## 8. Park and Ride Lot Kendall Drive

This includes a lease agreement with the Florida Power and Light Company (FPL) of approximately 2.8 acres of FPL property at Kendall Drive and SW 127<sup>th</sup> Avenue with construction of Park and Ride facility to provide 180 parking spaces. A Supplemental Joint Participation Agreement with the FDOT in the amount of \$379,900 was executed on June 2010 bringing the total budgeted project cost from \$2.660 million to \$2.760 million (split between local and State funding). The project's Preliminary Design is expected complete May 2011 (Notice to Proceed was issued January 2011), with construction expected to be March 2012 through December 2012. The project is less than 1% complete.

Next year's Capital Plan will reflect the revised funding amounts and cost. The following is from the 2010-2011 Approved Capital Plan.

### From 2010-2011 Approved Capital Plan

#### PARK AND RIDE LOT KENDALL DRIVE

PROJECT # 6731191

LOCATION: Unincorporated Miami-Dade County

DISTRICT LOCATED: 13

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FDOT Funds	138	889	303	0	0	0	0	0	1,330
PTP Bonds	0	889	0	0	0	0	0	0	889
Capital Impr. Local Option Gas Tax	138	0	303	0	0	0	0	0	441
<b>Total Revenue:</b>	<b>276</b>	<b>1,778</b>	<b>606</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,660</b>
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Planning and Design	135	96	0	0	0	0	0	0	231
Construction	0	1,544	514	0	0	0	0	0	2,058
Construction Management	0	31	6	0	0	0	0	0	37
Project Administration	91	57	60	0	0	0	0	0	208
Project Contingency	50	50	26	0	0	0	0	0	126
<b>Total Expenditures:</b>	<b>276</b>	<b>1,778</b>	<b>606</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,660</b>

## 9. Park and Ride at SW 168 Street and Busway

Purchase of Park and Ride Facility at SW 168th Street and Busway for lot with 149 spaces is scheduled to be completed by April 2011. The State Joint Participation Agreement was approved May 2010. Total cost is \$1,400,000.

### From 2010-2011 Approved Capital Plan

#### PARK AND RIDE FACILITY AT SOUTHWEST 168 STREET AND BUSWAY

PROJECT # 6710300

LOCATION: Southwest 168 Street and Busway, CSouth Miami

DISTRICT LOCATED: 9

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(s) SERVED: 9

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FDOT Funds	0	700	0	0	0	0	0	0	700
PTP Bonds	0	700	0	0	0	0	0	0	700
<b>Total Revenue:</b>	<b>0</b>	<b>1,400</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,400</b>
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Land/Building Acquisition	0	1,400	0	0	0	0	0	0	1,400

## 10. Park and Ride at SW 344 Street and Busway

This project is currently 7% complete. Miami-Dade Transit is planning to build a Park and Ride Facility to be located west of the southern terminus of the Busway Extension to Florida City Segment II. The facility will be located between SW 344th Street (Palm Drive) and NW 2nd Street and from NW 2nd Avenue to NW 3rd Avenue, adjacent to the South Miami-Dade Busway in Florida City. Facility will incorporate bus bays and shelters, large surface parking lot for patrons and facility for MDT Bus Operators. Total cost is \$10.1 million (also includes FTA and FDOT funds). The FTA issued a "Finding of No Significant Impact" Statement on 4/15/2010 for the Environmental Assessment that is the expected level of environmental documentation required for this project. Final Design is 30% complete, Right-of-Way Acquisition Phases also is currently in process, with construction expected to begin March 2012 and complete by June 2013.

### From 2010-2011 Approved Capital Plan

#### PARK AND RIDE LOT AT SW 344 STREET

PROJECT # 671610

Construct a Park and Ride Lot at SW 344 St

LOCATION: South Miami-Dade Busway and SW 344 St

DISTRICT LOCATED: 9

ESTIMATED ANNUAL OPERATING IMPACT: \$0

DISTRICT(S) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5307/5309 Formula Grant	330	1,031	452	0	0	0	0	0	1,813
FDOT Funds	2,178	2,504	0	0	0	0	0	0	4,682
PTP Bonds	1,212	2,404	0	0	0	0	0	0	3,616
<b>Total Revenue:</b>	<b>3,720</b>	<b>5,939</b>	<b>452</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,111</b>
Expenditure Schedule:	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
Land/Building Acquisition	3,000	3,000	0	0	0	0	0	0	6,000
Planning and Design	430	0	0	0	0	0	0	0	430
Construction	0	2,545	282	0	0	0	0	0	2,827
Construction Management	0	91	40	0	0	0	0	0	131
Project Administration	190	103	30	0	0	0	0	0	323
Project Contingency	100	200	100	0	0	0	0	0	400
<b>Total Expenditures:</b>	<b>3,720</b>	<b>5,939</b>	<b>452</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,111</b>

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

CIP014-TR08-DE1 Construct a Park and Ride Lot at SW 344 Street



## 11. NW 215<sup>th</sup> Street parcel

As part of the Short-Term Transit Improvement Options Task Force (described under the North Corridor on page 32), MDT in conjunction with the MPO, FDOT, and other key partners identified the purchase of the parcel at NW 27<sup>th</sup> Avenue and NW 215<sup>th</sup> Street as strategic and necessary for short, mid and long term public transit use. The acquisition of the parcel is completed and is being added to the Transportation Improvement Plan at a future MPO.

The property is approximately 14-acres of vacant land located at the intersection of the SR 821/Homestead Extension of Florida's Turnpike (HEFT) and NW 27<sup>th</sup> Avenue, across from Calder Race Course and SunLife Stadium. Because of its prime location at the intersection of arterial roadways and major sporting venues, the property is a strategic park-and-ride location for the NW 27th Avenue Enhanced Bus Service project and is required for this corridor improvement. This particular parcel will serve as the northern most end of the line and park-and-ride location for all current and future alternatives (Enhanced Bus, BRT, and Heavy Rail). The unimproved site is forecasted to have approximately 350 parking spaces. All efforts are being made to ensure this park and ride opens concurrently with the new Enhanced Bus Service. This location would also provide strategic transit-oriented development opportunities, and the Department of Planning and Zoning is developing a Highest and Best Use Study to be completed by April 2011 with the support of stakeholders including the City of Miami Gardens.



## **12. Capital Reserve Fund project listing**

In December 2010 the Board adopted Resolution R-1202-10 to clarify the intent that the Capital Expansion Reserve Fund, included among requirements of Ordinance 02-116 revision approved March 2009, would be used to expand the transit system beyond the MIC-Earlington Heights project and that the funds from the Capital Expansion Reserve Fund would not be used for debt service on the MIC-Earlington Heights project but for investment in other improvements, including but not limited to the North Corridor and East-West Corridor expansion projects. The specified listing of the projects to be funded from this Reserve Fund is currently part of the development of the FY12 Proposed Budget, and will be included in this Five Year Implementation Plan going forward and as a line item in the Capital Budget.

The Reserve represents 10% of the County's annual share of Surtax funds excluding future and existing debt service. For FY2011, the cumulative total was planned at \$20.722 million as shown in the 2010 Pro Forma.

## **13. Toll plaza diesel tank removal project**

This item from the FY2010-2011 Capital Budget (shown as project #607540) was a duplicate of the SW 312<sup>th</sup> Street Road Widening project (see page 59) and has already been marked for deletion for the next budget cycle in FY2011-2012.