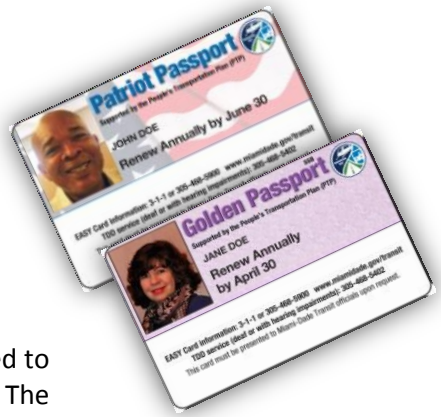
SECTION III – DETAILED DESCRIPTIONS OF ALL PTP FUNDED PROJECTS

PTP TRANSIT ORIGINAL PROJECTS

Transit Service Improvements (Fare Programs and Bus Service)

In 2002, the PTP included 23 Transit-related projects identified in Ordinance 02-116. Items 1 and 2 are related to fare policy, Items 3-14 discuss the projects directly related to bus operations and Items 15-22 cover the remaining eight rapid transit projects.

1. Golden Passport Program (Used for both bus and rail service) and Patriot Passport



This is an ongoing program that was implemented with the passage of the PTP in 2002. Prior to passage of the PTP seniors received ½ fare as required by Federal regulations. In 1999 the County developed the Golden Passport program to provide free transit service for low-income seniors, defined as persons over 65 years with an annual income less than $22,000. The program began in December 1999, and about 16,000 people enrolled. Participation in the program expanded in succeeding years and at the time of the PTP referendum, over 55,000 persons were enrolled.

The passage of the PTP in 2002 expanded the Golden Passport to include free transit service to all persons who are receiving Social Security benefits, regardless of age or income level. Additionally in June 2004, the PTP was amended to include the Patriot Passport Program as a three year demonstration program. The program allows United States veterans who reside in Miami-Dade County, were honorably discharged, and earn an annual income of $22,000 or less, to ride transit fare-free. In November 2007, the Patriot Passport Program was made permanent.

Currently 177,206 Golden Passports and 6,760 Patriot Passports have been issued to qualified individuals. The programs have no direct capital fiscal impact. The foregone revenue impact of the programs is estimated at $10-12 million annually. This is based on the number of FY10 Golden Passport and Patriot Passport boardings and applying similar Metrobus and Metrorail ridership, transfer and monthly pass characteristics as well as the Federally required half-fare for seniors. This estimate does not include a fare inelasticity calculation (potential reduced ridership in response to new or increased fares).

MDT estimates that the annual operating cost of the programs is $97 million, based on the average cost per boarding multiplied by the number of Golden Passport and Patriot Passport boardings. PTP funding under the unified transit system contributes approximately 24% of MDT's total operating budget. In FY 2010-11, the total PTP operations funding established during the budget process was $91,969,000.

2. Metromover Service

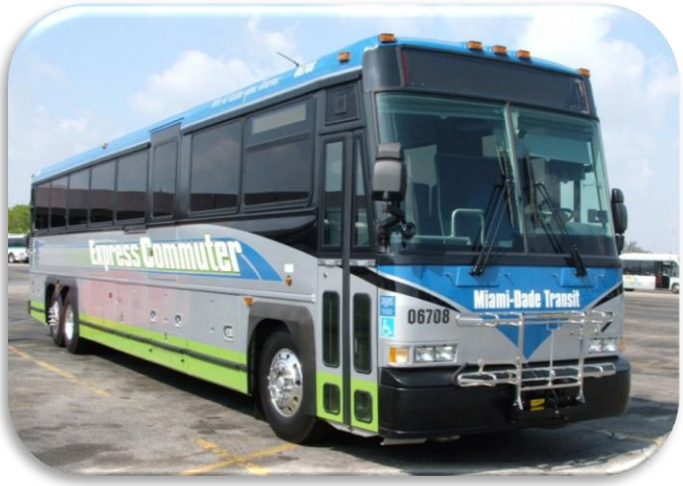
This ongoing program is implemented, and has no direct capital fiscal impact. The foregone revenue impact of the programs is estimated up to $2 million annually. This is based on the number of FY10 Metromover and applying the previous $0.25 fare, excluding any fare inelasticity calculation (potential reduced ridership in response to new or increased fares).

During the July 9, 2002 discussion of the Transit Surtax ordinance, the Board approved an amendment which provided for fare-free transportation on Metromover upon voter-approval of the PTP. At that time, the Metromover fare was $0.25 per boarding which generated $440,830 in revenues on a ridership of 4,768,592. The Fiscal Year 2010 Metromover ridership has grown by 70% to 8,090,456 (peaked in FY08 at 8,839,156).

MDT estimates that the annual operating cost of the programs is $23 million based on the average cost per boarding multiplied by the number of Metromover boardings. PTP funding under the unified transit system contributes approximately 24% of MDT's total operating budget. In FY 2010-11, the total PTP operations funding established during the budget process was $91,969,000.

3. Increase Bus Fleet from 700 to 1,335

This project is 24% complete, excluding any municipal participation and based on the revised overall goal of 1,191 buses. MDT increased its bus fleet from 700 to a peak of 1,033 and currently stands at 817. New bus purchases include 31-foot Optare minibuses (31 passenger seats), 32-foot Optima minibuses (26 passenger seats), 40-foot NABI full-size buses (38 passenger seats) and MCI commuter coaches (55 passenger seats). In 2009, 60-foot articulated hybrid buses were incorporated in the fleet (60 passenger seats).



These purchases meet the need for over-the-road coaches for use on longer commuter routes; full-sized, conventional buses for busy regular and express bus routes; and minibuses for routes with low ridership. While the original goal was to increase the fleet to 1,335 buses, MDT revised their goal to 1,191. In 2007, the number of buses peaked at 1,033 for a project completion rate of 68%, at that time. As provided in the PTP, municipalities were expected to purchase and operate an additional 200 buses as part of their surtax allocation. To date, the municipal portion has not been fully implemented (refer to the Municipal Activity section of this report for municipal PTP status).

Funding expended is $135,102,118. At this time, only replacement buses are scheduled for procurement. If the remaining 374 buses had been procured, the approximate cost would be $103,000,000.

4. Increase Current Service Miles from 27 Million Miles to 44 Million Miles and Operating Hours from 1.9 Million Hours to 3.3 Million Hours

These projects are implemented and have been adjusted.

The increase in bus service was accomplished by increasing frequencies on existing routes, adding completely new routes in areas without service and adding new service to accommodate changing travel patterns. Prior to the 2002 vote, there were 84 bus routes in the transit network. There are 95 bus routes in 2010, an increase of 13%. Additionally, in order to provide the same frequency of service, additional buses were needed on the routes to compensate for longer run times due to increased traffic congestion.

Due to budgetary limitations, and implementation of service standards evaluation, total revenue miles (primarily with underperforming routes) and operating hours were decreased. In 2007, miles peaked at 38.1 million (for a project completion rate then of 65%) and service hours peaked at 3 million (for a project completion rate then of 76%). Current bus service miles are 29.2 million, or 13% of the targeted increase, and operating hours are at 2.4 million, or 36% of the targeted increase. These levels are adjusted from the planned 44 million miles and 3.3 million hours, respectively. However, there may be future opportunities to increase service miles/operating hours to accommodate future enhanced bus service along the NW 27th Avenue and East/West Corridors, although no plans to increase the current miles or hours. However, if the service miles and operating hours were increased to 44 million (17.3 additional) and 3.3 million (0.9 additional), respectively, the approximate annual cost increase would be $166,000,000. A total of $404,946,360 has been expended to date inclusive of increasing off peak and weekend service (Project #6, page 21), and more frequent peak service and certain 24 hour service (Project #7, page 21).

MDT continuously evaluates the effectiveness and efficiency of the service routes and related economies relative to locally established service standards. The process compares existing routes with peer routes with respect to average boarding's per revenue-hour and net cost per passenger. Using these measures, routes below half the average effectiveness and those with greater than double the average net costs per boarding are examined and services adjusted accordingly without creating undue hardship to passengers.

5. Utilize Minibuses on All New Bus Routes and in Neighborhood/Municipal Circulator Shuttle Service

This program is implemented and has been adjusted. Commensurate with vehicle capacity and demand (ridership), minibuses have already been assigned to 19 of the 30 new bus routes, or 63% of targeted increase, with $38,797,769 expended to date. These 19 routes constitute all routes which warrant a minibus. Since it is not feasible to assign full-size buses to all new routes, because the ridership may dictate otherwise, MDT has no plans to do so. However, to assign minibuses to the remaining 11 routes which already have full-size buses, the approximate increase in operations and maintenance costs would be $16,500,000 per year to provide the same passenger capacity.

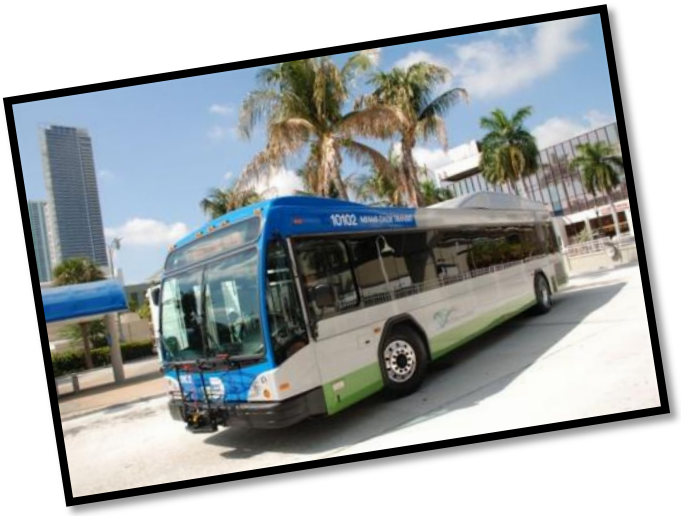
6. **Add Midday, Saturday and Sunday Service within 30 days of Approval of a Dedicated Funding Source using Existing Buses.**

This project is 100% complete and the commitment was kept within 30 days of the November 2002 vote.

These bus system improvements began immediately after the adoption of the PTP. Within one week of the vote, MDT implemented 24 service improvements to add midday, Saturday and Sunday service to routes that did not have such service previously. Adding or increasing weekday, midday and weekend service is an ongoing effort subject to the service standards evaluation process discussed in miles/hours increase (Project #3, page 20) and $60 million expended to date is already included in the $404 million "funding expended" figure. This implemented project has an annual fiscal impact of $8,500,000 and is included in the MDT Operating budget.

7. **Provide 15 Minutes or Better Bus Service during Rush Hour; 30 Minutes or Better during Other Periods; 24-hour Service in Certain Major Corridors**

This project is implemented as follows: Peak every 15 minutes is 27% implemented; Off-peak every 30 minutes is 60% implemented; 24 hours is 100% implemented. After passage of the PTP, many routes received more frequent headways, however some were later reduced or eliminated due to fiscal constraints, implementation of the truer grid system and/or service not being warranted according to service standards. There are currently 95 bus routes. However, to adjust all headways, the approximate annual cost would be $34,000,000 to have all routes brought to peak headways of 15 minutes or better and $46,000,000 to have all routes brought to midday headways of 30 minutes or better. Additionally, the $124 million expended attributable to this project is also included in the miles/hours increase (Project #3, page 20) $404 million "funding expended" figure.



Metrorail and Metromover 24 hour service were discontinued and replaced by overnight Metrobus service per PTP Amendment BCC R-421-04 in 2004, saving a net of ($3.15 million) annually.

8. Replace Buses on a Systematic Basis to Reduce Operating Cost and Increase Reliability

This program was implemented and is on-going through the County's Bus Replacement/Expansion Plan. Transit buses have a life expectancy of 7 to 12 years, depending on vehicle type, size and construction. The County endeavors to adhere to Federal regulations addressing bus replacement in order to keep maintenance costs low and to maintain service reliability. MDT has budgeted an average of $67 million for the next five years, or $335 million total (approximately $300 million for bus replacement; $35 million for enhancement/expansion of routes exceeding service standards). The Approved Capital Budget shows the following funding for acquiring these replacement buses.

From 2010-2011 Approved Capital Plan

BUS ACQUISITION **PROJECT # 6730101**

Purchase replacement hybrid buses to maintain the bus fleet replacement plan
Acquisition of Replacement Buses as per fleet replacement plan. FY 09-10 funds includes FDOT funds for $3.7 million and a local PTP match of $3.7 million. Additionally, the $13.895 million are federal funds for the purchase of buses for I-95 Managed Lanes
LOCATION: Countywide
DISTRICT LOCATED: Countywide
ESTIMATED ANNUAL OPERATING IMPACT: $9315
DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
FTA Section 5309 Discretionary Grant	0	2,626	0	1,700	0	0	0	0	4,326
FDOT Funds	0	0	4,028	12,917	187	0	0	0	17,132
PTP Bonds	0	13,108	8,434	12,917	21,402	16,589	0	0	72,450
Total Revenue:	**0**	**15,734**	**12,462**	**27,534**	**21,589**	**16,589**	**0**	**0**	**93,908**
Donation Schedule:	**Prior Years**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**Future**	**Total**
FDOT Toll Revenue Credits	0	448	0	433	0	0	0	0	881
Expenditure Schedule:	**Prior Years**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**Future**	**Total**
Equipment Acquisition	0	15,734	12,462	27,534	21,589	16,589	0	0	93,908
Total Expenditures:	**0**	**15,734**	**12,462**	**27,534**	**21,589**	**16,589**	**0**	**0**	**93,908**

A total of $135,102,118 expended to date, with $78,608,000 further planned. In addition to purchasing buses for service expansion under the PTP (see Project # 2 above), MDT purchased 315 buses to replace older, less reliable vehicles. The systematic replacement of buses and the addition of new buses have lowered the average age of the bus fleet. The newer fleet and the introduction of MDT's improved Bus Maintenance Program have increased fleet reliability. Prior to implementation of the PTP, MDT's mean distance between road calls (a measure of reliability) was 2,053 miles. However, by 2010, the mean distance between road calls increased to 5,039 miles, a 145% improvement.

9. Construct Bus Pull-out Bays on Major Streets to Expedite Traffic Flow

This project is implemented and on-hold. In 2002, 186 bus pull-out bays were earmarked for construction improvements. To date, 44 bus pull-out bays have been completed (24% of total, cost of $1,286,118). Due to budgetary limitations, this project was placed on hold in February 2008. However, to construct the remaining 142 bus pull-out bays, the estimated cost was $4,250,000.

MDT buses operating on busy streets without pull-out bays stop in the right lane of traffic to pick up and drop off passengers. Blocking the right lane at bus stops reduces traffic flow and adds to congestion. To address this issue, bus pull-out bays are built to allow buses to pick up and drop off passengers out of the flow of traffic. MDT continues to actively work with Miami-Dade Public Works Department (PWD) and FDOT to identify additional locations where bus pull-out bays could be constructed.

10. Implement Grid System for Bus Service (north-south and east-west) on Major Streets and Avenues with Circulator Service Feeding Main Line Bus Service and Rapid Transit Lines

This project is completed. While a modified grid system was in place at MDT prior to the passage of the PTP, a trunk and feeder style (resulting in a truer grid system) was implemented in December 2009 and represented an overall reduction in service/routes and provided a savings to the Department of approximately $12,300,000.

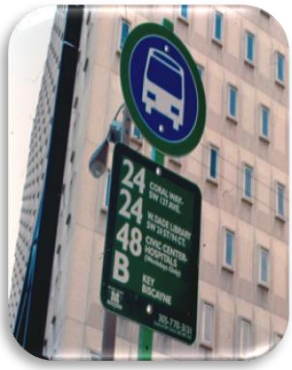
11. Expand the Bus Shelter Program throughout the County

This project is ongoing. Prior to the adoption of the PTP in November 2002, only 454 (11%) of the 4,018 bus stops in Unincorporated Dade County had shelters. Shelters at bus stops in municipalities were not included as municipalities are responsible for shelters programs within their municipal boundaries.

The bus shelter contract is revenue-generating and there is no cost to Miami-Dade County. Since 2002 an additional 578 remain installed, for a current total of 1,032 bus shelters throughout Unincorporated Miami-Dade County. Of these, 1,017 have been installed in unincorporated Miami-Dade County. Miami-Dade Transit is planning to install an additional 200 bus shelters over the next five years.

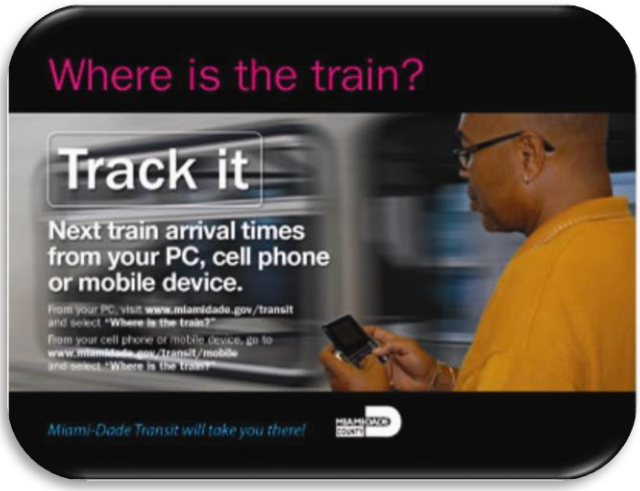
12. Enhance and Expand Transit Bus Stop Signage Countywide; Incorporate Information Technology at Bus Stop and Rail Stations

Aspect	Implemented	Funding	
		Expended	To complete
Enhancement of bus stop signage	91%	$1,619,489	$160,138
Train Tracker System	100%	$0	$0
Bus Tracker System	25%	$0	$0
Electronic Signage Information System (ESIS)	47%	$46,407	$5,600,000
WiFi on Bus and Rail	10%	$18,944	$324,967
Traffic Signal Prioritization (TSP)	25%	$0	$2,320,000
Total	--	**$1,684,840**	**$8,405,105**



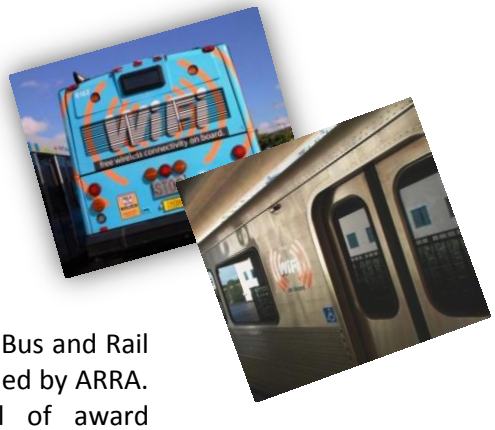
As of September 2010, 8,141 out of 8,946 (91%) bus stops feature new bus stop signage in the program that began July 2004. This ongoing program is to replace or newly install signs that display route information, schedules, fares, maps and general transit information in English, Spanish and Creole. MDT has replaced or newly installed a total of over 10,000 new bus stop signs.

Train Tracker is a completed project. A Train Tracker pilot was launched utilizing all in-house resources with a display at the Government Center station of next train arrival times. The production Train Tracker service launched in 2008 is 100% implemented and allows users to see, over the web and on mobile devices, the estimated time of arrival of the next train approaching a station. As discussed below the next train information is being incorporated in Electronic Signage Information System (ESIS).



A Bus Tracker System pilot project was implemented on the Kendall Cruiser utilizing all in-house resources also. MDT intends to prepare an infrastructure to support a "state-of-the-art" real-time Bus Tracking System. The system will be accessible via the Internet, cellphone, personal digital assistants/smartphones and electronic signs at select bus stops. This project also provides easier integration with/between MDT's Transit Operations System (TOS) and the Automated Fare Collection System (AFCS).

The ESIS is to "provide excellent riding environment for transit passengers." MDT is seeking to implement wireless connectivity and "Next Train" arrival information at all station platforms. As part of this project, MDT will replace the existing analog clock units at station platforms with state-of-the-art LCD signs capable of reading information in a wide array of formats. These enclosures will house two (2) wireless radios each (one private, one public) which will provide patrons and MDT staff wireless internet access at the station platforms. With this implementation, it will also be possible to provide real-time arrival times, emergency information, elevator/escalator status and other service announcements. This information will also be provided in an audible format to support ADA compliance. ESIS will include 196 Liquid Crystal Display (LCD) signs at 23 Metrorail stations, which includes 8 LCD signs at the AirportLink station. The system also can accommodate advertising messages for help to offset its cost.



Wi-FI on Rail/Mover/Express Route Bus Vehicles – As of 1/24/11, 100% implemented on Rail, 16% implementation on Bus.

Traffic Signal Prioritization (TSP) – MDT will implement a TSP throughout the entire system.

Funding required to complete ESIS is $5.6 million funded by State Joint Participation Agreement (JPA), Local Option Gas Tax (LOGT), CBS Contract and American Recovery and Reinvestment Act (ARRA); WiFi on Bus and Rail Vehicles, $324,967 funded by MDT Operating; and TSP, $2.32 million funded by ARRA. The RFP was advertised June 2009. Trust and Board approval of award recommendation is expected early 2011 for contract providing for purchase, installation, staff training, warranty, maintenance and support of ESIS. Estimated operating and maintenance cost is $618,588, and revenue from sale of advertising through the CBS contract is $180,000.

From 2010-2011 Approved Capital Plan

UPGRADE AND/OR REPLACE BUS TRACKER AND AUTOMATIC VEHICLE LOCATING SYSTEM **PROJECT # 672830**

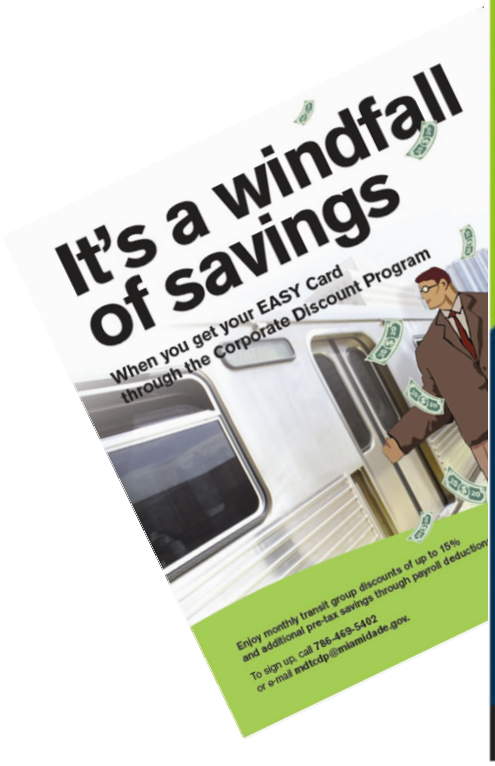
DISTRICT LOCATED: Countywide

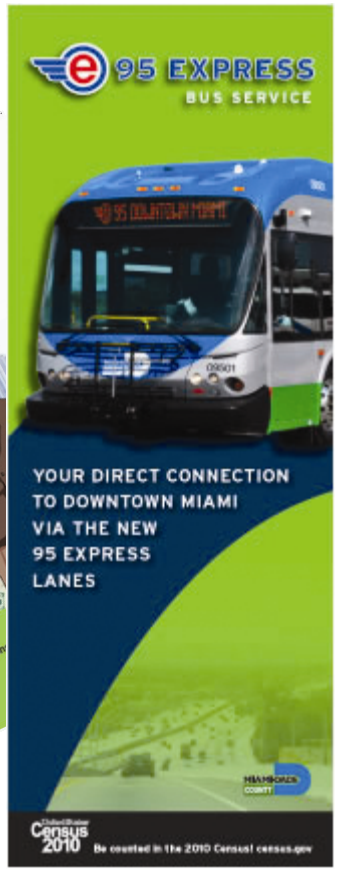
DISTRICT(s) SERVED: Countywide

Revenue Schedule	Prior Years	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	Future	Total
PTP Bonds	2,600	4,740	9,770	0	0	0	0	0	17,110
Expenditure Schedule:	**Prior Years**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**Future**	**Total**
Equipment Acquisition	2,080	4,220	9,250	0	0	0	0	0	15,550
Project Administration	520	520	520	0	0	0	0	0	1,560
Total Expenditures:	**2,600**	**4,740**	**9,770**	**0**	**0**	**0**	**0**	**0**	**17,110**

13. Expand Transit's Public Information Program through Enhanced Marketing and Advertising

This ongoing program is implemented, has an annual fiscal impact of $250,000 and is included in MDT's Operating budget. MDT expanded and improved its customer information and marketing initiatives, to increase ridership and ensuring that the community is educated on the various transit improvements, projects and programs, as a result of the passage of the PTP. Other more specific efforts included marketing initiatives targeted at promoting the new AirportLink, new fare collection system and various rail and bus service changes. A total of $5.075 million has been expended to date.

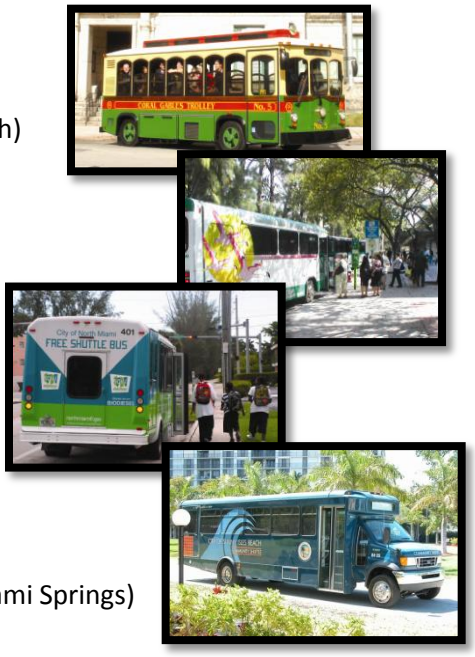




14. Expand on Successful Municipal Circulator Program

This is an ongoing program. There are currently 31 municipalities that are eligible to receive surtax funding with 30 participating in the program. (Indian Creek is not participating.) Funding expended of $60.7 million is the audited amounts and budgeted amounts for circulator and transit expenditures through FY 2009-2010. It includes direct operating and capital expenses for those municipalities operating circulators, and for those municipalities not directly operating a circulator it includes expenses for items that support transit in those areas such as bus shelters along MDT bus routes. The current 21 municipalities are listed below that operate a circulator, partner with another municipality or partner with Miami-Dade Transit. Opa-Locka will become the 22nd in February 2011.

- City of Aventura
- Village of Bal Harbour
- Town of Bay Harbor Islands
- Village of Biscayne Park (ILA with the City of North Miami)
- City of Coral Gables
- City of Hialeah
- City of Hialeah Gardens (ILA with the City of Hialeah)
- City of Homestead
- Town of Medley
- City of Miami Beach (ILA with Miami Dade Transit)
- Miami Dade County Shores Village
- City of Miami Springs
- City of North Bay Village
- City of North Miami
- City of North Miami Beach
- Village of Palmetto Bay
- City of Sunny Isles Beach
- Town of Surfside
- City of Sweetwater
- Village of Virginia Gardens (ILA with the City of Miami Springs)
- City of West Miami



The annual ridership of the six largest circulator systems - Miami Beach, Coral Gables, Hialeah, North Miami, Aventura and Sunny Isles Beach - totaled 4,221,000 in 2010. It should be noted that many of the municipalities operating circulator systems exceed the 20% minimum transit expenditure requirement (see page 68). The amount budgeted by the municipalities for FY 2010-2011 is $11.9 million. Additionally, a number of municipalities have multi-year debt obligations to complete capital projects.