Interim Progress Report #2:

"An Analysis of Miami-Dade Transit's Operating Cost Efficiency"

Wednesday, September 7, 2011 @ 2:00 PM

MIAMI-DADE COUNTY

CUTR

Study Purpose

- CUTR will conduct an objective assessment of the relative efficiency of MDT and document actions, activities or policies that have been taken or enacted based on prior work done to assist the agency in creating a more efficient operating environment
- CUTR will review operating factors by mode (bus, heavy rail, and automated guideway) and compare results with factors calculated for peer agencies using the methodology outlined in TCRP 141

Selected Results – Task 2 - *Develop and Compare Operating-cost Data*

Bus Peers

Transit Agency	Location	Likeness Score
Dallas Area Rapid Transit (DART)	Dallas TX	0.37
Broward County Transportation Department (BCT)	Pompano Beach F	0.52
Washington Metropolitan Area Transit Authority (WMATA)	Washington DC	0.53
Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta GA	0.59
Alameda-Contra Costa Transit District (ACCT)	Oakland CA	0.61
Metropolitan Transit Authority of Harris County (Houston)	Houston TX	0.69
San Francisco Municipal Railway (MUNI)	San Francisco CA	0.73
Hillsborough Area Regional Transit Authority (HART)	Tampa FL	0.95
Bi-State Development Agency (BiState)	St. Louis MO	0.97
Maryland Transit Administration (MTA)	Baltimore MD	0.98

Mover Peers

Transit Agency	Location	Likeness Score
Detroit Transportation Corporation (DTC)	Detroit MI	0.77
Jacksonville Transportation Authority (JTA)	Jacksonville FL	1.38

Rail Peers

Transit Agency	Location	Likeness Score
Southeastern Pennsylvania Transportation Authority (SEPTA)	Philadelphia PA	0.45
Metropolitan Atlanta Rapid Transit Authority (MARTA)	Atlanta GA	0.60
Los Angeles County Metropolitan Transportation Authority (LACMTA)	Los Angeles CA	0.72
Maryland Transit Administration (MTA)	Baltimore MD	1.03
Port Authority Transit Corporation (PATC)	Lindenwold NJ	1.18
Massachusetts Bay Transportation Authority (MBTA)	Boston MA	1.22
Port Authority Trans-Hudson Corporation (PATHC)	Jersey City NJ	1.24
Chicago Transit Authority (CTA)	Chicago IL	1.32
The Greater Cleveland Regional Transit Authority (GCRTA)	Cleveland OH	1.46
Washington Metropolitan Area Transit Authority (WMATA)	Washington DC	1.48
Staten Island Rapid Transit Operating Authority (SIRTOA)	Staten Island NY	1.60
San Francisco Bay Area Rapid Transit District (BART)	Oakland CA	1.79

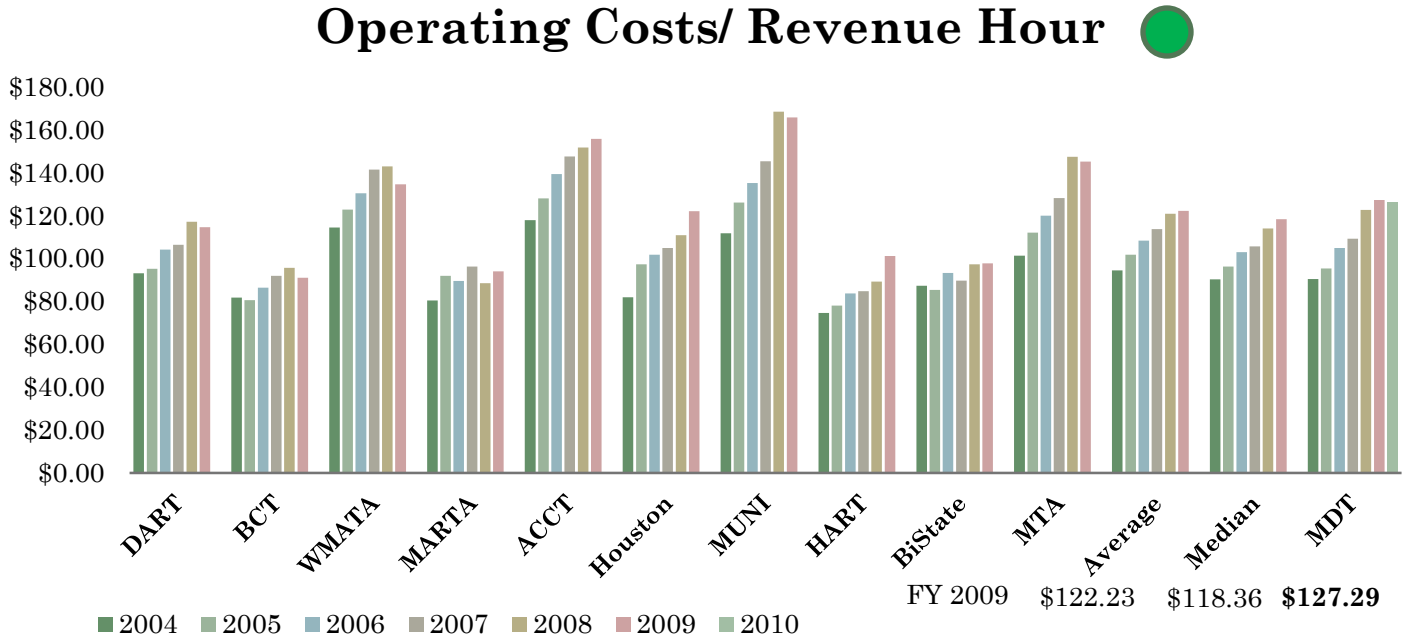
Bus Results

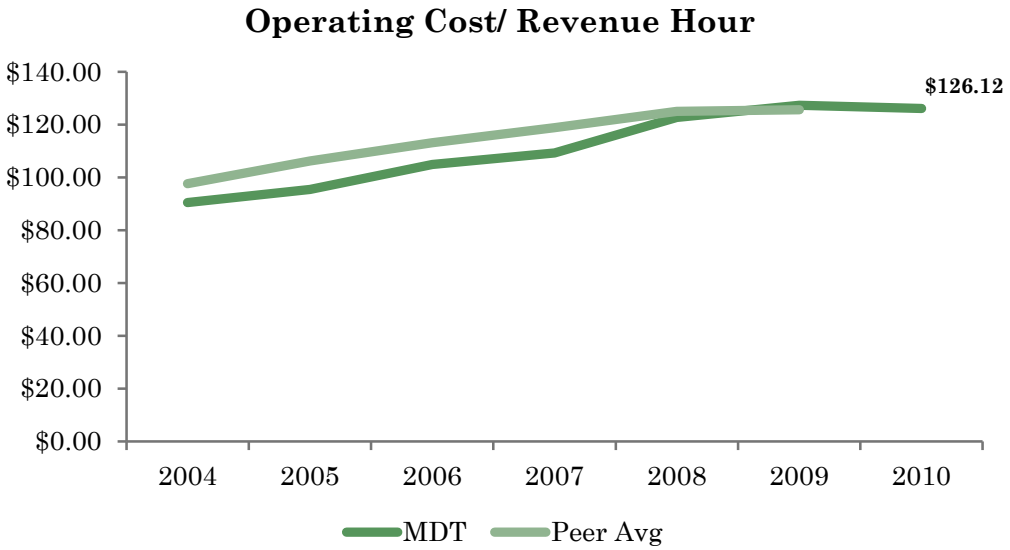
- MDT's Operating cost per hour is consistent with the peer median and average from 2004 through 2009
- Annual operating cost per bus operated during peak service was consistent with peers from 2004 to 2009 and dropped by 20% in 2010
- Miami's farebox recovery ratio was better than the peers'. Subsidy per boarding was 53 cents higher than the peer average in 2009 although lower year over year for 2010
- Operating cost per passenger mile compared favorably at 86 cents in 2009, and was reduced to 81 cents in 2010

Bus Results

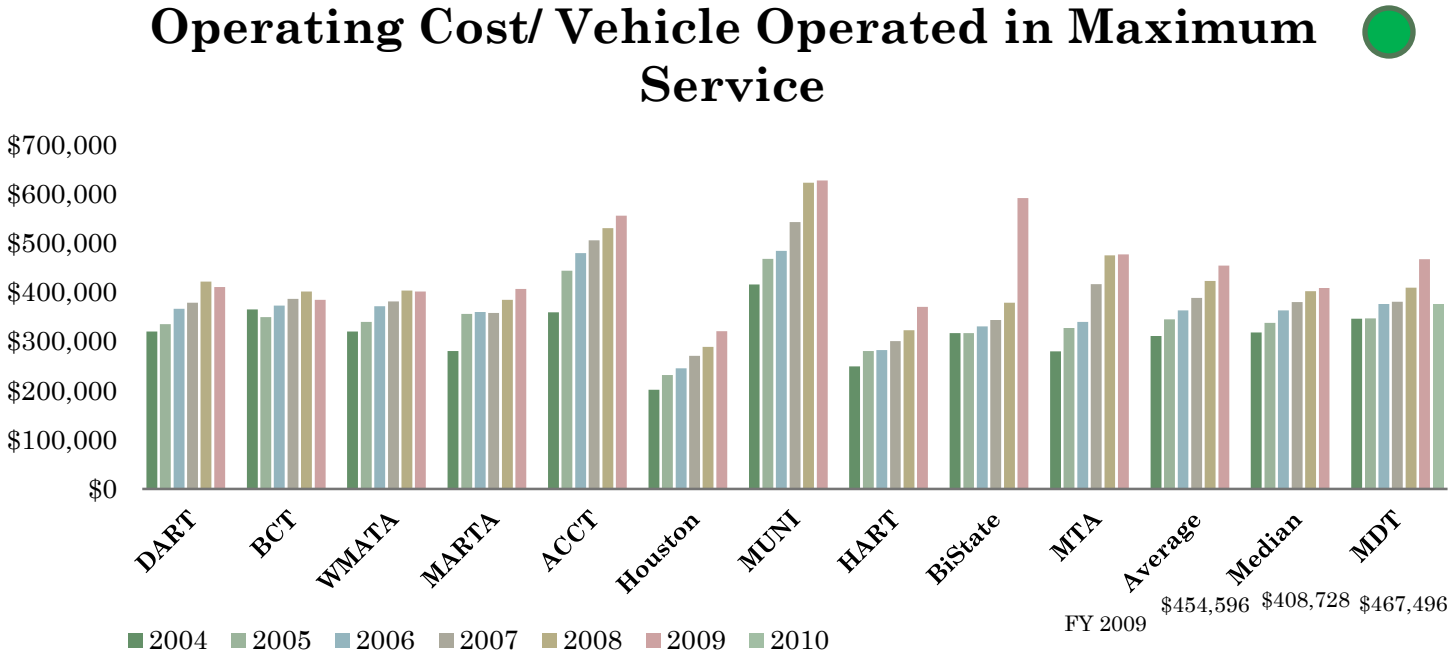
- Miami's passenger trips and passenger miles were consistently higher than peer averages, but have been dropping since 2008
- Average trip length is increasing and is significantly above peer agencies
- The agency requires more labor to deliver service than peers and has made modest progress in the area of miles between failures since 2004

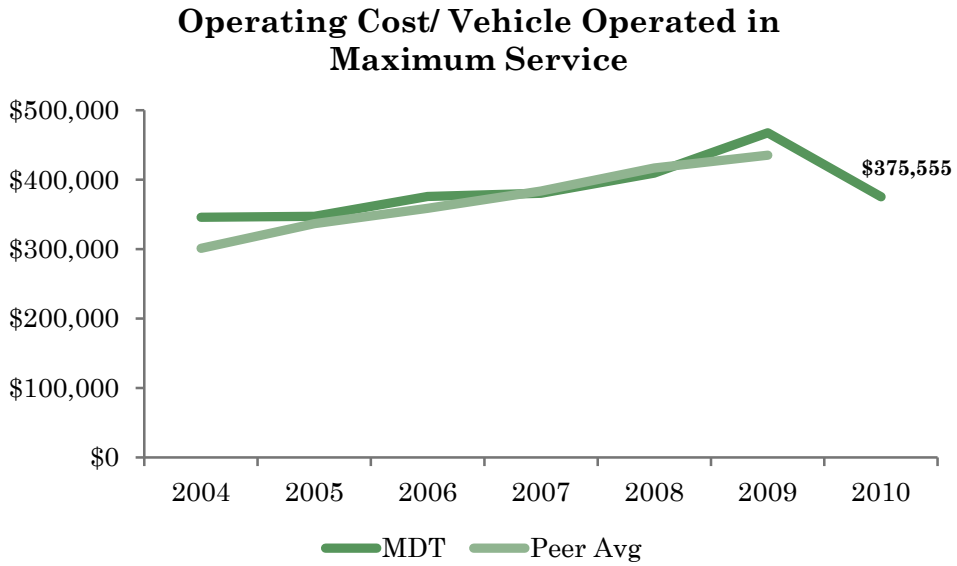
Bus Results – Cost Efficiency





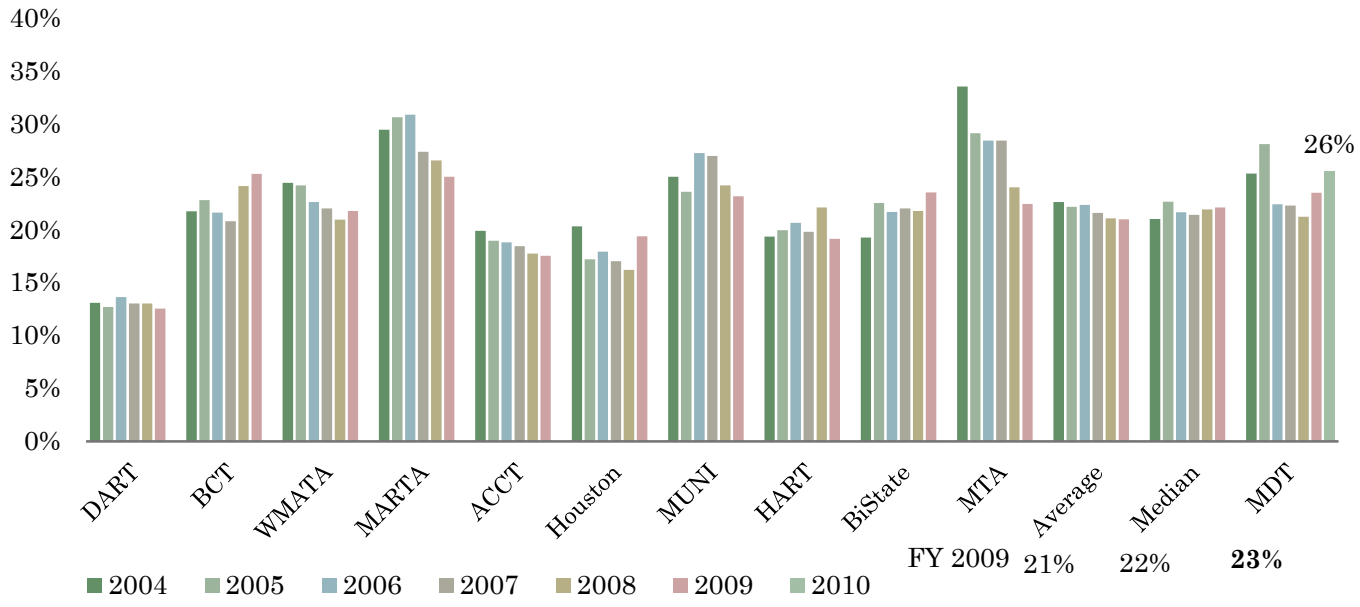
Bus Results – Cost Efficiency



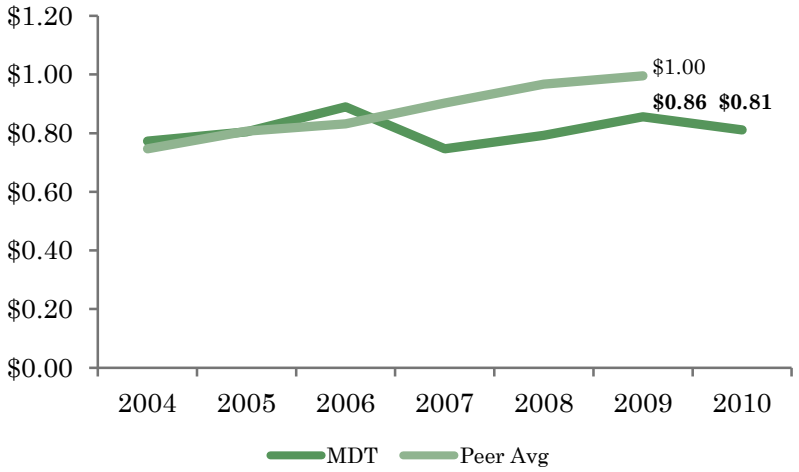


Bus Results – Cost Effectiveness

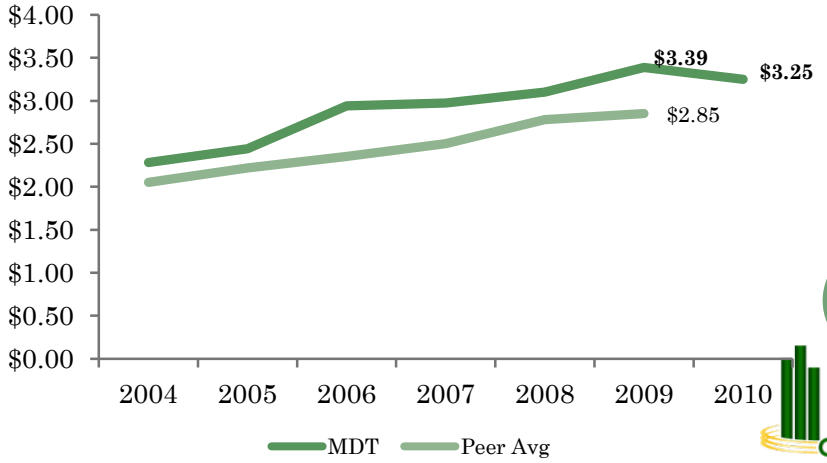
Farebox Recovery



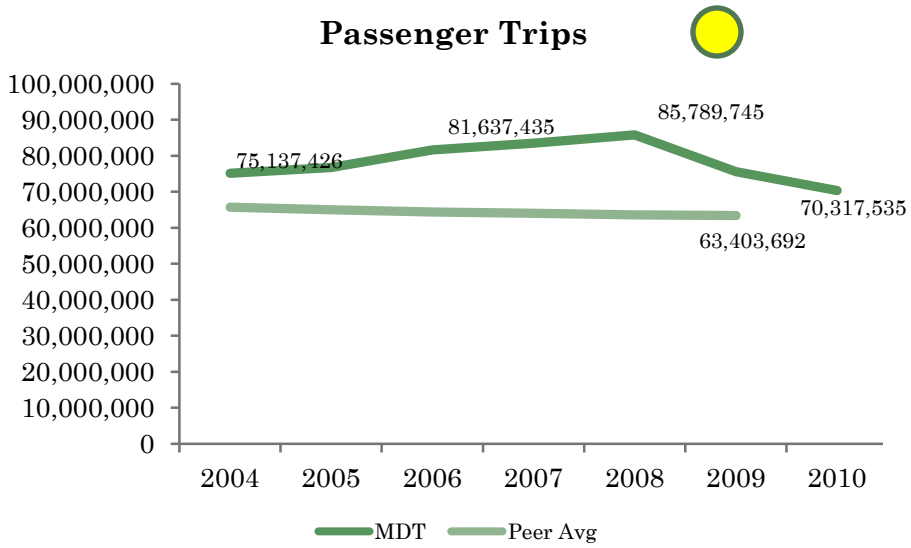
Operating Cost per Passenger Mile

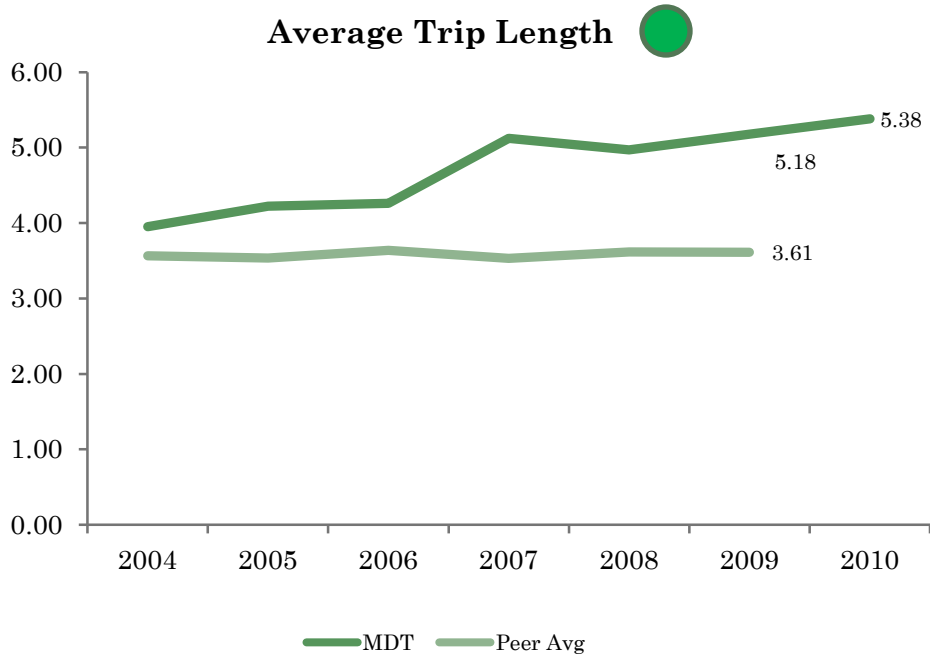


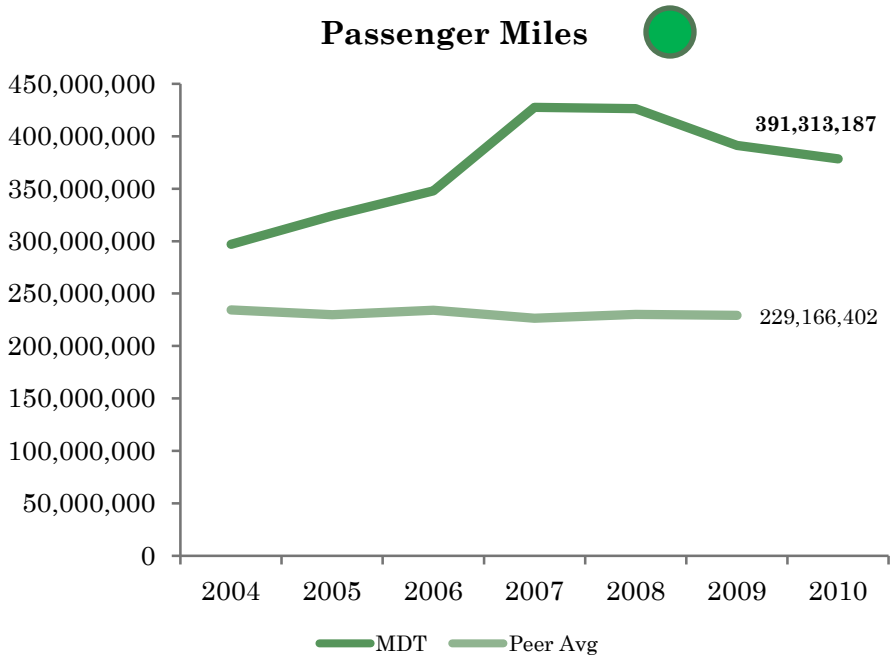
Subsidy per Boarding



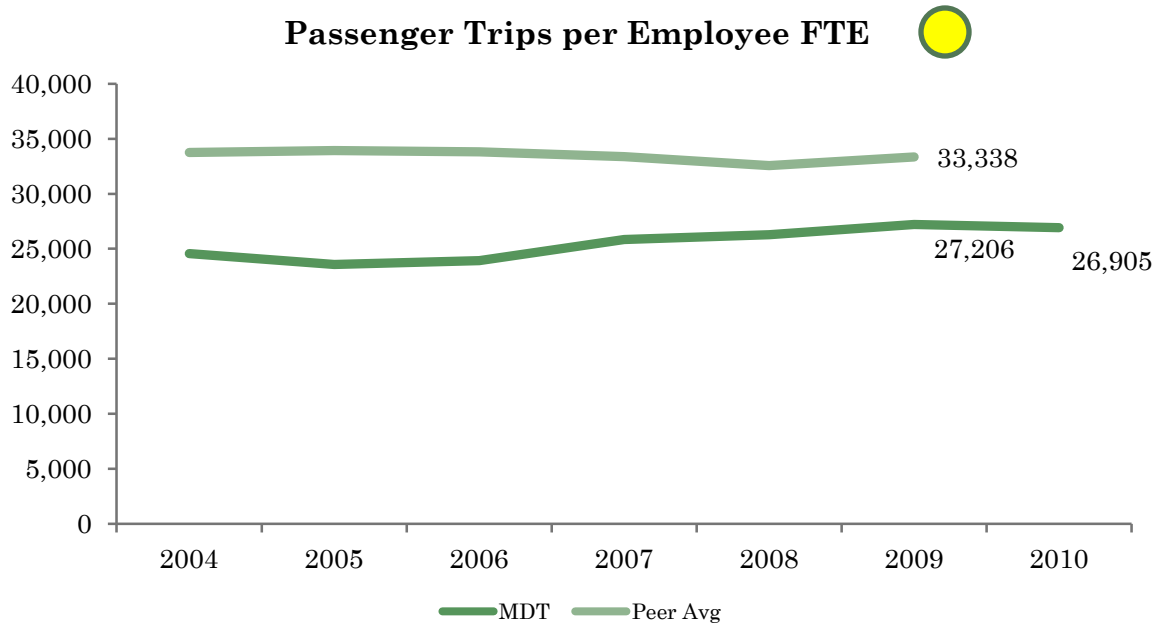
Bus Results – Service Utilization

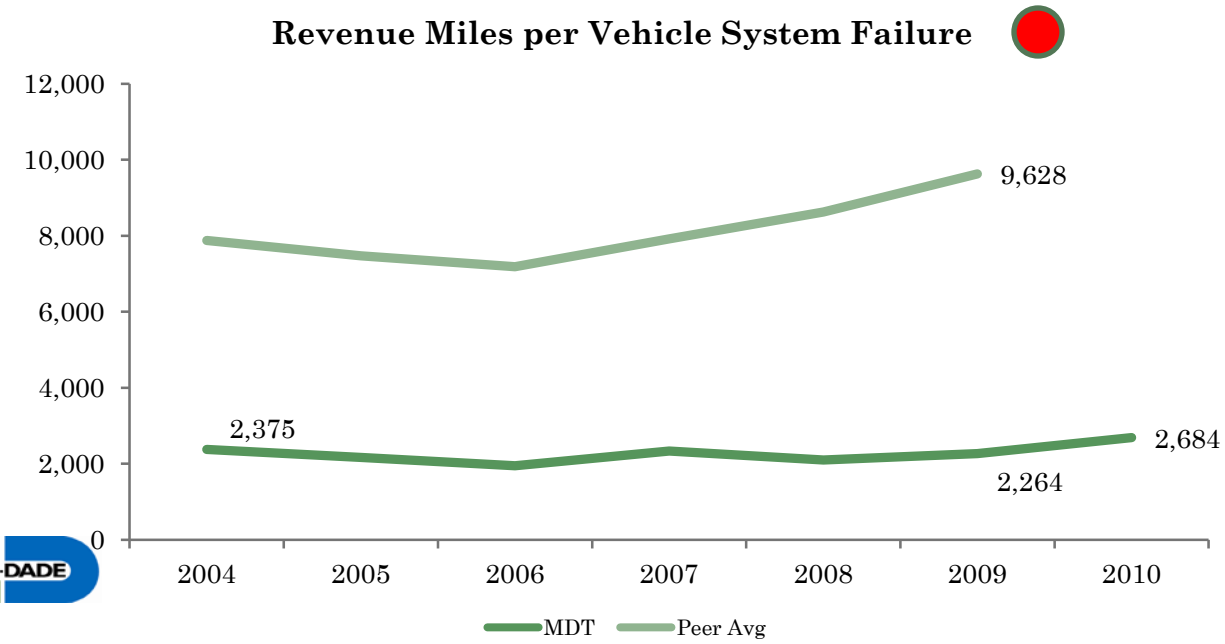






Bus Results – Productivity and Maintenance

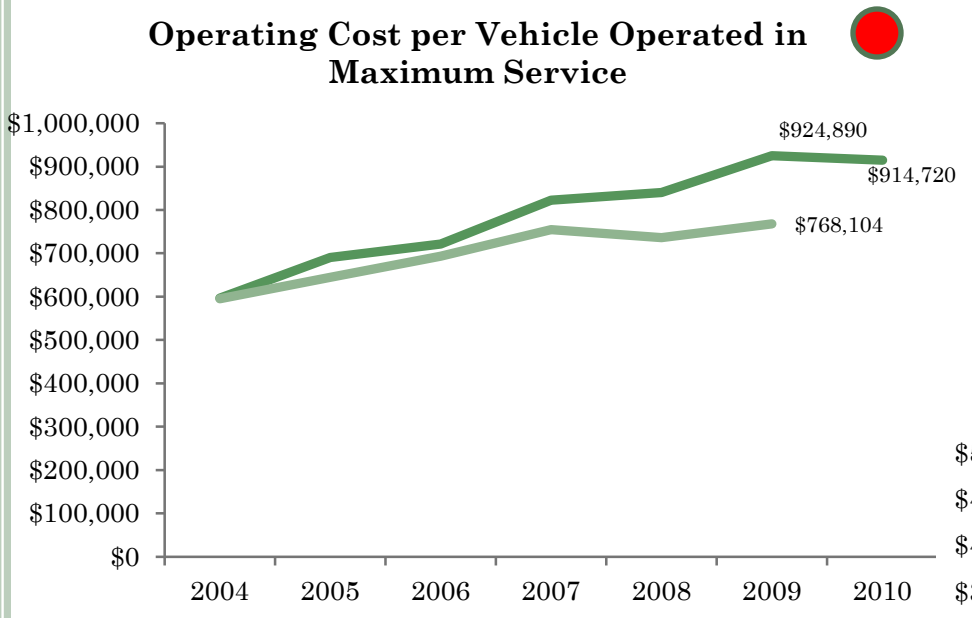


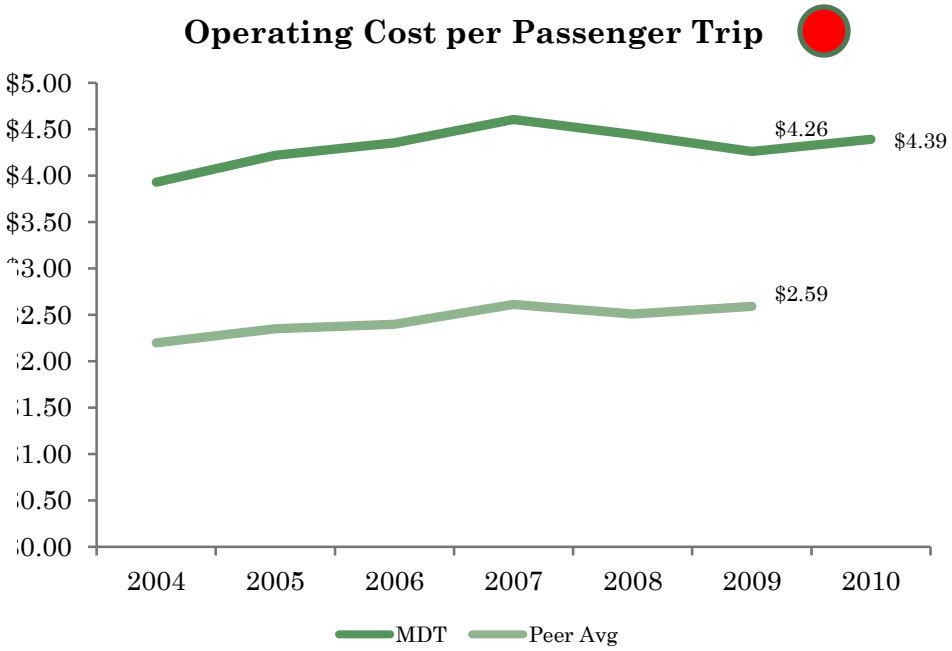


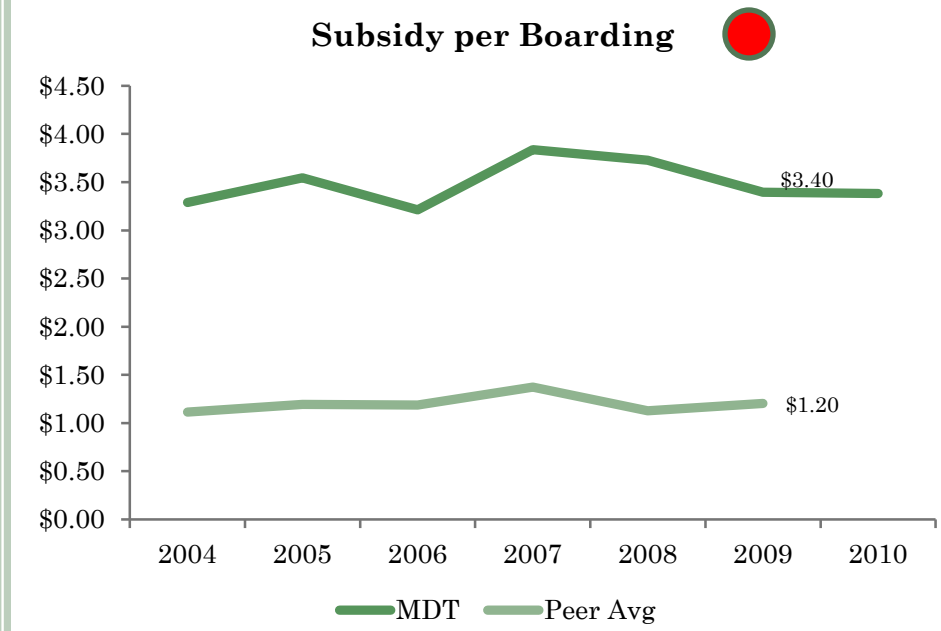
Rail Results

- Operating costs per peak vehicle operated exceeds peers since 2004 although reduced from 2009 to 2010
- Operating cost per passenger trip was almost 65% higher than the peer average in 2009
- The subsidy per rail boarding was nearly three times as high as the peer average $1.20 in 2009 (MDT = $3.40)
- Revenue miles between failures were significantly below peer agencies
- Percentage of operating budget spent on maintenance was fairly consistent with peers

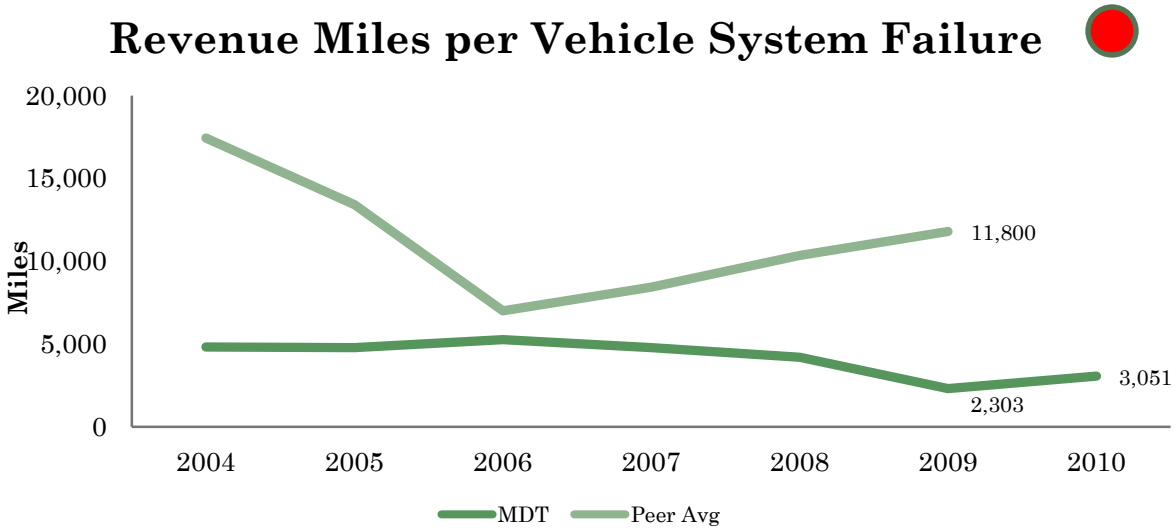
Rail Results – Cost Efficiency& Effectiveness

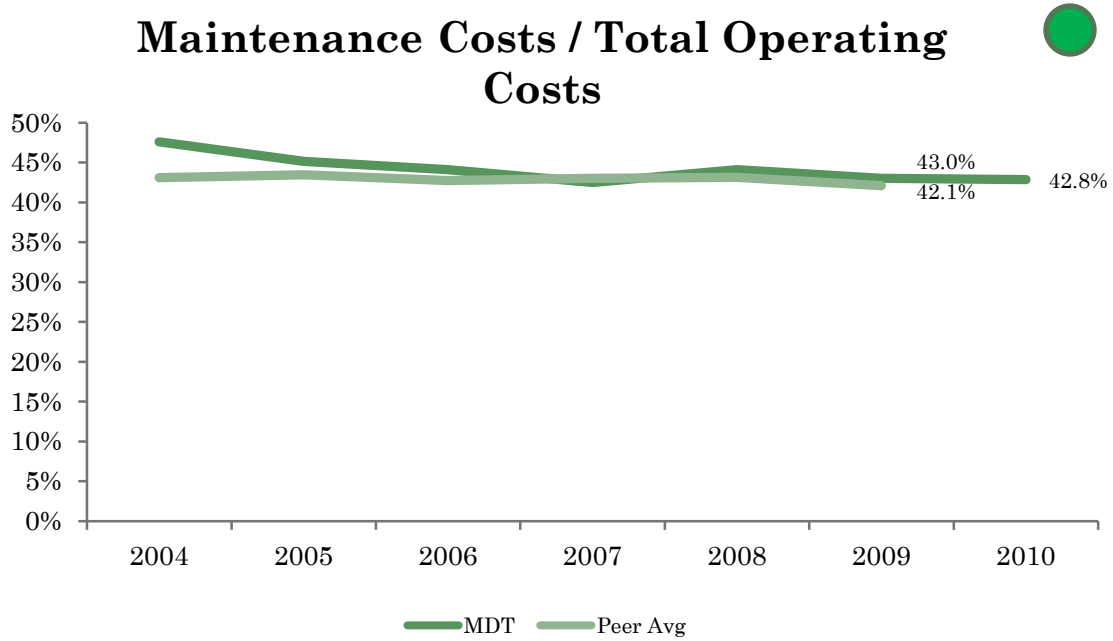






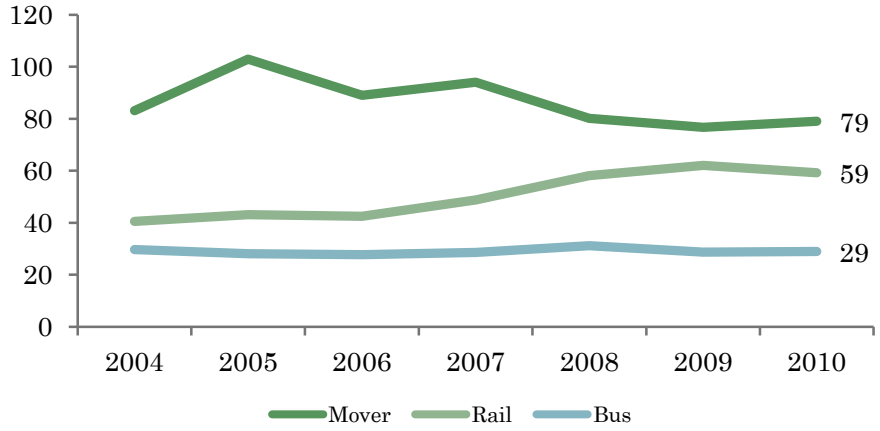
Rail Results - Maintenance



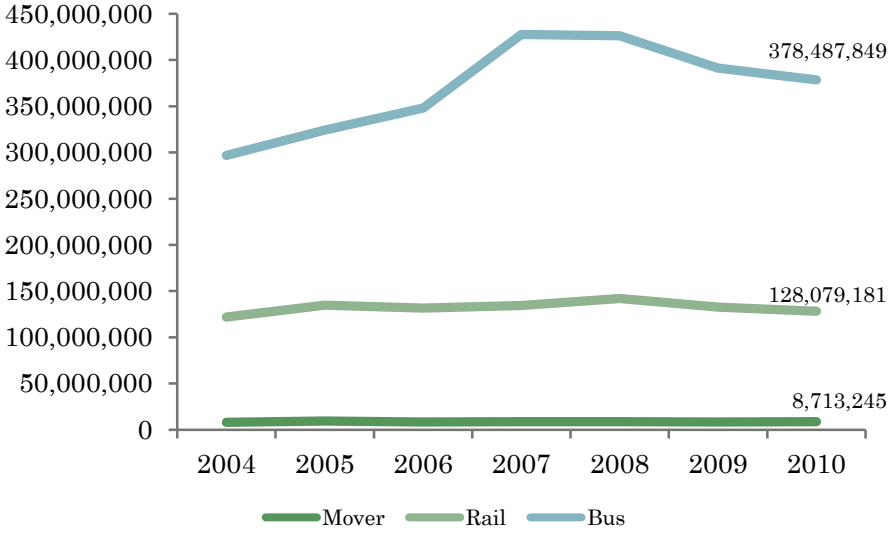


Selected Modal Comparisons

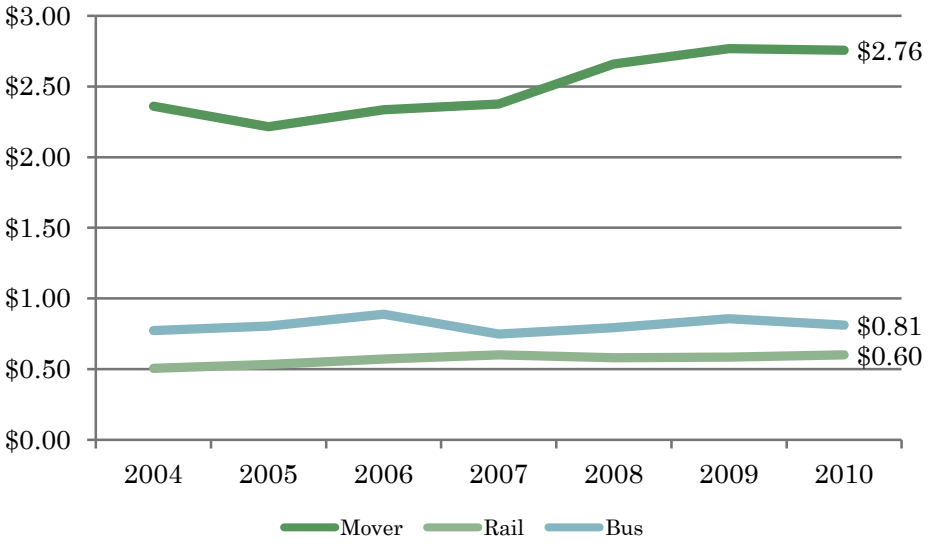
Passenger Trips per Revenue Hour



Passenger Miles



Operating Cost per Passenger Mile



Preliminary Results – Task 1

"Objective assessment of the relative efficiency of MDT - document actions, activities or policies that have been taken based on prior work done to assist the agency in creating a more efficient operating environment"

Prior Work or Studies Under Review

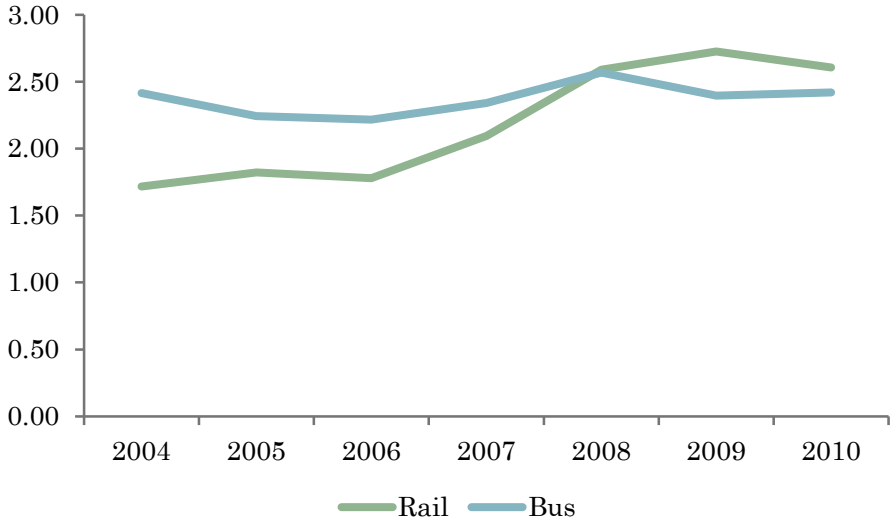
CUTR Reports / MDT		Category	Synthesis to MDT
September 2001	Miami-Dade Transit Efficiency Review	Analysis-Activity	05-18-11
June 2003	Mechanic Manpower Analysis for Miami-Dade Transit	Analysis-Activity	05-18-11
March 2005	Miami-Dade Transit Technical Memorandum: Fares	Analysis-Activity	06-10-11
November 2005	Miami-Dade Transit Technical Memorandum: Operating Costs	Analysis-Activity	06-10-11
November 2005	Miami-Dade Transit Service Standards, Presentation to RTC	Analysis-Activity	06-10-11
March 2006	Facilities Division FY 2004 Work Order Analysis	Analysis-Activity	06-10-11
July 2006	Miami-Dade Transit System Subsidy Policy, Peer Review and Analysis	Analysis-Activity	06-17-11
December 2002	Miami-Dade Transit Metrorail Fleet Management Plan, Revision II	Mandated Plan	06-10-11
February 2003	Miami-Dade Transit Metrorail Operations Plan, Revision 7	Mandated Plan	06-10-11
June 2003	Miami-Dade Transit Metromover Fleet Management Plan, Revision III	Mandated Plan	06-10-11
January 2005	Metrobus Fleet Management Plan, Revision II	Mandated Plan	06-17-11
June 2005	Miami-Dade Transit Facilities Maintenance Division Equipment & Maintenance Plan	Mandated Plan	05-18-11
April 2006	Miami-Dade Transit Track and Guideway Division Equipment & Maintenance Plan	Mandated Plan	06-17-11
January 2001	Miami-Dade County Transit Agency Rail Rehabilitation, Phase I - Final Report	Operational Review	05-18-11
June 2001	Miami-Dade Transit 13(c) Strategic Task Force Final Report	Operational Review	06-17-11
April 2002	Miami-Dade Transit Rail & Mover Rehabilitation, Phase II - Final Report	Operational Review	06-10-11
March 2004	Miami-Dade Transit Metrobus Maintenance Program, Phase I - Final Report	Operational Review	06-24-11
November 2004	Miami-Dade Transit Materials Management - Analysis and Recommendations	Operational Review	06-17-11
December 2004	Miami-Dade Transit Comprehensive Bus Operational Analysis - Final Recommendations	Operational Review	06-24-11
September 2006	Miami-Dade Transit Metrobus Maintenance Program, Phase II - Final Report	Operational Review	06-24-11
April 2007	Field Engineering, Systems Maintenance, and Structural Inspection & Analysis Division	Operational Review	06-24-11
January 2010	Organizational Review & Peer Comparison, Miami-Dade Transit Performance Metrics	Operational Review	06-24-11

Service Standards

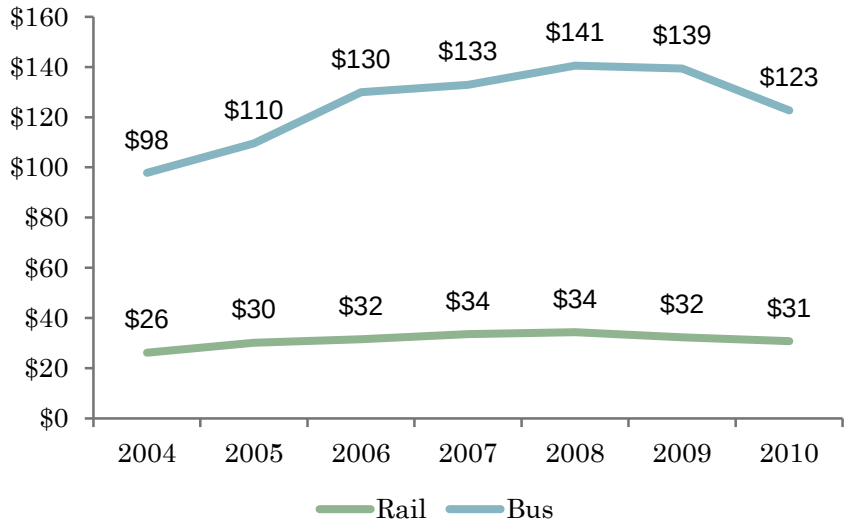
- "Guidelines" in place since 1998
- Recommended standards in November 2005
- BOCC adopted standards September,2009
- Significant changes include:
  - Service coverage- new criteria for concentrations of transit dependent pop., establishes standards for Expansion Areas
  - Route Spacing – defines urban core, criteria for weekday, midday, Sunday, weekend core and non-core service
  - Route Deviation- sets maximum of 125% of length, new deviation standard for underserved areas
  - Bus Stop Spacing and Amenities
  - New Headway standards for Bus and Rail
  - Passenger Loading and Service Span changes
  - System-wide and Route level Bus Productivity metrics established along with On-time performance standards

SERVICE STANDARDS – SELECTED METRICS

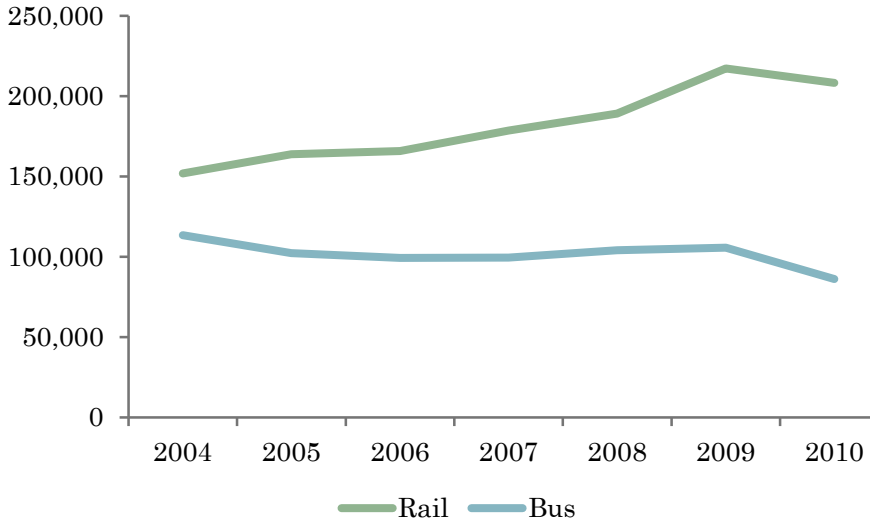
Passenger Trips per Revenue Mile



Operating Cost per Capita

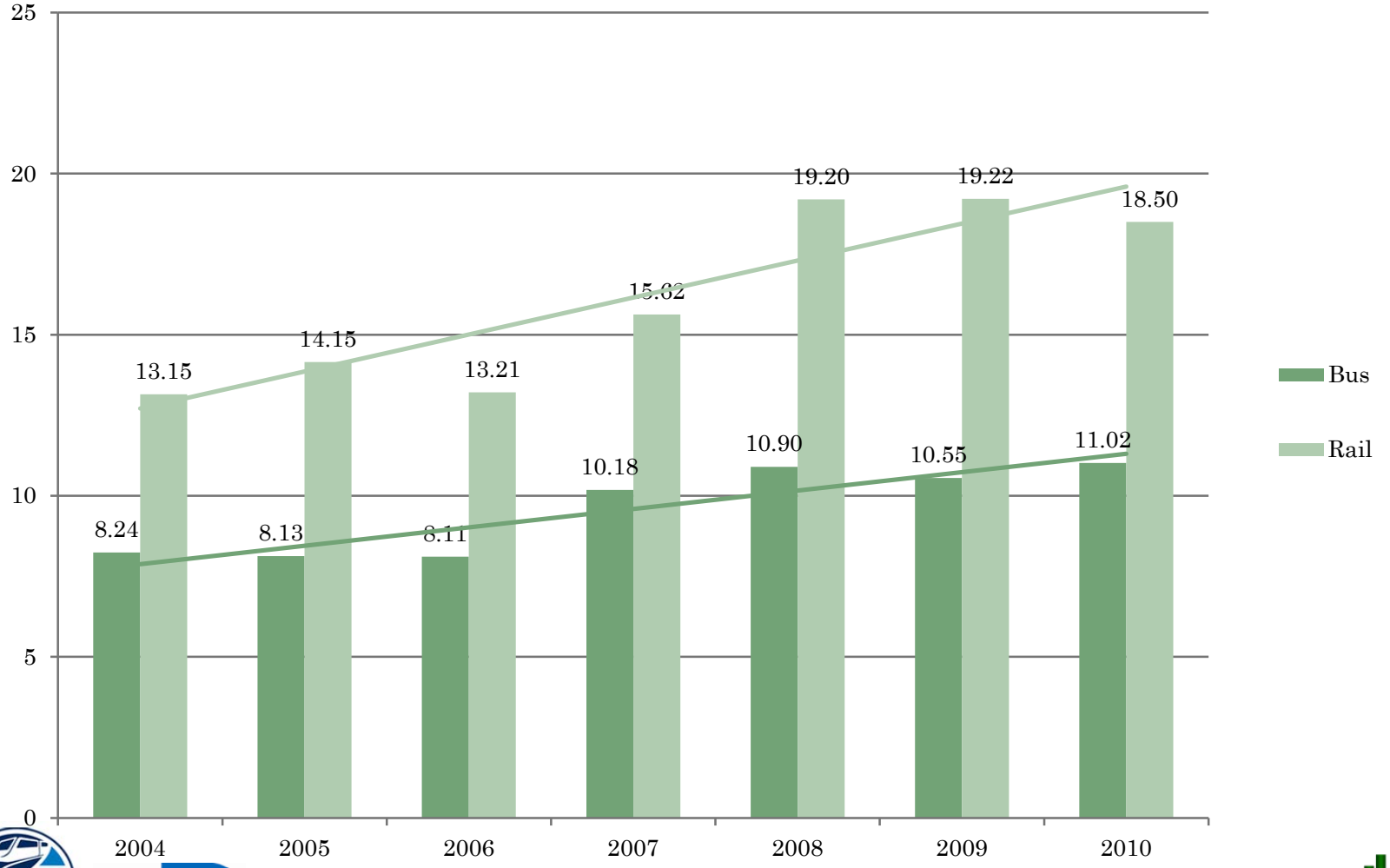


Passenger Trips per VOMS



Average Trip Length

Passengers per Vehicle Mile – Miami Dade Transit 2004 - 2010



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