

“An Analysis of Miami–Dade Transit’s Operating Cost Efficiency”

Part II

Thursday, February 9, 2012



Study Background

- ▶ CITT requested assistance from CUTR in the conduct of an objective assessment of the relative efficiency of Miami-Dade Transit
- ▶ Two parts
 - Peer comparison of operating costs
 - Impact of previous studies, analysis and assistance CUTR provided to Miami-Dade Transit
- ▶ Part I presented – Project and Financial Review Committee September 7, 2011



Study Objective – Part II

“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”





Part II – Report Synthesis

- ▶ Review work performed from 2001 to 2010
- ▶ Identify recommendations
- ▶ Review agency practices associated with topic
- ▶ Assess what related actions have been taken
- ▶ Where appropriate quantify results of implementation



Part II – Report Synthesis

3 Types of Efforts

1. **Operational reviews** that included significant findings/recommendations and generally involved an MDT task force, e.g., *Rail Rehabilitation: Phase One Metrorail*
2. **Analysis of a specific activity** that generally produced a summary of findings, e.g., *Technical Memorandum: Fares*
3. **Development of mandated plans** that involved technical assistance and rarely included findings or recommendations, e.g., *Fleet and Equipment Management Plans*



Report Synthesis

- ▶ Review included 22 CUTR Reports
 - 9 Operational reviews
 - 7 Analyses
 - 6 Mandated Plans
- ▶ Completed between 2001 and 2010



Sample Status Summary (Operational Reviews)

Recommendation	Status
Make the Phase One Final Report available to employees and implement recommendations	The analysis was made available to employees (Status of recommendations - Report IX)
Recommendation	Status
Formalize bus operator feedback in problem diagnosis	All bus operators are met by a Yard Supervisor, who surveys them on problems encountered and forwards problems to bus maintenance
Recommendation	Status
Update the written Maintenance Program and the Bus Maintenance Procedures Manual	The Maintenance Program and Bus Maintenance Procedures Manual were updated and are available on Transitnet
Recommendation	Status
Review and update existing agency objectives for bus maintenance to	Objectives are updated and reported through the MDT Scorecard and Transit
Recommendation	Status
Conduct an inventory of training needs for all levels of staff and coordinate the training program with HR	Consolidated all training under one department and HR conducted a training needs survey



Operational Review Summary of Findings

- ▶ Many of the recommendations were accepted and implemented by the agency
 - Metrorail and Metromover normalized fleet mileage
 - Materials Management established performance metrics for critical parts
 - Metrobus increased focus on tracking cost per mile
- ▶ Some not implemented due to a conflicting County policy – e.g. “contracting out”
- ▶ Other recommendations were dealt with in an alternative fashion– e.g. pc based system vs. wireless handheld devices

Operational Review

I. Rail Rehabilitation, Phase I (Metrorail)

- Referred hiring, selection and training issues to 13(c) Task Force
- Removed vehicles from mothball status
- Removed restrictions on use of mainline during revenue service
- Initiated normalization of fleet mileage
- ✗ Did not conduct a 20-year needs study
- ✗ Did not complete rail vehicle overhaul
- ✗ Have not resolved contracting issues



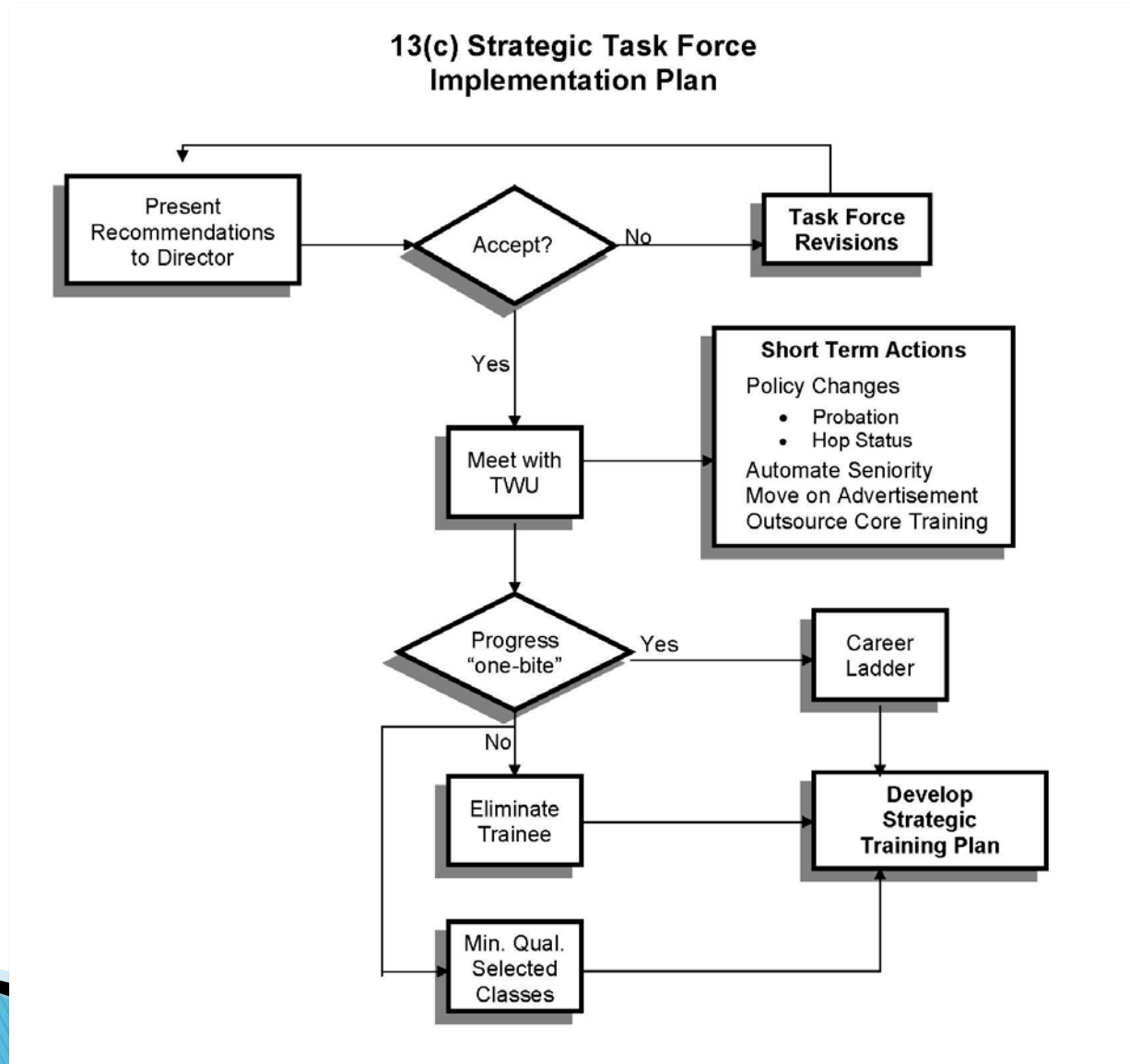
Operational Review

II.13(c) Strategic Task Force

- Achieved 24-month hold for failed trainee
- Maintained 2-week advertising schedule
- × Permanent status not required for trainee
- × Unable to develop 13(c) seniority database
- × No minimum qualifications in future
- × No one-bite rule



13(c) Implementation Process



Operational Review

IV. Rail & Mover Rehabilitation Report, Phase II (Metromover)

- Adjusted staffing allocation
- New vehicles procured rather than midlife rehab
- Implemented EAMS to track incidents, repairs and maintenance
- Established accelerated schedule of hi-cycle switch replacement in “hot spot”



Operational Review

X. Materials Management Analysis

- Instituted EAMS for inventory control/purchase order process
- Established performance target for buses down for parts
- Reducing obsolete inventory – exploring managed inventory by commodity
- Doubled warranty dollars
- Defined critical parts – established targets and report
- ✗ Still working on establishing performance measures in form of purchase order processing targets (a challenge)



Operational Review

XI. Comprehensive Bus Operational Analysis

- Ridership data collected using APCs and manual ride checks
- APCs used to monitor on-going capacity
- Recommendations would yield savings of
 - 19 buses
 - \$4.5 million in annual operating costs
- x On-board passenger survey every 5 years (2004)
- x District transit needs assessments
- x Status of APC validation
- x Formal feedback loop (APCs) with operators



Operational Review

XX. Metrobus Maintenance Program, Phase II

- Formalized bus operator problem feedback
- Updated and distributed Maintenance Program and Bus Maintenance Procedures Manual(via TransitNet)
- Objectives reported through MDT Scorecard and Transit Service Monthly Report
- Established facilities modernization through IE&M
- Set target of 100% for PMI
- Online tracking of repeat failures
- Incorporated performance factors into contracts (parts, rebuilds and warranty)
- × Incorporate FIU time standards into EAMS
- × Staff maintenance office with clerks to free supervisor





Operational Review

XXII. Organizational Review & Peer Comparison

- ▶ Peer Review
- ▶ Staff allocation – continued reductions into FY 2011 – 3,199 staff versus 3,720 staff in FY 2008
- ▶ Performance Metrics
 - × Measures lacked cost performance
 - × Measures applied over short-term
- ▶ Potential financial impact of reorganization
 - \$37.5 million reduction



Analysis of Specific Activity – Summary of Findings

- ▶ In 2009, MDT formally adopted service standards
- ▶ MDT also established a fare policy that allows for fare increases at regular intervals based on current economic conditions
- ▶ Farebox recovery ratio up from 21% in 2008 to 26% in 2010
- ▶ Boardings per hour for bus have remained steady with decrease in miles and are up for rail from 2004 to 2010



Analysis of Specific Activity

- ▶ III. Metrorail Efficiency Review – established baselines; began tracking and posting performance results
- ▶ VII. Bus Mechanic Manpower Analysis – methodology OK; more vehicle miles per FTE than peers
- ▶ XIII. **Technical Memorandum: Fares** – 10/1/08 fare increase and authorized to raise fares every 3 years based on CPI
- ▶ XV. Technical Memorandum: Operating Costs – bus & rail costs per passenger mile and vehicle mile
- ▶ XVI. **Service Standards** – adopted on 11/4/09 for system-wide productivity, bus and rail on-time, passenger complaints, and bus accidents
- ▶ XVII. Facilities Work Orders – established process to determine manpower needs in March 2009 FEMP
- ▶ XIX. Subsidy Policy – systemized fare charge policy



Mandated Plans Summary of Findings

- ▶ MDT has integrated the use of fleet management plans and equipment & maintenance plans into the regular planning process
- ▶ In the past, the plans were completed to fulfill an FTA mandate
- ▶ Today the plans serve to provide the agency with structured maintenance procedures



Mandated Plans

- ▶ V. Metrorail Fleet Management Plan – updated 9/05, 4/07, 6/08 and 11/10
- ▶ VI. Metrorail Operations Plan
- ▶ VIII. Metromover Fleet Management Plan – updated 3/09
- ▶ XII. Metrobus Fleet Management Plan – updated 3/09 and 9/11
- ▶ XIV. Facilities Equipment & Maintenance Plan – updated 3/09
- ▶ XVIII. Track & Guideway Equipment & Maintenance Plan – updated 7/09



Questions / Discussion

