Customer Services, Operations, and Safety Committee Board I nformation Item I I I

July 10, 2008

## Operational Performance

# Washington Metropolitan Area Transit Authority Board Action/Information Summary 

| $\mathbb{C}^{\text {a }}$ Action ${ }^{\text {E }}$ Information | MEAD Number: | Resolution: $\mathbb{E}_{\mathrm{Yes}} \mathbb{E}_{\mathrm{No}}$ |
| :---: | :---: | :---: |

TITLE:
Operational Performance

## PURPOSE:

To provide the Committee with monthly operational highlights and system performance trends for FY08.

## DESCRIPTION:

Information contains operational highlights that have occurred during the first 11 months of FY08 in the areas of on-time performance and reliability for Metrorail, Metrobus, MetroAccess and Vertical Transportation. Per Board request average time associated with unscheduled maintenance calls related to resets and adjustments is provided for elevators/escalators.

## FUNDING IMPACT:

No impact on funding.

## RECOMMENDATION:

None

# Operational Performance 

## Presented to the Board of Directors: <br> Customer Service, Operations, and Safety Committee

July 10, 2008

## Rail On-Time Performance Summary

DEFI NITION - Measured during peak service (morning, evening), identifying percentage of trains on each line end-to-end within a 2 minute headway deviation and measured mid day and late night within a $50 \%$ headway deviation. This measures how well we are providing service.

CALCULATI ON - (Number of Metrorail station arrivals - number of headways with $>2$ minute deviation or $50 \%$ headway deviation) / number of Metrorail station arrivals = Metrorail On Time Performance End to End.


Rail On-Time Performance Summary
DEFI NITION - Measured during peak service (morning, evening), identifying percentage of trains on each individual line end-to-end within a 2 minute headway deviation and measured mid day and late night within a $50 \%$ headway deviation. This measures how well we are providing service.

CALCULATI ON - (Number of Metrorail station arrivals - number of headways with $>2$ minute deviation or $50 \%$ headway deviation) / number of Metrorail station arrivals = Metrorail On Time Performance End to End.


## Rail On-Time Performance Summary



Rail On Time Performance Yellow Line (All Travel Periods)


## Rail Car Failures by Delay Time

DEFI NITION - Delay in minutes that resulted from rail car subsystem component failures.
CALCULATI ON - Rail car subsystem failures grouped by number of minutes of the delay.

Rail Car Failures By Delay Time May 2008

© Propulsion Brake © Door 日 HVAC © ATC

## Major I ncidents Affecting Rail Performance

DEFI NITI ON - Comparison of number of delay incidents by type from February thru May 2008.
CALCULATI ON - Total number of delay incidents by type by month February thru May 2008.


Delays resulting in four minutes or greater

## Bus Mean Distance Between Failures

DEFI NITI ON - This measure identifies the number of miles traveled before a mechanical breakdown for the entire bus fleet CALCULATI ON - Number of failures/miles = Mean Distance Between Failures.

**Data includes FYO4 and newer Fleets.

## Bus Trips Scheduled vs Completed

DEFI NITI ON - This measure identifies the number of trips scheduled and completed on a monthly basis for FY 2008 CALCULATI ON - Number of trips completed = Trips Scheduled - Lost Trips. Trips lost are due to accidents, road calls, occurrences, and cuts.


Fiscal Year 2008-99.99\% of scheduled trips are completed

## Escalators and Elevators Reliability

DEFI NI TI ON - Percentage of time that the escalator or elevator system is available for service.
CALCULATI ON - Hours achieved divided by operating hours. Hours achieved = operating hours - (hours out of service both scheduled and unscheduled). Operating hours $=$ revenue hours * number of units.


Escalator Availability for May AM Peak is 93.8\%; PM Peak is 93.9\%; Mid-day non-peak 93.2\%; Late Night non-peak 93.2\%

| Elevator System Availability |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
| -Goal | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% | 97.5\% |
| - F-FY2008 | 95.6\% | 95.9\% | 97.0\% | 97.0\% | 97.3\% | 96.5\% | 97.1\% | 97.1\% | 96.6\% | 96.6\% | 96.5\% |  |
| $\square=$ FY2007 | 93.4\% | 94.4\% | 94.6\% | 95.9\% | 97.0\% | 95.9\% | 95.3\% | 94.7\% | 94.9\% | 95.6\% | 95.8\% | 94.4\% |

Elevator Availability for May AM Peak is 96.4\%; PM Peak is 96.6\%; Mid-day non-peak 96.5\%; Late Night non-peak 96.5\%

## Escalators - Analysis of Unscheduled Failures March 2008 to May 2008



Largest percentage (91\%) of problems associated with escalator unscheduled outages is safety resets or an adjustment (e.g., reset comb impact switch, adjusted drive chain switch) as compared to $89 \%$ for the previous 3 months

Average amount of time for each of the maintenance calls - 25 minutes
Safety Work Orders 4\% - correction of problems discovered during routine safety inspections
Power surges $2 \%$ - outages resulting from power surges
Incidents and Accidents 1\% - outages due to incidents

## Elevators - Analysis of Unscheduled Failures March 2008 to May 2008



Largest percentage (69\%) of problems associated with elevator unscheduled outages is safety resets or an adjustment (e.g. reset controller fault, adjusted car doors) as compared to $72 \%$ for the previous 3 months

Average amount of time for each of the maintenance calls is 30 minutes
Power alarm related $17 \%$ - outages resulting from power failures or fire alarms
Incidents and Accidents 7\% - outages due to incidents
Safety Work Orders 6\% - correction of problems discovered during routine safety inspections

## Elevators/ Escalators Not Functioning More than Four Weeks

Elevators

| Unit | Location | Start Date | CP | Major Repair | Descripion of Repair / Repair Details |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Courthouse | 24.Mar.08 | X |  | C1P Modernization - Projecteed compleion date 711408 ( Contractor-Mid-America) |
| 2 | Potomac Avenue | 15.Apr.08 | X |  | CIP Moderization. Projected completion date 84008 |
| 1 | Anacostia | 11.Jun-08 | X |  | CIP Moderiziation Projected completion date 94008 |

Escalators

| Unit | Location | Start Date | CP | Major Repair | Descripion of Repair / Repair Details |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Balliton | 1-Ap. 08 | $\chi$ |  | CIP Modernization - Projected completion date 71708 (Contractor K KNE) |
| 12 | Ballston | 15-Ap.08 | X |  | C1P Modernization - Projected completion date 71508 |
| 3 | Clarendon | 28-Apr.08 | $\chi$ |  | C1P Modernization - Proected completion date 72808 |
| 8 | Gallery Place | 5-May.08 | X |  | C1P Moderizizaion - Projected completion date 72108 |
| 4 | Gallery Place | 12.May.08 | X |  | CPP Modernization - Projected completion date 118808 |
| 4 | Capito Heights | 19.May.08 | X |  | CPPModernization - Projected completion date 84008 |

## MetroAccess

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DEFI NITION - Percentage of on-time pickup within a 30-minute window ( 15 minutes before or after scheduled pickup time). CALCULATI ON - (Total on-time trips including "no shows" to which were initially on-time /sum of total completed trips (including "no shows" to which we were initially late) and missed trips = MetroAccess On Time Performance.



DEFI NI TI ON - Percentage of missed/excessively late trips (beyond 30 minutes).
CALCULATI ON - Number of completed trips with a >30 minute deviation from the scheduled arrival time/Completed trips $=$ MetroAccess Percentage of Missed/Excessively Late Trips.

