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

November 6, 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 FY09.

## DESCRIPTION:

Information contains operational highlights that have occurred during the first three months of FY09 in the areas of on-time performance and reliability for Metrorail, Metrobus, MetroAccess and Vertical Transportation. Per Board request rail car door malfunctions resulting in offloads is included.

## FUNDING IMPACT:

No impact on funding.
RECOMMENDATION:

None

# Operational Performance 

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

November 6, 2008

## Bus On-Time Performance Comparison Chart

DEFI NITION - Measurement of time throughout the day (from beginning to end of service) for all routes by capturing the data recorded by the CAD/AVL whenever a bus encounters a time point. Parameters used by other agencies have a broad range and use selected time points vs WMATA using all time points.

CALCULATI ON - (Difference between scheduled time and actual time arriving at a time point based on 2 min early and 7 min late parameters.


## Bus Mean Distance Between Failures

metro
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.

FY 2009 YTD - 5,699


## Rail On-Time Performance Summary

DEFI NITION - Measured during peak service (AM/PM), identifying percentage of trains on each line end-to-end within a 2 minute headway deviation and measured mid-day non-peak and late night non-peak 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 Car Door Malfunctions - Peak Percentage of Trains Operated



262 trains per day during peak period $x$ average 21 weekdays $=5,502$ trains per month

## Rail Car Door Malfunctions - Non-Peak Percentage of Trains Operated



130 trains per day during non-peak period $\times$ average 21 weekdays $=2,730$ trains per month

## Major I ncidents Affecting Rail Performance



262 trains per day during peak period +130 during non-peak $=392 \times$ average 21 weekdays $=8,232$ trains per month

## Escalators and Elevators Availability

DEFI NI TION - 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 System Availability


Escalator Availability AM peak is 91.0\%; PM peak is 91.3\%; mid-day non-peak 91.0\%; late night non-peak 91.3\%

| Elevator System Availability |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $100 \%$$95 \%$$90 \%$ | $X=X$ |  |  |  |  |  |  |  |  |  |  |  |
|  | 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\% |
| -X-FY2009 | 97.1\% | 97.1\% | 96.7\% |  |  |  |  |  |  |  |  |  |
| - - FY2008 | 95.6\% | 95.9\% | 97.0\% | 97.0\% | 97.3\% | 96.5\% | 97.1\% | 97.1\% | 96.6\% | 96.6\% | 96.6\% | 96.5\% |

Elevator Availability AM peak is 96.7\%; PM peak is 96.6\%; mid-day non-peak 96.5\%; late night non-peak 96.8\%
588 escalators and 269 elevators

## Escalators J uly - September Top 12

DEFI NI TI ON - Top 12 Escalators with the lowest availability for the past 90 days J uly 2008 thru September 2008.
CALCULATION - Ranked availability.

| Jul - Sep 3 Month Trend |  | Sys. <br> Avail. | $\begin{gathered} \text { OOS } \\ \text { COUNT } \end{gathered}$ | $\begin{aligned} & \text { Hours } \\ & 00 \mathrm{~S} \end{aligned}$ | Manufacturer | Date In Service | $\mathrm{CIP}$ <br> Rehab Date | Covered |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STATION NAME | UNIT |  |  |  |  |  |  |  |
| DUPONT CIRCLE | A03S01 | 0.00\% | 1 | 1774.00 | APV | 17-Jan-77 | 4-Mar-04 |  |
| NEW CARROLLTON | D13X02 | 28.98\% | 19 | 1298.91 | WE100 | 17-Nov-78 | 10-Sep-05 | X |
| GALLERY PLACE | F01N07 | 41.38\% | 3 | 1041.07 | WE100 | 27-Mar-76 | 1-Nov-05 |  |
| FOGGY BOTTOM | C04X02 | 42.85\% | 15 | 1013.91 | WE100 | 17-Nov-78 | 25-Jan-06 | X |
| FOGGY BOTTOM | C04X01 | 53.30\% | 6 | 831.79 | WE100 | 30-Apr-83 | Future | X |
| SMITHSONIAN | D02S01 | 54.67\% | 9 | 806.12 | O\&K | 1-Jul-77 | Future |  |
| ROSSLYN | C05X07 | 55.01\% | 7 | 799.19 | O\&K | 1-Jul-77 | Future |  |
| SMITHSONIAN | D02N03 | 57.22\% | 26 | 758.89 | WE100 | 1-Jul-77 | 25-0ct-01 |  |
| FRANCONIA/SPRINGFIELD | J03X03 | 58.20\% | 16 | 751.95 | WE100 | 1-Jul-77 | Future | X |
| COLUMBIA HEIGHTS | E04X01 | 58.48\% | 11 | 731.19 | O\&K | 1-Jul-77 | Future |  |
| CONGRESS HEIGHTS | F07X04 | 59.65\% | 22 | 715.72 | FUJI | 13-Jan-01 | Future | X |
| HUNTINGTON | C15SO1 | 60.47\% | 25 | 701.30 | WE100 | 17-Dec-83 | 27-Mar-01 |  |

## Elevators J uly - September Top 12

DEFI NI TI ON - Top 12 Elevators with the most lowest availability J uly 2008 thru September 2008.
CALCULATI ON - Ranked by availability.

| Jul - Sep 3 Month Trend |  | Sys. <br> Avail. | $\begin{gathered} \text { OOS } \\ \text { COUNT } \end{gathered}$ | $\begin{aligned} & \text { Hours } \\ & 00 \mathrm{~S} \end{aligned}$ | Manufacturer | Date In Service | CIP <br> Rehab Date |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| STATION NAME | UNIT |  |  |  |  |  |  |
| VIENNA | K08X02 | 74.61\% | 15 | 450.33 | VA ELEV | 7-Jun-86 | 26-Nov-03 |
| MCPHERSON SQUARE | C02E02 | 85.74\% | 10 | 252.97 | US | 1-Jul-77 | 18-Jun-02 |
| WATERFRONT | F04X02 | 86.29\% | 6 | 243.14 | MOTION CONTROL | 28-Dec-91 | Future |
| FRANCONIA/SPRINGFIELD | J03X05 | 86.50\% | 3 | 239.53 | SWIFT | 29-Jun-97 | 16-Dec-02 |
| ADDISON ROAD | G03X02 | 87.14\% | 3 | 228.22 | ESCO | 22-Nov-80 | 11-Jan-06 |
| BALLSTON | K04X04 | 88.46\% | 7 | 204.74 | OTIS | 1-Dec-79 | Future |
| FOREST GLEN | B09X03 | 89.00\% | 3 | 195.06 | DOVER | 22-Sep-90 | 23-Dec-05 |
| PENTAGON | C07N01 | 89.07\% | 7 | 195.90 | SCHINDLER | 3-Oct-02 | Future |
| SUITLAND | F10X03 | 89.65\% | 12 | 183.67 | THYSSEN | 13-Nov-01 | Future |
| HUNTINGTON | C15S02 | 91.23\% | 7 | 155.52 | US | 17-Dec-83 | 17-Jun-03 |
| COURT HOUSE | K01X01 | 91.53\% | 25 | 150.22 | MOTION CONTROL | 1-Dec-79 | 1-Apr-02 |
| WHEATON | B10X02 | 91.57\% | 3 | 149.46 | CEMCO | 22-Sep-90 | 16-Jan-03 |

MetroAccess

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.

MACS - On-time Performance


Percent of Missed/Excessively Late Trips ( 30 mins beyond the scheduled pick-up window)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2 \\ & 1 \\ & 1 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun |
| -Goal | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| -X-FY2009 | 1.1 | 1.5 | 1.6 |  |  |  |  |  |  |  |  |  |
| --FY2008 | 1.4 | 1.2 | 1.7 | 2.0 | 2.0 | 1.9 | 1.1 | 1.8 | 1.5 | 1.7 | 1.2 | 1.3 |

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.

