

Customer Services, Operations, and Safety Committee

Board Information Item IV

April 10, 2008

Operational Performance

Washington Metropolitan Area Transportation Authority Board Action/Information Summary

Action Information	MEAD Number:	Resolution:

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 eight months of FY08 in the areas of on-time performance and reliability for Metrorail, Metrobus, MetroAccess and Vertical Transportation. Per Board request, specific details why a performance goal is not being achieved are provided.

FUNDING IMPACT

None

RECOMMENDATION

None

Operational Performance

Presented to the Board of Directors:

Customer Service, Operations, and Safety Committee

April 10, 2008







Rail On-Time Performance Summary

DEFINITION – 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.

CALCULATION – (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

DEFINITION – Measured during peak service (morning, evening), identifying percentage of trains on each individual line **endto-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.

CALCULATION – (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 Car Failures by Delay Time

DEFINITION – Delay in minutes that resulted from railcar subsystem component failures. **CALCULATION** – Rail car subsystem failures grouped by number of minutes of the delay.



Railcar Failures By Delay Time February 2008

🗳 Propulsion 🖾 Brake 🖾 Door 🖽 HVAC 🖾 ATC



Major Incidents Affecting Rail Performance

DEFINITION – Number of incidents by type.

CALCULATION – Total number of incidents by type for February 2008.





Bus Mean Distance Between Failures

DEFINITION – This measure identifies the number of miles traveled before a mechanical breakdown

CALCULATION – Number of failures/miles = Mean Distance Between Failures.





Bus Fleet Comparison by Failures

DEFINITION – Number of failures by subsystem per bus fleet for February 2008. **CALCULATION** – Total number of failures per subsystem by bus fleet



Bus Failures by Subsystem February 2008

Bus Fleet Size: CNG = 275 Hybrid = 50 Clean Diesel = 117



Escalators and Elevators Reliability

DEFINITION - Percentage of time that the escalator or elevator system is available for service.

CALCULATION - 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.







Escalators and Elevators Reliability

DEFINITION – Top 12 Elevators and Escalators with the most non-scheduled outages for the past 90 days December 2007 thru February 2008.

CALCULATION – Rank first by number of failures, second by amount of time.

	DECEMBER 2007			JANUARY 2008			FEBRUARY 2008		
Rank	Station Name	Unit	Outages	Station Name	Unit	Outages	Station Name	Unit	Outages
1	U STREET	4	18	DEANWOOD	2	26	ANACOSTIA	2	20
2	MCPHERSON SQUARE	2	15	DUPONT CIRCLE	3	19	CLEVELAND PARK	5	17
3	VIENNA	3	15	ANACOSTIA	2	17	CONGRESS HEIGHTS	1	17
4	NEW YORK AVE	1	14	SHAW	1	15	TENLEYTOWN	7	16
5	MINNESOTA AVE	1	14	ROSSLYN	4	14	DUPONT CIRCLE	3	15
6	RHODE ISLAND AVE	2	13	SMITHSONIAN	1	14	GALLERY PLACE	2	15
7	POTOMAC AVE	3	13	MT VERNON	6	14	VIRGINIA SQUARE	1	15
8	SHAW	2	13	CAPITOL SOUTH	3	13	WOODLEY PARK	4	13
9	ARCHIVES	5	12	FRIENDSHIP HEIGHTS	3	12	ARCHIVES	2	13
10	SMITHSONIAN	4	12	CAPITOL HEIGHTS	3	12	NAVY YARD	3	13
11	WEST FALLS CHURCH	3	12	FRIENDSHIP HEIGHTS	5	12	ADDISON ROAD	1	13
12	MT VERNON	7	12	SMITHSONIAN	3	12	COLUMBIA HEIGHTS	1	12

ESCALATORS

ELEVATORS

	DECEMBER 2007			JANUARY 2008			FEBRUARY 2008		
Rank	Station Name	Unit	Outages	Station Name	Unit	Outages	Station Name	Unit	Outages
1	BALLSTON	3	14	BALLSTON	3	19	COLUMBIA HEIGHTS	1	13
2	DUPONT CIRCLE	1	10	WATERFRONT	1	10	COLUMBIA HEIGHTS	2	9
3	WATERFRONT	1	8	MINNESOTA AVE	1	8	WATERFRONT	1	9
4	SHAW	1	7	SHAW	1	6	CLEVELAND PARK	1	8
5	CAPITOL SOUTH	1	5	CAPITOL HEIGHTS	2	6	BROOKLAND	2	7
6	WOODLEY PARK	1	4	FOREST GLEN	3	5	COURTHOUSE	1	7
7	FOREST GLEN	1	4	WHEATON	1	5	VAN NESS	1	6
8	ROSSLYN	2	4	EASTERN MARKET	2	5	ROSSLYN	1	6
9	EASTERN MARKET	2	4	MINNESOTA AVE	2	5	CAPITOL SOUTH	1	6
10	FOREST GLEN	3	4	COLUMBIA HEIGHTS	1	5	SUITLAND	2	6
11	COLUMBIA HEIGHTS	2	4	LARGO TOWN CENTER	6	5	EISENHOWER AVE	1	5
12	COLUMBIA HEIGHTS	1	4	MT VERNON	3	4	MINNESOTA AVE	1	4



DEFINITION - Percentage of on-time pickup within a 30 minute window (15 minutes before or after scheduled pickup time).

CALCULATION - (Total on-time trips including "no shows" to which we 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.





DEFINITION - Percentage of missed/excessively late trips (beyond 30 minutes). **CALCULATION** - Number of completed trips with a >30 minute deviation from the scheduled arrival time/Completed trips = MetroAccess Percentage of Missed/Excessively Late Trips.

