

### Customer Services, Operations, and Safety Committee

### Board Information Item III

November 6, 2008

**Operational Performance** 

### Washington Metropolitan Area Transit Authority Board Action/Information Summary

C Action <sup>C</sup> Information MEAD Number: Resolution: □ Yes <sup>C</sup> 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:

Customer Service, Operations, and Safety Committee

November 6, 2008



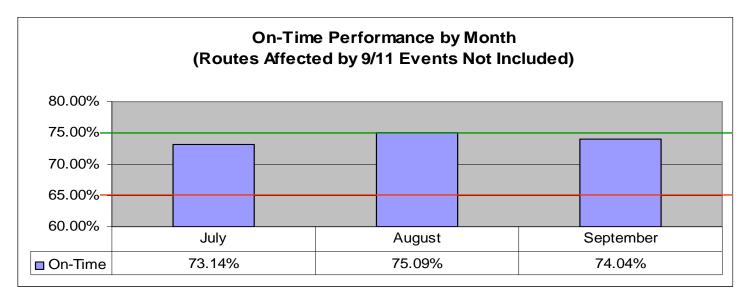




## **Bus On-Time Performance Comparison Chart**

**DEFINITION** – 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.

**CALCULATION** – (Difference between scheduled time and actual time arriving at a time point based on 2 min early and 7 min late parameters.

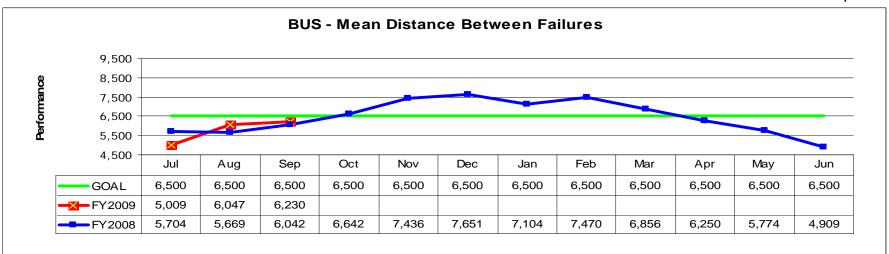


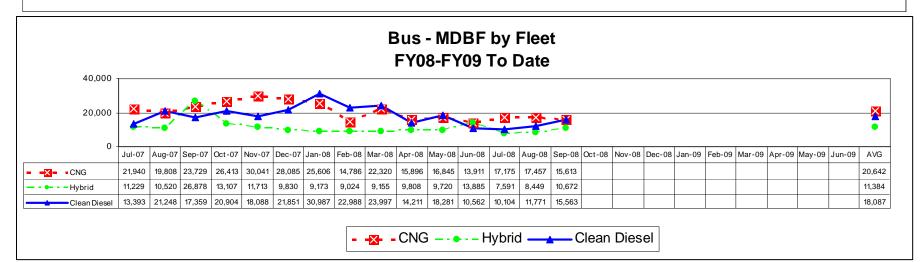
High Average – 75% – Low Average – 65%



### **Bus Mean Distance Between Failures**

DEFINITION – This measure identifies the number of miles traveled before a mechanical breakdown for the entire bus fleetCALCULATION – Number of failures/miles = Mean Distance Between Failures.FY 2009 YTD – 5,699



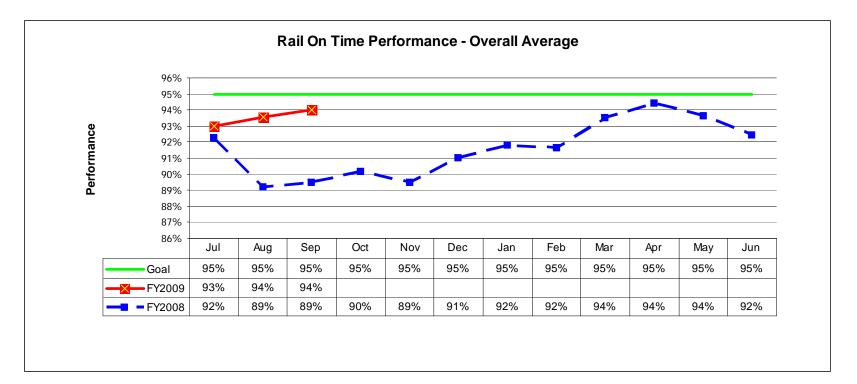




### **Rail On-Time Performance Summary**

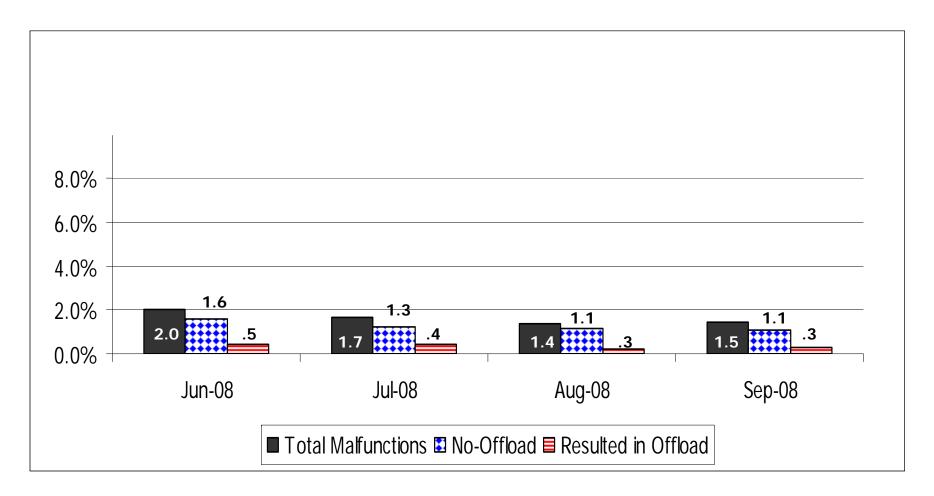
**DEFINITION** – Measured during peak service (AM/PM), identifying percentage of trains on each line **end-to-end** within a 2 minute headway deviation and measured mid-day non-peak and late night non-peak within a 50% headway deviation. This measures how well we are providing service.

**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.





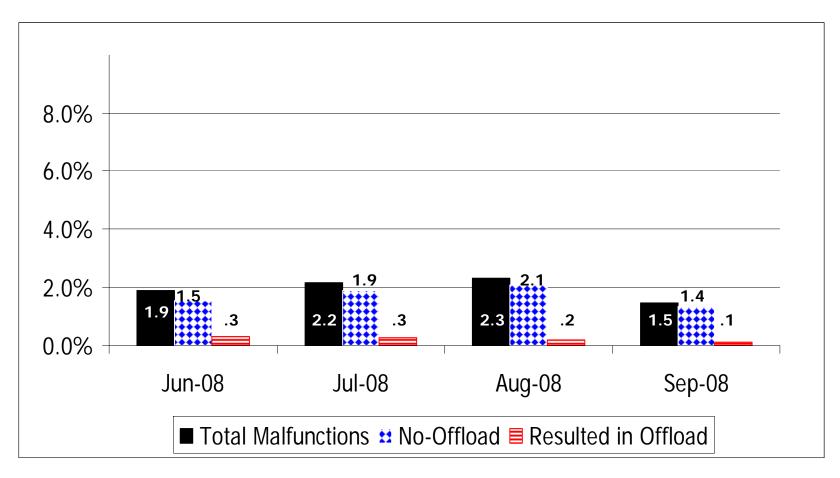
# Rail Car Door Malfunctions – Peak Percentage of Trains Operated



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



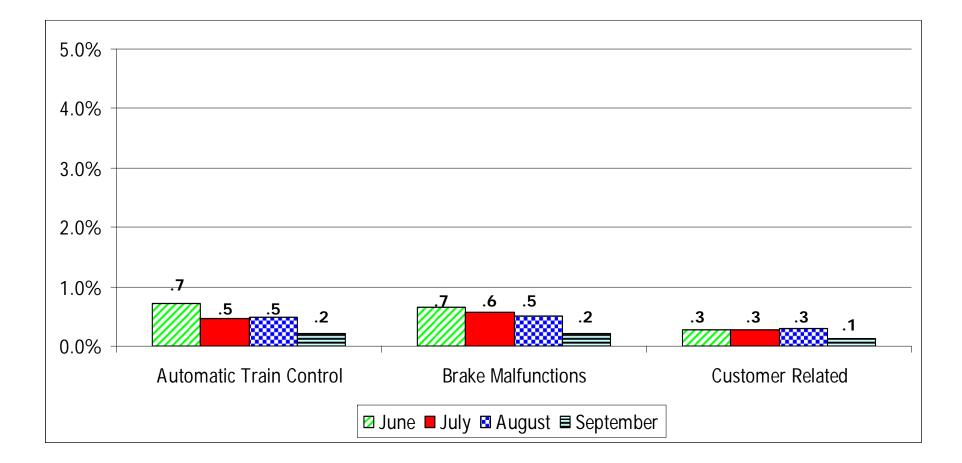
# Rail Car Door Malfunctions – Non-Peak Percentage of Trains Operated



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



## **Major Incidents Affecting Rail Performance**



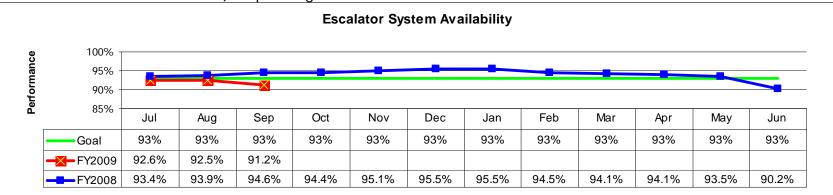
262 trains per day during peak period + 130 during non-peak = 392 x average 21 weekdays = 8,232 trains per month

Delays resulting in four minutes or greater

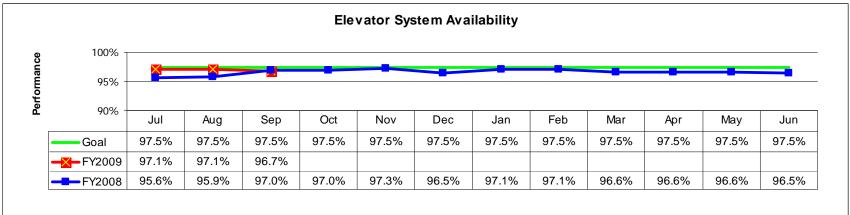


## **Escalators and Elevators Availability**

**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.



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 Availability AM peak is 96.7%; PM peak is 96.6%; mid-day non-peak 96.5%; late night non-peak 96.8%



# **Escalators July – September Top 12**

**DEFINITION** – Top 12 Escalators with the lowest availability for the past 90 days July 2008 thru September 2008. **CALCULATION** – Ranked availability.

Jul - Sep 3 Month Trend		Sys.	00S	Hours		Date In	CIP	Covered
STATION NAME	UNIT	Avail.	COUNT	00S	Manufacturer	Service	Rehab Date	
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	Х
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	Х
FOGGY BOTTOM	C04X01	53.30%	6	831.79	WE100	30-Apr-83	Future	Х
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-Oct-01	
FRANCONIA/SPRINGFIELD	J03X03	58.20%	16	751.95	WE100	1-Jul-77	Future	Х
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	Х
HUNTINGTON	C15S01	60.47%	25	701.30	WE100	17-Dec-83	27-Mar-01	

Repeater

FY09 Goal: 93%



**DEFINITION** – Top 12 Elevators with the most lowest availability July 2008 thru September 2008. **CALCULATION** – Ranked by availability.

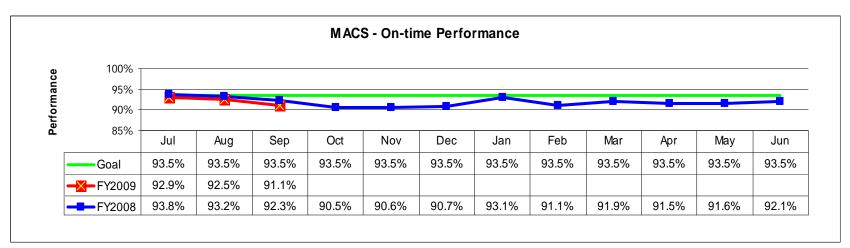
Jul - Sep 3 Month Trend		Sys.	00S	Hours		Date In	CIP
STATION NAME	UNIT	Avail.	COUNT	00S	Manufacturer	Service	Rehab Date
VIENNA	K08X02	74.61%	15	450.33	VA ELEV	7-Jun-86	26-Nov-03
MCPHERSON SQUARE	C02E02	85.74%	10	252.97	US	1-Jul-77	18-Jun-02
WATERFRONT	F04X02	86.29%	6	243.14	MOTION CONTROL	28-Dec-91	Future
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

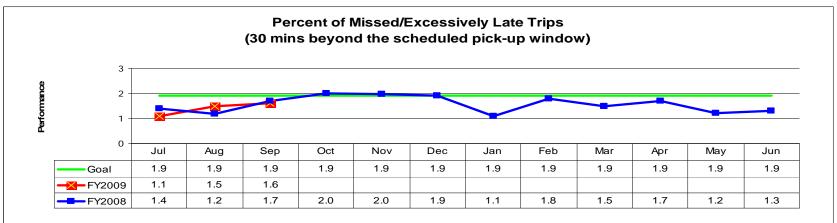
Repeater



## **MetroAccess**

**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 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.