

## Customer Services, Operations, and Safety Committee Board Information Item III

**December 4, 2008** 

**Operational Performance** 

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

	- F	Information	MEAD Number:	Resolution:		
	Action •				Yes 🖸	No

т	Т	Г		ᆮ	•
			_	_	_

**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 four months of FY09 in the areas of on-time performance and reliability for Metrorail, Metrobus, MetroAccess and Vertical Transportation and rail car door malfunctions resulting in offloads.

#### **FUNDING IMPACT:**

No impact on funding.

#### **RECOMMENDATION:**

None



Presented to the Board of Directors:

Customer Service, Operations, and Safety Committee

December 4, 2008



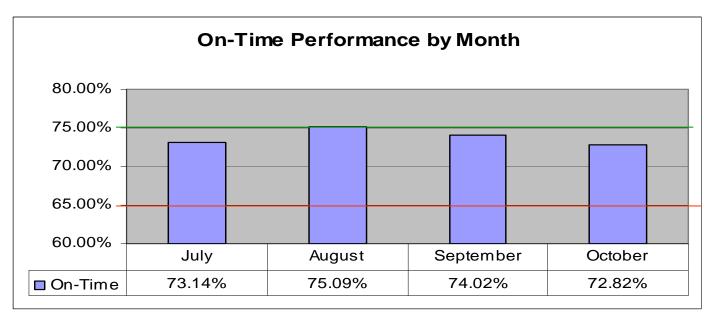




#### **Bus On-Time Performance Comparison Chart**

**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.



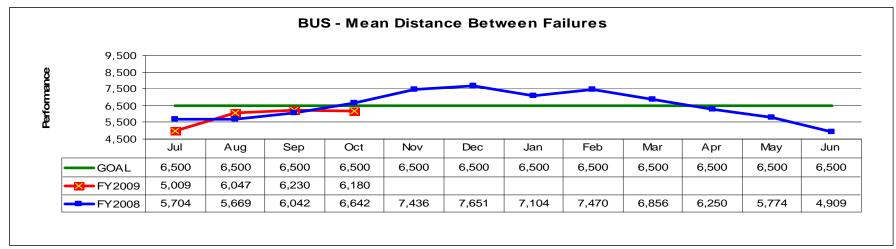
High Average – 75%

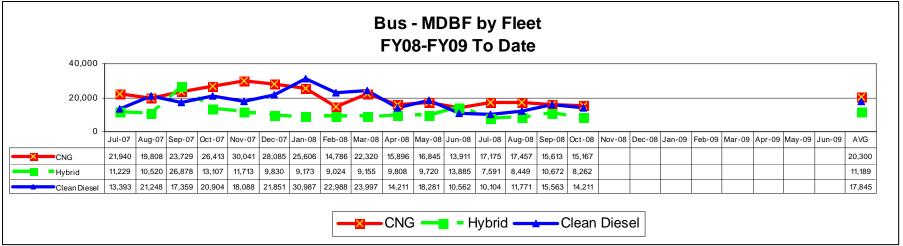
Low Average – 65%



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

**DEFINITION** – This measure identifies the number of miles traveled before a mechanical breakdown for the entire bus fleet **CALCULATION** – Number of failures/miles = Mean Distance Between Failures. **FY 2009 YTD – 5,816** 



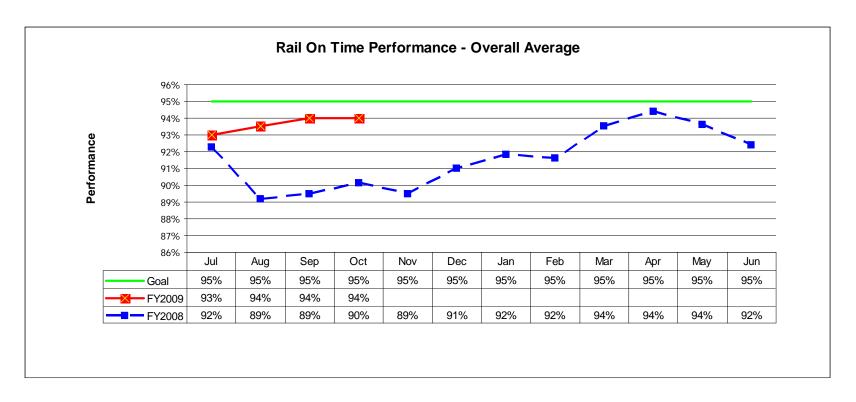




### **Rail On-Time Performance Summary**

**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.

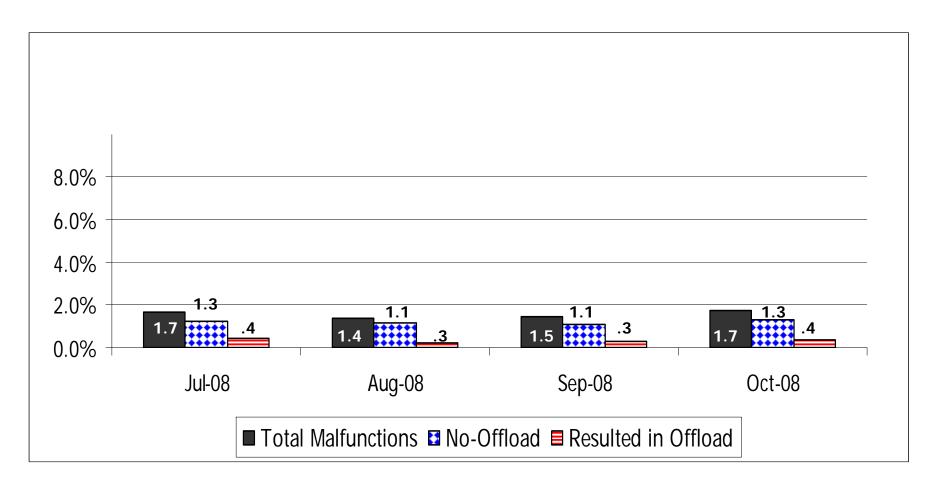
**CALCULATION** – (Number of Metrorail station arrivals – number of headways with >2 minute deviation or 50% headway deviation) / number of Metrorail station arrivals = Metrorail On-Time Performance End-to-End.



Red Line = 96% Blue Line = 91% Orange Line = 95% Green Line = 91% Yellow Line = 94%



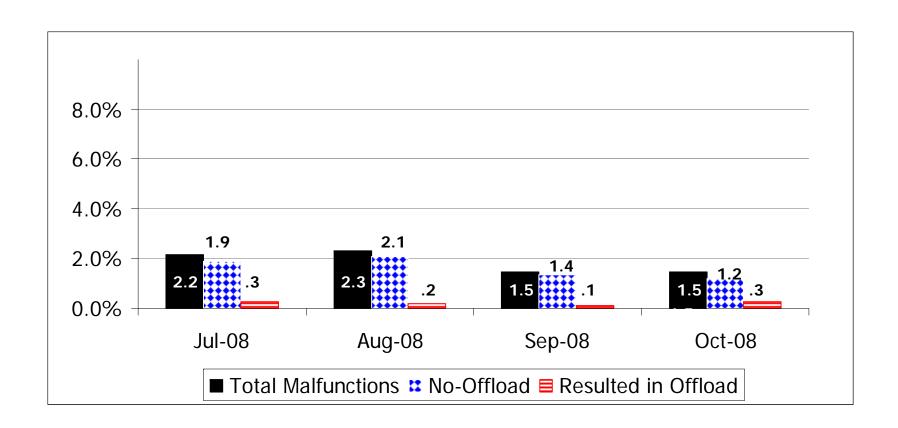
# Rail Car Door Malfunctions – Peak Percentage of Trains Operated



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



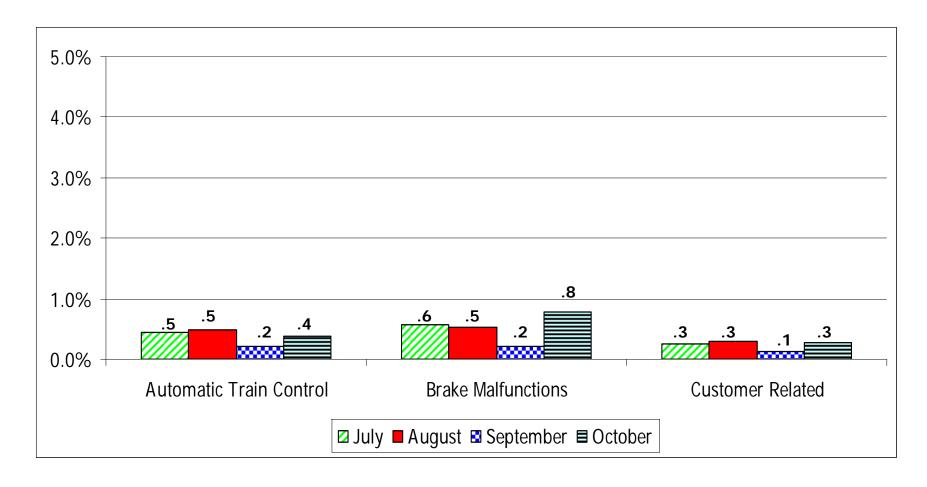
# Rail Car Door Malfunctions – Non-Peak Percentage of Trains Operated



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



### **Major Incidents Affecting Rail Performance**

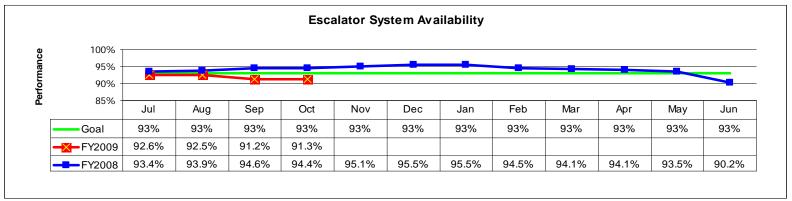


262 trains per day during peak period + 130 during non-peak = 392 x average 21 weekdays = 8,232 trains per month

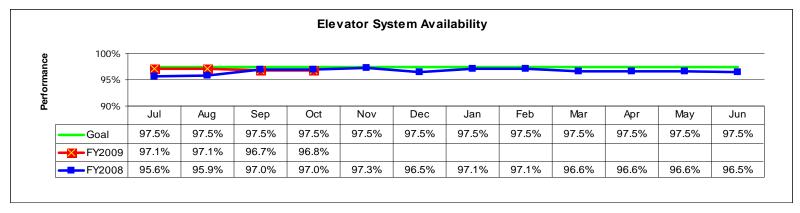


#### **Escalators and Elevators Availability**

**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 91.4%; mid-day non-peak 91.0%; late night non-peak 91.2%



Elevator Availability AM peak is 96.6%; PM peak is 96.6%; mid-day non-peak 96.3%; late night non-peak 96.8%



## **Escalators August to October Top 12**

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

August - October 2008 Escalator 3 Month Trend		Sys. Avail	008	OOS Hours OOS	Manufacturer	Date In	CIP Rehab	Covered
Station Name	Unit	Oys. Avail	Count	110013 000	manulacturei	Service	Date	Oovered
FOGGY BOTTOM	C04X01	15.80%	3	1,493.71	O&K	1-Jul-77	Future	
DUPONT CIRCLE	A03S01	16.29%	11	1,484.98	APV	17-Jan-77	4-Mar-04	
SMITHSONIAN	D02N03	24.84%	21	1,333.35	O&K	1-Jul-77	Future	
EASTERN MARKET	D06X01	27.43%	10	1,287.33	WE100	1-Jul-77	5-Dec-00	
L'ENFANT PLAZA	F03N06	49.24%	16	900.54	WE100	30-Apr-83	Future	Χ
SMITHSONIAN	D02S01	53.65%	12	821.46	WE100	1-Jul-77	25-Oct-01	
FRANCONIA/SPRINGFIELD	J03X03	56.95%	14	763.56	MONT	1-Jul-77	Future	Χ
COLUMBIA HEIGHTS	E04X01	57.61%	16	733.48	FUJI	1-Jul-77	Future	
STADIUM ARMORY	D08N04	59.23%	14	709.53	WE100	1-Jul-77	Future	
WATERFRONT	F04X03	60.94%	14	698.12	WE250	28-Dec-91	7-Jun-01	
CONGRESS HEIGHTS	F07X05	60.96%	7	691.82	FUJI	13-Jan-01	Future	Χ
METRO CENTER	C01S03	66.33%	22	595.37	WE100	1-Jul-77	26-Mar-03	Χ

Repeater FY09 Goal: 93%



## **Elevators August to October Top 12**

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

August - October 2008 Elevator 3 N	Sys. Avail	008	OOS Hours	Manufacturer	Date In	CIP Rehab	
Station Name	Unit	oyol Alvali	Count	008	manadada	Service	Date
VIENNA	K08X04	75.04%	4	442.85	MOTION CONTROL	22-Jan-01	
VIENNA	K08X02	76.88%	9	395.73	VA ELEV	7-Jun-86	26-Nov-03
COURTHOUSE	K01X01	84.25%	31	279.34	MOTION CONTROL	1-Dec-79	1-Apr-02
METRO CENTER	C01N02	85.73%	30	253.27	US	1-Jul-77	27-Aug-01
SUITLAND	F10X03	85.93%	17	249.61	THYSSEN	13-Nov-01	
FRANCONIA/SPRINGFIELD	J03X05	86.62%	4	237.31	SWIFT	29-Jun-97	16-Dec-02
ADDISON ROAD	G03X02	86.69%	4	236.04	ESCO	22-Nov-80	11-Jan-06
MCPHERSON SQUARE	C02E01	86.81%	12	234.07	US	1-Jul-77	18-Jun-02
PRINCE GEORGE'S PLAZA	E08X05	88.75%	6	199.48	MOTION CONTROL	1-May-01	
BALLSTON	K04X04	89.30%	4	189.87	OTIS	1-Dec-79	
GALLERY PLACE	B01E01	90.08%	9	175.93	MONTGOMERY	27-Mar-76	27-Apr-02
HUNTINGTON	C15S03	90.26%	1	172.85	SCHUMACHER	30-Jul-08	

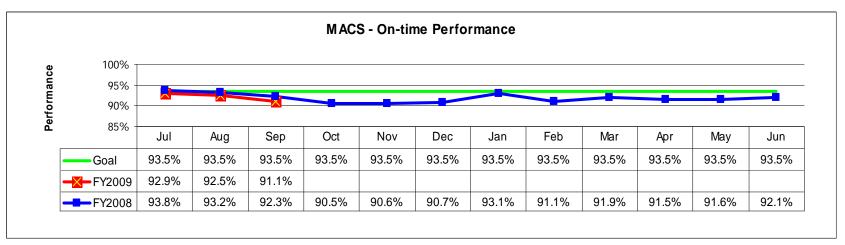
Repeater

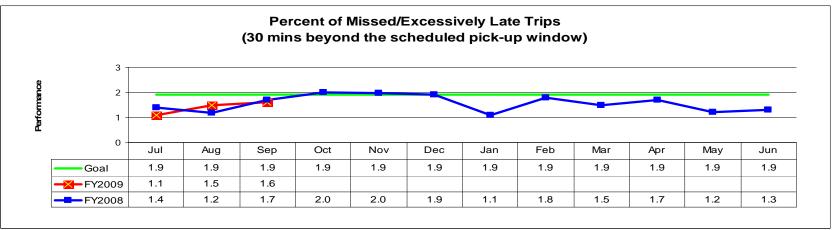
FY09 Goal: 97.5%



#### **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.