



Customer Services, Operations, and Safety Committee

Board Information Item III

October 2, 2008

Operational Performance

Washington Metropolitan Area Transit Authority
Board Action/Information Summary

<input type="checkbox"/> Action <input checked="" type="checkbox"/> Information	MEAD Number:	Resolution: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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TITLE:

Operational Performance

PURPOSE:

To provide the Committee with monthly operational highlights and system performance trends for FY09.

DESCRIPTION:

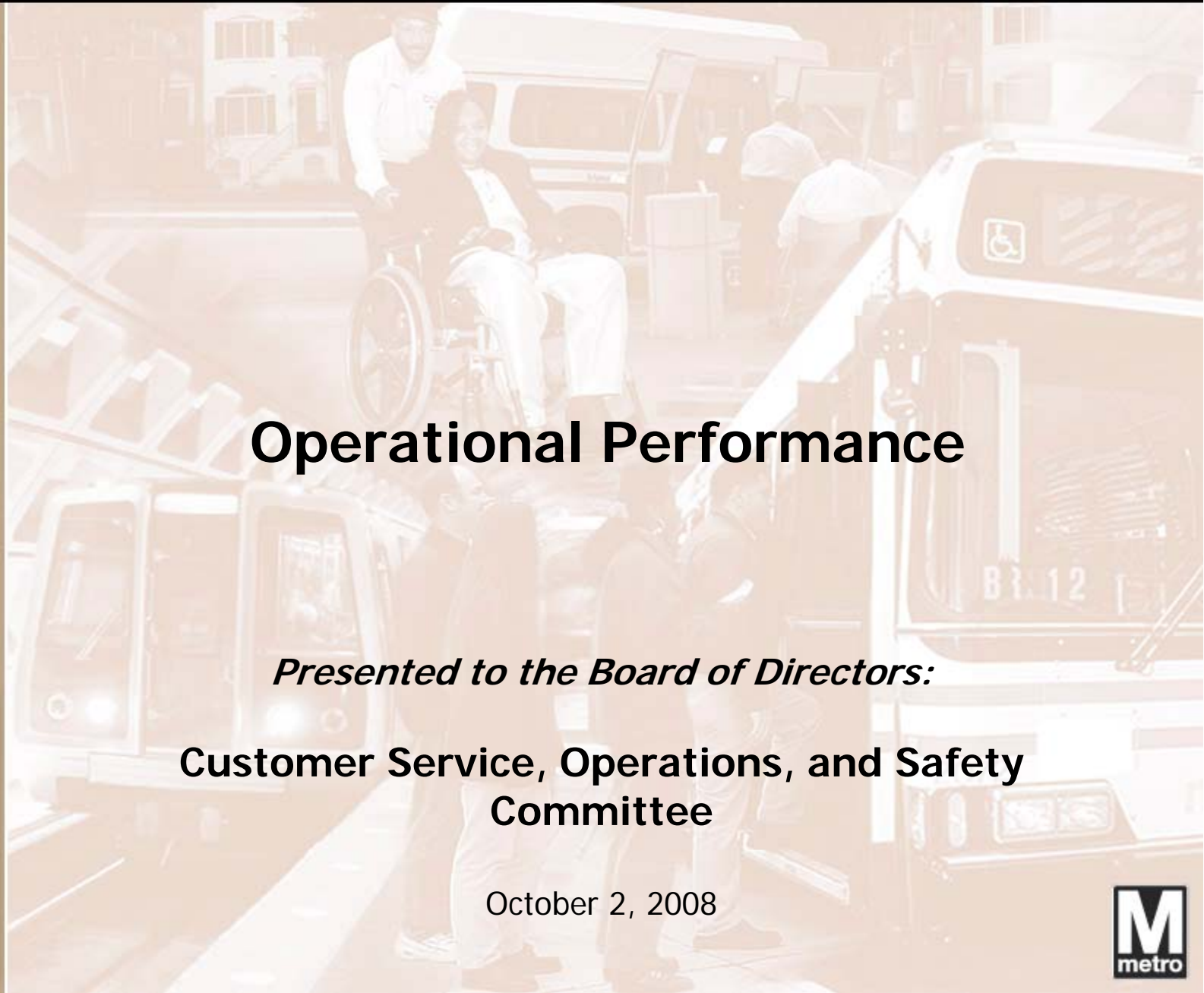
Information contains operational highlights that have occurred during the first 2 months of FY09 in the areas of on-time performance and reliability for Metrorail, Metrobus, MetroAccess and Vertical Transportation. Per Board request rail car door malfunctions resulting in offloads is included.

FUNDING IMPACT:

No impact on funding.

RECOMMENDATION:

None



Operational Performance

Presented to the Board of Directors:

**Customer Service, Operations, and Safety
Committee**

October 2, 2008





Performance Matrix August FY09

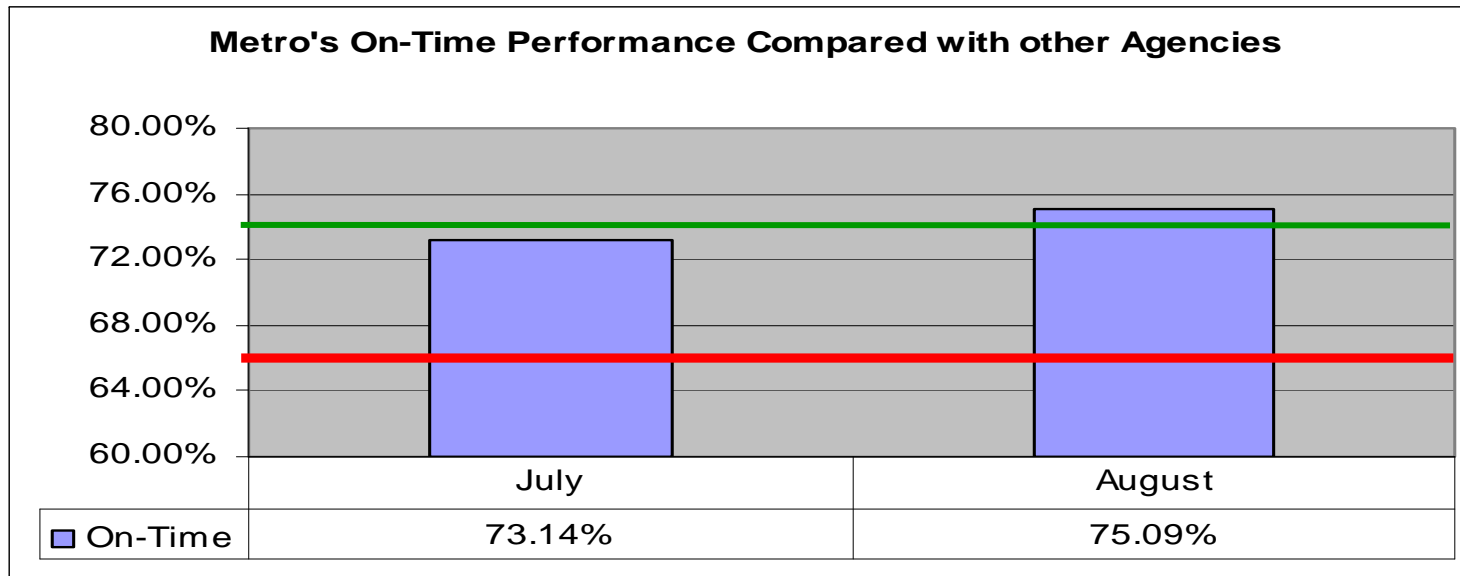
MEASUREMENT	AUG FY09	FY09 Target
BUS		
On-Time Performance (all timepoints)	75.09%	TBD
Mean Distance Between Failures	6,047	6,500
RAIL		
On-Time Performance (end-to-end)	94%	95%
Rail Car Door Malfunctions (Peak)	1.4%	
Rail Car Door Malfunctions (Off-Peak)	2.3%	
Automatic Train Control Major Incidents	0.5%	
Brake Malfunctions Major Incidents	0.5%	
VERTICAL TRANSPORTATION		
Escalator System Availability	92.5%	93%
Elevator System Availability	97.1%	97.5%
METROACCESS		
On-time Performance	92.9%	93.5%
Percent of Missed/Excessively Late Trips (30 mins beyond the scheduled pick-up window)	1.1	1.9



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 timepoint. Parameters used by other agencies have a broad range and use selected time points vs WMATA using all timepoints.

CALCULATION – Difference between scheduled time and actual time arriving at a timepoint based on 2 minutes early and 7 minutes late parameters.



— High Average – 75% — Low Average – 65%

Impact Delays:

- Traffic congestion – 2nd in the nation according to the Texas Transportation Institute
- Incidents (assaults, police activity)

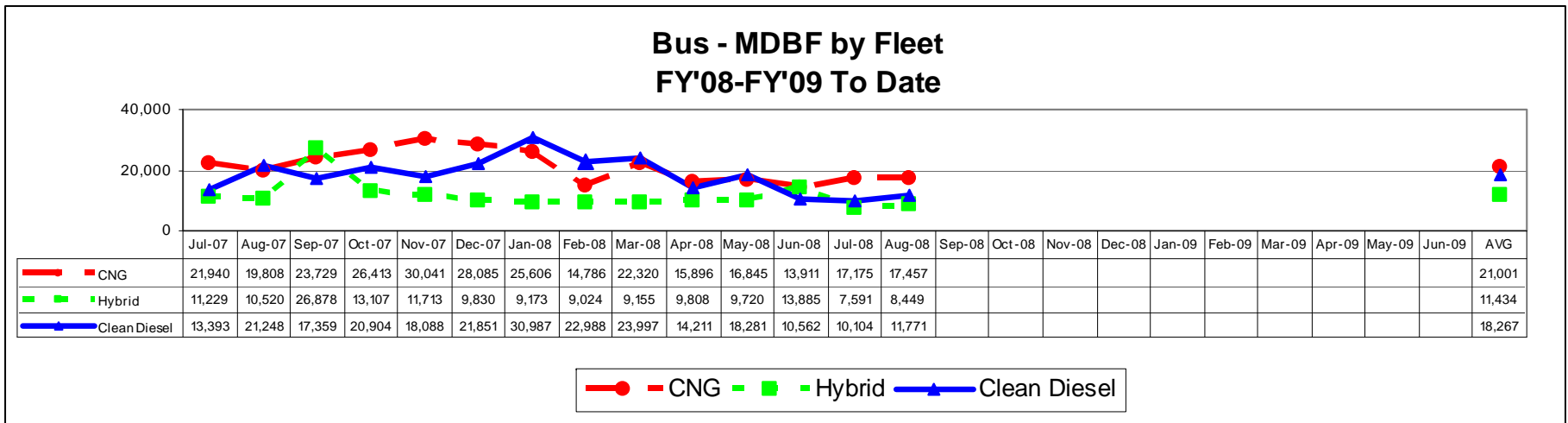
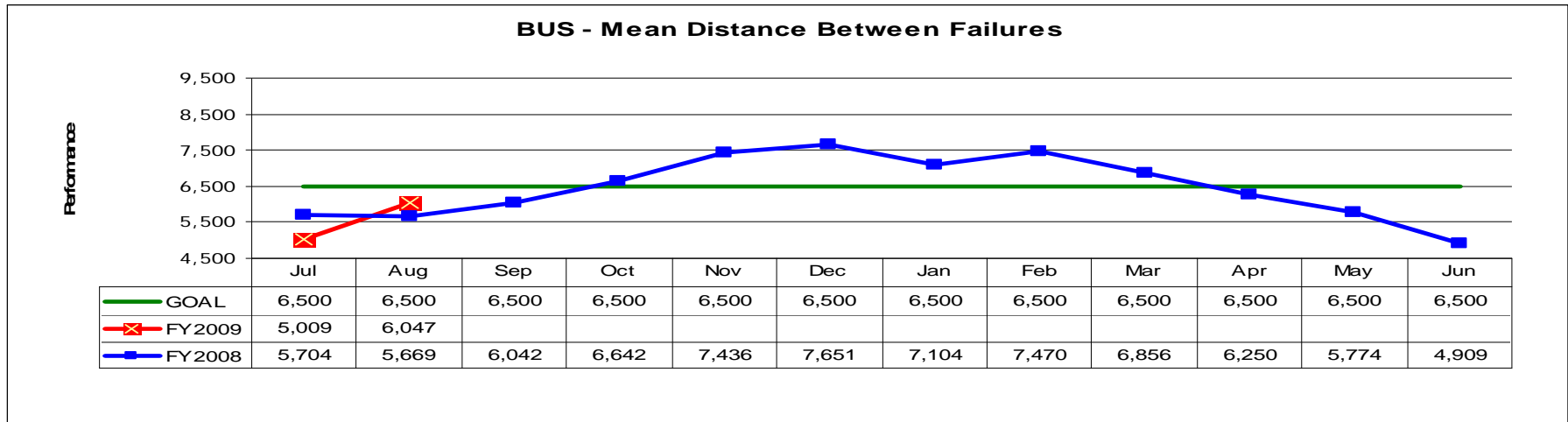


Bus Mean Distance Between Failures

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 – 5,473

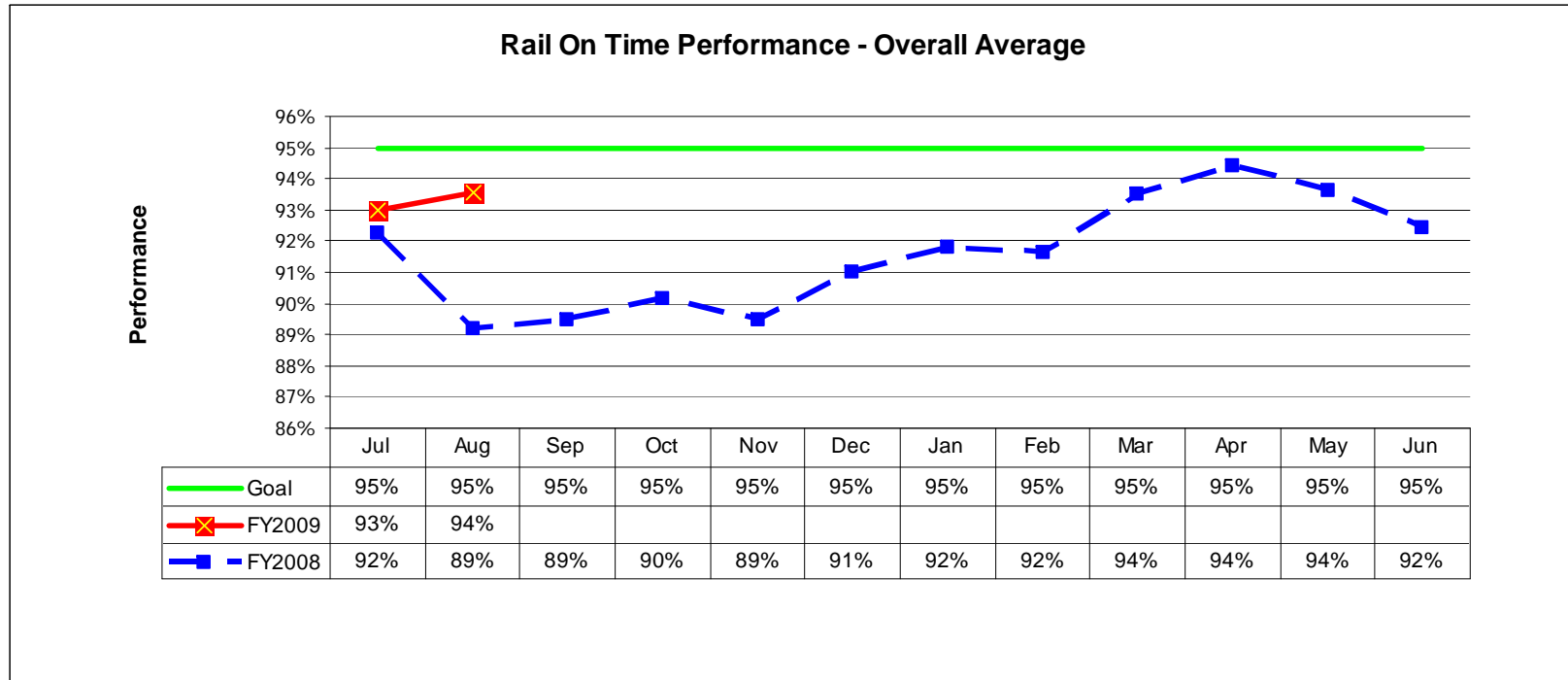




Rail On-Time Performance Summary

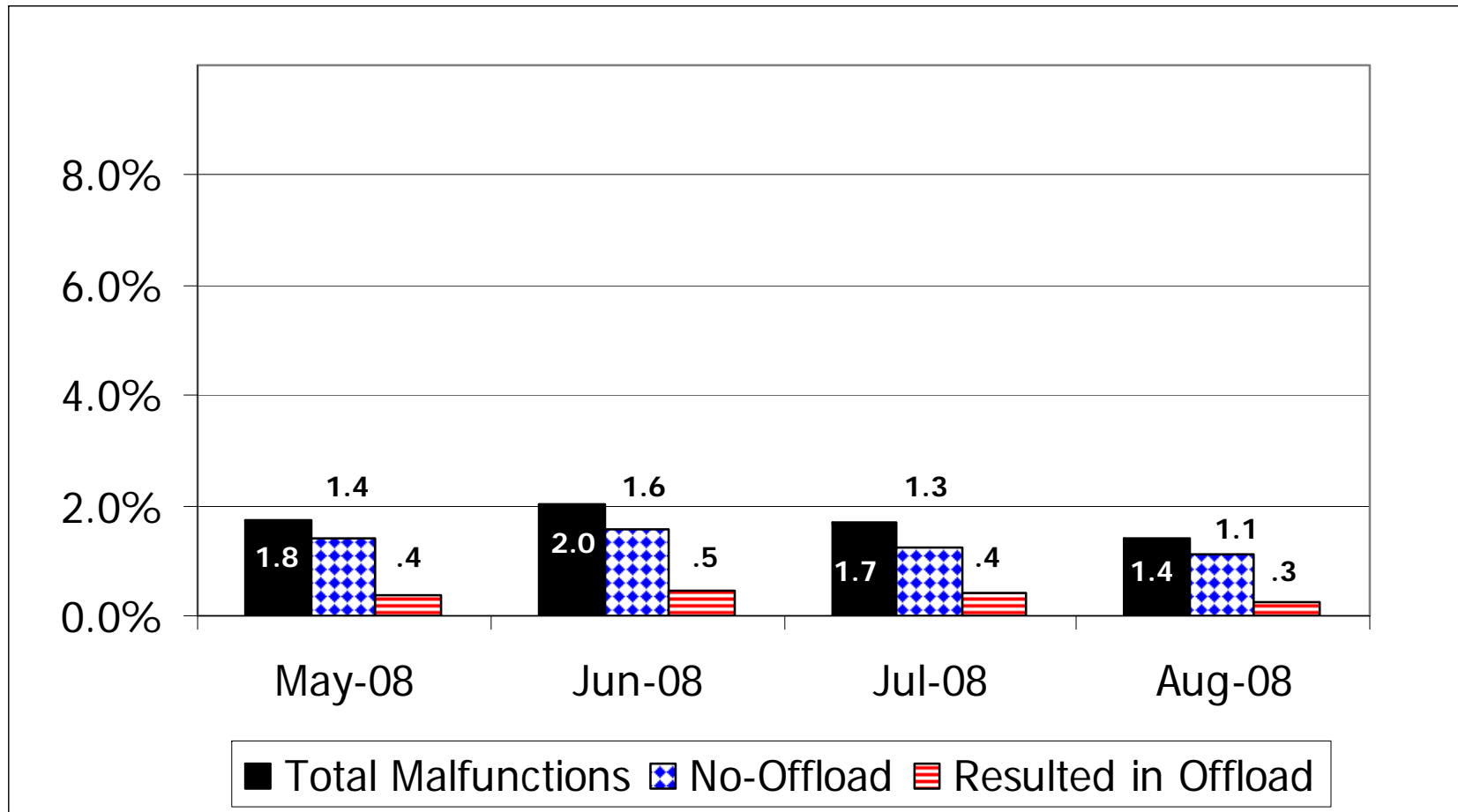
DEFINITION – Measured during peak service (morning, evening), identifying percentage of trains on each line **end-to-end** within a 2 minute headway deviation and measured midday and late night within a 50% headway deviation. This measures how well we are providing service.

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.





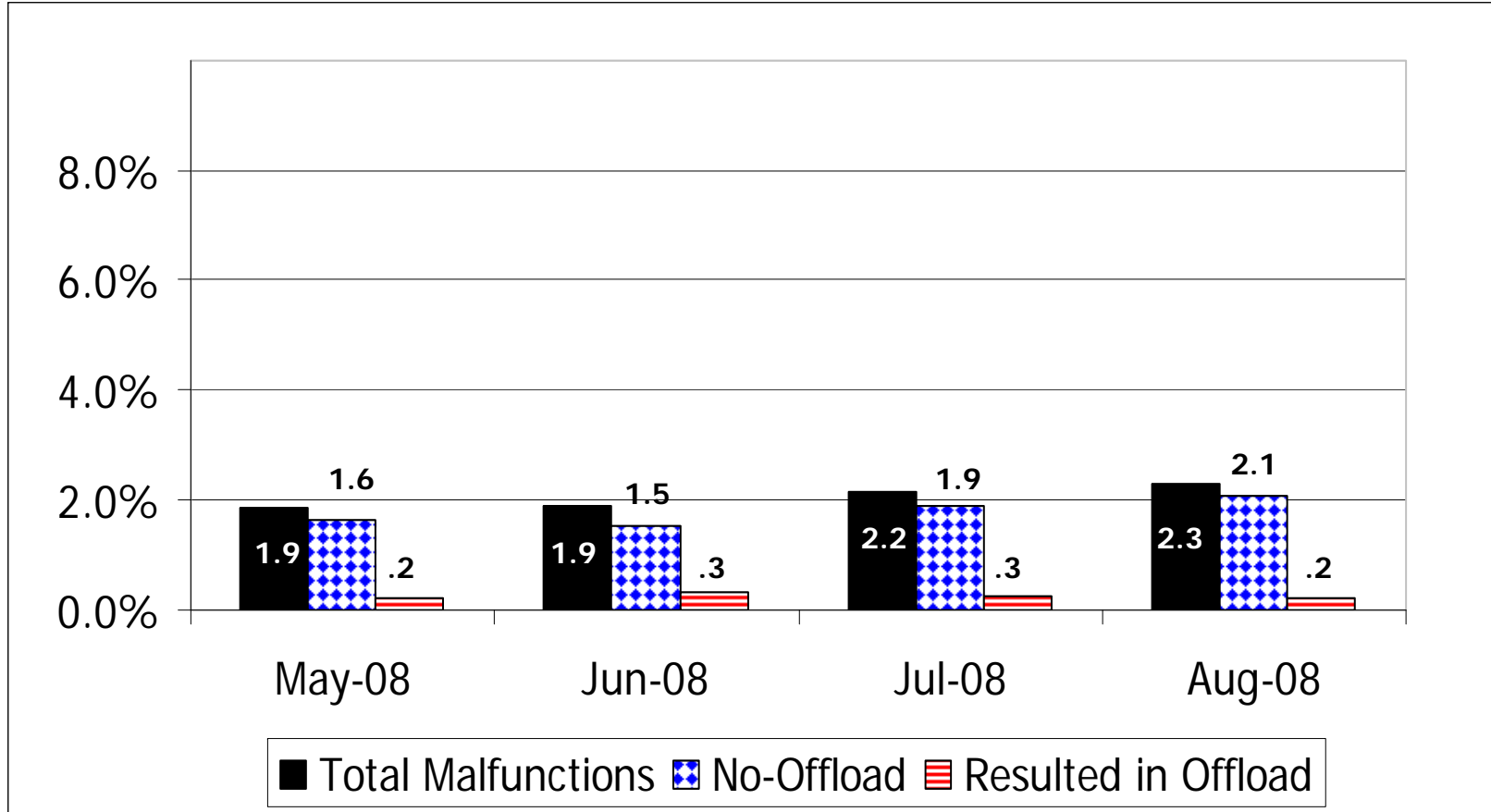
Rail Car Door Malfunctions – Peak Percentage of Trains Operated



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



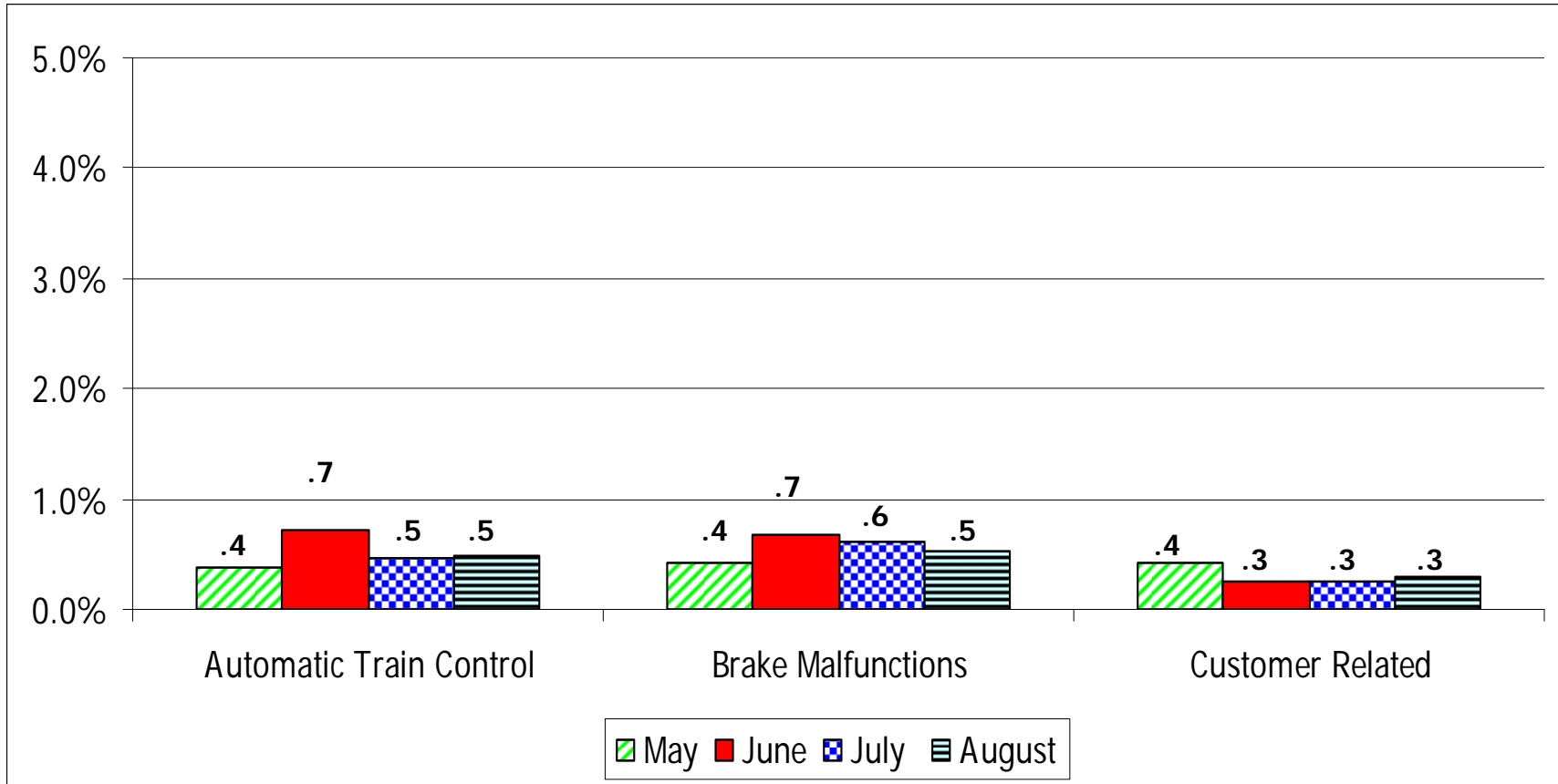
Rail Car Door Malfunctions – Non-Peak Percentage of Trains Operated



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

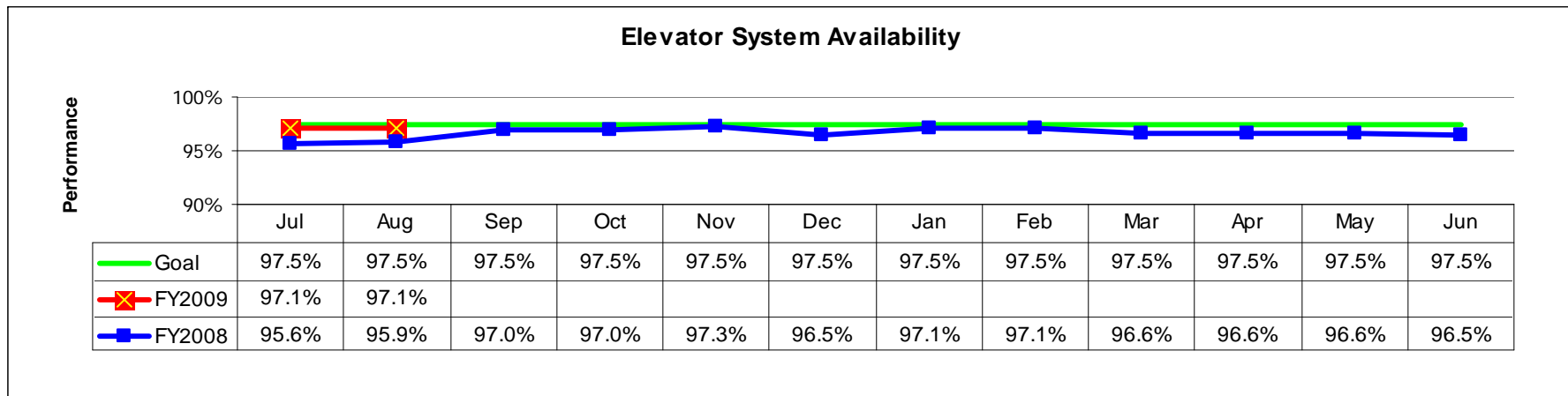
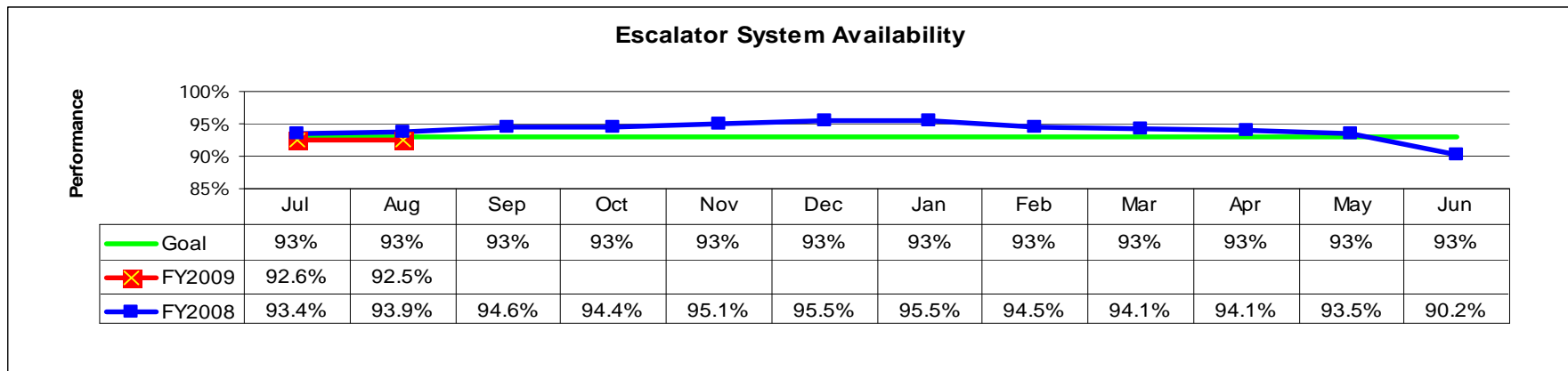
Delays resulting in four minutes or greater



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.



588 escalators and 269 elevators



Escalators June – August Top 12

DEFINITION – Top 12 Escalators with the lowest availability for the past 90 days June 2008 thru August 2008.

CALCULATION – Ranked availability.

Jun -Aug Escalator 3-Month Trend		Sys.	OOS	Hours	Manufacturer	Date In	CIP	Covered	
STATION NAME	UNIT	Avail.	COUNT	OOS		Service	Rehab Date		
DUPONT CIRCLE	#1	25.96%	6	1836.48	APV	17-Jan-77	FUTURE	X	ENTRANCE
ROSSLYN	#7	50.20%	7	842.42	WE100	1-Jul-77	FUTURE	X	PLATFORM
FOGGY BOTTOM	#1	53.82%	4	820.72	O&K	1-Jul-77	FUTURE		ENTRANCE
CAPITOL SOUTH	#1	60.90%	21	601.40	MONT	1-Jul-77	FUTURE		ENTRANCE
WHEATON	#2	64.47%	17	621.49	WE250	22-Sep-90	FUTURE	X	PLATFORM
ARLINGTON CEMETERY	#7	67.84%	37	549.01	WE100	1-Jul-77	FUTURE	X	PLATFORM
GALLERY PLACE	#2	69.88%	52	533.87	WE100	27-Mar-76	14-Mar-01		ENTRANCE
FOGGY BOTTOM	#2	72.43%	32	489.43	O&K	1-Jul-77	FUTURE		ENTRANCE
METRO CENTER	#1	73.20%	28	290.15	O&K	1-Jul-77	FUTURE		ENTRANCE
NAYLOR ROAD	#2	73.69%	17	387.74	FUJITEC	29-Mar-01	FUTURE	X	PLATFORM
WOODLEY PARK	#6	74.57%	23	442.64	WE100	5-Dec-81	14-Jan-03	X	ENTRANCE
VIRGINIA SQUARE	#2	75.02%	10	442.37	WE100	1-Dec-79	FUTURE	X	ENTRANCE



Elevators June – August Top 12

DEFINITION – Top 12 Elevators with the most lowest availability June 2008 thru August 2008.

CALCULATION – Ranked by availability.

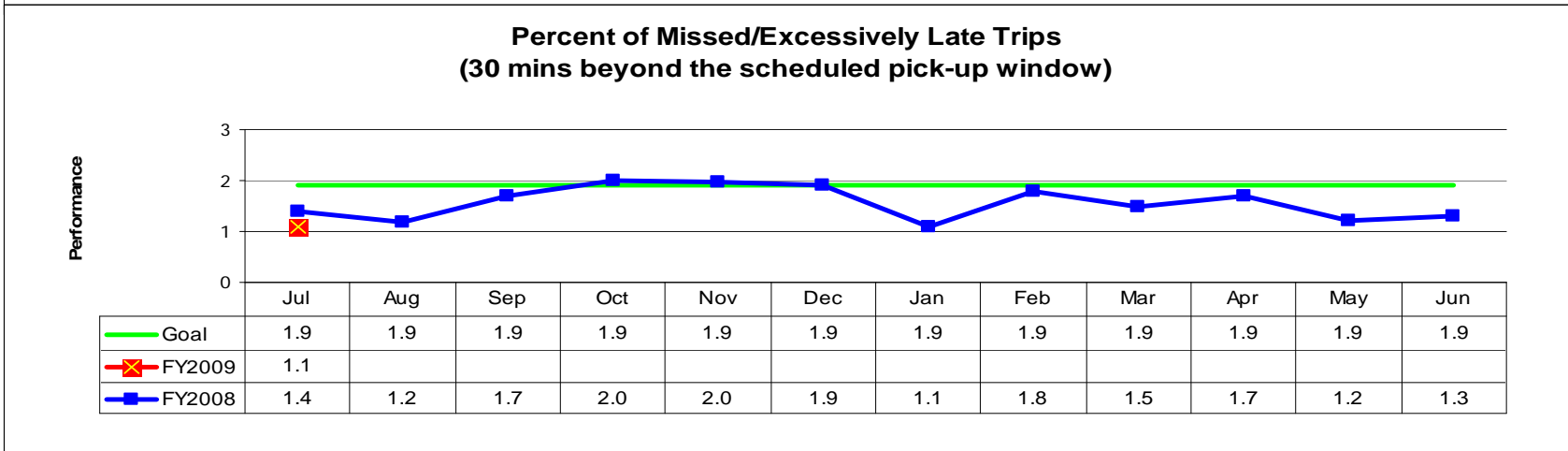
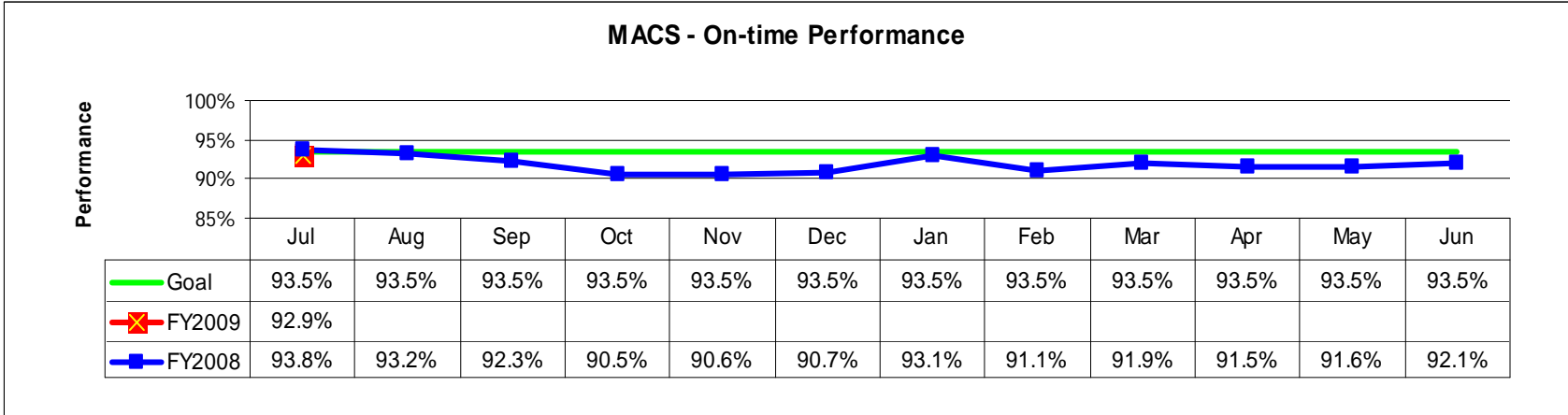
Jun - Aug Elevator 3-Month Trend		Sys.	OOS	Hours	Manufacturer	Date In	CIP
STATION NAME	UNIT	Avail.	COUNT	OOS		Service	Rehab Date
PENTAGON	#1	67.49%	4	577.06	SCHINDLER	3-Oct-02	FUTURE
FRANCONIA/SPRINGFIELD	#4	79.12%	6	370.61	SWIFT	29-Jun-97	FUTURE
VIENNA	#2	80.46%	12	346.67	VA ELEV	7-Jun-86	26-Nov-03
FOREST GLEN	#3	81.84%	6	322.43	DOVER	22-Sep-90	26-May-05
WHEATON	#3	81.84%	2	221.13	CEMCO	22-Sep-90	16-Sep-02
ADDISON ROAD	#2	84.83%	4	269.22	ESCO	22-Nov-80	6-Apr-01
MCPHERSON SQUARE	#1	85.41%	9	258.99	US	1-Jul-77	18-Jun-02
WATERFRONT	#2	86.30%	6	243.14	MOTION CONTROL	13-Jan-01	FUTURE
NEW CARROLTON	#4	87.86%	6	215.41	MC	18-Nov-78	FUTURE
BALLSTON	#4	88.78%	5	199.24	OTIS	1-Dec-79	FUTURE
FRIENDSHIP HEIGHTS	#2	90.05%	6	176.64	WEST	25-Aug-04	26-Nov-03
HUNTINGTON	#2	91.15%	8	157.12	KONE	17-Dec-83	17-Jun-03



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.