Customer Services, Operations, and Safety Committee

Board Information Item IV-A

February 14, 2008

Operational Performance

Washington Metropolitan Area Transportation Authority
Board Action/Information Summary

☐ Action ☒ Information	MEAD Number:	Resolution: ☐ Yes ☒ No

PURPOSE

To provide the Committee monthly operational highlights and system performance trends for FY08.

DESCRIPTION

Information contains operational highlights that have occurred during the first six months of FY08 in the areas of on-time performance, reliability and customer satisfaction for Metrorail, Metrobus and MetroAccess. 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
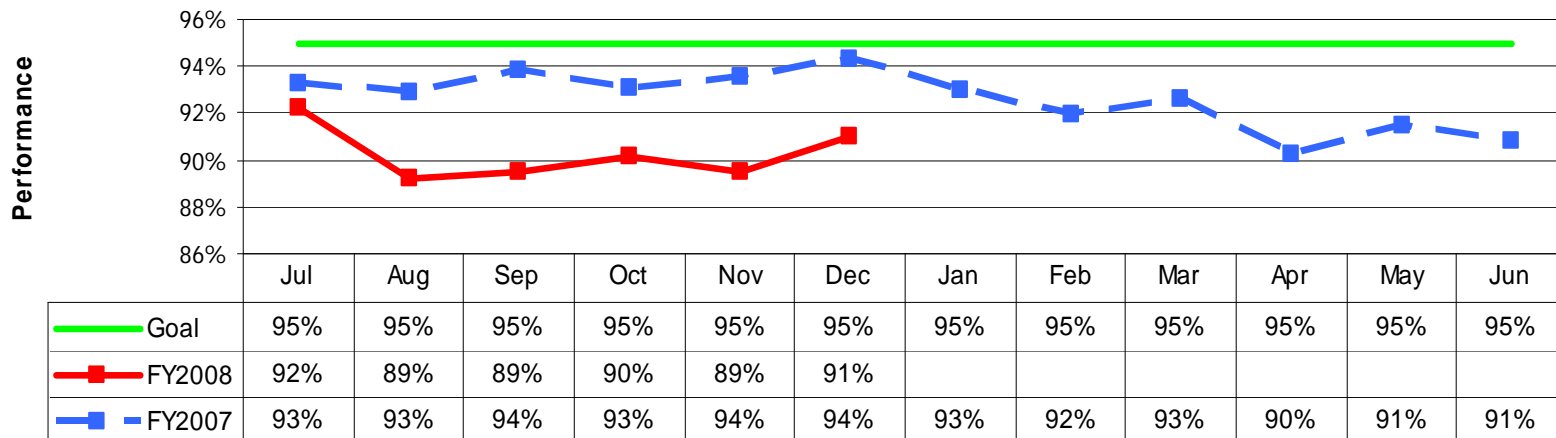
February 14, 2008

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 - Overall Average

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	92%	89%	89%	90%	89%	91%						
FY2007	93%	93%	94%	93%	94%	94%	93%	92%	93%	90%	91%	91%

Rail On Time Performance (Peak Time)

DEFINITION - Measured during peak service (morning) on each line **end to end** - identifies percentage of trains within a 2 minutes headway deviation. This measures how well we are providing service.

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

Rail On Time Performance
Peak AM Service

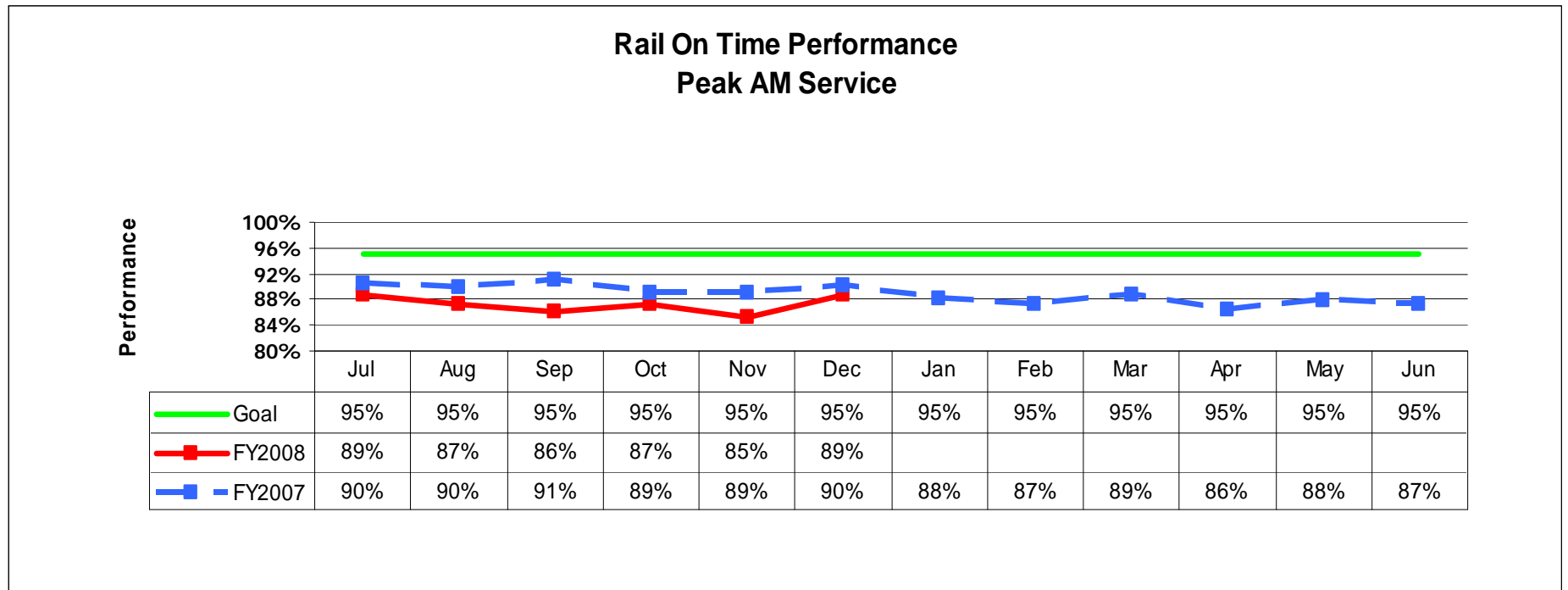|	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	89%	87%	86%	87%	85%	89%						
FY2007	90%	90%	91%	89%	89%	90%	88%	87%	89%	86%	88%	87%

Rail On Time Performance (Peak Time)

DEFINITION - Measured during peak service (evening) on each line **end to end** - identifies percentage of trains within a 2 minutes headway deviation. This measures how well we are providing service.

CALCULATION – (Number of Metrorail station arrivals – number of headways with > 2 minute deviation) / number of Metrorail station arrivals = Metrorail On Time Performance End to End.
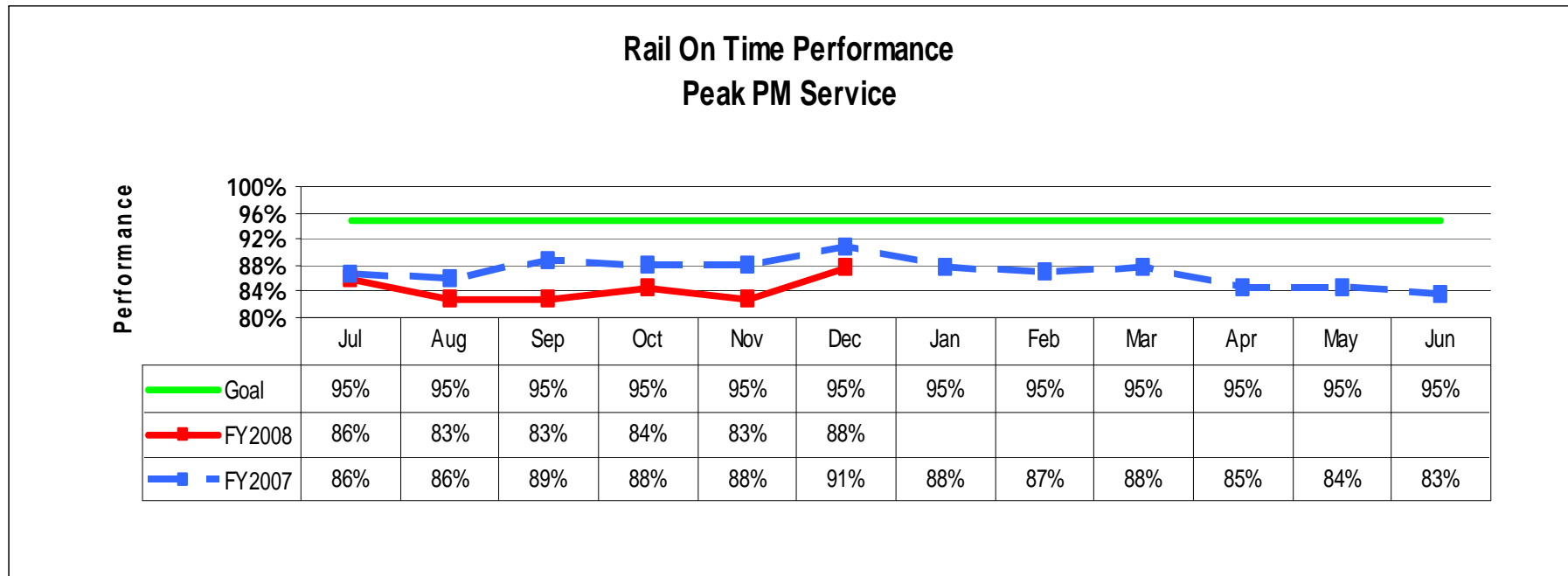
Rail On Time Performance
Peak PM Service

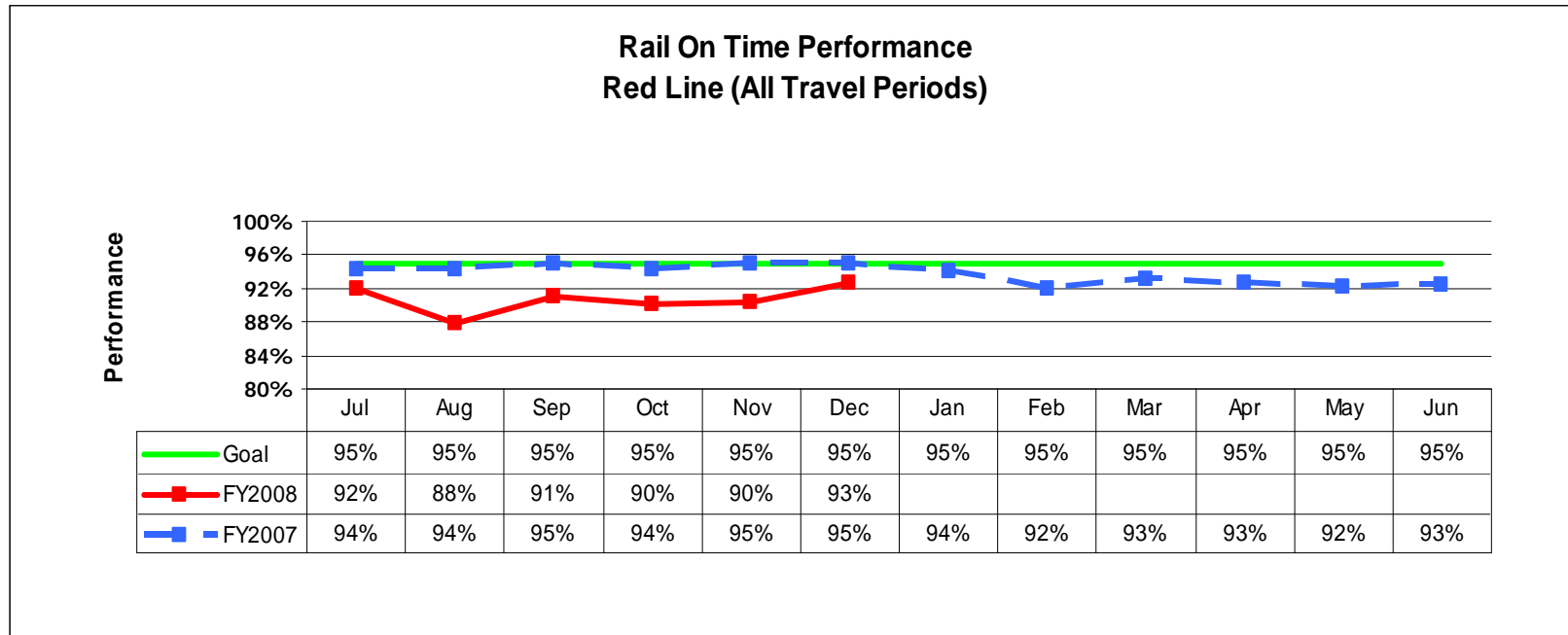|	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	86%	83%	83%	84%	83%	88%						
FY2007	86%	86%	89%	88%	88%	91%	88%	87%	88%	85%	84%	83%

Rail On Time Performance By Line

DEFINITION - Measured during peak service (morning, evening) identifying percentage of trains on the Red 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
Red Line (All Travel Periods)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	92%	88%	91%	90%	90%	93%						
FY2007	94%	94%	95%	94%	95%	95%	94%	92%	93%	93%	92%	93%

Rail On Time Performance By Line

DEFINITION - Measured during peak service (morning, evening) identifying percentage of trains on the Blue 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.
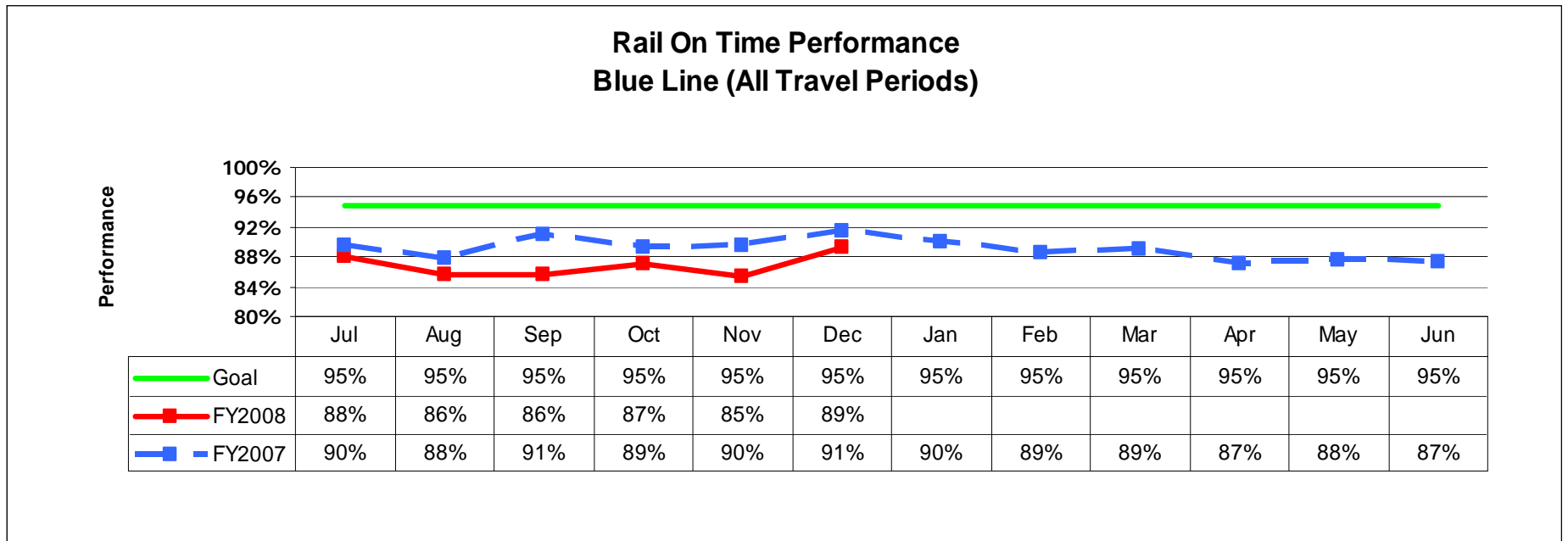
Rail On Time Performance
Blue Line (All Travel Periods)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	88%	86%	86%	87%	85%	89%						
FY2007	90%	88%	91%	89%	90%	91%	90%	89%	89%	87%	88%	87%

Rail On Time Performance By Line

DEFINITION - Measured during peak service (morning, evening) identifying percentage of trains on the Orange 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.
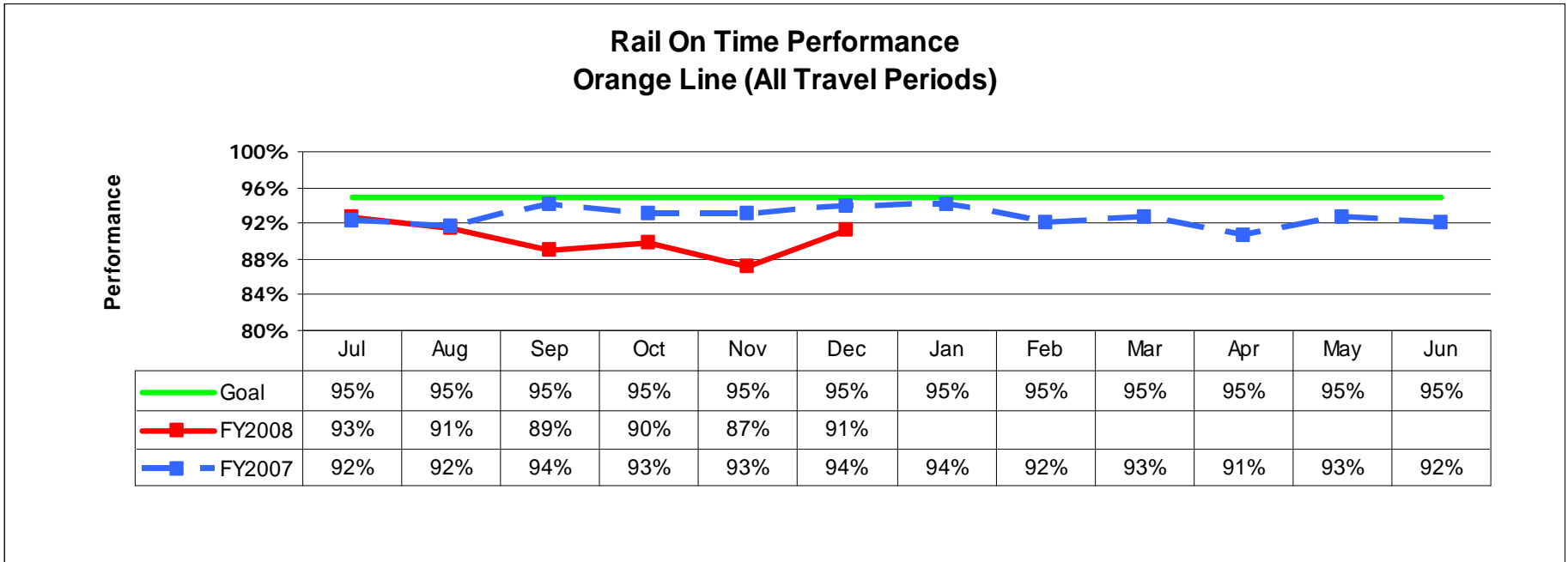
Rail On Time Performance
Orange Line (All Travel Periods)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	93%	91%	89%	90%	87%	91%						
FY2007	92%	92%	94%	93%	93%	94%	94%	92%	93%	91%	93%	92%

Rail On Time Performance By Line

DEFINITION - Measured during peak service (morning, evening) identifying percentage of trains on the Green 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.
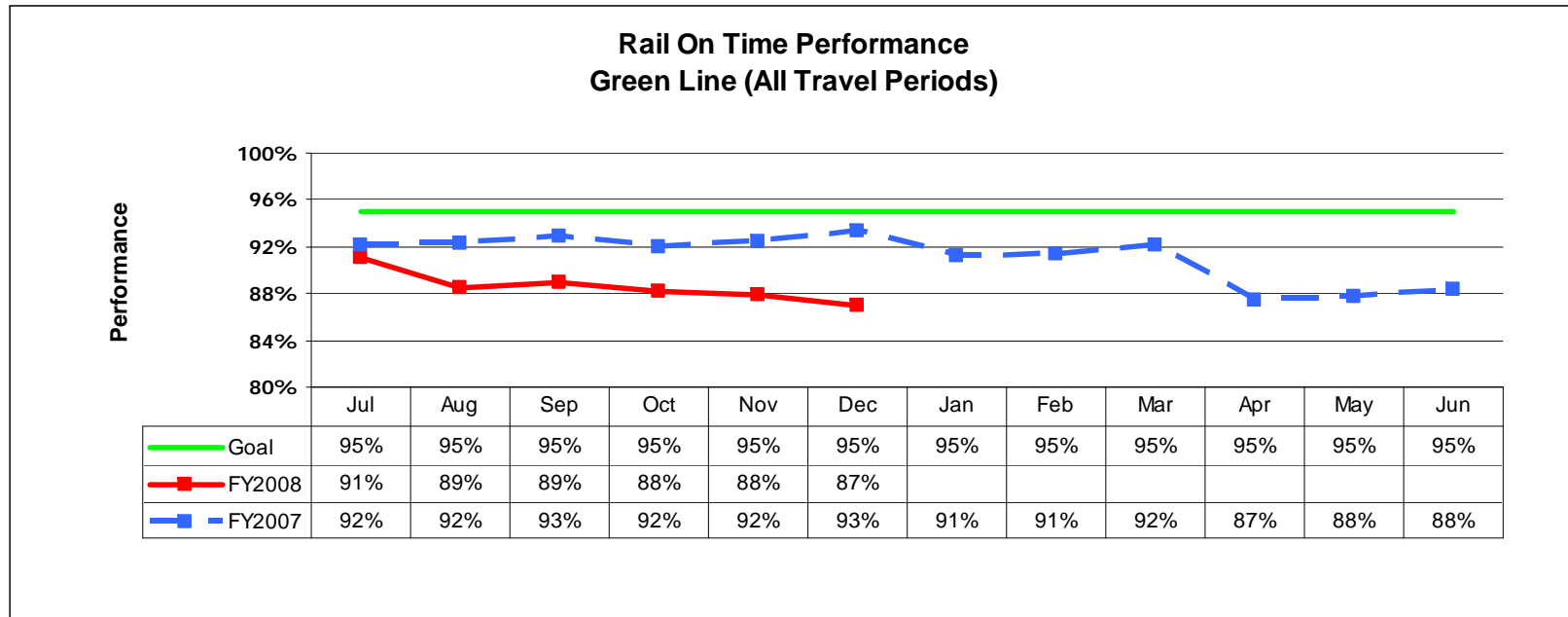
Rail On Time Performance
Green Line (All Travel Periods)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	91%	89%	89%	88%	88%	87%						
FY2007	92%	92%	93%	92%	92%	93%	91%	91%	92%	87%	88%	88%

Rail On Time Performance By Line

DEFINITION - Measured during peak service (morning, evening) identifying percentage of trains on the Yellow 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.
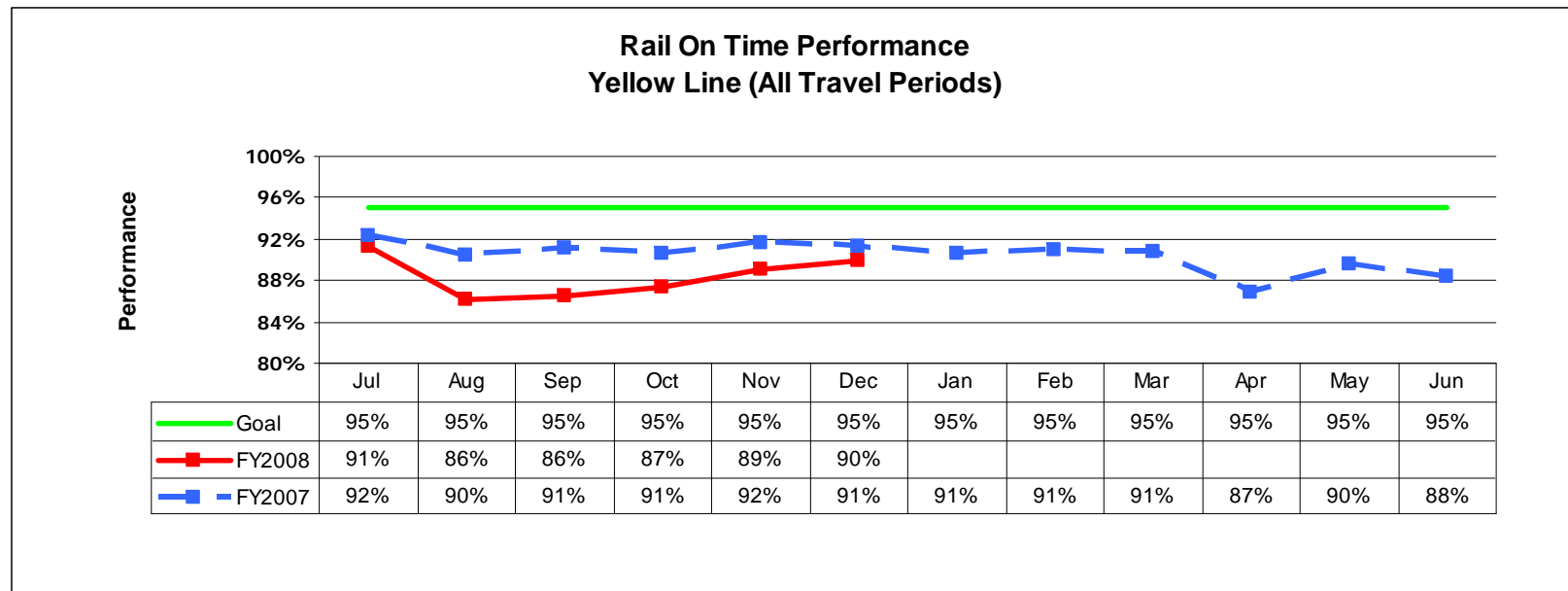
Rail On Time Performance
Yellow Line (All Travel Periods)

|	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
FY2008	91%	86%	86%	87%	89%	90%						
FY2007	92%	90%	91%	91%	92%	91%	91%	91%	91%	87%	90%	88%

Rail Car Fleet Comparison by Failures

DEFINITION –Failures relative to the size of the rail car series for December 2007.

CALCULATION – Total number of failures by rail car series/total number of each particular rail car series.

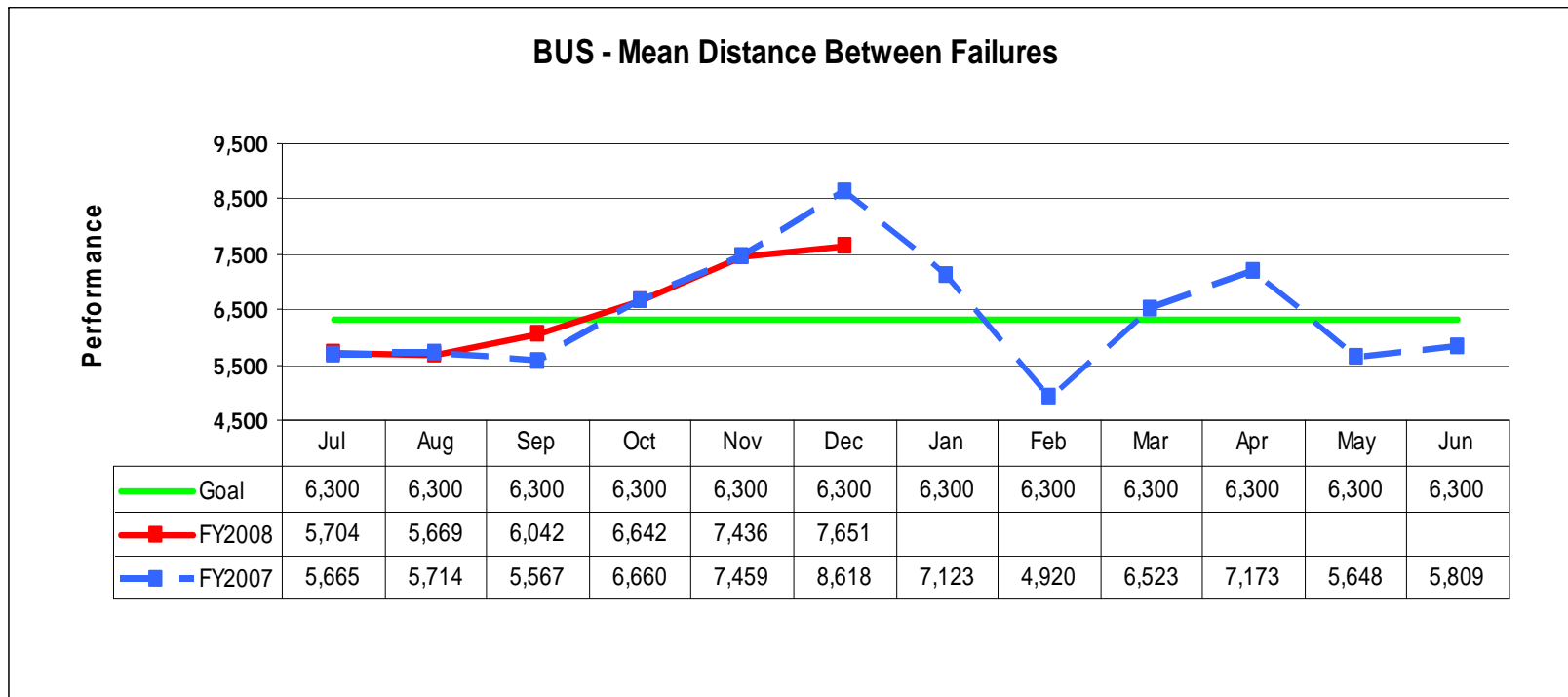**Total Railcar Failures by Subsystem**
December 2007
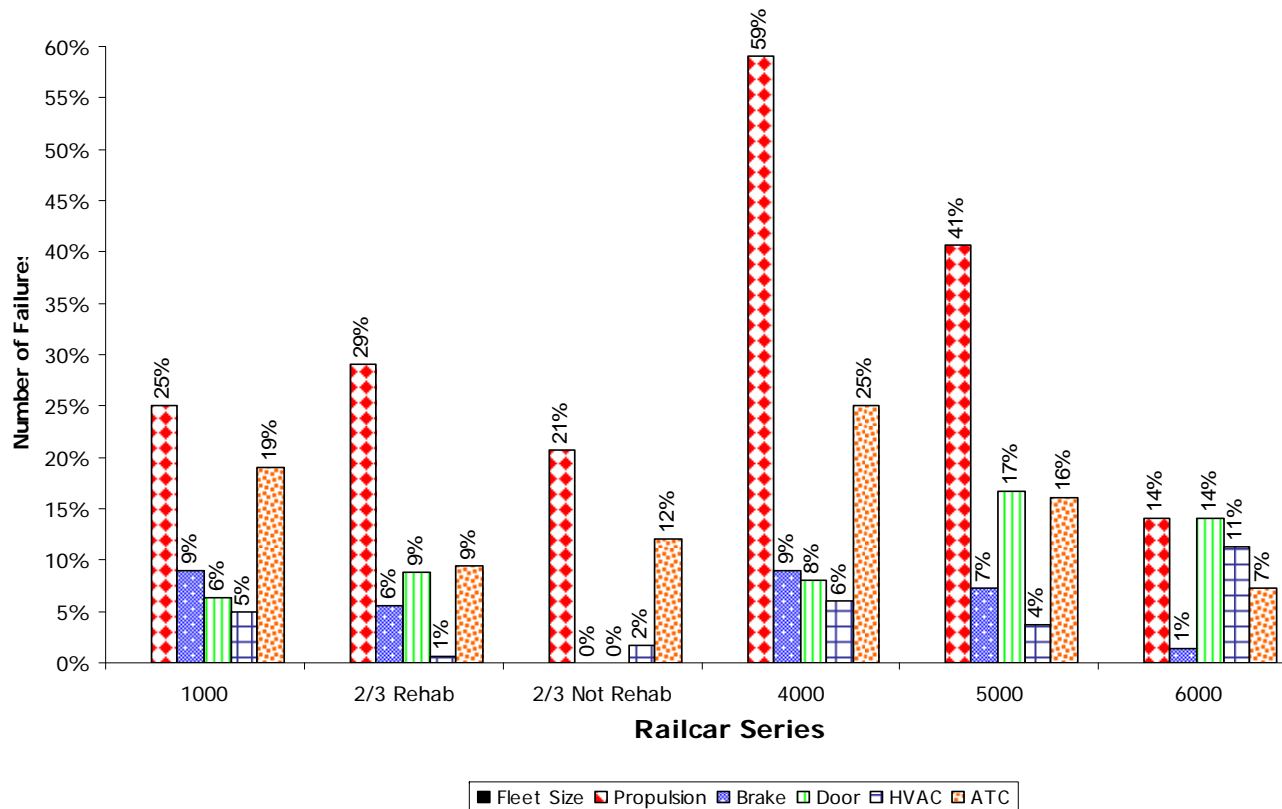
Rail car Series Size: 1000 = 300   **2/3 Rehab** = 306   **2/3 Not Rehab** = 58   **4000** = 100   **5000** = 192   **6000** = 150

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 - Mean Distance Between Failures

Performance

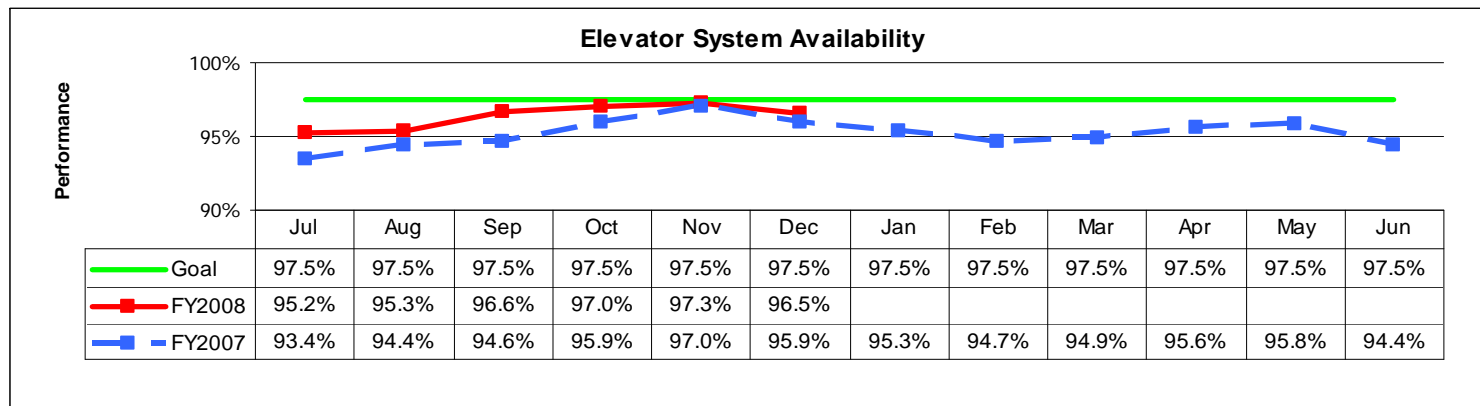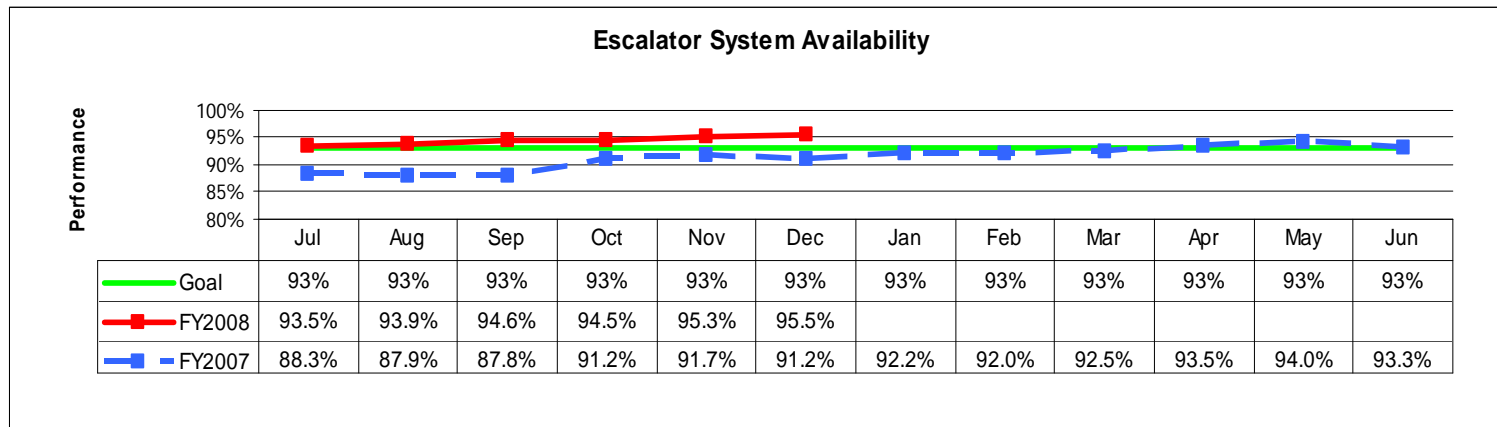|	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300	6,300
FY2008	5,704	5,669	6,042	6,642	7,436	7,651						
FY2007	5,665	5,714	5,567	6,660	7,459	8,618	7,123	4,920	6,523	7,173	5,648	5,809

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.
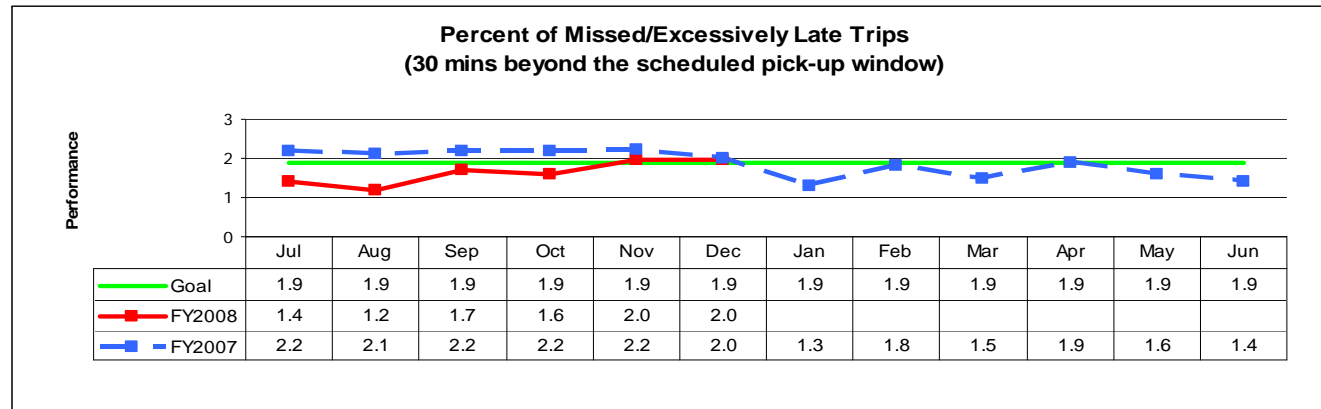
Escalator System Availability

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
FY2008	93.5%	93.9%	94.6%	94.5%	95.3%	95.5%						
FY2007	88.3%	87.9%	87.8%	91.2%	91.7%	91.2%	92.2%	92.0%	92.5%	93.5%	94.0%	93.3%

Elevator System Availability

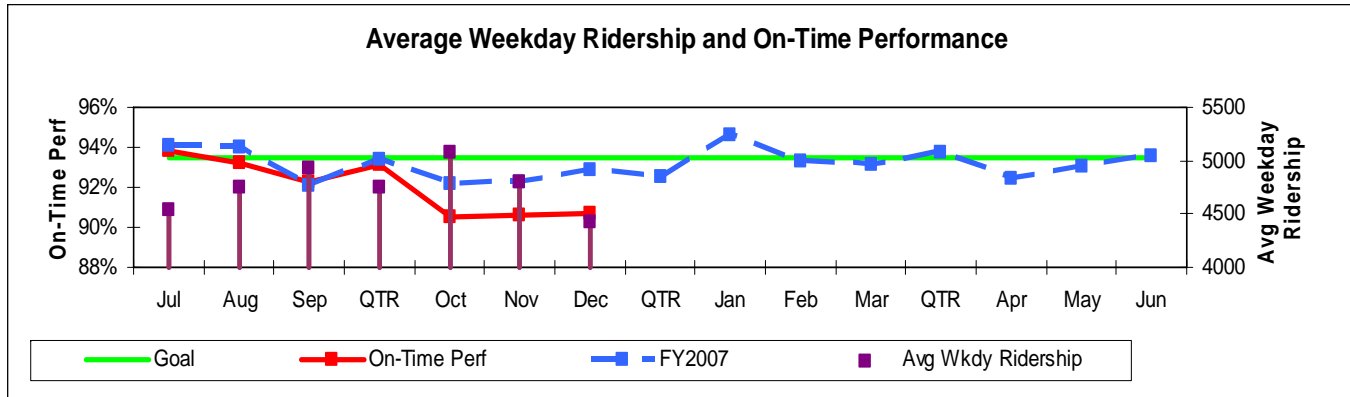|	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Goal	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%
FY2008	95.2%	95.3%	96.6%	97.0%	97.3%	96.5%						
FY2007	93.4%	94.4%	94.6%	95.9%	97.0%	95.9%	95.3%	94.7%	94.9%	95.6%	95.8%	94.4%

MetroAccess

DEFINITION - Percentage of on time pickup within a 30 minute window (15 minutes before or after scheduled pickup time).
CALCULATION - (Completed trips - number of trips with a 30 minute or > deviation) / number of completed trips = MetroAccess On Time Performance.

Average Weekday Ridership and On-Time Performance

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

	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
FY2008	1.4	1.2	1.7	1.6	2.0	2.0						
FY2007	2.2	2.1	2.2	2.2	2.2	2.0	1.3	1.8	1.5	1.9	1.6	1.4

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.