

# Vital Signs Report

*A Scorecard of Metro's*

*Key Performance Indicators (KPI)*



**Office of Performance**

Chief Performance Officer

June 2010

*Page Left Intentionally Blank*

# Table of Contents

---

- Strategic Framework .....4
- Metro Facts at a Glance.....5
- KPI’s that Score How Well Metro is Performing:
  - Bus On-Time Performance .....7
  - Bus Fleet Reliability .....8
  - Rail On-Time Performance by Line.....9
  - MetroAccess On-Time Performance ..... 10
  - Escalator System Availability ..... 11
  - Elevator System Availability..... 12
  - Customer Injury Rate ..... 13
  - Metro Access Passenger Injury Rate ..... 14
  - Employee Injury Rate..... 15
  - Crime Rate ..... 16
  - Arrests, Citations and Summonses..... 17
- Other Performance Measures:
  - General Manager 6-Month Action Plan ..... 18
  - Jurisdictional Measures ..... 19
- Definitions.....21
- Performance Data .....23

**Strategic Framework Overview** There are five strategic goals that provide a framework to quantify and measure how well Metro is performing. Each of the goals have underlying objectives intended to guide all employees in the execution of their duties. This report is a scorecard of key performance indicators tracking individual measures, ratios, rates and statistics.

*5 Goals*

- |       |  |
|-------|--|
| Goals | <ol style="list-style-type: none"> <li>1. <u>Create</u> a Safer Organization</li> <li>2. <u>Deliver</u> Quality Service</li> <li>3. <u>Use</u> Every Resource Wisely</li> <li>4. <u>Retain, Attract</u> and <u>Reward</u> the Best and the Brightest</li> <li>5. <u>Maintain</u> and <u>Enhance</u> Metro's Image</li> </ol> |
|-------|--|

*12 Objectives*

Goal	Objective
1	1.1 <u>Improve</u> customer and employee safety and security ("prevention")
	1.2 <u>Strengthen</u> Metro's safety and security response ("reaction")
2	2.1 <u>Improve</u> service reliability
	2.2 <u>Increase</u> service and capacity to relieve overcrowding and meet future demand
	2.3 <u>Maximize</u> rider satisfaction through convenient, comfortable services and facilities that are in good condition and easy to navigate
	2.4 <u>Enhance</u> mobility by improving access to and linkages between transportation options
3	3.1 <u>Manage</u> resources efficiently
	3.2 <u>Target</u> investments that reduce cost or increase revenue
4	4.1 <u>Support</u> diverse workforce development through management training and provision of state of the art facilities, vehicles, systems and equipment
5	5.1 <u>Enhance</u> communication with customers, employees, Union leadership, Board, media and other stakeholders
	5.2 <u>Promote</u> the region's economy and livable communities
	5.3 <u>Use</u> natural resources efficiently and reduce environmental impacts

## Metro Facts at a Glance

---

### Metro Service Area

Size	1,500 square miles
Population	3.5 million

### Fiscal Year 2009 Actual Ridership

Bus	134 million
Rail	223 million
MetroAccess	2 million
Total	359 million

### Fiscal Year 2010 Budget

Operating	\$1.4 billion
Capital	\$0.7 billion
Total	\$2.1 billion

### Metrobus General Information

Size	12,000 bus stops
Routes	320
Fiscal Year 2010 Operating Budget	\$506.1 million
Average Weekday Boardings	409,815 (April 2010)
Highest Ridership Route in 2009	30-31-32-34-35-36-37-39 – Pennsylvania Ave. (16,330 average weekday ridership)
Metrobus Fare	\$1.45 cash, \$1.35 SmarTrip®
Express Bus Fare	\$3.20 cash, \$3.10 SmarTrip®
Bus Fleet*	1,482
Buses in Peak Service*	1,242
Bus Fleet by Type*	Compressed Natural Gas (459), Electric Hybrid (95), Clean Diesel (116) and All Other (812)
Bus Garages	9 – 3 in DC, 3 in MD and 3 in VA

*\*As of June 2009*

## Metrorail General Information

Fiscal Year 2010 Operating Budget	\$782.8 million
Average Weekday Passenger Trips	802,414 (April 2010)
Highest Ridership Day	Obama Inauguration on Jan. 20, 2009 ( 1.1 million)
Busiest Station in 2009	Union Station (34,465 average weekday boardings)
Regular fare (Weekdays 5-9:30 a.m., 3-7 p.m. and weekends 2 a.m. to closing)	\$1.75 Minimum; \$4.60 Maximum
Reduced fare (All other times)	\$1.45 Minimum; \$1.95 Mid-Range; \$2.45 Maximum
1 <sup>st</sup> Segment Opening/Year	Farragut North-Rhode Island Avenue (1976)
Newest Stations/Year	Morgan Boulevard, New York Avenue, and Largo Town Center (2004)
Rail Cars in Revenue Service**	1,118
Rail Cars in Peak Service**	850
Rail Cars by Series**	1000 Series (288), 2000/3000 (362), 4000 (100), 5000 (184) and 6000 (184)
Lines	5 – Blue, Green, Orange, Red and Yellow
Station Escalators	588
Station Elevators	236
Longest Escalator	Wheaton station (230 feet)
Deepest Station	Forest Glen (21 stories / 196 feet)
Rail Yards	9 – 1 in DC, 6 in MD and 2 in VA

*\*\*As of April 2010*

## MetroAccess General Information

Fiscal Year 2010 Operating Budget	\$85.6 million
Average Weekday Trips	8,914 (March 2010)
Paratransit Vehicle Fleet	500
Contract Provider	MV Transportation

**KPI: Bus On-Time Performance**

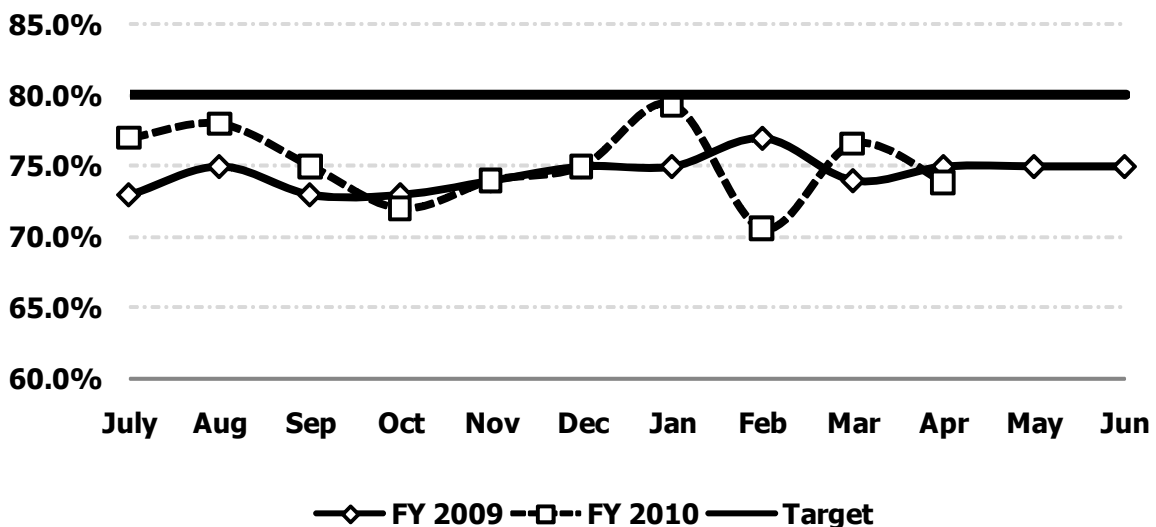
**Objective 2.1 Improve Service Reliability**

**Reason to Track:** This indicator illustrates how closely Metrobus adheres to published route schedules on a system-wide basis. Factors which affect On-Time Performance (OTP) are traffic congestion, inclement weather, scheduling, vehicle reliability, and operational behavior. Bus On-Time Performance is essential to delivering quality service to the customer.

**Why Did Performance Change?**

April's OTP declined as a result of increased late arrivals. Late arrivals increased by 3.0% when compared to the prior month; however OTP is consistent with prior months - excluding January and February. This change is attributed to traffic congestion and crowding due to the Cherry Blossom Festival. April's early arrivals of 6.7% has improved when compared to the fiscal year average of 7.6%.

### Bus On-Time Performance



**Actions to Improve Performance**

- A cross departmental Metro team is analyzing all factors contributing to buses arriving early. Recommended actions for minimizing early arrivals will be presented to the AGM-BUS.
- Increase training for front-line bus employees and supervisors.

**Conclusion:** Bus OTP recovered from the austere weather conditions of February and is in line with prior year and prior months activity.

**KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures)**

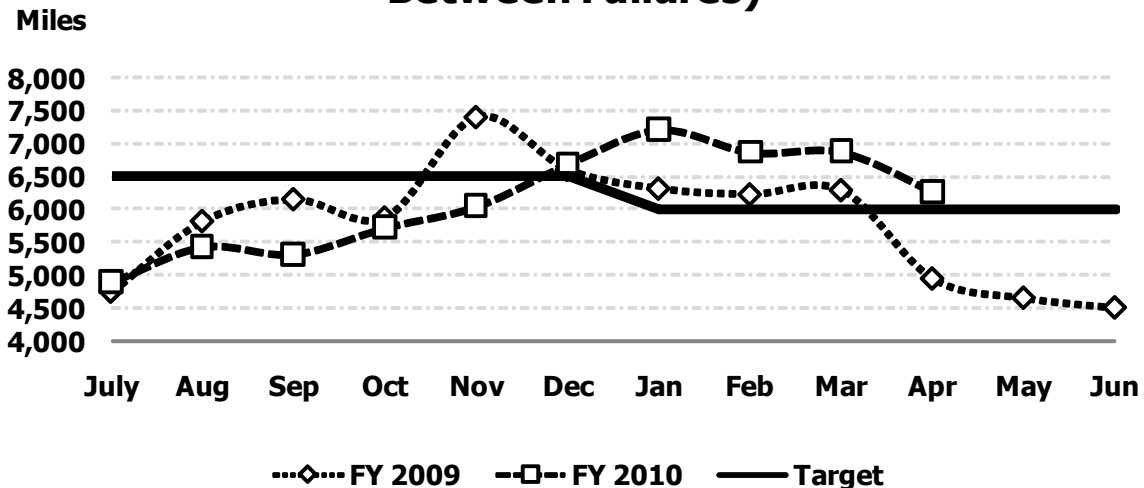
**Objective 2.1 Improve Service Reliability**

**Reason to Track:** One source of reliability problems are vehicle breakdowns that cause buses to go out of service. This key performance indicator communicates service reliability and is used to monitor trends in vehicle breakdowns and to plan corrective actions. Factors that influence Mean Distance Between Failures (MDBF) are the quality of a maintenance program, vehicle age, original vehicle quality, and road conditions. For this measure higher miles are better.

**Why Did Performance Change?**

- Bus maintenance employees beat their MDBF target for the fifth consecutive month, performing at an average MDBF of approximately 6,800 miles.
- April's MDBF decreased, however it is still better than the MDBF target.
- Most failures are attributed to: engine, air systems, transmissions, brakes, and warning light interruptions.

### Bus Fleet Reliability (Bus Mean Distance Between Failures)



**Actions to Improve Performance**

- Complete the implementation of the new Fleetwatch Program by mid FY 11. Fleetwatch is a bus fluid management system, which also improves Metro's ability to accurately track bus miles traveled.
- Standard operating procedures are constantly being reviewed to include industry best practices.

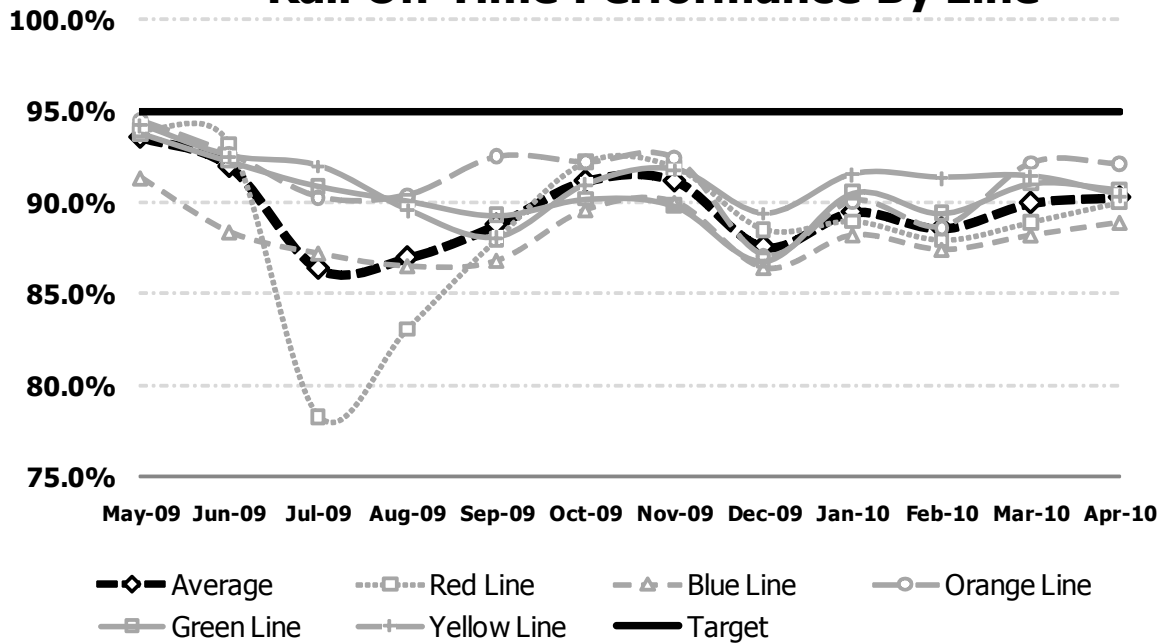
**Conclusion:** The FY 2010 MDBF has continued to out perform the target over the last four months. The MDBF target decreased from 6,500 to 6,000 to address the delayed delivery of new buses. These buses were not placed into service until late March due to acceptance testing taking longer than expected. The MDBF target will be re-evaluated and will increase after the delivery of all the new buses, to be completed by September 2010.

**Reason to Track:** On-Time Performance measures the adherence to headways during peak and off-peak periods. A headway is the time between trains. Factors that can affect on-time performance include track conditions resulting in speed restrictions, the number of passengers accessing the system at once, dwell time at stations, and delays such as sick passengers or offloads. On-time performance, along with other measures, is a component of customer satisfaction.

**Why Did Performance Change?**

- Completion of maintenance work allowed the removal of speed restrictions on the Red Line in March improving the throughput of trains in April on the Red Line.
- Orange Line and Blue Line continues to perform well due to additional afternoon trains on the Orange Line to assist in managing service demand.
- All lines in the rail system continue to operate in manual mode, which reduces on on-time performance.

**Rail On-Time Performance By Line**



**Actions to Improve Performance**

- New schedule adjustment on the Red Line to fix running time.
- Upon resolution of the National Transportation Safety Board (NTSB), Federal Transit Administration (FTA) and Tri-state Oversight Committee (TOC) reports and following installation of a real-time notification system, return rail system to automatic train control operations.
- Implement new track inspection program in concentrated zones to increase safety and improve communications during midday hours. This approach is also expected to improve the maintenance of headways throughout the day.
- Continue to evaluate the scheduling of track and car maintenance activities to improve service availability.

**Conclusion:** System-wide Metrorail service reliability has continued to show improvement as major repair work has been completed. Maintenance of the rail system will continue to be needed to ensure safe and reliable service for Metrorail customers.

**KPI: MetroAccess On-Time Performance**

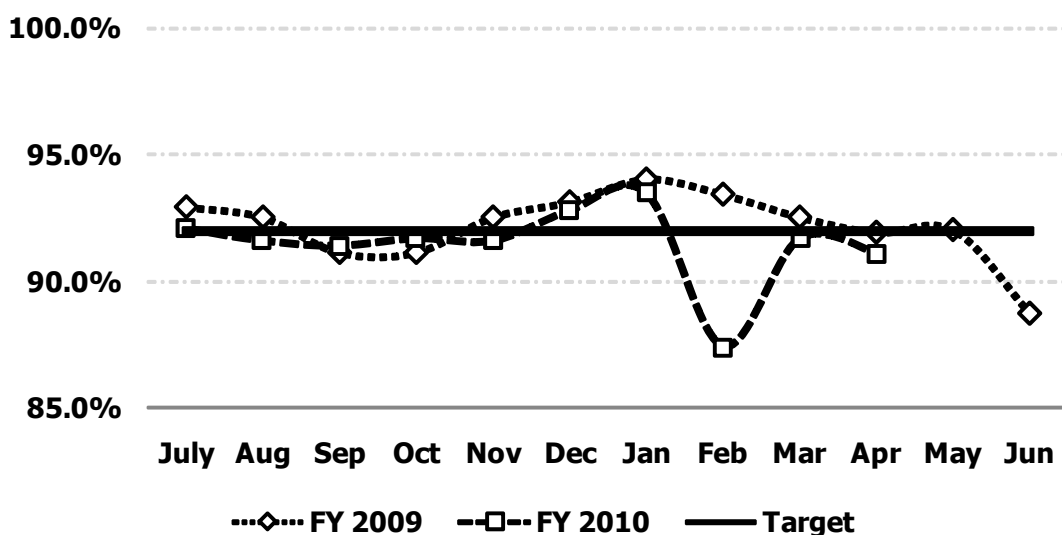
**Objective 2.1 Improve Service Reliability**

**Reason to Track:** On-time performance (OTP) is a critical measure of MetroAccess service reliability and customer expectations. Adhering to the customer's scheduled pick-up window is comparable to Metrobus adhering to scheduled timetables. Factors which affect on-time performance are traffic congestion, inclement weather, scheduling, vehicle reliability and operational behavior. MetroAccess on-time performance is essential to delivering quality service to customers.

**Why Did Performance Change?**

- On-time performance has been holding relatively steady around 92% with the exception of February, where the snow significantly impacted service delivery on secondary roads. Additional impacts to OTP are due to exceedingly high ridership and migration of customers from social service agencies reducing and eliminating their transportation programs.

### MetroAccess On-Time Performance



**Actions to Improve Performance**

- MetroAccess staff is increasing its communication with customers about using fixed route service for part of their trip.
- Continue to adjust schedules to improve efficiency while maintaining on-time performance within target range.
- Reevaluate the Metro Access Fleet Plan to allow vehicles to remain in service longer, adding capacity to the system.

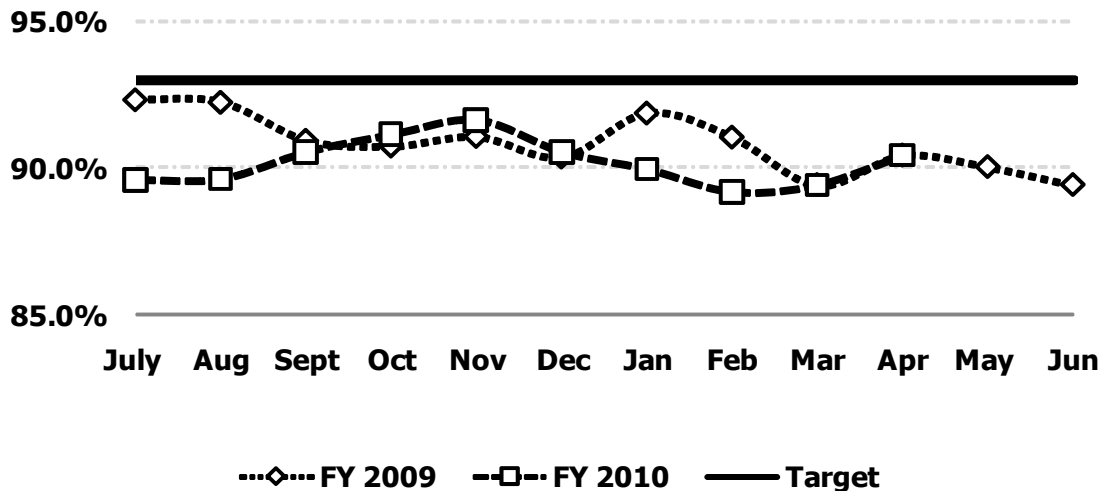
**Conclusion:** MetroAccess delivered 91.1% of trips on-time for April 2010, nearing its target of 92.0%. MetroAccess on-time performance shows consistent delivery of service within customer expectations.

**Reason to Track:** Riders access Metrorail stations via escalators to the train platform. An out-of-service escalator requires walking up or down a stopped escalator, which can add to the rider's total travel time and may make stations inaccessible to some customers. Escalator availability is a key component of customer satisfaction with Metrorail service.

**Why Did Performance Change?**

- Preventive maintenance activities have increased, resulting in fewer mechanical failures and extending escalator lifecycles.
- Staff is analyzing work orders to identify trends in mechanical problems in order to identify the root cause and focus resources appropriately. This results in fewer instances of units going out of service with chronic problems.

### Escalator System Availability



**Actions to Improve Performance**

- Initiate assessment by outside experts of maintenance and repair programs to assess efficiency and effectiveness and provide recommendations for improvements, by September 2010.
- Consolidate supervision to improve accountability and creation of rapid response maintenance teams.
- Continue to increase the number of preventive maintenance inspections in order to reduce unscheduled maintenance activities.

**Conclusion:** Escalator system availability improved from March and is performing at the same level as April 2009. Metrorail escalators were available for 284,953 hours in April (equivalent to an average of 528 out of 588 escalators in operation systemwide).

**KPI: Elevator System Availability**

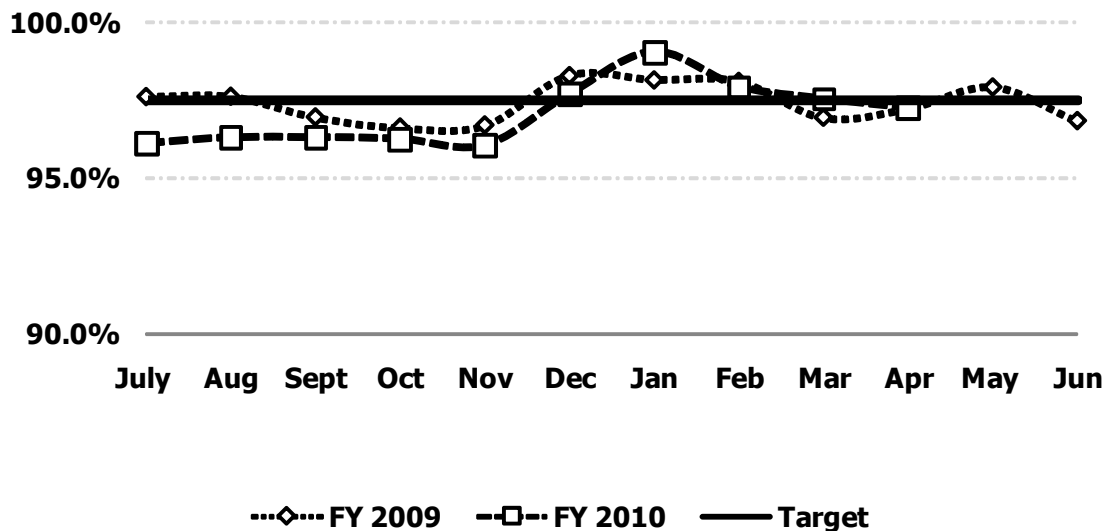
**Objective 2.1 Improve Service Reliability**

**Reason to Track:** Metrorail elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, travelers carrying luggage and other riders. When an elevator is out of service, Metro is required to provide alternative services, which may include a bus bridge to another station.

**Why Did Performance Change?**

- Elevator availability continues to be high, with April 2010 performance very close to the target.

### Elevator System Availability



**Action to Improve Performance**

- Continue current level of service until the next phase of major elevator rehabilitation work begins in Fiscal Year 2011 in conjunction with the Red Line infrastructure rehabilitation project.
- Identify additional areas of improvement in elevator maintenance processes through external program assessment.

**Conclusion:** Elevator availability approaches the target in April, and is consistent with performance at this time last year. Metrorail elevators were available for 145,170 hours in April (equivalent to an average of 269 out of 277 elevators in operation systemwide).

**KPI: Customer Injury Rate**

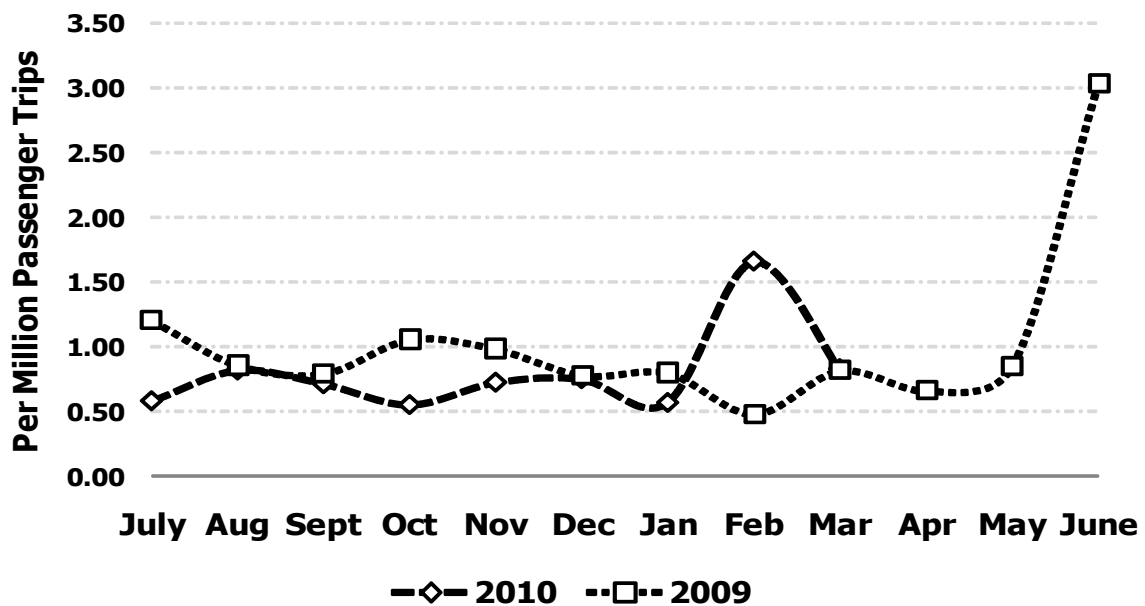
**Objective 1.1 Improve Customer and Employee Safety and Security**

**Reason to Track:** Customer safety is the highest priority for Metro and a key measure of quality service. Customers expect a safe and reliable ride each day. The customer injury rate indicates how well the service is meeting this safety objective.

**Why Did Performance Change?**

- For FY 2010, Metrorail has averaged less than one injury per every 7 million passenger trips each month, and Metrobus has averaged one injury per every 1 million passenger trips per month.
- Following the heavy snow in February which resulted in more slippery conditions around the system. This is reflected in facility injuries and bus passenger injuries compared with the total number of passenger trips provided during February. March customer safety returned to a normal rate overall.

### Customer Injury Rate



**Actions to Improve Performance**

- Metro continues to seek ways to ensure safe operations. This includes implementing the recommendations of oversight agencies. For example, Metrorail trains are being operated manually and do not stop as smoothly as when operated in automatic mode. Returning to automatic train operations will improve the smoothness of the train's movement.
- Additional examples include running twice-daily computerized tests of all track circuits and developing a program to ensure the electronics in our train control system are performing as they were designed.
- Metrobus is providing additional employee training to improve safe driving behavior, making travel safer and more comfortable for those standing onboard vehicles.

**Conclusion:** Metro continues to work everyday to improve safety for customers. Rail and bus transit continue to be two of the safest modes of transportation in the Washington region.

**MetroAccess Passenger Injury**  
**KPI: Rate (Per 100,000**  
**Passengers)**

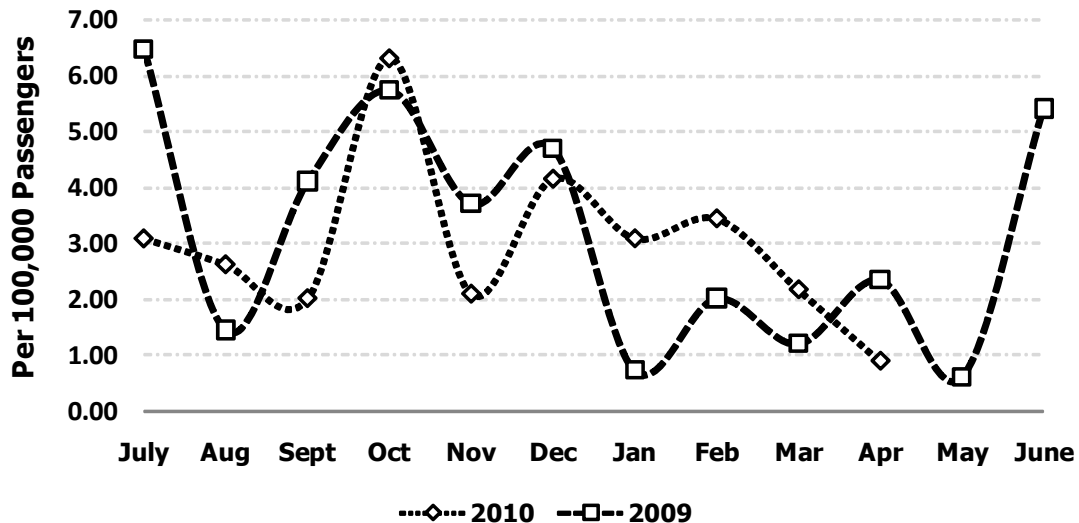
**Objective 1.1 Improve**  
**Customer and Employee Safety**  
**and Security**

**Reason to Track:** Safely transporting passengers is the highest priority for Metro. MetroAccess transports customers with disabilities who require the most assistance of all of Metro's riders.

**Why Did Performance Change?**

- MetroAccess began providing door-to-door service in June of 2008. Prior to that time, service was provided curb-to-curb. This change significantly increased the contract operator's responsibility for ensuring safe boarding and alighting of all passengers. The overall trend continues downward, indicating improved safety in assisting passengers from door-to-door.
- April 2010 shows a near-record low rate of injuries to passengers due to improved safety in assisting passengers.
- For FY 2010, MetroAccess has averaged 2.95 passenger injuries per 100,000 passengers, down from 3.20 in FY 2009.

### MetroAccess Passenger Injury Rate



**Actions to Improve Performance**

- MetroAccess dispatchers to receive enhanced training on trip reassignment and road supervisors to receive safety and trip monitoring training.
- First quarter of independent inspections of MetroAccess fleet and maintenance facilities (25% of fleet) to be completed by August 2010.
- Add feature to next Access Matters newsletter on passenger safety. MetroAccess service contractor to launch monthly MetroAccess Safety newsletter by July 2010 for employees and customers.
- All MetroAccess Road Supervisors will collectively complete a minimum of 400 weekly Safety Conversations. MetroAccess Service Monitors will complete a minimum of 50 Safety Conversations.

**Conclusion:** MetroAccess continues to improve its overall passenger safety performance. In April, MetroAccess experienced one of its safest months on record as it continued to experience near-record service demand.

**Employee Injury Rate (Worker's  
KPI: Compensation Claims with Cost of  
More than \$20)**

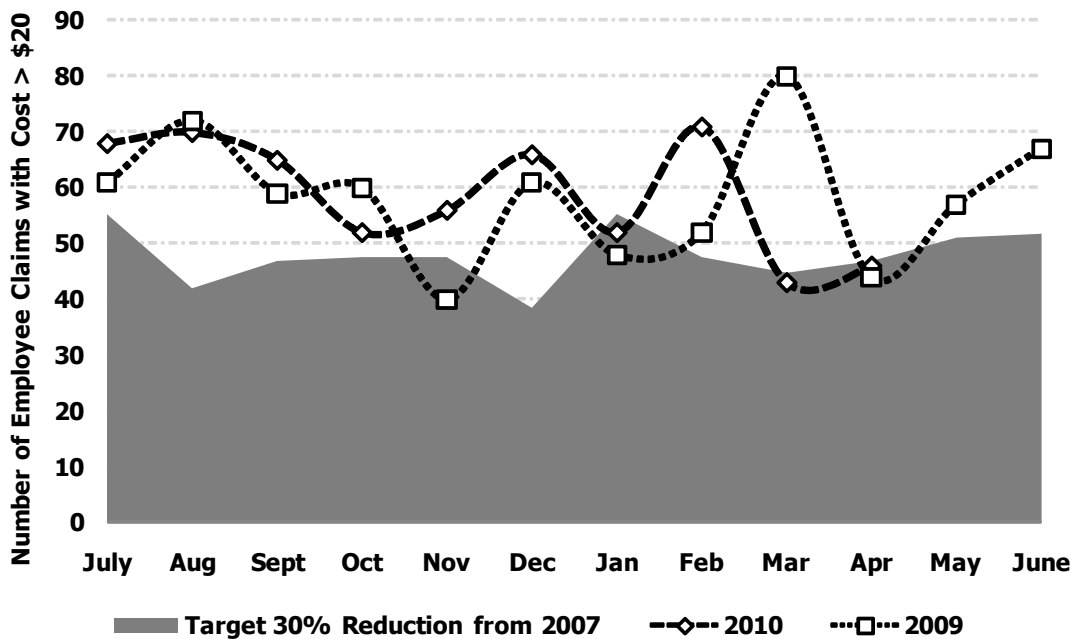
**Objective 1.1 Improve  
Customer and Employee Safety  
and Security**

**Reason to Track:** Worker's compensation claims are a key indicator of how safe employees are in the workplace. This measure captures all of the types of claims filed where there is a cost of more than \$20.

**Why Did Performance Change?**

- For FY 2010 agency-wide Worker's Compensation claims with cost are averaging 11 percent less than the base year of 2007, where claims averaged 68.5 per month. Improvement is notable compared with the base year, in FY 2010 the monthly claims rate has been better than the target three times. However, the target of a 30 percent reduction, or an average of 48 claims per month has not yet been achieved consistently.
- Worker's compensation claims are trending lower throughout FY 2010 as a result of programs focused on reducing employee accidents and injuries.

### Employee Injury Rate



**Actions to Improve Performance**

- Recent improvements are attributable to the Safety Conversation Program, Local and Departmental Safety Committees, the Return-to-Work Program, and the At-Risk program which focuses on employees with frequent injuries.
- Metrobus is considering moving forward with installation of DriveCam® monitoring cameras on buses to assist with improving safety.

**Conclusion:** Improving safe behavior in the workplace is a top priority for Metro. Progress is being made but additional work is still needed. Throughout Metro, activities are being implemented including updates to rules and procedures, improved training for frontline employees and increased reporting of unsafe actions in the workplace. Employee injuries on the job are the primary measure of the success of these activities.

**KPI: Crime Rate (Per Million Passenger Trips)**

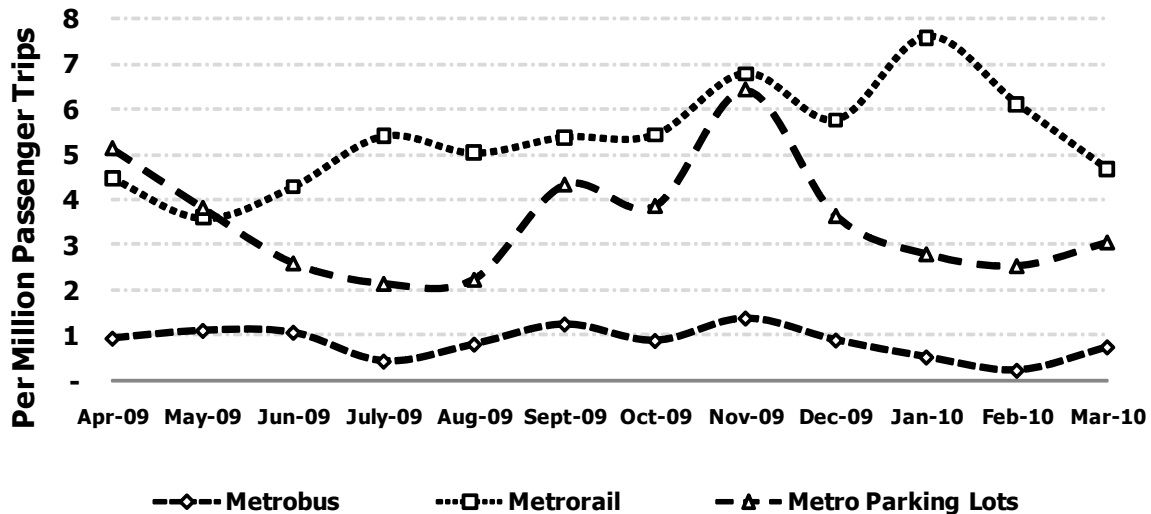
**Objective 1.2 Strengthen Metro's Safety and Security Response**

**Reason to Track:** This measure provides an indication of the perception of safety and security customers experience when traveling the Metro system. Increases or decreases in crime statistics can have a direct effect on whether customers feel safe in the system.

**Why Did Performance Change?**

- The crime rate in the Metrorail system has declined to almost the lowest level in a year, and the crime rates for Metrobus and Metro Parking Lots are also at or near the low points for the fiscal year. It should be noted that the reduction in the rail crime rate per million riders is affected by the significant increase in the number of days the rail system operated and the increase in rail ridership from February to March.
- Robbery/snatches continue to be a significant problem. Snatches are the theft of property from the victim. Typically, items stolen include small electronics such as cell phones, Ipods, cameras, MP3 players, etc. In March 2010, 62% of robberies were snatch cases. Metro experienced a notable increase in snatch cases beginning in November 2009. The increases were related to the growing popularity of small electronic devices and access to expanded cellular service in the underground Metrorail stations.
- The transit system experienced an increase in larcenies from February to March 2010. The larcenies were primarily thefts of auto parts/accessories and property from unoccupied vehicles in Metro parking facilities.

### Crime Rate



**Actions to Improve Performance:**

- Marketing/public awareness campaigns which include public address announcements, distribution of crime prevention literature, information posters in the system, and television news coverage. This includes adding permanent informational signs and variable message signs in parking lots. The Metro Transit Police Department (MTPD) is increasing the use of Closed Circuit Television as part of a comprehensive crime prevention strategy.
- Casual clothes teams working specific identified crime categories, for example auto theft/thefts from autos and robberies inside stations and/or on trains. To deter theft, the MTPD began using mobile patrol vehicles to patrol multi-level parking garages.

**Conclusion:** Over the last year there has been a sustained decrease in parking lot crimes, particularly thefts of autos. Thefts of small electronic devices have increased significantly. The MTPD will continue public outreach through various methods and targeted patrol deployment.

**KPI: MTPD Arrests, Citations and Summons**

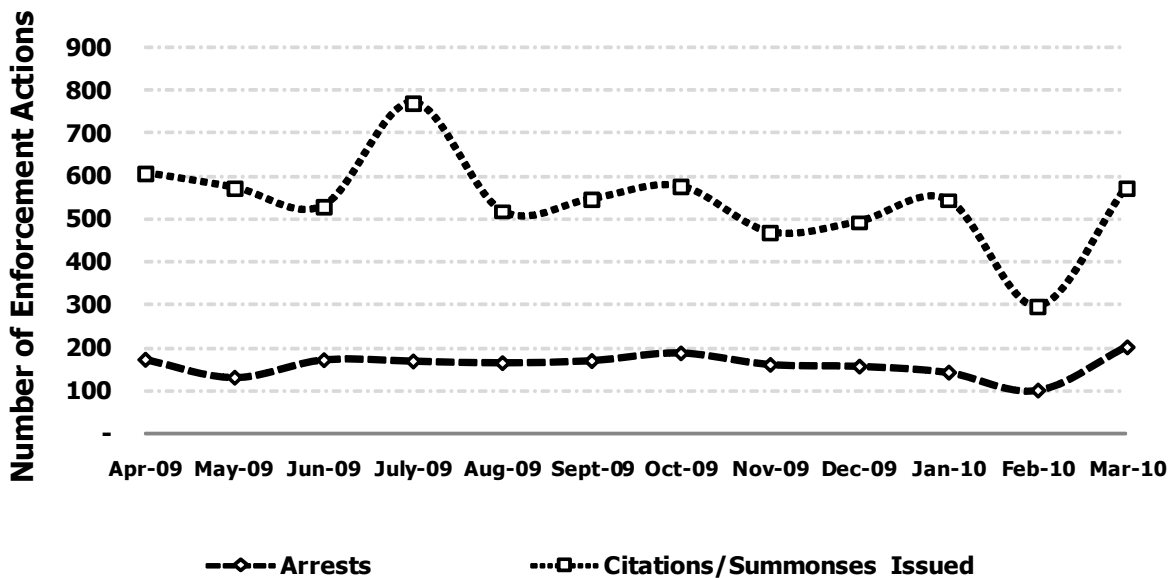
**Objective 1.2 Strengthen Metro's Safety and Security Response**

**Reason to Track:** This measure reflects actions by the Metro Transit Police Department (MTPD) to keep the Metro system safe. This includes arrests of individuals breaking the law within the Metro system and citations/summons issued by MTPD officers. Examples of citations/summons include fare evasion and public conduct violations.

**Why Did Performance Change?**

- Arrests made by MTPD returned to previous levels after dipping in February. The same is true for citations/summons issued. Significant winter weather in February led to reductions in transit operations and ridership, resulting in reduced criminal activity.

### Arrests, Citations and Summons



**Actions to Improve Performance:**

MTPD will change deployment strategies and focus on enforcement of law through arrests and issuing summons and citations. The Department will deploy patrol details to crime "hot spots" in an effort to deter crime.

**Conclusion:** During the reporting period of late winter, Metro experienced many weather related situations which reduced ridership, and February has fewer reporting days. In March, transit service and ridership returned to normal levels, along with police enforcement actions.

# General Manager 6-Month Action Plan

	Apr	May	Jun	Jul	Aug	Sep	Oct
<b>Safety</b> (Strategic Framework Goal 1)							
Fill safety department vacancies							
Increase safety training							
Close out safety-related audit findings							
Develop incident tracking, safety management reporting system							
Encourage near-miss reporting, publicize employee hotline	✓						
Strengthen whistleblower protection							
Complete new right-of-way worker protection manual							
Revise rail safety rules and procedures handbook							
Assess safety-related internal controls							
Initiate thorough assessment of safety culture							
<b>Service Reliability</b> (Strategic Framework Goal 2)							
Increase training for front-line employees and supervisors							
Create transparent performance tracking & reporting systems	✓						
Revise inspection & maintenance procedures in operations							
New schedule adjustment on Red Line to fix running time.							
External assessment of elevator and escalator maintenance and repair program							
Continually re-emphasize safety and State of Good Repairs as top priorities							
<b>Budget</b> (Strategic Framework Goal 3)							
Educate policymakers, customers, public about funding roles							
Implement approved FY2011 budget							
Transition to next 6-year capital program							
Respond to NTSB recommendations							
Stakeholder discussion on long-term fiscal outlook							

Summary of results to date:  
 This is the initial documentation of these 21 actions which are all scheduled to be completed by the end of October. In each succeeding monthly report there will be information provided on successes being accomplished as well as issues, delays or challenges being encountered.

Scorecard Key -  
 Accomplished   
 On schedule   
 Requires attention

**Jurisdictional Measures****FY 09  
Actual**

---

<b>Output:</b>	<b>Revenue Vehicle Miles (Millions)</b>	
Metrorail		71.803
Metrobus		41.168
<b>Output:</b>	<b>Passengers Per Revenue Vehicle Mile</b>	
Metrorail		3.10
Metrobus		3.25
<b>Efficiency:</b>	<b>Operating Cost Per Revenue Vehicle Mile</b>	
Metrorail		\$10.60
Metrobus		\$12.19
<b>Efficiency:</b>	<b>Farebox Recovery Ratio</b>	
Metrorail		66.5%
Metrobus		22.1%
MetroAccess		4.2%
WMATA Systemwide		49.6%
<b>Efficiency:</b>	<b>Operating Cost Per Passenger Trip</b>	
Metrorail		\$3.42
Metrobus		\$3.75
MetroAccess		\$37.64
<b>Outcome:</b>	<b>Annual Ridership (Millions)</b>	
Metrorail (linked trips)		222.858
Metrobus		133.773
MetroAccess		2.109
<b>Outcome:</b>	<b>Maryland Annual Ridership (Millions)</b>	
Metrorail		43.828
Metrobus		39.266
MetroAccess		1.303
<b>Outcome:</b>	<b>District of Columbia Annual Ridership (Millions)</b>	
Metrorail		127.536
Metrobus		70.407
MetroAccess		0.535
<b>Outcome:</b>	<b>Virginia Annual Ridership (Millions)</b>	
Metrorail		51.494
Metrobus		22.789
MetroAccess		0.266

---

## Jurisdictional Measures

<b>Metrobus in Fairfax County</b>	<b>FY07 Actual</b>	<b>FY08 Actual</b>	<b>FY09 Estimate</b>	<b>FY09 Actual</b>	<b>FY10 Estimate</b>	<b>FY11 Estimate</b>
Metrobus Routes	87	100	100	91	75 <sup>1</sup>	75
Trips Originating in Fairfax County	9,272,000	10,040,500	10,140,905	9,440,351	10,445,132	9,629,158
Platform Hours	372,266	395,999	407,627	407,844	371,721	395,662
Platform Miles	7,065,260	7,310,086	7,564,034	6,565,966	6,662,941	7,330,351
Operating Subsidy	\$36,723,400	\$36,744,578	\$44,433,718	\$42,761,346	\$40,219,382	\$40,650,118
Operating Subsidy/ Platform Mile	\$5.20	\$5.03	\$5.87	\$6.51	\$6.04	\$5.55
Operating Subsidy/ Platform Hour	\$98.65	\$92.79	\$109.01	\$104.85	\$108.20	\$102.74
Operating Subsidy Per Trip	\$3.96	\$3.66	\$4.38	\$4.53	\$3.85	\$4.22
Percent Change in Fairfax County Trips	0.0%	8.3%	1.0%	-6.0%	3.0%	-7.8%

<b>Metrorail in Fairfax County</b>	<b>FY07 Actual</b>	<b>FY08 Actual</b>	<b>FY09 Estimate</b>	<b>FY09 Actual</b>	<b>FY10 Estimate</b>	<b>FY11 Estimate</b>
Fairfax County Ridership	28,815,191	28,432,596	29,285,574	29,012,470	30,164,141	29,592,719
Operating Subsidy	\$17,496,099	\$19,266,866	\$17,664,683	\$17,334,537	\$24,137,403	\$16,999,647
Operating Subsidy Per Metrorail Passenger	\$0.61	\$0.68	\$0.60	\$0.60	\$0.80	\$0.57
Percent Change in Metrorail Ridership	-3.3%	-1.3%	3.0%	2.0%	3.0%	3.0%

<sup>1</sup> FY10 Metrobus Routes as of April 2010

Produced by jurisdictional request based on available data.

## Vital Signs Report

### Definitions for Key Performance Indicators

---

**Bus On-Time Performance** – Metrobus on-time performance measures adherence to scheduled service.

**Calculation:** For delivered trips, difference between scheduled time and actual time arriving at a time point based on a window of no more than 2 minutes early or 7 minutes late. Sample size of observed time points varies by route.

**Bus Fleet Reliability (Bus Mean Distance between Failures)** – The number of miles traveled before a mechanical breakdown.

**Calculation:** Total miles (revenue and non-revenue) / number of failures.

**Rail On-Time Performance by Line** – Metrorail on-time performance measures headway adherence by line during peak and off-peak periods. During peak service (AM/PM rush), station stops made within the scheduled headway plus two minutes are considered on-time. During non-peak (mid-day and late night), station stops made within the scheduled headway plus no more than 50% of the scheduled headway are considered on-time.

**Calculation:** For peak service, the number of Metrorail station stops made up to the scheduled headway plus 2 minutes / total Metrorail station stops. For off-peak service, the number of Metrorail station stops made up to 150% of the scheduled headway / total Metrorail station stops.

**MetroAccess On-Time Performance** – The number of trips provided within the on-time pick-up window as a percentage of the trips that were actually dispatched into service (delivered). This includes trips where the vehicle arrived, but the customer was not available to be picked up. Vehicles arriving at the pick-up location after the end of the 30-minute on-time window are considered late. Vehicles arriving more than 30 minutes after the end of the on-time window are regarded as very late.

**Calculation:** The number of vehicle arrivals at the pick-up location within the 30-minute on-time window / the total number of trips delivered.

**Elevator and Escalator System Availability** – Percentage of time that the Metrorail escalator or elevator system is in service during operating hours.

**Calculation:** Hours in service / operating hours. Hours in service = operating hours – hours out of service (both scheduled and unscheduled). Operating hours = revenue hours per unit x number of units.

**Customer Injury Rate (per Million Passenger Trips)** – For every one million passenger trips, the number of customers injured and requiring medical transport way from the rail and bus system. This measure is used to demonstrate the proportion service provided safely.

**Calculation:** (Bus passenger injuries + rail passenger injuries + rail facility injuries) / (passenger trips / 1,000,000).

**MetroAccess Passenger Injury Rate (per 100,000 Passengers)** – The number of passengers injured and requiring medical transport for every one hundred thousand passengers transported by Metro Access.

**Calculation:** Passenger injuries requiring medical transport / total passengers.

**Employee Injury Rate (Worker's Compensation Claims with Cost > \$20)** – The number of worker's compensation claims made by employees per month. This measure compares the base year of FY 2007 and the target reduction of 30% fewer than the base year number of claims, and is a measure of improving safe behavior of employees throughout the agency.

**Calculation:** Number of worker's compensation claims with cost > \$20 per month as compared with the target of 30% less than the number of claims made in FY 2007 by month.

**Crime Rate (per Million Passenger Trips)** - Crimes reported to Metro Transit Police Department on Bus, Rail, or at parking lots, metro facilities, bus stops and other locations in relation to Metro's monthly passenger trips. Reported by Metrobus, Metrorail, and Metro parking lots.

**Calculation:** Number of crimes / (passenger trips / 1,000,000)

**Arrests, Citations and Summonses** – The number of arrests and citations/summonses issued by the Metro Transit Police Department. Examples of citations/summonses include minor misdemeanors, fare evasion and public conduct violations.

**KPI: Bus On-Time Performance**

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>FY 2009</b>	73.0%	75.0%	73.0%	73.0%	74.0%	75.0%	75.0%	77.0%	74.0%	75.0%	75.0%	75.0%
<b>FY 2010</b>	77.0%	78.0%	75.0%	72.0%	74.0%	75.0%	79.4%	70.6%	76.6%	73.8%		
<b>Target</b>	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

**KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures)**

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>FY 2009</b>	4,744	5,820	6,153	5,876	7,405	6,601	6,316	6,227	6,292	4,945	4,652	4,503
<b>FY 2010</b>	4,898	5,437	5,325	5,732	6,054	6,700	7,223	6,878	6,882	6,270		
<b>Target</b>	6,500	6,500	6,500	6,500	6,500	6,500	6,000	6,000	6,000	6,000	6,000	6,000

**KPI: Rail On-Time Performance by Line**

	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10
<b>Average</b>	93.6%	92.0%	86.4%	87.0%	88.8%	91.2%	91.2%	87.6%	89.5%	88.6%	90.0%	90.3%
<b>Red Line</b>	94.0%	93.2%	78.3%	83.1%	88.0%	92.2%	91.9%	88.5%	89.0%	87.9%	88.9%	90.0%
<b>Blue Line</b>	91.4%	88.4%	87.2%	86.5%	86.8%	89.6%	90.0%	86.4%	88.2%	87.4%	88.2%	88.9%
<b>Orange Line</b>	94.5%	92.7%	90.3%	90.4%	92.5%	92.2%	92.4%	87.1%	90.1%	88.7%	92.2%	92.1%
<b>Green Line</b>	93.8%	92.3%	90.9%	90.1%	89.3%	90.2%	89.8%	86.8%	90.5%	89.4%	91.1%	90.7%
<b>Yellow Line</b>	94.3%	92.5%	92.0%	89.6%	88.1%	91.0%	91.8%	89.4%	91.6%	91.4%	91.4%	90.4%
<b>Target</b>	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%

**KPI: MetroAccess On-Time Performance**

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>FY 2009</b>	92.9%	92.5%	91.1%	91.1%	92.5%	93.1%	94.0%	93.4%	92.5%	91.9%	92.0%	88.7%
<b>FY 2010</b>	92.1%	91.6%	91.4%	91.7%	91.6%	92.8%	93.5%	87.4%	91.7%	91.1%		
<b>Target</b>	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%

**KPI: Escalator System Availability**

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>FY 2009</b>	92.4%	92.3%	91.0%	90.8%	91.1%	90.4%	91.9%	91.1%	89.4%	90.4%	90.0%	89.4%
<b>FY 2010</b>	89.6%	89.7%	90.6%	91.1%	91.6%	90.6%	90.0%	89.2%	89.5%	90.5%		
<b>Target</b>	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%	93.0%

**KPI: Elevator System Availability**

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>FY 2009</b>	97.6%	97.6%	96.9%	96.6%	96.7%	98.3%	98.1%	98.1%	96.9%	97.2%	97.9%	96.8%
<b>FY 2010</b>	96.1%	96.3%	96.3%	96.3%	96.0%	97.7%	99.0%	97.9%	97.5%	97.3%		
<b>Target</b>	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%

**KPI: Customer Injury Rate (per million passenger trips)**

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
<b>FY 2009</b>	1.21	0.86	0.80	1.06	0.99	0.78	0.80	0.49	0.82	0.67	0.86	3.03
<b>FY 2010</b>	0.59	0.83	0.72	0.56	0.73	0.76	0.58	1.67	0.84			

**KPI: Metro Access Passenger Injury Rate (per 100,000 passengers)**

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
<b>FY 2009</b>	6.47	1.45	4.12	5.75	3.72	4.71	0.73	2.02	1.21	2.36	0.61	5.42
<b>FY 2010</b>	3.09	2.63	2.02	6.31	2.10	4.16	3.09	3.45	2.18	0.90		

**KPI: Employee Injury Rate (Workers Compensation Claims with Cost > \$20)**

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
<b>FY 2010</b>	68	70	65	52	56	66	52	71	43	46		
<b>FY 2009</b>	61	72	59	60	40	61	48	52	80	44	57	67
<b>FY 2007</b>	79	60	67	68	68	55	79	68	64	67	73	74
<b>Target 30% &lt; 2007</b>	55	42	47	48	48	39	55	48	45	47	51	52

**KPI: Crime Rate (per million passenger trips)**

	Apr-09	May-09	Jun-09	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Metrobus	0.93	1.10	1.06	0.43	0.80	1.24	0.88	1.37	0.89	0.52	0.23	0.74
Metrorail	4.48	3.60	4.29	5.40	5.03	5.38	5.43	6.78	5.76	7.59	6.11	4.68
Metro Parking Lots	5.12	3.81	2.59	2.14	2.23	4.32	3.85	6.41	3.63	2.79	2.53	3.05

**Crimes by Type**

	Apr-09	May-09	Jun-09	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Robbery	99	73	68	73	70	81	96	104	89	122	81	86
Larceny	74	57	63	74	52	92	80	110	59	51	27	69
Motor Vehicle Theft	18	13	16	15	10	8	10	12	7	6	5	6
Attempted Motor Vehicle Theft	16	5	7	2	2	7	6	7	3	1	1	6
Aggravated Assault	8	8	6	8	11	9	7	8	7	10	7	7
Rape	0	0	0	0	0	0	0	0	0	2	2	0
Burglary	0	0	0	0	0	0	0	0	0	1	0	0
Homicide	0	0	0	0	0	0	0	1	0	0	0	0
Arson	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>215</b>	<b>156</b>	<b>160</b>	<b>172</b>	<b>145</b>	<b>197</b>	<b>199</b>	<b>242</b>	<b>165</b>	<b>193</b>	<b>123</b>	<b>174</b>

**KPI: Metro Transit Police Arrests, Citations and Summonses**

	Apr-09	May-09	Jun-09	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10
Arrests	172	130	171	168	164	169	187	160	156	142	100	201
Citations/Summonses Issued	606	572	529	770	517	545	575	468	492	543	295	572
<b>Arrests, Citations and Summonses</b>	<b>778</b>	<b>702</b>	<b>700</b>	<b>938</b>	<b>681</b>	<b>714</b>	<b>762</b>	<b>628</b>	<b>648</b>	<b>685</b>	<b>395</b>	<b>773</b>