# Vital Signs Report

A Scorecard of Metro's Key Performance Indicators (KPI)



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In July 2010, continued record high temperatures and severe storms negatively impacted the delivery of rail and bus services and the availability of escalators and elevators. An increase in road construction projects this summer also contributed to a decrease in bus on-time performance in July. Other notable performance achievements include increased reliability of the bus fleet with the acceptance of 30 new buses.

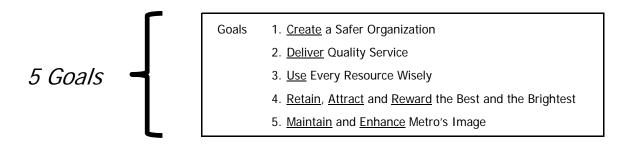
Crime was down system wide and another notable decrease, 10%, occurred in employee injury rates between June and July. To create a safety culture, many new safety initiatives focusing on prevention have been implemented, such as, assigning safety officers in bus facilities and rail yards and establishing an internal safety hotline to report safety concerns. Upcoming Performance Action Highlights:

- Implement performance tracking systems for Bus Services and Metro Transit Police to allow for quick performance monitoring and corrective actions.
- Increase inventory of key escalator and elevator parts to reduce the time units are out of service awaiting materials.
- Install DriveCam, a tool used to improve driving behavior and assess collision environment, in the entire Metrobus fleet.
- Maximize police presence in the transit system through several deployment strategies including the continuous use of uniformed and plain clothes officer presence in hot spots.

In June of this year Metro received a joint letter from the Mayor of the District of Columbia and the Maryland and Virginia Governors calling for improvements in performance management and offering to share best practices in this area. Metro staff has now had the opportunity to visit and learn from the Mayor's performance team and their use of CapStat. Metro staff are scheduled to visit Maryland's StateStat performance team and Maryland Department of Transportation performance staff to continue sharing best practices. Virginia's Governor McDonnell has recently written to applaud the publication of these Vital Signs Reports. Additionally, Metro staff is working to incorporate improvements recommended by the Riders' Advisory Council and the Jurisdictional Coordinating Committee. Those improvements will begin to be reported in October.

#### 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.



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

Metro Service Area	
Size	1,500 square miles
Population	3.5 million

Fiscal Year 2010 A	ctual Ridership
Bus	124 million
Rail	217 million
MetroAccess	2.4 million
Total	343.4 million

Fiscal Year 2011	Fiscal Year 2011 Budget									
Operating	\$1.5 billion									
Capital	\$0.7 billion									
Total	\$2.2 billion									

Routes 320  Fiscal Year 2011 Operating Budget \$538 million  Average Weekday Ridership 414,100 (July 2010)  Highest Ridership Route in 2009 30's – Pennsylvania Ave. (16,330 avg. wkdy ridership)  Metrobus Fare \$1.70 cash, \$1.50 SmarTrip®, Bus-to-bus Transfers Free Express Bus Fare \$3.85 cash, \$3.65 SmarTrip®, Airport Fare \$6.00  Bus Fleet 1,501  Buses in Peak Service* 1,242  Bus Fleet by Type Compressed Natural Gas (461), Electric Hybrid (299), Clean Diesel (117) and All Other (624)  Average Fleet Age 7.5 years  Bus Garages 9 – 3 in DC, 3 in MD and 3 in VA	Metrobus General Informat	ion
Fiscal Year 2011 Operating Budget \$538 million  Average Weekday Ridership 414,100 (July 2010)  Highest Ridership Route in 2009 30's – Pennsylvania Ave. (16,330 avg. wkdy ridership)  Metrobus Fare \$1.70 cash, \$1.50 SmarTrip®, Bus-to-bus Transfers Free  Express Bus Fare \$3.85 cash, \$3.65 SmarTrip®, Airport Fare \$6.00  Bus Fleet 1,501  Buses in Peak Service* 1,242  Bus Fleet by Type Compressed Natural Gas (461), Electric Hybrid (299), Clean Diesel (117) and All Other (624)  Average Fleet Age 7.5 years	Size	11,750 bus stops
Average Weekday Ridership 414,100 (July 2010)  Highest Ridership Route in 2009 30's – Pennsylvania Ave. (16,330 avg. wkdy ridership)  Metrobus Fare \$1.70 cash, \$1.50 SmarTrip®, Bus-to-bus Transfers Free  Express Bus Fare \$3.85 cash, \$3.65 SmarTrip®, Airport Fare \$6.00  Bus Fleet 1,501  Buses in Peak Service* 1,242  Bus Fleet by Type Compressed Natural Gas (461), Electric Hybrid (299), Clean Diesel (117) and All Other (624)  Average Fleet Age 7.5 years	Routes	320
Highest Ridership Route in 2009 30's – Pennsylvania Ave. (16,330 avg. wkdy ridership)  Metrobus Fare \$1.70 cash, \$1.50 SmarTrip®, Bus-to-bus Transfers Free  Express Bus Fare \$3.85 cash, \$3.65 SmarTrip®, Airport Fare \$6.00  Bus Fleet 1,501  Buses in Peak Service* 1,242  Bus Fleet by Type Compressed Natural Gas (461), Electric Hybrid (299), Clean Diesel (117) and All Other (624)  Average Fleet Age 7.5 years	Fiscal Year 2011 Operating Budget	\$538 million
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Clean Diesel (117) and All Other (624)  Average Fleet Age 7.5 years	Buses in Peak Service*	1,242
	Bus Fleet by Type	1 7
Bus Garages 9 – 3 in DC, 3 in MD and 3 in VA	Average Fleet Age	7.5 years
	Bus Garages	9 – 3 in DC, 3 in MD and 3 in VA

<sup>\*</sup>As of July 2010

### **Metrorail General Information**

Fiscal Year 2011 Operating Budget	\$822 million
Average Weekday Ridership	794,032 (July 2010)
Highest Ridership Day	Obama Inauguration on Jan. 20, 2009 ( 1.1 million)
Busiest Station in 2010	Union Station (34,713 average weekday boardings in April)
Regular Fare (peak)	Minimum - \$2.20 paper fare card, \$1.95 SmarTrip® Maximum - \$5.25 paper fare card, \$5.00 SmarTrip®
Reduced Fare (non-peak)	Minimum - \$1.85 paper fare card, \$1.60 SmarTrip® Maximum - \$3.00 paper fare card, \$2.75 SmarTrip®
Peak-of-the-peak Surcharge	\$.20 - weekdays 7:30 - 9 a.m. and 4:30 - 6 p.m., depending on starting time of trip
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	238
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
++A	

<sup>\*\*</sup>As of April 2010.

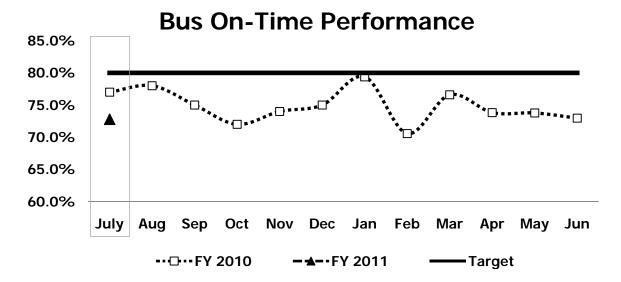
### **MetroAccess General Information**

Fiscal Year 2011 Operating Budget	\$104 million
Average Weekday Trips	8,554 (June 2010)
MetroAccess Fare	Within ADA core service area - \$3.00; Outside ADA core service area - \$2.00 to \$4.00 supplemental fare
Paratransit Vehicle Fleet	600
Average Fleet Age	3 years
Paratransit Garages	7 (1 in DC, 4 in MD and 2 in VA)
Contract Provider	MV Transportation

**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 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:

- July's on-time performance continued a three month stretch of nearly three out of every four buses adhering to the published schedule. Consistent with the prior months, one out of every four buses ran late 75% of the time or early 25% of the time.
- In comparison to last year, bus on-time performance has been impacted by major construction. In particular the H street construction has impacted the X1, X2, X3, and S41 service. Construction also impacted the 32, 34, 36, A11, J13, K11, D51, and M6 routes along Pennsylvania Avenue. Construction at Silver Spring and Rosslyn bus transit hubs resulted in heavier traffic and detours, further impacting on-time performance.
- Detours on Douglas Bridge impacted the P17, P19, and A9 routes.



#### **Actions to Improve Performance**

- The implementation of Bus Services' new automated performance reporting system gives supervisors a realtime view of on-time performance and Next Bus predictability which will allow for quicker monitoring and corrective actions.
- A new management succession program has graduated 15 trainees into the ranks of bus operations supervisor.
   Vacancies in bus supervisory positions responsible for on-the-street service management have been observed to negatively affect on-time performance.
- Service evaluation studies are underway for the B2, D12, D13, D14, 23 and 25 Routes.
- Metrobus Service Changes are being proposed to enhance ridership, meet current demands for service, and implement new services consistent with regional planning efforts.

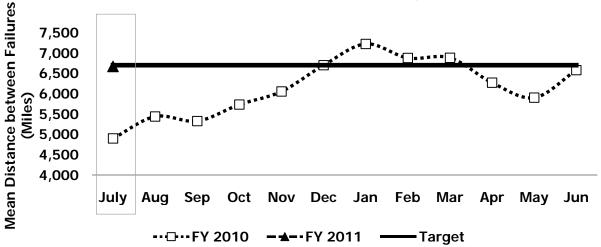
<u>Conclusion</u>: As federal stimulus funds have flowed to the local governments, summer road construction projects notably increased compared to last year. In spite of the additional resulting traffic and detours, Metro continues to deliver 3 out of 4 buses on-time.

Reason to Track: One source of reliability problems is 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 bus fleet reliability are the quality of a maintenance program, vehicle age, original vehicle quality, and road conditions. For this measure higher miles are better, meaning that the vehicle goes farther without breaking down.

#### Why Did Performance Change:

- July 2010 bus fleet reliability was significantly better than July of last year. July's bus fleet reliability performance is consistent with the prior month of June. Performance continues to improve as new, more reliable buses are rolled out and the older buses are retired. Replacement of 30 less reliable buses in July positively impacted bus reliability.
- The FY11 bus fleet reliability target was revised from 6,000 miles to 6,700 miles to reflect the anticipated reliability improvement due to the arrival of 96 new buses and awarding of a contract to purchase 52 more new buses in FY11.

### **Bus Fleet Reliability**



#### **Actions to Improve Performance**

- Continue to place 148 new buses in service, removing the older, less reliable buses. Of the current procurement for 148 buses, 96 have been received and put into service.
- Last month it was stated that Bus Services will improve monitoring service interruptions to identify trends and develop actions to reduce or eliminate repeat failures. Careful attention has been placed on monitoring new management systems and other reporting tools to understand the nature of equipment failures to prevent breakdowns.

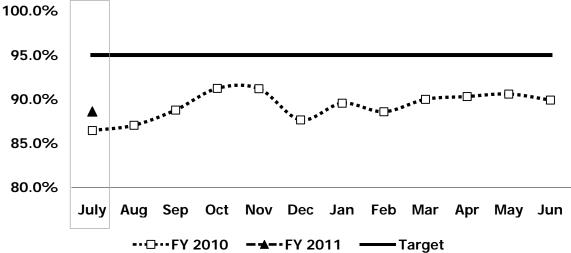
<u>Conclusion</u>: FY11 began with buses averaging 6,670 miles between breakdowns. As temperatures cool, bus fleet reliability is expected to increase even more.

**Reason to Track:** On-time performance measures the adherence to weekday headways, 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, equipment failures and delays such as sick passengers or offloads. On-time performance is a component of customer satisfaction.

#### Why Did Performance Change:

- On-time performance in July 2010 was about the same as June 2010 and slightly better than July of last year.
- On July 2, the 4000 Series railcars were removed from service as a precautionary action to address a possible short in the car door motor circuitry that theoretically could have caused the doors to open when the train is moving. This reduced railcar availability through July 20<sup>th</sup> as car maintenance addressed the issue for every motor (each car has 12 motors).
- The Red Line schedule change was implemented June 27<sup>th.</sup> The change resulted in better adherence to the dispatch schedule and more consistent running time, improving service consistency and reliability.
- The most frequent type of delay lasting more than three minutes was door malfunction. Door malfunctions were reported 52 times with an average delay of 6 minutes per occurrence. Uneven passenger distribution onboard railcars and passengers holding doors at crowded platforms contribute to door malfunctions.
- Despite the continued record heat, the number of hot car incidents declined in July as compared with June. This was due to increased preventive maintenance on the air conditioning units in the vehicles.
- Severe thunderstorms caused downed trees and power lines which impacted power availability in rail stations and rail yards on the Red Line July 25-26 and the Red, Blue and Yellow Lines on July 29<sup>th</sup>.





#### **Actions to Improve Performance**

- To ensure the heating and air conditioning systems are working properly, evaluate the feasibility of a more comprehensive and focused effort to take place in the fall and spring to supplement the routine inspections.
- Review policy of having cars wait at terminals with all doors open when it is hot outside. Closing the doors during the layover time will allow cars to cool off and will reduce strain on the air conditioning units.
- Provide staffing to assist with the boarding process when passenger loads are significant, to help even passengers per car and per doorway.

<u>Conclusion</u>: Metrorail continues to provide reliable rail transportation throughout the Metro region, in spite of significant railcar maintenance activities and serious weather events of July 25-26 and 29th.

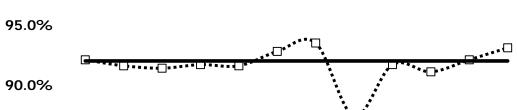
**Reason to Track:** On-time performance is a critical measure of MetroAccess service reliability and customer expectations. Adhering to the customer's scheduled pick-up window is comparable to Metrobus adhering to scheduled timetables. Factors which affect on-time performance are traffic congestion,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

#### Why Did Performance Change:

100.0%

\* July on-time performance data is not yet available.





#### **Actions to Improve Performance**

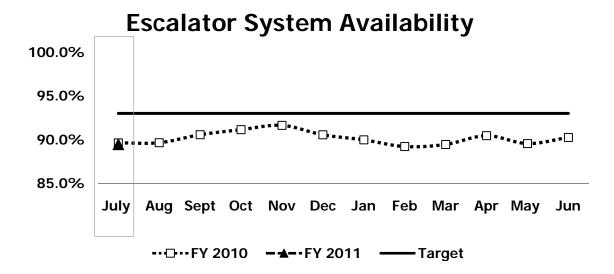
- Continue to monitor implementation of streamlined procedures and gains made from refresher training.
- Continue to ensure that all dispatchers are monitoring the delivery of service proactively, so that good ontime performance can be maintained.

**Conclusion**: MetroAccess delivered 93.1% of trips on-time for June 2010, exceeding 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:

- Despite a number of severe storms that caused power outages and water intrusion, July 2010 escalator system
  availability was consistent with July of last year. Water intrusion shorted switches and controllers and power
  outages/surges took 188 units out of service for several hours. Metro customers experienced the most outages
  on July 25-26, when approximately 20% of Metro escalators experienced outages. Overall availability only
  decreased slightly (1% which "equals" six escalators) between June 2010 and July 2010.
- Repair work at the Dupont Circle station had a significant impact on availability, with escalators 80% available in July.
- Major rehabilitation work continued in July, with nineteen escalators out of service. During the month, work began on platform escalators at Virginia Square, Judiciary Square and Union Station while work was completed on platform escalators at Woodley Park and Franconia-Springfield and an entrance escalator at Gallery Place-Chinatown putting these escalators back in service.
- The outside assessment of elevator/escalator maintenance continued in July with preliminary assessments prepared for Bethesda, Woodley Park-Zoo/Adams Morgan and Foggy Bottom-GWU stations.



#### Actions to Improve Performance

- At Dupont Circle station, complete maintenance to improve reliability of escalators, including repairs resulting
  from July 12<sup>th</sup> motor fire. As a result of the incident, Metro identified a number of areas for improving response
  to ensure the safety of customers. Examples include better on-scene communications and improved crowd
  management.
- Replace escalator components damaged as a result of water intrusion during July storms.
- Focus staff on parts inventory planning in order to increase inventory of key parts and reduce the time units are out of service awaiting materials. This includes identifying suppliers to fabricate parts for escalators built by manufacturers' no longer in business.
- Continue to proactively identify maintenance issues through inspections in order to reduce units going out of service unexpectedly.

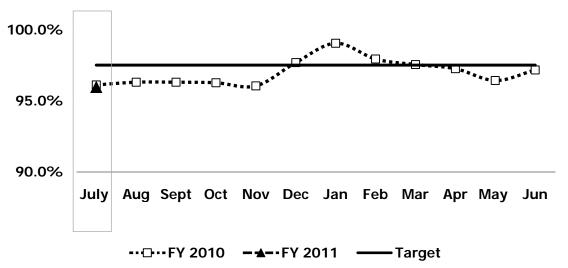
<u>Conclusion</u>: Although faced with severe weather and necessary rehabilitation work, Metrorail escalators were available for 314,560 hours in July (equivalent to an average of 526 out of 588 escalators in operation systemwide). This represents only a 1% decrease in availability from June to July when an average of 532 units were available.

**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 shuttle bus service to another station.

#### Why Did Performance Change:

- July 2010 elevator system availability is consistent with July of last year. Availability decreased from June to July by 1.2% which "equals" three elevators. The reduction was experienced because of an increase in unscheduled service calls and the impact of severe weather.
- Thirty-two elevators went out of service in July due to weather conditions. The storm caused water intrusion (elevator pits filling with water that must be drained before putting units back into service) and power surges/outages damaged electronic equipment. High temperature days also caused equipment damage due to increases in motor room temperatures.
- The outside assessment of elevator/escalator maintenance continued in July with preliminary assessments prepared for Bethesda, Woodley Park-Zoo/Adams Morgan and Foggy Bottom-GWU stations.

### **Elevator System Availability**



#### **Actions to Improve Performance**

- Focus staff on parts inventory planning in order increase inventory of key parts and reduce the time units are out of service awaiting materials.
- Continue to proactively identify maintenance issues through inspections in order to reduce units going out of service unexpectedly.

<u>Conclusion</u>: Despite a number of severe storms that caused power outages and water intrusion, Metrorail elevators were available for 136,560 hours in July. This is equivalent to an average of 228 out of 238 elevators in operation system-wide. This is a decrease of 1.2% in July from June. Metro has an additional 39 elevators located at Metro maintenance and vehicle storage facilities.

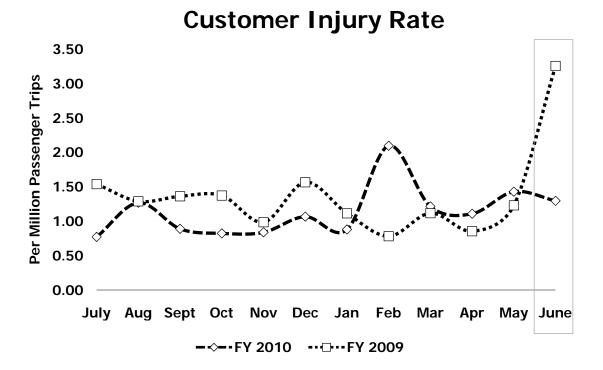
KPI: Customer Injury Rate (Metrorail & Metrobus) Obje (June) Empl

**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 is an indicator of how well the service is meeting this safety objective.

#### Why Did Performance Change:

- This month marked the one year anniversary of the June 22<sup>nd</sup> rail collision.
- The overall customer injury rate decreased in June 2010 by 0.13 injuries per million trips, or one less injury for every 8 million passenger trips provided.
- In June, the highest rate of customer injuries occurred among bus passengers. The bus customer injury rate for June 2010 is 1.43 injuries per million trips.



#### Actions to Improve Performance

- Developed a new Safety Measurement System designed to aid in root cause analysis.
- Worked with National Transportation Safety Board and the Tri-State Oversight Committee to close 202 of 256 safety action plans or followed through on recommendations that were received by these agencies.
- DriveCam, a tool used to improve driving behavior and assess collision environment, will be installed in the entire Metrobus fleet.

**Conclusion**: Safety remains Metro's number one priority and everyone at Metro is committed to preventing accidents.

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

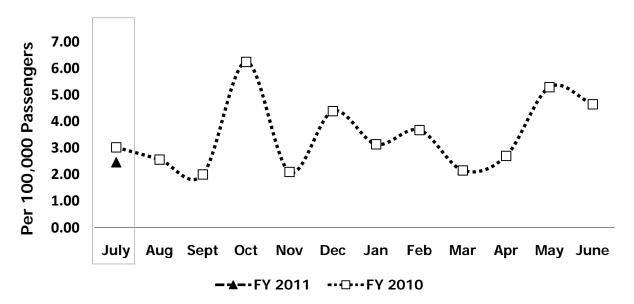
Objective 1.1 Improve Customer and Employee Safety and Security

**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:

• There were five passenger injuries on MetroAccess in July 2010, a significant reduction from the ten injuries in June. Of the five injuries in July, three of the passenger injuries occurred during separate non-preventable collisions, one occurred during a preventable collision and one was related to passenger assistance. All reported injuries resulted in either an observatory visit to a medical facility or treatment for minor injuries. Enhanced training has resulted in improved proficiency in assisting passengers, resulting in fewer injuries.

### MetroAccess Passenger Injury Rate



#### **Actions to Improve Performance**

- Road Supervisors will increase to 700 total safety conversations and road observations per week. The objective is to eliminate at risk behavior by drivers. The success of this program will be demonstrated through a downward trend in passenger assistance related injuries.
- Weekly fliers will be distributed to MetroAccess operators on collision avoidance, defensive driving, and passenger assistance.
- MetroAccess operators will continue to receive enhanced refresher training in defensive driving, which includes
  the following modules: following distance, intersections, distracted driving, fixed objects/mirror settings, railroad
  crossings, and pre-trip/post trip safety checks, and passenger assistance.
- MetroAccess Safety Director will continue to conduct four-hour safety seminars with all division general managers and safety, operations, and maintenance management personnel. Topics include hiring, training, and riskreducing techniques.

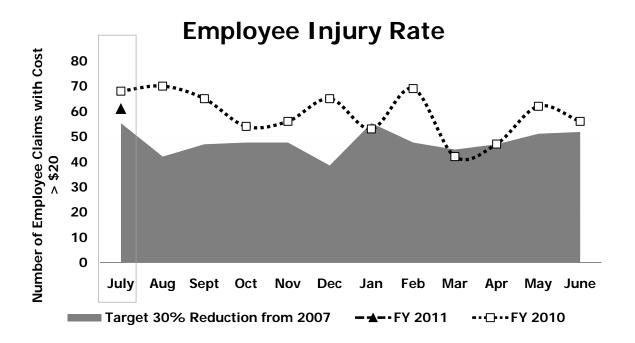
<u>Conclusion</u>: While MetroAccess has recorded an improved passenger injury rate for the month of July 2010 over previous months, there will continue to be an emphasis placed on decreasing passenger injuries through increased operator/supervisor interaction, safety awareness campaigns, and employee training.

**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:

KPI:

- Compared to July of last year, July 2010 employee injuries decreased by 10%. Many new safety initiatives to create a safety culture focused on prevention were implemented, such as assigning safety officers in bus facilities and rail yards, establishing an internal safety hotline to report safety concerns, and conducting an assessment of Metro's safety culture.
- About a third of July 2010 injuries were sustained by Bus Transportation employees. Although bus
  transportation has the largest share of injuries, for the last three years that injury rate has decreased by 9.8%
  and avoided 101 injuries.
- Collisions represent the largest single injury cause (approximately 30%), followed by upper body muscle straining (20%) and slip and falls (18%).



#### **Actions to Improve Performance**

Metro, in particular Bus Transportation, will focus on employees with two or more incidents in the past 24
months to identify and correct hazards in the workplace and address other issues that may impact the
employees' ability to work safely.

**Conclusion**: Metro has lowered employee injuries over the past year and continues to implement key safety priorities.

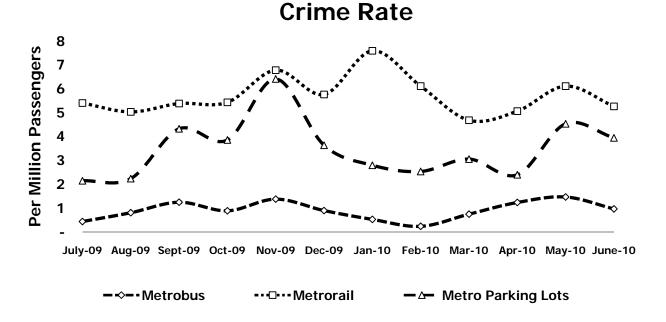
KPI: Crime Rate (June)
(Per Million Passengers)

# 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 June 2010 Metro crime rate decreased in all transit venues.
- Robberies decreased 20% which was largely attributed to a 28% reduction in small electronic device robberies.
- Outdoor crimes continue to drive the number of larcenies. In June, half of larcenies were thefts from autos (54 of 111, 49%), primarily GPS devices from parked vehicles. The balance were largely bicycle thefts (44 of 111, 40%).
- Aggravated assaults returned down to monthly trends of between 7 and 10 events reported.
- Patrol commanders used various deployment strategies to reduce crime in partnership with local, state and federal law enforcement agencies, including high visibility details in stations and decoy cars in parking lots.



#### **Actions to Improve Performance**

- The MTPD uniformed patrol division is coordinating deployment strategies to maximize police presence in the transit system. Deployment strategies include the continuous use of uniformed and plain clothes officer presence in hot spots, such as New Carrollton and Branch Avenue to address motor vehicle crimes and in downtown core stations including Gallery Place and L'Enfant Plaza for robberies and youth disorder.
- MTPD is initiating "MetroStat" to target deployments strategies to trends in criminal activity.
- Continue aggressive public awareness campaign to educate customers and reduce robberies of small electronic devices. This includes an advertising campaign on trains and in stations and rider tips on Metro's website.

<u>Conclusion</u>: The crime rate reduced in June for Metrobus, Metrorail and Parking Lots as MTPD focused on crime prevention through uniform police presence in hot spot stations and customer education.

#### **KPI:** Arrests, Citations and Summonses (June)

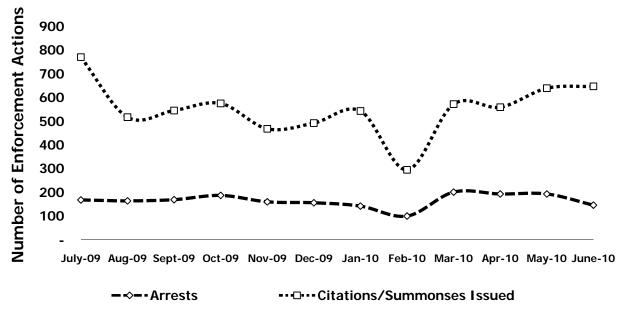
## Objective 1.2 Strengthen Metro's Safety and Security Response

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

#### Why Did Performance Change:

- Arrests were down from 193 in May to 146 in June. During June, a number of these arrests were made by officers patrolling platforms in an effort to reduce robberies of small electronic devices.
- Citations/summonses stayed consistent with May, with citations exceeding over 600 in each month. Almost 7% more citations/summonses were issued for public conduct ordinances in FY2010 (July 1, 2009 to June 30, 2010) compared to FY2009. The target was a 5% increase for FY2010.
- Fare evasion citations made up 58% of June 2010 citations/summonses. Compared with the same month in 2009, fare evasion citations increased by 25%.

### **Arrests, Citations and Summonses**



#### Actions to Improve Performance

- Continue focusing attention on station platforms and trains to reduce robberies of small electronic devices during rush hours.
- Deploy youth disorder details to maintain order in stations and trains particularly during evenings and weekends. Continue attention on decreasing public conduct offenses by issuing citations/summonses.

**Conclusion**: MTPD's targeted efforts to patrol platforms, address youth disorder and decrease public conduct offenses can be seen in recent arrest, citation and summon trends.

	Actions Through:								
	Apr	May	Jun	Ju	Jul Aug Sep				
eate a Safer Organization									
Fill safety department vacancies			<b>√</b>						
Increase safety training									
Close out safety-related audit findings									
Develop incident tracking, safety management reporting system									
Encourage near-miss reporting, publicize employee hotline	<b>√</b>			on-g	joing				
Strengthen whistleblower protection				<b>√</b>					
Complete new right-of-way worker protection manual				<b>√</b>					
Revise rail safety rules and procedures handbook			<b>√</b>						
Assess safety-related internal controls				<b>√</b>					
Initiate thorough assessment of safety culture			<b>√</b>	on-going			_		
liver Quality Service									
Increase training for front-line employees and supervisors									
Create transparent performance tracking & reporting systems	<b>√</b>			on-g	joing				
Revise inspection & maintenance procedures in operations			<b>√</b>	on-going					
New schedule adjustment on Red Line to fix running time.			1						
External assessment of elevator and escalator maintenance and repair program									
Continually re-emphasize safety and State of Good Repairs as top priorities			✓		on-g	joing			
e Every Resource Wisely									
Educate policymakers, customers, public about funding roles		<b>√</b>		on	-goin	g			
Implement approved FY2011 budget			<b>√</b>		on-g	joing	J		
Transition to next 6-year capital program			<b>√</b>		on-g	joing	J		
Respond to NTSB recommendations with capital budget impact									
Stakeholder discussion on long-term fiscal outlook			✓	OI	n-go	ing			
Summary of results to date:  Each action has been assigned to specific members of the executive staff. Detailed exection steps have been laid out with clear due-dates. The GM is constantly monitoring the progress being made on each task and maintaining accountability for results.			Rec	Acc	ompli n sche	shed edule ntion	~		

Jurisdiction	nal Measures	FY 09 Actual
Output:	Revenue Vehicle Miles (Millions)	
Metrorail		71.803
Metrobus		41.168
Output:	Passengers Per Revenue Vehicle Mile	
Metrorail	•	3.10
Metrobus		3.25
Efficiency:	Operating Cost Per Revenue Vehicle Mile	
Metrorail	3	\$10.60
Metrobus		\$12.19
Efficiency:	Farebox Recovery Ratio	
Metrorail	Turebox Recovery Ratio	66.5%
Metrobus		22.1%
MetroAccess		4.2%
WMATA Syster	mwide	49.6%
Efficiency:	Operating Cost Per Passenger Trip	
Metrorail	operating cost i or i assenger imp	\$3.42
Metrobus		\$3.75
MetroAccess		\$37.64
Outcome:	Annual Ridership (Millions)	
Metrorail (linked	• • •	222.858
Metrobus (unlin	• •	133.773
MetroAccess	• •	2.109
Outcome:	Maryland Annual Ridership (Millions)	
Metrorail		43.828
Metrobus		39.266
MetroAccess		1.303
Outcome:	District of Columbia Annual Ridership (Millions)	
Metrorail		127.536
Metrobus		70.407
MetroAccess		0.535
Outcome:	Virginia Annual Ridership (Millions)	
Metrorail		51.494
Metrobus		22.789
MetroAccess		0.266

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

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

 $<sup>^{\</sup>rm 1}\,$  FY10 Metrobus Routes as of April 2010

Produced by jurisdictional request based on available data.

**Bus On-Time Performance** – Metrobus 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.

<u>Bus Fleet Reliability (Bus Mean Distance between Failures)</u> – The number of revenue miles traveled before a mechanical breakdown. A failure is an event that requires the bus to be removed from service or deviate from the schedule.

Calculation: Number of failures / miles

Rail On-Time Performance by Line – Rail on-time performance is measured by line during weekday peak and off-peak periods. During peak service (AM/PM), 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:** Number of Metrorail station stops made up to the scheduled headway plus 2 minutes / total Metrorail station stops for peak service. Number of Metrorail station stops made up to 150% of the scheduled headway / total Metrorail station stops for off-peak service.

MetroAccess On-Time Performance – The number of trips provided within the on-time pick-up window 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.

<u>Elevator and Escalator System Availability</u> – Percentage of time that Metrorail escalators or elevators in stations and parking garages are 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 \* number of units.

<u>Customer Injury Rate (per Million Passenger Trips)</u> – The number of customers injured and requiring medical transport from the rail and bus system for every one million passenger trips. Customer injuries per million passenger trips is used to demonstrate the relative proportion of safe service which is provided.

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

<u>MetroAccess Passenger Injury Rate (per 100,000 Passengers)</u> – 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 the 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.

<u>Crime Rate (per Million Passengers)</u> – 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)

<u>Arrests, Citations and Summonses</u> – 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 / Target = 80%

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2010	77.0%	78.0%	75.0%	72.0%	74.0%	75.0%	79.4%	70.6%	76.6%	73.8%	73.8%	73.0%	77.0%
FY 2011	72.8%												72.8%

KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures) / Target = 6,700 Miles (Revised in July 2010)

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2010	4,898	5,437	5,325	5,732	6,054	6,700	7,223	6,878	6,882	6,270	5,902	6,578	4,898
FY 2011	6,670												6,670

Bus Fleet Reliability (Bus Mean Distance Between Failure by Fleet Type)

Type (~ % of Fleet)	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Avg.
CNG (31%)	7,739	7,851	8,105	7,362	12,258	9,347	8,935	8,853	7,842	7,905	9,059	9,093	8,696
Hybrid (20%)	8,962	8,520	9,973	10,980	10,167	11,859	10,666	10,546	9,499	8,844	9,944	10,161	10,010
Clean Diesel (8%)	13,015	11,150	12,345	10,052	11,137	9,806	9,911	11,109	7,990	7,345	7,933	10,547	10,195
All Other (41%)	3,739	3,679	3,872	4,393	4,187	5,225	4,928	4,804	4,562	4,102	4,517	4,332	4,362

KPI: Rail On-Time Performance by Line / Target = 95%

	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	Mav-10	Jun-10	Jul-10	Avg.
Red Line	83.1%		92.2%	91.9%	88.5%	89.0%	87.9%	88.9%	90.0%	91.0%	90.1%	88.5%	89.1%
Blue Line	86.5%	86.8%	89.6%	90.0%	86.4%	88.2%	87.4%	88.2%	88.9%	88.3%	87.5%	86.0%	88.0%
Orange Line	90.4%	92.5%	92.2%	92.4%	87.1%	90.1%	88.7%	92.2%	92.1%	91.4%	90.4%	88.8%	90.9%
Green Line	90.1%	89.3%	90.2%	89.8%	86.8%	90.5%	89.4%	91.1%	90.7%	91.0%	90.8%	90.3%	90.0%
Yellow Line	89.6%	88.1%	91.0%	91.8%	89.4%	91.6%	91.4%	91.4%	90.4%	90.7%	89.8%	88.6%	90.5%
Average (All Lines)	87.0%	88.8%	91.2%	91.2%	87.6%	89.5%	88.6%	90.0%	90.3%	90.6%	89.9%	88.6%	89.5%

KPI: MetroAccess On-Time Performance / Target = 92%

	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. thru July
FY 2010	92.1%	91.6%	91.4%	91.7%	91.6%	92.8%	93.5%	87.4%	91.7%	91.1%	92.1%	93.1%	92.1%

KPI: Escalator System Availability / Target = 93%

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2010	89.6%	89.7%	90.6%	91.1%	91.6%	90.6%	90.0%	89.2%	89.5%	90.5%	89.6%	90.3%	89.6%
FY 2011	89.5%											·	89.5%

**KPI**: Elevator System Availability / Target = 97.5%

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2010	96.1%	96.3%	96.3%	96.3%	96.0%	97.7%	99.0%	97.9%	97.5%	97.3%	96.4%	97.2%	96.1%
FY 2011	96.0%												96.0%

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

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru June
FY 2009	1.54	1.29	1.36	1.37	0.99	1.57	1.12	0.78	1.12	0.86	1.23	3.26	1.37
FY 2010	0.77	1.27	0.89	0.82	0.84	1.07	0.88	2.10	1.22	1.11	1.43	1.30	1.14

<sup>\*</sup>Revised to include escalator injuries and reflect the revision of FY 2010 belated bus ridership data.

#### **Customer Injuries by Mode/Facility**

Bus Passenger Injury Rate (per million passenger trips)

Das i asseriger mjary iki	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru June
FY 2009	1.32	1.02	0.67	1.13	1.47	0.86	0.79	0.49	0.71	0.80	1.47	0.89	0.97
FY 2010	0.93	1.16	1.23	0.79	1.33	0.75	0.42	1.41	1.46	1.11	1.26	1.43	1.11

Rail Passenger Injury Rate (per million passenger trips)

Kum r decemger myur y K	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru June
FY 2009	0.38	0.22	0.39		0.06		0.27	0.12	0.26	0.05	0.05	4.04	0.54
FY 2010	0.10	0.22	0.17	0.16	0.18	0.00	0.06	0.15	0.10	0.19	0.22	0.20	0.15

Rail Transit Facilities Occupant Injury Rate (per million passenger trips)\*

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru June
FY 2009	1.28	1.24	1.43	1.12	0.62	1.83	1.03	0.84	1.10	0.84	1.04	0.55	1.08
FY 2010	0.58	1.12	0.50	0.68	0.37	1.25	1.09	2.31	0.99	0.91	1.31	1.03	1.01

<sup>\*</sup>Revised to include escalator injuries.

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

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2010	3.03	2.57	2.01	6.24	2.10	4.39	3.14	3.68	2.16	2.70	5.29	4.65	3.03
FY 2011	2.46												2.46

#### KPI: Employee Injury Rate (Workers Compensation Claims with Cost > \$20) / Target = 30% Reduction from 2007

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru June
FY 2007	79	60	67	68	68	55	79	68	64	67	73	74	69
FY 2009	61	72	59	60	40	61	48	52	80	44	57	67	58
FY 2010	68	70	65	54	56	65	53	69	42	47	62	56	59

<sup>\*</sup> FY 2010 revised to reflect claims filed late.

KPI: Crime Rate (per million passenger trips)

	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	June-10	Avg.
Metrobus	0.43	0.80	1.24	0.88	1.37	0.89	0.52	0.23	0.74	1.23	1.46	0.96	0.90
Metrorail	5.40	5.03	5.38	5.43	6.78	5.76	7.59	6.11	4.68	5.06	6.11	5.26	5.72
Metro Parking Lots	2.14	2.23	4.32	3.85	6.41	3.63	2.79	2.53	3.05	2.39	4.53	3.94	3.48

Crimes by Type\*

Criffics by Type	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	June-10	Avg.
Robbery	73	70	81	96	104	89	122	81	86	91	89	71	88
Larceny	74	52	92	80	110	59	51	27	69	66	97	111	74
Motor Vehicle Theft	15	10	8	10	12	7	6	5	6	9	13	13	10
Attempted Motor Vehicle													
Theft	2	2	7	6	7	3	1	1	6	9	9	5	5
Aggravated Assault	8	11	9	7	8	7	10	7	7	9	15	7	9
Rape	0	0	0	0	0	0	2	2	0	0	0	0	0
Burglary	0	0	0	0	0	0	1	0	0	0	1	0	0
Homicide	0	0	0	0	1	0	0	0	0	0	0	0	0
Arson	0	0	0	0	0	0	0	0	0	0	0	0	-
Total	172	145	197	199	242	165	193	123	174	184	224	207	185

Monthly crime statistics can change as a result of reclassification following formal police investigation.

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

	July-09	Aug-09	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	June-10	Avg.
Arrests	168	164	169	187	160	156	142	100	201	193	193	146	165
Citations/Summonses													
Issued	770	517	545	575	468	492	543	295	572	559	639	647	552
Arrests, Citations and													
Summonses	938	681	714	762	628	648	685	395	773	752	832	793	717

Metrobus Ridership (millions)

mon obde trade only (transcrip)													
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2009	12.1	11.7	11.9	12.3	10.2	10.5	10.2	10.2	11.3	11.2	10.9	11.3	12.1
FY 2010	11.8	11.2	11.4	11.3	9.8	9.3	9.6	7.1	11.0	10.8	10.3	10.5	11.8
FY 2011	10.4												10.4

Metrorail Ridership (millions)

	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2009	21.0	18.5	18.2	19.7	16.1	16.4	18.5	16.6	19.1	20.3	18.4	20.1	21.0
FY 2010	20.5	17.9	17.8	19.0	16.4	16.0	16.5	13.4	20.3	20.8	18.3	20.3	20.5
FY 2011	20.2												20.2

MetroAccess Ridership (100,000s)

mon on occor Kitaor on by (100   0000)													
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Avg. thru July
FY 2009	1.63	1.62	1.69	1.82	1.57	1.73	1.58	1.72	1.91	1.97	1.90	1.93	1.6
FY 2010	1.98	1.95	1.99	2.08	1.90	1.82	1.91	1.36	2.32	2.22	2.08	2.15	2.0
FY 2011	2.03												2.0