# Vital Signs Report

A Scorecard of Metro's

Key Performance Indicators (KPI)



**Chief Performance Officer** 

Published: November 2010

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Metrorail on-time performance in September continued to out-perform the same period last year with significant improvement on the Orange and Blue lines, which increased to 92.1% and 88.3% respectively. Both Metrobus and MetroAccess on-time performance slipped in September. Many Metrobus routes continue to face the dual challenge of road construction and the resulting traffic congestion that comes with it. MetroAccess on-time performance was negatively impacted in September by a flood in the building where service is dispatched which severely restricted the functioning of the MetroAccess operations control center.

Reliability of the bus fleet exceeded its target in September improving to an average of more than 7,300 miles travelled per bus with no breakdown. The rail fleet reliability rate lags below its target and below September of last year but it did show improvement from the previous month. That gain above August comes from improvements in the 2000-3000 series railcars which operate the largest share of total car miles in the fleet.

Both escalator and elevator availability in September were below their targets and last September's rate however the escalator rate did improve modestly when compared to August. Customer and employee injury rates this month tracked at virtually the same levels as last year at this time. The crime rate on Metrobus remains consistently low and on Metrorail the rate is the same as last year at this time. The new measure tracking customer complaints saw improvement in September with a declining trend and levels lower than last year at this time.

Actions being taken to improve performance:

- Track work projects continue to be a major element of the long term strategy to improve Metrorail reliability. These projects can have a negative impact on monthly KPI's but will ultimately lead to sustainable performance improvements for all Metrorail customers.
- Conduct a Service Evaluation Study (SES) to improve Metrobus service. The purpose of the SES is to review the productivity, travel times, and reliability of certain bus lines. Public input will be taken into consideration as these productivity improvements are further defined.
- Implement action plan to address the findings from the independent assessment of Metro's elevator and escalator maintenance program to include equipment testing, training for employees and replacement of escalators.

#### 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. Although Metro is working on all goals and objectives only a select number of performance measures are presented in the Vital Signs Report to provide a high level view of agency progress.



Goals	1. Create a Safer Organization
	2. Deliver Quality Service
	3. Use Every Resource Wisely
	4. Retain, Attract and Reward the Best and the Brightest
	5. Maintain and Enhance Metro's Image

Г	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, comfortal services and facilities that are in good condition and easy navigate
12		2.4 <u>Enhance</u> mobility by improving access to and linkages bet transportation options
Objectives	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 manager training and provision of state of the art facilities, vehicles systems and equipment
	5	5.1 <u>Enhance</u> communication with customers, employees, Unio 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 environmenta impacts

Metro Service	Area	]
Size	1,500 sq. miles	
Population	3.5 million	_
Ridership		]
Mode	FY 2010	Average Weekday
Bus	124 million	431,521 (September 2010)
Rail	217 million	730,287 (September 2010)
MetroAccess	2.4 million	8,139 (September 2010)

343.4 million

Total

## Fiscal Year 2011 Budget

Operating	\$1.5 billion
Capital	\$0.7 billion
Total	\$2.2 billion

Metrobus General Informat	ion
Size	11,750 bus stops
Routes	320
Fiscal Year 2011 Operating Budget	\$538 million
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*	1,518
Buses in Peak Service*	1,242
Bus Fleet by Type*	Compressed Natural Gas (460), Electric Hybrid (355), Clean Diesel (117) and All Other (586)
Average Fleet Age*	7.12 years
Bus Garages	9 – 3 in DC, 3 in MD and 3 in VA

1,173,021

\*As of September 2010.

## **Metrorail General Information**

Fiscal Year 2011 Operating Budget	\$822 million
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	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

### MetroAccess General Information

Fiscal Year 2011 Operating Budget	\$104 million
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***	2.6 years
Paratransit Garages	7 (1 in DC, 4 in MD and 2 in VA)
Contract Provider	MV Transportation
****	

\*\*\*As of September 2010.

# KPI: Bus On-Time Performance (September)

#### **Objective 2.1 Improve Service Reliability**

**<u>Reason to Track</u>**: 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?

- September's on-time performance decreased by 4% when compared to the prior month of August, indicating a small change in the pattern of nearly three out of every four buses adhering to schedule. An increase in the number of late buses negatively impacted on-time performance.
- The 70,71,90,92 routes faced daily challenges including traffic congestion and schedules which did not match the operating constraints of these routes.
- The S lines also struggled to meet September's OTP target. Road construction, heavy traffic, and city planned events continue to challenge the on-time performance of this line.



#### Actions to Improve Performance

- Modify underused service to provide faster, more direct bus service through popular routes in Virginia, the District of Columbia, and Maryland (e.g. limited-stop service between Capitol Heights and downtown Washington, and more frequent buses running between Silver Spring and Bethesda). Running limited stop service tends to allow buses to move quickly through corridors.
- Work to modify Bus Operator candidate classes from 20 to 40 trainees to address workforce shortages.
- Collaborate on efforts between the jurisdictions and Metro to study route deficiencies and make improvements to the region's most heavily used bus lines.

**Conclusion**: Although many uncontrollable situations such as road construction, traffic congestion, and major events creating detours continued to impact OTP, Metro is working hard to increase OTP. Pilot applications designed to assist in analyzing OTP deficiencies are being tested and redeployment of personnel to key corridors are underway.

KPI:

# 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 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:

- Bus fleet reliability exceeded the target during the month of September. Performance continued to improve as new, more reliable buses were rolled out including: 30 new hybrid electric buses that replaced 30 diesel buses. In addition, a handful of rehabilitated CNG buses were brought into operation this month. This raised the MDBF to 7,366 miles 9% above target.
- On September 13, 2010, U.S. DOT Secretary Ray LaHood highlighted Metro's effective use of American Recovery and Reinvestment Act funds to improve agency fleet reliability through the purchase of new buses and body and paint shop construction.



#### Actions to Improve Performance

- Continue to place 148 new buses in service, retiring older buses. Of the 148 buses, 132 have been put into service; all of the 148 buses will be in service by the end of November 2010.
- Review division out-of-service reports, road call data, repair actions, automatic vehicle monitoring system, and engine failures to aid in diagnosing and avoiding service interruptions.
- Metro Board approved contracts to rehabilitate Landover, Northern, and Western bus garages to maintain a state
  of good repair throughout the fleet.

<u>**Conclusion**</u>: Bus reliability ended 600 miles above the target. In September, reliability improved by 28% when compared to September of the prior year and 9% when compared to the prior month. Fiscal year to date bus fleet reliability is 6,885 miles (target = 6,700). With the continuing arrival of new buses, retiring the oldest, less reliable buses performance of the fleet should continue to improve.

KPI: Rail On-Time Performance (September)

**Objective 2.1 Improve Service Reliability** 

**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?

- Systemwide on-time performance improved slightly from August, with the most significant increases in the Orange and Blue Lines, which increased to 92.1% and 88.3% respectively.
- The Yellow and Green Lines had the highest reported headway adherence at 92.7% and 92.2% respectively.
- The number of door malfunctions resulting in delay increased in September, however, the time per incident declined.
- Customer-related incidents (e.g., sick customers) constituted 11 delays of four minutes or more, two more incidents than in August, but the average delay per incident decreased to 30 minutes, indicating quicker resolution of the incidents.
- Brake malfunctions resulting in delays declined from August to September, with the average time of delay remaining less than 10 minutes per incident.
- Major track work performed on the Red and Orange Lines did not have a measurable impact headway adherence. Red Line track work was performed during the Labor Day holiday weekend, and Orange Line work was performed during off-peak periods and weekends, avoiding the most heavily traveled times.



#### Actions to Improve Performance

- Continue to perform major track work projects during weekends when ridership is significantly lower than weekdays. Maintenance work is necessary for safety, service reliability and customer comfort. Weekend work has the least impact on on-time performance.
- Address door malfunction delays by highlighting causes to customers (e.g., holding open doors), troubleshooting actions performed by operators, and timely communication with the Operations Control Center.
- Plan for seasonal changes to keep leaves off the running rails to maintain consistent operating conditions, particularly at outdoor stations.

**<u>Conclusion</u>**: On-time performance is nearing 90% overall, significantly higher than last year, and on par with the performance over the last seven months.

KPI: Rail Fleet Reliability (September) (Mean Distance Between Delays)

#### **Objective 2.1 Improve Service Reliability**

**Reason to Track:** Mean distance between delays communicates the effectiveness of Metro's railcar maintenance program. This measure reports the number of miles between railcar failures resulting in delays of service greater than three minutes. Factors that influence railcar reliability are the age of the railcars, the amount the railcars are used, and the interaction between railcars and the track. The higher the mileage for the mean distance between delays, the more reliable the railcars.

#### Why Did Performance Change?

- Systemwide, rail fleet reliability improved in September with an increase in the 2000-3000, 4000 and 5000 series mean distance between delays.
- The 2000-3000 Series railcars operated the largest share of total miles in September (36%), improving in reliability by 24 percent.
- The 1000 Series cars provided service with a mean distance between delays slightly above the system average for the second month. This is largely attributable to a reduction in brake related delays.
- The 6000 Series railcars continue to show the highest reliability of the fleet, with an average of nearly 78,000 miles between delays. This was a decrease from August due to four more incidents in September that resulted in delays.
- The 4000 Series railcars showed a slight improvement in mean distance between delays of 4% over last month. These cars operate the smallest percentage of overall mileage at 8% and account for 18% of railcar-related delays.



#### Actions to Improve Performance

- Coordinate with Operations Control Center and Track Maintenance to keep running rails free of leaves to remove the potential for sliding and flats.
- Continue to assess door and brake malfunctions to reduce the number of incidents resulting in delays. Many times, door malfunctions are determined to be a temporary result of customer crowding or behavior, but must be verified by railcar maintenance prior to returning the railcars to service.
- Propulsion power is the railcar subsystem requiring the most time for railcar maintenance employees. To reduce the impact of propulsion maintenance, analyze incident data and identify track locations where the interaction between the railcar collector shoes, the contact rail (third rail) and DC power quality can be fixed to be within specifications.

**Conclusion**: Rail Fleet Reliability improved during September, largely due to a reduction in brake-related delays offset by a slight increase in door-related delays. The aging rail fleet will continue to require active maintenance monitoring.

# KPI: MetroAccess On-Time Performance (September)

**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?

- Following four months of exceeding the 92% target of delivered trips within the pick-up window, MetroAccess on-time performance dropped slightly to 91.8%.
- Several unplanned technical outages over the month negatively impacted the ability of dispatch to perform vital functions related to on-time performance.
- The MetroAccess Operations Control Center was temporarily evacuated due to a flood in the building, causing a tremendous disruption in service on the impacted days of service.



#### Actions to Improve Performance

- Continue real-time monitoring of dispatcher performance and route schedule adherence.
- Continue development of dispatch software tools and reporting.
- Continue refresher training with dispatchers and vehicle operators.

**Conclusion**: MetroAccess delivered 91.8% of trips on-time for September, dropping slightly below the target of 92.0%. Improvements in communications with the dispatcher continue to show benefits in on-time performance, while active monitoring of schedule adherence is necessary to maintain the timeliness of MetroAccess service.

KPI: Escalator System Availability (September)

**Objective 2.1 Improve Service Reliability** 

**<u>Reason to Track</u>**: 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?

- Overall escalator availability increased by .9% (which "equals" 5 escalators) between August and September 2010 and is slightly below September of last year.
- The number of unscheduled maintenance calls decreased for the third month in a row (a 5% decrease from August to September) leading to increased availability for the month.
- The availability gain is small this month due to increases in inspections (preventive maintenance and jurisdiction) and major repairs to replace handrails.
- Major rehabilitation work was completed on a platform escalator at Tenleytown-AU, bringing two escalators at the station back into service (including a walker unit). Rehabilitation began on a platform escalator at the Wheaton station. During September, a total of fourteen escalators were out of service due to rehabilitation work reducing availability at 8 stations.
- The outside assessment of elevator/escalator maintenance was completed in September and findings were presented to the Customer Service and Operations Committee in October. The presentation is available at www.wmata.com.



**Conclusion**: Metrorail escalators were available for 304,945 hours in September (equivalent to an average of 528 out of 588 escalators in operation systemwide). This represents an increase of less than 1% in availability from August to September when an average of 523 units were available.

#### KPI: Elevator System Availability (September) Objective 2.1 Improve Service Reliability

**<u>Reason to Track</u>**: 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?

- Availability increased slightly from August to September 2010 by .12% (which "equals" 4 elevators) and is below September of last year.
- The availability gain is small this month due to a significant increase in elevator preventive maintenance inspections where staff proactively identifies maintenance issues so that units stay in service longer.
- Major rehabilitation is underway on two elevators at Union Station to extend the life cycle of the elevators, including replacing the elevator cab equipment and most mechanical parts.
- The outside assessment of elevator/escalator maintenance is nearing completion, with the consultant having finished inspecting all units September 24. The report is being finalized and is expected in early November 2010. It will be available on <a href="http://www.wmata.com">www.wmata.com</a>.



#### Actions to Improve Performance

- Metro will be implementing an elevator/escalator action plan to address findings from the independent assessment of Metro's elevator and escalator program. Near-term actions for elevator maintenance include:
  - Begin implementing refresher training on maintenance standards and equipment familiarization
  - Interview for supervisor positions and begin their training
  - Initiate training for Quality Assurance officers and supervisors
  - Complete a water intrusion remediation plan

**Conclusion**: Metrorail elevators were available for 130,550 hours in September. This is equivalent to an average of 226 out of 238 elevators in operation at Metro stations and in parking garages. This represents a slight increase of .12% in availability from August to September when an average of 222 units were available.

# KPI:Passenger Injury Rate – Metrorail,<br/>Metrobus & MetroAccess (August)

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

**<u>Reason to Track</u>**: 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?

- Bus customer passenger injuries decreased by 40% or (6) injuries when compared to the prior month of July. Collisions, slips and falls, and sudden braking are the most common cause of bus customer injuries. In August, there were less collisions and incidents of sudden braking.
- The rail facility customer injury rate increased in August. This category includes passengers falling in stations or garages due to wet surfaces or debris, customers losing their balance or tripping on uneven tiles. Escalator injuries also contributed to the customer injury rate this month. Falls are the most significant type of escalator injury, occurring as customers walk or run up/down an escalator.
- Of the eight passenger injuries on MetroAccess in August, six occurred during vehicle collisions, all but one of which were non-preventable by the operator. The remaining two injuries were also not preventable by the operator. One occurred while the operator was outside the vehicle deploying the lift, and the other occurred when a passenger removed their safety belt during travel in violation of MetroAccess safety procedures.



#### Actions to Improve Performance

- Bus transportation intends to aggressively improve upon last year's safety initiatives of: enforcing a strict 2:1 training ratio for bus trainees, performing in-depth accident investigations, screening new hires using a behavior based selection application, and emphasizing training in defensive driving.
- Rail station managers will double their efforts to place "Watch Your Step" signage whenever there is a danger of slipping such as on wet platforms or escalators as appropriate. When there is a prediction of heavy rains, rail supervisors will inspect drains for clogging and report any other maintenance issues that need immediate attention.
- The Fall 2010 issue of "Access Matters" will feature content that focuses on a "Safety Partnership" between customers and MetroAccess, including safety related best practices for customers. The importance of accepting assistance in boarding and alighting vehicles and following safety related customer policies and guidance will be emphasized.

**Conclusion**: Bus passenger injuries decreased significantly in August. Metro is committed to taking actions to reduce customer injuries.

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

Objective 1.1 Improve Customer and Employee Safety and Security

**<u>Reason to Track</u>**: 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?

- The employee injury rate increased 23% when compared to the prior month of August (restated to reflect late reports). Although Bus Transportation represents the largest portion of claims reported year-to-date, their injuries have decreased by 18% when compared to September of the prior year.
- Employee injuries are primarily due to straining (28%), being struck by an object (16%), collisions (15%), and slip/falls (12%).



#### Actions to Improve Performance

- Metro will recognize the employee safety accomplishments of Operations personnel through the Champions of Safety Recognition Program November 16, 2010. This program is designed to acknowledge employees who have reached safe operations milestones or provided crucial support that enabled the safe operation.
- Employee safety training will continue to expand at all levels of Metro and the whistleblower protection policy will be reinforced.
- Although Bus Transportation safety conversations improved during the month of September, exceeding the agency target of 80%, bus operations will reiterate the importance of quality safety conversations.

**Conclusion**: Interim General Manager Richard Sarles testified before Congress on September 23, "At Metro, there is no higher value than safety and we recognize that Metro's long-term success depends on our ability to build a safety culture that is dedicated to prevention and continual improvement." Metro will continue to strengthen its safety practices to create a safe environment for its customers and employees alike.

KPI: Crime Rate (August) Per Million Passengers

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

**<u>Reason to Track</u>**: 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 Metrorail crime rate for August is the lowest reported since April of this year. The Metrobus crime rate was at a four month low as well. Larcenies were down in August and robberies continued to decline, contributing to the lower crime rate for Metrorail and Metrobus.
- Parking lot crime increased in August, as motor vehicle thefts went up (from 10 in July to 18 in August) and thefts from autos increased about 30%, or 17 cases from 54 in July to 70 in August.



#### Actions to Improve Performance

- Increase the use of variable message signs in parking facilities to remind customers to secure valuables out of sight in personal vehicles to reduce crimes of opportunity.
- Support the "secure your valuables" message by sending postcards to customers when valuables are visible in plain sight within vehicles parked at Metro facilities.
- In September, National Preparedness Month, Metro will focus on increasing awareness of how to contact police with MTPD's 24-hour telephone number, 202-962-2121. U.S. Department of Homeland Security Secretary Janet Napolitano will be heard through announcements in the Metrorail system asking customers to report all suspicious activity on buses, trains or in stations.

**Conclusion**: The Metrorail and Metrobus crime rate reduced from July to August, specifically robberies and larcenies. The transit system experienced an increase in the parking lot crime rate, primarily thefts from automobiles. MTPD is promoting crime prevention measures to reduce theft in parking lots.

#### KPI: Arrests, Citations and Summonses (August)

#### **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?

- Police calls for service were down in August (July 5,622, August 5,234) along with arrests (July 234, August 196) and citations/summonses (July 727, August 644).
- In early August, police arrested a suspect for bicycle theft at the King Street Metro station. Subsequently, bicycle thefts decreased by 47% from July (July 55, August 29).
- A highly publicized disturbance involving a large group of disorderly youth offenders at L'Enfant Plaza station platform led to multiple arrests and increased deployment of uniformed officers at key downtown stations during evening hours, particularly on weekends. This strategy, and others, shifted the police focus to deterrence of youth disorder in the system.



#### Actions to Improve Performance

- Collaborate with school officials to deter youth disorder and fare evasions while transporting students. MTPD will deploy uniformed police officers to details near schools (including the temporarily relocated Woodrow Wilson High School at Van Ness-UDC Metro station) and at transfer stations to provide safe transportation for all customers during morning and evening rush hours. School details will remain in place throughout the school year.
- Deploy uniformed officers from specialized units to augment regular patrols in order to reduce parking lot offenses.

<u>Conclusion</u>: During August, MTPD efforts emphasized the visible presence of officers and deterrence of crime as a strategy to reduce youth disorder.

#### KPI: Customer Comment Rate (September)

**<u>Reason to Track</u>**: Listening to customer feedback about the quality of service provides a clear roadmap to those areas of the operation where actions to improve the service can best help to maximize rider satisfaction.

#### Why Did Performance Change?

- **Rail:** Rail service complaints dropped 31 percent from last month, with the greatest drop in the category of inadequate service and delay/late service. Rude/discourteous complaints were down also. Safety/security complaints were even with last month.
- **Bus:** Bus complaints were slightly higher than last month overall, with the top three complaint categories having to do with no show, delay/late, and failure to service stop respectively. Rude/discourteous complaints were up slightly, remaining relatively constant over the last 7 months. Total unsafe operations complaints are down slightly, the lowest number since February, 2010.
- **MetroAccess:** Most common complaint reported is early or late trips, which is always the most common complaint. The rate of complaints (per million passengers) this year is significantly lower than last year overall. MetroAccess, with its direct contact with each customer, has a significantly higher comment rate.



#### Actions to Improve Performance

• Because MetroAccess complaints are directly related to on-time performance, improving on-time performance directly improves the complaint rate. In addition, the MetroAccess Director of Customer Service is performing significant community outreach, aimed at targeting the major issues customers are facing, and working on measures to correct them.

**Conclusion**: Metro carries millions of riders every day and provides a high quality service, but occasionally there are difficulties. Targeting actions to resolve customer complains will continue to improve the quality of service.

#### General Manager's 6-Month Action Plan (September)

<b>5</b>		A	ction	ıs Th	irougl	h:
	Apr	May	unſ	Inf	Aug	Sep
eate a Safer Organization					<u> </u>	
Fill safety department vacancies			$\checkmark$			
Increase safety training						
Close out safety-related audit findings						
Develop incident tracking, safety management reporting system						
Encourage near-miss reporting, publicize employee hotline	$\checkmark$			on-(	going	
Strengthen whistleblower protection				<b>√</b>		
Complete new right-of-way worker protection manual				$\checkmark$		
Revise rail safety rules and procedures handbook			✓	<u> </u>		
Assess safety-related internal controls				<b>√</b>		
Initiate thorough assessment of safety culture			$\checkmark$		on-g	oing
iver Quality Service						
Increase training for front-line employees and supervisors						
Create transparent performance tracking & reporting systems	$\checkmark$			on-(	going	
Revise inspection & maintenance procedures in operations			$\checkmark$		on-g	oing
New schedule adjustment on Red Line to fix running time			$\checkmark$			
External assessment of elevator and escalator maintenance and repair program						✓
Continually re-emphasize safety and State of Good Repair as top priorities			✓		on-g	oing
e Every Resource Wisely						
Educate policymakers, customers, public about funding roles		$\checkmark$		on	-goin	g
Implement approved FY2011 budget			$\checkmark$		on-g	oing
Transition to next 6-year capital program			$\checkmark$		on-g	oing
Respond to NTSB recommendations with capital budget impact						
Stakeholder discussion on long-term fiscal outlook			$\checkmark$	0	n-goi	ng
Summary of results to date:				<u>Sc</u>	:oreca	rd Ke
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			Red	Acc Oi quires	complis n sche s atter	shed dule ntion

<b>Output:</b> Metrorail Metrobus	Revenue Vehicle Miles (Thousands)	66,699 37,648
<b>Output:</b> Metrorail Metrobus	Passengers Per Revenue Vehicle Mile	3.26 3.28
<b>Efficiency:</b> Metrorail Metrobus	Operating Cost Per Revenue Vehicle Mile	\$11.84 \$12.99
Efficiency: Metrorail Metrobus MetroAccess WMATA Systemwide	Farebox Recovery Ratio	62.1% 22.9% 4.4% 44.0%
Efficiency: Metrorail Metrobus MetroAccess	Operating Cost Per Passenger Trip	\$3.64 \$3.96 \$41.39
Outcome: Metrorail (linked trips) Metrobus (unlinked tri MetroAccess	<b>Annual Ridership (Thousands)</b>	217,219 123,847 2,377
Outcome: Metrorail Metrobus MetroAccess	Maryland Annual Ridership (Thousands)	85,736 35,767 1,429
Outcome: Metrorail Metrobus MetroAccess	District of Columbia Annual Ridership (Thousands)	66,056 67,271 634
Outcome: Metrorail Metrobus MetroAccess	Virginia Annual Ridership (Thousands)	65,448 20,809 314

## **Jurisdictional Measures**

Metrobus in Fairfax County	FY07 FY08 FY09		FY09	FY10	FY11	
	Actual 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	\$36,723,400	\$36,744,578	\$42,761,346	\$40,219,382	\$40,650,118	
Operating Subsidy/ Platform Mile	\$5.20	\$5.03	\$6.51	\$6.04	\$5.55	
Operating Subsidy/ Platform Hour	\$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 FY08 FY09 Actual Actual 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>1</sup> 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.

**Bus Fleet Reliability (Bus Mean Distance between Failures)** – 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

**<u>Rail On-Time Performance by Line</u>** – 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.

**Rail Fleet Reliability (Railcar Mean Distance between Delays)** – The number of revenue miles traveled before a railcar failure results in a delay of service of more than three minutes. Some car failures result in inconvenience or discomfort, but do not always result in a delay of service (such as hot cars).

Calculation: Number of failures resulting in delays greater than three minutes / total railcar miles.

**MetroAccess On-Time Performance** – The number of trips provided within the on-time pick-up window as a percent of the total 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 transit system (rail, bus and MetroAccess) 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) and MetroAccess injuries / (passenger trips / 1,000,000).

**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.

<u>**Customer Comment Rate**</u> – A complaint is defined as any phone call, e-mail or letter resulting in investigation and response to a customer. This measure includes the subject of fare policy but excludes specific Smartrip matters handled through the regional customer service center. A commendation is any form of complimentary information received regarding the delivery of Metro service.

Calculation: Number of complaints or commendations / (passenger trips / 1,000,000)

#### KPI: Bus On-Time Performance / Target = 80%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Avg. Thru Sept.
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%	76.7%
FY 2011	72.8%	74.7%	71.7%										73.0%

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

	Jul	Aua	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mav	Jun	Avg. Thru Sept.
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	5,220
FY 2011	6,670	6,673	7,366										6,903

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

Type (~ % of Fleet)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Avg.
CNG (30%)	8,105	7,362	12,258	9,347	8,935	8,853	7,842	7,905	9,059	9,093	6,680	9,165	8,717
Hybrid (23%)	9,973	10,980	10,167	11,859	10,666	10,546	9,499	8,844	9,944	10,161	11,378	11,361	10,448
Clean Diesel (8%)	12,345	10,052	11,137	9,806	9,911	11,109	7,990	7,345	7,933	10,547	7,931	10,300	9,701
All Other (39%)	3,872	4,393	4,187	5,225	4,928	4,804	4,562	4,102	4,517	4,332	4,921	4,798	4,553

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

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Avg.
Red Line	92.2%	91.9%	88.5%	89.0%	87.9%	88.9%	90.0%	91.0%	90.1%	88.5%	88.3%	88.0%	89.5%
Blue Line	89.6%	90.0%	86.4%	88.2%	87.4%	88.2%	88.9%	88.3%	87.5%	86.0%	86.1%	88.3%	87.9%
Orange Line	92.2%	92.4%	87.1%	90.1%	88.7%	92.2%	92.1%	91.4%	90.4%	88.8%	90.5%	92.1%	90.7%
Green Line	90.2%	89.8%	86.8%	90.5%	89.4%	91.1%	90.7%	91.0%	90.8%	90.3%	91.9%	91.9%	90.4%
Yellow Line	91.0%	91.8%	89.4%	91.6%	91.4%	91.4%	90.4%	90.7%	89.8%	88.6%	91.4%	92.0%	90.8%
Average (All Lines)	91.2%	91.2%	87.6%	89.5%	88.6%	90.0%	90.3%	90.6%	89.9%	88.6%	89.2%	89.7%	

#### KPI: Rail Fleet Reliability (Rail Mean Distance Between Delays by Railcar Series) / Target = 60,000 miles

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Avg.
1K	45,250	49,292	37,808	35,548	45,404	37,742	33,487	41,859	32,241	32,258	46,370	43,908	40,097
AC	65,733	62,945	41,477	35,395	31,927	56,513	52,011	44,354	49,175	65,428	39,911	49,582	49,537
4K	28,682	58,752	22,346	19,933	24,393	41,982	27,659	41,703	18,166	21,553	17,893	18,645	28,475
5K	50,953	38,103	38,175	47,613	56,609	39,500	47,952	55,967	29,265	28,290	29,410	34,094	41,328
6К	103,325	76,017	74,306	83,567	141,162	78,393	110,522	80,046	93,631	57,029	107,198	77,921	90,260
CMNT AVG	55,985	55,610	41,082	38,798	42,997	49,088	46,943	49,375	39,573	42,424	40,435	43,420	

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

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Avg. Thru Sept.
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%	91.7%
FY 2011	94.6%	94.3%	91.8%										93.6%

#### KPI: Escalator System Availability / Target = 93%

													Avg.
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Thru Sept.
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%	89.9%
FY 2011	89.5%	88.9%	89.7%										89.4%

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

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
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%	96.2%
FY 2011	96.0%	94.8%	94.9%										95.2%

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

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
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	1.02
FY 2011	1.14	1.24											1.19

\*Includes escalator injuries and reflect the revision of FY 2010 belated bus ridership data.

#### Bus Passenger Injury Rate (per million passenger trips)

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
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	1.04
FY 2011	1.44	0.95											1.20

#### Rail Passenger Injury Rate (per million passenger trips)

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
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	0.85
FY 2011	0.10	0.11											0.10

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

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Avg. Thru Sept.
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	0.85
FY 2011	0.89	1.35											1.12

\*Includes escalator injuries.

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

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Avg. Thru Sept.
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	2.53
FY 2011	2.46	3.88	0.98										2.44

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

													Ava.
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Thru Sept.
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	64
FY 2010	68	70	65	54	56	65	53	69	42	47	62	56	68
FY 2011	47	52	64										54

\* FY11 first quarter has been revised to reflect late reports

#### Vital Signs Report Performance Data (cont.)

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

													Avg. thru
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Aug.
FY 2010 Metrobus	1.06	0.80	1.24	0.88	1.37	0.89	0.52	0.23	0.74	1.23	1.46	0.96	0.93
FY 2011 Metrobus	0.86	0.66											0.76
FY 2010 Metrorail	4.29	5.03	5.38	5.43	6.78	5.76	7.59	6.11	4.68	5.06	6.11	5.26	4.66
FY 2011 Metrorail	6.19	4.91											5.55
FY 2010 Metro Parking Lots	2.59	2.23	4.32	3.85	6.41	3.63	2.79	2.53	3.05	2.39	4.53	3.94	2.41
FY 2011 Metro Parking Lots	4.06	5.40											4.73

#### Crimes by Type\*\*

	Sept-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	June-10	July-10	Aug-10	Avg.
Robbery	81	96	104	89	122	81	86	91	89	71	66	58	86
Larceny	92	80	110	59	51	27	69	66	97	111	131	111	84
Motor Vehicle Theft	8	10	12	7	6	5	6	9	13	13	10	18	10
Attempted Motor Vehicle Theft	7	6	7	3	1	1	6	9	9	5	10	6	6
Aggravated Assault	9	7	8	7	10	7	7	9	15	7	14	15	10
Rape	0	0	0	0	2	2	0	0	0	0	1	0	0
Burglary	0	0	0	0	1	0	0	0	1	0	0	0	0
Homicide	0	0	1	0	0	0	0	0	0	0	0	0	0
Arson	0	0	0	0	0	0	0	0	0	0	0	0	-
Total	197	199	242	165	193	123	174	184	224	207	232	208	196

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

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

													Avg. thru
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Aug.
FY 2010 Arrests	168	164	169	187	160	156	142	100	201	193	193	146	166
FY 2011 Arrests	234	194											214
FY 2010 Citations/Summonses	770	517	545	575	468	492	543	295	572	559	639	647	644
FY 2011 Citations/Summonses	727	644											686

#### Vital Signs Report Performance Data (cont.)

#### Metrobus Ridership (millions)

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	Avg. Thru Sept.
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	11.9
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	11.5
FY 2011	10.4	10.5	10.5										10.5

#### Metrorail Ridership (millions)

													Ava.
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Thru Sept.
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	19.2
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	18.8
FY 2011	20.2	18.5	17.8										18.9

#### MetroAccess Ridership (100,000s)

	Jul	Aua	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Mav	Jun	Avg. Thru Sept.
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	2.06	2.03										2.0

#### Vital Signs Report Performance Data (cont.)

#### November 2010

#### KPI: Customer Commendation Rate (per million passenger trips)

	Jul	Aua	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
FY 2010	12.9	10.6	10.2	10.3	9.1	9.2	10.3	9.7	10.7	13.4	11.7	11.0	11.2
FY 2011	11.3	9.0	8.5										9.6

#### Number of Customer Complaints

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Avg. Thru Sept.
FY 2010	147	143	145	130	124	121	119	162	140	124	136	147	145
FY 2011	150	138	129										139