Vital Signs Report

A Scorecard of Metro's

Key Performance Indicators (KPIs)

2014 Third Quarter Results

Office of Performance

Chief Performance Officer

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Introduction to this report

As a regional transportation system, Metro's system-wide performance is captured in the Vital Signs Report. The Vital Signs Report provides analysis of a small number of key performance indicators (KPI's) that monitor long term progress in the strategic areas of safety, security, service reliability and customer satisfaction.

The report is not designed to measure the experience of individual customers using Metro's services. Instead, the Vital Signs Report communicates if the Metro system's performance is improving, worsening or remaining steady.

Detailed performance analysis is presented in the Vital Signs Report through answers to two prime questions: Why did performance change? What actions are being taken to improve performance? Metro is focused on these two questions to continually drive improvement.

The Vital Signs Report demonstrates Metro's commitment to be transparent and accountable to our Board of Directors, jurisdictional stakeholders and the public. This report documents performance results and strives to hold WMATA's management accountable for what is working, what is not working, and why.

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Strategic Plan Overview

Strategies flow from Metro's Board-adopted Vision, Mission, and Goal statements, and provide the overarching framework for executing the General Manager's business plan

Vision: **Metro moves the region forward by connecting communities and improving mobility for our customers**

Mission: **Metro provides safe, equitable, reliable and cost-effective public transit**

Goals:

Build and maintain a premier safety culture and system

Meet or exceed customer expectations by consistently delivering quality service

Improve regional mobility and connect communities

Ensure financial stability and invest in our people and assets

KPI:	Bus On-Time Performance	Goal: Meet or exceed customer expectations
	Jul-Sep 2014	by consistently delivering quality service

Reason to Track: This indicator illustrates how closely Metrobus adheres to published route schedules on a system-wide basis. Factors which effect 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. For this measure higher is better.

Why Did Performance Change?
- Third quarter's bus on-time performance was two points better than Q3-2012 (78% compared to 76%) as a result of fewer buses arriving late. This quarter buses ran late 16% of the time compared to 18% in Q3-2012* or 26 more buses arriving on time.
- Although the improvement has been a continued trend, bus customers also experienced the benefits of the new Metroway Bus Rapid Transit Expansion (a collaborative effort between Metro and partner jurisdictions to provide faster service between Crystal City and Braddock Road) and continued benefits of active street management.
- The benefit of the region's first dedicated bus-only lane service, Metroway, speaks for itself. Metroway's bus on-time performance eclipses the on-time performance of other Priority Corridor routes. Metroway's on-time- performance was 98% compared to Priority Corridor's 76%.
- Despite delays driven by special events and road construction, real time adjustments helped to reduce the impact of some of these delays.
- This quarter customers experienced September's normal seasonal drop in on-time performance as school and commuter traffic increased but the decline this year was less steep than last year because of improved service monitoring and adjustments.

Bus On-Time Performance

* Jul-Dec 2013 data not available

—△· CY 2012   ··◇·· CY 2013   —■— CY 2014   —— Target
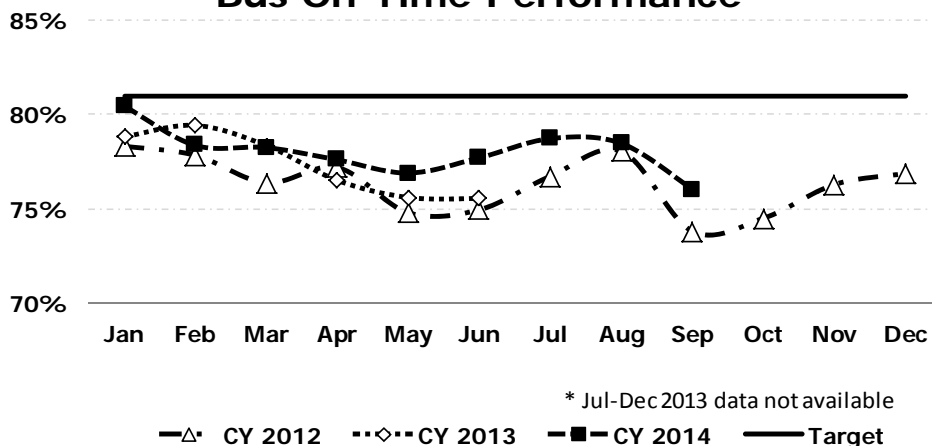
Actions to Improve Performance

- Continue to monitor the results of new initiatives like Active Service Management (ASM) which assigns street managers to terminals (as opposed to driving around in service vehicles) for more visibility to the public and bus operators and increased ride-alongs on poor performing routes .
- Priority Corridor's on-time performance continues to hover below the average on-time performance of 78%. Bus Services anticipates improvement as the Priority Corridor becomes fully matured.
- Continue to monitor the absenteeism campaign to improve delays driven by workforce challenges.
- Continue to educate jurisdictions on their role in contributing to improved bus on-time performance.

Conclusion: Metroway Bus Rapid Transit Service and active street management contributed to the two percentage point improvement this quarter, despite delays driven by special events, road construction and increased traffic during the month of September.

KPI:	Bus Fleet Reliability Jul-Sep 2014	Goal: Meet or exceed customer expectations by consistently delivering quality service

Reason to Track: Mean Distance Between Failures (MDBF) is used to monitor trends in vehicle breakdowns that cause buses to go out of service and to plan corrective actions. Factors that influence bus fleet reliability are the vehicle age, quality of a maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction. For this measure higher is better.

Why Did Performance Change?

- It continues to be a challenging year for bus fleet reliability. Q3-2014 bus fleet reliability was 8% worse compared to Q3-2013; customers experienced 165 more service interruptions due to mechanical failures.
- Despite 26 new buses being placed into service in September, staff continued to work towards resolving certain industry challenges. Like most transit properties, Metro procures bus engines from a primary engine manufacturer and many of the service interruptions were driven by bus manufacturer part failures. Engine failures are Metro's leading cause of service interruptions.
- The Hybrid and CNG fleets provide 80% of the bus service and both of these fleets experienced an uptick in engine shut off failures this quarter. Some of these failures continued to be related to coolant pump, ignition and EGR (the EGR system controls the bus' emission system) component failures.
- Some of the older Diesel buses continue to be plagued by fluid leaks and wheel chair lift related problems.
- The CNG articulated buses (accordion appearance) continue to experience EGR cooler and turbocharger failures (turbochargers control airflow to the engine).

Bus Fleet Reliability
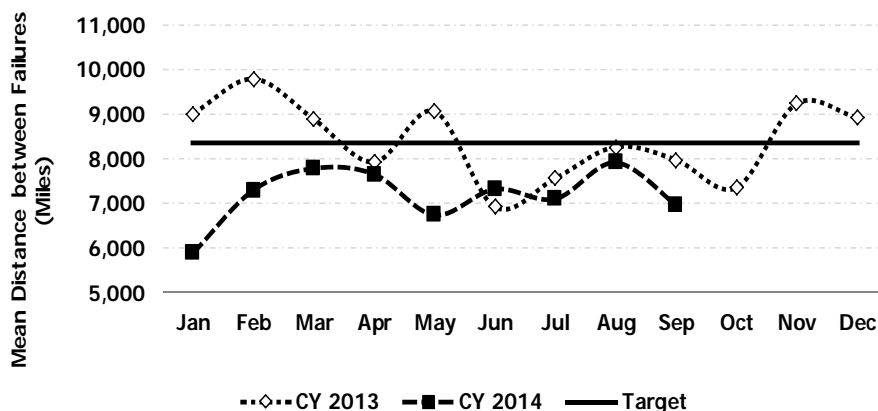
Actions to Improve Performance

- Metro continues to conduct an in-depth failure analysis and has developed a reliability action list targeting specific actions for each sub-fleet.
- Collaborate with BAE Systems to develop a proactive campaign to replace 3 components with high failure rates and install new software on the Hybrid fleet.
- The Hybrid bus manufacturer will continue the campaign to replace coolant booster pumps on 10 buses per week.
- Continue to work through internal funding challenges to acquire the parts/services needed in a timely fashion. Projects aimed at resolving CNG part failures have just been funded; buses will undergo retrofits of improved components.
- Educate bus operators on minor trouble shooting techniques to reduce occurrences which are not actually mechanical failures.

Conclusion: Q3-2014 bus fleet reliability was 8% worse compared to Q3-2013; customers experienced 165 more service interruptions due to mechanical failures. A number of campaigns are underway to systematically resolve specific component failures for each fleet type.

KPI:	Rail On-Time Performance Jul-Sep 2014	Goal: Meet or exceed customer expectations by consistently delivering quality service

Reason to Track: On-time performance measures the adherence to weekday headways, the time between trains. Factors that can effect on-time performance include: infrastructure conditions, speed restrictions, single-tracking around scheduled track work, railcar delays (e.g., doors), or delays caused by sick passengers. For this measure higher is better.

Why Did Performance Change?
- Rail On-Time Performance slipped in August, the first full month of Silver Line service and rebounded in September as staff became more accustomed to managing the new service.
- Operations staff identified key elements of strong Silver Line service (e.g., on-time dispatch from Wiehle-Reston East, on-time train arrivals at East Falls Church to ensure proper sequencing of Silver, Orange and later, Blue Line trains and strategically responding to delay incidents) and began managing to these elements, including:
    - Placed supervisor at McLean station to monitor train arrivals, holding trains as needed to improve on-time arrival to East Falls Church.
    - Strategically turn back trains during delay incidents when possible to restore near normal service to highest ridership segments.

Rail On-Time Performance
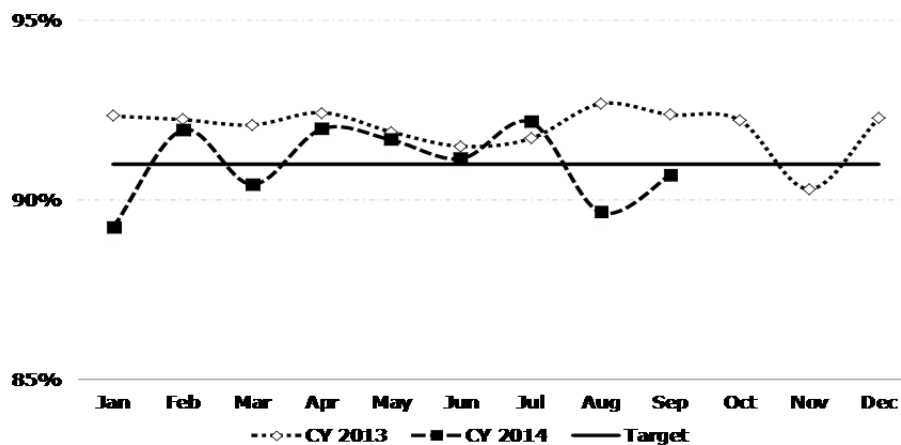
Actions to Improve Performance
- Following analysis of runtimes between Silver Line stations, make slight schedule adjustments in December to support on-time departure from Wiehle-Reston East and proper sequencing of Silver and Orange Line trains from East Falls Church.
- Begin training operators in anticipation of the return to Automatic Train Operations on the Red Line.
- Rail Operations is taking steps to minimize customer delay due to railcar brake malfunctions. Train operators will wait two minutes before attempting to re-start a train experiencing a brake problem so that air compressors may recharge, potentially avoiding an offload and allowing the train to resume service.

Conclusion: Rail On-Time Performance rebounded in September as staff became more accustomed to managing the new Silver Line service that was introduced in late July.

KPI:	Rail Fleet Reliability Jul-Sep 2014	Goal: Meet or exceed customer expectations by consistently delivering quality service

Reason to Track: Mean Distance Between Delays (MDBD) 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. For this measure higher is better.

Why Did Performance Change?

- Railcar delay incidents remained consistent with Q3/2013 despite providing additional service to Silver Line (service requirement increased by 48 railcars and mileage by 15%), indicating that maintenance practices are keeping railcars running longer.
- Brakes emerged as the leading cause of railcar delay incidents in Q3/2014 (37%). In a typical brake incident, safety mechanisms make railcars inoperable when brake problems are detected, delaying customers until a mechanic can resolve the problem. YTD, brake delay incidents were most prevalent on the 1000 series, 2000/3000 series and 5000 series railcars. During Q3/2014, Car maintenance made significant progress on 1000 series initiatives to reduce troubles (minimizing fluid leaks in hydraulic power units and replacing pipe pressure switches).
- By railcar series, brakes and door delay incidents in Q3/2014 led to fewer miles between delay for the 5000 and 2000/3000 railcars (-23% and -7%, respectively) than Q3/2013. Offsetting this are significant improvements in the 6000 series (120% better), followed by 4000 and 1000 series (29% and 27% better, respectively).

Rail Fleet Reliability
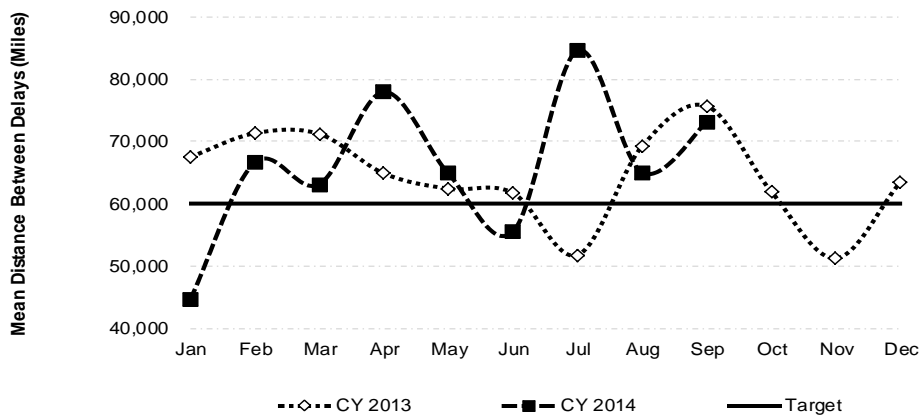
Actions to Improve Performance

- Car maintenance and engineering staff are continuing to test and implement initiatives to reduce brake incidents, including pneumatics system upgrades on the 2000/3000 series and synchronizing air compressor operations across railcars within a train.
- To minimize customer delay, train operators will wait two minutes before attempting to re-start a train experiencing a brake problem. While a short delay for riders, this action is anticipated to, in some cases, allow the train to resume service once air compressors are recharged.
- Staff participates in regular cross-departmental delay incident review meetings to identify cause, evaluate procedures and focus improvement actions.

Conclusion Despite a 15% increase in railcar mileage from the introduction of Silver Line, railcar delay incidents remained consistent with Q3/2013. Car Maintenance and Engineering staff focused on improving brake performance on the 1000 series that represented the largest share of brake problems.

| **KPI:** | **Escalator System Availability**
Jul-Sep 2014 | **Goal: Meet or exceed customer expectations by consistently delivering quality service** |

Reason to Track: Customers 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 total travel time and may make stations inaccessible to some customers. Escalator availability is a key component of customer satisfaction with Metrorail service. This measure communicates system-wide escalator performance (at all stations over the course of the day) and will vary from an individual customer's experience. For this measure higher is better.

Why Did Performance Change?

- Systemwide escalator availability continued to exceed target in Q3/2014 as stronger maintenance led to shorter outages for customers.
- Escalator preventive maintenance (PM) compliance reached 96% in Q3/2014, as the addition of new mechanics enabled Metro to more proactively identify and resolve needed repairs (in 2010, less than half of PM inspections were completed).
- When outages did occur, mechanics working in geographic regions were able to quickly respond and resolve less time intensive repairs (Mean Time to Repair was 5 hours in Q3/2014 compared with 18 hours in Q3/2011).
- In July, mechanics began responding to unscheduled outages for the 27 escalators located at the new Silver Line stations. Scheduled maintenance was conducted by the equipment manufacturer.
- Scheduled maintenance accounted for over half of all maintenance hours (up from 36% in Q3/2013) as Metro installed new escalators at five stations and rehabilitated escalators at six other stations.

Escalator System Availability

Legend: CY 2013 (open diamond, dotted), CY 2014 (filled square, dashed), Target (solid line)
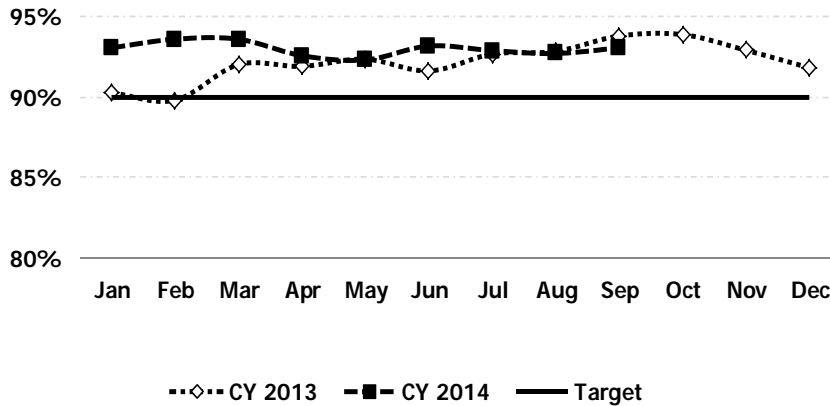
Actions to Improve Performance

- Continue escalator replacement program, introducing the 15th and 16th new escalators between mezzanine and platform levels at Bethesda station and begin installation of entrance escalators at Bethesda and Metro Center (12th and G St.). The new Metro Center entrance escalators will be covered to reduce rainwater intrusion, which is anticipated to improve Mean Time Between Failure compared to the current uncovered escalators at that entrance.
- Participate in cross-departmental meeting to review reliability trends, share best practices across maintenance disciplines and identify opportunities to improve maintenance procedures (ex: introduced pre-measured grease applicators to ensure proper lubrication of escalators, reducing unexpected outages).
- In 2015, implement round-the-clock remote monitoring of escalator status to ensure units are quickly entered into Metro's maintenance tracking system, notifying customers in a timely manner and improving mechanic response time.

Conclusion: Stronger escalator maintenance led to shorter outages for customers, keeping systemwide escalator availability above target in Q3/2014.

KPI:	Elevator System Availability	Goal: Meet or exceed customer expectations
	Jul-Sep 2014	by consistently delivering quality service

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. For this measure higher is better.

Why Did Performance Change?

- Overall Q3/2014 elevator availability was on-par with Q3/2013, just shy of the target.
- The mix of elevator maintenance shifted towards unscheduled work this quarter. Elevators stayed out of service as technicians conducted troubleshooting to identify root cause (e.g., Forest Glen and Friendship Heights, where multiple operating elevators ensured the stations remained accessible) and groundwater intrusion damaged a pump at Gallery Place.
- Elevator preventive maintenance (PM) compliance was 89%, slightly below Q3/2013 as 60 mechanics participated in training aimed at improving the quality of PM inspections on Metro's hydraulic elevators. In the near term, improved maintenance practices resulting from the training are anticipated to improve Mean Time Between Failure.
- In July, mechanics began responding to unscheduled outages for the 28 elevators located at the new Silver Line stations. Scheduled maintenance was conducted by the equipment manufacturer.

Elevator System Availability
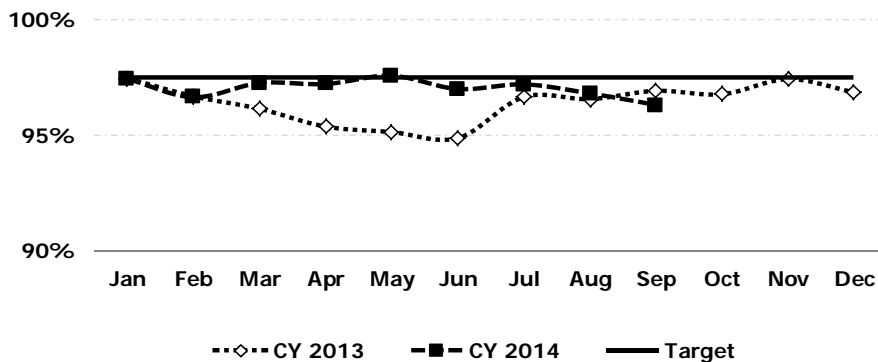
Actions to Improve Performance

- As part of the Metro Forward rebuilding program, begin replacement of 100 elevators, including some of Metro's oldest elevators and units damaged by persistent water intrusion.
- Continue program to remove water from elevator wells, installing monitors and removing water to external discharge locations at Huntington (south) and Wheaton garage.
- Extend PM compliance training to address Metro's traction elevators (23% of elevators).

Conclusion: Overall Q3/2014 elevator availability was on-par with Q3/2013, with work focusing on troubleshooting the root cause of outages and responding to damage caused by water intrusion.

KPI:	Customer Injury Rate Jul-Sep 2014	Goal: Build and maintain a premier safety culture and system

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. For this measure lower is better.

Why Did Performance Change?

- Q3-2014 customer injury rate was worse than Q3-2013 primarily as a result of bus collision-related incidents. There were five or 23% more collision injury-related incidents compared to Q3-2013. Overall customer injuries were 9% higher than Q3-2013.
- In September, there were three incidents that accounted for 31 of the 58 bus collision-related incidents. This is approximately 10 customers injured per bus. Non-preventable accidents represent 52% of September's collisions.
- Although slips/trips/falls continue to be a large contributing factor (driven by inattentive actions, intoxication and out-of service escalators); the escalator, platform and parking lot injury rate improved 5% compared to Q3-2013. Safety awareness campaigns are a consistent reminder to customers to be aware of their surroundings.
- There was a slight increase in the rail on-board injury rate, typically related to slips/trips/falls.
- MetroAccess customer injury rate increased (52% or three more injuries) compared to Q2-2013. Metro Access injuries were both collision and non-collision-related injuries (e.g., a patron drove their walking aid off the edge of the vehicle lift).

Customer Injury Rate
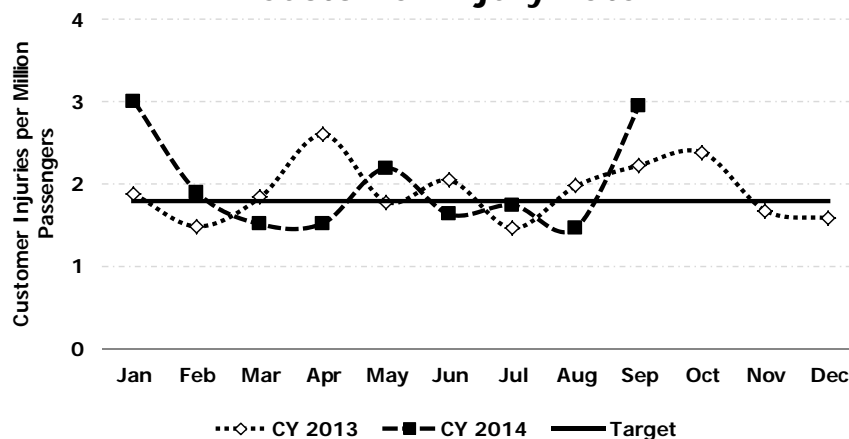
Actions to Improve Performance

- Safety officers, transit police and bus superintendents will continue to work together to conduct scheduled and non-scheduled safety blitz' at locations identified as accident/incident hot spots. There were 50% more safety blitz' conducted compared to Q3-2013.
- In response to three catastrophic incidents which occurred at other transit properties, Metro partnered with the National Highway Traffic Safety Administration and conducted an analysis that will require certain bus manufacturers to implement corrective actions (e.g. retrofitting certain buses with a collapsible bar in front of front facing seats).
- Continue to conduct DriveCam coaching and training for 100 bus operators who have demonstrated the most risky driving behaviors.

Conclusion: The customer injury rate was worse than Q3-2013 primarily as a result of bus collision-related incidents. There were five or 23% more collision injury related incidents compared to Q3-2013.

KPI:	**Employee Injury Rate** Jul-Sep 2014	**Goal: Build and maintain a premier safety culture and system**

Reason to Track: OSHA recordable injuries are a key indicator of how safe employees are in the workplace. For this measure lower is better.

Why Did Performance Change?

- The employee injury rate for Q3-2014 was better than target and Q3-2013. There were 5% fewer employees injured for every 200,000 hours worked.
- This year slips/trips/falls takes the top spot for employee-related incidents. Traditionally, collision-related injuries were the largest cause of injuries, now the second largest cause of employee related injuries.
- Slips/trips/falls represent 24% of employees injured and collisions represent 20%. Bus operators and rail and bus employees in mechanical jobs are the leading groups of employees injured. These groups experience injuries related to collision, push/pulling and struck by objects –respectively.
- The initial review of employee injuries asserts that these injuries were caused by inattention and non-preventable collisions (a portion of arrest/crime-related injuries in the case of Transit Police).

Employee Injury Rate
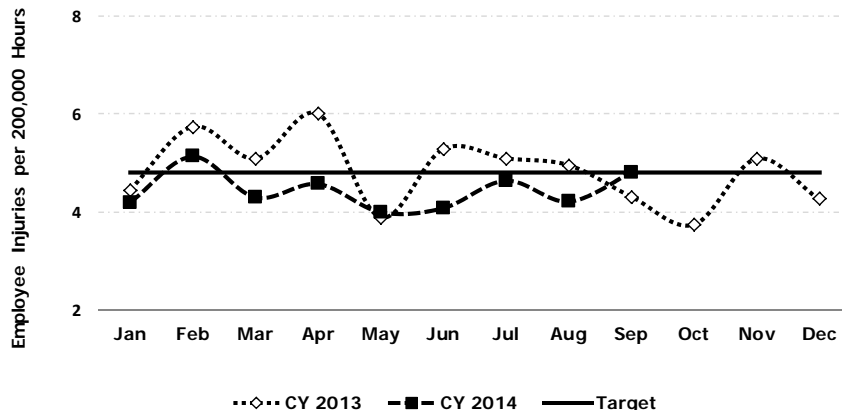
Actions to Improve Performance

- Continue to systematically review incidents, inspect employee facilities and provide effective resources and training to employees to ensure a safer workplace.
- SAFE and department training leads will continue to develop classes geared to better root cause and corrective actions to prevent recurrences, best practice ergonomic techniques (e.g., proper method for turning the bus steering wheel to avoid straining) and defensive driving courses.
- Survey transit police officers to determine assault-related contributing behaviors and revise training programs to reduce assaults.

Conclusion: The employee injury rate for Q3-2014 was better than target and Q3-2013. Metro will continue its injury prevention approach that includes a renewed focus on performing thorough investigations and providing proper training.

KPI:	Crime Rate Jul-Sep 2014	Goal: Build and maintain a premier safety culture and system

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. For this measure lower is better.

Why Did Performance Change?

- Crimes are down in every mode this quarter compared to Q3-2013.
- Metrorail's crime rate is down 21% from the same quarter last year as the amount of robberies has declined 48% and snatches and pickpockets 60%. High visibility details were dispatched in rail stations /trains and continued customer awareness campaigns were conducted through the distribution of literature and public announcements.
- The crime rate on Metrobus declined 51%. Significant attention was placed on preventing youth misconduct (e.g. conducted numerous back to school initiatives). Also, transit police worked shoulder to shoulder details with Prince George's County police.
- Parking lot crime declined 58%. Bike locks were distributed, casual clothes officers were instrumental in reducing parking lot crimes, scout cars were deployed and vulnerability assessments were conducted and risks mitigated.

Crimes per Million Customers
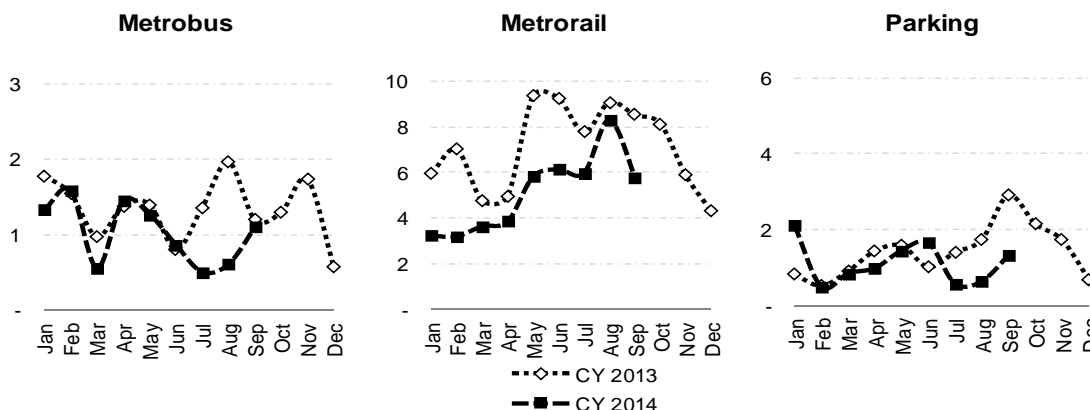
Combined Target is: Less than 2,000 Part I Crimes in CY 2014

Actions to Improve Performance

- Continue shoulder to shoulder details with jurisdictions. Prince Georges' Deputy Chief of Patrol is committed to attending each MetroStat (a forum for developing crime reduction strategies/tactics).
- Encourage mobile patrol to get out of vehicles to conduct physical facility checks to combat assaults.
- Share information with regional law enforcement and request patrol coordination.
- Continue to identify, implement and track effectiveness of strategies to reduce crime in the Metro transit system (e.g., deployment of crime reduction teams, decoy vehicles in parking lots, distribution of crime prevention literature, Parking Watch Program using Gators, surveillance vans and hazard assessments).

Conclusion: Crimes were down in every mode this quarter compared to Q3-2013. Numerous crime prevention initiatives have been instrumental in reducing crime, while transit police continue to protect customers and employees alike.

KPI:	Customer Satisfaction Jul-Sep 2014	Goal: : Meet or exceed customer expectations by consistently delivering quality service

Reason to Track: Surveying customers about the quality of Metro's service delivery provides a mechanism to continually identify those areas of the operation where actions to improve the service can maximize rider satisfaction. The higher the Customer Satisfaction score, the better.

Why Did Performance Change?

- Metrobus satisfaction climbed 2 percent since last quarter bringing it back up to last year levels.
- Likely driving this increase are improved feelings of safety on the bus—up 5 percent compared to last year (83% vs. 88%) as well as a quarter over quarter increase in bus cleanliness of 6 percent (75% to 81%).
- Other Metrobus factors have remained the same compared to the previous year. Bus stop cleanliness continues to be a challenge with DC (63%) and Maryland (64%) customers reporting the lowest levels of cleanliness satisfaction.
- Bus operators continue to deliver high quality service: greeting customers as they board (81%); exhibiting high levels of professionalism (71%) and displaying courteousness (72%).
- Metrorail experienced a slight drop in satisfaction compared to Q2-2014, but it is down 7 percentage points compared to Q3-2013.
- Ratings of reliability have slowly improved over the past several quarters but overall there is no statistically significant improvement.
- Other Metrorail service area ratings (e.g., cleanliness, climate control, etc.) are all down compared to this same period last year. However, ratings are consistent with the previous quarter.
- Metrorail communications is up across all indicators; operators continue to make understandable announcements and NextTrain usage has doubled in the last year with no degradation in reliability.

Customer Satisfaction
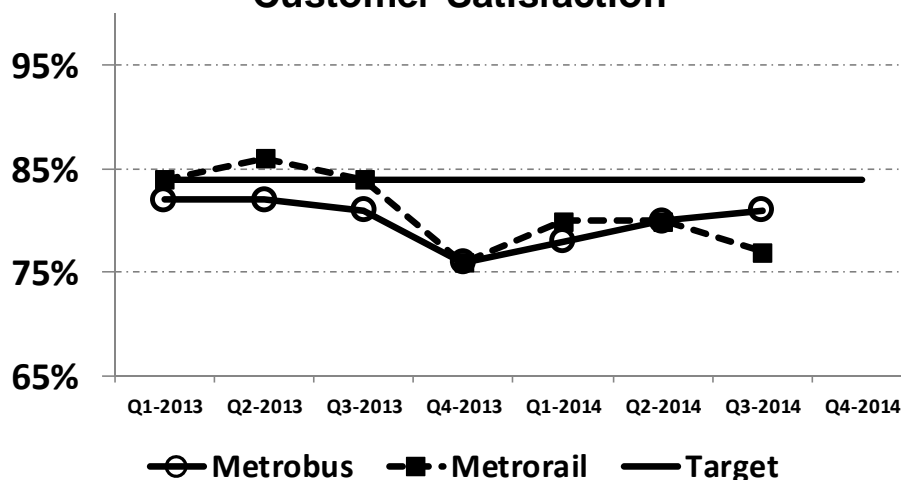
Actions to Improve Performance

- Metrobus customer satisfaction levels will continue to improve as more attention is paid to service levels. Cleanliness levels have likely bounced back due to operators removing debris at the end of each trip.
- Metrorail customers place considerable emphasis on reliability and comfort. Gains in reliability will be cut short if more attention is not given to other Metrorail service areas (e.g., train cleanliness, smoothness of ride).

Conclusion: Metrobus continues to make exceptional efforts to improve all areas of service. Metrorail has shown steady improvement in reliability but may need to turn some attention to other areas of service to maintain a consistent level of satisfaction.

Board Standards and Guidelines

Resolution 2012-29: Rail Service Standards
Resolution 2013-20: Rail Service Standards

Board Standard: Metrorail Service (Resolutions 2012-29 and 2013-20)

Board Standard: Hours of Service - Hours that the Metrorail system is open to serve customers.

Target: Opens at 5 AM weekdays, 7 AM weekends. Closes at 12 AM Sunday – Thursday, 3 AM Friday and Saturday.

Time Period: Jun-Aug 2014

Results: Metro was paid to stay open an additional hour following two preseason football games (Aug 7 and 18).

Board Standards: Headway – Scheduled time interval between trains during normal weekday service.

Target: During rush - 3 min on core interlined segments, 12 min at Arlington Cemetery and 6 min on all other segments; during weekday mid-day - up to 6 min on core interlined segments and 12 min on all other segments; and during weekday evenings - up to 15 min on core interlined segments and up to 20 min on all other segments.

Time Period Tracked: Jun-Aug 2014

Results:
- Metro provided enhanced evening service on Independence Day, operating near rush-hour service levels from 6PM to midnight.
- Weekday evening headways were changed to accommodate system rebuilding on 63 days.
- For details on Metro's adherence to scheduled headways, see Rail On-Time Performance page 9.

Board Standard: Passengers-per-car (PPC) - Average number of passengers in a Metrorail car during a weekday hour at maximum load stations.

Target: Optimal PPC of 100, with minimum of 80 and maximum of 120 PPC.

Time Period Tracked: Jun-Aug 2014

Rush Results:

		Max Load Points	Jun-14	Jul-14	Aug-14
AM Rush	Red	Gallery Place	90	90	87
		Dupont Circle	92	83	85
	Blue	Rosslyn	88	98	88
		L'Enfant Plaza	66	81	53
	Orange	Court House	104	96	78
		L'Enfant Plaza	89	80	62
	Yellow	Pentagon	85	69	73
	Green	Waterfront	68	72	77
		Shaw-Howard	85	76	68
	Silver	Rosslyn			77
		L'Enfant Plaza			56
PM Rush	Red	Metro Center	89	80	84
		Farragut North	91	82	82
	Blue	Foggy Bottom-GWU	100	98	96
		Smithsonian	68	79	59
	Orange	Foggy Bottom-GWU	95	91	77
		Smithsonian	71	76	60
	Yellow	L'Enfant Plaza	82	79	74
	Green	L'Enfant Plaza	69	86	94
		Mt. Vernon Sq.	84	68	71
	Silver	Rosslyn			75
		L'Enfant Plaza			48

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 total 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: Total Bus Miles / Number of failures.

Rail On-Time Performance – Metrorail adherence to scheduled weekday headways.
Calculation: During rush (AM/PM) service, number of station stops delivered within the scheduled headway plus 2 minutes, divided by total station stops delivered. During non-rush (mid-day and evening), number of station stops delivered up to 150% of the scheduled headway divided by total station stops delivered. Station stops are tracked system-wide, with the exception of terminal and turn-back stations.

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: Total railcar revenue miles / number of failures resulting in delays greater than three minutes.

Rail Passengers Per Car - Average number of passengers in a Metrorail car during a rush hour at maximum load stations.
Calculation: Total passengers observed on-board trains passing through a station during a rush hour divided by actual number of cars passing through the same station during the rush hour. Counts are taken at select stations where passenger loads are the highest and in the predominant flow direction of travel on one to two dates each month (from 6:00 AM to 10:00 AM and from 3:00 PM to 7:00 PM). In order to represent an average day, counts are normalized with rush ridership.

Elevator and Escalator System Availability – 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. Operating hours = operating hours per unit * number of units.

Customer Injury Rate (per million passengers[1]) – Injury to any customer caused by some aspect of Metro's operation that requires immediate medical attention away from the scene of the injury.
Calculation: Number of injuries / (number of passengers / 1,000,000).

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[1] Passengers are defined as follows:
- o Metrobus reports unlinked passenger trips. An unlinked trip is counted every time a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are counted.
- o Metrorail reports linked passenger trips. A linked trip is counted every time a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel one trip is counted.
- o MetroAccess reports completed passenger trips. A fare paying passenger traveling from an origin to a destination is counted as one passenger trip.

Employee Injury Rate (per 200,000 hours) – An employee injury is recorded when the injury is (a) work related; and, (b) one or more of the following happens to the employee: 1) receives medical treatment above first aid, 2) loses consciousness, 3) takes off days away from work, 4) is restricted in their ability to do their job, 5) is transferred to another job, 6) death.
Calculation: Number of injuries / (total work hours / 200,000).

Crime Rate (per million passengers[1]) – Part I crimes reported to Metro Transit Police Department for Metrobus (on buses), Metrorail (on trains and in rail stations), or at Metro parking lots in relation to Metro's monthly passenger trips. Reported by Metrobus, Metrorail, and Metro parking lots.
Calculation: Number of crimes / (number of passengers / 1,000,000).

Customer Comment Rate (per million passengers[1]) – 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 / (number of passengers / 1,000,000).

Customer Satisfaction – Customer satisfaction is defined as the percent of survey respondents who rated their last trip on Metrobus or Metrorail as "very satisfactory" or "satisfactory." The survey is conducted via phone with approximately 400 bus and 400 rail customers who have ridden metro in the past 30 days. Results are summarized by quarter (e.g., January – March).
Calculation: Number of survey respondents with high satisfaction / total number of survey respondents.

KPI: Bus On-Time Performance -- Target = 81%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2012	78.3%	77.8%	76.4%	77.2%	74.8%	74.9%	76.7%	78.0%	73.8%	74.5%	76.3%	76.9%	76.2%
CY 2013	78.8%	79.4%	78.4%	76.5%	75.6%	75.5%							
CY 2014	80.4%	78.4%	78.2%	77.6%	76.9%	77.7%	78.7%	78.5%	76.0%				77.7%

KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures) -- Target = 8,343 Miles

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	9,008	9,783	8,883	7,918	9,060	6,917	7,553	8,260	7,972	7,342	9,226	8,923	7,915
CY 2014	5,879	7,291	7,778	7,648	6,733	7,313	7,095	7,911	6,954				7,301

* Bus Fleet Reliability target revised effective January 2014

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	Q3-2014
CNG (30%)	7,435	7,337	7,706	6,350	6,373	6,897	7,369	6,489	5,938	5,911	6,064	6,839	6,240
Hybrid (27%)	9,086	11,431	10,256	5,575	8,049	8,791	8,578	8,147	9,448	9,224	10,958	8,761	9,562
Clean Diesel (8%)	5,960	11,529	12,793	10,277	12,117	9,567	9,148	7,723	8,136	7,272	9,186	7,400	7,894
All Other (35%)	4,296	6,627	6,207	4,528	5,269	5,701	4,885	3,733	4,662	4,484	4,842	3,279	4,126

KPI: Rail On-Time Performance -- Target = > 91%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	92.3%	92.2%	92.1%	92.4%	91.9%	91.5%	91.7%	92.7%	92.4%	92.2%	90.3%	92.3%	92.2%
CY 2014	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%	92.2%	89.7%	90.7%				90.8%

KPI: Rail On-Time Performance by Line

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
Red Line	91.5%	92.3%	87.8%	91.1%	87.0%	90.8%	89.1%	91.6%	91.1%	89.4%	92.2%	92.3%	92.2%
Blue Line	91.6%	91.1%	90.2%	91.4%	89.2%	91.2%	89.7%	90.5%	90.7%	90.5%	92.2%	87.9%	89.6%
Orange Line	93.3%	93.1%	92.2%	93.4%	90.8%	93.2%	91.5%	92.4%	92.5%	92.5%	93.2%	86.4%	88.3%
Green Line	93.8%	92.5%	92.2%	93.6%	91.2%	93.5%	92.9%	93.6%	92.9%	93.2%	92.2%	87.9%	89.7%
Yellow Line	92.9%	92.9%	91.2%	95.0%	90.3%	92.6%	94.2%	93.5%	91.5%	91.6%	92.3%	95.7%	95.9%
Silver Line											88.5%	86.7%	88.4%
Average	92.4%	92.2%	90.3%	92.3%	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%	92.2%	89.7%	90.7%
Target	90.5%	90.5%	90.5%	90.5%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%	91.0%

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	67,500	71,323	71,225	64,890	62,418	61,745	51,757	69,230	75,697	61,959	51,248	63,468	63,576
CY 2014	44,530	66,600	63,127	77,957	64,848	55,522	84,627	65,042	73,150				73,350

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	Sept	Q3-2014
1000 series railcars	74,880	46,283	87,738	31,151	48,027	47,860	48,748	44,507	55,558	86,726	62,966	59,758	53,461
2000/3000 series railcars	81,366	82,916	84,531	60,796	102,450	116,661	106,927	131,518	90,600	145,570	108,009	87,816	117,779
4000 series railcars	20,165	16,337	25,384	17,282	39,542	27,254	30,727	19,707	14,825	25,775	25,027	24,951	19,545
5000 series railcars	47,648	32,215	43,412	41,012	53,807	50,481	132,119	67,049	46,668	55,787	35,918	92,871	68,370
6000 series railcars	116,314	157,980	82,233	127,765	98,260	83,886	173,233	134,846	127,240	221,333	171,859	189,617	87,403
Fleet average	61,959	51,248	63,468	44,530	66,600	63,127	77,957	64,848	55,522	84,627	65,042	73,150	63,576

KPI: MetroAccess On-time Performance -- Target = 92%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	93.3%	92.3%	92.6%	91.6%	91.9%	89.9%	91.3%	92.9%	90.6%	91.2%	91.1%	92.5%	91.6%
CY 2014	93.3%	90.2%	92.5%	91.1%	92.3%	92.4%	92.6%	92.8%	91.8%				92.4%

KPI: Escalator System Availability -- Target = 90%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	90.2%	89.8%	92.0%	91.9%	92.3%	91.6%	92.6%	92.8%	93.8%	93.9%	92.9%	91.8%	93.1%
CY 2014	93.0%	93.6%	93.6%	92.6%	92.3%	93.1%	92.9%	92.7%	93.0%				92.9%

KPI: Elevator System Availability -- Target = 97.5%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	97.5%	96.7%	96.1%	95.4%	95.1%	94.9%	96.7%	96.6%	96.9%	96.8%	97.4%	96.9%	96.7%
CY 2014	97.4%	96.6%	97.3%	97.2%	97.6%	97.0%	97.2%	96.8%	96.3%				96.8%

KPI: Customer Injury Rate (per million passengers)* -- Target = < 1.8 injuries per million passengers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	1.88	1.49	1.84	2.60	1.78	2.05	1.46	1.98	2.23	2.39	1.68	1.59	1.88
CY 2014	3.01	1.90	1.51	1.53	2.19	1.63	1.74	1.47	2.95				2.05

*Includes Metrobus, Metrorail, rail transit facilities (stations, escalators and parking facilities) and MetroAccess customer injuries

Bus Customer Injury Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	1.40	2.03	2.30	4.48	2.06	3.03	1.61	2.73	3.51	3.48	1.55	1.25	2.65
CY 2014	3.14	2.28	1.30	2.04	2.96	1.99	2.27	1.90	4.89				3.03

Rail Customer Injury Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	0.12	0.06	0.06	0.05	0.16	0.00	0.10	0.28	0.06	0.06	0.13	0.07	0.01
CY 2014	0.13	0.07	0.36	0.05	0.22	0.16	0.10	0.17	0.06				0.11

Rail Transit Facilities Occupant Injury Rate (per million passengers)*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	2.02	0.83	1.40	1.32	1.24	1.23	0.98	1.17	1.12	1.34	1.60	1.43	1.09
CY 2014	2.43	1.46	1.19	1.08	1.27	0.66	1.08	0.91	1.09				1.03

*Includes station, escalator and parking facility customer injuries.

KPI: MetroAccess Customer Injury Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	5.95	24.53	11.67	16.55	21.81	23.63	33.57	5.47	16.92	21.10	5.78	30.18	18.56
CY 2014	37.17	12.76	11.72	10.33	20.97	58.95	26.00	10.73	47.35				28.13

KPI: Employee Injury Rate (per 200,000 hours) -- Target = < 4.8 injuries per 200,000 hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013	4.45	5.74	5.09	6.00	3.89	5.28	5.09	4.95	4.31	3.74	5.09	4.26	5.0
CY 2014	4.29	5.34	4.29	4.17	3.49	3.97	4.77	4.21	4.81				4.4

* Starting in 2013, WMATA's definition of an employee injury is aligned with industry practices which meet the Occupational Safety and Health Administration (OSHA) Recording Criteria: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, loss of consciousness, or a diagnosis of a significant injury/illness by a physician. Results from CY2012 have been recalculated to enable historical analysis.

KPI: Crime Rate (per million passengers)* -- Target = < 2,000 Part I Crimes in Calendar Year 2014

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2013 Metrobus	1.78	1.54	0.97	1.38	1.40	0.80	1.36	1.96	1.20	1.30	1.73	0.58	1.51
CY 2014 Metrobus	1.33	1.58	0.56	1.45	1.27	0.87	0.50	0.61	1.10				0.74
CY 2013 Metrorail	5.95	7.00	4.75	4.97	9.36	9.25	7.76	9.08	8.53	8.13	5.87	4.30	8.44
CY 2014 Metrorail	3.22	3.19	3.64	3.85	5.81	6.13	5.97	8.32	5.78				6.67
CY 2013 Parking	0.81	0.51	0.89	1.42	1.57	1.00	1.39	1.73	2.90	2.15	1.72	0.68	1.97
CY 2014 Parking	2.10	0.49	0.84	0.97	1.44	1.64	0.57	0.63	1.32				0.83

Crimes by Type

CY 2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Robbery	17	19	21	26	26	18	20	18	15				180
Larceny (Snatch/Pickpocket)	25	30	34	31	42	30	21	26	28				267
Larceny (Other)	41	17	24	44	60	98	88	115	80				567
Motor Vehicle Theft	4	1	4	5	13	7	4	4	8				50
Attempted Motor Vehicle	10	1	2	0	2	4	2	0	2				23
Aggravated Assault	6	8	7	12	9	10	11	5	10				78
Rape	0	0	0	0	1	0	1	0	0				2
Burglary	0	0	1	1	0	0	0	0	1				3
Homicide	0	0	0	0	0	0	0	0	0				-
Arson	1	0	0	0	0	0	0	0	0				1
Total	104	76	93	119	153	167	147	168	144	-	-	-	1,171

*Five homicides occurred in 2012 in the transit system. Per DC law, these crimes are reported to the FBI by the DC Police Department, and are not included in Metro's crime re

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

***Beginning in January 2012, snatch and pickpocket crimes were recorded as larcenies in accordance with FBI reporting procedures.

KPI: Customer Satisfaction Index

	Metrobus		Metrorail		Target
	CY 2013	CY 2014	CY 2013	CY 2014	
Jan-Mar	82%	78%	84%	80%	84%
Apr-Jun	82%	80%	86%	80%	84%
Jul-Sep	81%		84%		84%
Oct-Dec	76%		76%		84%

Metrobus Ridership (millions of unlinked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2014	10.5	10.1	10.8	11.8	11.8	11.6	11.9	11.6	11.9				**35.3**
CY 2013	10.7	10.4	11.3	11.6	12.1	11.2	11.8	11.7	11.7	12.3	11.0	10.4	**35.2**

Metrorail Ridership (millions of linked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2014	15.2	14.4	16.8	19.5	18.1	18.3	19.4	17.6	17.5				**54.5**
CY 2013	17.3	15.7	17.9	19.7	18.5	17.9	19.4	18.0	16.9	17.2	15.7	14.7	**54.3**

MetroAccess Ridership (100,000s of completed trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q3-2014
CY 2014	0.16	0.16	0.17	0.19	0.19	0.19	0.19	0.19	0.19				**0.57**
CY 2013	0.17	0.16	0.17	0.18	0.18	0.17	0.18	0.18	0.18	0.19	0.17	0.17	**0.54**

Metro Service Area

Size	1,500 sq. miles
Population	5 million

Ridership

Mode	CY 2013	Average Weekday
Bus	136 million	458,662 (June 2014)
Rail	209 million	751,538 (June 2014)
MetroAccess	2.1 million	7,698 (June 2014)
Total	347 million	

Fiscal Year 2014 Budget

Operating	$1.7 billion
Capital	$0.9 billion
Total	$2.6 billion

Metrobus General Information

Size	11,275 bus stops and 2,543 shelters
Routes*	309 Routes on 176 Lines
Fiscal Year 2014 Operating Budget	$579.3 million
Highest Ridership Route in 2014	14th St. Line-Rts 52, 53, 54 (15,807 avg. wkdy ridership)
Metrobus Fare	$1.75, Bus-to-bus Transfers Free

Express Bus Fare	$4.00, Airport Fare $6.00
Bus Fleet*	1,525
Buses in Peak Service	1,290
Bus Fleet by Type*	Compressed Natural Gas (459), Electric Hybrid (742), Clean Diesel (144) and All Other (180)
Average Fleet Age*	7.00 years
Bus Garages	9 – 4 in DC, 3 in MD and 2 in VA

*As of July 31, 2014.

Metrorail General Information

Fiscal Year 2014 Operating Budget	$961.8 million
Highest Ridership Day	Obama Inauguration on Jan. 20, 2009 (1.1 million)
Busiest Station in 2013	Union Station (657,000 entries in December 2013)
Regular Fare (peak)	Minimum - $3.15 paper fare card, $2.15 SmarTrip® Maximum - $6.90 paper fare card, $5.90 SmarTrip®
Reduced Fare (non-peak)	Minimum - $2.75 paper fare card, $1.75 SmarTrip® Maximum - $4.60 paper fare card, $3.60 SmarTrip®
Paper Farecard Surcharge	$1.00 per trip 50¢ fare surcharge for seniors/people with disabilities
1st Segment Opening/Year	Farragut North-Rhode Island Avenue (1976)
Newest Stations/Year	McLean, Tysons Corner, Greensboro, Spring Hill and Wiehle-Reston East (2014)
Rail Cars in Revenue Service	1,104
Rail Cars in Peak Service	954
Rail Cars by Series	1000 Series (278), 2000/3000 (358), 4000 (100), 5000 (184) and 6000 (184)

Lines	6 – Red, Blue, Orange, Green, Yellow and Silver
Station Escalators	613
Station and Parking Gar. Elevators	275
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 2014 Operating Budget	$114.1 million
MetroAccess Fare	Twice the fastest rail or bus equivalent SmarTrip-based fare up to a $6.50 maximum
Paratransit Vehicle Fleet	600
Average Fleet Age	1.5 years
Paratransit Garages	6 (1 in DC, 3 in MD and 2 in VA)
Service Delivery Providers	Diamond Transportation, First Transit, and Veolia Transportation
Quality Assurance Provider	Medical Transportation Management
Operations Control Center Provider	MV Transportation