Vital Signs Report

A Scorecard of Metro's

Key Performance Indicators (KPIs)

2014 Second Quarter Results

Office of Performance

Chief Performance Officer

Published: August 2014

Page Left Intentionally Blank

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.

Page Left Intentionally Blank

Table of Contents

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** (Apr-Jun 2014)	**Goal: Meet or exceed customer expectations 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?
- Bus Services continues to see the benefits of several better bus service initiatives; Q2-2014 bus on-time performance improved two percentage points compared to Q2-2013 (approaching 78% from 76%).
- Customers experienced improvement with fewer buses running late. In the second quarter of 2013 buses ran late 19% of the time compared to this year's 16%. With 1,290 buses per day operating in peak service that improvement equates to 39 buses per day not running late.
- Implementation of Active Service Management (ASM) that assigns street managers to terminals (as opposed to driving around in service vehicles) so they are more visible to the public and bus operators. ASM requires increased ride-alongs on poor performing routes and improves management by incorporating three elements:
    - Predictive - The use of historical and current information to anticipate and prevent specific situations
    - Proactive - Immediately addresses a situation before it impacts the customer
    - Reactive - Quickly responds to issues to minimize impacts that have already occurred
- Modification of street operation guidelines which permitted trips to run perpetually late. For example, bus operators who were identified as starting a run late are now rescheduled and strategic buses are deployed to fill in gaps in service.
- March 2014 Service Adjustments (OTP improved ~ 1% compared to Q2-2013).

Bus On-Time Performance

Jul-Dec 2013 data not available

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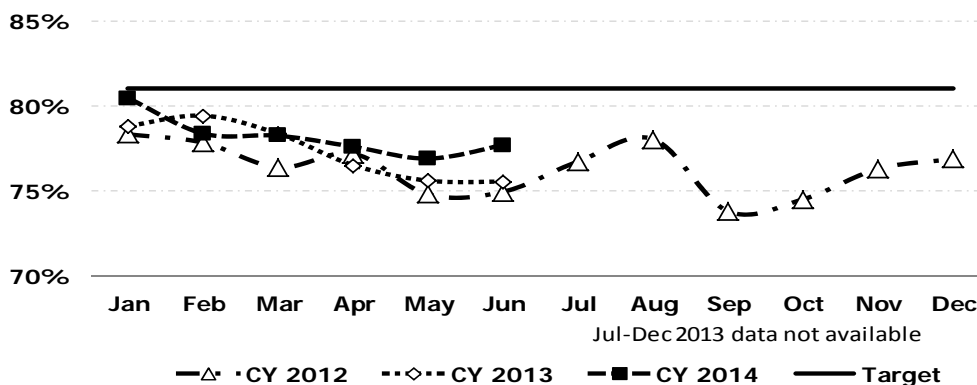
Actions to Improve Performance

- Provide new MetroWay service to Crystal City/Potomac Yard. Metroway improves service by providing dedicated bus lanes to cut through congestion and provide faster travel time and more frequent services.
- Thirty-eight service changes will soon go into effect to reduce crowding, shorten wait times and improve OTP.
- Continuing with ongoing studies to improve Metrobus service on the region's most heavily used lines; Metro will host community meetings to discuss the U & V lines Metrobus Service Evaluation study.
- Bus Operator absenteeism can affect the ability to provide bus service on-time; Metrobus is implementing a campaign to reduce absenteeism. This will improve garage departure delays driven by workforce challenges.
- Consistently identify buses operating late and coordinate appropriate corrective action.

Conclusion: Metrobus customers experienced better on-time performance in Q2-2014 compared to Q2-2013 as a result of improved service supervision, modified street operation guidelines and service adjustments.

| KPI:	Bus Fleet Reliability (Apr-Jun 2014) (Mean Distance Between Failures)	Goal: Meet or exceed customer expectations by consistently delivering quality service

Reason to Track: This key performance indicator communicates service reliability and 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?

- This has been a challenging year for bus fleet reliability. Severe weather and roadway conditions contributed to mechanical issues.
- Customers experienced 10% more service interruptions compared to Q2-2013 as a result of breakdowns.
- Mechanical failures indiscriminately affected each fleet type; running the gamut from an uptick in suspension issues caused by increased roadway pot holes from the harsh winter, to gas pressure failures.
- The fleet also experienced water intrusion issues (a record rain was recorded at 2.25 inches May 16th). Water intrusion has a direct impact on electrical components which ultimately cause engines to cut off.
- Metrobus continues to encounter manufacturer cooling component and dual power inverter failures on the Hybrids (Hybrids provide ~51% of the service).
- The older Diesel fleet repairs were related to fluid leaks and wheelchair lift problems.

Bus Fleet Reliability
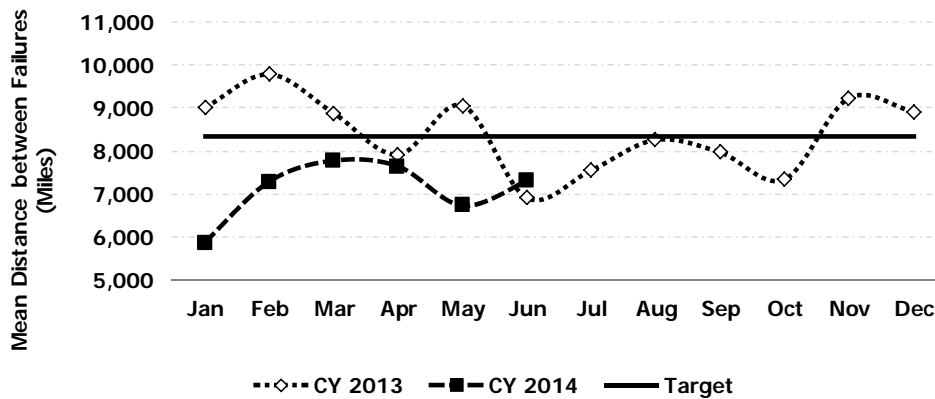
Actions to Improve Performance

- Conduct an in-depth failure analysis for the top five service interruptions (engine, warning lights, brakes, air pressure, body and transmission service interruptions) to reduce failures by identifying sub-fleet trends and developing systematic action plans.
- Begin major fleet initiatives to prepare for extreme weather conditions and minimize failures. Some of these initiatives include replacing air dryers, coolant boosters on 10 buses per week and monitoring coolant system hoses and fittings.
- Continue to diligently work with bus and engine manufacturers to significantly reduce manufacturer related flaws; warranty cost avoidance/recovery totaled nearly $780K in Q2-2014.
- Install diversion shields on the 2001-2002 CNG fleets to avoid water intrusion into the programmable logic controller (PLC) system.
- Finalize midlife over-haul of the Clean Diesel fleet; 86 have been rehabbed and placed back into service.

Conclusion: Q2-2014 bus fleet reliability suffered 10% more service interruptions due to a number of mechanical failures compared to Q2-2013. Metrobus is systematically researching failure trends and developing action plans.

KPI:	Rail On-Time Performance (Apr-Jun 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?
- Q2-2014 Rail On-Time Performance (OTP) improved significantly from Q1-2014 and was above target. OTP was just shy of Q2-2013 as disruptions during rush period service lowered Red Line performance.
- Red Line OTP decreased almost 1% from Q2-2013. For example, in June, incidents dragged Red Line PM Rush OTP to <80% on at least 1 day of each week, including person struck by train at Bethesda (6/3), arcing insulator at Medical Center (6/10), railcar brakes in emergency at Grosvenor and Shady Grove (6/18), and interlocking out of correspondence at Silver Spring (6/25).
- Track work to improve long-term reliability did cause a short term decline in OTP this quarter. Track work occurred on the Red Line core during weekday evenings and in non-core locations on all other lines. Red Line evening OTP was 76%. This reduction had a comparatively small impact on the overall Red Line OTP because only 4% of Red Line weekday service occurs in the evening. Due to lower frequency of train arrivals in non-core locations, track work was accommodated in these locations without significant impact to evening OTP (95% on all other lines).
- Systemwide train delay minutes were on-par with Q2-2013, with railcar incidents continuing to make up almost half. Operations-related delays were up in Q2-2014, including actions taken to manage headways after an incident occurs (e.g., express and turn back trains).

Rail On-Time Performance
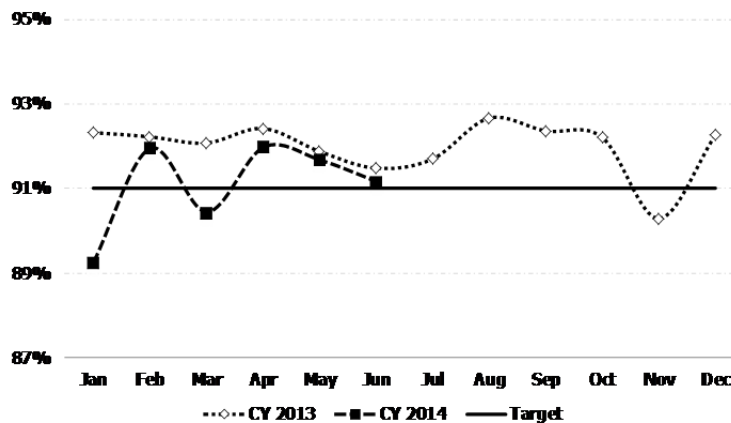
Actions to Improve Performance
- Continue weekly meeting of operations and maintenance management to identify lessons learned from incidents causing the most significant customer delay and develop actions to reduce delay.
- Introduce Silver Line serving a total of 28 stations. Manage OTP for the new Line through monitoring of on-time departures from Wiehle-Reston East by supervisors and having controllers focus on smoothly merging Orange and Blue train lines at Rosslyn.
- Develop plan to improve retention of controllers in Rail Operations Control Center who are key to keeping trains on-time.
- Install equipment at Grosvenor enabling on-site supervisor to manage departures from that station (currently operators must wait for permission from ROCC, which can delay departure).

Conclusion: Rail On-Time Performance (OTP) was above target each month in Q2-2014, a significantly improvement from Q1-2014. Disruptions during rush service on the Red Line contributed to slightly lower system-wide OTP than Q2-2013.

| KPI:	Rail Fleet Reliability (Apr-Jun 2014) (Mean Distance Between Delays)	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?
- Metrorail fleet reliability for Q2-2014 was 3% better than Q2-2013, performing above target in April and May.
- The largest improvement in reliability came from the 5000 and 6000 series railcars (59% and 42% more miles between delay, respectively) particularly in April 2014 when the brakes and door malfunctions decreased 66% for these two series compared to last April. Brake and door malfunctions are the two largest causes of delay for these types of train cars. Customers benefit greatly from this because these two types of delay often necessitate that the train be off-loaded for safety reasons.
- Dragging down reliability in June were the 4000 series railcars (42% worse MDBD) due primarily to door delays (none on 4000 series railcars last June, 12 delays were reported this June).

Rail Fleet Reliability
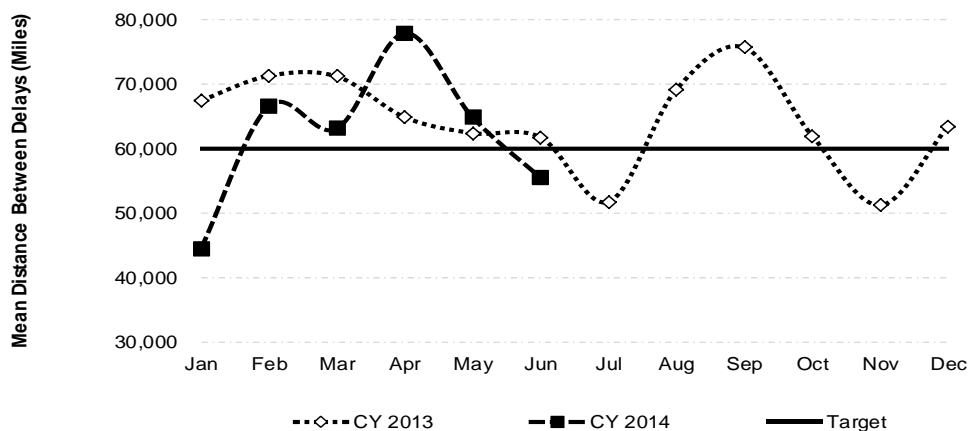
Actions to Improve Performance
- To accommodate new Silver Line service, continue analyzing troubles with existing fleet looking for solutions that will consistently allow deployment of 5% more cars, reaching a total car requirement of 954 cars reliably delivering service each weekday. These maintenance actions are critical leading up to eventual delivery of the new 7000 series fleet.
- Improve performance of the more maintenance intensive 4000 series railcars through a variety of initiatives, including addressing door operations in periodic inspections, rebuilding and hardening air compressors and replacing propulsion system equipment with newer, more reliable components.
- Continue reliability improvements for every fleet (e.g., 5000 series propulsion).

Conclusion: Metrorail fleet reliability for Q2-2014 was 3% better than Q2-2013 due to notably better brake and door performance on the 5000 and 6000 series railcars.

KPI:	Escalator System Availability (Apr-Jun 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?
- Q2-2014 systemwide escalator availability continued above target and was better than Q2-2013 due to faster resolution of unscheduled outages.
- Maintenance teams working in geographic sectors in the rail system responded quickly to unscheduled outages in their sectors and found escalators requiring less time intensive repairs (Mean Time to Repair of 5 hours in Q2-2014 compared with 17 hours in Q2-2011).
- Repairs were less complex due to continued focus on preventive maintenance compliance (96% in Q2-2014) correcting problems before escalators went out of service unexpectedly and analyzing trend data to isolate and remedy the worst performing components (e.g., reducers, stub shafts, comb faults).
- Scheduled maintenance made up almost half of all maintenance hours (49%) as Metro installed new escalators at five stations (Georgia Ave, Columbia Heights, Bethesda, Friendship Heights and Mt. Vernon Square) and rehabilitated escalators at 6 other stations.

Escalator System Availability
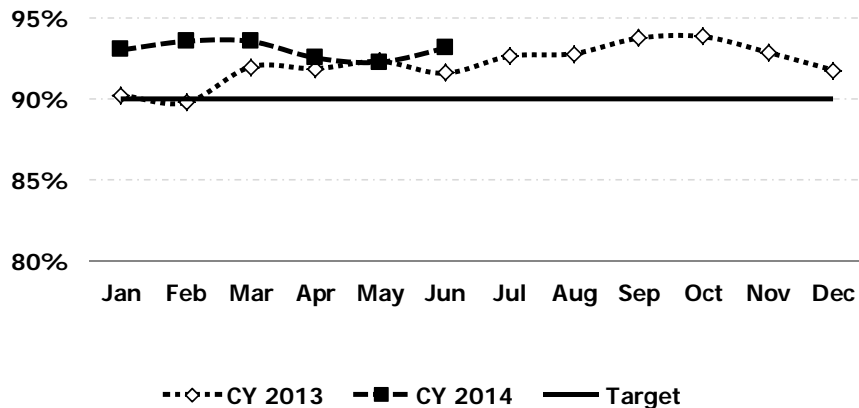
··◇·· CY 2013   ■ CY 2014   —— Target

Actions to Improve Performance
- With the start of Silver Line service, begin responding to unscheduled escalator outages for 27 escalators at the new stations. Scheduled maintenance will be conducted by equipment manufacturer during the warranty period.
- Building upon successful implementation of mechanic teams by geographic regions, move from four to five regions in order to further shorten outage response time and make escalators available for customers more quickly.
- To improve long-term reliability, continue escalator replacement at 5 stations (for a total of 128 brand new units in the rail system) and continue rehabilitations at 8 stations.

Conclusion: Escalator availability continued to be above target due to continued emphasis on preventive maintenance, quick response to unscheduled outages and focused effort to identify and remedy the worst performing components.

KPI:	Elevator System Availability (Apr-Jun 2014)	Goal: Meet or exceed customer expectations 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?
- Systemwide Q2-2014 elevator availability was significantly better than Q2-2013 and above target in May 2014 due to fewer scheduled rehabilitations.
- In Q2-2014, an average of two elevators were out of service for rehabilitation, compared with an average of 10 in Q2-2013.
- Unscheduled elevator maintenance hours increased 71% in Q2-2014 from Q2-2013. An increased focus on safety-focused inspections identified needed repairs on 21 units (up from 10 in Q2-2013). In addition, a number of units going out of service unexpectedly were purposefully kept out of service until a root cause could be identified and remedied, sometimes requiring assistance from other maintenance groups within Metro (Navy Yard, power issue) or new parts ordered (Friendship Heights and Shady Grove).

Elevator System Availability
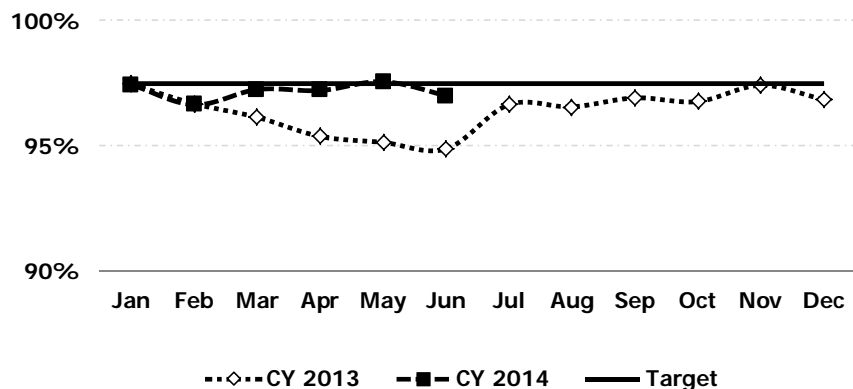
Actions to Improve Performance
- With the start of Silver Line service, begin responding to unscheduled elevator outages for 28 elevators at the new stations. Scheduled maintenance will be conducted by the equipment manufacturer during the warranty period.
- Shift elevator maintenance staffing approach from one dedicated maintenance team covering the entire rail system to mechanics in five geographic regions maintaining both elevators and escalators. This move is intended to speed elevator outage response and improve quality of work as mechanics become familiar with equipment in region.
- To improve the quality of preventive maintenance inspections for hydraulic elevators (77% of elevators), improve inspection protocols to more thoroughly examine each unit and provide classroom/hands-on training for mechanics.

Conclusion: Metro scheduled fewer elevator rehabilitations in Q2-2014, improving availability for customers.

| KPI:	Customer Injury Rate (Apr-Jun 2014) Per Million Passengers	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?
- Q2-2014 customer injury rate improved by more than 17% (or 11 fewer injuries) compared to Q2-2013.
- Although bus customer injuries tend to represent at least 50% of the customer injuries, there has been a notable 26% decline in bus customer injuries this quarter. Bus Services aggressively pursued a number of initiatives to achieve this:
  - Created a new accident investigation team of Street Operation Managers, solely dedicated to assessing accidents and identifying the best corrective actions using an accident severity matrix.
  - Implemented a DriveCam, remedial and refresher training program which addresses the riskiest driving behaviors; improving the operating skills of operators who have had accidents or received complaints about unsafe driving; and complying with mandatory refresher training designed to eliminate bad driving habits and improve overall skills.
  - Designed a new management tool, "The Bus Accident Rating and Corrective Action Tracker", to improve root cause analysis, ensure training consistency and compliance with training period guidelines.
- Overall rail transit facility injuries (e.g. escalators, stations and parking facilities injuries) also improved. There were 21% or 5 fewer injuries than Q2-2013, driven by fewer slips/trips/falls on the escalators. Metro continued to develop ads and announcements to increase customer awareness.

Customer Injury Rate
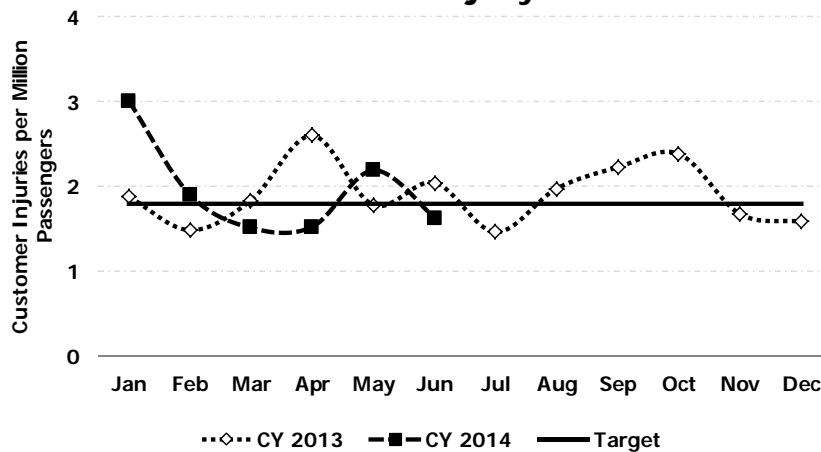
Actions to Improve Performance
- Continue to conduct safety blitz' at locations identified as accident/incident hot spots and continue to communicate safety bulletin messages.
- Improve interdepartmental collaboration to strengthen accident investigations and preventability solutions.
- Enhance Metrobus Operator training by increasing training exercises in rush-hour and evening environments.
- Refresh slips, trips, and falls safety posters and begin airing safety campaigns to influence different age groups.

Conclusion: Q2-2014 customer injury rate declined by more than 17% (or 11 fewer injuries) compared to Q2-2013. Metro continues to develop and promote new safety initiatives that drive down customer injuries.

KPI:	Employee Injury Rate (Apr-Jun 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 Q2-2014 also improved compared to Q2-2013 by 20%. There were 40 fewer employee injuries this quarter primarily as a result of fewer collisions and slips, trips, and falls.
- Continuing with efforts to eliminate complacency and promote a safety culture, several proactive and reactive initiatives were implemented:
  - o Improved training to conduct better safety observations to correct field hazards and better accident investigations.
  - o Restructured bus division training approach to reduce collisions and improve overall bus service.
  - o Developed video focusing on how to prevent slips/trips/falls.
  - o Displayed posters reflecting cardinal safety rules in work areas and discussed an ergonomic study that resulted in new tools and procedures.

Employee Injury Rate
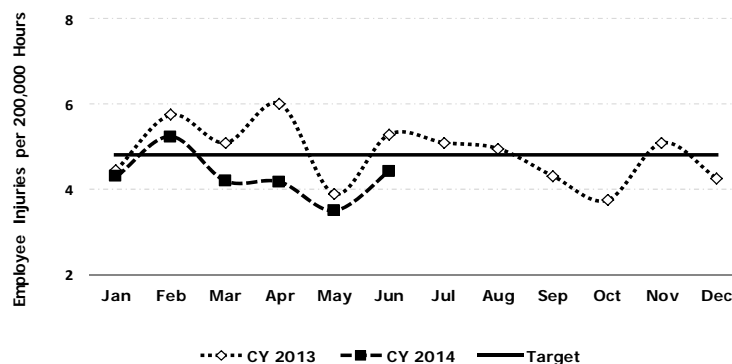
Actions to Improve Performance

- Begin Rail "Push" initiative which encourages employees to avoid rushing and to follow procedures.
- Develop Close Call Posters to increase awareness and use of Close Call Program. Close Call is voluntary, confidential, non-punitive, and encourages employees to report close calls that would otherwise not be reported. This program seeks to improve safety in the various transportation environments to study near miss incidents, determine root causes, and develop preventative measures.
- Continue to conduct Roadway Worker Protection compliance checks.
- Continue to promote training instructor, safety officers, and Metro Transit Police collaboration to improve accident investigations and to develop lessons learned.
- Approve Fatigue Risk Management Hours of Service Policy for safety critical positions.
- Develop new Safety Measurement System (SMS) Department reports designed to provide key summary information to support management decisions.

Conclusion: The employee injury rate for Q2-2014 improved compared to Q2-2013 by 20%. Metro continues to explore initiatives that promote a safety culture and eliminate complacency.

KPI:	**Crime Rate (Apr-Jun 2014) Per Million Passengers**	**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?

- Metrorail's crime rate is down significantly from the same quarter last year as the amount of robberies, snatches and pickpockets has gone down by almost half. A visible police presence in rail stations and on trains, increased customer awareness and improved security features, such as fingerprint technology, by electronic device manufacturers.
- The crime rate on Metrobus is relatively low and unchanged this quarter compared to the same quarter last year.
- Parking lot crime has been higher this quarter compared to the same quarter last year driven largely by an increase in the number of thefts from vehicles.

Metrobus Crime Rate — **Metrorail Crime Rate** — **Parking Crime Rate**

Crimes per Million Passengers

Legend: CY 2013, CY 2014
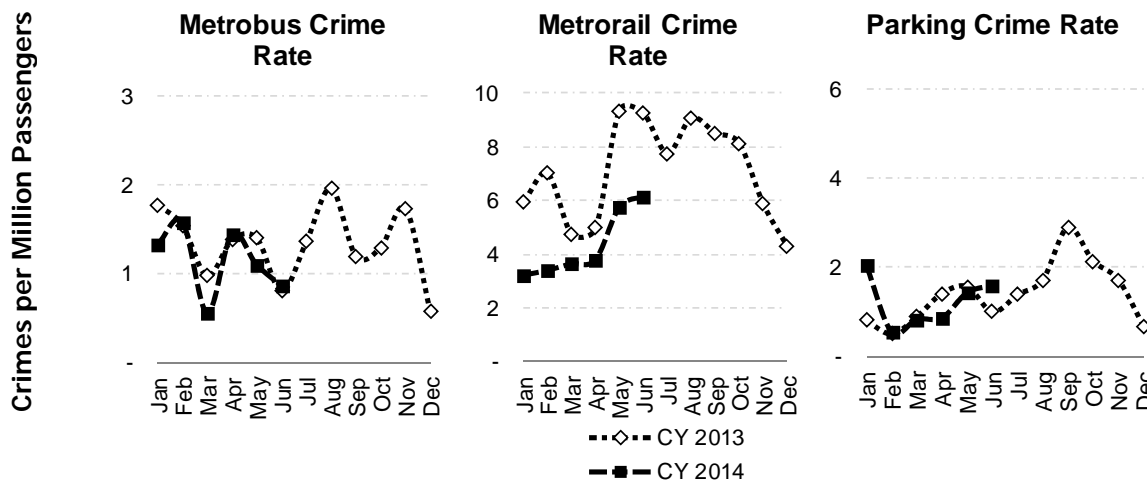
*Scales for Crime Rate have been adjusted
Target: Less than 2,000 Part I Crimes in CY 2014

Actions to Improve Performance

- Identify, implement and track effectiveness of strategies to reduce crime in 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).
- Continually seek opportunities to improve the MetroStat process, the Metro Transit Police Department (MTPD) forum for developing crime reduction strategies/tactics across divisions and bureaus to target Part I crime trends.

Conclusion: Metrobus continues to maintain a relatively low crime rate and notable improvements in preventing crime of Metrorail have driven the crime rate down when compared to the same quarter last year.

KPI:	Customer Satisfaction (Apr-Jun 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?

- While down from previous year levels, Metrobus and Metrorail satisfaction ratings are consistent quarter to quarter in 2014. Notably, Metrobus satisfaction ratings are not statistically different, suggesting satisfaction levels are the same compared to last year. For Metrorail, satisfaction is statistically different but trending in positive direction the past two quarters.
- Metrobus performance measures (e.g., bus and stop cleanliness, on-time performance, etc.) have remained the same or are down compared to the previous year. From Q1 to Q2 of 2014, bus stop security improved a full 7 percentage points (72% vs. 79%). Bus operators continue to deliver high quality service: greeting customers as they board (81%); meeting or exceeding customer service levels (92%); and maintaining a high level of courteousness (86%).
- Metrorail performance measures (e.g., cleanliness, climate control, etc.) are all down compared to this same period last year. This is notable for ratings of both train and station cleanliness. Smoothness of ride on Metrorail also dropped notable this quarter compared to last year at this same time. A recent influx of new train operators may be contributing to "herky jerky" rides as they get more experienced at smoothly starting and stopping trains.

Metrobus Customer Satisfaction

Jan-Mar: CY2013 82%, CY2014 78%; Apr-Jun: CY2013 82%, CY2014 80%; Jul-Sep: CY2013 81%; Oct-Dec: CY2013 76%

Metrorail Customer Satisfaction

Jan-Mar: CY2013 84%, CY2014 80%; Apr-Jun: CY2013 86%, CY2014 80%; Jul-Sep: CY2013 84%; Oct-Dec: CY2013 76%
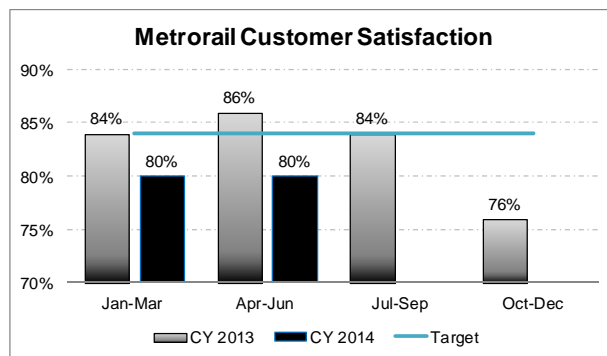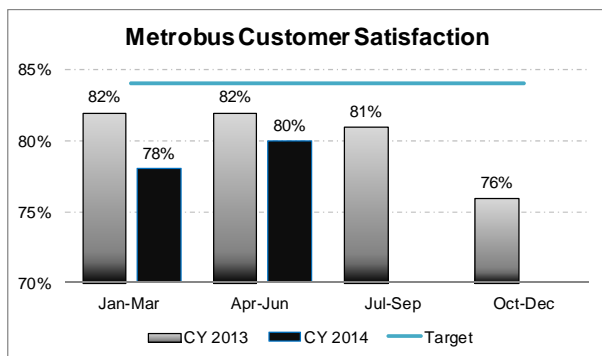
Actions to Improve Performance

- Metrobus customer satisfaction levels will continue to improve as more attention is paid to service quality. Reliability trending positively the past two quarters is showing early signs of Active Service Management effectiveness. Cleanliness levels are likely to bounce back as Operators begin to clean buses of debris at the end of each trip.
- Metrorail customers place considerable emphasis on cleanliness and car cleaning schedules are being reviewed.
- Metrorail customers' smoothness of ride will improve as new conductors become accustom to the challenges of operating in revenue service. Ongoing track repair work will also help to mitigate smoothness of ride issues experienced by customers.

Conclusion: Bus and rail customer satisfaction is down from the same period last year and not achieving target. While these results are not as good as last year Metrorail is maintaining consistency so far this year and Metrobus is showing improvement compared to last quarter.

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: Mar-May 2014

Results: Metro was paid to open two hours early for customers traveling to each of the following events: Rock 'n' Roll Marathon (March 15), Credit Union Cherry Blossom 10-Mile Run (April 6), Nike Women's Half Marathon (April 27) and Susan G. Komen Race for the Cure (May 10).

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: Mar-May 2014

Results:
- Weekday evening headways were changed to accommodate system rebuilding on 55 days.
- For detail on Metro's adherence to scheduled headways, see Rail On-Time Performance on 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: Mar-May 2014

Rush Results:

		Max Load Points	Mar-14	Apr-14	May-14
AM Rush	Red	Gallery Place	93	98	92
		Dupont Circle	87	83	83
	Blue	Rosslyn	100	98	83
		L'Enfant Plaza	86	79	72
	Orange	Court House	75	96	107
		L'Enfant Plaza	83	82	75
	Yellow	Pentagon	85	82	79
	Green	Waterfront	76	72	71
		Shaw-Howard	72	68	71
PM Rush	Red	Metro Center	76	86	92
		Farragut North	79	90	77
	Blue	Foggy Bottom-GWU	84	97	95
		Smithsonian	66	71	72
	Orange	Foggy Bottom-GWU	77	91	95
		Smithsonian	74	81	71
	Yellow	L'Enfant Plaza	76	85	80
	Green	L'Enfant Plaza	62	78	68
		Mt. Vernon Sq.	67	76	70

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).

---

[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	Q2-2014
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%	75.6%
CY 2013	78.8%	79.4%	78.4%	76.5%	75.6%	75.5%							75.9%
CY 2014	80.4%	78.4%	78.2%	77.6%	76.9%	77.7%							77.4%

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	Q2-2014
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	7,893
CY 2014	5,879	7,291	7,778	7,648	6,733	7,313							7,227

* Bus Fleet Reliability target revised effective January 2014

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

Type (~ % of Fleet)	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	12-Month MDBF
CNG (30%)	7,391	8,597	8,138	7,435	7,337	7,706	6,350	6,373	6,897	7,369	6,489	5,938	7,096
Hybrid (27%)	9,647	9,013	8,660	9,086	11,431	10,256	5,575	8,049	8,791	8,578	8,147	9,448	8,641
Clean Diesel (8%)	6,531	10,695	7,407	5,960	11,529	12,793	10,277	12,117	9,567	9,148	7,723	8,136	8,771
All Other (35%)	4,177	5,077	5,907	4,296	6,627	6,207	4,528	5,269	5,701	4,885	3,733	4,662	4,930

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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%	91.9%
CY 2014	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%							91.6%

Rail On-Time Performance by Line

	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	12-Month Avg
Red Line	90.6%	92.2%	91.5%	92.3%	87.8%	91.1%	87.0%	90.8%	89.1%	91.6%	91.1%	89.4%	90.4%
Blue Line	90.5%	91.6%	91.6%	91.1%	90.2%	91.4%	89.2%	91.2%	89.7%	90.5%	90.7%	90.5%	90.7%
Orange Line	92.4%	93.3%	93.3%	93.1%	92.2%	93.4%	90.8%	93.2%	91.5%	92.4%	92.5%	92.5%	92.6%
Green Line	93.7%	94.7%	93.8%	92.5%	92.2%	93.6%	91.2%	93.5%	92.9%	93.6%	92.9%	93.2%	93.2%
Yellow Line	92.6%	93.8%	92.9%	92.9%	91.2%	95.0%	90.3%	92.6%	94.2%	93.5%	91.5%	91.6%	92.7%
Average (All Lines)	91.7%	92.7%	92.4%	92.2%	90.3%	92.3%	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%	91.5%

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	Q2-2014
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	63,018
CY 2014	44,530	66,600	63,127	77,957	64,848	55,522							66,109

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

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	12-Month Avg
1000 series railcars	40,344	64,881	62,987	74,880	46,283	87,738	31,151	48,027	47,860	48,748	44,507	55,558	54,414
2000/3000 series railcars	104,897	123,374	128,953	81,366	82,916	84,531	60,796	102,450	116,661	106,927	131,518	90,600	101,249
4000 series railcars	12,087	28,465	30,393	20,165	16,337	25,384	17,282	39,542	27,254	30,727	19,707	14,825	23,514
5000 series railcars	115,289	53,741	59,349	47,648	32,215	43,412	41,012	53,807	50,481	132,119	67,049	46,668	61,899
6000 series railcars	81,207	77,985	111,766	116,314	157,980	82,233	127,765	98,260	83,886	173,233	134,846	127,240	114,393
Fleet average	51,757	69,230	75,697	61,959	51,248	63,468	44,530	66,600	63,127	77,957	64,848	55,522	62,162

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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%	91.2%
CY 2014	93.3%	90.2%	92.5%	91.1%	92.3%	92.4%							91.9%

KPI: Escalator System Availability -- Target = 90%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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%	91.9%
CY 2014	93.0%	93.6%	93.6%	92.6%	92.3%	93.1%							92.7%

KPI: Elevator System Availability -- Target = 97.5%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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%	95.1%
CY 2014	97.4%	96.6%	97.3%	97.2%	97.6%	97.0%							97.3%

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	Q2-2014
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	1.42
CY 2014 Metrobus	1.33	1.58	0.56	1.45	1.10	0.87							1.14
CY 2013 Metrorail	5.95	7.00	4.70	4.97	9.19	9.25	7.76	9.08	8.53	8.13	5.87	4.30	5.84
CY 2014 Metrorail	3.22	3.40	3.64	3.80	5.75	6.13							5.23
CY 2013 Parking	0.81	0.51	0.89	1.42	1.62	1.00	1.39	1.73	2.90	2.15	1.72	0.68	0.75
CY 2014 Parking	2.04	0.56	0.84	0.87	1.44	1.59							1.30

Crimes by Type

CY 2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Jun
Robbery	18	19	20	24	24	16							121
Larceny (Snatch/Pickpocket)	25	31	33	31	42	30							192
Larceny (Other)	40	18	25	43	60	96							282
Motor Vehicle Theft	4	1	4	5	13	7							34
Attempted Motor Vehicle Th	9	1	3	0	2	4							19
Aggravated Assault	5	9	8	11	9	10							52
Rape	0	0	0	0	1	0							1
Burglary	0	0	0	2	0	0							2
Homicide	0	0	0	0	0	0							-
Arson	1	0	0	0	0	0							1
Total	**102**	**79**	**93**	**116**	**151**	**163**	**-**	**-**	**-**	**-**	**-**	**-**	**704**

*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 Commendation Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
CY 2013	6.6	6.4	5.9	7.0	6.2	6.4	7.3	6.1	5.0	6.7	5.9	4.6	6.6
CY 2014	7.0	6.0	6.6	5.2	7.2	7.3							6.6

KPI: Customer Complaint Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
CY 2013	84	73	74	74	76	79	90	81	82	81	113	74	76
CY 2014	92	88	74	81	79	79							80

Metrobus Ridership (millions of unlinked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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	35.0
CY 2014	10.5	10.1	10.8	11.8	11.8	11.6							35.1

Metrorail Ridership (millions of linked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
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	56.2
CY 2014	15.2	14.4	16.8	19.5	18.1	18.3							55.8

MetroAccess Ridership (100,000s of completed trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q2-2014
CY 2013	1.68	1.63	1.71	1.81	1.83	1.69	1.79	1.83	1.77	1.90	1.73	1.66	5.34
CY 2014	1.61	1.57	1.71	1.94	1.91	1.87							5.71

Note: Targets are re-evaluated annually and based on changing operating conditions and performance.

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*	1,515
Buses in Peak Service	1,290
Bus Fleet by Type*	Compressed Natural Gas (458), Electric Hybrid (698), Clean Diesel (144) and All Other (215)
Average Fleet Age*	7.39 years
Bus Garages	10 – 4 in DC, 3 in MD and 3 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