Vital Signs Report

A Scorecard of Metro's

Key Performance Indicators (KPIs)

2014 First 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 (Jan-Mar 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?

- Deep snow on many secondary and neighborhood roads prevented service from safely being delivered to a large number of customers for brief periods this quarter.
- For service that was delivered, bus on-time performance improved by less than 1% compared to Q1-2013.
- Bus service was not on-time 21% of the time. Late arrivals (more than 7 minutes) occurred 14% of the time which is a 3% improvement compared to Q1-2013. However, some bus service arrived too early 3% of the time (arriving more than 2 minutes early is not considered on-time).
- Advancing Better Bus initiatives - which includes additional limited-stop MetroExtra service; improvements to 11 Priority Corridors - benefits more than 150,000 customers (1/3 of the bus weekday customers) – multiple bus service improvements were implemented in March to improve on-time performance and reduce crowing.
- To see a complete list of service improvements visit: http://www.wmata.com/about_metro/news/PressReleaseDetail.cfm?ReleaseID=5694
- Bus detours are typically caused by special events, construction, and collisions. These incidents can also impose challenges to being on-time. However, detours decreased 59% compared to Q1-2013.

Bus On-Time Performance

Jul-Dec 2013 data not available

‑‑‑ CY 2012   ∙∙∙◇∙∙∙ CY 2013   ‑■‑ CY 2014   ——— Target
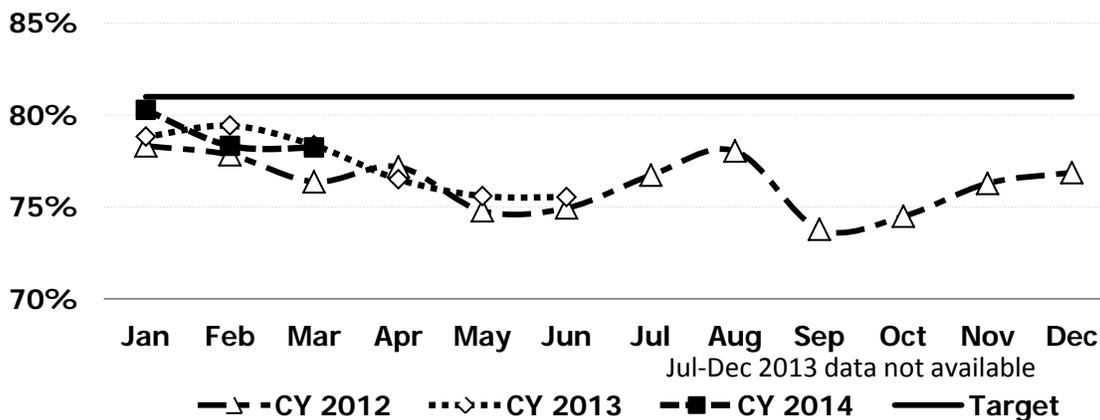
Actions to Improve Performance

- Bus Services is anticipated to begin improving upon implementation of "Active Service Management" (ASM). Active Service Management is a real time concept that contains three elements:
  - o Predictive - The use of historical and current information to anticipate and prevent specific situations
  - o Proactive - Immediately addresses a situation before it impacts the customer
  - o Reactive - Quickly responds to issues to minimize impacts that have already occurred
- Continue evaluating service performance, prioritizing Priority Corridor routes, for service changes that would improve on-time performance and reduce crowding.
- Evaluate new challenges that may contribute to bus operators starting a trip late for immediate resolution.

Conclusion: Bus On-Time Performance improved less than 1% compared to Q1-2013, despite the region receiving as much as 52 inches of snow and some of the coldest temperatures in decades. Active Service Management will be improved upon and is expected to result in numerous benefits for customers and bus operators alike.

KPI:	Bus Fleet Reliability (Jan-Mar 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 quarter's bus fleet reliability was most affected by the harsh single-digit temperatures experienced during the first quarter. These conditions affected every single type of bus in the fleet causing bus fleet reliability to drop 25% compared to Q1-2013.
- Buses depend on air compressor systems, which were largely affected by the severe conditions causing significant mechanical failures across the fleets. There were 30% more mechanical failures during the first quarter compared to Q1-2013 (in January alone there were 729 service interruptions – 53% more than January, 2013).
- The extremely cold temperatures caused copper air lines to freeze; the copper lines were not designed to tolerate single-digit conditions. This caused frozen air dryers and ice-clogged air lines; sufficient air pressure is required to operate the brakes and other pneumatic components of the bus (e.g. doors).
- The frigid temperatures also caused increased engine failures, compounding pre-existing challenges with engine failures. Exhaust gas recirculation (EGR) valves (used for nitrogen oxide (NOX) emission reduction) continue to challenge the reliability of the Hybrid and CNG fleets.

Bus Fleet Reliability
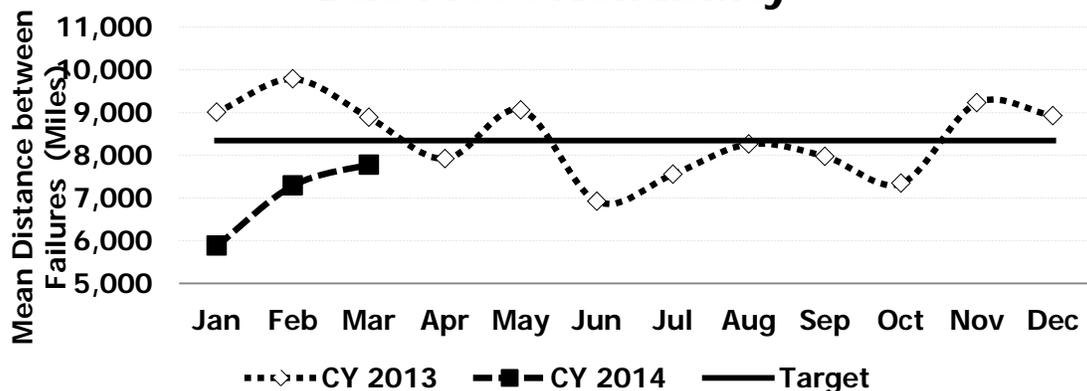
Actions to Improve Performance

- Metrobus air systems function optimally in warmer weather and do not perform at peak levels in times of sustained single-digit air temperatures typically experienced by transit systems in more northern cities. Metro is working with the manufacturers on a solution (e.g. relocate the copper lines or insulate them) that will accommodate both extreme hot and cold weather conditions.
- Metro is continuing to work with bus and engine manufacturers to resolve EGR and NOX sensor-related equipment.
- Projects are underway to study and solve piston-related failures on the CNG fleet as well.
- Continue the midlife overhaul of the Clean Diesel fleet. Approximately 70 buses have been overhauled and placed back into service so far this year.

Conclusion: This quarter's Bus Fleet Reliability was most affected by the harsh single-digit temperatures experienced. These conditions affected every single fleet causing reliability to drop 25% compared to Q1-2013. Air systems were the components most affected by the frigid temperatures. Air pressure is needed to operate the brakes, doors, and other pneumatic components.

| KPI: Rail On-Time Performance (Jan-Mar 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 (OTP) in Q1-2014 was almost 2 percentage points below Q1-2013 as cold temperatures led to an increase in delays and fewer railcars were available on some days. Similar to Metrobus, significant snow accumulation this quarter triggered management's decision to reduce service for brief periods.
- For the quarter, incidents delaying customers were up 12% from Q1-2013, driven by an increase in railcar, infrastructure and track delays, particularly in January and March.
- Delays lowered OTP on all lines, with the most significant impacts on the Red and Blue Lines in January. For example, incidents pulled Red Line OTP to 87% (e.g., cracked rail on 1/7 at Brookland station, 1/22 power outage at Glenmont yard) and Blue Line to 89% (railcar brake delays on multiple days, 1/23 cracked rail between Braddock Road and Reagan National Airport).
- Railcar availability was below the target 3/4 through 3/6, leading to shorter trains and in some instances wider headways (40 instances of "no dispatch due to no car available" in March).
- Rail OTP was lowest on snow storm days (2/13, 3/3, 3/4 and 3/17) as headways were purposefully widened to due to expected low ridership and/or deteriorating weather (15% fewer train stops than a typical weekday).

Rail On-Time Performance
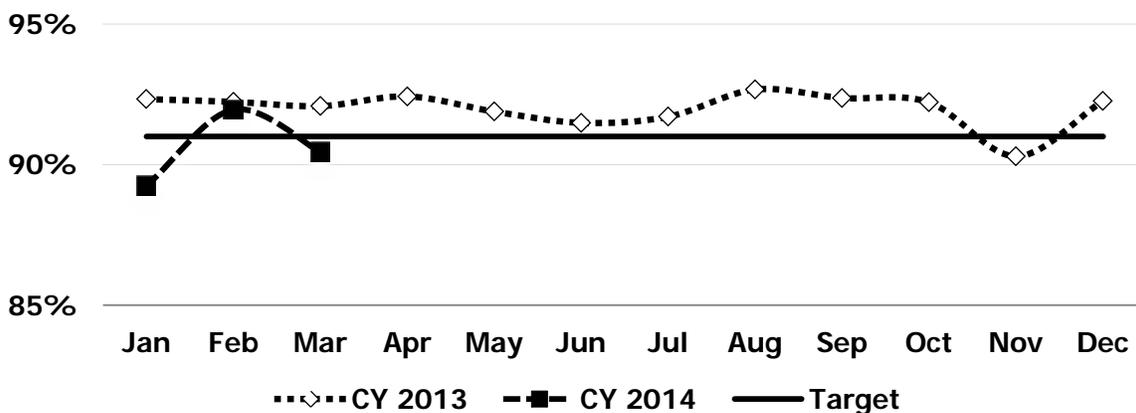
Actions to Improve Performance

- Controllers will begin using enhanced railcar troubleshooting guide to quickly determine railcar problem and decrease length of delay.
- Move gap train from Largo to near Stadium Armory in order to more quickly address headway gaps due to delays on Orange/Blue Lines.
- Continue weekday evening and weekend track work to improve long-term reliability. Begin conducting mid-day track work to accelerate system rebuilding, focusing on non-core segments to minimize customer impact.

Conclusion: Cold temperatures led to an increase in delays, fewer available railcars on some days, and snow events reduced service levels, lowering OTP almost 2 percentage points below Q1-2013.

| KPI:	Rail Fleet Reliability (Jan-Mar 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?

- Railcar reliability was 6% below target for Q1-2014, and 20% below Q1-2013. The performance for the quarter was driven down due to car and related track failures during January.
- During the quarter extreme cold affected railcar equipment in several ways. In the brake systems, moisture in the brake lines sometimes froze and prevented air pressure from building and reaching the brakes, resulting in the brakes engaging and not releasing.   This condition resulted in the highest number and amount of delays due to brakes since 2012.
- Delays due to power failures spiked in January, to the highest number of delay incidents since 2012 and the highest minutes of delay since June 2013. Damaged collector shoes (the paddles on the sides of trains that pick up electricity from the third rail), collector shoe fuses and cables being found damaged from flashing were identified. Maintenance Operations Center personnel analyze the locations and conditions around the failures to identify the root cause, and generate work orders to correct situations where the running rails and third rail are out of alignment, resulting in damage to collector shoe assemblies.

Rail Fleet Reliability
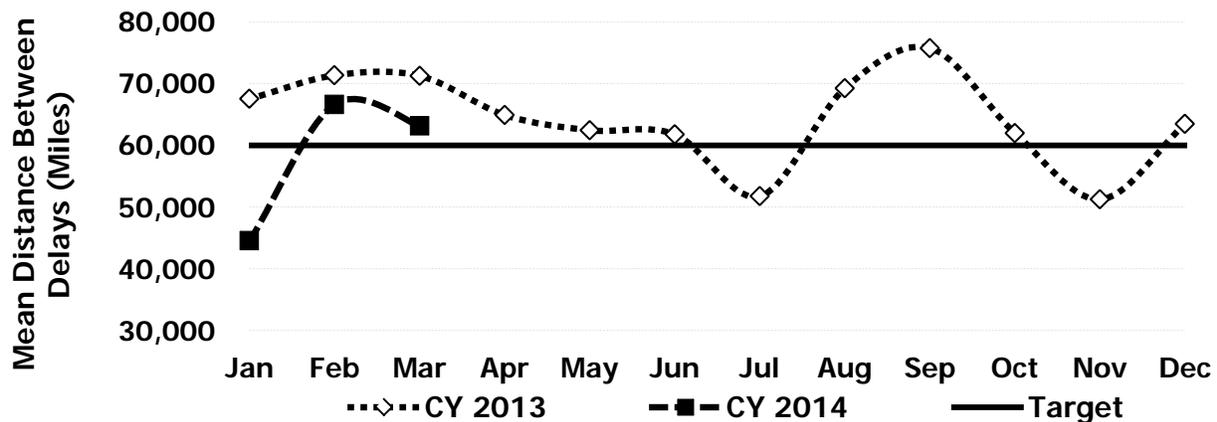
Actions to Improve Performance

- Assess the track geometry and third rail regularly to ensure that the third rail is aligned at the right height relative to the running rails to reduce the chance of damage to railcar collector shoes. Integrate Maximo work orders for out of alignment third rail segments into the track maintenance planning process to correct them timely.
- Newer railcars with modern brake systems are less likely to have brake failures during cold weather. Replacement of the oldest railcars is underway.
- Railcar maintenance is performing special inspections of the older railcars and implementing campaigns to improve reliability.

Conclusion: Railcar reliability was below target by 6% for Q1-2014 due to system impacts of severe cold and the impact of incorrect third rail alignment damaging railcars in January.

KPI:	Escalator System Availability (Jan-Mar 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?

- Q1-2014 escalator availability improved significantly from Q1-2013 as the consistent emphasis on preventive maintenance entered its 3rd year.
- Technicians proactively resolved maintenance issues during preventive maintenance (PM) inspections conducted when the system is closed to customers (escalator PM compliance was over 95% in Q1-2014, compared with 58% in Q1-2011).
- Escalator Mean Time to Repair was the best it's been in over three years, falling below 5 hours (compared with 15 hours in Q1-2011). With the addition of more technicians since Q1-2013, Metro was able to quickly respond when outages did occur, and an increasing number of outages were less complex (e.g., paneling loose, trash in step) due to better preventive maintenance.
- Scheduled escalator maintenance accounted for 53% of all out of service hours in Q1-2014. Twenty-two units were out of service during some or all of the quarter, including two new replacement entrance escalators at Van Ness (became available to customers in March). Replacement work was underway on escalators at five stations and rehabilitations continued at 7 other stations.

Escalator System Availability

Legend: CY 2013, CY 2014, Target
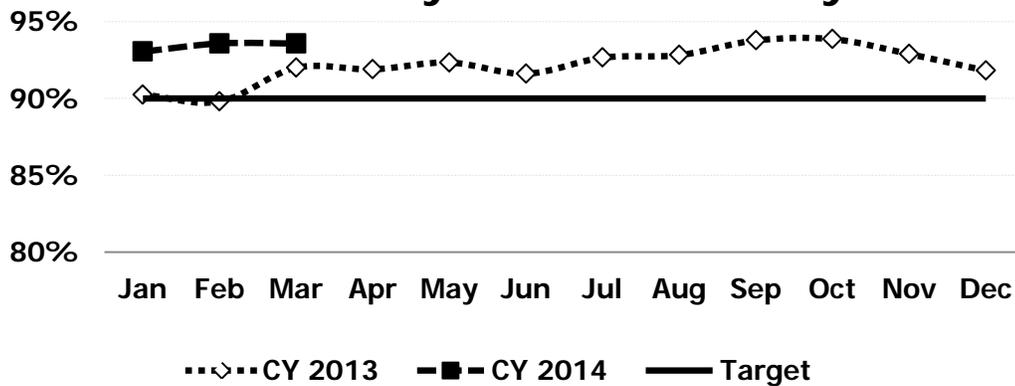
Actions to Improve Performance

- To improve long-term reliability, continue escalator replacements at Georgia Ave, Columbia Heights, Bethesda, Friendship Heights and Mt. Vernon Square and rehabilitations at 7 stations.
- Enhance checklist so that technicians can more efficiently conduct preventive maintenance inspections (e.g., moving from the top to the bottom of the escalator) and more readily demonstrate linkage to jurisdictional escalator/elevator codes.
- Add superintendent to manage maintenance of new escalators/elevators (e.g., Silver Line, Silver Spring transit center).

Conclusion: Q1-2014 escalator availability improved almost 3 percentage points from Q1-2013 as the addition of new technicians led to quicker response and better preventive maintenance, which led to shorter, less complex repairs.

KPI:	Elevator System Availability (Jan-Mar 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 Q1-2014 elevator availability was slightly above Q1-2013 driven by a decrease in scheduled maintenance. The mix of elevator maintenance shifted toward unscheduled repairs due to a renewed emphasis on elevator safety inspections and an increase in water intrusion repairs.
- Metro increased elevator safety inspections to monitor compliance with customer safety requirements, resulting in the identification and resolution of complex repairs (e.g., lighting elevator pit at Prince George's Plaza, replacing rope cable at Wheaton). As a result, repairs took longer to complete in Q1-2014 (2.6 more hours than Q1-2013).
- Technicians responded to an increase in water intrusion events that took units out of service for long periods at McPherson Square, West Hyattsville and Wheaton stations as water collected at the bottom of elevator pits and damaged mechanical equipment (12 elevators, compared with 2 in Q1-2013).
- Scheduled elevator modernizations accounted for 38% of elevator out-of-service hours in Q1-2014. Modernization work was completed on two elevators at Smithsonian and work began on an elevator at Ronald Reagan Washington National Airport (In Q1-2013, scheduled modernizations accounted for 67% of out-of-service hours, averaging 8 elevators).

Elevator System Availability
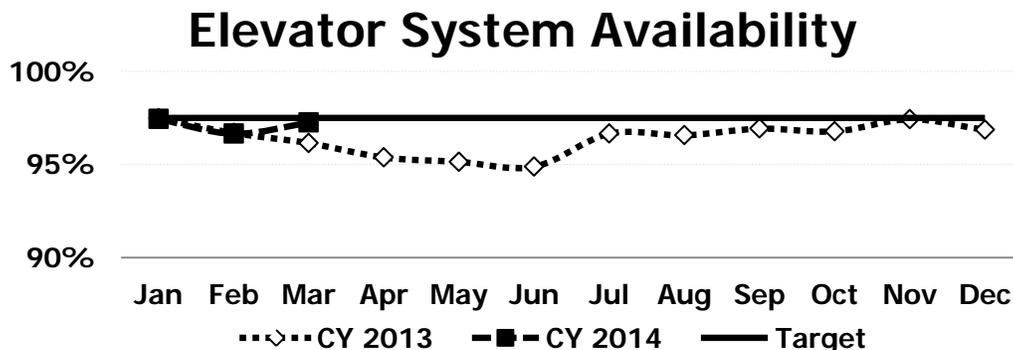
Actions to Improve Performance

- Following successful installation last year of elevator pit water abatement systems at Addison Road, Glenmont and Prince George's Plaza (monitors for intrusion and removes water), install similar systems at Huntington and Wheaton stations to prevent water damage.
- Examine options to improve elevator outage response and increase accountability, including realigning staffing from dedicated elevator maintenance crews to combined escalator/elevator crews organized by four regions.
- Put units back in service faster by improving outage notification to Station Managers, who can either reset the unit or request maintenance response. Initiate a pilot to add kiosk alarm at three stations and evaluate results.
- IT and Elevator/Escalator Services will expand testing of a remote access system (RAS) to monitor elevator/escalator outages.
- Begin to review quality of elevator PM inspections to identify what's being done well, and identify opportunities for improvement.
- Continue elevator modernization at Ronald Reagan Washington National Airport and begin work on an elevator at Federal Triangle.

Conclusion: Elevator availability was slightly better than Q1-2013 due to a reduction in scheduled maintenance. Overall elevator maintenance shifted from scheduled to unscheduled work as water damaged elevators and safety inspections lead to complex repairs.

KPI:	Customer Injury Rate (Jan-Mar 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?

- The customer injury rate did not improve compared to Q1-2013. For every million trips, there were 2.1 customer injuries compared to 1.7.
- The first quarter of 2014 presented notable weather challenges creating vulnerable circumstances for buses travelling on ice and snow covered area roadways and for customers walking on slippery sidewalks.
- Bus injuries were 42% of this quarter's customer injuries. Bus customer injuries were predominately caused by bus collisions (bus collision related injuries increased by 21 or 64%). Although fewer bus trips were provided, bus collisions increased by 53% compared to Q1-2013.
- Rail-related injuries did not improve (increased 13% compared to Q1-2013) and were primarily driven by an increase in facility injuries (e.g. platforms, parking lots). However, escalator injuries improved/declined 28%. It is typical for these injuries to be slip/trip and fall related, but the inclement weather created an additional burden for negotiating wet and or slippery surfaces.

Customer Injury Rate
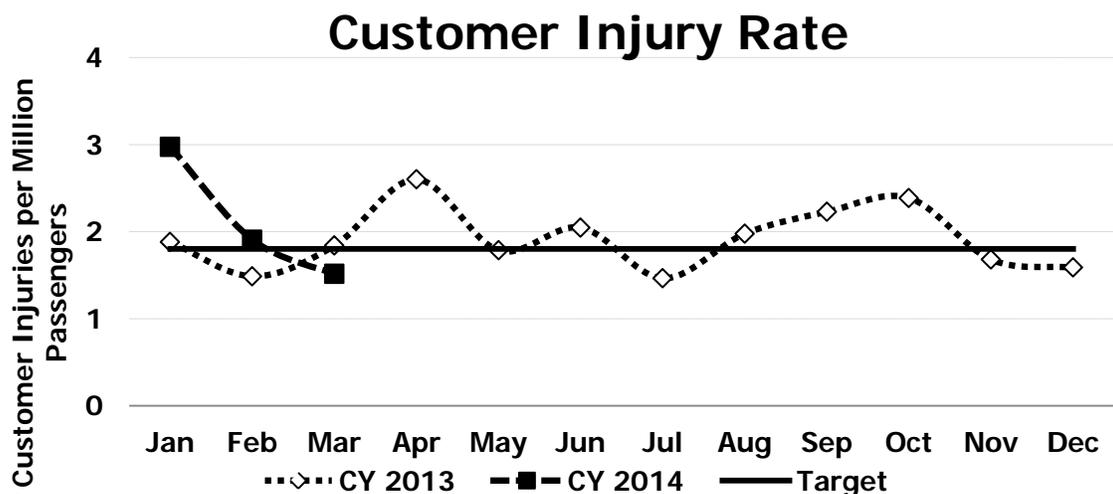
Actions to Improve Performance

- Twenty two percent of bus accidents are caused by rear-end collisions. As a result, reflective chevrons were installed on the back of 80 buses to test whether increased visibility will reduce collisions. Bus Services will evaluate the results of this test and if proven effective additional chevrons will be installed.
- Bus division trainers will conduct bi-monthly meetings to focus on relevant safety topics. Bus Operators will have the opportunity to suggest improvements that they believe would contribute to the reduction of incidents.
- Track accident Hotspots to conduct periodic safety exercises – known as safety blitzes. During safety blitzes, bus operators will be reminded of safe driving practices. It has been noted that bus operators appreciate having eyes on the street to bring additional awareness to safety.
- Station Managers as well as facility engineers will continue to be vigilant in identifying and remedying safety hazards such as wet surfaces. One common practice is to place visible caution signs to alert customers.

Conclusion: The customer injury rate worsened compared to Q1-2013. For every million trips, there were 2.1 customer injuries compared to 1.7 last year. Many of this quarter's incidents were the result of inclement weather. WMATA will continue to monitor the trends of incident prone scenarios to test and develop specific safety solutions.

KPI:	Employee Injury Rate (Jan-Mar 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 improved 10% during the first quarter compared to Q1-2013; decreasing from 5.1 to 4.4 employees injured for every 200K hours worked.
- Employee injuries have typically been driven by a common and repeating set of injury categories: slips/trips and falls (31%), collisions (22%) struck by/against (14%), and pushing/pulling-related injuries (12%). Overall, these top four injury categories improved by less than 1% compared to Q1-2013.
- Substantial efforts were made to reduce employee injuries by continuing to focus on creating a "shared climate of safety" through initiatives like the fatigue management program, At-Risk program, improved incident investigation, and health awareness throughout the organization. The number of At-Risk employees has been reduced by 32% since the inception of the At-Risk program.
- During the inclement weather, staircases, walkways, etc. were monitored for snow and ice removal to prevent slips/trips and falls. For example, temporary paper runners were taped on high traffic areas were carpet runners may not have existed.

Employee Injury Rate
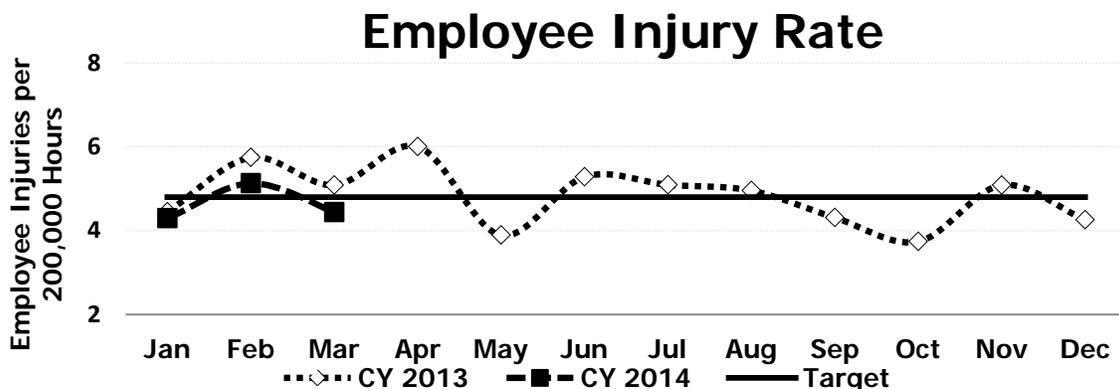
Actions to Improve Performance

- Continue to conduct facility and ground inspections to identify tripping hazards, loose handrails, untidy work areas, and other hazards that may cause an employee to be injured. These hazards are identified and reported to facilities and or operation centers for immediate action.
- Eight to ten hours of repetitious motion has been known to cause wrist and shoulder injuries. Bus Transportation has instructed bus operators on exercises and stretches designed to help avoid pulling and strain related injuries.
- Bus Operator assaults decreased by 55% or 5 assaults compared to Q1-2013. All future bus procurements will include bus shields.
- Continue to conduct quarterly meetings with superintendents and unions to discuss and address safety concerns as well as lessons learned.
- The Elevator/Escalator group recently experienced a notable decrease in employee injuries; managers have and will continue to complete and review incident reports within seven days to recreate the incident and attain final root cause, share lessons learned with the employees involved, as well as local safety meetings.

Conclusion: Employee injuries improved compared to Q1-2013. The development of initiatives like the fatigue management program, At-Risk program, improved incident investigation, and health awareness throughout the organization has contributed to the reduction of employee injuries. Conducting facility inspections also remained essential to contributing to the efforts to reduce employee injuries, especially during inclement weather.

KPI:	Crime Rate (Jan-Mar 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?

- During the first quarter of 2014, the number of Part I crimes was down 34%. This was largely due to fewer crimes in the rail system. The very cold weather this year compared to last year contributed to reducing the opportunity for and interest in certain types of crimes that tend to occur when the weather is warmer. For example, bicycle thefts, which are down 55% from 2013 year-to-date.
- Crimes against property, especially auto thefts and thefts from autos were higher for the quarter, largely due to multiple cars targeted in one incident in January, which impacted the data significantly.
- Another area that has been aggressively targeted is the reduction of snatches of personal electronic devices. Raising awareness of customers to be alert for this type of activity, along with stepped-up enforcement, has resulted in 43% fewer snatches so far this year.

Metrobus Crime Rate*

Metrorail Crime Rate

Parking Crime Rate

Crimes per Million Passengers

···◇·· CY 2013
━■━ CY 2014

*Scales for Crime Rate have been adjusted
Target: Less than 2,000 Part I Crimes in CY 2014
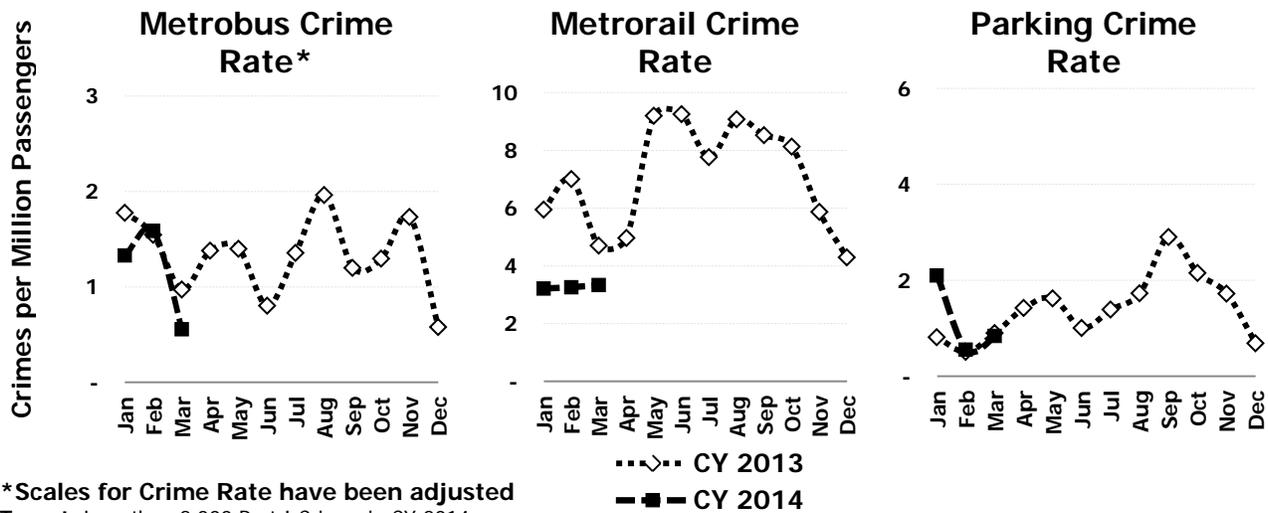
Actions to Improve Performance

- MTPD officers continue to look at hotspots and adjust their patrols to deter criminal activity in and around the Metro system. District officers are sharing lookout information from video where possible to assist each other in finding individual suspects when they cross into adjacent patrol areas.
- Officers keep close watch on parking facilities through casual clothes surveillance teams and by using Gators to patrol the facilities adjacent to stations.
- In an effort to be proactive in reducing bicycle thefts, MTPD officers are identifying bicycles that could be better secured, encouraging owners to trade in their cable locks for free U-locks and register their bicycles. At this time, approximately one-third of bicycles locked to the bike racks at stations are registered in the database.

Conclusion: Metro's crime rate was lower for the first quarter of 2014, with 34% fewer crimes. MTPD officers are increasing outreach activity by encouraging bicycle owners to be more vigilant and use stronger locks for their bikes.

KPI: Customer Satisfaction (Oct-Dec 2013)	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?

- Metro retooled its customer satisfaction survey process over the last 18 months. The most recent data covers the period of November – December 2013. The most recent survey sampled 771 Metrobus and Metrorail customers from the District of Columbia, Maryland and Virginia. (Q4-2012 data was not collected).
- Metro customer satisfaction has trended unfavorably downward to 76% satisfied-or-very-satisfied for both bus and rail, largely due to perceived service reliability challenges.
- Metrorail overall satisfaction is in decline, likely due to several major delays that occurred in November, during the survey timeframe. Perceptions of on-time service consistency drive this measure. Respondents in Maryland and Virginia rated service more negatively than in the District of Columbia compared to the previous quarter.
- Nearly a quarter (24%) of customers engaged station managers for some type of information in Q4-2013. Those customers interacting with station managers said they met or exceeded expectations (88%)—rating them as both knowledgeable and courteous.
- Metrobus overall satisfaction and perceived reliability measures were also down for the reporting period. This is also largely driven by the perception of poor reliability. Customers perceive Metrobus as unreliable based on arrival times not being consistent, or not being frequent enough to count on. Metrobus customers do use NextBus, however, and say that it is effective in predicting when the bus will actually arrive.
- Bus operators were regarded as approachable, and the majority of survey respondents (75%) said they were greeted when boarding. While a small percent of surveyed customers spoke with the operator, the percentage was double (17%) the prior quarter. This interaction and operator friendliness is the number one driver of customers' satisfaction.

Metrobus Customer Satisfaction

Legend: CY 2013 | Target

Metrorail Customer Satisfaction

Legend: CY 2013 | Target
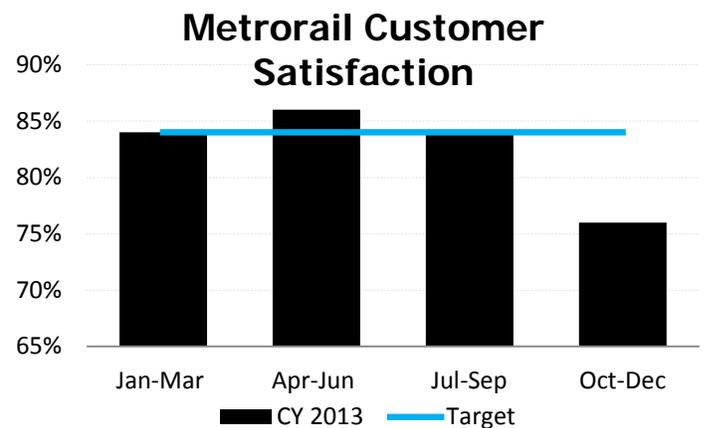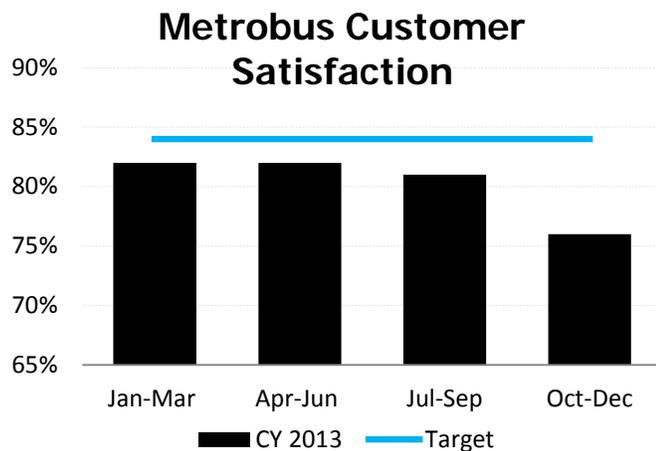
Actions to Improve Performance

- Continue to encourage bus operators to greet customers. This engagement makes customers feel more at ease, and may also positively impact employee performance as well.
- Rail system reliability continues to be a challenge with ongoing repair work and periodic delays. Metro's communication efforts, particularly electronic information and information on the Metro website are being used by customers to gain information. Metro staff should continue to ensure that the available information is timely and provides information for travel options when necessary.

Conclusion: Metro customer satisfaction has trended downward to 76% satisfied or very satisfied for both bus and rail, largely due to perceived service reliability challenges.

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: December 2013 – February 2014
Results: Metro provided an additional hour of service on 12/1 following a Redskins game.

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: December 2013 – February 2014

Results:
- Headways were changed on 1 day (2/13, snow storm). Service levels reduced due to expected low ridership and/or deteriorating weather (15% fewer train stops than a typical weekday).
- Weekday evening headways were changed to accommodate system rebuilding on 63 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: December 2013 – February 2014

Rush Results:

Line	Maximum Load Stations	AM Rush				PM Rush		
		Dec-13	Jan-14*	Feb-14		Dec-13	Jan-14*	Feb-14
Red	AM Gallery Place/PM Metro Center	66	72	89		70	76	83
	AM Dupont Circle/PM Farragut North	64	83	85		62	70	71
Blue	AM Rosslyn/PM Foggy Bottom-GWU	64	65	97		76	83	93
	AM L'Enfant Plaza/PM Smithsonian	67	74	55		55	59	67
Orange	AM Court House/PM Foggy Bottom-GWU	83	86	112		77	86	90
	AM L'Enfant Plaza/PM Smithsonian	62	69	66		53	58	63
Yellow	AM Pentagon/PM L'Enfant Plaza	54	77	79		56	64	76
Green	AM Waterfront/PM L'Enfant Plaza	60	72	70		58	59	71
	AM Shaw-Howard U/PM Mt. Vernon Sq.	68	75	62		61	68	69

Estimated. Red and Green Line observations occurred on snow days that did not represent the average day. Blue and Orange was not observed in January.

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	Q1-2014
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%	77.5%
CY 2013	78.8%	79.4%	78.4%	76.5%	75.6%	75.5%							78.9%
CY 2014	80.4%	78.4%	78.2%										79.0%

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	Q1-2014
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	9,192
CY 2014	5,879	7,291	7,778										6,851

* Bus Fleet Reliability target revised effective January 2014

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

Type (~ % of Fleet)	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	12-Month MDBF
CNG (30%)	6,350	8,030	6,701	7,391	8,597	8,138	7,435	7,337	7,706	6,350	6,373	6,897	7,218
Hybrid (27%)	10,418	11,323	8,067	9,647	9,013	8,660	9,086	11,431	10,256	5,575	8,049	8,791	8,882
Clean Diesel (8%)	8,812	9,499	8,369	6,531	10,695	7,407	5,960	11,529	12,793	10,277	12,117	9,567	8,940
All Other (35%)	5,417	5,809	4,031	4,177	5,077	5,907	4,296	6,627	6,207	4,528	5,269	5,701	5,111

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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%										90.5%

Rail On-Time Performance by Line

	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	12-Month Avg
Red Line	92.9%	90.5%	90.0%	90.6%	92.2%	91.5%	92.3%	87.8%	91.1%	87.0%	90.8%	89.1%	90.5%
Blue Line	90.5%	91.4%	90.4%	90.5%	91.6%	91.6%	91.1%	90.2%	91.4%	89.2%	91.2%	89.7%	90.7%
Orange Line	93.0%	93.3%	92.7%	92.4%	93.3%	93.3%	93.1%	92.2%	93.4%	90.8%	93.2%	91.5%	92.7%
Green Line	93.5%	93.5%	93.6%	93.7%	94.7%	93.8%	92.5%	92.2%	93.6%	91.2%	93.5%	92.9%	93.2%
Yellow Line	92.3%	92.6%	92.4%	92.6%	93.8%	92.9%	92.9%	91.2%	95.0%	90.3%	92.6%	94.2%	92.8%
Average (All Lines)	92.4%	91.9%	91.5%	91.7%	92.7%	92.4%	92.2%	90.3%	92.3%	89.2%	92.0%	90.4%	91.6%

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	Q1-2014
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	69,956
CY 2014	44,530	66,600	63,127										56,213

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

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	12-Month Avg
1000 series railcars	61,274	47,303	62,981	40,344	64,881	62,987	74,880	46,283	87,738	31,151	48,027	47,860	52,722
2000/3000 series railcars	97,509	107,133	67,271	104,897	123,374	128,953	81,366	82,916	84,531	60,796	102,450	116,661	92,204
4000 series railcars	43,317	31,220	25,575	12,087	28,465	30,393	20,165	16,337	25,384	17,282	39,542	27,254	23,379
5000 series railcars	46,025	44,579	57,447	115,289	53,741	59,349	47,648	32,215	43,412	41,012	53,807	50,481	49,366
6000 series railcars	65,697	99,006	128,325	81,207	77,985	111,766	116,314	157,980	82,233	127,765	98,260	83,886	95,892
Fleet average	64,890	62,418	61,745	51,757	69,230	75,697	61,959	51,248	63,468	44,530	66,600	63,127	60,273

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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%	92.7%
CY 2014	93.3%	90.2%	92.5%										92.0%

KPI: Escalator System Availability -- Target = 90%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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%	90.7%
CY 2014	93.0%	93.6%	93.6%										93.4%

KPI: Elevator System Availability -- Target = 97.5%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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%	96.8%
CY 2014	97.4%	96.6%	97.3%										97.1%

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	Q1-2014
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	1.74
CY 2014	2.97	1.91	1.52										2.12

*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	Q1-2014
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	1.92
CY 2014	3.04	2.28	1.30										2.20

Rail Customer Injury Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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	0.08
CY 2014	0.13	0.07	0.36										0.19

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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	1.43
CY 2014	2.43	1.46	1.19										1.68

*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	Q1-2014
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	13.93
CY 2014	37.17	12.76	11.72										20.46

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	Q1-2014
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	5.07
CY 2014	4.29	5.13	3.91										4.42

* 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	Q1-2014
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	1.59	0.56										1.15
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	3.26	3.34										3.28
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	2.10	0.56	0.84										1.16

Crimes by Type

CY 2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Mar
Robbery	18	17	19										54
Larceny (Snatch/Pickpocket)	25	30	32										87
Larceny (Other)	41	18	24										83
Motor Vehicle Theft	4	1	4										9
Attempted Motor Vehicle Th	10	1	2										13
Aggravated Assault	5	9	7										21
Rape	0	0	0										-
Burglary	0	0	0										-
Homicide	0	0	0										-
Arson	1	0	0										1
Total	104	76	88	-	-	-	-	-	-	-	-	-	268

*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	Q1-2014
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	6.3
CY 2014	7.0	6.0	6.6										6.6

KPI: Customer Complaint Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
CY 2013	84	73	74	74	76	79	90	81	82	81	113	74	77
CY 2014	92	88	74										84

KPI: Customer Satisfaction Index

	Metrobus	DC	MD	VA	Metrorail	DC	MD	VA
Jan-Mar 2013	82%	79%	84%	90%	84%	87%	85%	82%
Apr-Jun 2013	82%				86%			
Jul-Sep 2013	81%	80%	81%	83%	84%	84%	82%	87%
Oct-Dec 2013	76%	76%	74%	81%	76%	76%	75%	77%

Metrobus Ridership (millions of unlinked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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	32.4
CY 2014	10.5	10.1	10.8										31.4

Metrorail Ridership (millions of linked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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	50.9
CY 2014	15.2	14.4	16.8										46.4

MetroAccess Ridership (100,000s of completed trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Q1-2014
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	5.03
CY 2014	1.61	1.57	1.71										4.89

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

Board Standard: Passengers-per-car

Line	Maximum Load Stations	AM Rush Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
Red	Gallery Place	76	79	87	78	82	66	72	89
	Dupont Circle	80	75	99	85	77	64	83	85
Blue	Rosslyn	90	81	80	80	85	64	65	97
	L'Enfant Plaza	54	69	81	76	70	67	74	55
Orange	Court House	100	86	102	94	105	83	86	112
	L'Enfant Plaza	71	75	81	77	78	62	69	66
Yellow	Pentagon	73	72	72	62	73	54	77	79
Green	Waterfront	64	77	92	83	77	60	72	70
	Shaw-Howard*	74	69	72	80	103	68	75	62

Line	Maximum Load Stations	PM Rush Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
Red	Metro Center	78	83	84	74	83	70	76	83
	Farragut North	85	79	91	80	73	62	70	71
Blue	Foggy Bottom-GWU	113	89	91	90	83	76	83	93
	Smithsonian	67	74	88	93	59	55	59	67
Orange	Foggy Bottom-GWU	88	80	92	104	98	77	86	90
	Smithsonian	90	72	68	70	63	53	58	63
Yellow	L'Enfant Plaza	72	79	72	62	69	56	64	76
Green	L'Enfant Plaza	70	69	88	68	74	58	59	71
	Mt. Vernon Sq.	76	66	68	55	70	61	68	69

*Green Line AM Max load station changed from L'Enfant Plaza to Shaw-Howard based on analysis of customer travel patterns

*Estimated. Red and Green Line observations occurred on snow days that did not represent the average day.

Blue and Orange was not observed in January.

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	483,356 (March 2014)
Rail	209 million	668,847 (March 2014)
MetroAccess	2.1 million	6,838 (March 2014)
Total	347 million	

Fiscal Year 2014 Budget

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

Metrobus General Information

Size	11,279 bus stops and 2,392 shelters
Routes*	318 Routes on 175 Lines
Fiscal Year 2014 Operating Budget	$579.3 million
Highest Ridership Route in 2009	30's – Pennsylvania Ave. (16,330 avg. wkdy ridership)
Metrobus Fare	$1.80 cash, $1.60 SmarTrip®, Bus-to-bus Transfers Free
Express Bus Fare	$4.00 cash, $3.65 SmarTrip®, Airport Fare $6.00
Bus Fleet*	1,516
Buses in Peak Service	1,284
Bus Fleet by Type*	Compressed Natural Gas (459), Electric Hybrid (698), Clean Diesel (144) and All Other (215)
Average Fleet Age*	7.4 years
Bus Garages	10 – 4 in DC, 3 in MD and 3 in VA

*As of April 15, 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 - $3.10 paper fare card, $2.10 SmarTrip® Maximum - $6.75 paper fare card, $5.75 SmarTrip®
Reduced Fare (non-peak)	Minimum - $2.70 paper fare card, $1.70 SmarTrip® Maximum - $4.50 paper fare card, $3.50 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	Morgan Boulevard, NoMa-Gallaudet (New York Ave), and Largo Town Center (2004)
Rail Cars in Revenue Service	1,104
Rail Cars in Peak Service	896
Rail Cars by Series	1000 Series (288), 2000/3000 (362), 4000 (100), 5000 (184) and 6000 (184)
Lines	5 – Red, Blue, Orange, Green, and Yellow
Station Escalators	586
Station Elevators	245
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	Within the ADA service area – twice the equivalent SmarTrip-based fare up to a $7 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

**As of June 2013.