Vital Signs Report

A Scorecard of Metro's

Key Performance Indicators (KPIs)

2013 Year-End 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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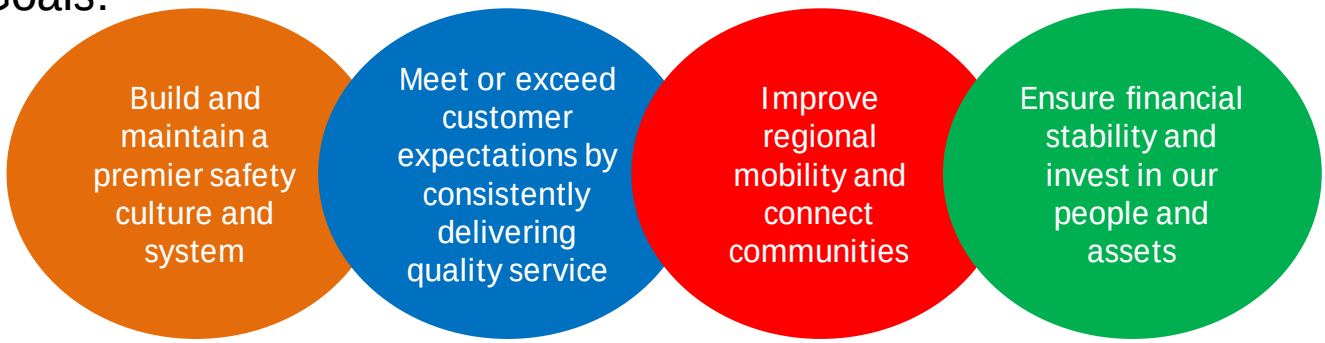
Strategic Plan Overview

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:

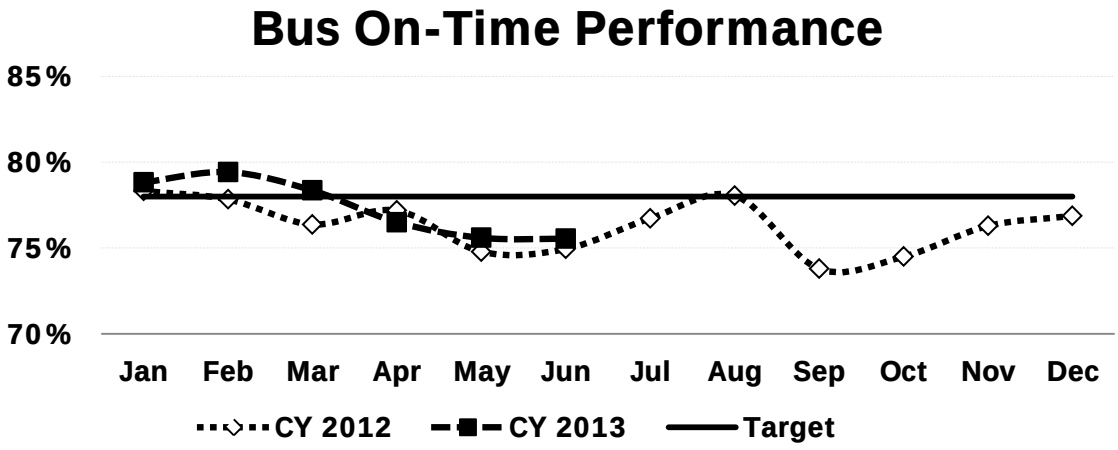


KPI: Bus On-Time Performance (Jan-Dec 2013) **Goal: Meet or exceed customer expectations by consistently delivering quality service**

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 On-Time Performance improved each consecutive year since 2010 through 2012 by approximately one percentage point each year. Incremental improvement continued through the second quarter of CY2013.
- During the third quarter of CY2013 on-time performance began being reported at over 80%, which was historically un-chronicled. The improvement was attributed to a fleet technology upgrade that allowed for better tracking of bus locations which provided more accurate arrival times. However, staff subsequently discovered that the favorable performance did not accurately account for the reporting of earlies (buses arriving more than 2 minutes ahead of schedule), thus compromising Bus On-Time Performance results for the latter portion of CY2013.
- Efforts are underway to correct the fleet technology issues and reporting of the on-time performance results will resume once the technical team has reached a reasonable degree of confidence in the data.



Actions to Improve Performance

- Many efforts have taken place this year to improve bus on-time performance through schedule adjustments that better accommodate the circumstances of the service area, expanding the use of strategic buses to reduce the effects of detours, implementing service changes identified through service evaluations, corridor development studies, bus operator and customer recommendations, and internal operator work schedule optimization efforts.
- Metro will continue to implement service optimization plans identified in the Priority Corridor Plan to provide better bus service, and make service recommendations to the Board that allow for more reliable bus routing.
- Continue to evaluate the effects of the bus fleet technology upgrade on bus on-time performance.
- Continue producing studies to improve Metrobus service on some of the region's priority corridor lines.
- Service operation managers will continue to perform street checks and work with the On-Time Performance Center to respond to delays/incidents that require real time temporary adjustments.

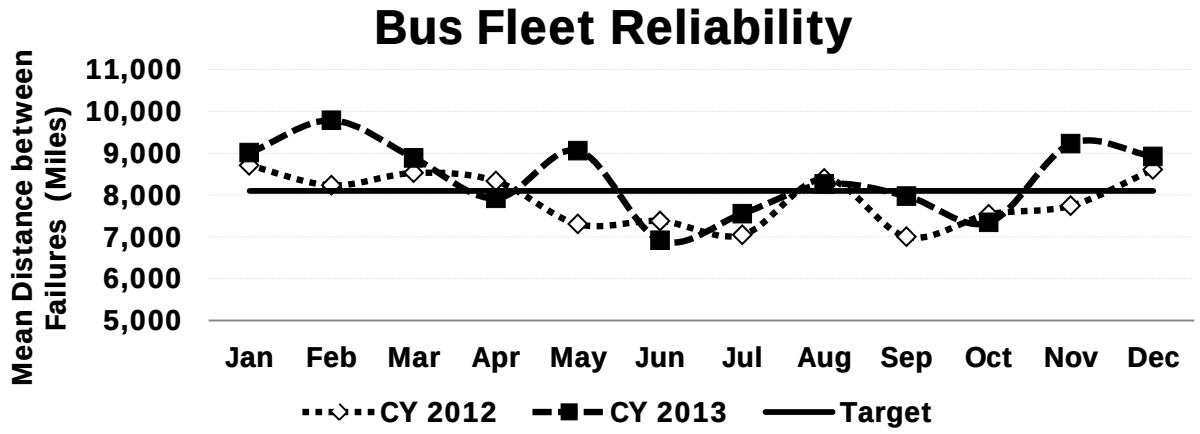
Conclusion: On-time performance has been improving by approximately one percentage point per year since 2010. A technical issue has temporarily disabled the ability to report current on-time performance but efforts are underway to resolve this problem.

KPI:	Bus Fleet Reliability (Jan-Dec 2013) (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?

- Full year bus fleet reliability results outperformed the target and were better than the prior year by 6%. There were 234 fewer mechanical breakdowns this year compared to CY12.
- The top service interruptions caused by mechanical breakdowns this year were: engine, transmission, door, brake, and wheelchair lift failures. Engine failures decreased 3.2%, brake failures decreased 27.1% and wheelchair lifts decreased 24.7%. Additionally, transmission failures decreased 3.1% and door failures decreased 10.5%. Many of these challenges were driven by failed sensors, electrical faults, fluid leaks, and doors that were misaligned.
- The overall bus fleet reliability improvement this year is attributed to a robust maintenance program and a sustained bus procurement program which included:
  - Replacing 100 older, less reliable buses with new buses
  - Performing a midlife overhaul on the Clean Diesel Fleet to improve reliability
  - Consistently analyzing out-of-service reports for failure patterns and working closely with manufacturers to resolve challenges like the Absorbed Glass Mat (AGM) battery complications that affected the Hybrid fleet. AGM batteries are designed to be maintenance-free and provide longer life than traditional batteries.



Actions to Improve Performance

- Continue to perform robust engine compartment inspections to allow mechanics to find and prevent troubles with auxiliary parts (e.g., hydraulic and battery power wires).
- Expand the bus fleet by adding 20 buses a year in addition to replacing 100 buses a year per the five-year bus procurement plan.
- Perform midlife overhaul on 100 buses a year. At mid-life, the bus engine is rebuilt, transmission and electronics are replaced, chassis parts and seats are replaced, and the body of the bus is repainted. Mid-life overhauls are proven to reduce mechanical failures causing fewer breakdowns requiring major repairs.
- Continue to partner with manufacturers to resolve major fleet deficiencies.

Conclusion: Bus fleet reliability in 2013 outperformed its target and was better than the prior year by 6% as a result of a robust maintenance program and a sustained bus procurement program. There were 234 fewer mechanical breakdowns this year compared to CY2012.

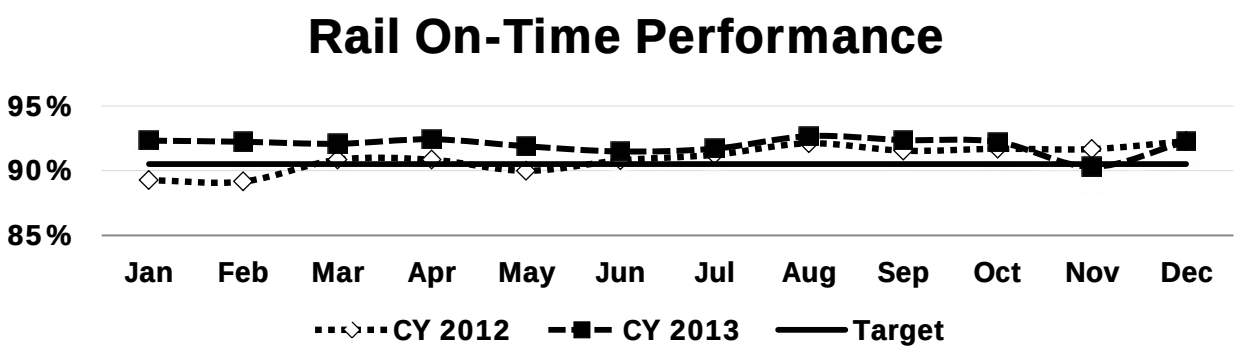
KPI: Rail On-Time Performance (Jan-Dec 2013)

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) for 2013 was 92%, a full percentage point better than the prior year's performance. With the exception of November, OTP was better for every month in 2013 as compared to the prior year.
- November's OTP was challenged from three high-profile incidents on the Red Line. These incidents included a delay caused by a leak of hydraulic fluid from a piece of equipment on the rails near Union Station, a delay caused by a low-hanging radio antenna cable that had broken from its support near Woodley Park Station, and another delay caused by a train with locked brakes at Takoma Station. These incidents required significant single-tracking operations, as well as train cancellations and passenger offloads, which significantly impacted service delivery.
- Many concurrent efforts underpin this sustained improvement. Rail Transportation has enhanced its Train Operator training program and increased support for other rail operations personnel. This has resulted in better, more reliable train operations, as well as swifter, more focused responses to service disruptions, allowing quicker restoration of normal service.
- Improvements to track and signal work in 2013, particularly the elimination of regularly scheduled mid-day track work, and the curtailing of evening track work, has allowed maintenance crews to perform critical system maintenance while maximizing quality service delivery. In addition, the lessons learned from performing this regularly scheduled track work has been applied to better the responses to unplanned events, minimizing the disruption to the customer.



Actions to Improve Performance

- To help prevent the significant delays of November form recurring, many departments across the organization are addressing the failures which led to these delays. For example, the track maintenance equipment, which caused the hydraulic leak near Union Station, is being upgraded with more robust hydraulic lines.
- Metro has undertaken major steps to return to Automatic Train Operation (ATO) for the safe and efficient movement of trains throughout the system. ATO is desirable because of the efficiency and consistency of accelerating and braking, providing a smoother ride for customers. Major steps include addressing NTSB recommendations, deploying the right equipment and tools, organizational changes, and improved processes and procedures.
- In 2014, Metro expects to accept and begin revenue service on Phase I of the Silver Line. A major expansion of the Metrorail system, it includes the addition of five new stations in northern Fairfax County. Four of these stations will serve the swiftly expanding community of Tysons Corner, with the fifth serving the Reston-Herndon communities. A second phase will expand service to the Reston-Herndon communities, and serve the Dulles International Airport, and Loudon County, Virginia.

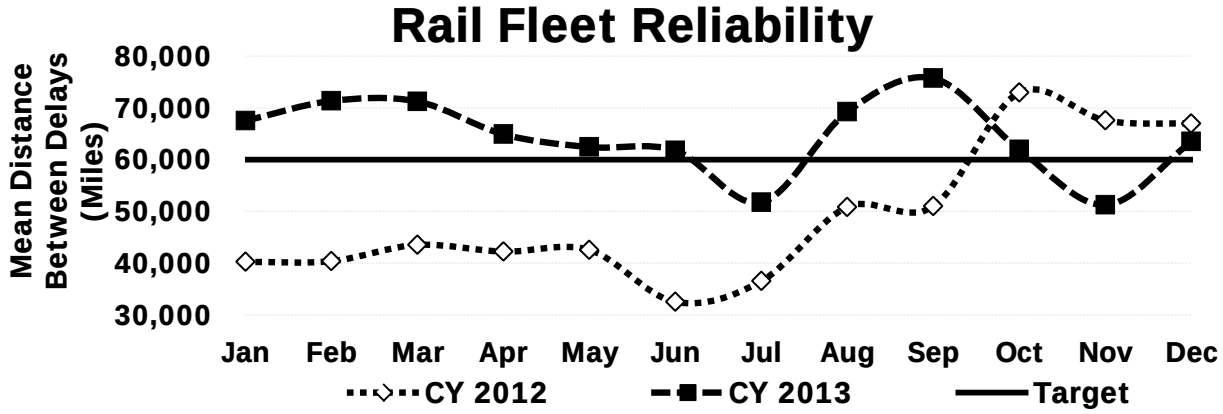
Conclusion: Rail on-time-performance (OTP) for 2013 was 92%, the best annual rail OTP for the last five years.

KPI:	Rail Fleet Reliability (Jan-Dec 2013) (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?

- Rail fleet reliability for 2013 improved 37% from 2012, with improvements in almost every car class. This was due to concerted efforts from both Car Maintenance and Car Engineering departments to address recurrent system weaknesses.
- Rail fleet reliability declined in November 2013 due to a sharp spike in brake- and door-related delays on the 4000 series fleet, as well as from an increase in door-related delays on the 5000 series fleet. The decline in November ran counter to the established trend, and performance recovered the following month.
- The 2000/3000 car fleet doubled reliability in 2013, proving to be the most improved fleet. This was followed by the 1000 and the 6000 series car fleets, which improved by 38% and 36%, respectively. Modifications to critical components improved the reliability of these fleets, as delays due to door, brake, and propulsion system problems significantly decreased in 2013.
- In 2013, Car Maintenance crews completed more than 18 campaigns to improve the safety, reliability, and comfort of our customers. These efforts worked to engineer-out specific system vulnerabilities, and were part of an ongoing process to analyze mechanical-related delays to find, and fix, the root cause of these failures.
- The 4000 series car fleet was the only class to experience lower reliability in 2013, as compared to 2012. Propulsion and brake system troubles depressed the reliability of this fleet by 6% for the year.



Actions to Improve Performance

- Car Maintenance continues to address and engineer-out identified weaknesses in the railcar fleet. For example, to help prevent APS failure-related delays, which was the root cause of a significant delay in November at Takoma Station, the 5000 series car APS systems are undergoing two reliability improvement modifications. These modifications have been designed to specifically address known weaknesses in these systems.
- Metro will begin to accept, test, and place in service the 7000 series fleet in 2014. A complete technological break with past fleets and engineered for reliability and maintainability, these cars will begin to replace the 1000 and 4000 series fleets, and provide for additional service expansion. This fleet is expected to meet the needs of the Silver Line service requirements, as well as allowing for more eight-car trains during peak service periods throughout the Metrorail system.

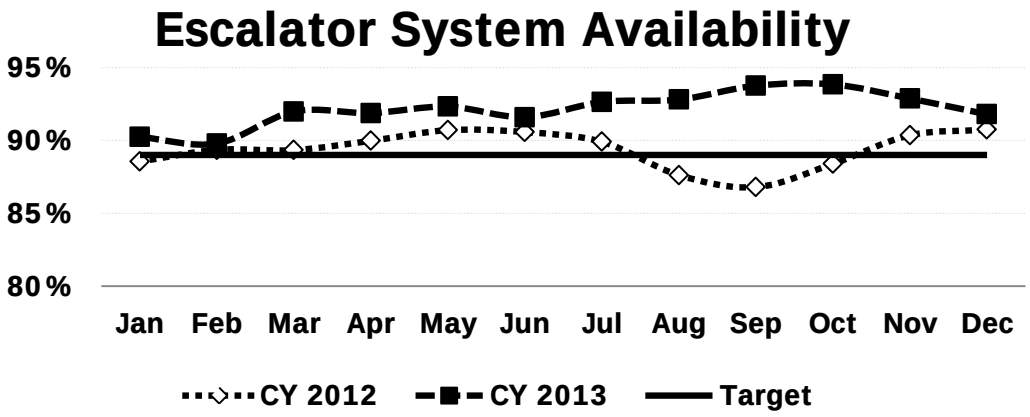
Conclusion: Rail fleet reliability for 2013 improved 37% from 2012, posting the best annual reliability since 2010.

KPI:	Escalator System Availability (Jan-Dec 2013)	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?

- Escalator availability for 2013 was 92.2%, more than 3% better than the prior year's performance. In comparison to 2012, availability was better for every month in 2013.
- Significant maintenance and management enhancements made in 2013 supported this sustained improvement. Such actions included increased hiring, training and development of technicians, an enhanced focus on preventive maintenance, and standardization of technical documentation.
- These efforts have resulted in a healthier, more stable escalator fleet. A key indicator of system health, unscheduled revenue hours out-of-service, has improved almost 30% as compared to 2012.
- An aggressive escalator modernization program continued in 2013. Though the number of modernizations remained relatively unchanged, the time required to perform these modernizations improved by 20%. Work-crews became increasingly able to perform these complex modernizations with greater efficiency, returning these units to revenue service sooner.



Actions to Improve Performance

- Metro will continue with its escalator modernization program throughout 2014, as part of its program to fully replace more than 120 escalators by 2020. Doing so will lower the average age of the escalator fleet, and provide a more safe and reliable level of service to our customers.
- In 2014, the deployment of the remote monitoring system will expand to more stations. This will allow for near real-time fault monitoring and reporting. In turn, that will allow for more informed maintenance responses, allowing technicians to respond sooner and return the units to service faster.

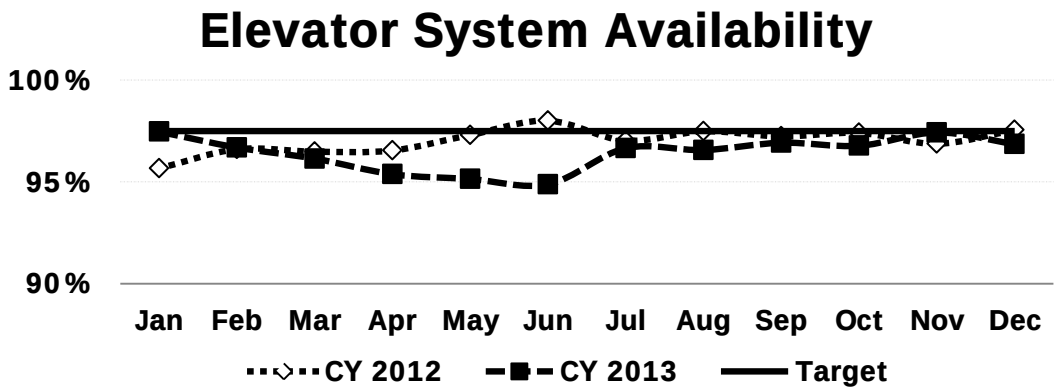
Conclusion: Escalator availability for 2013 was 92.2%, more than 3% better than the prior year's performance, the best delivered since 2010.

KPI:	Elevator System Availability (Jan-Dec 2013)	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?

- Elevator availability for 2013 was 96.4%, below target availability by almost one percentage point, and approximately a half a point below 2012's availability.
- A large increase in the elevator fleet modernization program exhibited strong downward pressure on availability in 2013. Although the modernizations are expected to yield a long-term benefit to our customers in the form of improved availability, safety, and comfort, the number of elevator revenue-hours-out-of-service for these improvements increased 57% in 2013, compared to the prior year.
- Significant changes made in 2013, including enhanced training and a comprehensive change in the deployment of work crews, led to a notable improvement in unscheduled outages. These improvements allowed Metro's elevator technicians to return troubled units to service quicker, as seen in a 12% decline in unscheduled revenue-hours-out-of-service in 2013.



Actions to Improve Performance

- In an ongoing effort to enhance the capabilities and skill level of its technicians, Metro will continue with its training and development campaigns. This effort is designed to ensure that elevator technicians are well versed across multiple elevator types and manufacturers. The effort is expected to improve the preventive and corrective maintenance skills of the workforce, and yield a safer and more reliable elevator system.
- To provide our customers with a safe, efficient, and reliable transit system, Metro will continue with its elevator modernization program in 2014. Through the Capital Improvement Program, 8 additional elevators are scheduled to undergo modernizations throughout the year.

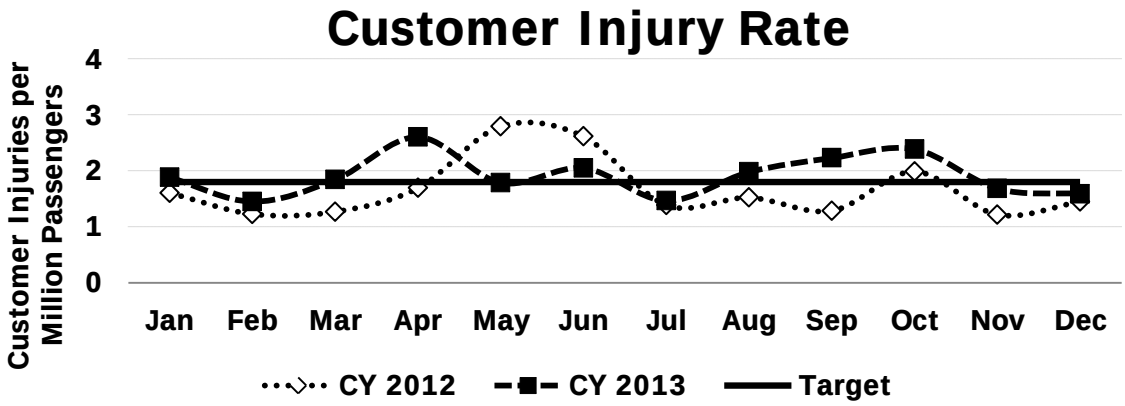
Conclusion: Elevator availability for 2013 was below target availability by almost one percentage point, and a half a point below 2012's availability.

KPI: Customer Injury Rate (Jan-Dec 2013) 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 CY2013 customer injury rate did not meet its target and was 14% worse than CY12 (1.92 injuries per million passengers compared to 1.69).
- Similar to last year - Slips/trips/falls were the leading cause of customer injuries this year followed by collision-related injuries, striking/struck by, and caught in/by an object, respectively. During the month of December, slips/trips/falls alone represented 80% of all customer injuries.
- Approximately 95% of the slips/trips/falls occurred in rail station facilities: 62% on escalators and 33% at other locations in a rail station (e.g., platforms). Inattention to actions or surroundings was found to be the leading cause of slips/trips/falls.
- Bus collisions were the second leading cause of customer injuries this year. On the positive side, preventable collisions decreased 11%, however non-preventable collisions increased 15% compared to CY12. Although there were five fewer bus collisions this year, bus collision-related injuries increased by 32% or 48 injuries. Many buses were rear-ended while the bus serviced a stop.



Actions to Improve Performance

- Several initiatives began in 2013 to address observed injury trends. These include:
  - Replacing high-floor buses with low-floor buses that allowed customers to board at the same level as the curb
  - Providing formal and informal training for bus operators focusing on defensive driving techniques to assist in avoiding non-preventable collisions like being hit from the rear
  - Continuing to investigate and expose false injury claims to deter fraud
  - Launching Customer Communication Campaigns promoting thought provoking advertisements and announcements to remind customers to be aware of their surroundings
  - Creating a pilot program placing brightly colored chevron decals on the backs of buses to increase visibility in an effort to reduce rear end collisions.
- Metro will refresh and continue a number of these initiatives like the Customer Communication Campaign and continue training Bus Operators as needed.
- Continue to replace lights throughout the rail/parking facility with brighter lights promoting better visibility and overall safety.
- Continue to implement National Transportation Safety Board recommendations; Metro closed 20 out of 29 recommendations, as of the end of 2013.

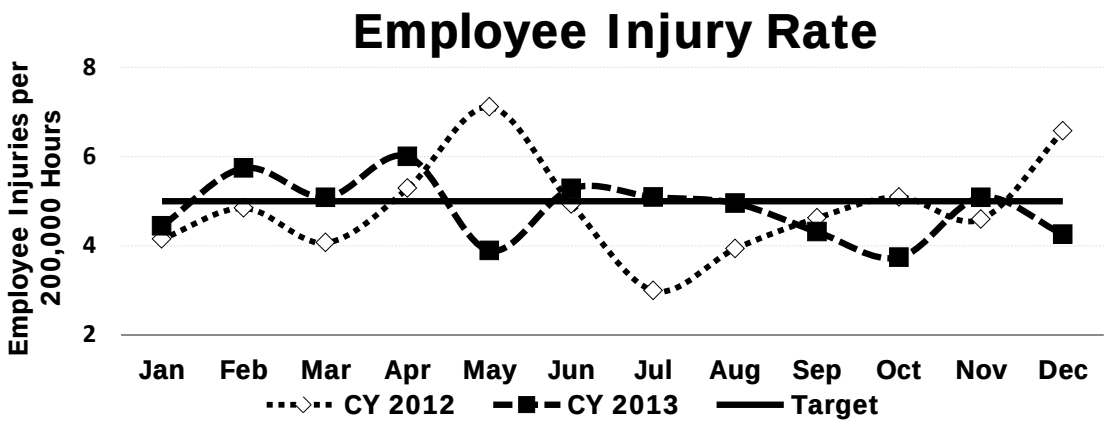
Conclusion: The CY2013 customer injury rate did not meet its target and was 14% worse than CY2012, even though a host of safety initiatives were implemented in 2013 focusing on reducing slips/trips/falls and bus collision related injuries.

KPI: **Employee Injury Rate (Jan-Dec 2013)** **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 was better than target for CY13. There were 4.81 employee injuries (against a target of 5 or fewer) for every 200,000 hours worked.
- Leading causes of employee injuries for the year were slips/trips/falls, collisions, struck by/against, caught in/between, pushing/pulling, lifting, stress and pursuit/arrest-related injuries.
- Employee injuries were driven by a variety of factors like slipping while using the steps, a sudden twist causing a strain, mental stress and/or physical injuries after a collision, equipment incidents, or the result of an assault.



Actions to Improve Performance

- Throughout the year, a stronger emphasis was placed on improving incident investigations (using incident investigation tools like TAProot), implementing a Fatigue Risk Management System, launching the first rail transit agency confidential Close Call Reporting System. In addition, promoting healthy living by offering wellness education for employees, providing aerobic exercise classes, and providing ergonomic training focused on proper techniques to lift and bend all contribute to a stronger, healthier workforce.
- Continue to implement a fatigue management system that will establish overall guidance and training.
- Bus Operators are the largest group of employees with injuries. Bus Services will launch an accident preventability tool that will better aid in:
  - Improving the timeliness of root cause analysis
  - Ensuring corrective action and training is consistent and appropriate with work procedures across Bus Transportation
  - Ensuring prescribed level of training is scheduled and completed within period guidelines
  - Assisting in identifying Trainer effectiveness and/or Bus Operator repeat deficiency.

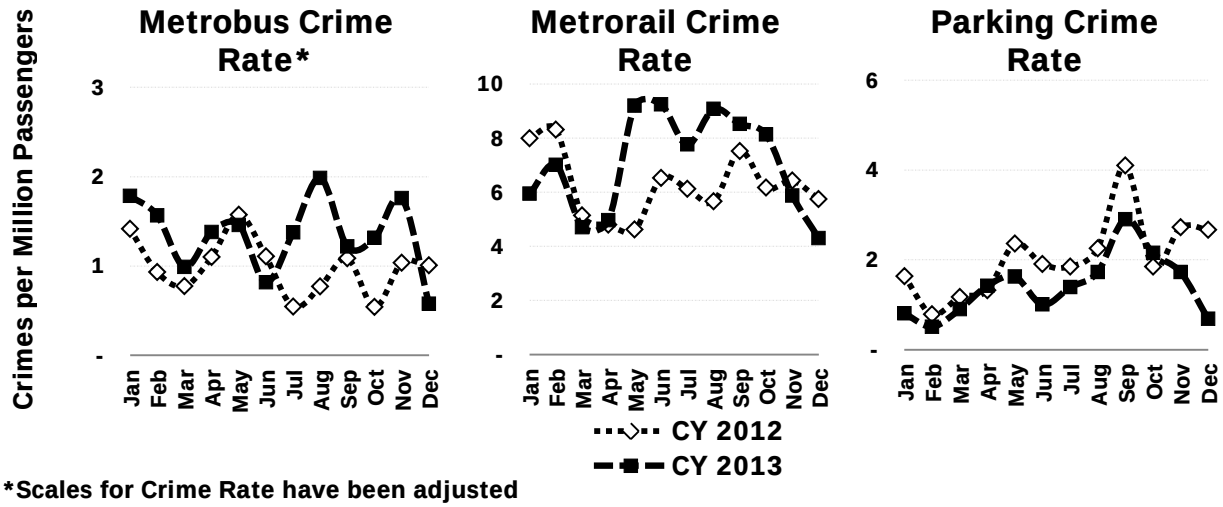
Conclusion: The employee injury rate was better than target for CY13. There were only 4.81 employee injuries for every 200,000 hours worked. Improving incident investigations to better determine methods to prevent employee injuries will be key in reducing employee injuries in the New Year.

KPI:	Crime Rate (Jan-Dec 2013) 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?

- Crime rates for 2013 were mixed. When compared to 2012, the rail and bus crime rates both rose, while the parking lot crime rate decreased.
- The rail crime rate increased in 2013, driven by a spike in thefts of bikes and smartphones over the late spring and summer months. In response, MTPD focused several efforts to counter this trend, including crime suppression and prevention teams in stations and aboard trains, as well as a concerted multimedia public information and awareness campaign targeting thefts of bikes and portable electronic devices. A newly launched bicycle registration program, paired with a bike lock giveaway program, supplemented these efforts.
- The bus crime rate increased in 2013 as well, due to the same uptick in thefts of portable electronic devices that was seen on the rail system. An effort to increase the flexibility and responsiveness of officers, and better serve the needs of customers on the Metrobus system, was a key driver behind a reorganization of the MTPD in 2013. This has allowed MTPD to allocate resources – including the use of on-board officers, as well as officers 'trailing' buses – where they are most needed.
- The parking crime rate decreased in 2013, and was below the level in 2012 for 10 months out of the year. Increased patrols of parking structures by dedicated personnel, as well as supplementary efforts by jurisdictional partners have helped maintain this lowered rate.



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

Actions to Improve Performance

- In 2014, Metro will replace over 13,000 parking garage light fixtures with new, high-efficiency LED lighting to create a brighter environment for customers. In addition to the improved lighting in garages, Metro will upgrade subway station lighting in all of its underground stations by 2015. Both of these upgrades will provide a higher quality of light with an improved Color Rendering Index (CRI) that increases both lighting levels, overall visibility and safety.
- MTPD will continue to promote and expand its bicycle registration program, and work with jurisdictional partners in preventing bicycle thefts across the metropolitan region. Furthermore, Metro intends to increase the number of secure bike lockers throughout the system in 2014.

Conclusion: Crime rates for 2013 were mixed, but MTPD closed the year posting strong, sustained downward trends in overall crime.

KPI: Customer Satisfaction (Jan-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?

- Awaiting Quarterly Report

Actions to Improve Performance

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Conclusion:

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: September – November 2013

Results:

- Opened at 7:00 on Labor Day, operated a Sunday schedule
- Opened at 6:00 on Saturday, September 14 for the Navy-Air Force Half Marathon
- Opened at 5:00 on Sunday, October 20 and 27 for the Army Ten-Miler and the Marine Corps Marathon

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: September – November 2013

Results:

- Headways were adjusted for evening track work 60 days between September and November 2013.

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: Sep-Nov 2013

Rush Results:

		AM Rush			PM Rush		
Line	**Maximum Load Stations**	**Sep**	**Oct**	**Nov**	**Sep**	**Oct**	**Nov**
Red	AM Gallery Place/PM Metro Center	87	78	82	84	74	83
	AM Dupont Circle/PM Farragut North	99	85	77	91	80	73
Blue	AM Rosslyn/PM Foggy Bottom-GWU	80	80	85	91	90	83
	AM L'Enfant Plaza/PM Smithsonian	81	76	70	88	93	59
Orange	AM Court House/PM Foggy Bottom-GWU	102	94	105	92	104	98
	AM L'Enfant Plaza/PM Smithsonian	81	77	78	68	70	63
Yellow	AM Pentagon/PM L'Enfant Plaza	72	62	73	72	62	69
Green	AM Waterfront/PM L'Enfant Plaza	92	83	77	88	68	74
	AM Shaw-Howard/PM Mt. Vernon Sq.	72	80	103	68	55	70

Non Rush Results: Data not available. Staff to propose data collection techniques for CY2014 that can be accommodated within budget.

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:*

- *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.*
- *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.*
- *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 = 78%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru June
CY 2012	78.3%	77.8%	76.4%	77.2%	74.8%	74.9%	76.7%	78.0%	73.8%	74.5%	76.3%	76.9%	76.6%
CY 2013	78.8%	79.4%	78.4%	76.5%	75.6%	75.5%							77.4%

KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures) -- Target = 8,100 Miles

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	8,704	8,230	8,527	8,330	7,302	7,378	7,045	8,389	6,999	7,537	7,743	8,608	7,854
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	8,309

* Bus Fleet Reliability target revised effective January 2013

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

Type (~ % of Fleet)	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	12-Month MDBF
CNG (30%)	8,625	10,614	7,324	6,350	8,030	6,701	7,391	8,597	8,138	7,435	7,337	7,706	7,720
Hybrid (27%)	11,611	11,806	12,593	10,418	11,323	8,067	9,647	9,013	8,660	9,086	11,431	10,256	10,106
Clean Diesel (8%)	8,382	10,223	6,830	8,812	9,499	8,369	6,531	10,695	7,407	5,960	11,529	12,793	8,441
All Other (35%)	5,735	5,531	6,347	5,417	5,809	4,031	4,177	5,077	5,907	4,296	6,627	6,207	5,307

KPI: Rail On-Time Performance -- Target = > 90.5%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	89.3%	89.2%	90.8%	90.8%	90.0%	90.8%	91.2%	92.1%	91.5%	91.7%	91.7%	92.3%	91.0%
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%	92.0%

In June 2012, the Rail OTP calculation was adjusted to reflect Rush+. To allow for comparison with past performance, OTP was recalculated for Jan 2011-May 2012.

Rail On-Time Performance by Line

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	12-Month OTP
Red Line	91.7%	92.3%	91.4%	92.9%	90.5%	90.0%	90.6%	92.2%	91.5%	92.3%	87.8%	91.1%	91.2%
Blue Line	91.0%	90.4%	90.3%	90.5%	91.4%	90.4%	90.5%	91.6%	91.6%	91.1%	90.2%	91.4%	90.9%
Orange Line	93.0%	92.5%	93.0%	93.0%	93.3%	92.7%	92.4%	93.3%	93.3%	93.1%	92.2%	93.4%	92.9%
Green Line	94.5%	93.9%	94.4%	93.5%	93.5%	93.6%	93.7%	94.7%	93.8%	92.5%	92.2%	93.6%	93.7%
Yellow Line	92.7%	92.5%	92.0%	92.3%	92.6%	92.4%	92.6%	93.8%	92.9%	92.9%	91.2%	95.0%	92.8%
Average (All Lines)	92.3%	92.2%	92.1%	92.4%	91.9%	91.5%	91.7%	92.7%	92.4%	92.2%	90.3%	92.3%	92.0%

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	40,253	40,399	43,537	42,237	42,556	32,526	36,551	50,842	51,013	72,943	67,555	66,942	46,274
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	63,624

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	YTD Thru Dec
1000 series railcars	54,957	62,059	86,988	61,274	47,303	62,981	40,344	64,881	62,987	74,880	46,283	87,738	59,842
2000/3000 series railcars	81,562	103,832	87,537	97,509	107,133	67,271	104,897	123,374	128,953	81,366	82,916	84,531	93,027
4000 series railcars	34,736	30,497	29,932	43,317	31,220	25,575	12,087	28,465	30,393	20,165	16,337	25,384	24,798
5000 series railcars	81,165	55,815	56,372	46,025	44,579	57,447	115,289	53,741	59,349	47,648	32,215	43,412	52,738
6000 series railcars	91,361	137,175	105,226	65,697	99,006	128,325	81,207	77,985	111,766	116,314	157,980	82,233	97,537
Fleet average	67,500	71,323	71,225	64,890	62,418	61,745	51,757	69,230	75,697	61,959	51,248	63,468	63,624

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	93.4%	92.3%	91.7%	92.8%	92.4%	92.7%	93.6%	92.5%	92.1%	92.4%	92.2%	92.3%	92.5%
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%	91.8%

KPI: Escalator System Availability -- Target = 89%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	88.6%	89.4%	89.3%	90.0%	90.7%	90.6%	89.9%	87.6%	86.8%	88.4%	90.4%	90.8%	89.4%
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%	92.1%

KPI: Elevator System Availability -- Target = 97.5%

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	95.7%	96.6%	96.5%	96.5%	97.3%	98.0%	97.0%	97.5%	97.2%	97.4%	96.9%	97.5%	97.0%
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%	96.4%

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	YTD Thru Dec
CY 2012	1.60	1.23	1.27	1.69	2.79	2.61	1.39	1.52	1.28	1.99	1.21	1.45	1.68
CY 2013	1.88	1.45	1.84	2.60	1.78	2.05	1.46	1.98	2.23	2.38	1.68	1.59	1.92

*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	YTD Thru Dec
CY 2012	1.58	1.28	1.11	2.81	4.49	4.18	1.43	1.69	1.15	3.58	1.39	1.48	2.19
CY 2013	1.40	2.03	2.30	4.48	2.06	3.03	1.61	2.73	3.51	3.47	1.55	1.25	2.48

Rail Customer Injury Rate (per million passengers)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	0.00	0.00	0.05	0.11	0.16	0.05	0.05	0.05	0.12	0.17	0.06	0.07	0.08
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	0.10

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

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	1.57	1.08	1.22	0.84	1.57	1.54	1.06	0.93	1.20	0.69	0.93	1.37	1.07
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	1.30

*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	YTD Thru Dec
CY 2012	5.92	11.69	10.83	11.47	5.48	17.45	30.40	45.07	6.18	11.96	5.98	6.31	14.15
CY 2013	5.95	18.40	11.67	16.55	21.81	23.63	33.57	5.47	16.92	21.10	5.78	30.18	17.59

KPI: Employee Injury Rate (per 200,000 hours) -- Target = < 5.0 injuries per 200,000 hours

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	4.15	4.84	4.07	5.29	7.11	4.93	3.00	3.93	4.62	5.09	4.59	6.57	4.86
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	4.81

* 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.

* Effective 2013, prior month claims may be revised each month to reflect the result of an investigation or a lagged claim; prior month hours may be revised to reflect updated hours.

KPI: Crime Rate (per million passengers)* -- Target = < 2,000 Part I Crimes in Calendar Year 2013

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012 Metrobus	1.41	0.93	0.77	1.10	1.57	1.11	0.54	0.77	1.09	0.54	1.03	1.00	0.99
CY 2013 Metrobus	1.78	1.57	0.99	1.38	1.46	0.82	1.38	1.98	1.22	1.31	1.76	0.58	1.36
CY 2012 Metrorail	7.99	8.31	5.14	4.79	4.62	6.52	6.13	5.66	7.52	6.16	6.43	5.75	6.20
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	7.10
CY 2012 Parking	1.64	0.78	1.17	1.32	2.36	1.90	1.85	2.25	4.09	1.84	2.72	2.67	2.02
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	1.41

Crimes by Type

2013	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Nov
Robbery	53	48	23	26	32	31	34	31	43	35	41	26	423
Larceny (Snatch/Pickpocket)	56	48	43	54	86	61	74	67	51	83	51	24	698
Larceny (Other)	27	31	40	58	94	95	78	115	90	77	45	26	776
Motor Vehicle Theft	1	3	1	4	7	6	7	7	14	5	4	2	61
Attempted Motor Vehicle Theft	1	0	4	4	4	1	1	1	8	2	5	0	31
Aggravated Assault	11	9	8	4	9	9	10	7	9	10	6	9	101
Rape	0	0	0	0	0	0	0	0	0	0	0	0	-
Burglary	0	0	0	0	0	0	0	0	2	0	0	0	2
Homicide	0	0	0	0	0	0	0	0	0	0	0	0	-
Arson	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	**149**	**141**	**119**	**150**	**232**	**203**	**204**	**228**	**217**	**212**	**152**	**87**	**2,094**

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

KPI: Customer Commendation Rate (per million passengers) -- Target = > 10.8 per million passengers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	10.1	10.5	11.3	11.1	11.0	11.2	10.9	11.9	11.7	11.7	10.9	11.1	11.1
CY 2013	12.7	12.9	11.0	12.9	12.7	12.4	14.0	12.3	11.3	12.4	10.8	13.0	12.4

KPI: Customer Complaint Rate (per million passengers) -- Target = < 125 complaints per million passengers

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	122	130	131	120	122	142	136	134	141	140	124	124	122
CY 2013	125	124	115	124	126	132	137	122	133	134	167	148	132

Metrobus Ridership (millions of unlinked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	10.8	10.9	11.7	11.0	11.6	11.0	11.2	11.9	11.3	11.2	10.8	10.1	133.5
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	136.2

Metrorail Ridership (millions of linked trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	16.5	16.6	19.7	19.0	19.1	19.5	18.9	18.2	16.6	17.4	16.2	14.6	212.2
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	208.9

MetroAccess Ridership (100,000s of completed trips)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Thru Dec
CY 2012	1.69	1.71	1.85	1.74	1.83	1.72	1.64	1.77	1.62	1.67	1.67	1.59	20.50
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	21.04

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	FY 2012	Average Weekday
Bus	132 million	412,158 (December 2013)
Rail	218 million	602,349 (December 2013)
MetroAccess	2.1 million	6,498 (December 2013)
Total	353 million	

Fiscal Year 2013 Budget

Operating	$1.6 billion
Capital	$.9 billion
Total	$2.5 billion

Metrobus General Information

Size	11,279 bus stops and 2,392 shelters
Routes*	318 Routes on 175 Lines
Fiscal Year 2013 Operating Budget	$565 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*	1,507
Buses in Peak Service	1,284
Bus Fleet by Type*	Compressed Natural Gas (460), Electric Hybrid (671), Clean Diesel (144) and All Other (232)
Average Fleet Age*	6.7 years
Bus Garages	10 – 4 in DC, 3 in MD and 3 in VA

**As of April 4, 2013.*

Metrorail General Information

Fiscal Year 2013 Operating Budget	$896 million
Highest Ridership Day	Obama Inauguration on Jan. 20, 2009 (1.1 million)
Busiest Station in 2012	Union Station (713,000 entries in November 2012)
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	588
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 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.*