

Washington Metropolitan Area Transit Authority

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 Quarter 2



Vital Signs

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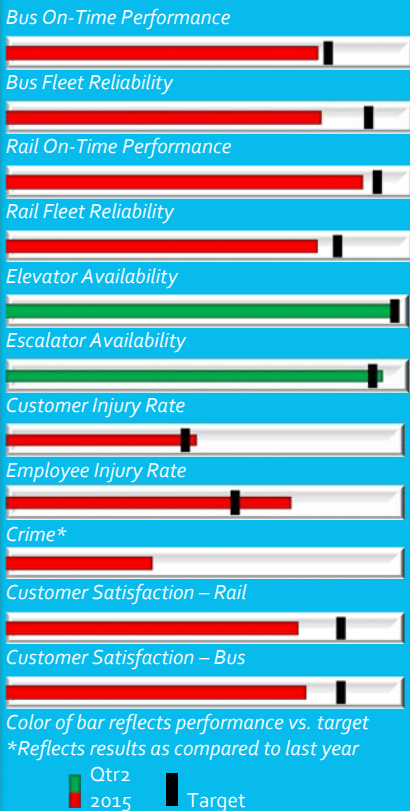
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Highlights

- **Bus on-time performance (OTP)** did not reach target. Increased late arrivals were caused by road construction delays, the fare evasion program and other issues. (pg. 3)
- Rail OTP was negatively impacted by railcar repairs and inspections, especially the 4000 series railcar unplanned campaign. (pg. 5)
- **Fleet reliability** was mostly below target as bus manufacturer-related failures continued and railcars experienced door and propulsion issues. Sixteen new 7000 series cars were put into service this quarter, making up only one percent of total railcars. (pgs. 4 and 6)
- **Escalators and elevator availability** met targets with an improved regional staffing model, better cross-training and equipment condition. (pg. 7)
- **Customer injuries** improved over the quarter but still came in a little worse than target largely driven by bus collisions. **Employee injuries** were up. Bus and rail **crimes** increased due to robberies which were offset by fewer vehicle thefts. (pgs. 8-10)



Performance



Introduction

Goal: Meet or exceed customer expectations by consistently delivering quality service

Goal: Build and maintain a premier safety culture and system

Goal: Ensure financial stability and invest in our people and assets

Goal: Improve regional mobility and connect communities

VITAL SIGNS communicates the transit system's performance to the Board of Directors on a quarterly and annual basis.

The public and other stakeholders are invited to monitor Metro's performance using a web-based scorecard at wmata.com.

Metro's managers measure what matters and hold themselves accountable to stakeholders via a focused set of Key Performance Indicators (KPIs) reported publicly in Vital Signs.

The report is organized by the Board-adopted strategic goals that align actions to improve performance and deliver results.

Vital Signs is different from most public performance reports in that it provides systematic, data-driven, analysis of KPIs by answering two questions:

Why did performance change?

What actions are being taken to improve it?

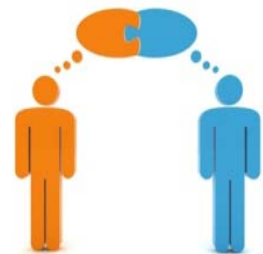
The answers reveal the challenges and complexities of our operation.

TARGETS are set for every Vital Signs KPI to identify success. Realistic targets deliver continuous improvement and keep the ball moving forward.

Metro's executive leaders set targets annually and present them to the Board to gauge progress.

Target setting takes into account factors like historical trends, planned activities, resource constraints, and external factors that influence results – e.g., roadway construction projects in bus corridors.

Metro values benchmarking to share best practices in the industry that lead to improved performance.



A BALANCED SCORECARD approach is used in Vital Signs, but the focus is on Metro's core business of quality service delivery.

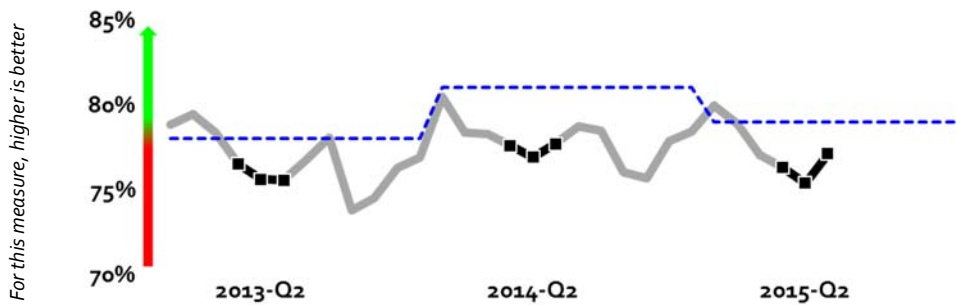
Mission-critical functions such as safety, security and finance provide in-depth reporting separately to the Board.

KPI: Bus On-Time Performance

For the first time in four years, Bus on-time performance has not outperformed the prior year; the target was not met and performance dropped year-to-date.

Why did performance change?

- **Late arrivals increased** this quarter compared to Q2/2014 by two percentage points. Multiple causes are being evaluated: **detours and delays, 4 out of every 10 bus operators have less than five years' experience, and disciplinary and bus fare evasion initiatives.**
- On-time performance (OTP) for the top four bus routes for fare-evasion was five percent lower than CY14.
- Despite multiple Better Bus service adjustments, **priority corridors' OTP declined** one percent compared to Q2/2014. Many of the priority corridor network (PCN) routes were affected **by construction-related detours and delays** requiring 15 additional minutes of travel time.



Key Actions to Improve Performance

Active Street Management

- Establish a Street Stat and a Performance Improvement Team (PIT)
 - Street managers will identify and provide a briefing on areas of concern
 - Team operations and training managers will address operator and customer concerns
 - Managers will identify and resolve service delivery issues
- Build on absenteeism improvements (improved 10 percent compared to the prior year)

Better Bus Service Initiative/State of Good Operation Began: PCN 2008 Status: Completion reliant on funding

- Implement bus service changes throughout the region: http://www.wmata.com/rider_tools/metro_service_status/rail_bus.cfm?#bus
- Propose cost-neutral service realignments to move resources to heavily utilized routes
- Collaborate with regional partners to implement new services and transit priority signals

Strategy for the Future of Metrobus

Status: Board Briefing — Sep. 2015

- Refine regional and non-regional bus service definitions and realign regional bus routes

KPI: Bus Fleet Reliability

Manufacturer-related failures continued to challenge bus fleet reliability; performance declined compared to Q2/2014 by four percent or 145 more mechanical failures.

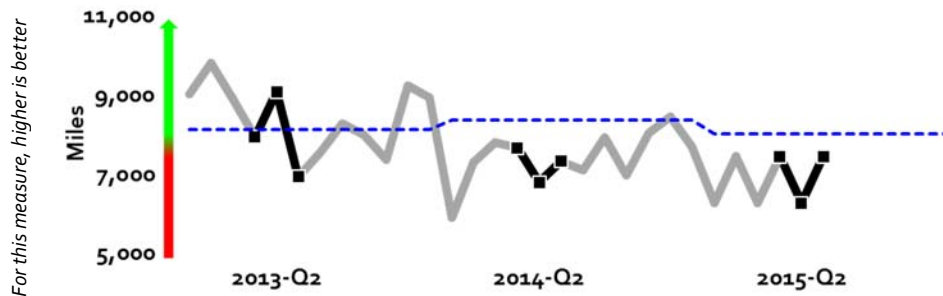
Why did performance change?

During the quarter there were **more mechanical failures** impacting service compared to Q2/2014:

- New NABI Hybrid buses, delivered nearly 18 months late due to quality production issues and New Flyer's purchase of NABI, were prone to manufacturer-related failures (e.g., exhaust system and dual power inverter module failures). The exhaust gas recirculator (EGR) coolers subsystem, is approaching fleet failure status.
- Despite a midlife overhaul, the Clean Diesel fleet was plagued by a new engine oil cooler manufacturer defect impacting the cooling system.
- Many CNG incidents were caused by ignition component and sensor failures. Also, 22 CNG articulated buses experienced EGR cooler, turbocharger and piston failures.



Midlife overhaul keeps buses in service longer for customers.



Key Actions to Improve Performance

Midlife Rehabilitation

- Completed 115 of the 117 Clean Diesel midlife overhauls by June 2015

Manufacturer Initiatives

- The bus maintenance group conducted an in-depth failure analysis resulting in some of the following initiatives:
 - Purge faulty Clean Diesel engine oil coolers
 - Retrofit the CNG articulated coolers, turbo charger and piston failures
 - Work with Hybrid bus manufacturer to resolve fleet deficiencies
- Work with both the bus and engine manufacturers to eliminate failures

Maintenance Activity

Anticipated completion: Ongoing

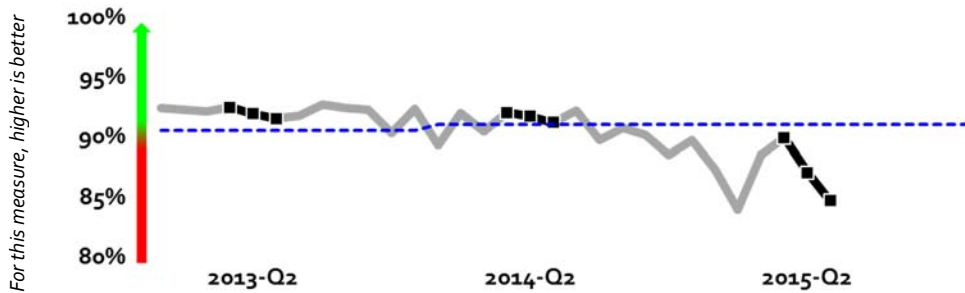
- Retire 2001-2002 CNG buses within the next 12 months
- Measure the quality assurance audit process, metrics will be prepared monthly and will show the top reliability issues (i.e., # of deficiencies per bus)
- Review division out of service reports to identify emerging issues impacting fleet reliability

KPI: Rail On-Time Performance

Rail OTP was significantly worse than last year as railcars stayed in maintenance yards for repairs and inspections in May and June, leaving customers with less frequent and more crowded train service.

Why did performance change?

- After approaching target in April 2015, **rail on-time performance worsened on all lines in May and June.**
- With **railcar reliability challenges** (pg. 6), there were fewer trains to depart from end of line stations increasing headways (time between trains) and lowering OTP.
- This reduction in service resulted in more instances of crowding. Increasingly, the measurement of average passengers-per-car (PPC) was above the Board-approved optimal standard of 100 PPC (pg. 14).



Key Actions to Improve Performance

Manage train spacing

Status: Ongoing

- Provide a new fire liaison post to coordinate emergency communication between Metro and first responders to more quickly restore even train spacing after smoke/fire incidents
- Once reviewed and accepted, implement APTA Peer Review recommendations to improve incident response by the Rail Operations Control Center

Maintain and improve reliability of rail infrastructure

Status: Contingent upon funding

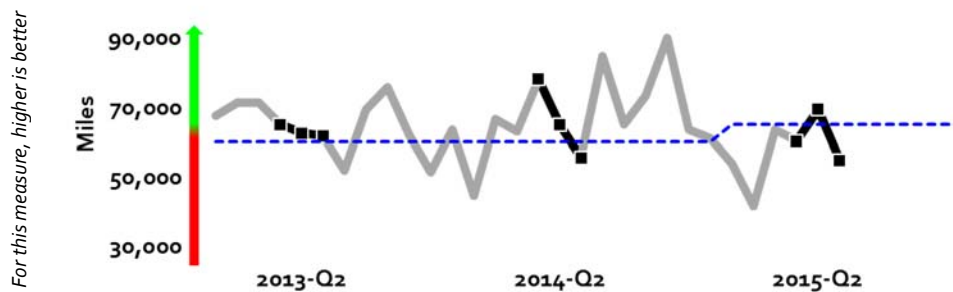
- Re-introduce mid-day track work, single-tracking around work sites to conduct ballast and joint repairs
- Reduce speeds in select locations due to third rail power limitations and right-of-way safety issues, including ballast settlement
- Conduct track inspections and make immediate repairs as needed

KPI: Rail Reliability

Rail fleet reliability was worse than last year as meeting the Silver Line car requirement continued to be a challenge; additional difficulties arose with the removal of all 4000 series cars for inspection in June and declining parts availability.

Why did performance change?

- After making 954 railcars available for service on all but one weekday in April, **railcar availability fell below the requirement most of May and June** (17 of 20 May weekdays, 17 of 22 June weekdays).
- **An unplanned campaign that removed all 4000 series railcars from service for door inspections delayed ongoing railcar maintenance.** Availability fell to its lowest June 23 (at 808 cars, 85% of requirement).
- There was a **significant increase in propulsion and door failures.** Propulsion systems rely primarily on dynamic braking systems and limited use of full friction brakes. As electronics wear with age and mileage (increased due to higher Silver Line car requirement), friction brakes are applied more often. This may in turn cause reports of odors/smoke that cause even more cars to be removed from service thereby delaying more customers.
- Sixteen new 7000 series cars were placed into service (one percent of total cars) during the quarter. Consistent with previous railcar procurements, 7000 series performance is expected to climb after the initial break-in.
- In order to comply with FTA procurement requirements for increased competition limiting sole source vendors and improved parts descriptions, staff was challenged to maintain adequate inventories of railcar parts throughout all maintenance facilities.



Key Actions to Improve Performance

Maintain and improve reliability of existing rail fleet

- Conduct unexpected corrective maintenance when trains go out of service
 - As new rail cars are added to the fleet, return to the pre-Silver Line spare ratio of 20 percent (from the current 14 percent)
 - Attempt to respond to surges in out of service railcars within the constraints of budgeted overtime
- During summer months, reduce some eight-car to six-car trains on Mondays and Fridays to allow repairs and upgrades to the fleet
- Identify solutions to reliability problems and conduct repair campaigns: 5000 series propulsion and door overhauls on 2000/3000 and 6000 series

Introduce new 7000 series railcars following testing and certification

Start: Q2/2015

Status: Contingent on funding

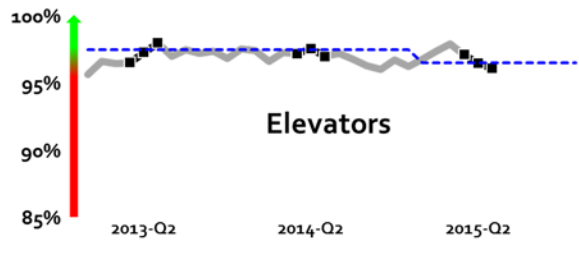
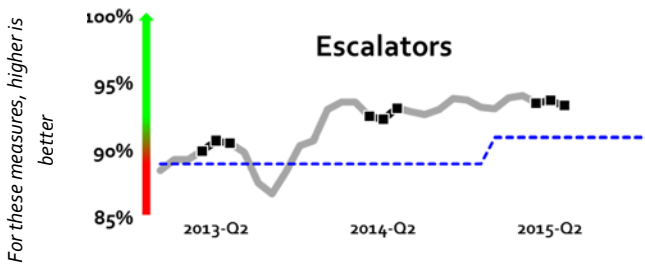
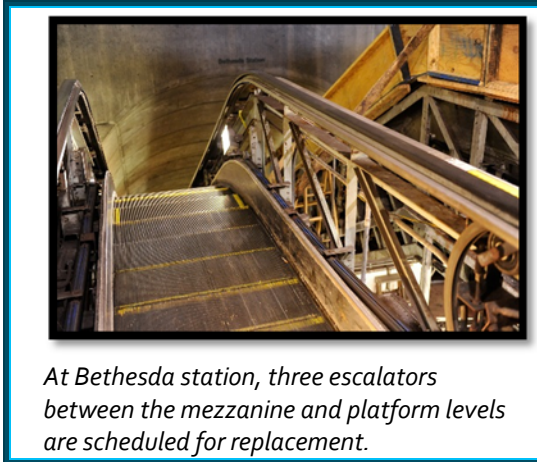
- Following the arrival of the first 64 7000 series cars to expand the fleet for Silver Line, begin to replace Metro's older, less reliable cars

KPI: Elevator and Escalator System Availability

Availability of escalator and elevators met targets due to better maintenance, faster response and repair time and replacements.

Why did performance change?

- **Escalator availability** reached 93.5 percent this quarter, **better than target and Q2/2014**. Improvements come from replacing troublesome models, better root cause analysis of unexpected breakdowns and good maintenance practices.
- **Elevator availability met target** this quarter, at 96.5 percent. Units out of service for modernization averaged five at any given time, double that of Q2/2014. The modernization focus impacted the ability to accommodate breakdowns and still meet availability targets.
- **Elevator repair times decreased by almost two hours** compared to the same period last year. Quicker response times come **from creating regional maintenance groups, cross-training staff** to repair both escalators and elevators and having units in better condition/**less intensive repairs**.



Key Actions to Improve Performance

Modernize escalator and elevator fleet

Start: Q1 2013

Status: Completion 2020

- Replace 137 of the system's 613 escalators by 2020 and rehabilitate up to an additional 144 escalators and 90 elevators. In addition to greater reliability, modernized units are expected to be more energy efficient
- The modernization program increased its pace into Q2/2015, with 30 escalators and 8 elevators undergoing rehabilitation or replacement

Cross train staff

Cross-train staff on the multiple escalator and elevator models

Implement remote monitoring

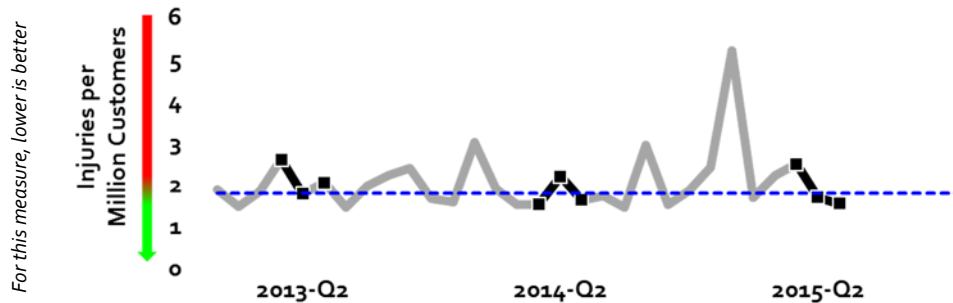
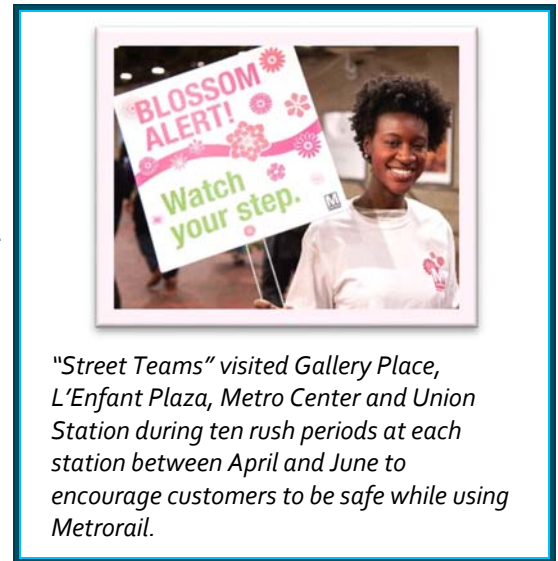
Create a dedicated staff and control room to enhance automatic notification of malfunctions and/or shutdowns, enabling more accurate availability reporting and reducing outage duration

KPI: Customer Injury Rate

The overall customer injury rate improved over the course of the quarter, but was slightly worse than target and Q2/2014.

Why did performance change?

- After 75 injuries in April, both May and June saw a drop to less than 50. At 1.9 injuries per million passengers, the **customer injury rate** for Q2/2015 was slightly **worse than the target** rate of 1.8.
- More customers were injured on bus compared to rail this quarter, but injuries were up on both modes compared to Q2/2014. **Collisions** were the **leading cause of bus customer injuries** this quarter (70 percent, up from 50 percent last year). In April, five collisions led to multiple injuries. By June, the rate decreased with stronger oversight by Street Operations Managers.
- Rail injuries increased compared to 2014 due to **more customers getting caught in train doors or falling while running through stations**. Slips, trips and falls resulting from **inattentiveness or distracted behavior** (such as walking through stations or riding on escalators while looking at cell phones) **are the most frequent type of rail injury**.
- Six **fewer MetroAccess customers were injured** this quarter compared to Q2/2014, for a total of 11 injuries primarily due to collisions.



Key Actions to Improve Performance

Conduct customer outreach

- Completed a pilot safety campaign targeting rail customers at stations with high numbers of injuries in 2014
 - Surveyed customers said the outreach was highly visible and improved unsafe behaviors like not holding escalator handrails
 - Customers responded best to messages with pictures and commonly used phrases, informing future outreach plans in Q3/Q4 with bus customers

Enhance safety features of vehicles

Status: Completion Q4/2015

- Completed door maintenance and inspections on 4000 railcars
- Review Metrobus interior design to identify opportunities to improve customer safety
- Evaluate the effectiveness of reflective chevrons and strobe lights on buses in improving customer safety
- Install microphones with noise-cancelling features in train audio systems to make onboard announcements easier to hear

Coach staff

Start: June 2014

- Identify unsafe behavior and incident hotspots using DriveCam bus videos to reduce the number and severity of collisions and conduct operator training for risky behavior
- After training 56 operators in April, DriveCam training was temporarily suspended until July to focus on a large intake of new operators
- Schedule safety blitzes at incident hotspots to reinforce safe behavior and address unsafe conditions

KPI: Employee Injury Rate

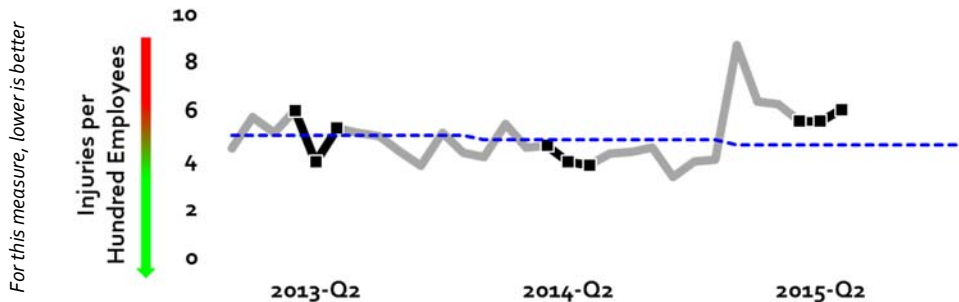
With collisions and slips, trips and falls being the leading the cause of injuries, the employee injury rate of 5.7 percent was worse than target and Q2/2014.

Why did performance change?

- Employee injuries increased more than 40 percent in Q2/2015 compared to the prior year, but improved over Q1/2015.
- About 10 more maintenance/technical staff sustained injuries this quarter compared to Q2/2014 due to the improper use of equipment or tools, the most common source of injuries for these employees. Although up in the quarter, maintenance groups' injuries are equivalent year to date to the prior year. Unlike other groups, elevator and escalator technicians reduced injury rates by more than 50 percent.
- Bus operators and supervisors saw a 25 percent increase in injuries this quarter compared to Q2/2014. Collisions remain the leading source of injuries and were up slightly compared to the prior year. This quarter, arm and wrist injuries increased and five more bus operators sought help for stress after witnessing passenger violence.
- Rail operators and station managers saw a 150 percent increase in injuries compared to Q2/2014. Slips, trips and falls showed significant increases with several station managers tripping on kiosk steps under construction and operators falling on rocks in rail yards. Train operators injured when a body part struck a door, console or pole increased greatly.
- Five more transit police officers were injured during the pursuit and/or arrests, increasing injuries by 40 percent compared to Q2/2014.



Employees concerned about their safety are encouraged to call the Safety Hotline and/or the confidential Close Call Hotline to report their concerns.



Key Actions to Improve Performance

Fare enforcement pilot campaign

Start: Q2/2015

Status: Completion Q2/2015

See Crime, pg. 10

Build safety culture

- Conduct regular executive, departmental, and local safety committee meetings
- Implement rail close call program and expand to bus
- Implement corrective actions resulting from the NTSB investigation and FTA safety audits
- Implement Fatigue Risk Management System
- Improve Employee Assistance Program outreach on available workplace stress programs

Analyze and address root causes of injuries

Enhance incident reporting and interview employees to identify the key factors underlying injuries and collisions

- Develop dashboard to automate monthly reporting and free staff time to conduct more in-depth analysis [Start: Q2/2015, Completion: Q3/2015]
- Continue to identify key factors for accident investigations
- Develop in-service training for transit police officers on safer apprehension techniques

KPI: Crime

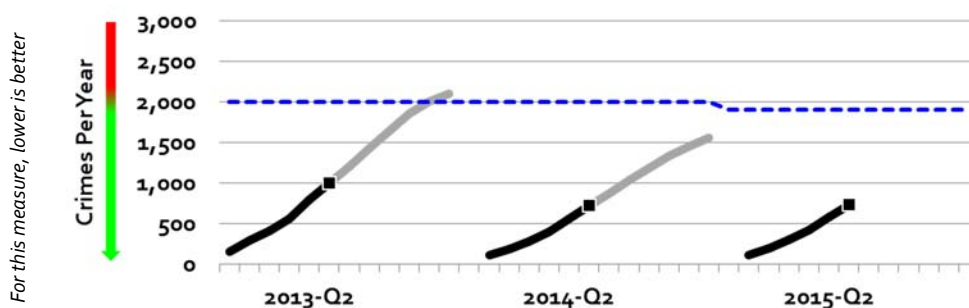
Cumulative Part 1 crimes increased two percent or 12 more crimes compared to Q2/2014 with increased robbery and robbery by force and violence, offset by a reduction in motor vehicle thefts year-to-date.

Why did performance change?

- **Part 1 crimes at bus stops more than doubled** from 33 to 62. Bus crimes generally consisted of **armed robbery, cell phone snatches and assaults**.
- **Bus operator assaults decreased by 26 percent**. Over half of bus operator assaults were due to verbal altercations about fare payment, eating, smoking and disorderly behavior; 43 percent of all bus operator assaults occurred in the southeast area of the District of Columbia, which is on par with Q1/2015.
- **Rail-related Part 1 crimes increased 12 percent** compared to Q2/2014. **Cell phone larceny snatches** continued to be the **predominant crime**; there has been a recent increase in pickpocket attempts as well.
- **Parking lot and facility crimes decreased 45 percent each**; however, there was a spike in bicycle thefts during the quarter.
- Metro Transit Police made several arrests, including a 20-year old woman for stabbing a station manager and a serial graffiti vandal.



Deployment of uniform and plain clothes officers to buses and bus stops decreased fare evasion while reducing operator assaults and maintaining customer perceptions of security.



Key Actions to Improve Performance

MTPD Tactics

- Develop relationships with local district commanders;
- Patrol hot spot areas (informed by crime heat spot maps) with uniformed and casual clothes officers;
- Caution customers and employees to be aware of their surroundings (e.g., crime bulletins and awareness campaigns like a National Night Out event which will focus on educating the public on ways to avoid being a victim);
- Exercise proven investigation techniques
- Review internal video evidence; and
- Partner with media

Fare Enforcement/Bus Operator Assaults

Start: April 2015

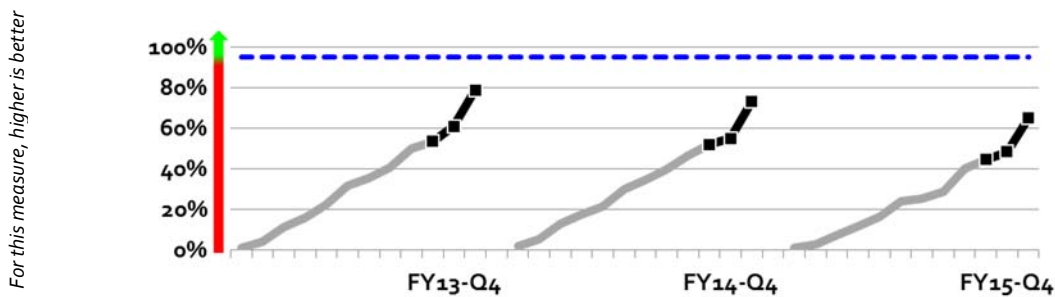
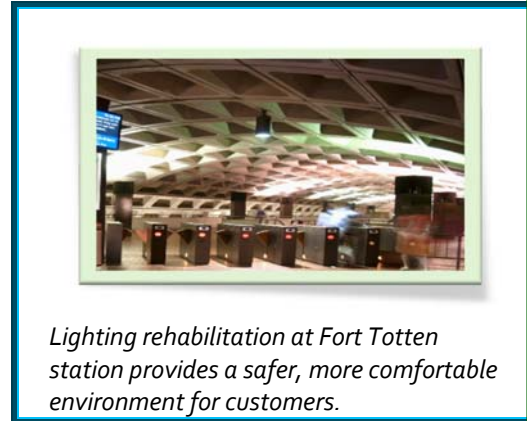
- Deploy uniformed police officers on certain bus routes and key rail station gate areas to enforce fare collection
- Use data to better inform the fare evasion patrol initiative and focus the High Intensity Target team in top fare evasion locations

Business Operations

The unaudited amounts in these charts are accurate as of August 26, 2015.

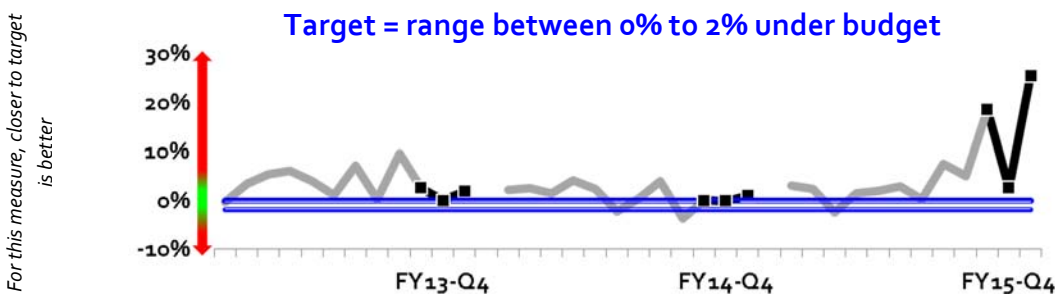
Capital Funds Invested

- Metro is budgeted to receive slightly more than \$1.1 Billion in fiscal 2015 to be invested in infrastructure renewal.
- This measure tracks the rate at which these funds are invested.
- This utilization is slightly behind the rate in fiscal 2014 and 2013.
- The fourth quarter of each fiscal year is typically the time of high funds utilization.



Operating Budget Variance

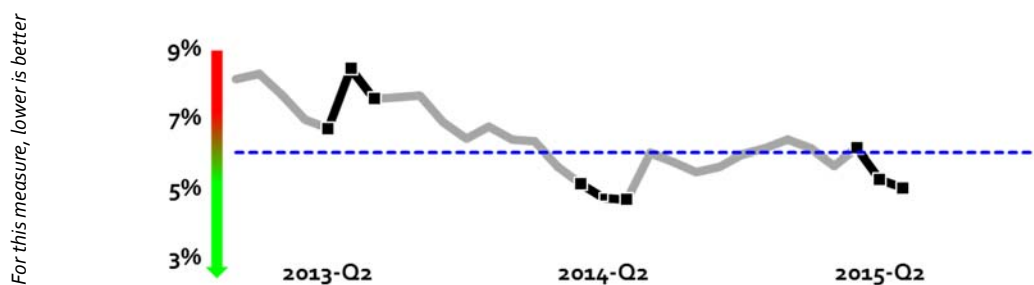
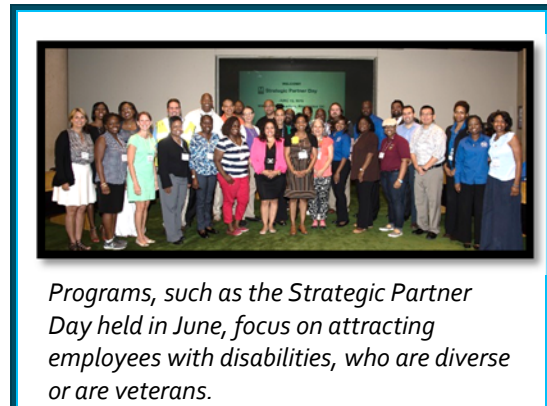
- The measure calculates the percentage variance between actual and budgeted spending each month.
- The target for this measure is a range between 0% and -2% under budget.
- The range can be explained by considering that underspending by more than -2% may indicate some important resource is not being utilized and may have a negative impact on service quality.



Business Operations

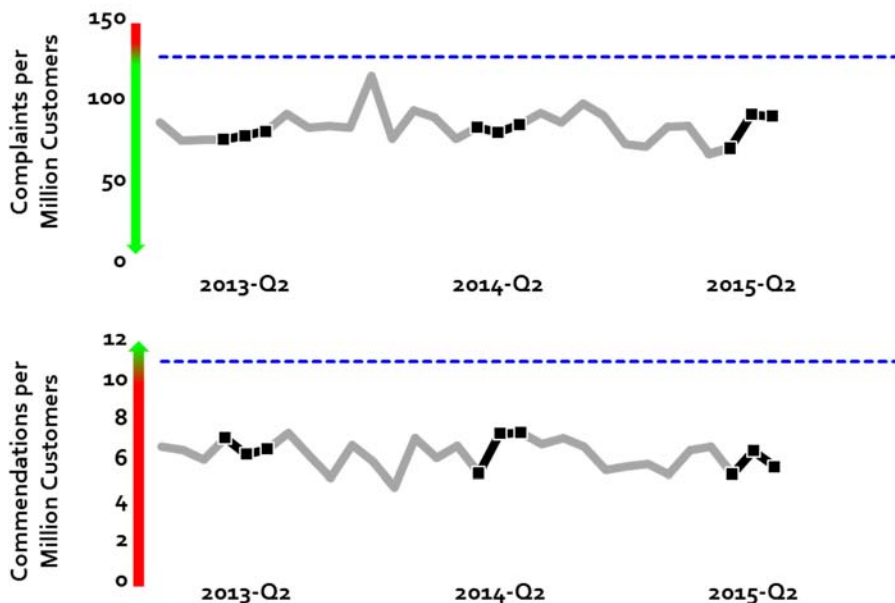
Vacancy Rate

- This period, the **vacancy rate** was 5.7 percent, which is **better than target** although worse than last year Q2.
- Per Board direction, staff established criteria to **focus on critical hire positions**. The criteria are:
 - Direct control over customer movement and safety
 - Responsibility for emergency situations
 - Requires extended recruitment/not easily recruited
 - Long-term training requirements for the positions
- Identification of positions included in the "critical hire" category will be available later this year.



Customer Comments (Complaints/Commendations)

- Through customer surveys, focus groups and other outreach methods, **unique insights from more than 26,000 customers** were gained.
- By CY15 end staff estimates reaching nearly 50,000.
- Staff projects a 58 percent increase in customer research work compared to 2014.



Business Operations

Meeting sustainability targets helps reduce costs and improve service while expanding the environmental benefits Metro already brings to the region.

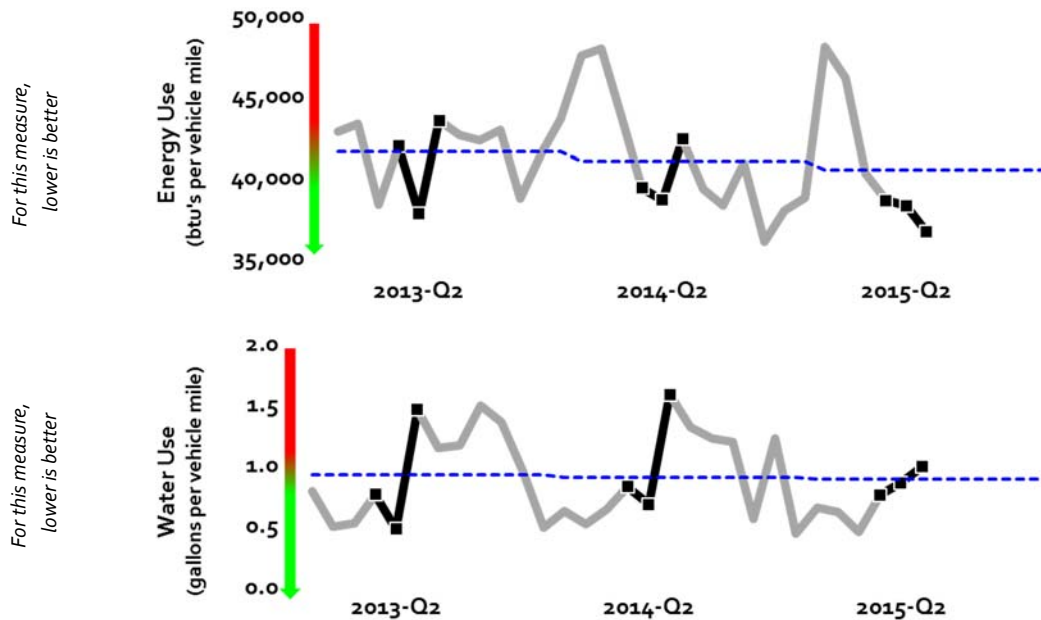
Environmental Sustainability

Energy and Water Usage

- Energy comes in many forms including electricity, natural gas, diesel and gasoline. All can be converted to a common unit called the “BTU” [British thermal unit] and tracked based on the number of bus and train miles operated annually.
- Metro consumes large quantities of water for its operation. Rail stations are cooled using water chiller plants and all buses and trains are washed on a regular basis. Like energy, water usage is also tracked on a per mile basis.
- Both of these measures have targets established to reduce consumption. By 2025 energy use is targeted to decrease 20 percent and water use is targeted to decrease 15 percent.



Seven chiller plants were fitted with state-of-the-art water treatment systems, saving an estimated 400,000 gallons of water per location annually.



Business Operations

When crowding consistently becomes a problem, the community is negatively affected by not having access to service.

Passengers Per Car

- Crowding levels on railcars is monitored in accordance with Board standards.
- Trained Metro observers are strategically placed around the system during its busiest times to monitor and report on crowding.
- Most recently, crowding on the Blue line in both the AM and PM peak periods has climbed to challenging levels.
- This measurement helps prioritize and guide where to deploy additional service in the form of more or longer trains.



During emergencies and special events, customers are encouraged to follow the guidance of Metro employees.

Optimal PPC of 100, with minimum of 80 and maximum of 120 PPC

| AM Rush Max Load Points | | Mar-14 | Apr-14 | May-14 | Mar-15 | Apr-15 | May-15 |
|--------------------------------|------------------|--------|--------|--------|--------|--------|--------|
| Red | Gallery Place | 93 | 98 | 92 | 88 | 94 | 98 |
| | Dupont Circle | 87 | 83 | 83 | 81 | 88 | 91 |
| Blue | Pentagon | | | | 94 | 93 | 106 |
| | Rosslyn | 100 | 98 | 83 | 79 | 89 | 93 |
| | L'Enfant Plaza | 86 | 79 | 72 | 63 | 55 | 49 |
| Orange | Court House | 75 | 96 | 107 | 100 | 79 | 115 |
| | L'Enfant Plaza | 83 | 82 | 75 | 59 | 61 | 63 |
| Yellow | Pentagon | 85 | 82 | 79 | 73 | 77 | 85 |
| Green | Waterfront | 76 | 72 | 71 | 86 | 84 | 87 |
| | Shaw-Howard | 72 | 68 | 71 | 82 | 74 | 80 |
| Silver | Rosslyn | | | | 80 | 82 | 86 |
| | L'Enfant Plaza | | | | 61 | 61 | 62 |
| PM Rush Max Load Points | | | | | | | |
| Red | Metro Center | 76 | 86 | 92 | 83 | 84 | 102 |
| | Farragut North | 79 | 90 | 77 | 77 | 80 | 81 |
| Blue | Rosslyn | | | | 109 | 120 | 113 |
| | Foggy Bottom-GWU | 84 | 97 | 95 | 97 | 109 | 115 |
| | Smithsonian | 66 | 71 | 72 | 59 | 63 | 55 |
| Orange | Foggy Bottom-GWU | 77 | 91 | 95 | 81 | 79 | 102 |
| | Smithsonian | 74 | 81 | 71 | 55 | 60 | 67 |
| Yellow | L'Enfant Plaza | 76 | 85 | 80 | 73 | 84 | 76 |
| Green | L'Enfant Plaza | 62 | 78 | 68 | 82 | 92 | 92 |
| | Mt. Vernon Sq. | 67 | 76 | 70 | 77 | 59 | 76 |
| Silver | Foggy Bottom-GWU | | | | 74 | 76 | 89 |
| | Smithsonian | | | | 61 | 62 | 56 |

Business Operations

Some performance measures best demonstrate results when reviewed annually.

Annually Reported Board Measures

Three measures already communicated to the Board of Directors will be included in the Annual Vital Signs Report after the end of 2015.

- **Bus Stop Accessibility**
Bus stops made accessible. CY 2015 target – 100
- **Metro 2025 Funds Secured**
With the agreement to purchase more railcars, the Board has committed to review the Momentum strategic plan, capital rebuilding progress to date and future requirements. This will inform next steps for Momentum funding and a new Capital Funding Agreement.
- **Households Near Transit**
Transit oriented development is one of the region’s best options for taking advantage of the investment already made in the existing Metro system. CY 2015 target – 55%



Key Performance Indicators

| KPI | How is it measured? | What does this mean and why is it key to our strategy? |
|-------------------------------------|---|--|
| Quality Service | | |
| Bus Fleet Reliability | <p>Mean Distance Between Failures (MDBF)</p> <p>Total bus miles / Number of failures</p> | <p>The number of total miles traveled before a mechanical breakdown requiring the bus to be removed from service or deviate from the schedule.</p> <p>Mean Distance Between Failures 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 include vehicle age, quality of maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction.</p> |
| Bus On-Time Performance | <p>Adherence to Schedule</p> <p>Scheduled time – Actual time arriving at a time point based on a window of no more than 2 minutes early or 7 minutes late</p> | <p>This indicator illustrates how closely Metrobus adheres to published route schedules on a system-wide basis. Factors that 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.</p> |
| Elevator and Escalator Availability | <p>In-service Percentage</p> <p>Hours in service / Operating hours</p> <p>Hours in service = Operating hours – Hours out of service</p> <p>Operating hours = Operating hours per unit * number of units</p> | <p>Escalator/elevator availability is a key component of customer satisfaction with Metrorail service. This measure communicates system-wide escalator and elevator performance (at all stations over the course of the day) and will vary from an individual customer’s experience.</p> <p>Availability is the percentage of time that Metrorail escalators or elevators in stations and parking garages are in service during operating hours.</p> <p>Customers access Metrorail stations via escalators to the train platform, while elevators provide an accessible path of travel for persons with disabilities, seniors, customers with strollers, and travelers carrying luggage. An out-of-service escalator requires walking up or down a stopped escalator, which can add to travel time and may make stations inaccessible to some customers. When an elevator is out of service, Metro is required to provide alternative services which may include shuttle bus service to another station.</p> |
| Rail Fleet Reliability | <p>Mean Distance Between Delays (MDBD)</p> <p>Total railcar revenue miles / Number of failures resulting in delays greater than three minutes</p> | <p>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).</p> <p>Mean Distance Between Delays communicates the effectiveness of Metro’s railcar maintenance program. This measure reports the number of miles between railcar failures resulting in delays of service greater than three minutes. Factors that influence railcar reliability are the age of the railcars, the amount the railcars are used and the interaction between railcars and the track.</p> |

| <i>KPI</i> | <i>How is it measured?</i> | <i>What does this mean and why is it key to our strategy?</i> |
|------------------------------|--|--|
| Rail On-Time Performance | <p>Adherence to scheduled weekday headways</p> <p>Number of station stops delivered within the scheduled headway during rush (AM/PM) service plus 2 minutes / Total station stops delivered</p> <p>Number of station stops delivered up to 150% of the scheduled headway during non-rush (mid-day and evening) / Total station stops delivered</p> | <p>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.</p> <p>Station stops are tracked system-wide, with the exception of terminal and turn-back stations.</p> |
| Safety & Security | | |
| Crime | Reported Part I crimes | <p>Part I crimes reported to Metro Transit Police Department for Metrobus (on buses), Metrorail (on trains and in rail stations), or at Metro-owned parking lots in relation to Metro’s monthly passenger trips. Reported by Metrobus, Metrorail, and Metro parking lots.</p> <p>This measure provides an indicator 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.</p> |
| Customer Injury Rate | <p>Customer injury</p> <p>Number of injuries / (Number of passengers / 1,000,000).</p> | <p>Injury to any customer caused by some aspect of Metro’s operation that requires immediate medical attention away from the scene of the injury.</p> <p>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.</p> |
| Employee Injury Rate | <p>Employee Injuries</p> <p>Number of injuries / (Total work hours / 200,000)</p> | <p>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.</p> <p>OSHA recordable injuries are a key indicator of how safe employees are in the workplace.</p> |

People and Assets

Customer Comment

Customer complaints or commendations

Number of complaints or commendations / (Number of passengers / 1,000,000)

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.

Tracking customer comments provides the opportunity to more quickly identify areas for improvement for the customers' experience.

Customer Satisfaction

Survey respondent rating

Number of survey respondents with high satisfaction / Total number of survey respondents

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).

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.

Communities

Rail Passengers Per Car

Number of rail passengers

Total passengers observed on-board trains passing through a station during a rush hour / 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 AM to 10 AM and from 3 PM to 7 PM). In order to represent an average day, counts are normalized with rush ridership.

The Board of Directors has established Board standards of rail passengers per car to measure railcar crowding. Car crowding informs decision making regarding asset investments and scheduling.

Additional Board standards have been set for:

- Hours of service – the Metrorail system is open to service customers
- Headway – Scheduled time interval between trains during normal weekday service

Glossary of Terms

Action – Specific and discrete steps taken that move the organization toward achieving the Strategic Goals.

Key Performance Indicator (KPI) – A quantifiable measure externally reported that tracks progress toward achieving the Board adopted Strategic Goals.

Mission – Overarching purpose of the organization.

Performance Management Framework – An organizational process and culture that values measurement as a tool to deliver results.

Performance Measure – A quantifiable measure generally tracked internally as a management tool to gauge progress being made.

Strategic Goal – Adopted by the Board to provide direction that aligns the organization to attain the mission.

Target – End point or direction for performance measures and KPI's. Targets define success.

Vision – Desired outcome for the organization.

| KPI: Bus On-Time Performance [Target 79%] | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CY 2013 | 78.8% | 79.4% | 78.4% | 76.5% | 75.6% | 75.5% | n/a | n/a | n/a | n/a | n/a | n/a | 77.4% |
| CY 2014 | 80.4% | 78.4% | 78.2% | 77.6% | 76.9% | 77.7% | 78.7% | 78.5% | 76.0% | 75.7% | 77.9% | 78.4% | 78.2% |
| CY 2015 | 79.9% | 78.9% | 77.2% | 76.8% | 75.5% | 77.2% | | | | | | | 77.6% |

| KPI: Bus Fleet Reliability (Bus Mean Distance Between Failures) [Target 8,000 Miles]* | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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 | 8,486 |
| CY 2014 | 5,879 | 7,291 | 7,778 | 7,648 | 6,773 | 7,313 | 7,095 | 7,911 | 6,954 | 8,027 | 8,440 | 7,670 | 7,040 |
| CY 2015 | 6,259 | 7,434 | 6,109 | 7,016 | 6,405 | 7,328 | | | | | | | 6,739 |

* Per page 16, bus fleet reliability is calculated by dividing total bus miles by number of failures. Miles for June 2015 are slightly overstated because they include bus mileage that had not been accurately reflected in prior months due to mechanical issues with hubdometers, the system used to collect mileage data. These issues were resolved during June 2015.

| Bus Fleet Reliability (Bus Mean Distance Between Failure by Fleet Type) | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CNG | 5,240 | 7,262 | 5,804 | 7,064 | 5,480 | 6,825 | | | | | | | 6,207 |
| Hybrid | 7,045 | 7,663 | 6,539 | 7,823 | 7,911 | 8,142 | | | | | | | 7,499 |
| Clean Diesel | 8,557 | 9,450 | 6,666 | 9,082 | 6,849 | 7,472 | | | | | | | 7,838 |
| All Other | 3,816 | 4,456 | 3,815 | 2,595 | 2,650 | 4,392 | | | | | | | 3,505 |

| KPI: Rail On-Time Performance [Target 91%] | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CY 2013 | 92.3% | 92.2% | 92.1% | 92.4% | 91.9% | 91.5% | 91.7% | 92.7% | 92.4% | 92.2% | 90.3% | 92.3% | 92.2% |
| CY 2014 | 89.2% | 92.0% | 90.4% | 92.0% | 91.7% | 91.2% | 92.2% | 89.7% | 90.7% | 90.1% | 88.4% | 89.7% | 90.5% |
| CY 2015 | 87.3% | 83.9% | 88.5% | 89.9% | 87.0% | 84.6% | | | | | | | 86.7% |

| Rail On-Time Performance by Line | | | | | | | | | | | | | |
|----------------------------------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| Red Line | 89.8% | 85.3% | 92.1% | 90.3% | 88.6% | 85.8% | | | | | | | 89.3% |
| Blue Line | 86.8% | 81.8% | 85.2% | 89.4% | 84.1% | 84.6% | | | | | | | 84.7% |
| Orange Line | 84.6% | 82.0% | 85.4% | 88.6% | 83.6% | 79.1% | | | | | | | 84.1% |
| Green Line | 85.0% | 82.8% | 86.2% | 88.5% | 86.9% | 83.2% | | | | | | | 84.8% |
| Yellow Line | 92.7% | 89.4% | 92.7% | 94.4% | 94.6% | 93.9% | | | | | | | 91.7% |
| Silver Line | 84.1% | 82.1% | 86.0% | 88.8% | 84.3% | 82.8% | | | | | | | 84.2% |

| KPI: Rail Fleet Reliability (Rail Mean Distance Between Delays by Railcar Series) [Target 65,000 miles] | | | | | | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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 | 77,957 | 64,848 | 55,522 | 84,627 | 65,042 | 73,150 | 89,891 | 63,436 | 61,000 | 56,213 |
| CY 2015 | 53,784 | 41,558 | 63,588 | 60,242 | 69,260 | 54,779 | | | | | | | 52,056 |

| KPI: Rail Fleet Reliability (Rail Mean Distance Between Delays by Railcar Series) | | | | | | | | | | | | | |
|---|--|--------|--------|---------|---------|--------|-----|-----|-----|-----|-----|-----|--------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 1000 series | 59,925 | 34,472 | 69,876 | 57,157 | 47,409 | 46,458 | | | | | | | 51,309 |
| 2000/3000 series | 71,595 | 56,046 | 83,615 | 106,406 | 157,484 | 70,185 | | | | | | | 69,385 |
| 4000 series | 22,973 | 18,894 | 26,103 | 20,208 | 29,239 | 11,800 | | | | | | | 22,610 |
| 5000 series | 36,136 | 36,844 | 70,401 | 45,923 | 49,013 | 50,925 | | | | | | | 44,436 |
| 6000 series | 95,297 | 64,816 | 61,007 | 84,083 | 124,325 | 89,370 | | | | | | | 70,898 |
| 7000 series | 7000 series results will be reported beginning in the Q3/2015 report, the first full quarter of 7000 series cars in-service. | | | | | | | | | | | | |

| KPI: MetroAccess On-time Performance [Target 92%] | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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% | 91.9% |
| CY 2014 | 93.3% | 90.2% | 92.5% | 91.1% | 92.3% | 92.4% | 92.6% | 92.8% | 91.8% | 91.9% | 91.5% | 92.2% | 92.0% |
| CY 2015 | 93.0% | 89.1% | 89.4% | 92.0% | 92.9% | 94.0% | | | | | | | 91.7% |

| KPI: Escalator System Availability [Target 91%] | | | | | | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CY 2013 | 88.6% | 89.4% | 89.3% | 90.0% | 90.7% | 90.6% | 89.9% | 87.6% | 86.8% | 88.4% | 90.4% | 90.8% | 90.7% |
| CY 2014 | 93.0% | 93.6% | 93.6% | 92.6% | 92.3% | 93.1% | 92.9% | 92.7% | 93.0% | 93.8% | 93.8% | 93.2% | 93.0% |
| CY 2015 | 93.1% | 93.9% | 94.1% | 93.5% | 93.7% | 93.3% | | | | | | | 93.6% |

| KPI: Elevator System Availability [Target 96.5%] | | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CY 2013 | 95.7% | 96.6% | 96.5% | 96.5% | 97.3% | 98.0% | 97.0% | 97.5% | 97.2% | 97.4% | 96.9% | 97.5% | 96.8% |
| CY 2014 | 97.4% | 96.6% | 97.3% | 97.2% | 97.6% | 97.0% | 97.2% | 96.8% | 96.3% | 96.0% | 96.7% | 96.2% | 97.2% |
| CY 2015 | 96.8% | 97.4% | 97.9% | 97.1% | 96.5% | 96.1% | | | | | | | 97.0% |

| KPI: Customer Injury Rate (per million passengers) [Target 1.8] | | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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 | 1.96 |
| CY 2014 | 3.01 | 1.90 | 1.51 | 1.53 | 2.19 | 1.63 | 1.74 | 1.47 | 2.95 | 1.53 | 1.86 | 2.42 | 1.94 |
| CY 2015 | 5.19 | 1.70 | 2.22 | 2.49 | 1.70 | 1.55 | | | | | | | 2.43 |

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

| KPI: Employee Injury Rate (per 200,000 hours) -- Target = < 4.6 injuries per 200,000 hours | | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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 | 5.05 |
| CY 2014 | 4.09 | 5.45 | 4.49 | 4.57 | 3.89 | 3.77 | 4.24 | 4.31 | 4.50 | 3.29 | 3.92 | 3.99 | 4.36 |
| CY 2015 | 8.69 | 6.36 | 6.25 | 5.56 | 5.57 | 6.05 | | | | | | | 6.41 |

| KPI: Crimes [Target 1,900] | | | | | | | | | | | | | |
|----------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | |
| CY 2013 | 149.0 | 290.0 | 410.0 | 560.0 | 795.0 | 998.0 | 1202.0 | 1430.0 | 1647.0 | 1859.0 | 2011.0 | 2098.0 | |
| CY 2014 | 104.0 | 179.0 | 274.0 | 395.0 | 552.0 | 717.0 | 864.0 | 1035.0 | 1186.0 | 1334.0 | 1446.0 | 1557.0 | |
| CY 2015 | 109.0 | 193.0 | 298.0 | 416.0 | 581.0 | 729.0 | | | | | | | |

| Crimes by Type | | | | | | | | | | | | | |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| Robbery | 32 | 19 | 20 | 36 | 36 | 27 | | | | | | | 170 |
| Larceny (Snatch/Pickpocket) | 31 | 34 | 32 | 23 | 34 | 41 | | | | | | | 195 |
| Larceny (Other) | 32 | 22 | 38 | 38 | 75 | 72 | | | | | | | 277 |
| Motor Vehicle Theft | 2 | 0 | 0 | 7 | 5 | 5 | | | | | | | 19 |
| Attempted Motor Vehicle Theft | 1 | 2 | 3 | 2 | 4 | 1 | | | | | | | 13 |
| Aggravated Assault | 11 | 6 | 12 | 12 | 11 | 2 | | | | | | | 54 |
| Rape | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| Burglary | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| Homicide | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | 0 |
| Arson | 0 | 1 | 0 | 0 | 0 | 0 | | | | | | | 1 |
| 2015 Part1 Crimes | 109 | 84 | 105 | 118 | 165 | 148 | | | | | | | 729 |

| Customer Satisfaction Rating | | | | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| | Q1-2013 | Q2-2013 | Q3-2013 | Q4-2013 | Q1-2014 | Q2-2014 | Q3-2014 | Q4-2014 | Q1-2015 | Q2-2015 | Q3-2015 | Q4-2015 | |
| Metrobus | 82% | 82% | 81% | 76% | 78% | 79% | 81% | 78% | 78% | 75% | | | |
| Metrorail | 84% | 86% | 84% | 76% | 80% | 80% | 77% | 82% | 74% | 73% | | | |
| KPI: Customer Commendation Rate (per million passengers) | | | | | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| 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 | 6.4 |
| CY 2014 | 7.0 | 6.0 | 6.6 | 5.2 | 7.2 | 7.3 | 6.7 | 7.0 | 6.6 | 5.4 | 5.6 | 5.7 | 6.6 |
| CY 2015 | 5.2 | 6.4 | 6.6 | 5.2 | 6.4 | 5.6 | | | | | | | 5.9 |
| KPI: Customer Complaint Rate (per million passengers) | | | | | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD |
| CY 2013 | 84 | 73 | 74 | 74 | 76 | 79 | 90 | 81 | 82 | 81 | 113 | 74 | 77 |
| CY 2014 | 92 | 88 | 74 | 81 | 79 | 83 | 90 | 84 | 96 | 89 | 71 | 69 | 82 |
| CY 2015 | 82 | 82 | 65 | 69 | 89 | 88 | | | | | | | 79 |