



# Vital Signs

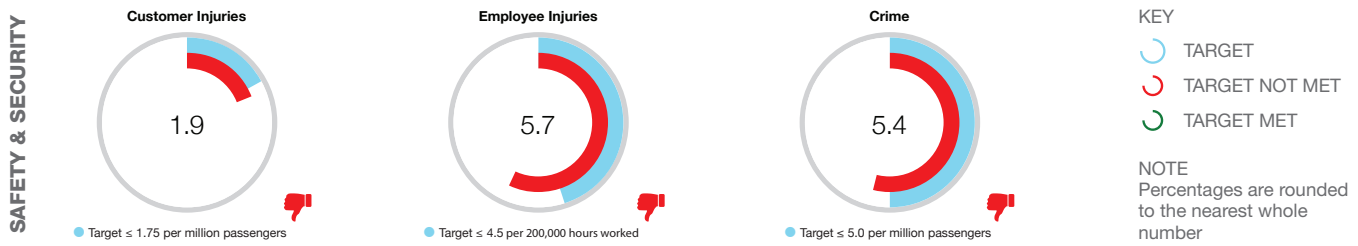
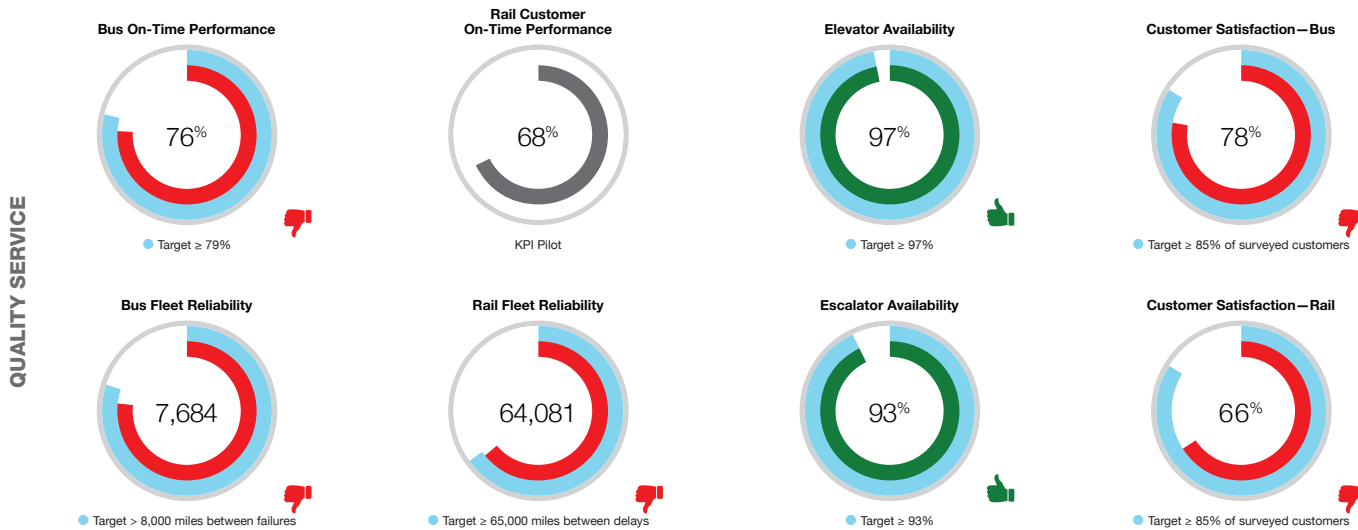
## July-September 2016

Published: October 2016

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## Performance



## Highlights

Extreme heat in July and August led to **bus fleet reliability** falling short of target, despite performing better than Q3/2015. **Bus on-time performance (OTP)** experienced the normal seasonal decline and was 3% lower than Q3/2015 due to September’s increased traffic and buses arriving early. **Bus customer satisfaction** significantly decreased when compared to the previous year due to inconsistent service delivery.

**Rail customer OTP** was highest in July at 71% but fell to 64% as the quarter progressed and customers on all lines (with the exception of Green) were impacted by SafeTrack work, although unplanned service disruptions account for the bulk of customer delays. Although not a significant decrease from Q3/2015, the **rail customer satisfaction** rate was well below target as less than half of rail customers perceived service as reliable. **Rail fleet reliability** fell just short of target in Q3/2016, hampered by sustained record high temperatures.

**Elevator availability** was near target due largely to a more rigorous inspection process requiring additional, often complex, repairs—an average of 11 more hours in Q3/2016 vs. Q3/2015. **Escalator availability** also was close to target although lower than Q3/2015 attributable to the modified inspection process and 14 more hours in Q3/2016 vs. Q3/2015 spent addressing “major repair” items, such as chains, motors, and brakes.

**Customer injuries** were worse than target in Q3/2016 due to bus collisions (50% non-preventable), and slips, trips and falls on vehicles and in facilities. Likewise, the **employee injury rate** overshot target largely as a result of non-preventable collisions, slip, trips, falls and struck by/against incidents. The **crime rate** exceeded target this quarter despite an 11% decrease in Part I crimes, largely attributable to a 10% decrease in total ridership.

# Path to Improved Performance



**Communicate** system performance quarterly and annually



**Balanced scorecard** approach, but focus is Metro's core business of quality service delivery

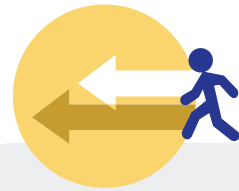


What gets measured gets managed, leading to **improved performance**

*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](http://wmata.com).

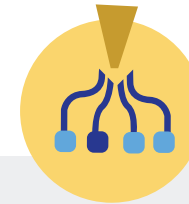
Metro's managers measure what matters and hold themselves accountable to stakeholders via a focused set of Key Performance Indicators (KPIs) reported publicly in *Vital Signs*.



**What** actions are being taken to improve?



**Why** did performance change?



Is Metro achieving its **four strategic goals?**

**Answer three questions...**



Utilizing systematic, **data-driven** analysis



**Targeting** that gauges progress and identifies success

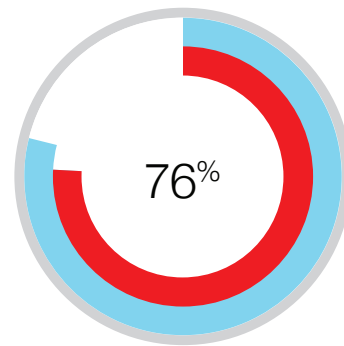


## Why did performance change?

- ▶ Overall early arrivals increased to 8% for both July & August, the highest experienced all year, with Late Night (11PM–4AM) period service continuing to experience an increase in buses arriving early.
- ▶ The regional Transportation Planning Board (TPB) labels September as one of the region’s worst months of traffic. AM Peak (6AM–9AM) period service has consistently been the most impacted due to a uptick in morning travel; however, this year’s AM Peak (6AM–9AM) period service OTP decline from August to September remained stable with prior year performance despite additional impact from SafeTrack.
- ▶ Seasonal congestion impacted the PM Peak (3PM–7PM) period service with a greater decline in performance from August to September 2016 compared to 2015 due to an increased number of buses arriving late in September.

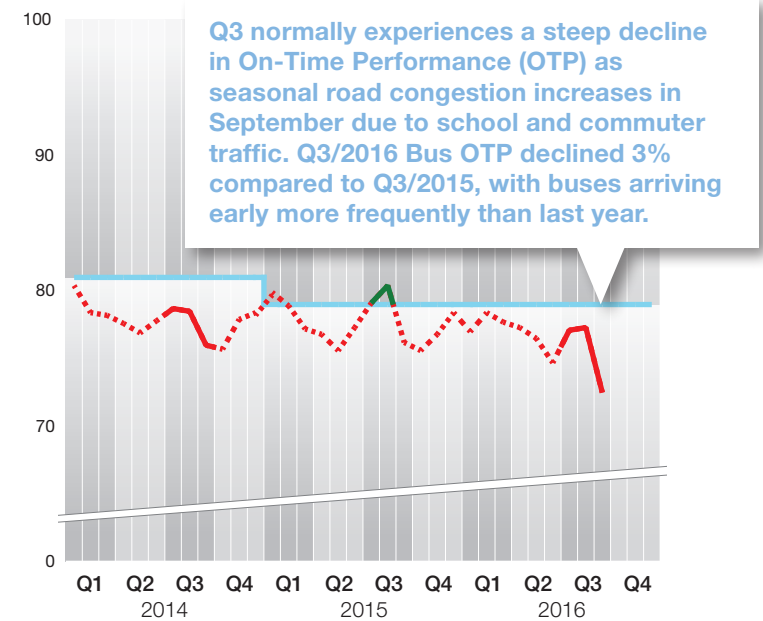
CURRENT QUARTER PERFORMANCE

### Bus On-Time Performance



● Target ≥ 79%

3-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

FOR ALL SERVICE PERIODS:

- ▶ Focus on reducing early arrivals through on-board bus technology and increased communication to operators.
- ▶ Add strategically placed accident response teams allowing for quicker response time as well as allowing street managers to focus on actively managing low performing routes.
- ▶ Continue to partner with bus planning & scheduling, DDOT, MPTD and Emergency Management to improve traffic patterns.

FOR LATE NIGHT (11PM–4AM) PERIOD SERVICE:

- ▶ Review running time for late night routes to determine if scheduling adjustments are needed.
- ▶ Request support from jurisdictions on late night high traffic and congested areas.



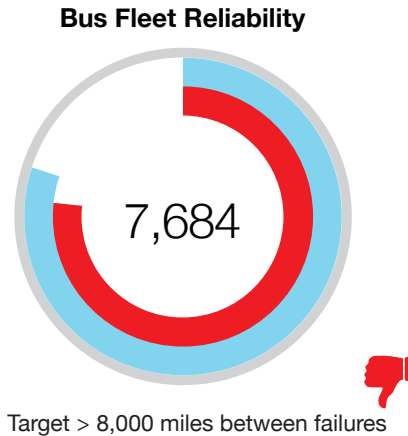
*Metro completed the \$5.5 million bus improvements at the Franconia-Springfield Metro station that expanded capacity and provides additional amenities to enhance the customer experience including three new bus bays and the introduction of real-time bus arrival information.*



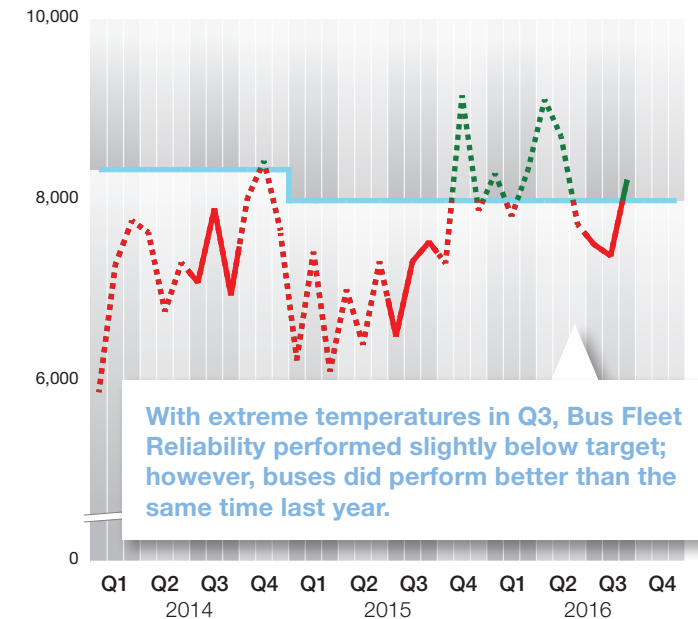
## Why did performance change?

- ▶ Q3/2016 Bus Fleet Reliability improved by 9% compared to Q3/2015, but performed 4% below target due to impacts from the extreme heat in July and August, which stressed equipment resulting in an increase in service interruptions. The new 40' Hybrid buses are performing well, as expected.
- ▶ Both the Hybrid and Clean Diesel fleets performed above target for the quarter, while the CNG and Diesel fleets performed below target but did remain in service longer (as a result of mechanical failure) compared to this same time last year due to mitigating and proactive actions to improve bus reliability:
  - » CNG fleet reliability improved 14% compared to this same time last year, however, performed below target due to impacts from a recently identified issue by the engine manufacturer that results in rough idling, and normal end of life issues.
  - » The Diesel fleet, which is the oldest fleet and only accounts for 5% of the entire fleet, performed 49% better compared to this same time last year.

### CURRENT QUARTER PERFORMANCE



### 3-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

- ▶ Continue to retire less reliable, older buses, and complete mid-life overhauls annually.
- ▶ Continue to work with manufacturers to complete retrofits and recalls on parts like defroster valves, coolant sensors, and heat exchangers, and proactively replace Energy Storage Systems on 2006 and 2008 Hybrid models.
- ▶ Recalibrate multiple engine models to address driveability, performance, and diagnostic issues on multiple fleets.
- ▶ Continue to work with the 2012 Clean Diesel engine manufacturer to determine root cause of exhaust after treatment failures related to soot and carbon build up and revise maintenance schedules to prevent failures.
- ▶ Continue evaluation of new products (such as pulleys, hoses, and fluids) and adjust preventive maintenance cycles to improve reliability of the entire fleet.



Mid-life overhauls and engine recalibrations improve the distance buses can travel before requiring repair.

# Bus Crowding

- ▶ Load factor measures customer crowding on buses.
- ▶ Automatic passenger counter data (for all routes and time periods) are used to calculate the max loads in the table below.
- ▶ Crowding appears to be problematic on many high ridership routes across all times of day and particularly in DC and MD.

## Q3/2016 TOP 10 MOST CROWDED ROUTES BY JURISDICTION

Service Code	Line Name	Route Name	Time Period	Highest Passenger Load	Load Factor
DC	16th Street	S2*	AM Peak	119	2.0
	16th Street	S4*	AM Peak	116	2.0
	Benning Road–H Street	X2*	Midday	113	2.0
	Georgia Avenue–7th Street	70*	Early Night	113	2.0
	16th Street–Potomac Park	S1*	AM Peak	111	2.0
	Georgia Avenue–7th Street	70*	PM Peak	105	2.0
	14th Street	53	PM Peak	98	2.0
	Benning Road–H Street	X2	PM Peak	97	2.0
	14th Street	52	PM Peak	90	2.0
	16th Street	S2	Midday	87	2.0
MD	Greenbelt–Twinbrook	C4	PM Peak	84	2.0
	New Hampshire Avenue–Maryland	K6	Midday	80	2.0
	Greenbelt–Twinbrook	C4	Midday	80	2.0
	Veirs Mill Road	Q6	Midday	80	2.0
	Veirs Mill Road	Q4	PM Peak	80	2.0
	Eastover–Addison Road	P12	PM Peak	80	2.0
	New Carrollton–Silver Spring	F4	AM Peak	78	2.0

Performance Thresholds	Load Factor
Below Threshold	< .3
Standards Compliant	.3 – .5
Occasional Crowding	.6 – .7
Recurring Crowding	.8 – .9
Regular Crowding	1.0 – 1.3
Continuous Crowding	> 1.3

## Q3/2016 TOP 10 MOST CROWDED ROUTES BY JURISDICTION

Service Code	Line Name	Route Name	Time Period	Highest Passenger Load	Load Factor
MD	Veirs Mill Road	Q4	Midday	79	2.0
	Veirs Mill Road	Q6	PM Peak	79	2.0
	Georgia Avenue–Maryland	Y2	Midday	77	2.0
VA	Ballston–Farragut Square	38B	PM Peak	80	2.0
	Lincolnia–North Fairlington	7Y	AM Peak	80	2.0
	Ballston–Farragut Square	38B	AM Peak	76	1.9
	Lee Highway–Farragut Square	3Y	PM Peak	75	1.9
	Mt Vernon Express	11Y	AM Peak	78	1.9
	Leesburg Pike	28A	AM Early	74	1.9
	Richmond Highway Express	REX	PM Peak	72	1.8
	Columbia Pike–Farragut Square	16Y	AM Peak	75	1.8
	Lee Highway–Farragut Square	3Y	AM Peak	72	1.8
	Washington Boulevard–Dunn Loring	2A	PM Peak	70	1.8

\*Route has articulated buses, allowing for highest passenger load above 100

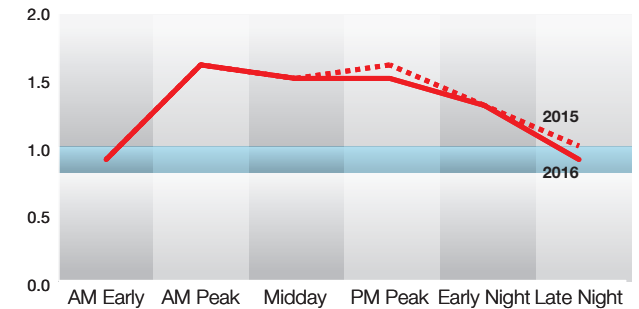
**Highest Passenger Load** = the average of all the highest max loads recorded by route, trip and time period

**Load Factor** = highest passenger load divided by actual bus seats used

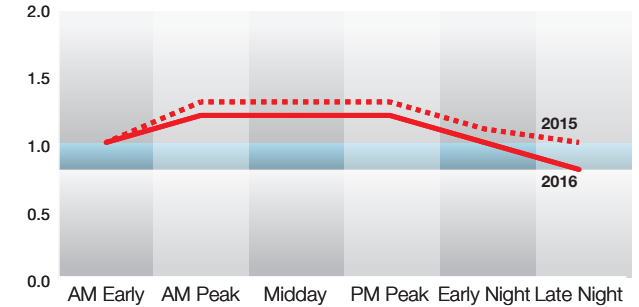
# QUALITY SERVICE



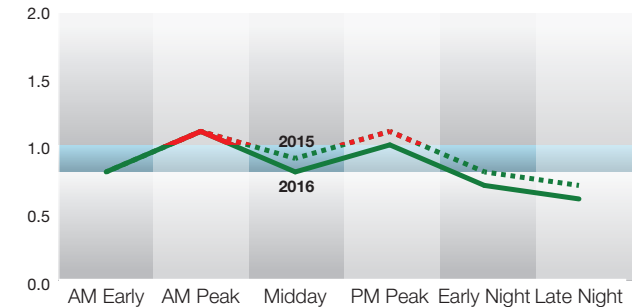
Q3 YEAR-OVER-YEAR PERFORMANCE – DC



Q3 YEAR-OVER-YEAR PERFORMANCE – MD



Q3 YEAR-OVER-YEAR PERFORMANCE – VA



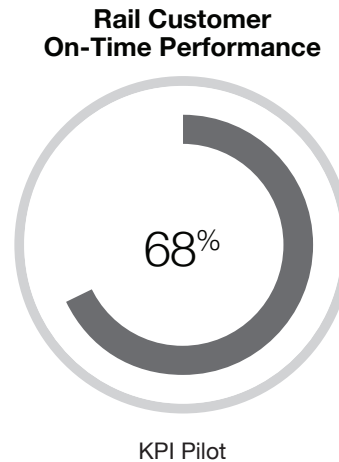
For all graphs: 1.0 = all bus seats occupied



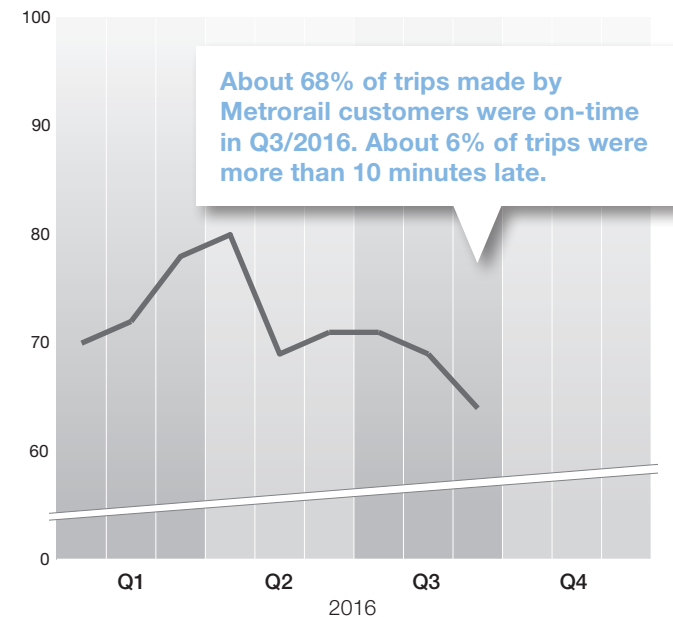
## Why did performance change?

- ▶ Rail customer on-time performance (OTP) was highest in July, at 71%, and steadily declined through the quarter to 64% in September.
- ▶ SafeTrack work affected customers on all but the Green Line this quarter. Overall, this planned work lowered system-wide customer OTP by only about one percentage point and OTP on affected lines by 2 to 6 percentage points during the duration of the surge. Customers most affected by the work used alternative means of travel, and rail scheduling and operations staff took steps to preserve service levels across most lines as much as possible.
- ▶ Unplanned service disruptions account for the bulk of customer delays. This quarter, 60% of service disruptions were railcar related (either because railcars failed in service or were not available for service); 18% were infrastructure-related; 12% were related to transit police responses, sick customers, or unattended bags; and 10% were other issues.
- ▶ Customer travel was also impeded by speed restrictions throughout the system. Over 150 speed restrictions were initiated this quarter, a 20% increase compared to Q3/2015. Inspection protocols improved following the derailment at East Falls Church at the end of July to identify deteriorated infrastructure conditions that require immediate fixes.

CURRENT QUARTER PERFORMANCE



1-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

- ▶ Reduce wait times and speed restrictions
  - » Improve the reliability and availability of the rail fleet by accelerating the delivery and acceptance of 7000 series railcars, training mechanics to improve the quality and timeliness of repairs, and implementing engineering campaigns to address components prone to failure.
  - » Reduce missed dispatches by developing tools and strategies to balance railcars and series across yards.
  - » Continue SafeTrack program to rehabilitate rail infrastructure. Propose service changes to allow more hours overnight to complete necessary repairs.
- ▶ Repair escalators, elevators and fare gates to enable smooth flow of passengers through station.
- ▶ Develop rail infrastructure Key Performance Indicator to quantify results of SafeTrack work.



*Through Surge 8 (ended September 11, 2016), crews have replaced over 17,000 cross-ties, 10,000 fasteners and 2.4 miles of rail in SafeTrack work areas.*

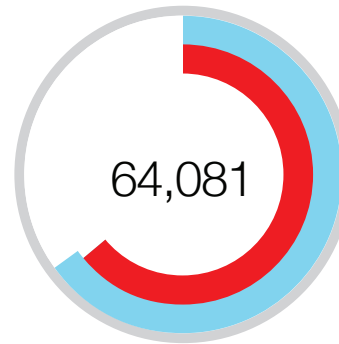


## Why did performance change?

- ▶ On average, railcars traveled just over 64,000 miles between delay, a 9% improvement over Q3/2015. The 6000, 7000, and 2000/3000 series continue to be the top performers of the fleet.
- ▶ Record high temperatures in July led to degraded performance, particularly for propulsion and brakes systems that are prone to failure in high temperatures. Doors and automatic train control systems were also top failure points this quarter.
- ▶ Car availability dropped sharply in July and August, as sustained temperatures above 90 degrees led to HVAC failures that took many cars out of service for repair. As temperatures cooled by mid-September, availability improved and met system-wide targets most days.
- ▶ Retirement of the relatively lower-performing 1000 series cars continued this quarter. As of the end of September, 90 cars—almost one-third of the fleet—have been removed from the property.

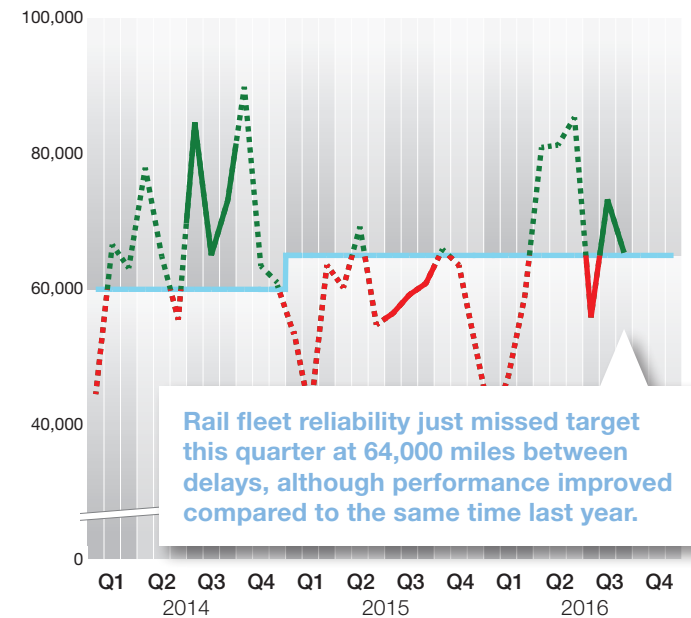
### CURRENT QUARTER PERFORMANCE

#### Rail Fleet Reliability



● Target ≥ 65,000 miles between delays

### 3-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

- ▶ Improve railcar availability and reduce breakdowns while railcars are in service
  - » Streamline parts planning and procurement to sustain recent improvements: develop guidance documents, begin establishing long-term contracts, and initiate new demand-forecasting process.
  - » Implement a 6-month maintenance blitz to address most frequent reliability issues with the 2000/3000, 5000 and 6000 series (HVAC, doors, pneumatics and propulsion).
  - » Implement engineering campaigns to overhaul and upgrade problematic components.
  - » Improve repair quality through new mechanic training and revision of manuals: 48 mechanics enrolled this quarter.
  - » Reduce repair times through better shop planning and reallocating staff: piloting new planning process at Alexandria and West Falls Church yards, reallocating staff to weekend shifts, and shifting preventive maintenance schedules to free up shop space for corrective repairs.
- ▶ Ensure timely and quality delivery of 7K rail cars: accelerate acceptance schedule from 16 to 20 cars per month (52 new cars placed in service in Q3/2016).



Delivery and acceptance of the new 7000 series cars is ramping up to 20 cars per month. As of mid-October, 24 eight car trains are in service.



**Metro had significantly fewer instances of overcrowding at max load points during rush periods this quarter compared to Q3/2015, largely driven by a decrease in ridership during rush periods.**

- ▶ Crowding levels on railcars is monitored in accordance with Board standards.

## Why Did Performance Change?

- ▶ Year-to-year decreases in rush period ridership occurred each month in this reporting period, ranging from a 7% rush period ridership decrease in May to a 16% rush period ridership decrease in July.
- ▶ The year-to-year rush period ridership decrease in July was offset by significantly fewer railcars observed for the month during both AM and PM rush periods, leading to overcrowding at multiple locations.

## Key Actions to Improve Performance

- ▶ Metro platform monitors were strategically assigned to help navigate customers at stations with increased crowding due to SafeTrack.
- ▶ Monitor effectiveness of test decals on platforms at Metro Center, Gallery Place, L'Enfant Plaza, and Union Station that show where a six-car train will be positioned. The decals are intended to help customers re-position on platform to avoid congestion and reduce the safety risk of running for the last door of train.

Optimal passengers per car (PPC) of 100, with minimum 80 and maximum of 120 PPC

AM Rush Max Load Points		May-15	Jun-15	Jul-15	May-16	Jun-16	Jul-16
Gallery Place	Red	98	89	96	80	94	92
Dupont Circle		91	101	91	79	88	88
Pentagon	Blue	106	113	95	101	73	72
Rosslyn		93	103	98	92	94	81
L'Enfant Plaza		49	72	61	60	62	60
Court House	Orange	115	106	103	99	92	102
L'Enfant Plaza		63	83	73	67	69	66
Pentagon	Yellow	85	80	83	79	93	78
Waterfront	Green	87	95	97	81	78	74
Shaw-Howard		80	100	72	72	68	76
Rosslyn	Silver	86	94	102	85	100	101
L'Enfant Plaza		62	69	71	70	67	59
PM Rush Max Load Points		102	98	107	95	90	88
Metro Center	Red	81	76	96	82	78	90
Farragut North		113	123	130	113	93	95
Rosslyn	Blue	115	120	99	100	103	87
Foggy Bottom-GWU		55	62	68	49	57	50
Smithsonian		102	101	92	81	90	116
Foggy Bottom-GWU	Orange	67	80	67	65	61	74
Smithsonian		76	79	79	79	87	82
L'Enfant Plaza	Yellow	92	93	95	89	73	80
L'Enfant Plaza	Green	76	76	71	59	64	62
Mt. Vernon Sq.		89	85	91	81	91	107
Foggy Bottom-GWU		56	63	60	61	68	81
Smithsonian	Silver	49	61	82	67	63	54





## Why did performance change?

- ▶ Elevator availability was near target this quarter, at 96.5%, on par with Q3/2015 (96.8%). While the amount of scheduled maintenance (planned replacements/rehabilitations) was largely the same year-to-year, there was an uptick in unscheduled maintenance. The majority of the increase in hours spent on unscheduled maintenance was due to a more rigorous inspection process that led to punch-list items that needed additional, often complex, repairs by mechanics. Three hours/unit were spent on these repairs stemming from inspection in Q3/2015 vs. 14 hours/unit this quarter.
- ▶ Escalator availability reached 92.5% this quarter, near target. This quarter's result was lower than Q3/2015 (93.2%). A decrease in scheduled maintenance was offset by a sharp increase in unscheduled maintenance; 44 hours/unit were spent on unscheduled maintenance in Q3/2015 vs. 66 hours/unit this quarter. Much of the increase in unscheduled maintenance was attributed to repairs stemming from the modified inspection process. Also, more than twice as much time (11 hours/unit in Q3/2015 vs. 25 hours/unit this quarter) was spent addressing "major repair" items, such as chains, motors, and brakes.

## Key actions to improve performance

### MODERNIZE ESCALATOR AND ELEVATOR FLEET

- ▶ Replace 137 of the system's 618 escalators by 2020 and rehabilitate up to an additional 144 escalators. Modernized units will be more reliable and energy efficient.
- ▶ Rehabilitate 100 of the system's 318 elevators (in stations and maintenance/administration facilities) by 2021. In 2016, replace 23 escalators and rehabilitate 8 escalators and 20 elevators.

### INCREASE AND ENHANCE REMOTE MONITORING OF SYSTEM'S ELEVATORS AND ESCALATORS

- ▶ Remote monitoring allows for quicker identification of outages and dispatch of technicians in order to return the equipment to service faster. Currently, 227 of the 278 (82%) public-facing elevators and 568 of the 618 (92%) escalators can be monitored remotely.

### ALLOCATE STAFF TO STATIONS MOST AFFECTED BY SAFETRACK

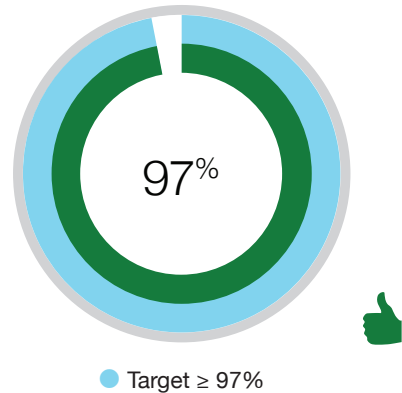
- ▶ Technicians have been strategically assigned to stations with increased crowding due to SafeTrack in order to minimize any disruptions due to vertical transportation.

### IMPLEMENT RELIABILITY PROGRAM

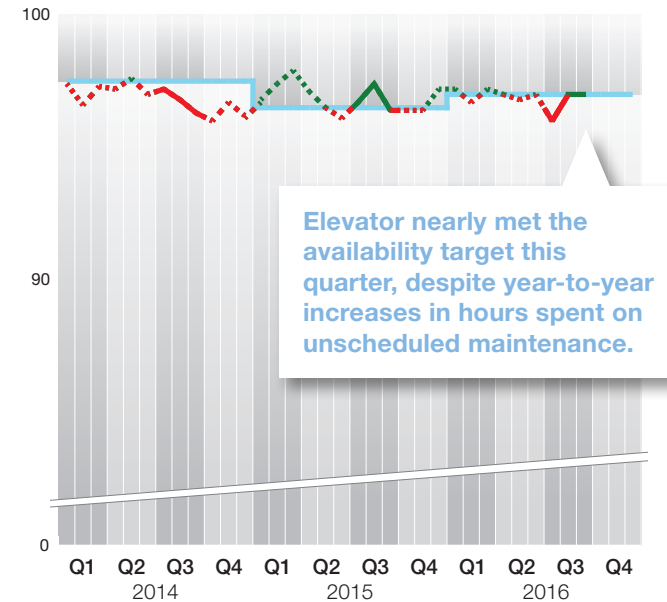
- ▶ Continued implementation of elevator/escalator asset management plan to improve asset reliability and total cost of ownership, as well as the reliability of work processes, procedures and practices.

CURRENT QUARTER PERFORMANCE

### Elevator Availability

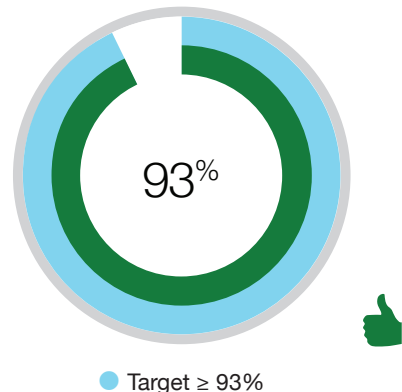


3-YEAR TREND IN PERFORMANCE—ELEVATOR

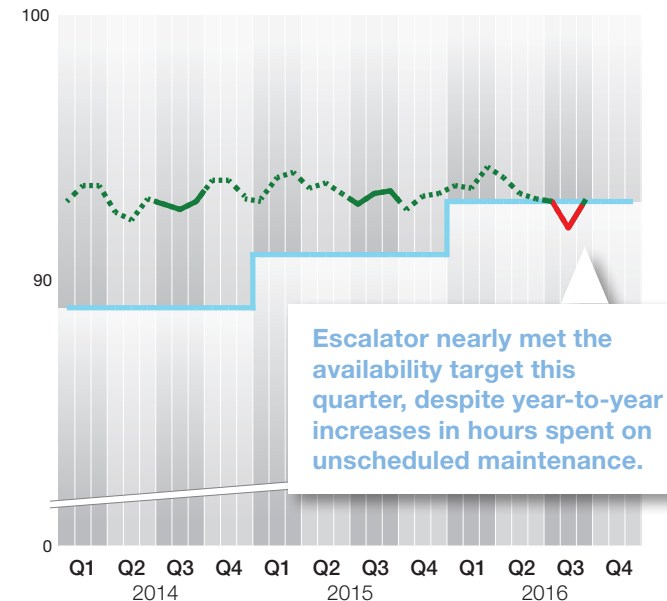


CURRENT QUARTER PERFORMANCE

### Escalator Availability



3-YEAR TREND IN PERFORMANCE—ESCALATOR





## Why did performance change?

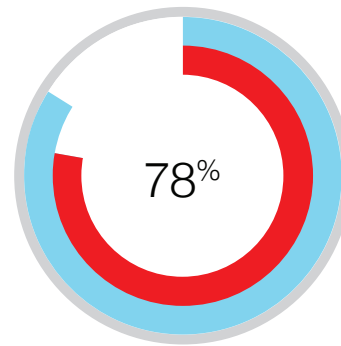
- ▶ Bus customers' satisfaction has decreased significantly due to inconsistent service delivery. All other aspects of the bus customer experience remained consistent with the previous year.
- ▶ Inconsistent service delivery continues to drag down rail customer satisfaction, as less than half of surveyed customers perceive Metro's service as reliable in Q3/2016. While customer's experience is largely consistent year over year, station cleanliness, ride quality, and interactions with station managers have all decreased.

## Key Actions to improve performance

- ▶ Improve rail service delivery through better rail fleet reliability and availability, timely railcar dispatching with enhanced balancing of railcars across yards, and continue SafeTrack program to rehabilitate rail infrastructure.
- ▶ Focus bus service delivery improvement efforts on reducing early arrivals (adding accident response teams to allow street managers to focus on low performing routes and continue to partner with jurisdictions to improve traffic patterns) and improving late night performance.
- ▶ As we enter into cooler months key aspects of both rail and bus experience is related to service delivery and climate control. Climate control in stations and on-board buses and trains is crucial to making our customers comfortable. Moreover, dependable service, to mitigate exposure to inclement weather, goes a long way to improving the overall customer experience.

CURRENT QUARTER PERFORMANCE

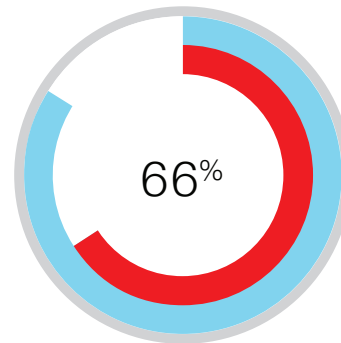
### Customer Satisfaction – Bus



- Target ≥ 85% of surveyed customers

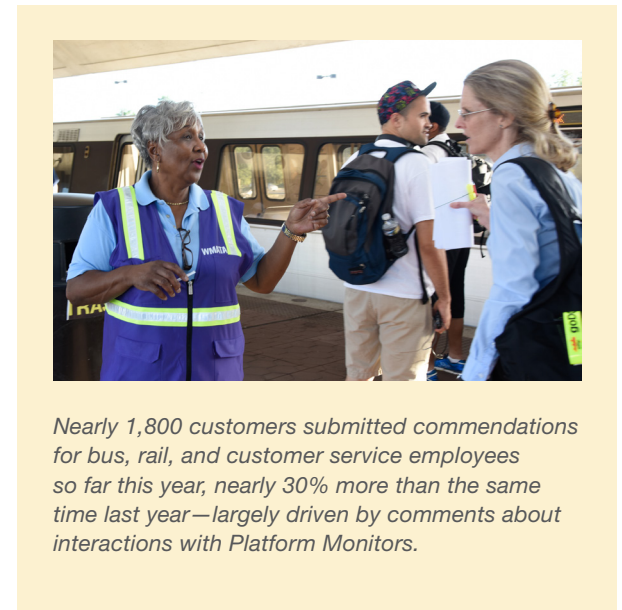
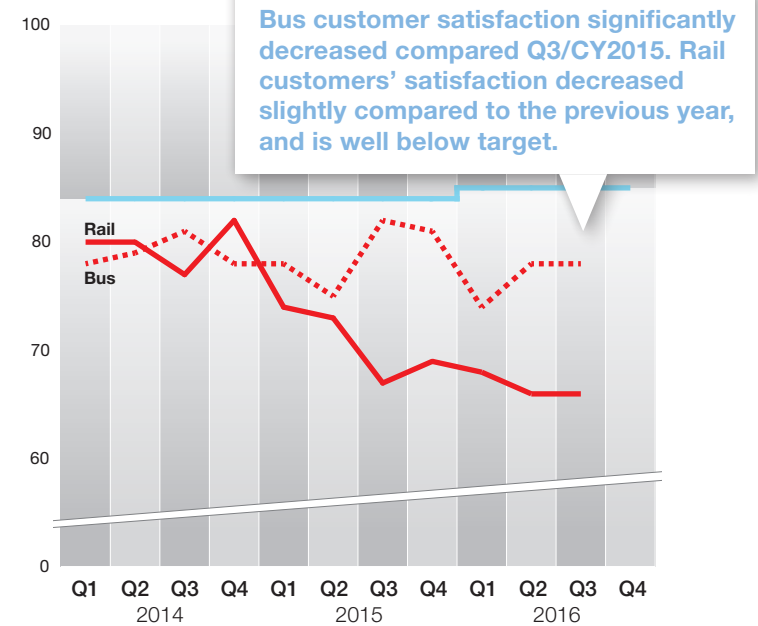
CURRENT QUARTER PERFORMANCE

### Customer Satisfaction – Rail



- Target ≥ 85% of surveyed customers

3-YEAR TREND IN PERFORMANCE



Nearly 1,800 customers submitted commendations for bus, rail, and customer service employees so far this year, nearly 30% more than the same time last year—largely driven by comments about interactions with Platform Monitors.

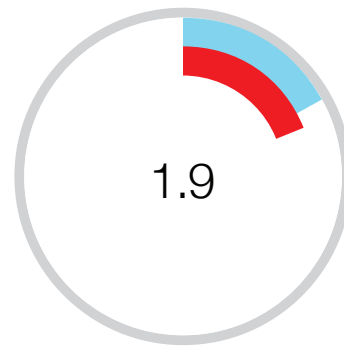


## Why did performance change?

- ▶ Bus injuries were 51% of total customer injuries for the quarter and the bus customer injury rate increased by 2% compared to Q3/2015. Collision-related injuries continue to be the leading cause of customer injuries (80%) followed by slips, trips, or falls (15%). The majority of bus customer injuries were the result of non-preventable collisions (50%). Customers falling due to not holding onto a handrail, hard breaking events, and inattention was the second leading factor for injuries (15%).
- ▶ The rail system accounted for 37% of customer injuries this quarter and the rail injury rate was 8% higher compared to Q3/2015. As in prior quarters, slips, trips, or falls, primarily on escalators or in rail stations, accounted for a large majority of injuries (90%). The primary factor in escalator injuries was passenger inattention or distraction (50%). Similarly, slips, trips, or falls in rail facilities were driven by passenger inattention or distraction (50%), uneven surfaces (10%), and intoxication (7%). The on-board injury rate is substantially lower than the other categories, accounting for only 4 injuries total.
- ▶ MetroAccess accounted for 12% of customer injuries for the quarter and the injury rate for MetroAccess customers rose by 60%. For the year, part of the increase is attributable to more inclusive standards for reportable injuries adopted this year, capturing certain incidents where the customer was not transported from the scene for medical attention or the customer was checked out as a precaution but no injury is claimed. The leading causes of MetroAccess customer injuries were collisions (44%) and slips, trips, or falls (39%).

### CURRENT QUARTER PERFORMANCE

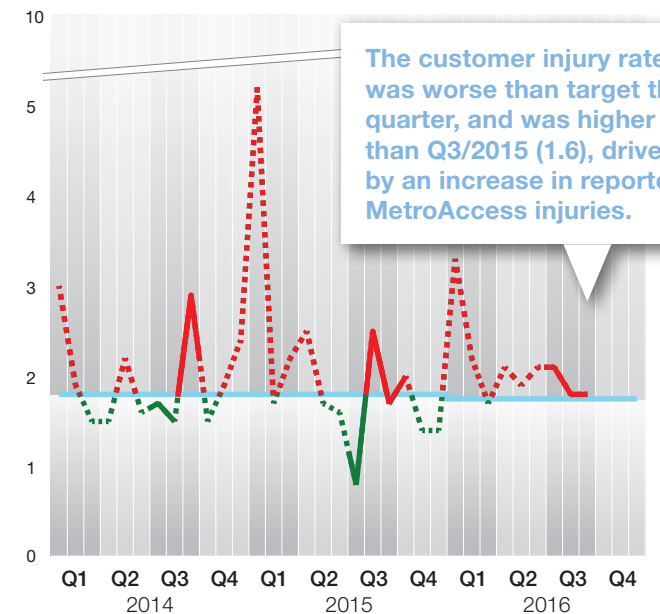
#### Customer Injuries



● Target ≤ 1.75 per million passengers



### 3-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

- ▶ Enhance safety features
  - » Introduce platform attendants at transfer stations to monitor crowds.
  - » Install public safety radio systems and cabling for cell phone service in tunnels.
  - » Improve station lighting.
- ▶ Coach staff
  - » Augment MetroAccess operator training with better methods to assist customers who have difficulty maintaining balance; this will be facilitated through a working group that will include an occupational therapist.
  - » Emphasize defensive driving tactics during bus operator training and develop weekly safety tips around frequent accident types.
  - » Schedule safety blitzes at incident hotspots to reinforce safe behavior and address unsafe conditions.
  - » Improve train operator response to passenger intercom calls.
- ▶ Submit for closure all FTA and NTSB safety recommendations.



*Holding on to handrails onboard transit vehicles may prevent injuries during braking.*

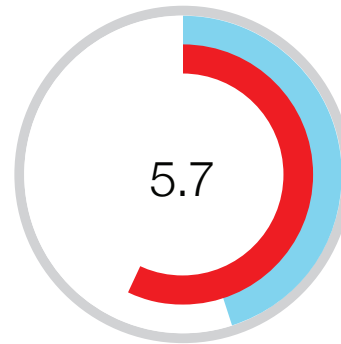


## Why did performance change?

- ▶ Motor vehicle collisions continue to be the leading employee injury type (28%), with non-preventable collisions involving buses accounting for 45% of the total. Overall, collision-related injuries doubled this quarter compared to Q3/2015 (49 to 24). Slips, trips, or falls and employees struck by or against objects each accounted for 15% of employee injuries.
- ▶ Bus Transportation had the most employee injuries in Q3/2016 (46%). Nearly one-third were the result of non-preventable collisions. Crime-related injuries were the second leading category but were fewer than Q3/2015.
- ▶ Rail Transportation accounted for 13% of employee injuries this quarter. Pushing or pulling injuries were the leading category (22%) and stress-related injuries accounted for the second-highest total (18%), driven by incidents with customers on the tracks (4 total employee injuries).
- ▶ Track and Structures accounted for 9% of employee injuries this quarter with more than half related to supporting SafeTrack activities. Non-preventable vehicle collisions while delivering materials to job sites and improper tool-use accounted for most SafeTrack-related injuries. The remaining injuries occurred during regular track maintenance and inspection activities.

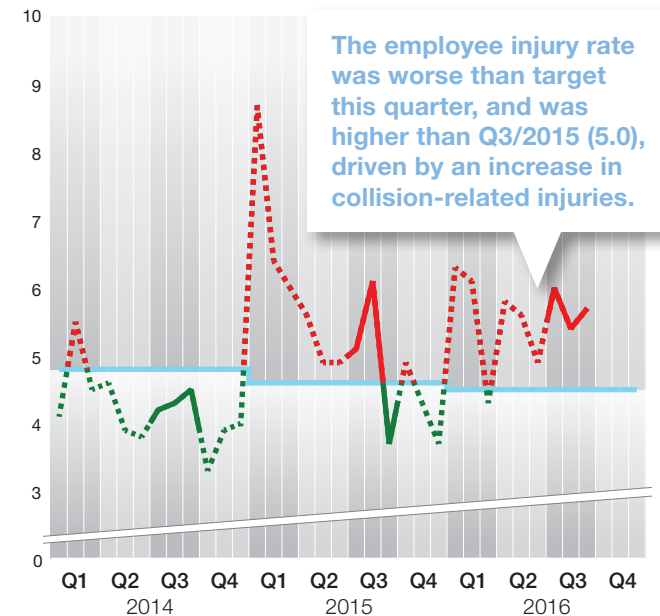
CURRENT QUARTER PERFORMANCE

### Employee Injuries



● Target ≤ 4.5 per 200,000 hours worked

3-YEAR TREND IN PERFORMANCE



## Key actions to improve performance

- ▶ Improve personal safety and security for bus operators
  - » Emphasize defensive driving tactics during bus operator training and develop weekly safety tips around frequent accident types.
  - » Continue Metro’s SafeWatch program, a partnership between Bus Services and Metro Transit Police to ensure the safety of bus operators late at night.
  - » Install additional shields to protect operators across the bus fleet.
  - » Conduct assault prevention workshops and Town Hall meetings.
- ▶ Train employees to identify hazards that may lead to injuries and improve compliance with use of personal protective equipment.
- ▶ Ensure coordination of safety issues among departments as required in the System Safety Program Plan.



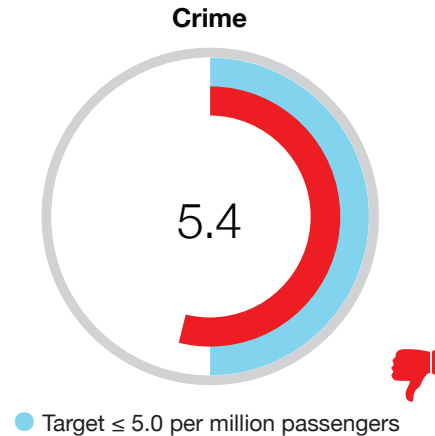
SafeTrack activities require vigilance in safety procedures for the safety of all employees within work zones.



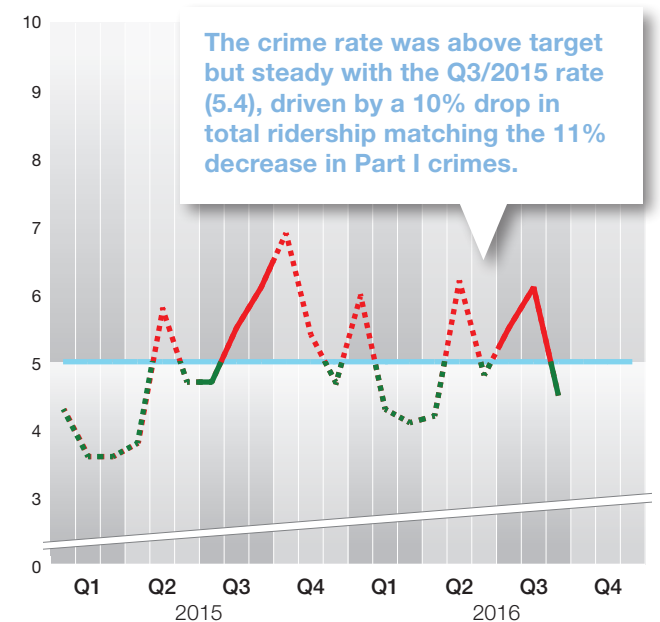
### Why Did Performance Change?

- ▶ The number of Part I crimes declined on the rail system (14%) and on buses (37%) in Q3/2016 and remained steady at bus stops and in parking lots. The reduction in bus crime sustained its positive momentum from Q1/2016 and Q2/2016, following an increase this year of both uniformed and casual clothes police deployments on buses to combat fare evasion. Bus operator assaults also decreased 9% from Q3/2015, in part driven by the focus on fare evasion and the introduction of more bus shields.
- ▶ Crime categories accounting for the majority of total Part I crimes declined compared to Q3/2015, including robberies (29%), larcenies (7%) and snatches (16%), while a few categories of less common crimes saw increases. Aggravated assaults increased from 29 to 36 (24%) and rapes from zero to three. All three rape cases were resolved with arrests made in two of the cases and the other report determined to be unfounded. One homicide occurred compared to two in Q3/2015 and Metro Transit Police arrested a suspect at the scene.
- ▶ Although crime is down for the quarter, total Part I crimes year-to-date are on par with 2015 due to higher levels in Q1/2016.

CURRENT QUARTER PERFORMANCE



2-YEAR TREND IN PERFORMANCE



### Key actions to improve performance

- ▶ Surge deployments of uniformed officers during morning and evening rush hours for increased visibility to deter aggravated assaults and other crimes in rail stations.
- ▶ Sustain the fare evasion initiative on rail and bus and continue the collaboration with bus operators and bus managers to reduce bus crime and operator assaults.
- ▶ Complete the introduction of new high visibility yellow and navy blue officer uniforms.
- ▶ Work with new Metro Transit Police Department (MTPD) Recruitment Officer to bring the force to full strength by filling vacancies.



Metro Transit Police continue to rollout new high visibility uniforms to deter crime and help Metro customers more easily find officers on the system.

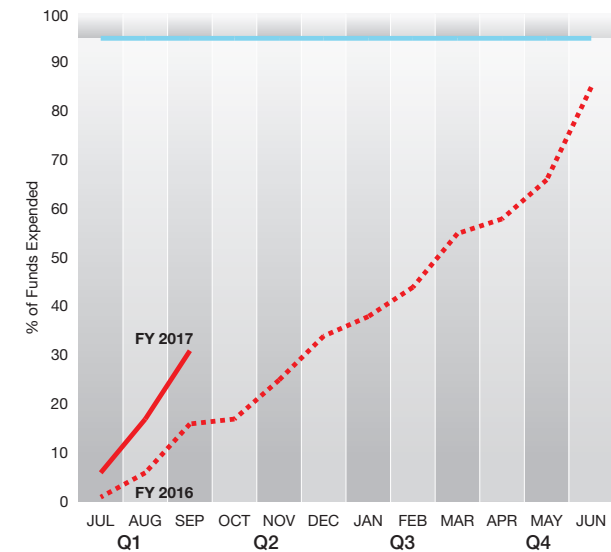
## Capital Funds Invested

- ▲ Metro's approved fiscal year 2017 capital budget is \$950 million.
- ▲ This measure tracks the rate at which the approved funding is invested in capital projects.
- ▲ The target for this measure is spending at least 95% of budgeted capital funds by the end of the fiscal year.
- ▲ In Q1/FY2017, capital expenditures were at 31% of budget for the fiscal year, which is significantly better than the performance of Q1/FY2016 (16%).

## PEOPLE AND ASSETS



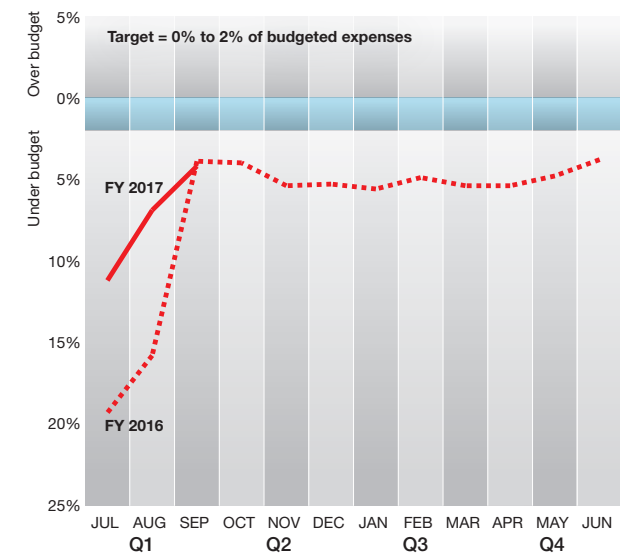
2-YEAR TREND IN PERFORMANCE (FISCAL YEAR)



## Operating Expense Variance

- ▲ Metro's approved fiscal year 2017 operating expense budget is \$1.745 billion.
- ▲ This measure calculates the cumulative year to date percentage variance between actual and budgeted expenses.
- ▲ The target for this measure is a range between 0% and 2% under budget.
- ▲ In Q1/FY2017, operating expenditures were under budget by 4%.

2-YEAR TREND IN PERFORMANCE (FISCAL YEAR)



# Ridership

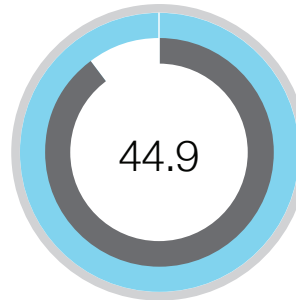


Ridership is a measure of total service consumed and an indicator of value to the region.

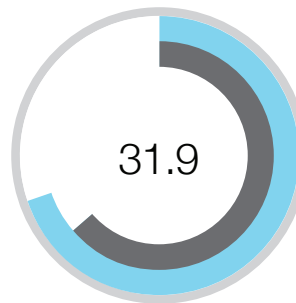
- ▲ Metro forecast total annual ridership of 341.5 million in its FY2017 budget.
- ▲ In Q1/FY2017, total ridership was 77.4 million, 12.6% below forecasted ridership of 88.6 million
  - » Metrorail ridership was 44.9 million, 15.4% below forecast.
  - » Metrobus ridership was 31.9 million, 8.5% below forecast.
  - » MetroAccess ridership was 0.6 million, 1.7% below forecast.

## CURRENT QUARTER PERFORMANCE

### Ridership—Rail



### Ridership—Bus

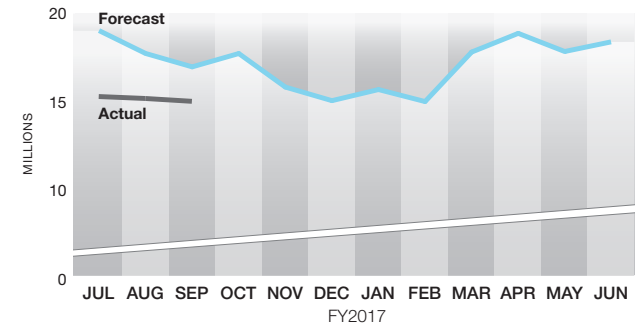


### Ridership—MetroAccess

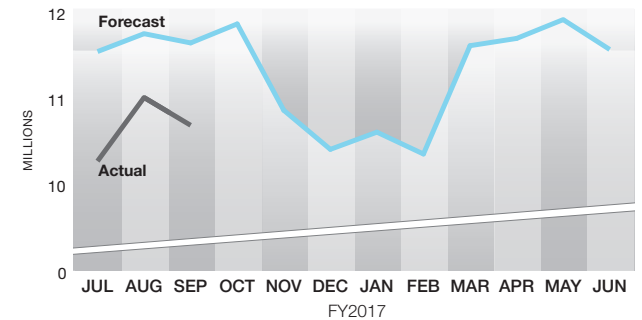


## Q3 ONE-YEAR PERFORMANCE

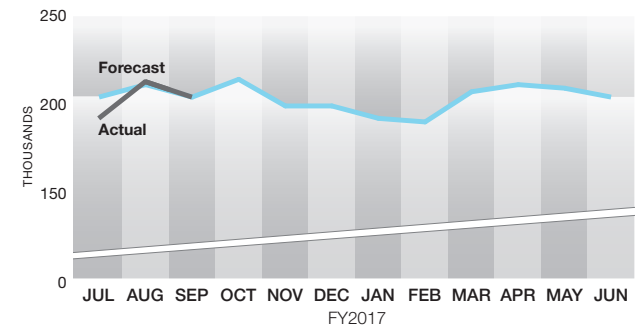
### Ridership—Rail



### Ridership—Bus



### Ridership—MetroAccess

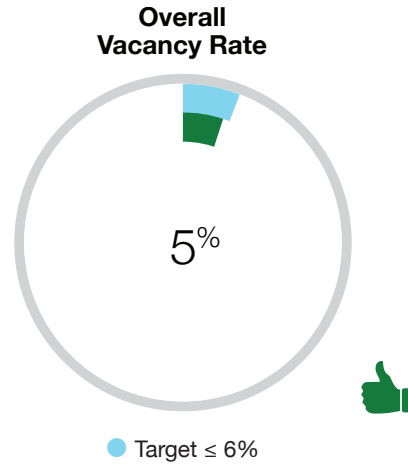




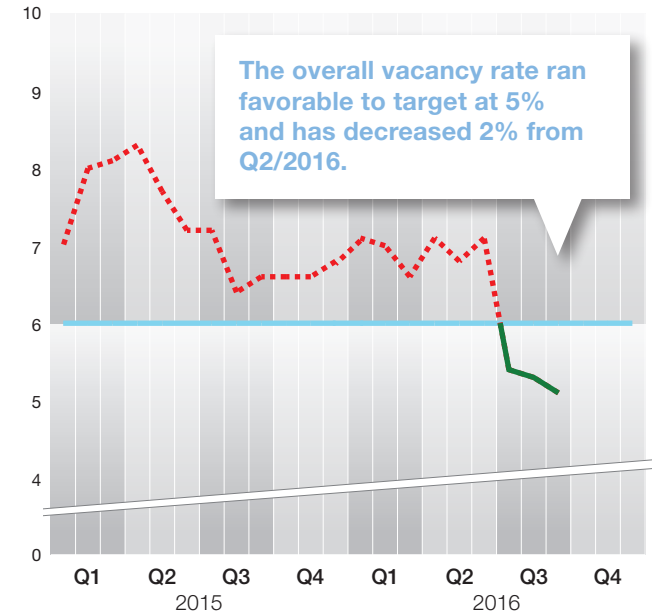
Why Did Performance Change?

- ▶ Q3/2016 vacancy rate ran favorable to target and improved 2% from Q2/2016 due to an overall reduction in the number of budgeted positions across the organization. All offices experienced a reduction in vacancies with the exception of the Office of Safety, Office of Fair Practices, and the Office of the General Counsel. The Office of Safety vacancy rate continues to be impacted by the additional Safety Officer positions that were required in support of SafeTrack.
- ▶ Q3/2016 operations critical vacancy rate of 10% improved 1% from Q2/2016, but remains slightly unfavorable to target due to critical vacancies within the Office of Safety, Metro Transit Police Department, and Chief Operating Officer (COO) Support Services Department. Improvement over the prior quarter is driven by critical hires within the Rail Services department for Systems Maintenance & Vehicle Engineering and within the COO Support Services Department for Elevator & Escalator.

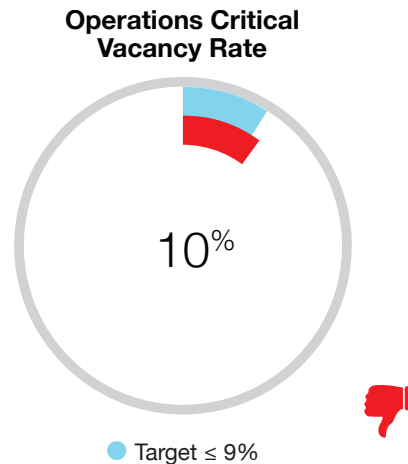
CURRENT QUARTER PERFORMANCE



2-YEAR TREND IN PERFORMANCE

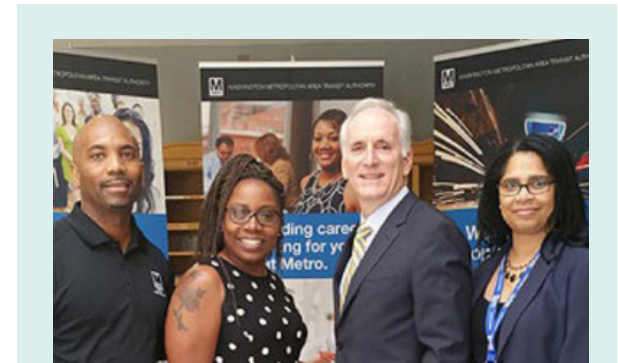


CURRENT QUARTER PERFORMANCE



Key actions to improve performance

- ▶ Prioritizing hiring actions based on executive level direction to fill the most critically-needed positions first.
- ▶ Reviewing recruitment processes and developing internal measures to identify opportunities to fill vacancies quicker.
- ▶ Regularly providing office directors and senior management reports on vacancies and status of recruitment efforts.
- ▶ Engaging external partners, such as federal and state employment agencies, technical schools, and universities, to assist with candidate sourcing.
- ▶ Continue completing a compensation market analysis of pay ranges to remain a competitive employer.



The 2<sup>nd</sup> Annual Strategic Partner Day was held in July. Partnerships with community-based organizations, state employment agencies, professional and trade associations, and other entities positively promote Metro as an employer of choice and establish qualified and diverse candidate pools.





DBEs are for-profit small businesses wherein socially and economically disadvantaged individuals (including ethnic minorities, women, and other individuals evaluated on a case-by-case basis) own at least a 51% interest, control management and daily business operations, and possess a DBE certification from the relevant state—generally through the state Unified Certification Program (UCP).

The measure for DBE awards, the DBE Participation Rate, calculates the percentage of contract dollars awarded to DBEs. Each Federal Fiscal Year (FFY), Metro sets a target for the percentage of contract dollars to be awarded to DBEs.

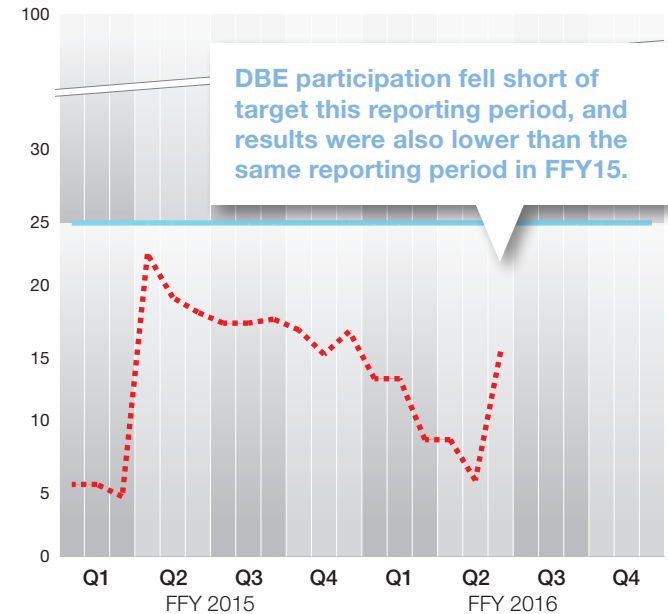
- ▶ In recent Federal Fiscal Years (FFY), the target has been 25%.
- ▶ For the first reporting period in FFY16, which covers October 1, 2015–March 31, 2016, Metro fell short of target, at 15.4% DBE participation.

DBE results are updated semi-annually in the Vital Signs Report to align with semi-annual federal fiscal year reporting. The next DBE report will be included with the Q4/2016 Vital Signs Report.

## Key actions to improve performance

- ▶ DBE office will partner with Metro's Office of Procurement and Materials to hold kick-off meetings after WMATA contracts containing DBE goals have been awarded. The DBE Office will provide information on topics such as DBE reporting, substitution, and prompt payment requirements. These initiatives will be vital to educating both Prime contractors and DBE subcontractors on the FTA reporting requirements, while emphasizing the importance of following all procedures related to DBE compliance.
- ▶ Attendance of the owner(s) or a representative of the Prime Contractor and DBE subcontractor firms at kick-off meetings will be incorporated as a post-contract award procedure as attendance will represent acknowledgement of contracting procedures having been explained.

2-YEAR TREND IN PERFORMANCE





## Why did performance change?

- ▶ Energy consumption is typically highest in the summer months as cooling systems in facilities, trains and buses are operational. Factors driving higher energy use per vehicle mile this year include hotter temperatures (a 10 percent increase in days requiring air conditioning), a slightly longer utility billing period, and rail maintenance and service disruptions (SafeTrack, speed restrictions) that result in higher rates of traction power use per vehicle mile. Traction power represents over 30% of the Authority’s energy use so changes in efficiency in this area have a large impact on Metro’s performance on this measure. However, due to Metro’s successful implementation of several projects to improve energy efficiency, overall energy consumption increased only slightly compared to the same period last year.
- ▶ Like energy usage, water consumption is typically highest in Q3 because of the large quantities of water used by station chillers during summer months. Hotter temperatures compared to Q3/2015 led to about a 6 percent increase in water consumption per vehicle mile.

## Key actions to improve performance

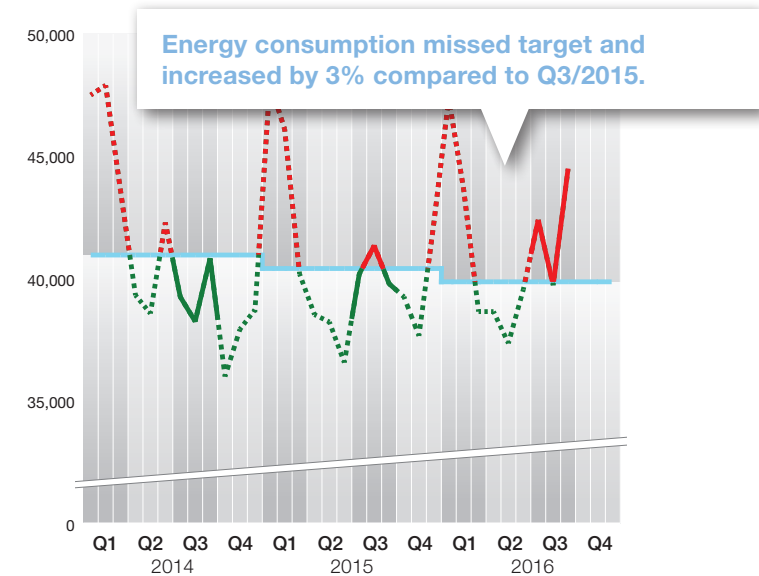
### ADVANCE ENERGY EFFICIENCY

- ▶ Complete facility and fleet energy audit and use information to make financially beneficial investments.
- ▶ Implement an Authority-wide energy monitoring system to guide energy management and reduce operating expenses.
- ▶ Complete implementation of anti-idling technology on fleet to reduce unnecessary fuel consumption.

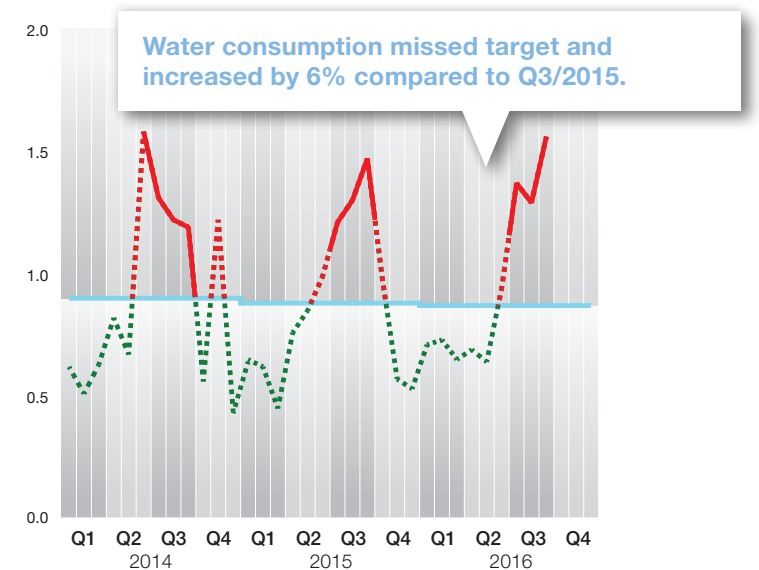
### REDUCE WATER CONSUMPTION

- ▶ Expand remote monitoring of Metro station chiller towers to reduce water consumption, reduce operating expenses, and extend the life of Metro’s chiller systems.

3-YEAR TREND IN PERFORMANCE – Energy Usage



3-YEAR TREND IN PERFORMANCE – Water Usage



## Key Performance Indicator (KPI) Definitions

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>QUALITY SERVICE</b>		
<b>Bus On-Time Performance</b>	<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>Number of time points that arrived on time by route based on a window of 2 minutes early and 7 minutes late ÷ Total number of time points scheduled (by route)</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>
<b>Bus Fleet Reliability</b>	<p>Mean Distance Between Failures (MDBF)</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>
<b>Bus Crowding</b>	<p>Ratio of bus seats filled</p> <p>Top load recorded on a route during a time period ÷ actual bus seat capacity</p>	<p>Bus crowding is a factor of bus customer satisfaction. This measure can inform decision making regarding bus service plans.</p>
<b>Rail Customer On-Time Performance</b>	<p>Percentage of customer journeys completed on time</p> <p>Number of journeys completed on time ÷ Total number of journeys</p>	<p>Rail Customer On-Time Performance (OTP) communicates the reliability of rail service, which is a key driver of customer satisfaction. OTP measures the percentage of customers who complete their journey within the maximum amount of time it should take per WMATA service standards. The maximum time is equal to the train run-time ÷ a headway (scheduled train frequency) ÷ several minutes to walk between the fare gates and platform. These standards vary by line, time of day, and day of the week. Actual journey time is calculated from the time a customer taps a SmarTrip® card to enter the system, to the time when the SmarTrip® card is tapped to exit.</p> <p>Factors that can effect OTP include: railcar availability, fare gate availability, elevator and escalator availability, infrastructure conditions, speed restrictions, single-tracking around scheduled track work, railcar delays (e.g., doors), or delays caused by sick passengers.</p>
<b>Rail Fleet Reliability</b>	<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>

*continued*

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Rail Crowding</b>	<p>Number of rail passengers per car</p> <p>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</p> <p>Trained Metro observers are strategically placed around the system during its busiest times to monitor and report on crowding.</p> <p>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.</p>	<p>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.</p> <p>Additional Board standards have been set for:</p> <ul style="list-style-type: none"> <li>▶ Hours of service—the Metrorail system is open to service customers</li> <li>▶ Headway—scheduled time interval between trains during normal weekday service</li> </ul>
<b>Railcar Availability</b>	<p>Percentage of active railcars available for service</p> <p>Cars released for service at 7 AM ÷ Total active railcars</p>	<p>Railcar availability is a key driver of on-time performance (OTP) and supports the ability to meet the Board standard for crowding. When the availability target is met, scheduled departures of all 8- and 6-car trains from end of line stations are possible. When not enough railcars are available, train lengths are first shortened to six cars, which can contribute to crowding. When railcar availability dips further and there are not enough trains to depart from end-of-line stations, headways (time between trains) increase, lowering OTP for customers.</p>
<b>Elevator and Escalator Availability</b>	<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>
<b>Customer Satisfaction</b>	<p>Survey respondent rating</p> <p>Number of survey respondents with high satisfaction ÷ Total number of survey respondents</p>	<p>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.</p> <p>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).</p>

*continued*

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>SAFETY AND SECURITY</b>		
<b>Customer Injury Rate</b>	Customer injury rate: $\frac{\text{Number of injuries}}{\text{Number of passengers} \div 1,000,000}$	<p>The customer injury rate is based on National Transit Database (NTD) reporting criteria. It includes 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>
<b>Employee Injury Rate</b>	Employee injury rate: $\frac{\text{Number of injuries}}{\text{Total work hours} \div 200,000}$	<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>
<b>Crime Rate</b>	Crime rate: $\frac{\text{Reported Part I crimes}}{\text{Number of passengers} \div 1,000,000}$	<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.</p> <p>This measure provides an indicator of the 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>

*continued*

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>PEOPLE AND ASSETS</b>		
<b>Capital Funds Invested</b>	Percentage of capital budget spent  Cumulative monthly capital expenditures ÷ fiscal year capital budget, including actual rollover from previous fiscal year	This indicator tracks spending progress of the Metro Capital Improvement Program.
<b>Operating Expense Variance</b>	Variance of actual to budgeted operating expenses  100% – (cumulative monthly operating expenditures ÷ fiscal year operating budget)	This indicator tracks Metro's progress managing its expenses.
<b>Ridership</b>	Total Metro ridership  Metrorail passenger trips + Metrobus passenger boardings + MetroAccess passenger trips	Ridership is a measure of total service consumed and an indicator of value to the region. Drivers of this indicator include service quality and accessibility.  Passenger trips are defined as follows:  ▶ <b>Metrorail reports passenger trips.</b> A passenger trip is counted when a customer enters through a faregate. In an example where a customer transfers between two trains to complete their travel one trip is counted.  ▶ <b>Metrobus reports passenger boardings.</b> A passenger boarding is counted at the farebox when a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are counted.  ▶ <b>MetroAccess reports passenger trips.</b> A fare paying passenger traveling from an origin to a destination is counted as one passenger trip.  *For performance measures and target setting, Metro uses total ridership numbers including passengers on bus shuttles to more fully reflect total passengers served. Metro does not include bus shuttle passenger trips in its budget or published ridership forecasts.
<b>Vacancy Rate</b>	Percentage of budgeted positions that are vacant  (Number of budgeted positions – number of employees in budgeted positions) ÷ number of budgeted positions	This measure indicates how well Metro is managing its human capital strategy to recruit new employees in a timely manner, in particular operations-critical positions. Factors influencing vacancy rate can include: recruitment activities, training schedules, availability of talent, promotions, retirements, among other factors.
<b>Disadvantage Business Enterprise (DBE) Contracts</b>	DBE Participation Rate:  Total contract dollars committed to DBEs ÷ Total contract dollars awarded to Primes	FTA DOT's DBE Program seeks to ensure nondiscrimination in the award and administration of DOT-assisted contracts.  DBE Participation Rate provides visibility into how well WMATA is doing to ensure that DBE certified businesses are awarded a specified percentage (target) of contracted work at WMATA.

*continued*

<b>KPI</b>	<b>How is it measured?</b>	<b>What does this mean and why is it key to our strategy?</b>
<b>Water Usage</b>	Rate of gallons of water consumed per vehicle mile Total gallons of water consumed ÷ Total vehicle miles	This measure reflects the level of water consumption Metro uses to run its operations. Water consumption is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.
<b>Energy Usage</b>	Rate of British Thermal Units (BTUs) consumed per vehicle mile  MBTU (Gasoline + Natural Gas + Compressed Natural Gas + Traction Electricity + Facility Electricity) × 1000 ÷ Total vehicles miles	This measure reflects the level of various types of energy Metro uses to power its operations. Energy consumption is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.
<b>Greenhouse Gas Emissions</b>	Rate of metric tons of CO <sub>2</sub> emitted per vehicle mile  (CO <sub>2</sub> metric tons generated from gas, CNG and diesel used by Metro revenue and non-revenue vehicles + CO <sub>2</sub> metric tons generated from electricity and natural gas used by facilities and rail services) ÷ Total vehicle miles	Greenhouse Gas emissions reflect how Metro sources its energy used to power its operations, as well as the amount of energy it uses. Reducing Greenhouse Gas emissions is a key area of Metro's Sustainability Initiative, which brings focus to Metro's efforts to provide stewardship of the environmental systems that support the region.

## Glossary of Terms

<b>Action</b>	Specific and discrete steps taken that move the organization toward achieving the Strategic Goals.
<b>Key Performance Indicator (KPI)</b>	A quantifiable measure externally reported that tracks progress toward achieving the Board adopted Strategic Goals.
<b>Mission</b>	Overarching purpose of the organization.
<b>Performance Management Framework</b>	An organizational process and culture that values measurement as a tool to deliver results.
<b>Performance Measure</b>	A quantifiable measure generally tracked internally as a management tool to gauge progress being made.
<b>Strategic Goal</b>	Adopted by the Board to provide direction that aligns the organization to attain the mission.
<b>Target</b>	End point or direction for performance measures and KPI's. Targets define success.
<b>Vision</b>	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 2014	80.4%	78.4%	78.2%	77.6%	76.9%	77.8%	78.7%	78.5%	76.0%	75.7%	77.9%	78.4%	78.1%
CY 2015	79.9%	78.9%	77.2%	76.8%	75.6%	77.3%	79.1%	80.4%	76.2%	75.6%	76.8%	78.4%	77.9%
CY 2016	77.0%	78.4%	77.7%	77.3%	76.5%	74.7%	77.1%	77.3%	72.4%				76.5%

KPI: BUS ON-TIME PERFORMANCE BY TIME PERIOD [TARGET 79%]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Early AM (4AM-6AM)	86.5%	87.5%	87.9%	88.2%	87.3%	87.5%	88.1%	88.4%	87.1%				87.6%
AM Peak (6AM-9AM)	80.0%	80.7%	81.3%	81.0%	81.0%	80.5%	82.4%	81.6%	74.6%				80.4%
Mid Day (9AM-3PM)	78.0%	79.8%	78.3%	78.4%	77.8%	75.2%	77.4%	77.6%	74.3%				77.4%
PM Peak (3PM-7PM)	70.6%	71.8%	69.1%	71.0%	69.2%	66.8%	71.4%	71.9%	65.0%				69.6%
Early Night (7PM-11PM)	78.9%	81.1%	77.6%	77.8%	77.4%	75.3%	76.9%	77.1%	73.6%				77.3%
Late Night (11PM-4AM)	77.0%	80.6%	78.6%	76.8%	76.2%	74.1%	73.5%	74.2%	73.9%				76.1%

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 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	7,127
CY 2015	6,259	7,434	6,109	7,016	6,405	7,328	6,499	7,327	7,542	7,307	9,121	7,893	6,852
CY 2016	8,301	7,827	8,343	9,119	8,711	7,736	7,514	7,389	8,231				8,087

\* Per page 19, 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.

*continued*



**BUS FLEET RELIABILITY (BUS MEAN DISTANCE BETWEEN FAILURE BY FLEET TYPE)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>CNG</b>	6,619	6,551	6,768	9,250	7,677	7,140	6,652	7,574	7,722				7,283
<b>Hybrid</b>	10,312	9,221	10,364	10,294	10,065	9,322	8,414	7,364	8,639				9,184
<b>Clean Diesel</b>	7,506	7,498	7,283	8,250	8,351	5,799	8,160	8,265	8,157				7,567
<b>All Other</b>	4,944	5,057	4,759	3,200	4,282	3,689	3,670	4,693	6,427				4,322

**KPI: RAIL CUSTOMER ON-TIME PERFORMANCE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>CY 2016</b>	69.9%	72.0%	77.6%	80.5%	69.3%	71.4%	71.0%	69.3%	64.4%				71.9%

**RAIL CUSTOMER ON-TIME PERFORMANCE BY LINE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>Red Line</b>	69.7%	74.4%	81.9%	78.2%	65.3%	73.8%	75.5%	62.5%	63.1%				71.9%
<b>Blue Line</b>	61.4%	60.8%	63.1%	84.8%	75.1%	71.0%	69.9%	77.5%	63.3%				70.1%
<b>Orange Line</b>	62.2%	61.6%	67.6%	72.3%	58.1%	50.1%	53.2%	58.3%	40.1%				58.9%
<b>Green Line</b>	76.4%	78.4%	83.3%	82.1%	76.1%	76.8%	78.2%	72.1%	71.8%				77.3%
<b>Yellow Line</b>	76.7%	79.6%	86.0%	82.9%	79.7%	79.1%	66.6%	75.2%	64.3%				77.1%
<b>Silver Line</b>	73.7%	72.9%	77.0%	80.3%	62.7%	51.8%	55.6%	69.3%	56.8%				66.8%

**RAIL CUSTOMER ON-TIME PERFORMANCE BY TIME PERIOD**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>AM Rush</b>	67.5%	73.8%	79.4%	79.5%	73.6%	70.9%	71.1%	71.4%	65.5%				72.8%
<b>Mid-day</b>	78.2%	77.9%	80.3%	87.4%	70.5%	76.6%	81.0%	77.6%	75.4%				78.4%
<b>PM Rush</b>	66.0%	70.4%	73.3%	75.4%	65.6%	64.3%	61.8%	59.6%	54.6%				65.9%
<b>Evening</b>	78.0%	80.5%	80.7%	89.1%	80.4%	83.6%	80.1%	80.1%	73.3%				80.9%
<b>Late Night</b>	83.6%	84.1%	86.1%	89.3%	83.1%	89.5%	86.5%	86.5%	83.0%				85.9%
<b>Weekend</b>	66.8%	53.6%	77.0%	79.5%	55.7%	73.1%	70.9%	68.9%	64.3%				68.7%

*continued*

**KPI: RAIL ON-TIME PERFORMANCE (HEADWAY ADHERENCE) [TARGET 91%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>CY 2014</b>	89.2%	92.0%	90.4%	92.0%	91.7%	91.2%	92.2%	89.7%	90.7%	90.1%	88.4%	89.7%	91.1%
<b>CY 2015</b>	87.3%	83.9%	88.5%	89.9%	87.0%	84.6%	84.4%	82.8%	78.9%	75.6%	80.1%	82.3%	87.0%
<b>CY 2016</b>	78.1%	81.7%	85.9%	87.3%	79.9%	80.4%	78.2%	76.4%	77.6%				80.8%

**RAIL ON-TIME PERFORMANCE BY LINE (HEADWAY ADHERENCE)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>Red Line</b>	72.5%	82.4%	88.7%	88.5%	75.6%	86.1%	86.1%	73.6%	81.7%				82.3%
<b>Blue Line</b>	80.8%	71.5%	79.6%	87.9%	80.9%	79.2%	79.2%	81.0%	73.2%				79.5%
<b>Orange Line</b>	78.0%	81.0%	82.6%	84.1%	74.9%	71.8%	70.4%	70.7%	70.7%				76.3%
<b>Green Line</b>	79.9%	90.0%	88.2%	87.7%	86.0%	85.3%	80.5%	77.4%	80.2%				84.1%
<b>Yellow Line</b>	86.0%	91.7%	94.6%	94.2%	93.5%	93.7%	80.9%	88.8%	88.9%				90.8%
<b>Silver Line</b>	78.4%	76.2%	79.9%	82.9%	75.5%	56.3%	64.3%	73.3%	69.1%				73.7%

**RAIL ON-TIME PERFORMANCE BY TIME PERIOD (HEADWAY ADHERENCE)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>AM Rush</b>	72.6%	80.7%	83.9%	82.7%	79.8%	75.4%	70.2%	70.1%	72.6%				76.8%
<b>Mid-day</b>	86.7%	85.5%	91.3%	94.6%	82.6%	88.0%	89.7%	87.7%	86.1%				88.2%
<b>PM Rush</b>	72.2%	78.0%	81.7%	83.0%	76.2%	73.2%	67.9%	65.8%	69.6%				74.6%
<b>Evening</b>	89.1%	89.3%	92.4%	94.5%	89.1%	96.9%	93.7%	92.4%	92.7%				92.5%

**KPI: RAIL FLEET RELIABILITY (RAIL MEAN DISTANCE BETWEEN DELAYS) [TARGET 65,000 MILES]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
<b>CY 2014</b>	44,530	66,600	63,127	77,957	64,848	55,522	84,627	65,042	73,150	89,891	63,436	61,000	60,485
<b>CY 2015</b>	53,784	41,558	63,588	60,242	69,260	54,779	56,446	59,196	60,872	65,900	63,564	51,599	56,165
<b>CY 2016</b>	39,657	47,239	59,131	80,943	81,278	85,389	55,850	73,246	65,416				62,116

*continued*

**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	56,737	58,681	77,629	105,734	174,016	94,926	50,031	62,903	50,941				72,275
2000/3000 series	51,392	57,103	66,428	78,186	72,896	119,880	55,279	136,774	61,239				70,130
4000 series	21,463	23,535	18,865	31,649	23,898	29,244	30,110	24,528	55,677				26,034
5000 series	24,104	34,868	51,345	79,911	62,025	37,149	45,753	65,966	44,059				44,575
6000 series	58,510	56,063	89,422	117,154	173,971	632,365	124,506	73,272	132,893				101,303
7000 series	16,986	50,712	167,196	98,498	100,820	118,706	54,560	69,168	107,486				73,175

**RAIL FLEET AVAILABILITY [TARGET 85%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
CY 2014	83.9%	85.4%	84.4%	85.1%	84.5%	84.9%	85.8%	86.9%	87.8%	88.2%	86.7%	87.5%	85.4%
CY 2015	87.1%	84.0%	85.6%	86.6%	84.3%	79.4%	79.9%	80.1%	82.3%	83.1%	81.2%	80.8%	83.2%
CY 2016	77.1%	78.8%	81.8%	81.6%	80.6%	76.1%	73.1%	73.2%	79.1%				77.9%

**KPI: METROACCESS ON-TIME PERFORMANCE [TARGET 92%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
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%	93.5%	94.8%	94.7%	93.9%	93.0%	93.4%	93.7%	91.7%
CY 2016	93.7%	93.1%	93.0%	92.5%	93.0%	92.3%	92.0%	91.4%					92.6%*

\* Data for September not available in time for publication. YTD reflects January–August results.

*continued*

**KPI: ESCALATOR SYSTEM AVAILABILITY [TARGET 93%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
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%	92.9%	93.3%	93.4%	92.7%	93.2%	93.3%	93.6%
CY 2016	93.6%	93.5%	94.3%	93.9%	93.3%	93.1%	93.0%	92.1%	92.5%				93.3%

**KPI: ELEVATOR SYSTEM AVAILABILITY [TARGET 97%]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
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%	96.7%	97.4%	96.4%	96.4%	96.4%	97.2%	97.0%
CY 2016	97.2%	96.7%	97.1%	97.0%	96.8%	96.6%	96.2%	96.7%	96.6%				96.8%

**KPI: CUSTOMER SATISFACTION RATING [TARGET 85%]**

	Q3/2013	Q4/2013	Q1/2014	Q2/2014	Q3/2014	Q4/2014	Q1/2015	Q2/2015	Q3/2015	Q4/2015	Q1/2016	Q2/2016	Q3/2016
Metrobus	81%	76%	78%	79%	81%	78%	78%	75%	82%	81%	74%	78%	78%
Metrorail	84%	76%	80%	80%	77%	82%	74%	73%	67%	69%	68%	66%	66%

**CUSTOMER COMMENDATION RATE (PER MILLION PASSENGERS)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
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	6.7	6.0	5.3	6.0	6.4	6.7	5.9
CY 2016	9.5	8.5	10.6	7.6	8.4	8.8	8.4	6.2	6.7				8.3

**CUSTOMER COMPLAINT RATE (PER MILLION PASSENGERS)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
CY 2014	92	88	74	81	78	83	90	85	96	89	71	69	82
CY 2015	82	82	65	69	89	88	86	88	112	80	81	85	79
CY 2016	114	98	105	93	103	122	164	138	126				118

*continued*

**KPI: CUSTOMER INJURY RATE (PER MILLION PASSENGERS) [TARGET ≤ 1.75]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
CY 2014	3.0	1.9	1.5	1.5	2.2	1.6	1.7	1.5	2.9	1.5	1.9	2.4	2.0
CY 2015	5.2	1.7	2.2	2.5	1.7	1.6	0.8	2.5	1.7	2.0	1.4	1.4	2.2
CY 2016	3.3	2.2	1.7	2.1	1.9	2.1	1.8	1.8	2.0				2.1

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

**KPI: EMPLOYEE INJURY RATE (PER 200,000 HOURS) [TARGET ≤ 4.5]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
CY 2014	4.1	5.5	4.5	4.6	3.9	3.8	4.2	4.3	4.5	3.3	3.9	4.0	4.4
CY 2015	8.7	6.4	6.0	5.6	4.9	4.9	5.1	6.1	3.7	4.9	4.3	3.7	5.7
CY 2016	6.1	5.5	4.3	5.8	5.6	4.9	6.0	5.4	5.7				5.4

**KPI: CRIMES [TARGET ≤ 5.0 PER MILLION PASSENGERS]**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
CY 2015	4.3	3.6	3.6	3.8	5.8	4.7	4.7	5.5	6.1	6.9	5.4	4.7	4.7
CY 2016	6.1	4.4	4.2	4.2	6.2	4.8	5.5	6.1	4.5				5.1

*continued*

<b>CRIMES BY TYPE</b>													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Robbery	33	30	28	29	39	30	21	28	12				250
Larceny (Snatch/Pickpocket)	30	28	29	27	18	15	26	26	22				221
Larceny (Other)	46	31	46	49	86	70	73	87	64				552
Motor Vehicle Theft	4	2	5	3	6	7	3	7	5				42
Attempted M V Theft	0	1	0	0	0	0	0	0	1				2
Aggravated Assault	15	16	12	6	14	10	17	10	9				109
Rape	0	0	0	1	2	1	1	1	1				7
Burglary	1	1	0	0	0	0	0	0	0				2
Arson	0	0	1	0	0	0	0	0	2				3
2016 Part1 Crimes	129	109	121	115	165	133	141	159	116				1,188
2016 Homicides	0	0	1	1	1	0	1	0	0				4

\* Homicides that occur on WMATA property are investigated by other law enforcement agencies. These cases are shown for public information; however, the cases are reported by the outside agency and are not included in MTPD crime statistics.

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OPERATING EXPENSE VARIANCE [TARGET 0-2 % BELOW BUDGET]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD
FY 2015	1.5%	1.1%	-0.7%	-0.6%	-0.4%	-0.2%	-0.4%	0.3%	0.7%	2.3%	2.1%	3.6%	3.6%
FY 2016	19.3%	15.8%	3.9%	4.0%	5.4%	5.3%	5.6%	4.9%	5.4%	5.4%	4.8%	3.8%	3.8%
FY 2017	11.2%	6.9%	4.2%										4.2%

CAPITAL FUNDS INVESTED [TARGET 95% OF CAPITAL BUDGET]													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY 2015	1%	3%	7%	11%	16%	24%	25%	29%	40%	45%	48%	65%	65.0%
FY 2016	1%	6%	16%	17%	25%	34%	38%	44%	55%	58%	66%	85%	85.0%
FY 2017	5.9%	17.5%	30.6%										30.6%

RIDERSHIP BY MODE [BUDGET FORECAST 341.5 MILLION FY2017]														
FY2017		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD
Rail	Forecast	18,812,600	17,524,000	16,770,000	17,521,000	15,631,000	14,866,000	15,491,000	14,815,000	17,603,400	18,657,000	17,632,000	18,177,000	53,106,600
	Actual	15,098,254	14,988,724	14,829,231										44,916,209
Bus	Forecast	11,524,000	11,731,000	11,624,000	11,844,000	10,844,000	10,392,000	10,591,000	10,338,000	11,592,000	11,676,000	11,894,000	11,548,000	34,879,000
	Actual	10,255,630	10,992,048	10,670,668										31,918,346
Access	Forecast	202,000	209,000	202,000	212,000	197,000	197,000	190,000	188,000	205,000	209,000	207,000	202,000	613,000
	Actual	189,991	210,705	202,000*										602,696
Total	Forecast	30,538,600	29,464,000	28,596,000	29,577,000	26,672,000	25,455,000	26,272,000	25,341,000	29,400,400	30,542,000	29,733,000	29,927,000	88,598,600
	Actual	25,543,875	26,191,477	25,701,899										77,437,251

\*MetroAccess ridership figures for the most recent month were not yet available at the time of publication and the forecast number was used to calculate quarterly totals.

VACANCY RATE [TARGET 6.0%]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2014	6.4%	6.3%	5.6%	5.1%	4.7%	4.7%	6.0%	5.7%	5.5%	5.6%	5.9%	6.1%	5.5%
2015	7.0%	8.0%	8.1%	8.3%	7.7%	7.2%	7.2%	6.4%	6.6%	6.6%	6.6%	6.8%	6.6%
2016	7.1%	7.0%	6.6%	7.1%	6.8%	7.1%	4.9%	5.0%	5.1%				5.1%

continued

OPERATIONS CRITICAL VACANCY RATE [TARGET 9.0%]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2015											9.4%	11.1%	10.2%
2016	11.3%	11.4%	11.5%	11.5%	10.1%	10.8%	9.8%	9.8%	9.6%				9.6%

WATER USAGE (GALLONS PER VEHICLE MILE) [TARGET 0.87]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2014	0.62	0.51	0.63	0.82	0.67	1.58	1.31	1.22	1.19	0.56	1.22	0.44	0.81
2015	0.65	0.62	0.45	0.76	0.86	1.07	1.21	1.30	1.47	0.98	0.57	0.53	0.74
2016	0.71	0.73	0.65	0.69	0.64	0.94	1.37	1.29	1.56				0.95

ENERGY USAGE (BTU/VEHICLE MILE) [TARGET 39,876]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2014	47,504	47,897	43,582	39,328	38,581	42,298	39,264	38,260	40,834	36,008	37,937	38,734	43,053
2015	48,010	46,105	40,195	38,538	38,235	36,579	40,193	41,349	39,798	39,262	37,668	42,273	41,107
2016	47,371	43,640	37,952	38,660	37,365	39,565	42,404	39,734	44,477				41,055

GREENHOUSE GAS EMISSIONS PER VEHICLE MILE [TARGET 3.64]													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2015	4.98	4.65	4.06	3.97	3.91	3.79	4.16	4.18	4.19	4.07	3.80	4.32	4.20
2016	4.76	4.41	3.79	4.01	3.80	4.03	4.39	4.05	4.63				4.19

DBE AWARDS/COMMITMENTS FOR FFY16, PERIOD 1 (OCT 1, 2015 – MAR. 31 2016)									
AWARDS/COMMITMENTS MADE (total contracts and subcontracts committed during this reporting period)	Totals Dollars	Total Number	Total to DBEs (dollars)	Total to DBEs (number)	Total to DBEs/Race Conscious (dollars)	Total to DBEs/Race Conscious (number)	Total to DBEs/Race Neutral (dollars)	Total to DBEs/Race Neutral (number)	Percentage of Total Dollars to DBEs
Prime Contracts Awarded this Period	\$64,975,570	19	\$303,955	1			\$303,955	1	0.47%
Subcontracts awarded/committed this period	\$9,710,000	15	\$9,710,000	15	\$9,710,000	15	\$0	0	100.00%
<b>Total</b>			<b>\$10,013,955</b>	<b>16</b>	<b>\$9,710,000</b>	<b>15</b>	<b>\$303,955</b>	<b>1</b>	<b>15.41%</b>