

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

# PERFORMANCE REPORT

FY2020 PRE-PANDEMIC PERFORMANCE

July 2019 – March 2020

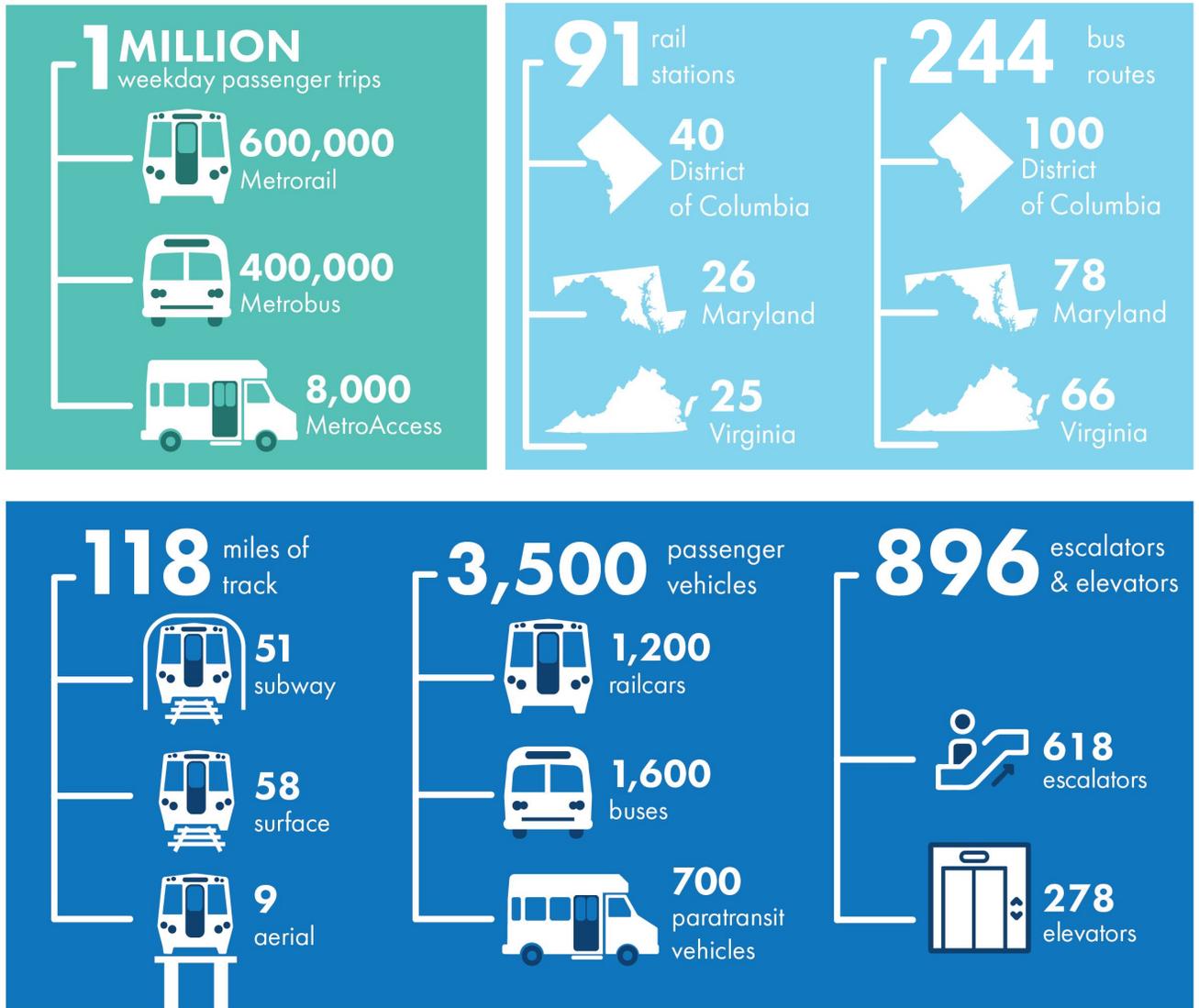


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October 5, 2020



# ABOUT METRO<sup>1</sup>

The Washington Metropolitan Area Transit Authority (Metro) is one of the largest transit organizations in the United States. Formed in 1967 under an interstate compact among the District of Columbia, the State of Maryland, and the Commonwealth of Virginia, the Metro service area is approximately 1,500 square miles, with a population of approximately four million people. Metro provides three core transit functions: Metrorail, Metrobus, and MetroAccess paratransit. Prior to the pandemic, average weekday passenger trips combined on all three modes totaled approximately one million.



<sup>1</sup>As of March 1, 2020. The COVID-19 pandemic has impacted these statistics.

# HOW TO READ THIS REPORT

## Metro's Performance Before the Pandemic

The drastic changes caused by the pandemic have significantly impacted operations and the results of all Metro's performance measures, which focus on safety, quality service, and financial responsibility. Ultimately, the result of these performance measures during the pandemic do not accurately reflect changes in operational performance—they reflect the unique circumstances of these unprecedented times. Accordingly throughout this report, Metro displays the results for all measures before the pandemic,<sup>1</sup> and compares the result to the established fiscal year 2020 (FY20) target. Colored indicators throughout the report show the pre-pandemic status against target. Cumulative count targets, originally set for the entire fiscal year, are adjusted to mathematically match the 9.5 months of the pre-pandemic period and denoted with a carrot (^) throughout the report. This period of normal operations can be directly compared to prior years and the intended targets, demonstrating Metro's performance growth or regression this fiscal year. Prior to the pandemic, Metro met or exceeded target for 16 out of 21 measures, including: ridership, 8 out of 12 safety and security measures, and 6 out of 7 quality service measures.

### Ridership

**Total ridership exceeded budget forecast prior to the pandemic**

### Customer Satisfaction

**Increased prior to the pandemic**

### Safety & Security

**8 out of 12 measures met or approached target prior to the pandemic**

- Part I Crime
- Metrorail Customer Injury Rate
- Metrobus Customer Injury Rate
- MetroAccess Customer Injury Rate
- NTD Bus Collision Rate
- Bus Pedestrian Strikes

### Quality Service

**6 out of 7 measures met target prior to the pandemic**

- MyTripTime
- MetroAccess On-Time Performance
- Rail Fleet Reliability
- Bus Fleet Reliability
- Elevator Availability
- Escalator Availability

<sup>1</sup> Metro identifies the period impacted by the Pandemic beginning the day we adjusted service schedules, which is March 18 for MetroAccess and March 16 for all other measures.

# TABLE OF CONTENTS

	<b>RIDERSHIP</b>	<ul style="list-style-type: none"><li>▪ Ridership</li></ul>	PAGE <b>5</b>
	<b>SAFETY &amp; SECURITY</b>	<ul style="list-style-type: none"><li>▪ Crime</li><li>▪ Injuries</li><li>▪ Safety incidents</li></ul>	PAGE <b>6</b>
	<b>QUALITY SERVICE</b>	<ul style="list-style-type: none"><li>▪ On-time performance</li><li>▪ Fleet reliability</li><li>▪ Asset availability</li></ul>	PAGE <b>15</b>
	<b>APPENDIX</b>	<ul style="list-style-type: none"><li>▪ A: Data table</li><li>▪ B: Definitions</li></ul>	PAGE <b>23</b>

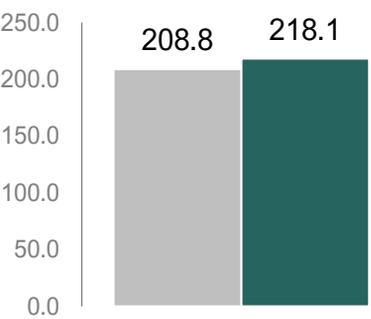
# RIDERSHIP

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020

The total ridership of 218.1 million before the pandemic is 4.5% above the forecast of 208.8 million for the same time period.

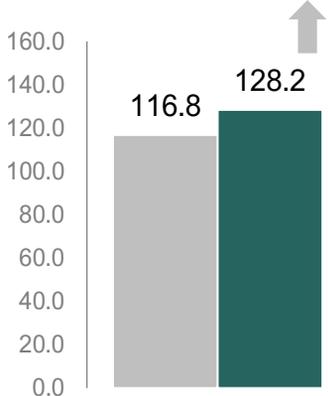
Note: Data have been updated since the Q3FY20 Metro Performance Report.

## Ridership<sup>^</sup> in millions



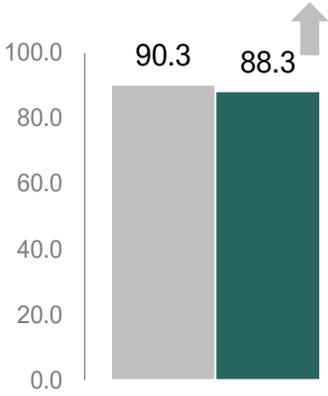
## MetroRail<sup>^</sup> Budget Actual

- Before the pandemic, ridership was 128.2 million, up 8% compared to prior year and 10% above budget
- Before the pandemic, average weekday ridership was 631,000 and average weekend ridership was 207,000 – both up about 7% from prior year



## Metrobus<sup>^</sup> Budget Actual

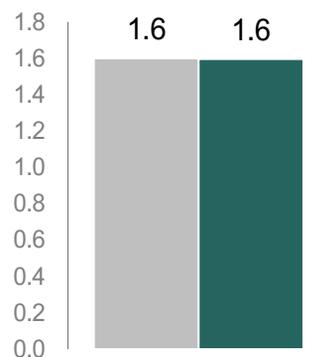
- Before the pandemic, ridership was 88.3 million, down 4% compared to prior year and 2% below budget
- Before the pandemic, average weekday ridership was 346,000, down 3% from the prior year. Average weekend ridership was 154,000, no change from prior year



Metro's **Ridership Data Portal** provides ridership data since 2010, including during the pandemic. Engage with the data through interactive dashboards using the Data Viewers ([Rail](#), [Bus](#), [Parking](#)).

## MetroAccess<sup>^</sup> Budget Actual

- Before the pandemic, ridership was 1.6 million – 3% lower than prior year; reduction is a result of expanding the Abilities-Ride program, which created favorable budget impact
- Before the pandemic, average weekday ridership was 7,500 – down 5% from the prior year



### Legend

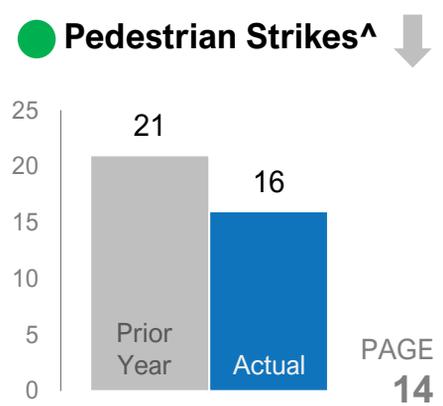
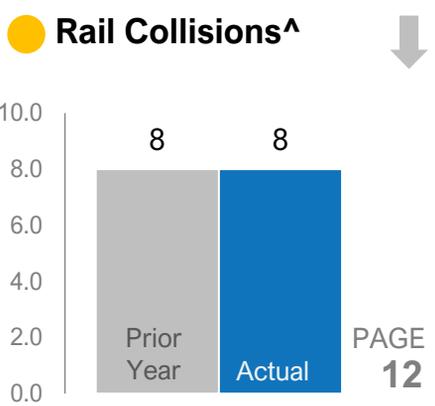
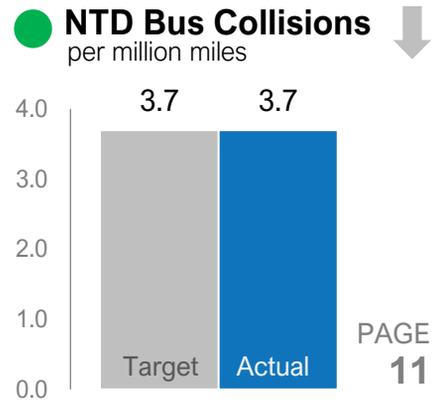
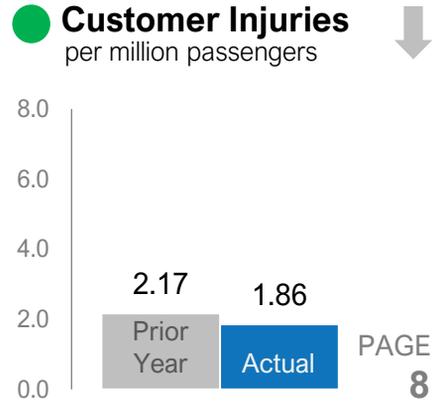
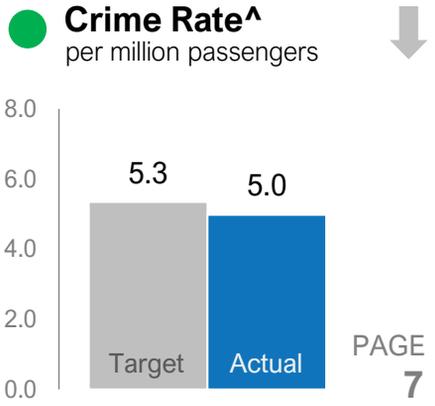
 Met or above target | 
  Near target | 
  Target not met | 
  No target | 
   Desired direction | 
 <sup>^</sup> Target Adjusted

# SAFETY & SECURITY

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020

**Prior to the pandemic, WMATA performed favorably on over half of its safety measures. Staff have taken steps to improve on areas not meeting target.**

Targets reflect the 9.5 months of FY19 before the pandemic. Data have been updated since the Q3FY20 report.



## Legend

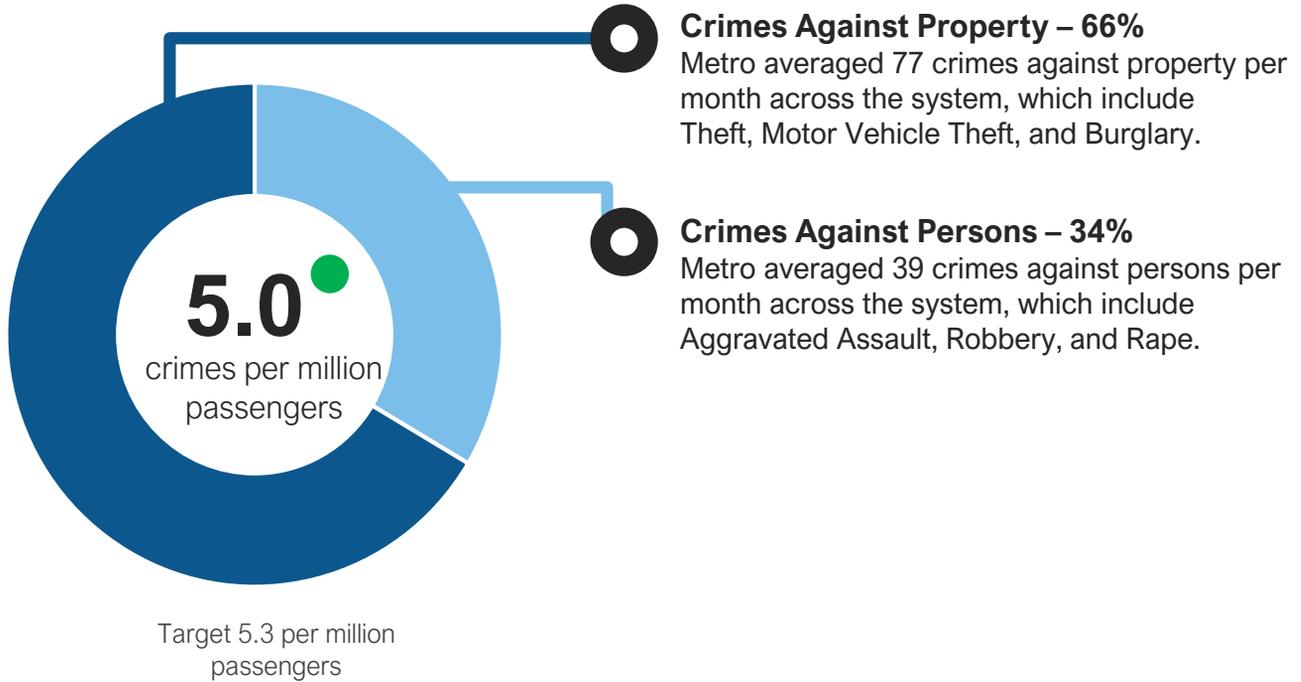
 Met or above target |  Near target |  Target not met |  No target |   Desired direction | <sup>^</sup> Target Adjusted



**The Part 1 crime rate was 5.0 crimes per million passengers before the pandemic, favorable to the target of 5.3.**

Before the pandemic, the Part I crime rate was below target, which is aligned to the five-year average. Metro had 1,019 crimes compared to a target of less than 1,095, about 116 crimes per month.

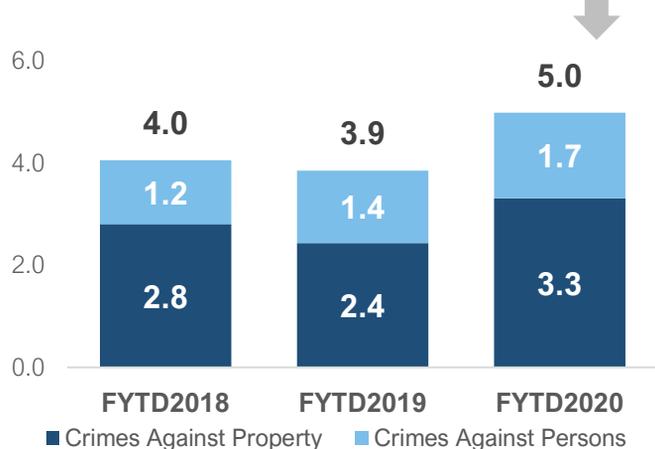
## What crimes occurred?



## Key actions to improve performance

- ▶ Enhance safety features to reduce all types of crimes across the system
  - Install public safety radio systems and cabling for cellphone service in tunnels
  - Improve station lighting
- ▶ Surge deployments of uniformed officers during high crime periods for increased visibility to deter crimes against persons and properties in rail stations, including aggravated assaults

## 3-Year Performance Trend



# CUSTOMER INJURY RATE

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020



## Metrorail Customer Injury Rate | 1.38 per million passengers

-- Target ≤ 1.40

Non-Preventable  
Preventable

Metrorail experienced 1.38 customer injuries per million passengers before the pandemic, meeting the target.

There were 177 customer injuries before the pandemic, with most occurring in stations (75 on escalators and 79 elsewhere in stations) while 23 injuries occurred onboard the train. Slips, trips, and falls were the most common incident type, making up 89% of all customer injuries before the pandemic. Many of the slip/trip/fall injuries involved customer distraction or intoxication.

### 3-Year Performance Trend



### Key actions to sustain performance

- ▶ Continue station modernization improvements to reduce hazards that result in slip/trip/fall and train door injuries
- ▶ Install escalator floor warnings to increase customer attentiveness as they are approaching the end of the escalator

## Metrobus Customer Injury Rate | 2.36 per million passengers

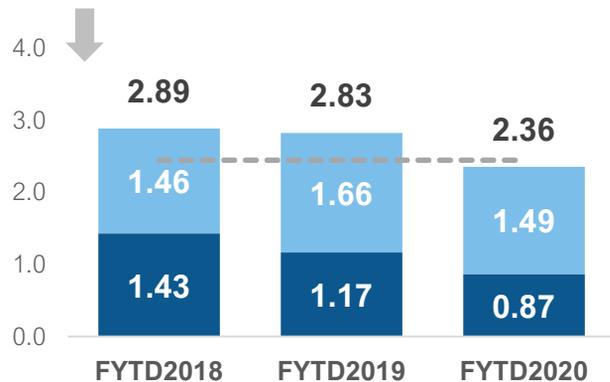
-- Target ≤ 2.45

Non-Preventable  
Preventable

Before the pandemic, Metrobus had a customer injury rate of 2.36 per million passengers, better than the target of less than 2.45.

There were 177 customer injuries before the pandemic. Collision-related injuries accounted for 43% of pre-pandemic injuries and slips/trips/falls accounted for another 45%. The top three key factors for injuries were hard braking (26), vehicle motion (24), and boarding or alighting (14).

### 3-Year Performance Trend



### Key actions to sustain performance

- ▶ Continue investigation of bus stop incidents to identify causal factors that result in customer injury
- ▶ Pilot collision avoidance technologies, such as Blind Spot Warnings and object detection, to decrease the number of bus collisions

# CUSTOMER INJURY RATE

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020



## MetroAccess Customer Injury Rate | 1.75 per 100,000 passengers

-- Target  $\leq$  2.85

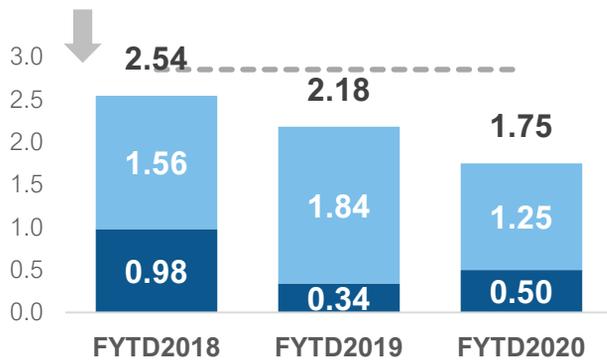
Non-Preventable

Preventable

The customer injury rate through the third quarter of FY20 was 1.75 per 100,000 passengers, which is favorable to target.

A total of 28 customer injuries were reported before the pandemic: 12 in the first quarter, 13 in the second quarter, and three in the third quarter up to the pandemic. The pre-pandemic customer injury rate of 1.75 is 18% lower than FY19 rate of 2.18. The customer injury rate is primarily driven by slips, trips, and falls, and collision-related injuries. Compared to FY19, there was a 10% reduction in slip/trip/fall injuries (10 fewer compared to FY19) and a 45% reduction in collision-related injuries (11 fewer compared to FY19).

### 3-Year Performance Trend



### Key actions to sustain performance

- ▶ Expand MetroAccess DriveCam, which provides additional 24-hour recording capability to existing system and supports focus on timely behavioral coaching for vehicle operators
- ▶ Conduct Annual Operator Wheelchair Recertification to ensure current securement best practices remain in operational practice

# EMPLOYEE INJURY RATE

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020



## ● Rail System Employee Injury Rate | 3.5 per 200,000 hours worked

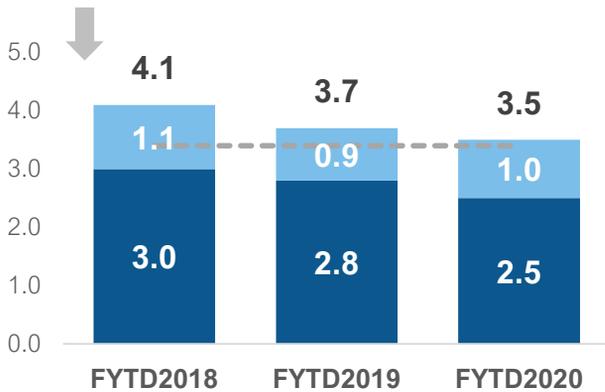
-- Target ≤ 3.4

Non-Preventable  
Preventable

Before the pandemic, Metrorail reported an employee injury rate of 3.5, just above target but an improvement over FY19.

Rail system personnel experienced 150 injuries before the pandemic. The top five incident types were slips, trips, and falls (40), struck by or against an object (30), assault or stress (24), lifting or lowering an object (20) and collision-related injuries (10).

### 3-Year Performance Trend



### Key actions to sustain performance

- ▶ Conduct Station Manager training to deescalate tense public interactions, similar to a previous initiative to reduce bus operator assaults
- ▶ Encourage Safety Observations and use data to identify and proactively address unsafe behaviors

## ● Bus Employee Injury Rate | 12.0 per 200,000 hours worked

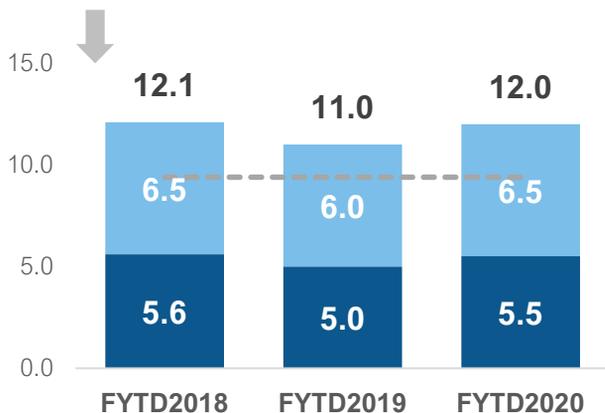
-- Target ≤ 9.4

Non-Preventable  
Preventable

The Metrobus employee injury rate was 12.0 before the pandemic. The rate decreased throughout the year but remained above target.

There were 319 Bus personnel injured before the pandemic. The top injury types were collision-related (90), assault or stress (66), slips, trips, and falls (47), pushing or pulling (37) and struck by or against an object (32).

### 3-Year Performance Trend



### Key actions to improve performance

- ▶ Pilot collision avoidance technologies
- ▶ Evaluate the bus operator training program
- ▶ Continue de-escalation and conflict resolution training
- ▶ Conduct safety observations and develop safety campaigns targeting specific injury types and known risky behaviors

# BUS COLLISION RATE

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020



## NTD Bus Collision Rate | 3.7 per million miles

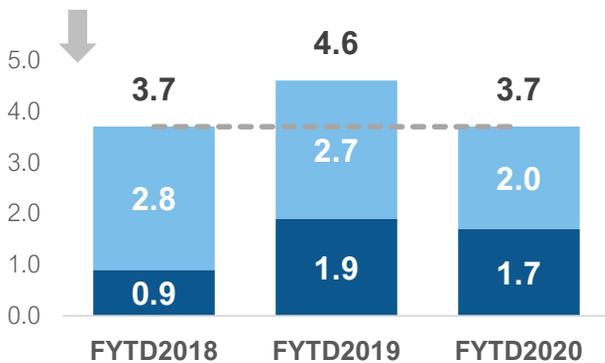
-- Target ≤ 3.7

Non-Preventable  
Preventable

Metrobus experienced a National Transit Database (NTD) collision rate of 3.7 before the pandemic, meeting target. Metro was deemed not-at-fault for the majority of collisions.

Of the 129 NTD collisions before the pandemic, 70 were non-preventable and 59 were preventable.

### 3-Year Performance Trend



### Key actions to improve performance

- ▶ Investigate collisions that occur at bus stops to identify causal factors that involve operators servicing and pulling in and out of stops
- ▶ Pilot collision avoidance technologies, such as Blind Spot Warnings, object detection and floating bus stops
- ▶ Evaluate the bus operator training program to improve driving techniques for new and existing operators and use of existing forward-facing cameras to coach operators who have been involved in collisions

Note: Metrobus tracks and reports serious collisions to the National Transit Database. A serious collision is one resulting in customer or employee injuries requiring immediate medical attention away from the scene, towaway of any vehicles involved, or combined property damage greater than \$25,000. This is a subset of all collisions, representing about 6%.

## All Bus Collision Rate | 63.5 per million miles

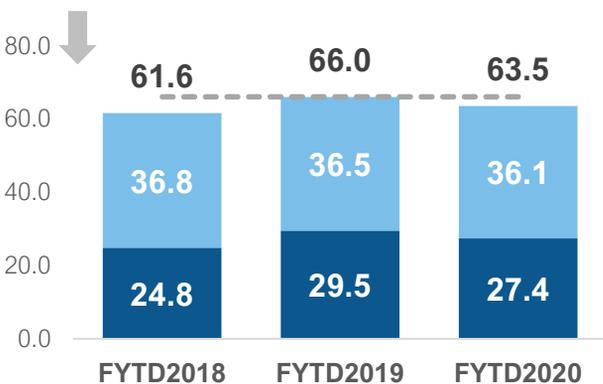
-- Target Decrease from Prior Year 66.0

Non-Preventable  
Preventable

Before the pandemic, the overall bus collision rate was 63.5 per million miles, favorable to target. Metro was deemed not-at-fault for the majority of collisions.

Before the pandemic, Metrobus recorded 2,191 collisions, of which 43% were deemed preventable. Overall, the top five preventable collision type for FY20 involved fixed objects (e.g., bus stop signs, tree branches), sideswipe, hit parked vehicle, hit other in rear, and intersection.

### 3-Year Performance Trend



### FY2020 Trend



# RAIL COLLISIONS & DERAILMENTS<sup>^</sup>

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020 AND TARGET ADJUSTED



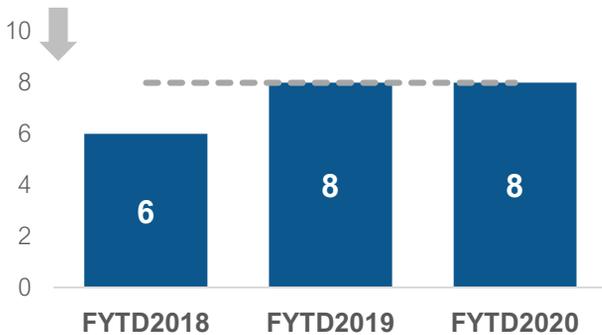
## Rail Collisions | 8 collisions

-- Target Decrease from Prior Year 8

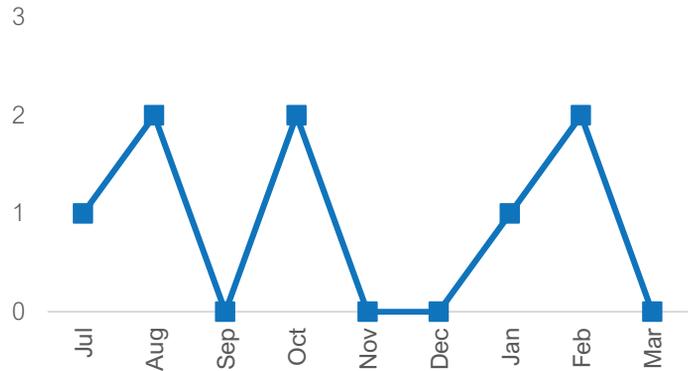
**Metrorail had eight collisions before the pandemic, matching the same time period in FY19.**

Before the pandemic, Metro experienced eight rail collisions. Five of the eight collisions involved roadway maintenance machines (RMMs). Six collisions occurred in rail yards and two on the mainline. One out-of-service mainline train collision resulted in two injuries and significant damage to the rail cars. Compared to the same time period in FY19, there were also eight collisions, with seven involving RMMs and one involving a train.

### 3-Year Performance Trend



### FY2020 Trend



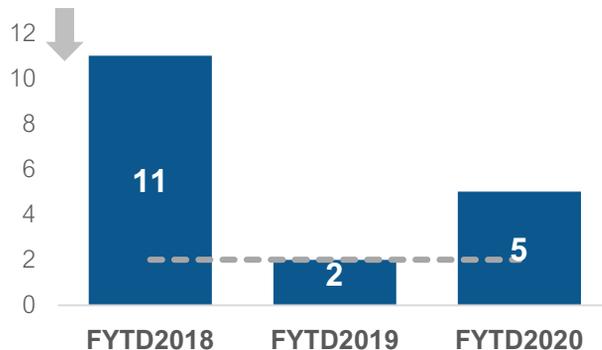
## Derailments | 5 incidents

-- Target Decrease from Prior Year 2

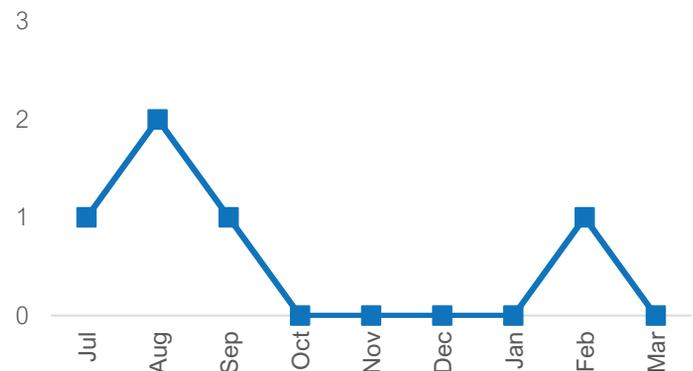
**There were five derailments before the pandemic, an increase from FY19 but less than the 11 experienced at the same time in FY18.**

All five derailments involved contractor-owned hi-rail vehicles, which have a higher inherent risk of derailment. Three of the five derailments were in the 2019 Platform Improvement Project's construction site. Metro is exploring the use of different equipment in areas where hi-rail vehicles are prone to derailment, implemented more structured and stringent inspections of contractor equipment with stricter rules on disqualifying problematic units, and conducted safety stand downs to review recent incidents and procedures to prevent derailments.

### 3-Year Performance Trend



### FYTD20 Trend



# RAIL INCIDENTS<sup>^</sup>

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020 AND TARGET ADJUSTED



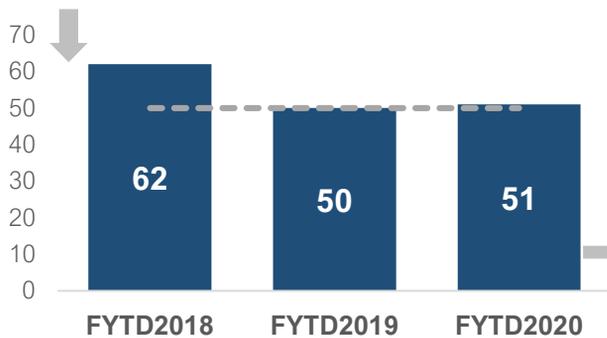
## ● Fire Incidents | 51 incidents

--- Target Decrease from Prior Year 50

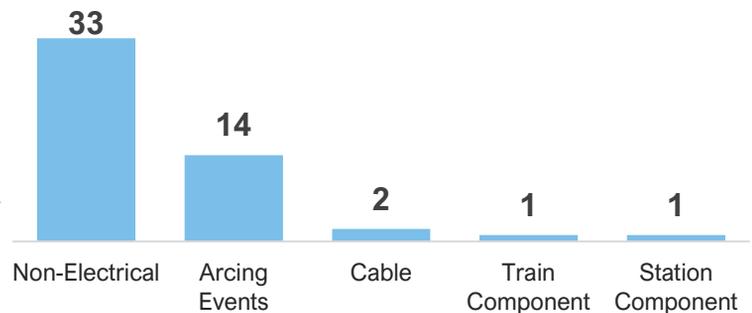
**There were 51 FTA-reportable fires before the pandemic, one more than in FY19.**

Before the pandemic, there were 51 total fires. Non-electrical fires (e.g., debris and crossties) accounted for the majority of fires during the pre-pandemic period, comprising of 65% (33 events). In comparison, there were fourteen arcing insulator events (27% of all fires), almost all on the Red Line north of Dupont Circle. To reduce fires, Metro is conducting more frequent trackbed/drain cleaning on the Red Line, while transitioning to condition-based monitoring. Metro is also piloting new technology, installing 47 thermoplastic insulators at Friendship Heights.

### 3-Year Performance Trend



### FYTD20 by Type



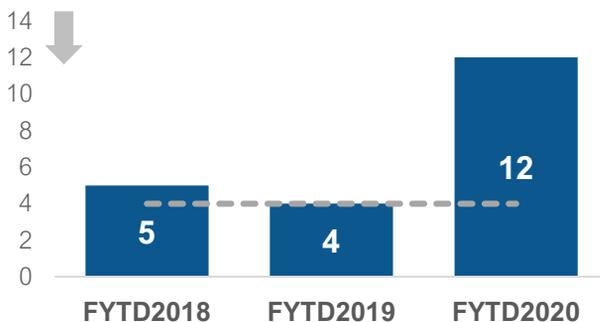
## ● Red Signal Overruns | 12 incidents

--- Target Decrease from Prior Year 4

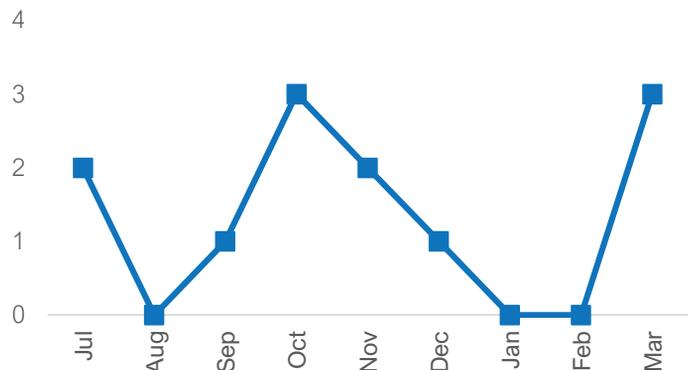
**Metrorail revenue vehicles overran a red signal 12 times before the pandemic, compared to four during the same time period in FY19.**

Operator error, failure to follow procedure, and miscommunication were the root causes of the red signal overruns that occurred pre-pandemic. Ten involved trains, and five occurred in early morning hours. Metro established a committee in November 2019 to investigate root cause(s) and common contributing factors (e.g., human factors, signal configuration) and develop mitigations. Metro has distributed these findings through multiple safety stand downs with rail operations and maintenance staff, and continues to verify and reinforce procedures through spot checks and refresher training.

### 3-Year Performance Trend



### FY2020 Trend



# OTHER SAFETY INCIDENTS<sup>^</sup>

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020 AND TARGET ADJUSTED



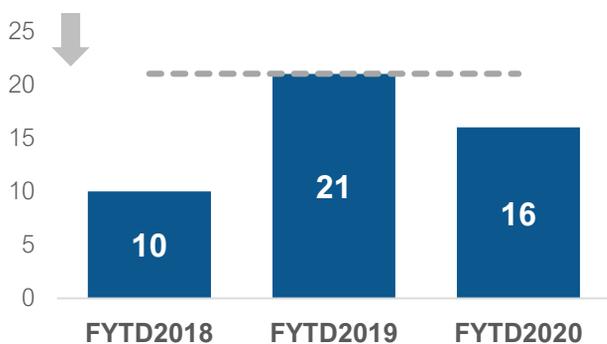
## Bus Pedestrian Strikes | 16 incidents

--- Target Decrease from Prior Year 21

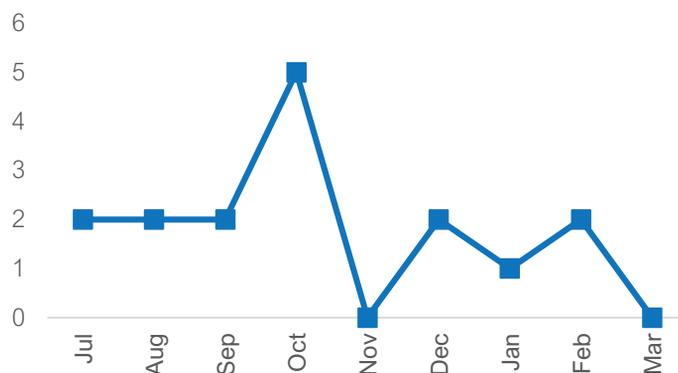
Before the pandemic, 16 pedestrians or bicyclists were struck by Metrobus and required immediate transport away from the scene, five fewer than the same period in FY19.

Of the 16 incidents this fiscal year before the pandemic, six involved bicyclists and 10 involved pedestrians (five in crosswalks). In addition to driver training, Metro is using technology to draw attention to risks. Metro has installed collision avoidance technology to provide warning lights/alarms for buses' blind spots and front-end views. In addition, front-mounted scrolling cautionary lights illuminate as operators are driving on the road to increase visibility of buses for pedestrians.

### 3-Year Performance Trend



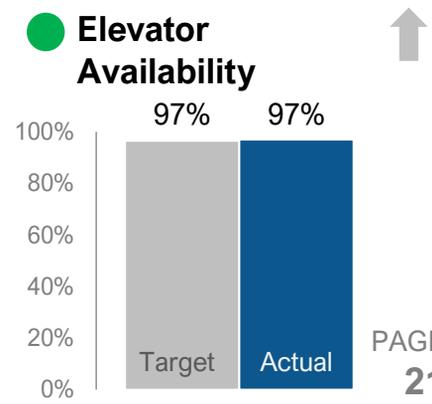
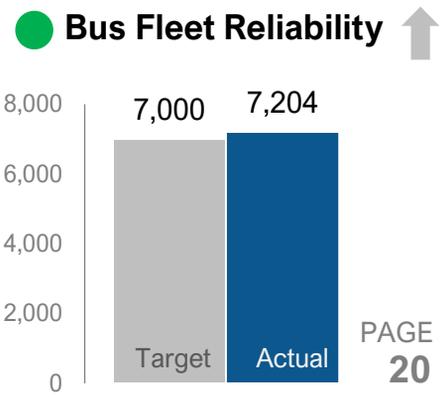
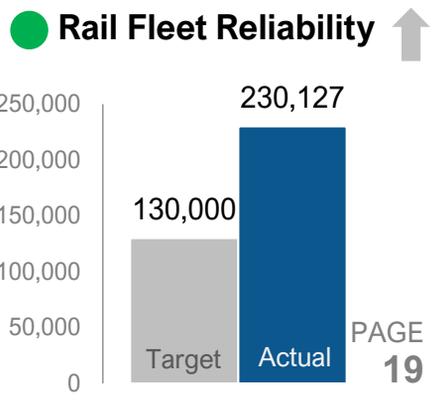
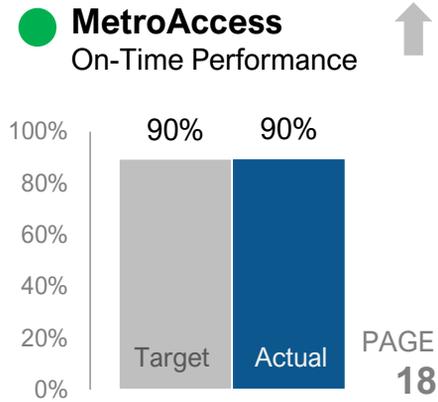
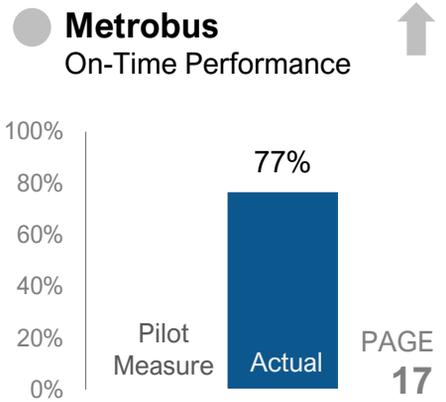
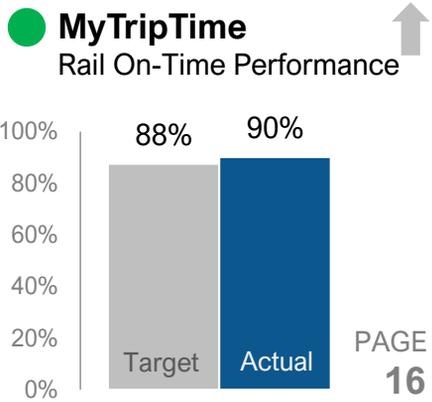
### FY2020 Trend



# QUALITY SERVICE

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020

The following highlights Metro’s system-wide quality service performance. WMATA met its targets for six of its seven measures of quality service prior to the pandemic.



## Legend

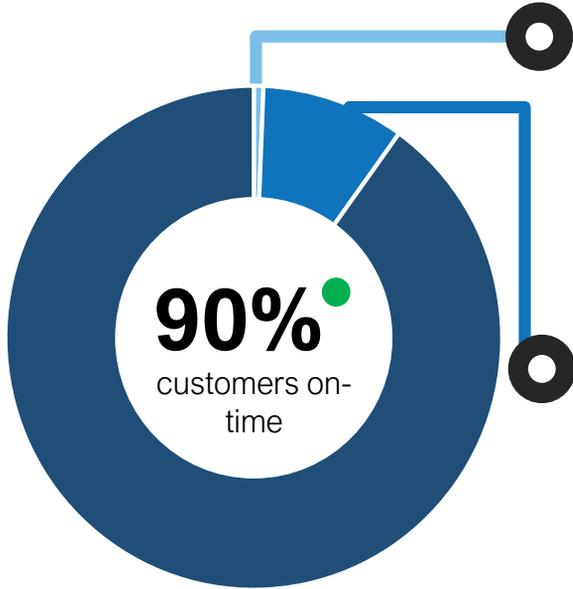
● Met or above target | 
 ● Near target | 
 ● Target not met | 
 ● No target | 
 ↓ ↑ Desired direction | 
 ^ Target Adjusted



**Metrorail customers completed 90% of their trips on-time before the pandemic, exceeding the target of 88%.**

Rail on-time performance (OTP) has consistently surpassed the target through all months this fiscal year, delivering the highest performance since the launch of this measure in FY16.

### What caused customers to not be on-time?



Target ≥ 88% on-time

#### Planned Delays

- ▶ **Planned track work** lowered OTP by approximately 0.7 percentage points
- ▶ Most planned track work occurred in the first quarter, when the Platform Improvement Project closed six Blue and Yellow Line stations for the first 10 weeks of the fiscal year for full platform reconstruction and major station improvements

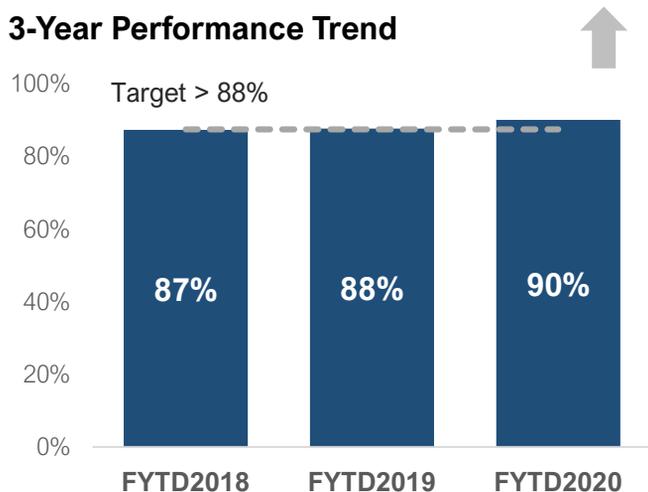
#### Unplanned Delays

- ▶ **Unplanned delays** lowered OTP by about 9.4 percentage points
- ▶ **Railcars** accounted for 36% of unplanned delays, a 12% decrease relative to the first three quarters of FY19 thanks to improvements in railcar reliability
- ▶ **Police activity and other customer-related incidents** accounted for 31% of delays with customer-related incidents (including sick passengers) increasing by 2% while police activity incidents dropped 36%
- ▶ **Infrastructure failures, operations and others** accounted for 33% of delays

### Key actions to sustain performance

- ▶ Continue to make critical repairs to rail infrastructure, ensuring it remains in a state of good repair
- ▶ Continue railcar maintenance, rehab and replacement program, including plan to replace the oldest 2000- and 3000- series railcars when they reach the end of their useful life

### 3-Year Performance Trend

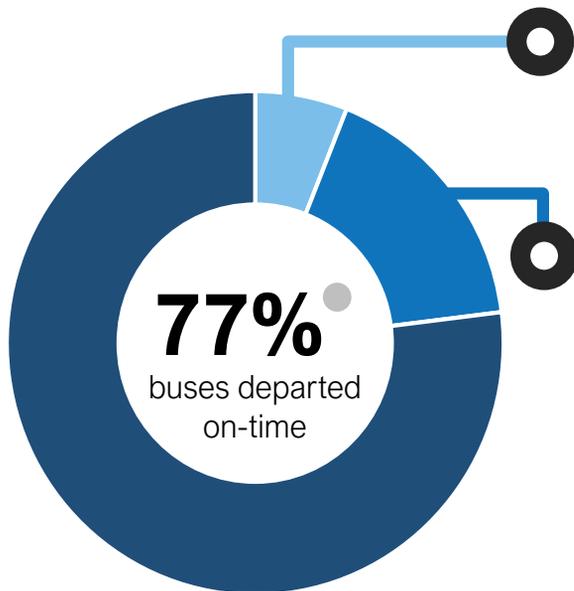




**Before the pandemic, 77% of buses were on-time. Buses serving customers along Metro’s seven high-frequency routes were on-time 66% while 78% buses serving other routes were on-time.**

Reliability of both service types during the midday (9AM-3PM) and PM peak (3PM-7PM) service periods continue to impact overall performance with traffic congestion serving as a main factor.

## What caused buses to not be on-time?



Pilot Measure

### Early Departures

6% of buses departed more than two minutes early

- ▶ **Early terminal departures** accounted for <1%
- ▶ **Early mid-route departures** accounted for the remaining 5.8% of all early departures

**Late Departures** continue to be the main reason that buses were not on-time, reducing performance by 17%

- ▶ **Late terminal departures**, occurring primarily during the midday and PM peak service periods, accounted for 1% of lates. These often occurred because the bus arrived late from the previous trip
- ▶ **Late mid-route departures** were the main reason buses were not on-time, accounting for 12% of lates, driven by traffic congestion as well as service delivery challenges due to police and customer incidents, collisions and other issues
- ▶ **Late terminal arrivals** accounted for the remaining 3% of lates driven by late mid-route departures during the midday and PM peak service periods impacting on-time terminal arrivals

## Advancing the Bus Transformation Project

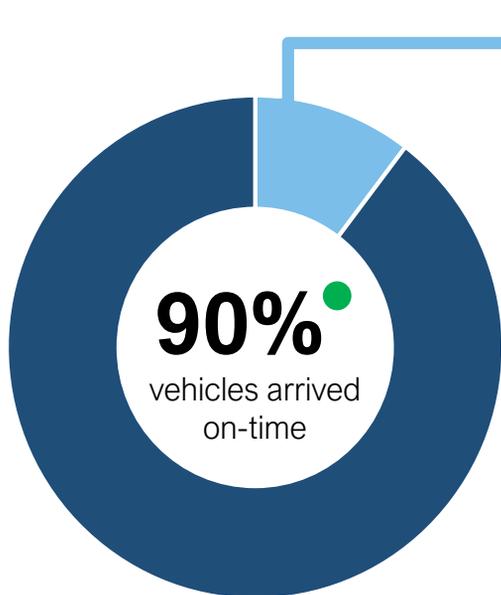
In September 2018, Metro, its partner jurisdictions, and local transit agencies launched Bus Transformation Project with the goal to create a bold, new vision and a collaborative action plan for the future of bus in the region. In January 2020, the WMATA Board endorsed the plan. Actions currently underway include:

- 1 Frequent & Convenient Bus Service** | establishing Metrobus Service Guidelines to ensure customers are provided equitable, reliable service
- 2 Prioritizing Buses on Roadways** | partnering with DDOT to launch three new car-free lanes, speeding up buses that travel on 7<sup>th</sup> Street NW, M Street SE, & MLK Jr Avenue SE
- 3 Excellent Customer Experience** | received an FTA grant to purchase two new electric buses, contributing to the region's sustainability and reducing noise



Before the pandemic, 90% of MetroAccess trips were on-time, meeting the FY20 target.

## What caused vehicles to not be on-time?



Target ≥ 90% on-time

### Operations Related Delays

- ▶ The contract team managing the Operations Control Center worked to establish schedules that balance productive routing (including shared rides) and strong on-time performance. The expansion of the Abilities Ride program—an alternative service that allows eligible customers to use on-demand taxi services—led to lower MetroAccess demand, which also contributed to improved on-time performance.
- ▶ The MetroAccess team discovered the mapping engines used by its real-time traffic application were not optimizing routes given current conditions, leading to lower on-time performance. As of February 28, 2020, this application has been removed from MetroAccess operating systems and Metro is soliciting a new system.

### Key actions to sustain performance

- ▶ Continue improving the accuracy of length-of-trip estimates by basing them on the fixed-route equivalent
- ▶ Continue to dynamically adjust the system's scheduling parameters and leverage available taxi and alternative resources when trips are projected late throughout the day

### 3-Year Performance Trend



# RAIL FLEET RELIABILITY

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020

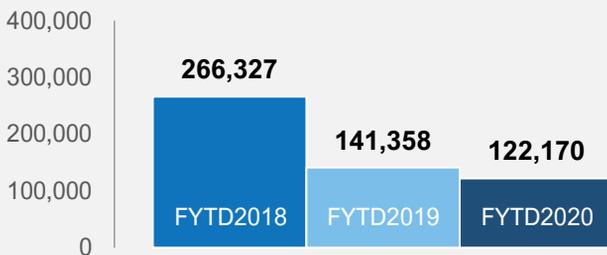


**Rail Fleet Reliability | 230,127** mean distance between delay  
 --Target ≥ 130,000

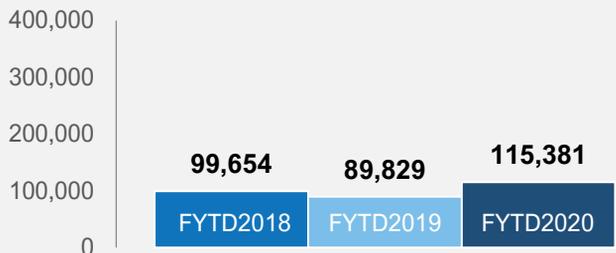
**Railcar performance reached record levels in FY20. Before the pandemic, railcars traveled 230,127 miles between delays, significantly exceeding target,**

Before the pandemic, railcar reliability soared in FY20, exceeding target by over 100,000 miles. Metrorail averaged only 1.2 four+ minute delays per day prior to the pandemic, compared to 2.5 in FY18 and 3.7 in FY16. Strong railcar performance also contributed to some of the best customer on-time performance numbers on record—and smoother rides for customers.

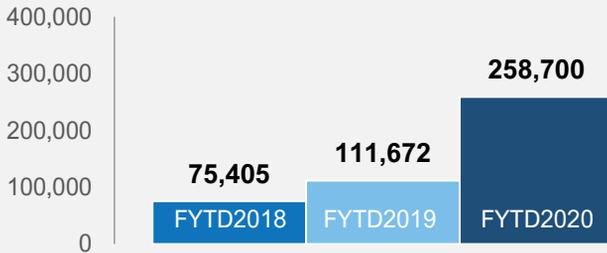
## 2000-series | 4% of mileage



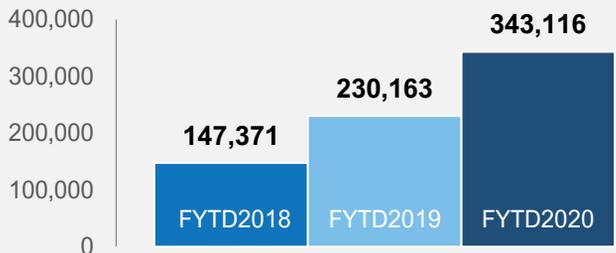
## 3000-series | 19% of mileage



## 6000-series | 12% of mileage



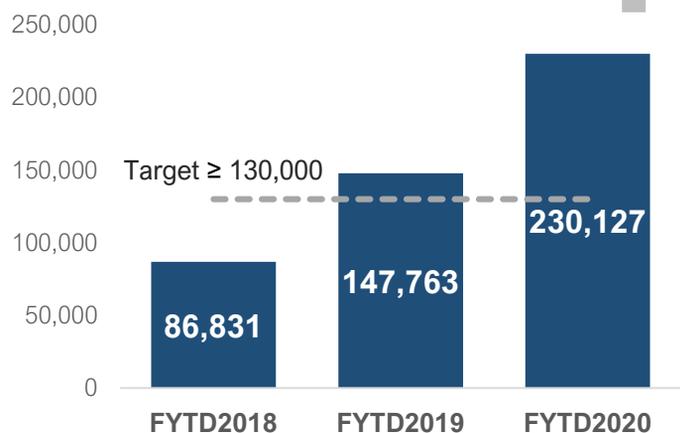
## 7000-series | 65% of mileage



### Key actions to sustain performance

- ▶ Continue using reliability analysis and frequent inspections to ensure engineers prioritize problems causing the largest impacts
- ▶ Continue the Scheduled Maintenance Program, which was helped improve performance of the 6000 series cars, and plan for the replacement of the 2000 and 3000 series as they turn 40 and near the end of their useful life

### 3-Year Performance Trend



# BUS FLEET RELIABILITY

BEFORE PANDEMIC: JUL 1, 2019 – MAR 15, 2020

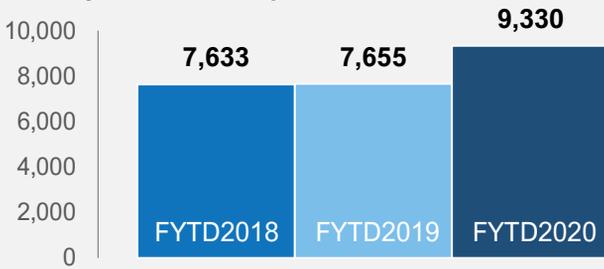


**Bus Fleet Reliability | 7,204** mean distance between failure  
 --Target ≥ 7,000

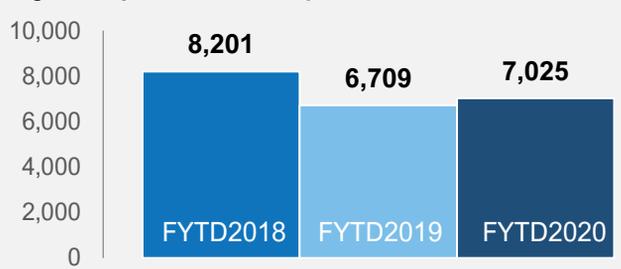
**Bus fleet performance was the best in two years, with buses traveling just over 7,200 miles between failure before the pandemic—better than target of 7,000 and a 12% improvement compared to the same time in FY19.**

Before the pandemic, bus fleet performance reached a single-month record high in the first half of March, with buses traveling over 10,600 miles between failure thanks to steady improvements over the fiscal year across all sub-fleets.

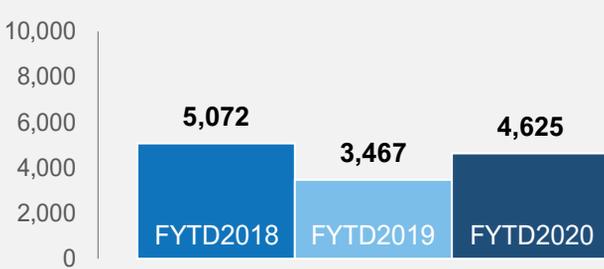
## CNG | 28% of mileage



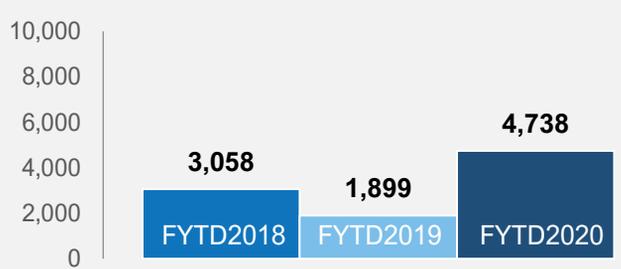
## Hybrid | 64% of mileage



## Clean Diesel | 8% of mileage



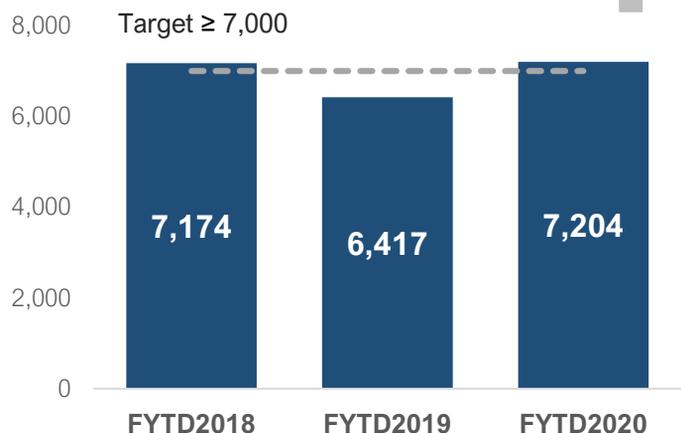
## Diesel | 0.2% of mileage



## Key actions to sustain performance

- ▶ Staff are continuing to focus on key programs to improve fleet reliability and keep the fleet in a good state of repair, including:
  - Preventive maintenance programs
  - Service lane activities, and
  - Replacement of older, less reliable buses

## 3-Year Performance Trend





## ● Elevator Availability | 97% available

-- Target ≥ 97%

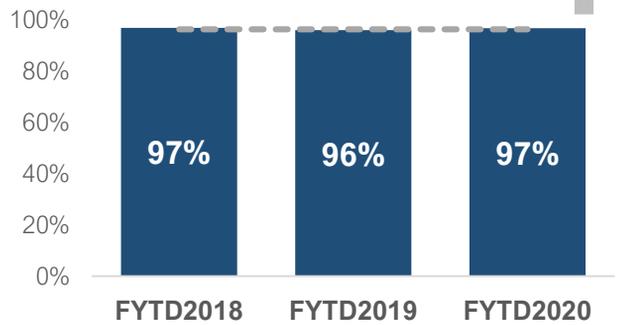
**Elevators were available 97% of the time before the pandemic, meeting target and improving by one percentage point compared to FY19.**

Elevator performance improved across the fiscal year due to staffing innovations, concentrated work during shutdowns, and better weather. Beginning in FY20, Metro also began using a dedicated maintenance crew to work on elevators, allowing mechanics to fully specialize in elevator service and resulting in a more efficient response to deficiencies identified during jurisdictional inspections.

### Key actions to sustain performance

- ▶ Increased elevator crews to better address jurisdictional inspection resulting in less downtime
- ▶ Hired full-time reliability engineer who works to identify component failure by equipment type with a goal to decrease the frequency of elevator failure and increase availability

### 3-Year Performance Trend



## ● Escalator Availability | 95% available

-- Target ≥ 92%

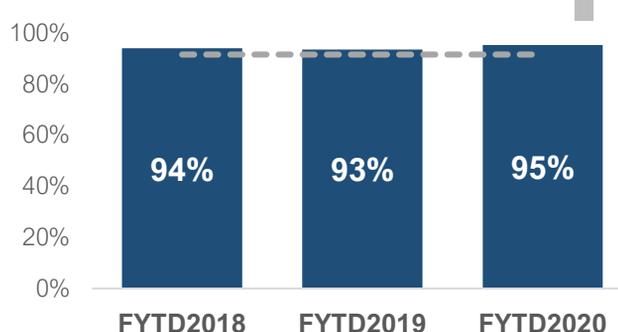
**Metro comfortably exceeded its 92% target for escalator availability in FY20, ending at 95% before the pandemic, a nearly two percentage point increase in availability compared to FY19.**

This year, Metro completed its \$176 million rehab and replacement program that delivered 145 new escalators for rail customers since 2011. As a result, fewer units were out of service for capital rebuilding than initially anticipated, increasing availability. During the third quarter, extremely mild winter led to fewer entrance unit outages that often occur due to freezing temperatures/inclement weather.

### Key actions to sustain performance

- ▶ Complete a new rehab and replacement contract to continue to ensure the system stays in a state of good repair—construction will begin late this fiscal year or early FY21
- ▶ Hired full-time reliability engineer who works to identify component failure by equipment type with a goal to decrease the frequency of escalator failure and increase availability

### 3-Year Performance Trend

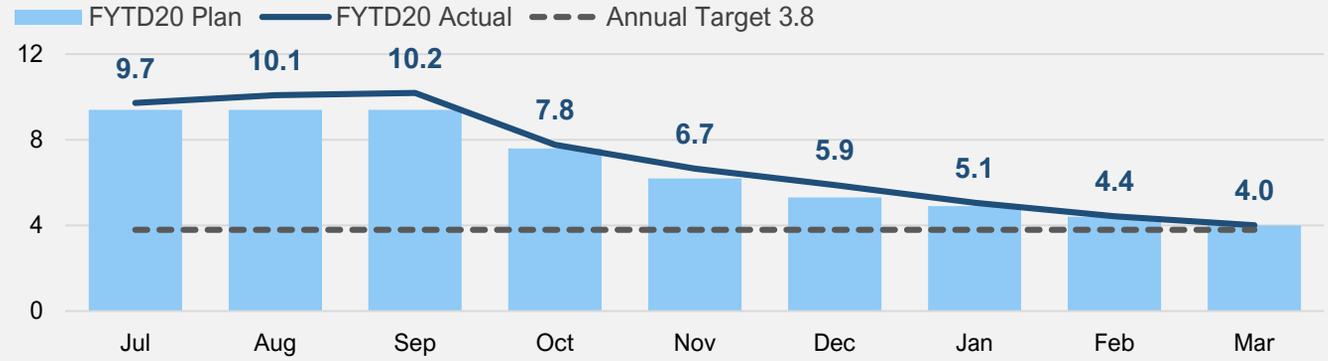




**4.0%** under performance restriction  
 --Target ≤ 3.8%

**Before the pandemic, 4.0% of track was under performance restriction, near the FY20 projection and on track to meet the end-of-year target of 3.8%.**

### Cumulative guideway restrictions % | FY20 vs Target



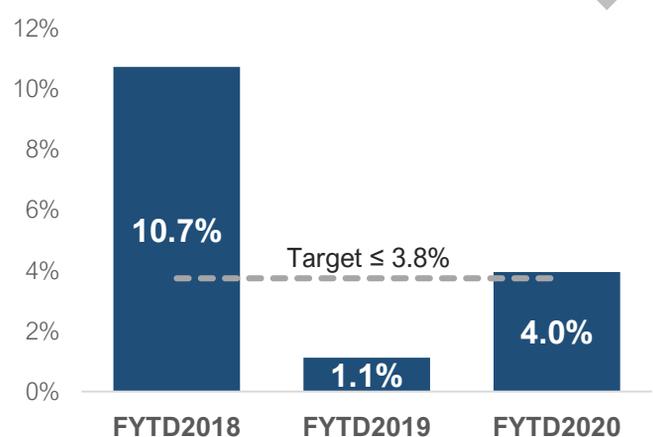
Guideway restrictions include planned track work and unplanned condition-related speed restrictions. Planned work is the main reason guideway was unavailable. On average, only 0.6% of track was restricted due to condition. Metro set a target to end FY20 at 3.8%, factoring in planned work including the 2019 Platform Improvement Project. By March, Metro was performing exactly as anticipated, with an average of 4% of track “restricted” through the first nine months of the year. While above the end-of-year target of 3.8%, Metro was on the planned glidepath to get there.

Metro continues to focus on preventive maintenance and capital programs to keep unplanned restrictions low. It also aims to increase its work accomplished during overnight non-revenue hours, limiting the impact to customers. Metro completed 169,029 work-wrench hours during non-revenue hours the first three quarters of FY20, a 15% improvement from the same time last year, even with a large portion of work cancelled in March 2020 due to the pandemic.

### Key actions to improve performance

- ▶ Continue preventive maintenance and capital programs to keep unplanned restrictions low
- ▶ Install heat tape at up to four more stations before next fall, eliminating the need for speed restrictions in these areas

### 3-Year Performance Trend



# APPENDIX A | DATA TABLE

## RIDERSHIP

### RIDERSHIP | BUDGET FORECAST 208.8 MILLION<sup>A</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	26.2	26.4	25.2	26.5	23.8	21.7	22.6	21.7	24.9	25.9	26.4	26.6	219.0
FY2019	26.5	25.7	24.4	27.8	23.6	22.1	22.1	21.9	26.0	27.4	27.5	26.4	220.2
FY2020	27.1	25.7	26.3	29.0	24.5	24.4	25.4	24.1	11.6				218.1

### RIDERSHIP | BUDGET FORECAST 208.8 MILLION<sup>A</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
RAIL	Forecast	15,075,900	13,906,700	14,106,700	15,720,200	13,758,600	13,110,900	11,911,200	12,053,600	7,205,400			116,849,200
	<b>Actual</b>	<b>16,452,435</b>	<b>15,132,103</b>	<b>15,338,075</b>	<b>17,447,889</b>	<b>14,559,802</b>	<b>13,524,283</b>	<b>15,076,151</b>	<b>14,161,023</b>	<b>6,557,892</b>			<b>128,249,653</b>
BUS	Forecast	10,849,269	11,469,189	11,326,425	11,625,175	10,444,157	9,927,622	9,965,643	9,643,624	5,053,247			90,304,351
	Actual: Farebox	9,114,770	9,201,401	9,188,379	9,588,732	8,282,577	7,945,124	8,643,419	8,172,989	3,903,278			74,040,669
	Actual: Metro Operated Shuttle	23,465	22,940	44,061	9,106	92,046	7,896	57,818	54,790	24,281			336,403
	Actual: APC	10,398,691	10,389,978	10,741,376	11,358,754	9,686,842	10,645,760	10,066,403	9,705,457	4,969,883			87,963,144
	<b>Actual: APC + Metro Shuttle</b>	<b>10,422,156</b>	<b>10,412,918</b>	<b>10,785,437</b>	<b>11,367,860</b>	<b>9,778,888</b>	<b>10,653,656</b>	<b>10,124,221</b>	<b>9,760,247</b>	<b>4,994,164</b>			<b>88,299,547</b>
ACCESS	Forecast	192,100	209,500	190,400	211,500	192,600	182,500	181,000	179,600	99,550			1,638,750
	<b>Actual</b>	<b>200,713</b>	<b>203,089</b>	<b>193,109</b>	<b>208,005</b>	<b>182,855</b>	<b>173,409</b>	<b>177,124</b>	<b>169,602</b>	<b>88,698</b>			<b>1,596,604</b>
TOTAL	Forecast	26,117,269	25,585,389	25,623,525	27,556,875	24,395,357	23,221,022	22,057,843	21,876,824	12,358,197			208,792,301
	Actual: Farebox + Metro Shuttle	25,791,383	24,559,533	24,763,624	27,253,732	23,117,280	21,650,712	23,954,512	22,558,404	10,574,149			204,223,329
	<b>Actual: APC + Metro Shuttle</b>	<b>27,075,304</b>	<b>25,748,110</b>	<b>26,316,621</b>	<b>29,023,754</b>	<b>24,521,545</b>	<b>24,351,348</b>	<b>25,377,496</b>	<b>24,090,872</b>	<b>11,640,754</b>			<b>218,145,804</b>

<sup>A</sup>FY2020 Ridership results were evaluated for the period beginning July 1 and before service was adjusted due to the pandemic – March 16 for Metrorail & Metrobus and March 18 for MetroAccess.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### MYTRIP TIME RAIL CUSTOMER ON-TIME PERFORMANCE | TARGET 88%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	86%	89%	87%	88%	87%	86%	86%	87%	88%	88%	87%	88%	87%
FY2019	86%	79%	90%	89%	87%	89%	90%	90%	89%	91%	90%	90%	88%
FY2020	89%	90%	89%	90%	90%	89%	92%	92%	92%				90%

### MYTRIP TIME RAIL CUSTOMER ON-TIME PERFORMANCE | BY LINE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	FYTD
 Red Line	88%	90%	91%	91%	90%	87%	92%	92%	90%	90%
 Blue Line	88%	88%	86%	87%	89%	87%	89%	90%	92%	88%
 Orange Line	88%	89%	85%	86%	86%	85%	89%	89%	91%	87%
 Green Line	90%	90%	91%	92%	90%	91%	93%	92%	93%	91%
 Yellow Line	89%	88%	87%	91%	90%	90%	92%	92%	93%	90%
 Silver Line	90%	90%	89%	88%	90%	88%	92%	91%	93%	90%

### MYTRIP TIME RAIL CUSTOMER ON-TIME PERFORMANCE | BY TIME PERIOD

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	FYTD
AM Rush [5AM-9:30AM]	90%	92%	90%	90%	90%	88%	92%	93%	92%	91%
Midday [9:30AM-3PM]	90%	92%	90%	90%	91%	90%	92%	93%	92%	91%
PM Rush [3PM-7PM]	88%	90%	89%	90%	90%	87%	92%	91%	94%	90%
Evening [7PM-9:30PM]	93%	93%	93%	94%	94%	93%	95%	94%	96%	94%
Late Night [9:30PM-12AM]	92%	93%	94%	94%	94%	92%	94%	94%	93%	93%
Weekend	80%	82%	87%	87%	87%	89%	86%	87%	82%	86%

\*FY2020 MyTripTime results were evaluated for the period beginning July 1 and ending the day before Metrorail service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### METROBUS ONTIME PERFORMANCE | PILOT KPI

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2020	78%	78%	74%	75%	76%	77%	78%	78%	78%				77%

### METROBUS ONTIME PERFORMANCE | BY TIME PERIOD

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
AM Early [4AM-6AM]	76%	78%	76%	75%	78%	77%	86%	86%	86%				80%
AM Peak [6AM-9AM]	82%	82%	77%	78%	79%	80%	81%	80%	81%				80%
Midday [9AM-3PM]	78%	77%	75%	76%	76%	78%	78%	78%	78%				77%
PM Peak [3PM-7PM]	74%	74%	69%	68%	69%	72%	73%	74%	74%				72%
Early Night [7PM-11PM]	78%	78%	77%	78%	80%	80%	81%	80%	80%				79%
Late Night [11PM-4AM]	80%	80%	80%	81%	83%	83%	82%	82%	82%				81%

### METROBUS ONTIME PERFORMANCE | BY SERVICE TYPE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
Headway Service	66%	66%	63%	66%	66%	66%	65%	66%	66%				66%
All Other Service	79%	79%	75%	76%	77%	78%	79%	79%	79%				78%
Early	7%	7%	6%	6%	7%	8%	7%	7%	7%				7%
Late	15%	15%	19%	18%	16%	14%	14%	14%	14%				15%

### METROACCESS ON-TIME PERFORMANCE | TARGET 90%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	89%	91%	90%	93%	93%	94%	94%	92%	93%	92%	93%	92%	92%
FY2019	92%	92%	92%	92%	90%	91%	90%	89%	89%	89%	86%	88%	91%
FY2020	89%	89%	87%	88%	90%	91%	91%	91%	92%				90%

\*FY2020 Bus On-Time Performance and MetroAccess results were evaluated for the period beginning July 1 and before service was adjusted due to the pandemic – March 16 for Metrobus and March 18 for MetroAccess.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### RAIL FLEET RELIABILITY: MEAN DISTANCE BETWEEN DELAY | TARGET 130,000

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	92,927	84,111	84,278	104,128	80,687	85,310	61,004	95,119	113,361	103,228	125,658	117,519	86,831
FY2019	124,123	119,755	145,352	141,878	161,039	162,407	134,683	146,531	238,078	198,102	265,139	194,907	147,763
FY2020	144,510	188,206	292,729	192,718	211,038	237,499	244,666	416,767	951,822				230,127

### RAIL FLEET RELIABILITY: MEAN DISTANCE BETWEEN DELAY | BY RAILCAR SERIES

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
2000 series	92,529	41,268	188,914	181,630	315,178	300,146	101,646	124,132	119,134				122,170
3000 series	100,691	93,781	152,396	82,935	78,083	131,524	97,057	403,078	392,082				115,381
6000 series	150,850	125,455	283,153	211,946	933,218	202,605	960,708	465,048	490,182				258,700
7000 series	174,545	436,424	429,369	310,590	305,472	314,362	426,973	466,173	2,413,809				343,116

### RAIL FLEET RELIABILITY: MEAN DISTANCE BETWEEN FAILURE | TARGET 10,000

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	7,430	8,227	9,711	10,881	10,376	10,496	10,021	11,280	11,202	13,699	11,755	12,850	9,786
FY2019	10,073	10,671	11,092	14,010	14,075	15,929	14,019	14,397	19,737	19,810	16,752	16,418	13,311
FY2020	15,344	19,374	20,799	20,998	20,784	23,425	26,760	24,142	26,812				21,253

### RAIL FLEET RELIABILITY: MEAN DISTANCE BETWEEN FAILURE | BY RAILCAR SERIES

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
2000 series	8,046	6,878	10,495	11,718	11,673	21,439	16,049	11,822	7,942				10,708
3000 series	7,821	9,743	10,297	9,424	9,450	10,182	14,805	15,210	18,236				10,688
6000 series	10,170	10,977	11,177	13,414	14,582	13,690	19,214	12,741	18,853				13,126
7000 series	28,598	39,675	42,937	44,021	37,152	46,381	41,734	40,062	41,617				39,556

\*FY2020 Rail Fleet Reliability results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### BUS FLEET RELIABILITY: MEAN DISTANCE BETWEEN FAILURE | TARGET 7,000

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	7,555	7,764	7,571	6,923	7,492	7,776	6,221	6,164	7,485	6,124	6,209	6,515	7,174
FY2019	6,192	5,961	5,806	6,644	6,670	6,806	6,422	6,661	6,796	6,622	5,680	6,111	6,417
FY2020	6,166	6,001	6,066	7,006	7,788	8,527	8,533	7,785	10,643				7,204

### BUS FLEET RELIABILITY: MEAN DISTANCE BETWEEN FAILURE | BY FUEL TYPE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
CNG	7,802	9,636	8,832	8,452	12,094	9,015	9,397	9,091	14,228				9,330
HYBRID	6,162	5,814	5,908	6,953	7,147	8,615	8,456	7,565	10,082				7,025
CLEAN DIESEL	3,590	2,945	3,109	4,877	5,163	6,842	6,794	6,260	7,581				4,625
DIESEL	3,662	3,952	8,390	3,972	2,640	277	5,238	5,371	0				4,738

### ELEVATOR AVAILABILITY | TARGET 97%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	97%	97%	97%	97%	97%	98%	97%	97%	97%	96%	96%	96%	97%
FY2019	95%	96%	95%	97%	96%	97%	96%	96%	97%	97%	97%	97%	96%
FY2020	96%	97%	97%	98%	97%	97%	97%	97%	96%				97%

### ESCALATOR AVAILABILITY | TARGET 92%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	95%	94%	95%	94%	94%	94%	93%	93%	93%	93%	91%	93%	94%
FY2019	93%	93%	92%	92%	94%	94%	94%	94%	94%	95%	94%	95%	93%
FY2020	94%	94%	94%	95%	95%	96%	96%	96%	97%				95%

\*FY2020 Bus Fleet Reliability and Elevator & Escalator Availability results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### RAIL GUIDEWAY CONDITION: FTA REPORTABLE SPEED RESTRICTIONS | TARGET 3.8%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	9.5%	12.9%	9.8%	9.5%	11.8%	14.0%	9.5%	9.5%	9.9%	9.6%	9.6%	0.1%	10.7%
FY2019	0.2%	2.1%	0.3%	1.8%	1.6%	3.6%	0.3%	0.2%	0.0%	0.0%	0.0%	9.1%	1.1%
FY2020	9.7%	10.4%	10.4%	0.5%	2.2%	2.0%	0.1%	0.1%	0.1%				4.0%

### TRAIN ON-TIME PERFORMANCE: HEADWAY ADHERENCE | TARGET 91%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	90%	92%	89%	92%	89%	88%	89%	91%	91%	92%	92%	93%	90%
FY2019	90%	78%	93%	93%	91%	93%	91%	92%	92%	93%	92%	91%	91%
FY2020	91%	92%	91%	92%	92%	91%	94%	94%	94%				92%

### TRAIN ON-TIME PERFORMANCE: HEADWAY ADHERENCE | BY LINE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
 Red Line	93%	95%	94%	95%	94%	93%	96%	95%	94%				94%
 Blue Line	87%	88%	87%	88%	89%	88%	91%	91%	93%				89%
 Orange Line	91%	92%	90%	90%	91%	90%	93%	93%	93%				91%
 Green Line	93%	94%	93%	95%	94%	93%	96%	96%	97%				94%
 Yellow Line	91%	91%	91%	93%	92%	91%	94%	95%	96%				93%
 Silver Line	89%	91%	89%	91%	91%	90%	92%	93%	93%				91%

\*FY2020 Train On-Time Performance results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### TRAIN ON-TIME PERFORMANCE: HEADWAY ADHERENCE | BY TIME PERIOD

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
AM Rush [5AM-9:30AM]	87%	88%	87%	88%	88%	87%	90%	91%	91%				88%
Midday [9:30AM-3PM]	95%	97%	95%	95%	96%	95%	97%	97%	97%				96%
PM Rush [3PM-7PM]	88%	90%	89%	91%	90%	89%	93%	92%	93%				90%
Evening [7PM-9:30PM]	97%	97%	97%	99%	98%	96%	98%	98%	97%				97%

### TRAINS IN SERVICE | TARGET 98%

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	99%	99%	98%	101%	99%	99%	97%	98%	98%	99%	98%	98%	99%
FY2019	97%	98%	98%	97%	97%	98%	96%	97%	98%	98%	98%	99%	97%
FY2020	99%	99%	98%	98%	97%	97%	98%	100%	99%				98%

### OFFLOADS | TARGET <80 PER MONTH

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	113	134	124	87	103	95	150	102	91	70	119	91	999
FY2019	88	91	69	79	75	83	94	76	58	58	65	99	713
FY2020	96	62	93	61	69	75	71	70	44				630

### CROWDING: CROWDED PASSENGER TIME | PILOT MEASURE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2019	3.5%	4.2%	4.5%	4.3%	3.8%	3.1%	3.2%	3.7%	3.8%	N/A	N/A	N/A	3.8%
FY2020	5.1%	4.4%	6.3%	6.5%	5.9%	5.0%	2.6%	2.6%	2.1%				4.8%

\*FY2020 Train On-Time Performance, Offloads, and Crowding results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### METRO RAIL CROWDING | PILOT MEASURE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2019	4.8%	4.5%	3.2%	4.0%	4.2%	3.6%	2.5%	4.0%	3.8%	3.6%	3.4%	3.8%	3.9%
FY2020	3.8%	2.0%	3.2%	4.1%	3.3%	3.1%	3.3%	3.1%	2.3%				3.3%

### METRO RAIL CROWDING | BY LINE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
 Red Line	4.5%	2.4%	3.9%	4.0%	3.5%	3.9%	3.2%	3.5%	2.8%				3.6%
 Blue Line	2.2%	0.7%	1.8%	3.5%	2.4%	1.9%	2.5%	2.2%	1.3%				2.3%
 Orange Line	5.3%	3.0%	5.0%	7.2%	5.8%	5.1%	5.8%	5.2%	3.6%				5.4%
 Green Line	2.6%	1.7%	2.2%	3.0%	1.4%	1.0%	1.3%	0.8%	0.7%				1.8%
 Yellow Line	3.3%	1.8%	3.0%	3.8%	3.9%	2.5%	4.0%	3.2%	2.9%				3.3%
 Silver Line	2.8%	1.3%	2.3%	2.6%	2.7%	2.3%	2.2%	2.6%	1.6%				2.4%

### METRO RAIL CROWDING | BY TIME PERIOD

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
AM Rush [5AM-9:30AM]	6.4%	3.2%	6.8%	7.7%	5.6%	5.9%	5.7%	6.0%	4.9%				6.0%
Midday [9:30AM-3PM]	0.1%	0.0%	0.2%	0.1%	0.1%	0.2%	1.6%	0.0%	0.0%				0.3%
PM Rush [3PM-7PM]	5.0%	3.3%	3.7%	4.7%	4.3%	4.3%	3.5%	3.7%	2.2%				4.0%
Evening [7PM-9:30PM]	0.8%	0.3%	0.2%	0.6%	0.1%	0.3%	0.1%	0.1%	0.1%				0.3%
Late Night [9:30PM-12AM]	0.0%	0.0%	0.0%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%				1.9%
Weekend	0.5%	0.2%	0.1%	0.9%	1.9%	0.0%	0.0%	0.0%	0.0%				0.5%

\*FY2020 Crowding results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## QUALITY SERVICE

### METROBUS CROWDING | PILOT MEASURE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2019	3.4%	4.2%	4.5%	4.3%	3.8%	3.1%	3.2%	3.7%	3.8%	N/A	N/A	N/A	3.8%
FY2020	5.1%	4.4%	6.3%	6.5%	5.8%	5.0%	2.6%	2.6%	2.1%				4.9%

### METROBUS CROWDING | BY TIME PERIOD

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
AM Early [4AM-6AM]	5.4%	5.7%	7.5%	8.3%	6.8%	5.2%	1.5%	1.9%	1.9%				5.4%
AM Peak [6AM-9AM]	6.5%	5.0%	9.0%	8.3%	7.8%	6.7%	4.0%	3.9%	3.2%				6.5%
Midday [9AM-3PM]	4.6%	3.6%	4.8%	5.1%	4.8%	4.3%	2.4%	2.4%	1.8%				4.1%
PM Peak [3PM-7PM]	5.6%	4.7%	6.5%	7.3%	6.3%	5.3%	2.3%	2.3%	2.0%				5.2%
Early Night [7PM-11PM]	3.7%	3.4%	4.2%	4.6%	3.4%	3.1%	1.4%	2.2%	1.7%				3.4%
Late Night [11PM-4AM]	9.2%	7.7%	7.5%	7.6%	5.3%	6.0%	3.5%	3.8%	3.4%				6.6%
Weekend	3.4%	4.5%	5.0%	5.2%	5.2%	4.0%	1.4%	1.6%	1.0%				3.9%

### METRORAIL CUSTOMER SATISFACTION RATING

	Q1	Q2	Q3	Q4
FY2018	74%	73%	76%	79%
FY2019	75%	73%	80%	76%
FY2020	79%	83%	85%	N/A

### METROBUS CUSTOMER SATISFACTION RATING

	Q1	Q2	Q3	Q4
FY2018	76%	72%	75%	80%
FY2019	71%	77%	75%	76%
FY2020	76%	79%	76%	N/A

\*FY2020 Crowding results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### PART I CRIMES PER MILLION PASSENGERS | TARGET ≤ 5.3<sup>A</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	4.5	4.9	5.1	4.1	3.8	3.7	3.6	2.5	3.7	4.6	3.8	4.4	4.0
FY2019	3.5	4.5	3.9	3.7	4.0	4.0	4.6	3.4	3.1	3.5	4.0	5.6	3.9
FY2020	4.8	4.2	5.9	6.9	4.3	5.5	3.7	4.5	4.4				5.0

### PART I CRIMES

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	113	127	126	107	90	79	79	52	90	116	97	114	863
FY2019	89	110	90	99	89	83	95	71	77	92	104	137	803
FY2020	125	106	147	187	100	118	88	101	47				1,019

### PART I CRIMES | BY TYPE

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2020													
Property Crime	81	72	107	133	63	66	59	67	28				676
Larceny	27	15	33	51	23	30	21	33	15				248
Larcey (Other)	47	50	69	77	38	35	31	32	13				392
Burglary	2	0	0	0	0	0	0	0	0				2
Motor Vehicle Theft	5	6	4	2	2	1	4	1	0				25
Attempted MV Theft	0	1	1	3	0	0	3	1	0				9
Arson	0	0	0	0	0	0	0	0	0				0
Violent Crime	44	34	40	54	37	52	29	34	19				343
Aggravated Assault	13	11	13	11	10	9	10	8	3				88
Rape	1	0	0	0	0	0	0	1	0				2
Robbery	30	23	27	43	27	43	19	25	16				253
FY2020 Part I Crimes	125	106	147	187	100	118	88	101	47				1,019
FY2020 Homicides	0	0	0	1	0	0	1	0	0				2

\*FY2020 Part I Crime results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### CUSTOMER INJURIES PER MILLION PASSENGERS | TARGET ≤ 2.00

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	1.57	2.02	2.61	1.87	1.92	2.13	2.91	2.60	2.53	2.01	1.20	1.59	2.22
FY2019	2.51	1.88	2.86	2.04	1.83	1.99	1.97	2.61	1.85	1.94	1.98	2.60	2.17
FY2020	1.90	1.44	2.05	1.58	2.12	2.45	1.54	2.04	1.46				1.86

### METRORAIL CUSTOMER INJURIES PER MILLION PASSENGERS | TARGET ≤ 1.40

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	1.45	1.24	1.18	0.82	1.50	1.37	2.47	1.90	1.53	1.01	1.09	1.22	1.48
Non-Preventable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Preventable	1.45	1.24	1.18	0.82	1.50	1.37	2.47	1.90	1.53	1.01	1.09	1.22	1.48
FY2019	2.09	1.19	1.16	1.30	1.32	1.06	1.75	2.05	1.28	1.19	1.18	1.09	1.47
Non-Preventable	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Preventable	2.09	1.19	1.16	1.30	1.25	1.06	1.75	2.05	1.28	1.19	1.18	1.09	1.46
FY2020	1.58	1.19	1.24	0.92	1.10	1.92	1.46	1.77	1.37				1.38
Non-Preventable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00
Preventable	1.58	1.19	1.24	0.92	1.10	1.92	1.46	1.77	1.37				1.38

\*FY2020 Customer Injury Rate results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### METROBUS CUSTOMER INJURIES PER MILLION PASSENGERS | TARGET ≤ 2.45

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	1.37	2.94	4.36	2.84	2.26	3.04	3.17	2.52	3.49	3.32	1.30	2.15	2.89
Non-Preventable	0.63	1.86	1.42	1.66	0.97	1.87	2.12	0.96	1.69	1.50	0.70	0.54	1.46
Preventable	0.74	1.08	2.94	1.17	1.29	1.17	1.06	1.56	1.80	1.82	0.60	1.61	1.43
FY2019	2.70	2.35	5.27	2.99	2.19	3.04	1.61	2.92	2.32	2.72	3.11	4.52	2.83
Non-Preventable	1.19	1.67	3.63	1.20	1.15	2.19	1.24	0.89	1.77	1.30	0.62	2.58	1.66
Preventable	1.51	0.69	1.65	1.79	1.04	0.85	0.37	2.03	0.55	1.41	2.49	1.94	1.17
FY2020	1.98	1.45	3.12	2.40	3.22	3.02	1.61	2.31	2.04				2.36
Non-Preventable	1.46	1.03	1.40	1.15	2.03	2.39	1.15	1.70	1.02				1.49
Preventable	0.52	0.41	1.72	1.25	1.19	0.63	0.46	0.61	1.02				0.87

### METROACCESS CUSTOMER INJURIES PER 100,000 PASSENGERS | TARGET ≤ 2.85

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	2.14	1.46	2.09	3.39	1.55	1.07	2.18	5.48	3.62	1.99	0.48	0.51	2.54
Non-Preventable	1.61	0.97	2.09	1.45	1.55	0.00	0.54	4.38	1.55	1.49	0.48	0.00	1.56
Preventable	0.54	0.49	0.00	1.94	0.00	1.07	1.63	1.10	2.07	0.50	0.00	0.51	0.98
FY2019	2.54	2.36	1.06	1.39	2.10	1.66	3.38	2.84	2.45	2.94	0.96	2.57	2.18
Non-Preventable	2.54	2.36	1.06	0.46	2.10	1.66	2.82	1.70	1.96	1.47	0.48	1.54	1.84
Preventable	0.00	0.00	0.00	0.93	0.00	0.00	0.56	1.14	0.49	1.47	0.48	1.03	0.34
FY2020	2.49	1.97	1.55	1.92	3.28	1.73	0.56	1.18	N/A				1.75
Non-Preventable	1.00	0.98	1.55	1.44	3.28	1.15	0.56	0.59	N/A				1.25
Preventable	1.49	0.98	0.00	0.48	0.00	0.58	0.00	0.59	N/A				0.50

\*FY2020 Customer Injury Rate results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### EMPLOYEE INJURIES PER 200,000 WORK HOURS | TARGET ≤ 5.0

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	7.2	6.1	7.7	8.1	6.5	5.5	7.6	7.0	7.2	6.6	7.5	8.0	7.0
FY2019	5.8	5.6	6.5	6.8	5.2	8.1	5.9	7.1	5.5	5.4	5.5	7.2	6.2
FY2020	7.0	8.7	6.5	8.1	5.7	5.6	6.7	4.8	5.8				6.6

### RAIL SYSTEM EMPLOYEE INJURIES PER 200,000 WORK HOURS | TARGET ≤ 3.4

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	5.7	3.9	3.7	4.9	2.6	3.6	5.4	3.1	3.9	4.3	3.9	4.0	4.1
Non-Preventable	2.0	0.8	1.3	0.8	0.2	1.5	1.8	1.1	0.4	0.8	0.2	1.3	1.1
Preventable	3.7	3.1	2.4	4.1	2.4	2.1	3.6	2.0	3.5	3.5	3.7	2.7	3.0
FY2019	4.9	3.1	4.0	2.3	2.9	4.5	3.1	4.7	3.7	2.2	3.7	2.3	3.7
Non-Preventable	1.0	0.8	1.1	0.8	0.8	1.3	0.6	0.4	1.4	0.4	0.8	0.2	0.9
Preventable	3.9	2.3	3.0	1.6	2.1	3.2	2.5	4.3	2.4	1.8	2.9	2.1	2.8
FY2020	3.7	5.2	3.5	4.0	2.5	2.9	2.7	3.4	4.0				3.5
Non-Preventable	1.7	1.0	0.8	1.1	0.6	1.0	0.8	0.6	1.6				1.0
Preventable	1.9	4.3	2.6	2.9	1.9	1.9	1.9	2.7	2.4				2.5

\*FY2020 Employee Injury Rate results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### BUS EMPLOYEE INJURIES PER 200,000 WORK HOURS | TARGET ≤ 9.4

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	11.0	10.2	14.0	14.0	13.8	7.3	11.7	12.2	14.0	12.3	11.0	14.7	12.1
Non-Preventable	6.5	5.7	7.5	7.5	6.4	5.1	6.5	8.1	5.7	7.2	6.6	8.7	6.5
Preventable	4.5	4.5	6.5	6.5	7.4	3.2	5.2	4.1	8.4	5.0	4.5	6.1	5.6
FY2019	8.2	10.0	10.4	16.1	9.8	14.2	11.0	11.2	7.8	11.5	9.3	14.7	11.0
Non-Preventable	5.5	4.3	7.5	9.2	4.4	8.5	4.3	5.8	4.4	6.5	4.8	8.8	6.0
Preventable	2.7	5.7	2.9	6.9	5.4	5.7	6.7	5.4	3.4	5.0	4.5	5.9	5.0
FY2020	13.3	15.2	11.2	13.4	8.4	11.3	15.3	7.8	10.5				12.0
Non-Preventable	8.2	7.9	4.6	6.8	5.1	6.1	8.4	5.1	5.2				6.5
Preventable	5.1	7.3	6.6	6.5	3.4	5.2	6.9	2.7	5.2				5.5

\*FY2020 Employee Injury Rate results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### NTD BUS COLLISIONS PER MILLION MILES | TARGET ≤ 3.7

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	3.2	4.8	3.5	4.4	2.0	3.2	3.2	3.7	4.9	2.5	3.6	4.2	3.7
Non-Preventable	2.5	3.9	2.5	3.7	1.5	2.2	2.2	3.5	3.4	1.3	3.1	3.7	2.8
Preventable	0.7	0.9	1.0	0.7	0.5	1.0	1.0	0.3	1.5	1.3	0.5	0.5	0.9
FY2019	5.4	3.9	6.2	7.0	3.3	4.0	3.2	3.8	4.6	6.1	2.6	5.6	4.6
Non-Preventable	3.2	3.0	3.6	3.6	1.5	2.5	2.0	1.4	3.1	4.4	1.2	2.9	2.7
Preventable	2.2	0.9	2.6	3.4	1.8	1.5	1.2	2.5	1.4	1.7	1.4	2.7	1.9
FY2020	3.5	4.0	4.5	4.3	4.0	3.3	2.9	3.4	4.0				3.7
Non-Preventable	2.1	1.9	2.2	2.1	1.6	2.3	2.2	2.1	1.5				2.0
Preventable	1.4	2.1	2.2	2.1	2.4	1.0	0.7	1.3	2.5				1.7

### ALL BUS COLLISIONS PER MILLION MILES | TARGET DECREASE FROM PRIOR YEAR^

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	58.7	65.0	59.6	58.3	62.5	61.1	60.8	61.7	66.2	67.4	73.6	63.2	61.6
Non-Preventable	33.8	36.4	38.4	34.0	37.8	40.1	36.2	38.2	36.6	43.0	48.8	32.1	36.8
Preventable	24.9	28.6	21.2	24.2	24.8	20.9	24.6	23.5	29.6	24.4	24.8	31.1	24.8
FY2019	68.8	70.0	67.6	70.0	57.7	67.7	64.0	61.3	66.0	72.9	67.4	65.9	66.0
Non-Preventable	35.6	42.6	38.9	36.1	34.3	37.2	34.4	32.2	36.6	43.9	40.8	36.0	36.5
Preventable	33.2	27.3	28.6	33.9	23.4	30.5	29.5	29.2	29.4	29.0	26.6	29.9	29.5
FY2020	61.8	65.1	63.9	70.8	65.0	61.7	60.3	62.9	56.4				63.5
Non-Preventable	32.4	37.9	36.8	42.3	37.3	37.1	36.3	33.5	26.7				36.1
Preventable	29.4	27.2	27.1	28.5	27.7	24.6	24.0	29.4	29.7				27.4

\*FY2020 NTD and All Bus Collision Rate results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### RAIL COLLISIONS | TARGET DECREASE FROM PRIOR YEAR<sup>^</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	1	1	1	0	0	1	0	1	1	1	1	2	6
FY2019	3	2	0	0	0	0	0	1	2	1	1	0	8
FY2020	1	2	0	2	0	0	1	2	3				11

### DERAILMENTS | TARGET DECREASE FROM PRIOR YEAR<sup>^</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	2	1	2	0	0	1	2	1	2	1	1	0	11
Trains Carrying Customers	0	0	0	0	0	0	1	0	0	0	0	0	1
Trains with No Customers	0	0	0	0	0	0	1	0	0	0	0	0	1
Roadway Maintenance Machine	2	1	2	0	0	1	0	1	2	1	1	0	9
FY2019	0	1	0	0	1	0	0	0	0	0	1	0	2
Trains Carrying Customers	0	0	0	0	0	0	0	0	0	0	0	0	0
Trains with No Customers	0	0	0	0	0	0	0	0	0	0	0	0	0
Roadway Maintenance Machine	0	1	0	0	1	0	0	0	0	0	1	0	2
FY2020	1	2	1	0	0	0	0	1	0				5
Trains Carrying Customers	0	0	0	0	0	0	0	0	0				5
Trains with No Customers	0	0	0	0	0	0	0	0	0				0
Roadway Maintenance Machine	1	2	1	0	0	0	0	1	0				0

<sup>^</sup>FY2020 Rail Collisions and Derailment results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### FIRE INCIDENTS | TARGET DECREASE FROM PRIOR YEAR<sup>A</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
<b>FY2018</b>	15	8	9	7	3	9	8	2	1	3	13	5	62
Non-Electrical	4	2	4	3	3	7	3	0	1	2	5	2	27
Cable	1	1	0	2	0	0	1	0	0	0	0	0	5
Arcing Insulator	9	5	5	2	0	0	4	2	0	1	8	3	27
Train Component	1	0	0	0	0	2	0	0	0	0	0	0	3
Station Component	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>FY2019</b>	10	11	5	3	5	2	3	5	6	7	4	9	50
Non-Electrical	4	1	1	2	4	2	3	3	2	4	3	4	22
Cable	0	3	0	0	0	0	0	0	0	0	0	0	3
Arcing Insulator	6	6	4	1	1	0	0	2	4	3	1	5	24
Train Component	0	1	0	0	0	0	0	0	0	0	0	0	1
Station Component	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>FY2020</b>	8	6	12	7	6	5	2	3	2				51
Non-Electrical	4	4	10	5	5	1	1	1	2				33
Cable	0	2	0	0	0	0	0	0	0				2
Arcing Insulator	4	0	1	1	1	4	1	2	0				14
Train Component	0	0	1	0	0	0	0	0	0				1
Station Component	0	0	0	1	0	0	0	0	0				1

<sup>A</sup>FY2020 Fire Incident results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SAFETY & SECURITY

### RED SIGNAL OVERRUNS | TARGET DECREASE FROM PRIOR YEAR<sup>^</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	0	0	1	0	0	1	0	0	3	0	3	2	5
FY2019	0	0	1	0	0	1	0	0	2	0	3	2	4
FY2020	2	0	1	3	2	1	0	0	3				12

### BUS PEDESTRIAN STRIKES | TARGET DECREASE FROM PRIOR YEAR<sup>^</sup>

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar*	Apr	May	Jun	FYTD
FY2018	3	0	0	0	2	2	1	0	2	3	0	1	10
FY2019	2	4	2	3	2	1	4	3	0	0	1	2	21
FY2020	2	2	2	5	0	2	1	2	0				16

\*FY2020 Red Signal Overrun and Bus Pedestrian Strike results were evaluated for the period beginning July 1 and ending the day before service was adjusted due to the pandemic – March 16.

# APPENDIX A | DATA TABLE

## SUPPORTING MEASURES

VACANCY RATE   TARGET 6%													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2018	7%	7%	7%	6%	7%	7%	6%	6%	7%	7%	7%	7%	7%
FY2019	7%	7%	6%	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%
FY2020	6%	6%	6%	6%	6%	7%	7%	6%	6%				6%

# APPENDIX B | DEFINITIONS

## RIDERSHIP + SUPPORTING MEASURES

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Ridership</b>	<p>Total Metro ridership</p> <p>Metro rail passenger trips + Metrobus passenger boardings + MetroAccess passenger trips</p>	<p>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.</p> <p>Passenger trips are defined as follows:</p> <ul style="list-style-type: none"> <li>▶ <b>Metro rail</b> reports passenger trips. 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.</li> <li>▶ <b>Metrobus</b> reports passenger boardings. A passenger boarding is counted via the onboard Automatic Passenger Counter (APC) when a customer boards a Metrobus. In an example where a customer transfers between two Metrobuses to complete their travel two trips are counted. Metrobus totals also include shuttles* to accommodate rail station shutdowns and other track work.</li> <li>▶ <b>MetroAccess</b> reports passenger trips. A fare paying passenger traveling from an origin to a destination is counted as one passenger trip.</li> </ul> <p>*Metro does not include bus shuttle passenger trips in its budget or published ridership forecasts.</p>
<b>Vacancy Rate</b>	<p>Percentage of budgeted positions that are vacant</p> <p>(Number of budgeted positions – number of employees in budgeted positions) ÷ number of budgeted positions</p>	<p>This measure indicates how well Metro is managing its human capital strategy to recruit new employees in a timely manner. Factors influencing vacancy rate can include: recruitment activities, training schedules, availability of talent, promotions, retirements, among other factors.</p>

# APPENDIX B | DEFINITIONS

## QUALITY SERVICE

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>MyTripTime</b> <b>Metrorail 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>Metrobus On-Time Performance</b>	<p>Percentage of bus service delivered on-time</p> <p>Schedule-based routes = Number of time points delivered on time based on a window of 2 minutes early and 7 minutes late ÷ Total number of time points delivered</p> <p>Headway-based routes = Number of time points delivered within the scheduled headway + 3 minutes ÷ Total number of time points delivered</p>	<p>Bus on-time performance (OTP) communicates the reliability of bus service, which is a key driver of customer satisfaction and ridership.</p> <ul style="list-style-type: none"> <li>▶ For schedule-based routes, OTP measures adherence to the published route schedule for delivered service.</li> <li>▶ For headway-based routes, OTP measures the adherence to headways, or the time customers wait between buses. Headway-based routes include routes 70, 79, X2, 90, 92, 16Y, and Metroway.</li> </ul> <p>Factors that can effect OTP include: traffic congestion, detours, inclement weather, scheduling, vehicle reliability, operational behavior, or delays caused by passengers.</p>
<b>MetroAccess On-Time Performance</b>	<p>Adherence to Schedule</p> <p>Number of vehicle arrivals at the pick-up location within the 30 minute on-time widow ÷ Total trips delivered</p>	<p>This indicator illustrates how closely MetroAccess adheres to customer pick-up windows on a system-wide basis. Factors that effect on-time performance are traffic congestion, inclement weather, scheduling, vehicle reliability, and operational behavior. MetroAccess on-time performance is essential to delivering quality service to the customer.</p>

# APPENDIX B | DEFINITIONS

## QUALITY SERVICE

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Rail Fleet Reliability</b>	<p>Mean Distance Between Delays (MDBD)</p> <p>Total railcar revenue miles ÷ Number of failures during revenue service resulting in delays of four or more minutes</p>	<p>The number of miles traveled before a railcar experiences a failure. Some car failures result in inconvenience or discomfort, but do not always result in a delay of service (such as hot cars). Mean Distance Between Delay includes those failures that had an impact on customer on-time performance.</p>
	<p>Mean Distance Between Failure (MDBF)</p> <p>Total railcar revenue miles ÷ Total number of failures occurring during revenue service</p>	<p>Mean Distance Between Failure and Mean Distance Between Delay communicate the effectiveness of Metro's railcar maintenance and engineering program. Factors that influence railcar reliability are the age and design of the railcars, the amount the railcars are used, the frequency and quality of preventive maintenance, and the interaction between railcars and the track.</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>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 x 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.</p> <p>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>

# APPENDIX B | DEFINITIONS

## QUALITY SERVICE

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Rail Infrastructure</b> (Federal Transit Administration Transit Asset Management Performance Measure)	<p>Percentage of track segments with performance restrictions at 9:00 AM the first Wednesday of every month</p> <p>Number of track miles with performance restrictions ÷ 234 total miles</p>	<p>In 2016, the Federal Transit Administration (FTA) issued its Final Rule on Transit Asset Management, which requires transit properties to set targets and report performance on a variety of measures, including guideway condition. Guideway includes track, signals and systems.</p> <p>A performance restriction occurs when there is a speed restriction: the maximum train speed is set below the guideway design speed. Performance restrictions may result from a variety of causes, including defects, signaling issues, construction zones, and maintenance causes. FTA considers performance restrictions to be a proxy for both track condition and the underlying guideway condition.</p>
<b>Train On-Time Performance: Headway Adherence</b>	<p>Number of station stops delivered within the scheduled headway plus 2 minutes during rush (AM/PM) service ÷ Total station stops delivered</p> <p>Number of station stops delivered up to 150% of the scheduled headway during non-rush (midday and evening) ÷ Total station stops delivered</p>	<p>Train on-time performance measures the adherence to weekday headways, or the time customers wait between trains. Factors that can effect on-time performance include: infrastructure conditions, missed dispatches, railcar delays (e.g., doors), or delays caused by sick passengers. Station stops are tracked system-wide, with the exception of terminal and turn-back stations.</p>
<b>Trains in Service</b>	<p>Percentage of required trains that are in service at 8:15 AM and 5:00PM</p> <p>Number of Trains in service ÷ Total required trains</p>	<p>Trains in Service is a key driver of customer on-time performance and supports the ability to meet the Board standard for crowding. WMATA's base rail schedule requires 140 trains during rush periods. Fewer trains than required results in missed dispatches, which leads to longer wait times for customers and more crowded conditions. Key drivers of train availability include the size of the total fleet and the number of "spares", railcar reliability and average time to repair, operator availability, and balancing cars across rail yards to ensure that the right cars are in the right place at the right time.</p>
<b>Offloads</b>	<p>Number of railcar offloads</p>	<p>An offload is any time all passengers traveling on a train must get off the train for any un-scheduled reason (e.g., not a turnback or planned removal from service). Offloads are a key driver of customer on-time performance and communicates the impact of Metro's maintenance and engineering programs on customer service. Factors that influence railcar offloads are railcar performance, rail infrastructure performance, rail operations policies, and customer behavior.</p>

# APPENDIX B | DEFINITIONS

## QUALITY SERVICE

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Crowding</b>	<p>Percentage of passenger time spent on vehicles exceeding crowding guidelines</p> <p>Number of crowded passenger minutes ÷ Total number of passenger minutes</p>	<p>Crowding is a key driver of customer satisfaction with Metrorail and Metrobus service. Crowding measures the percentage of passenger time spent on vehicles that exceed crowding guidelines per WMATA service standards:</p> <ul style="list-style-type: none"> <li>▶ Metrorail: 100 passengers per car before the pandemic and 23 passengers per car during the pandemic</li> <li>▶ Metrobus: 120% of seated capacity during peak, 100% off peak [100% at all times on express routes]</li> </ul> <p>Crowding informs decision making regarding asset investments, service plans and scheduling. Factors that can effect crowding include: service reliability, missed trips insufficient schedule, or unusual demand.</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>

# APPENDIX B | DEFINITIONS

## SAFETY & SECURITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Crime</b>	Reported Part I Crimes	<p>Part I crimes reported to the 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. Uniform Crime Reporting, managed by the Federal Bureau of Investigation, include Part I offense classifications of Criminal Homicide, Forcible Rape, Robbery, Aggravated Assault, Burglary, Larceny, Motor Vehicle Theft, and Arson.</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 can have a direct effect on whether customers feel safe in the system.</p>
<b>Customer Injury Rate</b>	Customer injury rate: $\frac{\text{Number of injuries} +}{\text{(Number of passengers} + 1,000,000)}$	<p>The customer injury rate is based on National Transit Database (NTD) Reporting criteria. This measure includes customers injured during Metro operations when the injury is considered serious or requires immediate medical attention away from the scene.</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: $\frac{\text{Number of injuries} +}{\text{(Total work hours} + 200,000)}$	<p>An employee injury is recorded based on OSHA 1904 Recordkeeping Criteria, when the injury is (a) work related; and, (b) one or more of the following happens to the employee: 1) fatality, 2) injury or illness that results in loss of consciousness, days away from work, restricted work, or job transfer 3) receives medical treatment above first aid, 4) diagnosed case of cancer, chronic irreversible diseases, fractured or cracked bones or teeth, and punctured eardrums, 5) special cases involving needlesticks and sharps injuries, medical removal, hearing loss, and tuberculosis.</p> <p>Per the Occupational Safety and Health Act, employers are obligated to provide a workplace free of recognized hazards which may cause employee death or serious injury. OSHA recordable injuries are a key indicator of how safe employees are in the workplace.</p>

# APPENDIX B | DEFINITIONS

## SAFETY & SECURITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>NTD Bus Collision Rate</b>	<p>NTD bus collision rate:</p> $\frac{\text{Number of NTD reportable collisions}}{\text{(Total number of bus miles operated} \div 1,000,000)}$	<p>The NTD collision rate is a subset of the Bus Collision Rate and is based on National Transit Database (NTD) Reporting criteria. It reflects bus collisions that result in injuries requiring transport for any involved vehicle or pedestrian; towaway of any involved vehicle; or total damages that cost \$25,000 or more.</p> <p>NTD-reportable collisions reflect a measure of serious bus collisions and represent an opportunity to fully investigate the incident; determining causal factors and root causes. The NTD bus collision rate is an indicator of how well service is meeting this safety objective.</p>
<b>Bus Collision Rate</b>	<p>Bus collision rate:</p> $\frac{\text{Number of collisions}}{\text{(Number of bus miles operated} \div 1,000,000)}$	<p>A bus collision includes all incidents where the transit vehicle comes in contact with another vehicle, object or person, regardless of fault. Collisions impact the ability to adhere to the published route schedule, reduce bus service quality, and reliability.</p>
<b>Rail Collisions</b>	<p>Number of rail collisions</p>	<p>Rail collision incidents reflect any incident on the mainline or yard where a train, with or without customers, or a Roadway Maintenance Machine (RMM) makes contact with another vehicle, equipment, or object, and meet the NTD threshold of substantial damage.</p> <p>The number of rail collision incidents is an indicator of how well Train and Equipment Operators and Rail Controllers are paying full time and attention to their operating environment and how efficient communications are from controllers to operators.</p>
<b>Derailments</b>	<p>Number of derailments</p>	<p>A derailment is a non-collision event that occurs when a train or other rail vehicle unintentionally comes off its rail, causing it to no longer be properly guided onto the railway.</p> <p>The number of derailment incidents is an indicator of how well Train Operators and Rail Controllers are paying full time and attention to their operating environment and how efficient communications are from controllers to operators. Derailments are also an indicator of the state of good repair of both the right-of-way and rail vehicles (trains, RMMs, Flat Cars, Hi-Rail trucks).</p>

# APPENDIX B | DEFINITIONS

## SAFETY & SECURITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
<b>Fire Incidents</b>	Number of fire incidents	<p>Fire incidents consist of any fire that occurs within the Metrorail system regardless if active suppression was required. There are three main types of fires that occur within the Metrorail system: non-electrical (e.g., debris, rubbish such as leaves, newspapers), cable, arcing events (track components, train components) and station equipment.</p> <p>The number of fire incidents is an indicator of how well Metro is keeping its right of way clean and dry, and its equipment in state of good repair.</p>
<b>Red Signal Overruns</b>	Number of red signal overruns	<p>Red signal overrun incidents reflect any time a train or equipment operator passes a red signal on the right-of-way (including in rail yards), or when the operator passes an employee on the roadway who's telling the train or Roadway Maintenance Machine (RMM) to not move any further.</p> <p>The number of red signal overruns is an indicator of how well Train Operators and Rail Controllers are paying full time and attention to their operating environment and how efficient communications are from controllers to operators.</p>
<b>Bus Pedestrian Strikes</b>	Number of pedestrian or cyclist strikes	<p>Bus pedestrian strikes counts include all incidents where the impact of a the transit vehicle with a person or cyclist causes immediate medical transport from the scene.</p>