# WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY **PERFORMANCE REPORT** Q4/FY2021

July 2020 – June 2021



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# ABOUT METRO

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

The FY2021 Metro Performance Report highlights Metro's performance on a suite of key performance indicators (KPIs) that evaluate how well the agency is delivering its mission to provide safe, equitable, reliable and cost-effective public transit and meeting the standards the Board has set for safety and service. These KPIs follow industry standard and align to the safety performance measures established in the Federal Transit Administration's National Public Transportation Safety Plan.

The report compares performance for the period of July 2020 - June 2021 to the targets that Metro set for the fiscal year. Colored indicators throughout the report show the status against target.

## In FY21, Metro met or exceeded target for all 20 measures, including 11 Safety & Security measures and nine Quality Service measures.



### Safety & Security

#### All Safety & Security KPIs met target in FY21. These include:

- Part I Crime
- Metrorail Customer Injury Rate
- Metrobus Customer Injury Rate
- MetroAccess Customer Injury Rate
- Rail System Employee Injury Rate
- Bus Employee Injury Rate
- NTD Bus Collision Rate
- Rail Collisions
- Derailments
- Fire Incidents

## Quality Service

## All Quality Service KPIs met target in FY21. These include:

- MyTripTime
- MetroAccess On-Time Pick-up Performance
- Rail Fleet Reliability
- Bus Fleet Reliability
- MetroAccess Fleet Reliability
- Elevator Availability
- Escalator Availability
- Available Track

# TABLE OF CONTENTS

RIDERSHIP	<ul> <li>Ridership</li> </ul>	PAGE <b>5</b>
SAFETY & SECURITY	<ul><li>Crime</li><li>Injuries</li><li>Safety incidents</li></ul>	PAGE <b>6</b>
QUALITY SERVICE	<ul> <li>On-time performance</li> <li>Fleet reliability</li> <li>Asset availability</li> <li>Crowding</li> </ul>	PAGE <b>15</b>
\$ FINANCIAL RESPONSIBILITY	<ul> <li>Balanced budget</li> </ul>	PAGE <b>26</b>
APPENDIX	<ul><li>A: Data table</li><li>B: Definitions</li></ul>	PAGE <b>28</b>

# **RIDERSHIP**

#### The total ridership of 81.3 million in FY21 was 33% above the forecast of 61 million, but 65% below FY20 ridership.

In a departure from historic trends, Metrobus ridership in FY2021 exceeded Metrorail ridership, with almost twice as many Metrobus customers compared to Metrorail customers.



#### 🕨 Met or above target | 🔴 Near target | 🛑 Target not met | 🌑 No target 🕴 🎵 Desired direction

# SAFETY TARGETS



Each fiscal year, Metro establishes performance targets for KPIs. These KPIs and targets are an important way to track progress through the year, and ultimately reflect how effectively Metro is delivering its mission to provide safe, equitable, reliable and cost-effective public transit.

In FY21, mode-level safety performance targets were established as part of <u>Metro's Agency Safety Plan</u> (ASP). The table below shows Metro's performance against target for this set of measures:

Metro Agency Safety Plan | FY21 performance against target target met KEY: target missed **FY21** RATES COUNTS ACTUAL (PER 10 MILLION VEHICLE REVENUE MILES) safety event safety event injury count fatality rate injury rate fatality count rate count Metrorail 0.41 20.1 9.7 147 71 Metrobus 1.13 74.4 54.9 198 146 16.6 0 23 MetroAccess 0 17.3

FY21 TARGETS	(PER 10 MILLI	RATES ON VEHICLE REV	VENUE MILES)		COUNTS	
	fatality rate	injury rate	safety event rate	fatality count	injury count	safety event count
Metrorail	0	38.1	11.1	0	324	95
Metrobus	0	95.7	69.3	0	359	260
MetroAccess	0	24.2	7.8	0	54	18

For internal management and public reporting, Metro developed a suite of measures and targets that feed into the mode-level, summary KPIs above. For safety performance measures related to employee injuries and reportable safety events, the approach is to continuously improve relative to prior years' performance levels. This follows Federal Transit Administration (FTA) guidance to set realistic targets, emphasizes the importance of building a safety culture, motivates staff to improve, and moves the agency along a glidepath to zero safety events.

	Measure	FY21	target	Methodology
	Rail Customer Injuries   # of injuries	177	or 🕇	Achieve FY2020 rate by end of year
	Bus Customer Injuries   # of injuries	154	or 🕇	Achieve FY2020 rate by end of year
	MetroAccess Customer Injuries   # of injuries	35	or 🕇	Achieve FY2020 rate by end of year
Rai	System Employee Injuries   # per 100 employees	3.5	or 🕇	5% improvement from 3-year average
	Bus Employee Injuries   # per 100 employees	11.2	or 🕇	5% improvement from 3-year average
	NTD Bus Collision Rate   # per million miles	3.7	or 🕇	7.5% improvement from 3-year average
	Rail Collisions   # of collisions	7	or 🕇	Improve relative to FY2020
	Derailments   # of incidents	4	or 🕇	Improve relative to FY2020
	Fire Incidents   # of incidents	66	or 🕇	Improve relative to FY2020
_	Red Signal Overruns   # of incidents	11	or 🕇	Improve relative to FY2020
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## SAFETY & SECURITY

The following highlights system-wide safety performance through the end of FY21.





#### Crime | 646 Part I Crimes FY target ≤ 840

## During FY21, there were 646 Part I crimes, about 54 crimes per month, meeting target of no more than 840 crimes.

Metro had 45 percent fewer crimes in FY21 compared to FY20. However, when scaled to ridership, the Part I crime rate increased 55 percent compared to FY20, with 7.9 crimes per million trips in FY21 compared to 5.1 in FY20. Roughly two-thirds of crimes occurred on Metrorail in FY21; although this is similar to FY20's result, rail ridership was down almost 80 percent in FY21, as compared to only 46 percent for Bus.

Crime rates may have increased during the pandemic due to several reasons: Lower ridership may embolden some offenders as there are fewer "eyes" in the system, and extended scheduling and docketing timelines mean that some offenders are released by the courts on their own personal recognizance. The Metro Transit Police Department has not substantially changed their policing practices and policies during the pandemic and continue to heavily investigate all crime.



#### PART I CRIME BREAKDOWN

#### Crimes Against Property – 78%

There were an average of 42 crimes against property per month across the system. These include theft, arson, robbery, and burglary. This total represents a 52 percent decrease from the previous fiscal year.

#### Crimes Against Persons – 22%

There were an average of 12 crimes against persons per month across the system, which include aggravated assault, homicide, and rape. This is an increase from last fiscal year and in line with the experience of other jurisdictions in the region.

### THREE-YEAR TREND | goal to decrease

Crimes Against Property Crimes Against Persons



- Enhance safety features to reduce all types of crimes across the systems: Install public safety radio systems, Improve station lighting.
- Deploy Daily Security Observation Response Team (SORT) details for increased visibility to deter crimes against persons and property in rail stations.
- Establish and staff the temporary District III police station.
- MTPD's Youth Services Unit (YSU) and Community Engagement Officers will aid efforts in reducing crime, engaging with the community, and monitoring crime trends.

# CUSTOMER INJURIES



#### Metrorail Customer Injuries | 95 injuries FY target ≤ 177

## There were 95 customer injuries within Metrorail in FY21, better than target. These 95 injuries result in a rate of 3.4 per million passengers in FY21, an increase relative to the FY20 rate.

Slips, trips, and falls accounted for 89 percent of all injuries for Metrorail customers for FY21. About half of all injuries occurred on station platforms or when customers fell into the roadway. Almost 40 percent occurred on escalators or elevators, with only 12 occurring on board trains. The top causal factors for injuries within Metrorail were intoxication (14), inattention/distraction (6), and train motion (e.g., quick stops, 6). The three primary station locations for injuries were at Congress Heights (6), Rhode Island Ave (6) and Gallery Place (5).



#### Key actions to sustain performance

 Continue station modernization improvements to reduce hazards that result in slip/trip/fall and train door injuries.

#### Metrobus Customer Injuries |130 injuries

FY target ≤ 154

## Metrobus experienced 130 customer injuries during FY21, better than target. These 130 injuries resulted in a rate of 2.5 per million passengers, an increase relative to the FY20 rate.

The top two types of injuries this fiscal year are slips, trips and falls (65 injuries) and collision-related (53 injuries). There were about two-thirds as many of these two injury types compared to FY20. Injuries most frequently occur when the bus is in motion (including during hard braking events) and when customers are boarding or alighting vehicles.



- Continue investigation of bus stop incidents to identify causal factors that result in injuries.
- Identify intersections that are hot spots for collisions for heightened observation by Field Supervisors.
- With the initial pilot now concluded advance procurement of collision avoidance technologies, such as Blind Spot Warnings and object detection, which is likely to lower the number of falls while the bus is in motion.

# CUSTOMER INJURIES



#### MetroAccess Customer Injuries | 11 injuries FY target ≤ 35

## There were 11 injuries among MetroAccess customers, better than target. These 11 injuries resulted in a rate of 1.03 per 100,000 passengers, which is a 38% decrease compared to FY20.

The 11 injuries in FY21 included four collision-related injuries, and seven slip/trip/falls. Less traffic during the pandemic contributed to a 50 percent decrease in collision-related injuries in FY21 compared to FY20. In addition, slips/trips/falls decreased by more than half, from 15 in FY20 to seven in FY21.



THREE-YEAR TREND | goal to decrease

- Incorporate sedans into MetroAccess fleet with sedan-specific standard operating procedure and associated training to maximize safety.
- Continue to engage an Occupational Therapist to address assistance-related injuries. Implement training on parking and assisting customers using sedans, as the methods differ compared to vans.
- Update DriveCam units, adding live and continuous audio and video recording capability. This enhances root cause analysis and enables timely behavioral coaching for vehicle operators.

# EMPLOYEE INJURY RATE



#### Rail System Employee Injury Rate | 3.3 per 100 employees Target ≤ 3.5

## The Rail system had 182 employee injuries in FY21 with a rate of 3.3 injuries per 100 employees, which outperformed the target rate of 3.5 injuries per 100 employees.

Slip/Trip/Fall injuries were the leading incident type in FY21 with 53 incidents. Train Operator slip/trip/fall injuries were primarily from boarding/alighting trains or contact with loose rocks and wet surfaces. Maintenance employee slip/trip/fall injuries were primarily from wet surfaces. Assault/stress cases (40) increased by 42 percent due to a sharp increase in high-stress police incidents in the Rail system and pushing/pulling cases increased by 63 percent in FY21 compared to FY20. Conversely, caught in/by (-58 percent), collision-related (-25 percent), and lifting/lowering (-10 percent), each decreased in FY21.



#### Key actions to sustain performance

- Encourage Safety Observations and use data to identify and proactively address unsafe behaviors.
- Conduct safety campaign to increase employee awareness around slip/trip/fall injuries.

#### Bus Employee Injury Rate | 11.2 per 100 employees Target ≤ 11.2

## Metrobus had 349 employees injured in FY21 with a rate of 11.2 injuries per 100 employees, meeting target.

The top injury types were collision-related (95), assault/stress (93), and slips/trips/falls (65). Compared to FY20, collision-related injuries decreased by two percent, while assault/stress injuries increased by 31 percent from FY20. It is possible that fewer riders on the bus was a factor in the increase in assaults on operators, as there were fewer people on the bus to observe or intervene.



- Increased the number of safety observations performed in the second half of FY21 in order to promote safe behaviors, particularly wearing PPE, which will continue to the new fiscal year.
- Ran a pilot program to train bus operators in deescalation strategies to help diffuse situations and prevent assaults. This training will be expanded to more operators.

# **BUS COLLISION RATE**



#### NTD Bus Collision Rate | 2.8 per million miles Target ≤ 3.7

## Metrobus experienced a rate of 2.8 serious collisions per million miles during FY21, meeting target and improving 20 percent from last fiscal year due in part to reduced traffic from the pandemic.

There were 102 serious collisions in FY21, amounting to about six percent of all bus collisions. About one in four of these were collisions occurring in intersections, and one in five were incidents where a bus was hit in the rear by another vehicle. Sideswipes were also another common collision type, making up 17 percent of NTD collisions. The number of intersection and sideswipe incidents were roughly similar to FY20 but hit-in-rear incidents increased by 24 percent.

Several incident types were down in FY21 as compared to FY20. These include fixed object strikes (-88 percent), other collisions (-75 percent), parked vehicle strikes (-60 percent), angle impacts (-43 percent), and pedestrian/cyclist strikes (-35 percent). Sideswipes were down a more modest 11 percent.



#### Key actions to sustain performance

- In FY21, DDOT and Metro constructed several floating bus stops along the 14<sup>th</sup> Street corridor as part of a pilot project. The partnership will continue this year to identify additional corridors for floating bs 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 (NTD). 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 six percent.

# RAIL COLLISIONS & DERAILMENTS



#### Rail Collisions | 3 collisions FY target ≤ 7

## The number of National Transit Database (NTD) reportable rail collisions decreased significantly during FY21, with three collisions compared to seven in FY20.

All collisions occurred in Metrorail yards, and two involved trains while one involved a roadway maintenance machine. None resulted in injuries. The causal factors for the collisions in FY21 were: failure to follow procedures, improper rail-car storage (e.g., stored too close), and attempting to uncouple while on a downgrade portion of the track. Metro has continued performing monthly compliance checks on safety stops in rail yards and implemented an updated Standard Operating Procedure (SOP) on moving rail vehicles within yards.



Derailments | 4 incidents FY target ≤ 4

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## There were four derailments in FY21, meeting target and a decrease of one incident from FY20.

Of the four derailments, three involved roadway maintenance machines (RMM) and one involved a train that derailed following a red signal overrun. None resulted in injuries. Of the RMM derailments, one occurred when a prime mover pushed a flat car past a switch that needed to be upgraded. Another involved a contractor Hi-rail vehicle and four trailers traveling through a switch with the tailgates down and is attributed to human error. In the third event, a tamper regulator derailed in a tunnel due to a combination of human error and the machine traveling in work mode with a missing gripper claw pin. In order to reduce derailment events Metro has continued performing monthly compliance checks on safety stops in rail yards



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Mar

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# RAIL INCIDENTS



#### Fire Incidents | 35 incidents FY target ≤ 66

#### There were 31 fewer NTD-reportable fires during FY21 compared to FY20 (47% improvement).

Sixteen fires were non-electrical (e.g., debris-related), 11 were arcing insulator/track component fires, six were related to station/facility equipment, one was related to a cable, and one was related to a train component. Metro's rail system experienced a 56 percent decrease in both non-electrical and insulator fires from FY20 to FY21, which included a six-month stretch of no insulator fires from October-March. The decrease in insulator fires can be attributed to the two-year insulator replacement program, increased track-bed cleaning, and increased insulator cleanings. The decrease in non-electrical fires is likely related to decreased Pandemic ridership, as the number of debris fires in stations and parking lots caused by normal combustible material (e.g., trash cans) saw a decline.



Red Signal Overruns | 11 incidents FY target ≤ 11

## Metrorail vehicles overran a red signal 11 times during FY21, meeting target and a decrease of 3 incidents from FY20. There were no events during the final four months of the fiscal year.

Train operators were involved in 10 of the red signal overruns; the other occurred with a roadway maintenance machine. Four occurred in yards where trains lack speed commands and seven occurred on the mainline where low speeds and lower-tenured employees were key factors. Investigations have identified human factors, including failed compliance and communications, as the root cause of the events. In response, Metro conducted safety stand-downs to review the incidents and proper procedure and computer-based training on moving trains without speed commands. Additional initiatives are underway, including the development of a point-and-call procedure for train operators to verbally call out signal states as they approach them, and the installation of "stop and proceed" software on railcars.









## The table below lists the performance targets established for FY21 for KPIs related to service quality.

Given the uncertainty surrounding the operating budget and service levels this fiscal year, targets for measures of service quality were generally kept at FY20 levels. For bus on-time performance, which was a new measure in FY20 and did not have a target, the FY21 target was set at the average performance achieved from July–August 2020. Fleet reliability measures are a nexus between service quality, asset condition, and safety. For rail and bus fleet reliability, Metro aims to continuously improve performance.

Measure	FY21 ta	rget	Methodology
MyTripTime   % of customers on-time	88%	or 🕇	Hold steady at FY2020 rate
Bus On-Time Performance   % of buses on-time	75%	or 🕇	Hold steady at Q1 FY2021 rate
MetroAccess On-Time Performance   % of vans on-time	90%	or 🕇	Hold steady at FY2020 rate
Rail Fleet Reliability   mean distance between failure	15,000	or 🕇	7% improvement from 3-year average
Bus Fleet Reliability   mean distance between failure	7,000	or 🕇	1% improvement from 3-year average
MetroAccess Fleet Reliability   mean distance between failure	20,000	or 🕇	Hold steady at FY2020 rate
Elevator Availability   % available	97%	or 🕇	Hold steady at FY2020 rate
Escalator Availability   % available	92%	or 🕇	Hold steady at FY2020 rate
Available Track   % unavailable	7.9%	or 🕇	Impact of Planned Track Work
Rail Crowding  % passenger time in crowded conditions	N/A		No target
Bus Crowding   % stops encountered by full bus	N/A		No target
Rail Customer Satisfaction	N/A		No target
Bus Customer Satisfaction	N/A		No target

METRO PERFORMANCE REPORT | Q1-Q4 FY2021

# QUALITY SERVICE



The following highlights Metro's system-wide service quality performance through the end of FY21.



# METRORAIL CUSTOMER ON-TIME PERFORMANCE



#### Metrorail Customer On-Time Performance | 91% of customer trips on time

FY target ≥ 88% on-time

#### In FY21, Metrorail customers completed 91% of their trips on-time, exceeding the target of 88%.

Rail on-time performance (OTP) has consistently surpassed the target through all 12 months this fiscal year.

#### What caused customer delays?





#### THREE-YEAR TREND | goal to increase

#### Planned delays

- Planned track work lowered OTP by approximately 1.3 percentage points.
- Planned track had the biggest impact during Q4, when summer platform reconstruction closed all four stations north of Fort Totten on the Green and Yellow Lines, and vegetation removal projects created single tracking zones during weekdays.

#### **Unplanned delays**

- Unplanned delays lowered OTP by about 7.7 percentage points.
- The top 5 drivers for unplanned delays in FY21: rail vehicle breakdowns, customer or workforce incidents (e.g., sick customers, injured employees), signaling failures, and rail operations and Metro Transit Police responses to safety events.
- A portion of late trips can be attributed to customer choices – e.g., missing a stop and having to circle back, or taking a longer route that requires fewer transfers

- Continue to monitor schedule adherence and share successful strategies and lessons learned to strengthen operational planning and scheduling.
- 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 2000and 3000-series railcars when they reach the end of their useful life.

# ON-TIME PERFORMANCE



#### ● Metrobus On-Time Performance | 75% of buses on time FY target ≥ 75% on-time

# In FY21 75.3% of buses were on-time, meeting the target of 75%. Buses serving customers along Metro's six high-frequency routes were 59% on-time while 77% of buses serving other routes were on-time.

Overall reliability was impacted by buses running early as a result of less traffic. However, beginning in mid-March 2021, schedules were adjusted to pandemic-level traffic, resulting in 78 percent on-time performance from mid-March through the end of the fiscal year.





100%

THREE-YEAR TREND | goal to increase



Early Departures lowered OTP by 13 percentage points

- Early departures more than doubled compared to FY20.
- Buses depart terminals on-time (early terminal departures accounted for only two percent of early departures), then start running early throughout the route due to less traffic.

Late Departures lowered OTP by 12 percentage points

- Late terminal departures accounted for 17 percent of lateness in Q4, as traffic began to increase and buses arrived late from previous trips.
- Late mid-route departures were the main reason buses were late, accounting for 69 percent of lateness in Q4, driven by service delivery challenges due to police and public activity, collisions and other issues.
- Late terminal arrivals accounted for the remaining 13 percent of lateness in Q4, driven by late midroute departures during the midday and PM peak service periods impacting on-time terminal arrivals.

- Continue to adjust schedules as traffic patterns evolve in the pandemic recovery period.
- Continue to advance the Bus Transformation Project, including partnering with DDOT to launch new car-free lanes, speeding up buses in the District of Columbia.
- Continue improving back-end data processes to ensure that customers receive accurate, up-to-date information about bus estimated arrivals.



#### MetroAccess On-Time Pick-Up Performance | 96% of pick-ups on time

FY target ≥ 90% on-time



#### THREE-YEAR TREND | goal to increase



## In FY21, 96% of MetroAccess trips were on-time, exceeding the target of 90%.

Less traffic, reduced ridership, and the elimination of shared rides (where delays can cascade across customer trips) have led to strong ontime performance.

- Continue improving the accuracy of length-of-trip estimates by basing them on the fixed-route equivalent.
- Work with OCC contractor to renew emphasis on proactively identifying when vehicles are dwelling for prolonged periods of time to prevent cascading delays.
- Continue to dynamically adjust the system's scheduling parameters and leverage available taxi and alternative resources when trips are projected late throughout the day.
- Pursue a new, cutting-edge scheduling and dispatch system.

# RAIL FLEET RELIABILITY



#### Rail Fleet Reliability | 35,208 miles between failure FY target ≥ 15,000

## Railcar reliability improved throughout FY21 and ended at a record high, driven by strong performance in the 7000-series fleet.

Railcar performance improved 47 percent in FY21 compared to FY20. Metro averaged only 5.9 railcar failures per day in FY21, compared to 9.4 in FY20 and 16.9 in FY19. Strong railcar performance also contributed to strong customer on-time performance results—and smoother rides for customers. These improvements are driven by the newest 7000-series fleet, which comprise over 80 percent of mileage and travel over 55,000 miles between failure.



#### 6000-series | 4% of miles traveled



#### 3000-series | 13% of miles traveled



#### 7000-series | 83% of miles traveled



In November following a train separation safety incident, Metro removed all 6000-series cars from service in order to fully investigate and understand the underlying factors and root causes. The 6000-series fleet remains out of service.

- Continue performing engineering improvements to the 7000-series fleet.
- Continue using reliability analysis and frequent inspections to ensure engineers prioritize problems causing the largest impacts.
- Continue the Scheduled Maintenance Program for 2000- and 7000-series fleets.
- Plan for the replacement of the 2000- and 3000series as they turn 40 and near the end of their useful life.



# BUS FLEET RELIABILITY



#### Bus Fleet Reliability | 9,151 miles between failure FY target ≥ 7,000

# Bus fleet performance reached record levels since Metro began measuring it in 2003, exceeding 9,100 miles between failures FY21—better than the target of 7,000 and a 20 percent improvement compared to last fiscal year thanks to improvements across all sub-fleets.

The compressed natural gas (CNG) fleet improved 13 percent compared to the same period last year, traveling just over 11,000 miles between failure while the hybrid fleet improved 15 percent, traveling about 8,500 miles between failure. The clean diesel fleet improved 79 percent since last year, traveling about 8,700 miles between failure.

This success was due partly to the reduction in service during the pandemic. Metro was able to keep its most reliable buses on the road and focus more time on maintaining some of the older buses in the fleet.



#### Clean Diesel | 8% of miles traveled



#### Key actions to sustain performance

- Increase collaboration between maintenance and transportation departments to reduce service interruptions through We Move the Region training program.
- Improve failure reporting in Metro's asset management system to allow for more in-depth trend analysis.
- Conduct internal quality audits of preventive maintenance programs and service lane activities to identify areas of improvement.
- Continue annual program to replace 100 of the oldest, least reliable buses in FY22.

Hybrid | 65% of miles traveled





#### THREE-YEAR TREND | goal to increase

# METROACCESS FLEET RELIABILITY

#### MetroAccess Fleet Reliability | 23,951 miles between failure FY target $\geq$ 20,000

#### In FY21, the mean distance between failure was 23,951 miles, exceeding the target of 20,000 miles.

In accordance with the MetroAccess Fleet Plan, 187 vehicles were retired and 177 were commissioned in FY21.

#### Key actions to sustain performance

- MetroAccess has introduced 177 sedans into revenue service to replace aging Ford Transit vans.
- Staff continues to focus on key initiatives to improve fleet reliability and good state of repair, to include preventive maintenance inspections and guarterly fleet audits.

## Target ≥ 20,000 25,462 23,951 21,557 0

THREE-YEAR TREND | goal to increase





# GUIDEWAY RESTRICTIONS AVAILABLE TRACK



■ Guideway Condition | 5.3% under performance restriction FY target ≤ 7.9%

## In FY21, 5.3% of track was under performance restriction, 2.6 percentage points below the FY21 projection.



#### CUMULATIVE GUIDEWAY CONDITIONS % | FYTD21 VS TARGET

On average, 5.3 percent of track was "restricted" through FY21, outperforming the target of 7.9 percent. Performance was better than anticipated due to fewer condition-related restrictions, early completion of capital projects, and adjustment of plans – particularly related to the stalled Purple Line construction.

Guideway restrictions include planned track work and unplanned condition-related speed restrictions. Planned work is the main reason guideway was unavailable. In FY21, only 0.3 percent of track was restricted due to condition, well below the average of 0.6 percent in FY20. The remaining five percent was due to planned capital programs implemented throughout the year. During the first quarter of FY21, Metro shutdown all Orange and Silver line stations west of Ballston to rebuild aging platforms and renovate stations. Similar work was conducted at Arlington Cemetery and Addison Road Stations between February and May, followed by the shutdown of all stations north of Fort Totten on Green and Yellow Lines starting in late May.

#### Key actions to sustain performance

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



#### THREE-YEAR TREND | goal to decrease

# **ELEVATOR & ESCALATOR**



#### ■ Elevator Availability | 98% available FY target ≥ 97%

## In FY21 elevators were available for use 98 percent of the time, meeting target and improving by one percentage point as compared to FY20.

At any given time across the fiscal year, about two percent of elevators were out service, equivalent to about five or six elevators out of the total 275+ units across the system. About 40 percent of the outages (roughly two units at a time) were due to capital work, with the rest due to unit failures or related fixes. Elevators went out of service less often during FY21 as compared to FY20 partially due to reliability improvements, but also resulting from significantly lower use during the pandemic. The average time to repair units rose during the early months of the fiscal year due to staffing constraints resulting from the pandemic but normalized as the year went on. Availability continued to stay strong as riders started returning to the system in spring 2021.

#### Key actions to sustain performance

- Continue current elevator rehabilitation contract (92 out of 100 completed by the end of FY21, with an additional seven scheduled for completion in FY22).
- Collaborate with engineers to identify 100 more units in need of replacement for the next contract.
- Pilot a new preventive maintenance cadence on select units to help optimize staff productivity.



#### THREE-YEAR TREND | goal to increase

#### Escalator Availability | 95% available FY target ≥ 92%

## In FY21 escalators were available for use 95 percent of the time, exceeding target by 3 percentage points and staying consistent with FY20 performance.

At any given time, about five percent of escalators were out of service, equivalent to roughly 30 of the 600+ units across the system. About 15 percent of these units (roughly five units at a time) were out due to capital work or planned maintenance checks. The rest were the result of unit failures or related fixes. These outages occurred less frequently in the first two quarters of FY21 as compared to FY20, likely due to decreased use. However, average repair times were higher in these early months of the fiscal year due to the pandemic's strain on workforce availability. Availability continued to stay high as ridership started increasing in spring 2021.

- Began seven-year contract to replace 130 escalators across the system, with five in progress by the end of FY21 and 10 scheduled for FY22.
- Continue contract to rehabilitate 89 escalators, with nine completed by the end of FY21 and 10 additional scheduled for FY22.
- Strengthen standards for preventive maintenance schedule adherence to optimize staff time and asset performance.

 THREE-YEAR TREND | goal to increase

 100%
 Target ≥ 92%

 80%
 94%
 95%
 95%

 20%
 94%
 95%
 95%

 0%
 FY19
 FY20
 FY21

## CROWDING



#### Metrorail Crowding | 0.6% of passenger travel time in crowded conditions

## Metrorail service levels during FY2021 have successfully supported social distancing during the pandemic; only 0.6% of passenger travel time was in crowded conditions (> 23 passenger per car).

Metrorail crowding levels remained below one percent in nine out of 12 months in FY21, as Metro ran almost all 8-car trains and maintained frequencies that enabled customers to socially distance. The jump in crowding in January was related to Capitol riot on January 6, when ridership briefly exceeded Metro's capacity guidelines of 23 passengers per car, or about one-third of seats occupied. The slight increase in May and June is due to an increase in ridership as well as weekend track work that has impacted service levels.



Metrobus Crowding | 3% of bus stops encountered with > 20 passengers on the bus

# During FY2021, three percent of bus stops were encountered by a bus with more than 20 passengers onboard. While a standard size 40' bus has seats available for 40 passengers, to support social distancing, Metro deems any bus occupied at 50% or greater capacity as being full.

Crowding on buses has continued to decrease as Metro made schedule changes in March and June that added back weekend and evening service. For safety and social distancing, through mid-June Metrobus had a policy of skipping stops or only stopping to allow alighting if the bus became too crowded. Since December, Metro introduced real-time crowding information available on transit apps so that Metrobus customers can see how full a bus is before it arrives.



Crowding on bus and rail vehicles is closely monitored by Metro staff. However, staffing levels, fleet size, and the operating budget provide a hard cap on the amount of service that can be provided to meet demand and still enable CDC-guidelines for social distancing. As a result, a specific target for crowding metrics has not been set.

Metro's focus remains to stay ahead of demand and provide as much service as is feasible given budget constraints and employee availability. By the end of the fiscal year, rail service levels were 80 percent of pre-pandemic levels, and staff were delivering 85 percent of pre-pandemic bus service.

## OPERATING FINANCIAL PERFORMANCE



Revenue losses from the Covid-19 pandemic—impacting ridership as well as non-passenger revenue—were offset by federal relief funding in addition to savings from overtime, paratransit, energy, and other services.

FY21 operating expenses totaled \$1.89 billion, favorable by \$46 million to the \$1.93 billion budget for the fiscal year. Including \$713 million in federal relief funding, total revenue through Q4 was \$879.3 million. Metro's net subsidy in FY21 was also on budget at \$1,009.1 million received from jurisdictions and \$102.5 million of federal relief to replace reduced jurisdictional contributions.



### APPENDIX A | DATA TABLE RIDERSHIP

RID	ERSHIP   FYTD BUDGE	T FORECAS	T 37.4 MILL											
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2	019	26.5	25.7	24.4	27.8	23.6	22.1	22.1	21.9	26.0	27.4	27.5	26.4	301.5
FY2	020	27.1	25.7	26.3	29.0	24.5	24.4	25.4	24.1	14.4	2.7	2.9	4.4	230.9
FY2	021	4.9	5.2	6.9	7.2	6.6	6.6	5.7	5.4	7.3	7.8	8.3	9.4	81.3
RID	ERSHIP   FYTD BUDGE	T FORECAS	T 37.4 MILL	ION										
FY2	021	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
۲L	Forecast	1,705,081	2,572,458	2,760,854	3,140,620	2,620,764	2,434,371	2,633,354	2,658,836	3,279,116	4,216,119	4,014,162	3,894,165	35,929,900
R	Actual	1,601,976	1,841,935	2,195,106	2,348,341	2,080,774	1,948,341	1,847,584	1,853,952	2,538,754	2,818,163	3,148,454	3,937,583	28,160,963
	Forecast	1,025,458	1,760,155	1,931,101	2,034,836	1,748,225	1,931,586	1,976,845	1,902,893	2,144,554	2,593,701	2,843,654	2,754,922	24,647,930
	Actual: Farebox	709,492	737,206	953,181	1,102,203	962,554	1,028,820	2,688,275	2,475,632	3,259,318	3,416,019	3,492,143	3,769,866	24,594,709
BUS	Actual: Metro Operated Shuttle	414	524	21,075	22,472	20,215	21,009	5,582	22,295	43,142	55,704	85,427	3,125	300,984
	Actual: APC	3,171,448	3,319,293	4,625,387	4,755,960	4,382,524	4,560,117	3,812,622	3,482,477	4,567,591	4,780,826	4,994,662	5,342,651	51,795,558
	Actual: APC + Metro Shuttle	3,171,862	3,319,817	4,646,462	4,778,432	4,402,739	4,581,126	3,818,204	3,504,772	4,610,733	4,836,530	5,080,089	5,345,776	52,096,542
ESS	Forecast	20,253	34,490	34,759	37,439	32,914	31,213	37,292	36,953	42,797	50,995	51,842	48,622	459,569
ACC	Actual	76,888	79,746	85,061	90,975	82,753	84,523	78,162	76,428	101,471	100,575	101,073	106,847	1,064,502
	Forecast	2,750,792	4,367,103	4,726,714	5,212,895	4,401,903	4,397,170	4,647,491	4,598,682	5,466,467	6,860,815	6,909,658	6,697,709	61,037,399
FOTAL	Actual: Farebox + Metro Shuttle	2,388,770	2,659,411	3,254,423	3,563,991	3,146,296	3,082,693	4,619,603	4,428,307	5,942,685	6,390,461	6,827,097	7,817,421	54,121,158
	Actual: APC + Metro	4 050 700	5 044 400	000 000	7 047 740	6 566 966	6 642 000	5 742 050	E 435 450	7 250 050	7 755 000	0 220 646	0 200 200	04 000 007

Shuttle

4,850,726 5,241,498 6,926,629 7,217,748 6,566,266 6,613,990 5,743,950 5,435,152 7,250,958 7,755,268 8,329,616 9,390,206 81,322,007

		CERS											
PARTICRIMES PER MILLI	.lul	Aug	Sep	Oct	Nov	Dec	.lan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	3.4	4.3	3.7	3.6	3.8	3.8	4.3	3.2	3.0	3.3	3.8	5.2	3.8
FY2020	4.6	4.1	5.6	6.4	4.1	4.8	3.5	4.2	4.9	12.7	15.2	11.8	5.1
FY2021	11.1	13.2	8.4	8.2	8.4	8.3	6.8	7.0	6.3	5.8	7.1	7.3	7.9
PART I CRIMES   TARGET :	≤ 840												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
FY2019	89	110	90	99	90	83	96	71	78	91	104	137	1,138
FY2020	125	106	147	187	100	118	88	101	71	34	44	52	1,173
FY2021	54	69	58	59	55	55	39	38	46	45	59	69	646
PART I CRIMES   BY TYPE													
FY2021	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Property Crime	27	45	37	38	34	32	22	15	19	16	27	35	347
Larceny	1	3	9	8	14	7	5	4	6	6	6	8	77
Larceny (Other)	24	40	26	29	17	20	14	9	11	8	19	23	240
Burglary	0	0	0	0	0	0	0	0	0	0	0	0	0
Motor Vehicle Theft	2	2	1	1	0	5	2	2	2	2	1	4	24
Attempted MV Theft	0	0	1	0	2	0	0	0	0	0	1	0	4
Arson	0	0	0	0	1	0	1	0	0	0	0	0	2
Violent Crime	17	12	8	10	13	11	7	6	11	19	14	11	139
Aggravated Assault	16	12	8	9	13	11	7	6	11	19	14	11	137
Rape	1	0	0	1	0	0	0	0	0	0	0	0	2
Robbery	0	0	0	0	0	0	0	0	0	0	0	0	0
FY2021 Part I Crimes	54	69	58	59	55	55	39	38	46	45	59	69	646
FY2021 Homicides	0	0	0	0	0	0	0	1	0	0	0	0	1

CUSTOMER INJURIES PER MILLION PASSENGERS														
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD	
FY2019	2.4	1.8	2.7	1.9	1.7	1.9	1.9	2.5	1.8	1.9	1.9	2.4	2.0	
FY2020	1.8	1.4	1.9	1.5	2.0	2.2	1.5	1.9	1.5	3.4	3.5	3.0	1.8	
FY2021	3.3	2.7	1.2	3.2	2.4	2.7	4.4	2.6	4.0	2.3	3.5	2.8	2.9	

METRORAIL CUSTOMER	INJURIES PE	R MILLION	PASSENGE	RS									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	2.1	1.2	1.2	1.3	1.3	1.1	1.8	2.1	1.3	1.2	1.2	1.1	1.4
Non-Preventable	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preventable	2.1	1.2	1.2	1.3	1.3	1.1	1.8	2.1	1.3	1.2	1.2	1.1	1.4
FY2020	1.6	1.2	1.2	0.9	1.1	1.9	1.5	1.8	1.6	3.3	7.2	3.6	1.5
Non-Preventable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preventable	1.6	1.2	1.2	0.9	1.1	1.9	1.5	1.8	1.6	3.3	7.2	3.6	1.5
FY2021	3.1	2.2	1.8	2.6	4.3	2.1	6.0	3.2	5.1	2.5	4.8	2.8	3.4
Non-Preventable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Preventable	3.1	2.2	1.8	2.6	4.3	2.1	6.0	3.2	5.1	2.5	4.8	2.8	3.4

METROBUS CUSTOMER I	IETROBUS CUSTOMER INJURIES PER MILLION PASSENGERS														
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD		
FY2019	2.4	2.1	4.6	2.6	1.9	2.6	1.4	2.5	2.1	2.4	2.7	4.0	2.6		
Non-Preventable	1.0	1.5	3.2	1.1	1.0	1.9	1.1	0.8	1.6	1.2	0.5	2.3	1.4		
Preventable	1.3	0.6	1.4	1.6	0.9	0.7	0.3	1.8	0.5	1.3	2.1	1.7	1.2		
FY2020	1.8	1.3	2.7	2.0	2.8	2.3	1.4	1.9	1.5	2.9	1.1	2.7	2.0		
Non-Preventable	1.3	1.0	1.2	1.0	1.7	1.8	1.0	1.4	0.9	1.7	0.0	1.0	1.2		
Preventable	0.5	0.4	1.5	1.1	1.0	0.5	0.4	0.5	0.6	1.2	1.1	1.7	0.8		
FY2021	3.2	2.7	0.9	3.1	1.1	3.1	3.4	1.7	3.5	2.1	2.6	2.8	2.5		
Non-Preventable	1.6	1.3	3.1	7.0	4.0	8.6	4.8	0.8	3.0	1.7	2.8	3.7	1.6		
Preventable	1.6	10.1	1.0	6.1	1.0	4.8	0.0	1.6	1.8	1.2	0.8	0.3	0.9		

METROACCESS CUSTOM	ER INJURIES	5 PER 100,0	00 PASSEN	GERS									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	2.5	2.4	1.1	1.4	2.1	1.7	3.4	2.8	2.5	2.9	1.0	2.6	0.0
Non-Preventable	2.5	2.4	1.1	0.5	2.1	1.7	2.8	1.7	2.0	1.5	0.5	1.5	1.7
Preventable	0.0	0.0	0.0	0.9	0.0	0.0	0.6	1.1	0.5	1.5	0.5	1.0	0.5
FY2020	2.5	2.0	1.6	1.9	3.3	1.7	0.6	1.2	0.0	2.0	1.9	0.0	1.7
Non-Preventable	1.0	1.0	1.6	1.4	3.3	1.2	0.6	0.6	0.0	2.0	0.0	0.0	1.2
Preventable	1.5	1.0	0.0	0.5	0.0	0.6	0.0	0.6	0.0	0.0	1.9	0.0	0.5
FY2021	1.3	1.3	0.0	2.2	2.4	0.0	1.3	2.6	0.0	1.0	1.0	0.0	1.0
Non-Preventable	1.3	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	1.0	0.0	0.0	0.4
Preventable	0.0	1.3	0.0	2.2	2.4	0.0	1.3	0.0	0.0	0.0	1.0	0.0	0.7

CUSTOMER INJURIES   TA	CUSTOMER INJURIES   TARGET ≤ 366														
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD		
FY2019	63	46	66	54	41	41	41	54	46	51	51	64	618		
FY2020	50	36	51	43	49	53	37	46	22	9	10	13	419		
FY2021	16	14	8	23	16	18	25	14	29	18	29	26	236		

METRORAIL CUSTOMER I	NJURIES   T	ARGET ≤ 17	7										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	33	17	16	21	18	13	22	26	20	20	19	17	242
Non-Preventable	0	0	0	0	1	0	0	0	0	0	0	0	1
Preventable	33	17	16	21	17	13	22	26	20	20	19	17	241
FY2020	26	18	19	16	16	26	22	25	12	3	7	5	195
Non-Preventable	0	0	0	0	0	0	0	0	0	0	0	0	0
Preventable	26	18	19	16	16	26	22	25	12	3	7	5	195
FY2021	5	4	4	6	9	4	11	6	13	7	15	11	95
Non-Preventable	0	0	0	0	0	0	0	0	0	0	0	0	0
Preventable	5	4	4	6	9	4	11	6	13	7	15	11	95

METROBUS CUSTOMER	INJURIES   T.	ARGET ≤ 154	4										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	25	24	48	30	19	25	13	23	21	25	30	42	325
Non-Preventable	11	17	33	12	10	18	10	7	16	12	6	24	176
Preventable	14	7	15	18	9	7	3	16	5	13	24	18	149
FY2020	19	14	29	23	27	24	14	19	10	5	2	8	194
Non-Preventable	14	10	13	11	17	19	10	14	6	3	0	3	120
Preventable	5	4	16	12	10	5	4	5	4	2	2	5	74
FY2021	10	9	4	15	5	14	13	6	16	10	13	15	130
Non-Preventable	5	1	3	8	4	9	13	2	10	6	10	14	85
Preventable	5	8	1	7	1	5	0	4	6	4	3	1	45

METROACCESS CUSTOME		I TARGET :	≤ 35										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
FY2019	5	5	2	3	4	3	6	5	5	6	2	5	51
Non-Preventable	5	5	2	1	4	3	5	3	4	3	1	3	39
Preventable	0	0	0	2	0	0	1	2	1	3	1	2	12
FY2020	5	4	3	4	6	3	1	2	0	1	1	0	30
Non-Preventable	2	2	3	3	6	2	1	1	0	1	0	0	21
Preventable	3	2	0	1	0	1	0	1	0	0	1	0	9
FY2021	1	1	0	2	2	0	1	2	0	1	1	0	11
Non-Preventable	1	0	0	0	0	0	0	2	0	1	0	0	4
Preventable	0	1	0	2	2	0	1	0	0	0	1	0	7

EMPLOYEE INJURIES PER	200,000 W	ORK HOURS	i i i i i i i i i i i i i i i i i i i										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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	4.2	1.7	2.1	1.7	5.5
FY2021	4.1	2.9	4.7	5.3	4.5	6.0	5.4	6.9	5.5	6.8	7.8	8.2	5.7

RAIL SYSTEM EMPLOYEE	INJURIES P	ER 200,000	WORK HOU	I <b>RS</b>   TARGE	ET ≤ 3.5								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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	3.4
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	0.8
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	2.6
FY2020	3.7	5.2	3.5	4.0	2.5	2.9	2.7	3.4	3.1	1.5	0.9	1.1	3.0
Non-Preventable	1.7	1.0	0.8	1.1	0.6	1.0	0.8	0.6	1.1	0.3	0.6	0.6	0.9
Preventable	1.9	4.3	2.6	2.9	1.9	1.9	1.9	2.7	2.0	1.2	0.3	0.6	2.1
FY2021	1.5	2.0	3.6	3.5	3.0	4.5	2.7	4.2	4.0	3.4	4.2	2.8	3.3
Non-Preventable	0.0	0.2	0.6	1.0	1.1	1.9	0.9	1.1	1.6	0.9	2.0	1.3	1.1
Preventable	1.5	1.7	3.0	2.5	1.8	2.5	1.8	3.1	2.4	2.6	2.2	1.5	2.2

<b>BUS EMPLOYEE INJURIES</b>	6 PER 200,00	00 WORK HO	OURS   TAR	GET ≤ 11.2									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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	11.2
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	6.1
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	8.0	2.5	4.1	3.4	10.2
Non-Preventable	8.2	7.9	4.6	6.8	5.1	6.1	8.4	5.1	4.2	1.0	1.0	1.9	5.5
Preventable	5.1	7.3	6.6	6.5	3.4	5.2	6.9	2.7	3.8	1.5	3.0	1.5	4.7
FY2021	7.6	6.5	8.0	8.6	8.7	10.6	11.6	14.2	9.3	15.0	15.9	16.3	11.2
Non-Preventable	4.5	2.6	3.6	4.8	6.0	6.2	4.2	7.5	5.2	8.1	9.3	9.9	6.1
Preventable	3.0	3.9	4.4	3.7	2.8	4.4	7.3	6.7	4.1	7.0	6.7	6.4	5.1

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

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	3.7	1.8	1.8	3.4	3.5
Non-Preventable	2.1	1.9	2.2	2.1	1.6	2.3	2.2	2.1	1.0	1.2	0.6	2.8	1.9
Preventable	1.4	2.1	2.2	2.1	2.4	1.0	0.7	1.3	2.7	0.6	1.2	0.6	1.6
FY2021	2.7	4.7	2.2	2.7	1.9	3.5	3.5	2.1	1.1	2.1	2.8	4.7	2.8
Non-Preventable	1.6	2.5	0.9	1.5	1.6	2.1	2.6	1.4	0.6	1.2	2.2	3.7	1.8
Preventable	1.1	2.1	1.2	1.2	0.3	1.5	1.0	0.7	0.6	0.9	0.6	0.9	1.0

RAIL COLLISIONS   TARGE	T ≤ 7												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	3	2	0	0	0	0	0	1	2	1	1	0	10
FY2020	1	2	0	2	0	0	1	2	0	2	0	0	10
FY2021	0	1	0	1	0	0	0	0	1	0	0	0	3
<b>DERAILMENTS</b>   TARGET ≤	4												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	0	1	0	0	1	0	0	0	0	0	1	0	3
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	3
FY2020	1	2	1	0	0	0	0	1	0	0	0	0	5
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	1	2	1	0	0	0	0	1	0	0	0	0	5
FY2021	2	0	0	0	0	0	0	0	1	1	0	0	4
Trains Carrying Customers	1	0	0	0	0	0	0	0	0	0	0	0	1
Trains with No Customers	0	0	0	0	0	0	0	0	0	0	0	0	0
Roadway Maintenance Machine	1	0	0	0	0	0	0	0	1	1	0	0	3

FIRE INCIDENTS   TARGE	T <b>≤ 66</b>												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	10	11	5	3	5	2	3	5	7	7	4	9	71
Non-Electrical	4	1	1	2	4	2	3	3	3	4	3	4	34
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	33
Train Component	0	1	0	0	0	0	0	0	0	0	0	0	1
Station Component	0	1	2	3	4	5	6	7	8	9	10	11	11
FY2020	8	6	12	7	6	5	2	3	3	1	7	6	66
Non-Electrical	4	4	10	5	5	1	1	1	3	0	1	2	37
Cable	0	2	0	0	0	0	0	0	0	0	0	0	2
Arcing Insulator	4	0	1	1	1	4	1	2	0	1	6	4	25
Train Component	0	0	1	0	0	0	0	0	0	0	0	0	1
Station Component	0	0	0	1	0	0	0	0	0	0	0	0	1
FY2021	4	1	3	3	4	2	3	5	2	1	3	4	35
Non-Electrical	1	0	1	3	3	1	3	1	1	0	1	1	16
Cable	0	0	0	0	0	0	0	0	0	0	1	0	1
Arcing Insulator	2	1	2	0	0	0	0	1	0	1	1	3	11
Train Component	0	0	0	0	0	0	0	1	0	0	0	0	1
Station Component	1	0	0	0	1	1	0	2	1	0	0	0	6

RED SIGNAL OVERRUNS	TARGET <mark>≤</mark> 1	11											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	0	0	1	0	0	1	0	0	3	0	3	2	10
FY2020	2	0	1	3	2	1	0	0	3	0	1	1	14
FY2021	1	0	2	1	2	4	0	1	0	0	0	0	11

MYTRIPTIME RAIL CUSTO	MER ON-TIN	IE PERFORI	MANCE   TA	RGET 88%									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	86%	79%	90%	89%	87%	89%	90%	90%	89%	91%	90%	90%	88%
FY2020	89%	90%	89%	90%	90%	89%	92%	92%	92%	96%	96%	91%	90%
FY2021	93%	92%	91%	90%	90%	90%	89%	91%	93%	94%	89%	91%	91%

<b>MYTRIPTIME RAIL CUSTO</b>	MER ON-TIM		MANCE   BY	/ LINE									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
RD Red Line	94%	94%	93%	93%	92%	92%	91%	92%	93%	94%	93%	92%	N/A
Blue Line	96%	91%	88%	84%	86%	85%	83%	83%	#DIV/0!	#DIV/0!	87%	84%	86%
orange Line	96%	91%	89%	86%	86%	87%	87%	90%	91%	93%	87%	90%	89%
GR Green Line	86%	91%	91%	91%	91%	90%	90%	92%	94%	93%	90%	94%	91%
YL Yellow Line	92%	91%	90%	88%	90%	89%	88%	87%	91%	91%	80%	87%	88%
sv Silver Line	99%	90%	89%	86%	82%	86%	87%	91%	92%	93%	91%	91%	90%

MYTRIPTIME RAIL CUSTO	MER ON-TI		MANCE   B	Y TIME PERI	OD								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
AM Rush [5AM-9:30AM]	95%	94%	92%	93%	91%	91%	89%	93%	96%	95%	92%	94%	93%
Midday [9:30AM-3PM]	92%	93%	92%	92%	93%	91%	92%	92%	92%	92%	86%	89%	91%
PM Rush [3PM-7PM]	94%	91%	88%	89%	88%	87%	85%	90%	94%	95%	90%	92%	90%
Evening [7PM-9:30PM]	91%	93%	92%	91%	93%	92%	92%	89%	91%	93%	91%	95%	92%
Late Night [9:30PM-12AM]	70%	95%	96%	95%	95%	95%	95%	91%	89%	93%	93%	96%	94%
Weekend	94%	90%	92%	84%	86%	90%	89%	90%	89%	92%	87%	86%	89%



METROBUS ON-TIME PER		TARGET	75%										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2020	78%	78%	74%	75%	76%	78%	78%	78%	78%	N/A	N/A	N/A	77%
FY2021	75%	75%	75%	75%	74%	74%	73%	72%	76%	78%	78%	78%	75%
METROBUS ON-TIME PER	FORMANCE	I BY TIME I	PERIOD										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
AM Early [4AM-6AM]	79%	79%	79%	80%	78%	78%	78%	76%	82%	84%	84%	84%	80%
AM Peak [6AM-9AM]	77%	76%	75%	76%	75%	75%	74%	72%	78%	80%	80%	79%	77%
Midday [9AM-3PM]	74%	74%	75%	75%	74%	73%	73%	71%	76%	78%	78%	78%	75%
PM Peak [3PM-7PM]	74%	72%	71%	72%	71%	71%	71%	69%	73%	75%	74%	74%	72%
Early Night [7PM-11PM]	76%	77%	77%	76%	75%	76%	75%	75%	78%	80%	79%	79%	77%
Late Night [11PM-4AM]	70%	75%	78%	76%	73%	74%	73%	75%	79%	81%	80%	79%	77%
METROBUS ON-TIME PER	FORMANCE	BY SERVI	CE TYPE										
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Headway Service	57%	57%	57%	63%	62%	61%	53%	55%	60%	62%	62%	62%	59%
All Other Service	77%	76%	76%	76%	75%	75%	74%	73%	78%	80%	79%	79%	77%
METROACCESS ON-TIME	PICK-UP PE	RFORMAN	CE   TARGE	Г 90%									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	92%	92%	92%	92%	90%	91%	90%	89%	89%	89%	86%	88%	90%
FY2020	89%	89%	87%	88%	90%	91%	91%	91%	93%	97%	97%	97%	91%
FY2021	97%	97%	97%	97%	97%	96%	97%	96%	96%	96%	95%	95%	96%



RAIL FLEET RELIABILITY:	MEAN DIST	ANCE BETW	EEN DELAY	7									
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
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	160,985
FY2020	144,510	188,206	292,729	192,718	211,038	237,499	244,666	416,767	817,083	343,530	342,375	350,532	245,476
FY2021	257,108	229,463	198,095	237,311	222,876	296,163	381,439	390,774	468,012	668,798	573,704	383,009	314,389

RAIL FLEET RELIABILITY: I	AIL FLEET RELIABILITY: MEAN DISTANCE BETWEEN DELAY   BY RAILCAR SERIES														
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD		
2000 series	N/A	N/A	N/A	N/A	4,224	105,184	1,920	N/A	N/A	N/A	N/A	N/A	55,664		
3000 series	N/A	80,770	64,988	86,881	74,240	100,216	165,106	176,653	138,413	142,019	373,247	160,993	108,024		
6000 series	N/A	133,107	104,044	244,479	292,119	N/A	N/A	N/A	N/A	N/A	N/A	N/A	157,791		
7000 series	257,108	359,123	484,306	375,459	389,112	527,285	518,932	488,102	632,811	1,195,577	618,250	451,321	484,890		

RAIL FLEET RELIABILITY: M	IEAN DIST	ANCE BETW	EEN FAILUI	RE   TARGE	Г 15,000								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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	14,211
FY2020	15,344	19,374	20,799	20,998	20,784	23,425	26,760	24,142	37,567	94,471	81,518	68,396	24,010
FY2021	48,762	27,890	13,882	34,393	31,244	33,847	44,584	57,893	54,420	54,820	58,433	48,956	35,208

RAIL FLEET RELIABILITY:		ANCE BETW	EEN FAILU	<b>re</b>   by rail	CAR SERIE	S							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
2000 series	N/A	N/A	N/A	N/A	1,408	10,518	1,920	N/A	N/A	N/A	N/A	N/A	8,564
3000 series	N/A	10,096	6,093	13,774	11,548	14,666	13,759	18,793	15,379	15,437	21,328	15,333	12,407
6000 series	N/A	13,652	9,147	17,463	17,183	N/A	13,022						
7000 series	48,762	45,934	21,744	63,330	58,143	49,154	81,546	88,018	75,335	78,656	76,223	64,474	55,685



BUS FLEET RELIABILITY: M		NCE BETW	EEN FAILU	RE   TARGET	Г 7,000								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
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	6,335
FY2020	6,166	6,001	6,066	7,006	7,788	8,527	8,533	7,785	10,506	12,758	14,028	10,310	7,652
FY2021	8,609	8,491	9,599	9,081	9,555	10,394	10,944	10,821	9,494	8,838	7,860	7,310	9,151

BUS FLEET RELIABILITY: N	IEAN DISTA	NCE BETW	EEN FAILUF	RE   BY FUEL	. TYPE								
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
CNG	10,769	10,665	11,066	10,954	9,574	11,032	12,263	15,157	12,764	12,546	9,794	8,457	11,037
HYBRID	8,149	7,766	9,294	9,029	10,246	11,282	10,558	9,455	8,113	7,494	6,819	6,788	8,565
CLEAN DIESEL	7,308	9,623	8,034	6,005	6,240	5,988	10,017	12,299	14,727	13,474	15,318	7,973	8,714
DIESEL	N/A	N/A	N/A	N/A	N/A	N/A							N/A

METROACCESS FLEET REL	IABILITY: N	IEAN DIST	NCE BETW		RE   TARGET	20,000							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	FYTD
FY2019	17,799	18,439	22,233	24,753	19,501	18,321	21,611	21,471	21,884	26,116	25,402	25,626	21,557
FY2020	23,823	24,162	26,297	25,137	22,691	21,738	23,118	29,861	35,570	34,626	34,362	22,851	25,462
FY2021	18,965	18,589	22,287	34,104	25,943	30,214	28,870	17,219	28,400	24,075	29,110	20,580	23,951

ELEVATOR AVAILABILITY	<b>Y</b>   TARGET 9	7%											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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%	98%	98%	97%
FY2021	97%	98%	97%	97%	98%	98%	98%	99%	99%	99%	99%	99%	98%
ESCALATOR AVAILABILI	<b>TY</b>   TARGET	92%											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	93%	93%	92%	92%	94%	94%	94%	94%	94%	95%	94%	95%	94%
FY2020	94%	94%	94%	95%	95%	96%	96%	96%	97%	96%	96%	94%	95%
FY2021	94%	94%	94%	95%	94%	94%	94%	95%	95%	95%	96%	96%	95%
RAIL GUIDEWAY CONDIT	ION: FTA RE	PORTABLE	SPEED RES	TRICTIONS	TARGET 7	.9%							
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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%	1.6%
FY2020	10.0%	10.7%	10.7%	0.5%	2.3%	2.0%	0.1%	0.1%	0.1%	0.1%	0.0%	18.9%	4.6%
FY2021	18.8%	22.2%	4.7%	0.0%	0.6%	0.8%	0.1%	0.1%	2.4%	3.1%	4.7%	6.5%	5.3%
TRAINS IN SERVICE   TAR	RGET 98%												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	97%	98%	98%	97%	97%	98%	96%	97%	98%	98%	98%	99%	65%
						-							
FY2020	99%	99%	98%	98%	97%	97%	98%	100%	101%	107%	106%	109%	47%

OFFLOADS													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2019	88	91	69	79	75	83	94	76	58	58	65	99	935
FY2020	96	62	93	61	69	75	71	70	44	9	24	15	689
FY2021	15	30	49	37	41	41	27	31	25	22	27	29	374
METRORAIL CROWDING													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0%	0.2%	0.2%	0.2%	0.1%
FY2021	0.8%	0.2%	0.1%	0.0%	0.5%	0.1%	1.3%	0.1%	0.1%	0.1%	1.1%	2.2%	0.6%
	RY LINE												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
🔞 Red Line	1.6%	0.2%	0.0%	0.1%	0.1%	0.1%	0.7%	0.0%	0.2%	0.0%	0.3%	2.4%	0.6%
Blue Line	0.1%	0.1%	0.2%	0.0%	0.7%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%
💿 Orange Line	0.1%	0.0%	0.2%	0.0%	2.4%	0.2%	2.0%	0.1%	0.0%	0.0%	0.1%	1.1%	0.5%
Green Line	1.1%	0.7%	0.1%	0.0%	0.0%	0.3%	0.0%	0.3%	0.1%	0.6%	4.6%	6.8%	1.5%
YL Yellow Line	0.0%	0.0%	0.3%	0.0%	0.2%	0.0%	2.7%	0.0%	0.0%	0.0%	1.3%	3.3%	0.7%
sv Silver Line	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.1%	0.3%	0.2%	0.1%
METRORAIL CROWDING	BY TIME PE	RIOD											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Weekday	0.9%	0.2%	0.0%	0.0%	0.0%	0.1%	1.6%	0.1%	0.1%	0.1%	1.1%	1.7%	0.6%
AM Rush [5AM-9:30AM]	1.0%	0.2%	0.1%	0.0%	0.0%	0.1%	1.1%	0.1%	0.0%	0.1%	0.6%	1.2%	0.4%
Midday [9:30AM-3PM]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%
PM Rush [3PM-7PM]	1.7%	0.5%	0.0%	0.1%	0.0%	0.2%	2.7%	0.1%	0.3%	0.2%	2.4%	3.2%	1.1%
Evening [7PM-9:30PM]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.9%	1.4%	0.4%
Late Night [9:30PM-12AM]	N/A	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

METROBUS CROWDING													
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
FY2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.3%	2.2%	3.0%	5.3%	3.9%
FY2021	6.7%	4.8%	3.2%	3.7%	3.4%	3.3%	2.1%	2.1%	2.6%	3.1%	3.8%	4.2%	3.5%
METROBUS CROWDING	BY TIME PE	RIOD											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
Weekday	6.3%	4.5%	3.0%	3.6%	3.2%	3.5%	2.0%	2.0%	2.5%	3.0%	3.7%	4.1%	3.4%
AM Early [4AM-6AM]	9.7%	5.4%	2.0%	2.4%	1.9%	2.2%	1.4%	1.4%	2.0%	2.4%	3.6%	3.6%	2.8%
AM Peak [6AM-9AM]	7.0%	3.7%	1.5%	1.6%	1.6%	1.5%	0.9%	0.9%	1.3%	1.6%	2.4%	2.8%	2.0%
Midday [9AM-3PM]	6.0%	5.0%	4.4%	5.1%	4.8%	5.4%	3.1%	3.0%	3.3%	4.1%	4.7%	5.2%	4.5%
PM Peak [3PM-7PM]	8.3%	5.6%	3.9%	5.0%	4.4%	4.6%	2.8%	2.8%	3.5%	4.0%	4.8%	5.4%	4.5%
Early Night [7PM-11PM]	3.2%	2.5%	1.3%	1.5%	0.8%	0.9%	0.5%	0.6%	1.1%	1.5%	1.9%	2.4%	1.5%
Late Night [11PM-4AM]	0.2%	0.0%	0.2%	0.4%	0.2%	0.2%	0.1%	0.2%	0.3%	0.7%	0.9%	0.9%	0.5%
Weekend	9.7%	6.2%	3.9%	4.4%	3.9%	2.8%	2.2%	2.2%	3.0%	3.6%	4.3%	4.5%	3.9%

METRORAIL CUSTOMER S	ATISFACTI	ON RATING <sup>3</sup>		
	Q1	Q2	Q3	Q4
FY2019	75%	73%	80%	76%
FY2020	79%	83%	85%	N/A
FY2021	N/A	N/A	N/A	91%

METROBUS CUSTOMER SATISFACTION RATING*						
	Q1	Q2	Q3	Q4		
FY2019	71%	77%	75%	76%		
FY2020	76%	79%	76%	N/A		
FY2021	64%	84%	88%	81%		

\*Given smaller sample sizes and a higher margin of error during the pandemic period (March 2020 to present), Metrorail and Metrobus Customer Satisfaction results should not be compared to pre-pandemic numbers and should be interpreted as directional only. From March 2020 through the third quarter of FY21 (March 2021), Metro was not able to collect enough survey data to reliably measure Rail Customer Satisfaction due to significant decreases in ridership. The sample size for Metrobus during this same period was larger than Rail's, but smaller than usual. Bus results are directional only.

### APPENDIX A | DATA TABLE SUPPORTING MEASURES

VACANCY	RATE													
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	FYTD
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%	6%	6%	6%
FY2021		7%	7%	7%	7%	7%	7%	8%	8%	8%	8%	9%	10%	10%
SUSTAIN	ABILITY													
ENERGY U	SE   TARGET 3	5.3												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan		Feb	Mar	Apr	May	Jun	FYTD
FY2019	39.69	42.45	41.12	36.98	42.53	39.15	42.63		43.60	36.80	37.29	36.80	38.88	39.7
FY2020	39.26	39.86	38.98	35.99	37.49	39.72	38.53		38.00	38.86	49.47	52.53	58.33	40.3
FY2021	65.04	44.15	37.41	36.07	37.09	41.15	41.06		42.33	35.25	36.83	36.28	38.64	39.7
WATER USI	E   TARGET 0.7	3												
	Jul	Aug	Sep	Oct	Nov	Dec	Jan		Feb	Mar	Apr	May	Jun	FYTD
FY2019	1.34	1.30	1.26	0.78	0.54	0.39	0.42		0.62	0.41	0.56	0.77	0.92	0.77
FY2020	1.48	0.98	1.01	0.76	0.73	0.40	0.48		0.37	0.44	1.36	1.22	1.48	0.82
FY2021	2.73	1.29	0.75	0.81	0.51	0.39	0.53		0.57	0.45	0.64	0.76	0.91	0.76
GREENHOU	JSE GAS EMIS	SIONS   TARG	EI 2.15											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan		Feb	Mar	Apr	May	Jun	FYTD
FY2019	3.47	3.66	3.61	3.18	3.66	3.37	3.65		3.69	3.19	3.20	3.19	3.43	3.43
FY2020	3.50	3.59	3.56	3.19	3.30	3.53	3.40		3.33	4.93	4.55	4.95	5.44	3.70
FY2021	5.99	4.01	3.38	3.22	3.25	3.62	3.61		3.70	3.08	3.29	3.24	3.48	3.54

## **APPENDIX B** | DEFINITIONS RIDERSHIP + SUPPORTING MEASURES

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Ridership	Total Metro ridership Metrorail passenger trips + Metrobus	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 boardings + MetroAccess	Passenger trips are defined as follows:
	passenger trips	Metrorail 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.
		Metrobus 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.
		MetroAccess reports passenger trips. A passenger traveling from an origin to a destination is counted as one passenger trip.
		*Metro does not include bus shuttle passenger trips in its budget or published ridership forecasts.
Vacancy Rate	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. Factors influencing vacancy rate can include: recruitement activities, training schedules, availability of talent, promotions, retirements, among other factors.

## **APPENDIX B** | DEFINITIONS RIDERSHIP + SUPPORTING MEASURES

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Water Usage	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.
Energy Usage	Rate of Thousand British Thermal Units (BTUs) consumed per vehicle mile Energy usage in native units (Gasoline + Diesel + Natural Gas + Compressed Natural Gas + Traction Electricity + Facility Electricity) × (individual formulas to convert to MBTU) ÷ Total vehicles	This measure reflects the level of various types of energy Metro uses to provide service and 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.
Greenhouse Gas Emissions	Rate of CO2e emitted per vehicle mile (Energy/fuel consumption used by Metro facilities and revenue and non-revenue vehicles, expressed in native units) x (individual GHG conversion factors for each energy type, result expressed in kilograms) ÷ 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.



KPI	How is it measured?	What does this mean and why is it key to our strategy?
MyTripTime Metrorail Customer On-Time Performance	Percentage of customer journeys completed on time Number of journeys completed on time ÷ Total number of journeys	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. Factors that can affect 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.
Metrobus On-Time Performance	Percentage of bus service delivered on-time 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 Headway-based routes = Number of time points delivered within the scheduled headway + 3 minutes ÷ Total number of time points delivered	<ul> <li>Bus on-time performance (OTP) communicates the reliability of bus service, which is a key driver of customer satisfaction and ridership.</li> <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> <li>Factors that can affect OTP include: traffic congestion, detours, inclement weather, scheduling, vehicle reliability, operational behavior, or delays caused by passengers.</li> </ul>
MetroAccess On- Time Pick-up Performance	Adherence to Schedule Number of vehicle arrivals at the pick-up location within the 30 minute on-time widow ÷ Total stops	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 pick-up performance is essential to delivering quality service to the customer.



KPI	How is it measured?	What does this mean and why is it key to our strategy?
Rail Fleet Relia bility	<ul> <li>Mean Distance Between Delays (MDBD)</li> <li>Total railcar revenue miles ÷</li> <li>Number of failures during revenue service resulting in delays of four or more minutes</li> <li>Mean Distance Between Failure (MDBF)</li> <li>Total railcar revenue miles ÷</li> <li>Total number of failures occurring during revenue service</li> </ul>	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. 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.
Bus Fleet Relia bility	Mean Distance Between Failures (MDBF) Total bus mileage ÷ Total number of mechanical failures occurring during revenue service	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.
MetroAccess Fleet Reliability	Mean Distance Between Failures (MDBF) Total MetroAccess vehicle odometer miles ÷ Total number of mechanical failures occurring during revenue service	The number of total miles traveled before a mechanical breakdown requiring the van to be removed from service or deviate from the schedule Mean Distance Between Failures is used to monitor trends in vehicle breakdowns that cause vans to go out of service and to plan corrective actions. Factors that influence MetroAccess van fleet reliability include vehicle age, quality of maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction.



KPI	How is it measured?	What does this mean and why is it key to our strategy?
Elevator and Escalator Availability	In-service percentage Hours in service ÷ Operating hours	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.
	Hours in service = Operating hours – Hours out of service	Availability is the percentage of time that Metrorail escalators or elevators in stations and parking garages are in service during operating hours.
	number of units	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.
Available Track (Federal Transit Administration Transit Asset Management Performance Measure)	Percentage of track segments with performance restrictions at 9:00 AM the first Wednesday of every month Number of track miles with performance restrictions ÷ 234 total miles	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. 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.
Train On-Time Performance: Headway Adherence	Number of station stops delivered within the scheduled headway plus 2 minutes during rush (AM/PM) service ÷ Total station stops delivered Number of station stops delivered up to 150% of the scheduled headway during non-rush (midday and evening) ÷ Total station stops delivered	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.

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Trains in Service	Percentage of required trains that are in service at 8:15 AM and 5:00PM Number of Trains in service ÷ Total required trains	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.
Offioads	Number of railcar offloads	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.
Rail Crowding	Percentage of passenger time spent on vehicles exceeding crowding guidelines Number of crowded passenger minutes ÷ Total number of passenger minutes	<ul> <li>Crowding is a key driver of customer satisfaction with Metrorail service. Crowding measures the percentage of passenger time spent on vehicles that exceed crowding guidelines per WMATA service standards:</li> <li>Before Pandemic: 100 passengers per car</li> <li>Pandemic: 23 passengers per car</li> <li>Crowding informs decision making regarding asset investments, service plans and scheduling.</li> <li>Factors that can effect crowding include: service reliability, missed trips insufficient schedule, or unusual demand.</li> </ul>



KPI	How is it measured?	What does this mean and why is it key to our strategy?
Bus Crowding	Percentage of bus stops encountered by a bus that exceeds crowding guidelines	Crowding is a key driver of customer satisfaction with Metrobus service. Crowding measures the percentage of bus stops encountered by a bus that exceeds crowding guidelines per WMATA service standards:
	Number of bus stops encountered by a	Before Pandemic: 120% of seated capacity during peak for BRT, framework, and coverage routes, 100% off peak and at all times on commuter routes
	crowaed bus ÷ Total number of bus stops	Pandemic: 50% of seated capacity
encountered	encountered	Crowding informs decision making regarding asset investments, service plans and scheduling. Factors that can affect crowding include: service reliability, missed trips insufficient schedule, or unusual demand.
		Note: Prior to the adoption of the Metrobus Service Guidelines in December 2020, crowding guidelines were 120% of seated load for all services except express bus during peak.
Customer	Survey respondent rating	Surveying customers about the quality of Metro's service delivery provides a mechanism to continually identify
Satisfaction	Number of survey respondents with high satisfaction ÷ Total number of survey respondents	those areas of the operation where actions to improve the service can maximize rider satisfaction.
		Customer satisfaction is defined as the percent of survey respondents who rated their last trip on Metrobus or
		Metrorail as "very satisfactory" or "satisfactory." The survey is conducted via phone with approximately 400 bus and
		400 rail customers who have ridden Metro in the past 30 days. Results are summarized by quarter (e.g., January– March).



## APPENDIX B | DEFINITIONS SAFETY & SECURITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Crime	Reported Part I Crimes	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. 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.
Customer Injury Rate	Customer injury rate: Number of injuries ÷ (Number of passengers ÷ 1,000,000)	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.
		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.
Employee Injury Rate	Employee injury rate: Number of injuries ÷ (Total work hours ÷ 200,000)	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.
		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.
NTD Bus Collision Rate	NTD bus collision rate: Number of NTD reportable collisions ÷ (Total number of bus miles operated ÷ 1,000,000)	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.
		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.



## APPENDIX B | DEFINITIONS SAFETY & SECURITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Rail Collisions	Number of rail collisions	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.
		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.
Derailments	Number of derailments	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.
		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).
Fire Incidents	Number of fire incidents	Fire incidents consistent 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.
		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.
Red Signal Overruns	Number of red signal overruns	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.
		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.



## APPENDIX B | DEFINITIONS FINANCIAL RESPONSIBILITY

KPI	How is it measured?	What does this mean and why is it key to our strategy?
Operating Financial Performance	Summary of expenses in comparison to total funding sources.	This indicator tracks Metro's progress managing its operating revenue and expenses

