WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

# PERFORMANCE REPORT

FY2023 Q3

July 2022 – March 2023

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# MESSAGE FROM THE GENERAL MANAGER

**Randy Clarke**
General Manager & Chief Executive Officer, WMATA

Happy Birthday to Metro! Metrobus and Metrorail celebrated big milestones this quarter: Metrobus turned 50 on February 4th and Metrorail turned 47 on March 27th. It is an honor to lead this organization and work with our regional partners to make investments that will ensure Metro is even safer and more reliable at 100.

This report provides data for the first nine months of fiscal year 2023 (FY23), from July 1, 2022, through March 31, 2023. During these nine months, we've seen 5-10 percentage-point increases in customer satisfaction, with 79 percent of Metrorail customers and 73 percent of Metrobus customers satisfied with their most recent trips. An independent Washington Post poll confirmed these results for rail, reporting that three out of four people rated our rail service as "excellent" or "good."

Ridership is also coming back, with around 25 million rides each on Metrorail and Metrobus in Q3. We set multiple post-pandemic ridership records as more commuters return to work and residents and visitors used Metro to attend regional events. This spring we carried 10,000 fans to Nationals Opening Day. On the Sunday of peak cherry blossom bloom, we carried 182,000 riders on bus, the highest Sunday since the start of the pandemic, and 347,000 riders on rail—higher than any Sunday since 2015. Through the mobility we provide, we help connect the region, drive growth, improve safety, and reach our climate change goals. We are also focused on being a good community partner. In April, we supported autism acceptance month with special in-station announcements featuring 26 local enthusiasts with autism. To celebrate Earth Day, we wrapped Metrobuses with artwork designed by 15 local elementary school students.

On February 23, 2023, the Board accepted Metro's Strategic Transformation Plan: Your Metro, the Way Forward. To support our vision of being the region's trusted way to move more people safely and sustainably, the plan sets four overarching goals: service excellence, talented teams, regional opportunity and partnership, and sustainability. In support of these goals, we implemented a new organizational alignment that includes innovative changes for Metro, and we are already delivering. Starting in July, we'll be aligning our performance reporting to the goals and metrics in the plan and will provide customers access to more frequent performance updates via dashboards on our website, wmata.com. I'm pleased to include several additional updates on our progress below.

**Service Excellence: Deliver safe, reliable, convenient, equitable, accessible, and enjoyable service for customers**

**Safety** is a top concern for our customers and employees. Over the last nine months, the rate of Part I crimes has averaged 7.2 crimes per

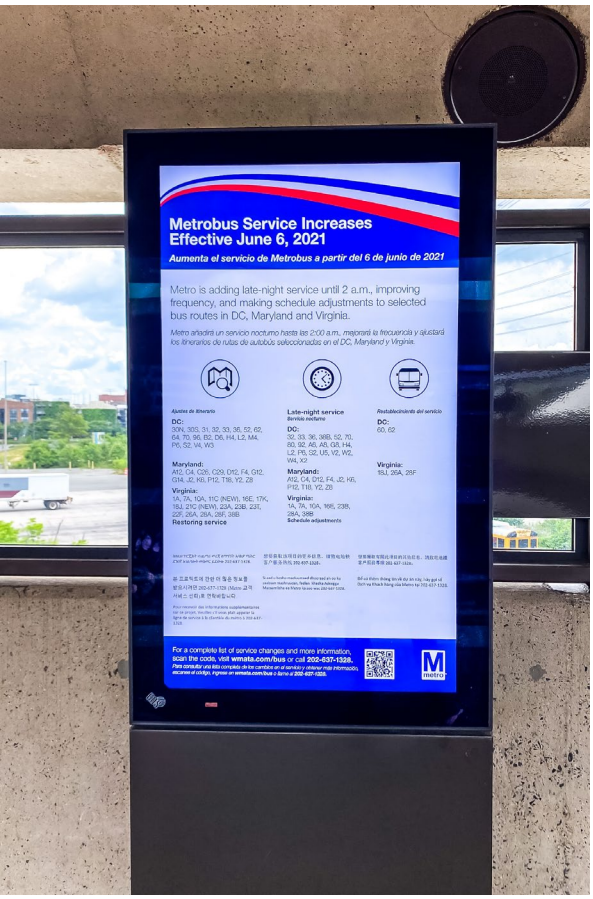
million passenger trips, above where we aim to be but reflective of trends across the region.

Increased police visibility, enforcement activities, and enhanced community relations programs are crime-reduction strategies to make Metro safer. In March, Metro added officers from other agencies in the Washington region and third-party security firms as extra patrols in stations. On an average day, an extra 90 personnel are in the system to help customers. These extra eyes have increased arrests 116 percent compared to the same time last year. In April, Sergeants and Lieutenants will begin carrying body-worn cameras, supplementing the more than 20,000 cameras Metro has throughout the rail, bus, and paratransit systems to further strengthen public safety and security efforts. Following initial deployment, body-worn cameras will be put into use at each of the three Metro Transit Police Department (MTPD) districts, with an estimated 315 officers trained and equipped by the end of the summer.

Metro is making multiple major capital investments aimed at improving rail service **reliability** and modernizing the rail system and facilities for customers. On May 7, the Yellow Line will reopen after eight months of construction for safety critical repairs to mitigate water intrusion in the decades-old, steel-lined tunnel and replace aging bridge bearings and expansion joints. The work included replacing over 1,000 individual steel plates held together by more than 12,000 bolts in the tunnel and replacing 88 bearings on the bridge. The project also upgraded the fire suppression system on the 3,000-foot bridge and removed and replaced miles of critical communications cables used by multiple regional partners. Returning the Yellow Line to service will benefit 93,000 or 27 percent of customers on an average weekday.

This summer, we will roll out Automatic Train Operation (ATO) on the Red Line, which will provide safer operations and a better customer experience. We aim to operate in ATO mode systemwide by December 2023. We are also advancing work on five major projects this summer:

- Completing the station roofing project on the Orange Line in coordination with Pepco
- Replacing 30 miles of steel rail in the areas most susceptible to breakage
- Installing fiber-optic cable to modernize communications and enable technology to increase work time during non-passenger hours
- Beginning escalator replacement and elevator rehabilitation at the Dupont Circle Station north entrance (located at Q St. and Connecticut Ave.)



- Modernizing customer information displays on platforms in the downtown transfer stations

To make it more **convenient** and **accessible** for families to ride Metro, we announced a policy change in March that allows customer to keep strollers open on Metrobus as long as there is space available in the front of the bus. We estimate that about five percent of trips – around 18,000 a day – involve customers using Metrobus to take their children to and from daycares and schools or running errands to grocery stores. The policy change follows feedback from customers, consultation with Metro employees, Local 689, and Local 922, and engagement with the Riders Advisory Council and the Accessibility Advisory Council.

Finally, removing barriers to purchasing fare is an important part of improving the customer experience: In March, we celebrated 25 million trips via the SmarTrip® mobile app.

**Talented teams: Attract, develop, and retain top talent where individuals feel valued, supported, and proud of their contribution**

On March 18, we celebrated Transit Worker Appreciation Day. It is an honor to work with nearly 12,000 caring transit professionals that proudly serve the region. Over the past nine months, staff have worked to recover from a vacancy level of 1,900 people that was mostly frontline employees down to its current level of 1,300 vacancies. Specifically, we've hired about 409 bus operators and 160 train operators, which has enabled us to deliver 99 percent of scheduled bus service and add 34 percent more rail trips each day, reducing wait times.

In December, we realigned Metro's internal organization to ensure we are well-placed to deliver on our Strategic Transformation Plan. One highlight is the creation of the Metro Integrated Control and Communications Center (MICC). For the first time, all control centers for bus, rail, police, maintenance, power, escalator/elevator, fire liaison, and communications are in one place. This will significantly improve daily operations coordination and incident management. Over the past three months, we also filled five key executive roles, hiring Metro's first Chief Diversity and Inclusion Officer; Senior Vice President of Rail Transformation; Senior Vice President of Bus Transformation; Executive Vice President and Chief Customer Experience and Engagement Officer; and Senior Vice President of the MICC.

**Regional Opportunity and Partnership: Design transit service to move more people and equitably connect a growing region**

We added service to Metrorail four times over the last three months. These improvements initially focused on peak periods during the middle of the week, where ridership is growing most. As we've added back 7000-series trains and operators, we've been able to expand these improvements to all periods of service. Today, 88 percent of all rush hour trips are served by a train every eight minutes or less. We are running 34 percent more trips a day than in July. Our service plan for FY24 aims to increase service even more. Once fully implemented, 75 percent of rail customer trips will have service every six minutes or better.

In April, we unveiled a draft Visionary Network for the Metrobus system that gives more people access to more bus service, seven days a week, 24 hours a day. The proposal includes about 100 routes that operate every 20 minutes or less, up from 59 routes today. We are conducting 50 community-focused events over 50 days – from April 17 to June 5 – to obtain customer input, building on the comments we received from over 11,000 people this fall. More information can be found at wmata.com/betterbus.

**Sustainability: Manage resources responsibly to achieve a sustainable operating, capital, and environmental model**

Every trip taken with Metro instead of a car reduces greenhouse gas emissions, and transitioning to zero-emission buses will deliver additional environmental and health benefits while improving the quality of life for people across the region. Over the past few years, Metro has been making investments in renewable energy. Today, 11 acres of solar panels bring 10 megawatts of electrical capacity to four Metro stations, generating enough electricity to power 1,100 homes. We recently broke ground on a new project to install 7,000 panels at the Southern Avenue Station parking lot that will generate power for 350 homes.

In March, we released plans to accelerate our timeline by three years for transitioning to a 100 percent zero-emission bus fleet. Under the new timeline, half of Metro's bus fleet will be zero-emission in 10 years, with all 1,500+ buses zero-emission by 2042. To accommodate the new buses, Metro will open its first all-zero-emission bus garage at Northern in 2027, with five of Metro's nine garages ready for zero-emission buses by 2031 and the remaining by 2041.

Increasing the number of facilities with green certifications is one way we are achieving the environmental sustainability goal in our Strategic Transformation Plan. In Q3 of FY23 we opened or broke ground on three facilities:

- In March, we officially opened the LEED-certified Maryland Headquarters building at New Carrollton, home to 1,200+ staff. We are proud to be a Transit-Oriented Development anchor in this new neighborhood. The Margaux, a mixed-use joint development partnership between Metro and Urban Atlantic, will soon offer 291 housing units which will be affordable thanks to low-rate financing provided by Amazon's Housing Equity Fund. The Margaux will join the already-completed Kaiser Permanente office building and The Stella, a 382-unit apartment building.
- In March, we also broke ground on the reconstruction of the Bladensburg Bus Garage, which will support 150 electric buses and be LEED-certified. The project will create new construction jobs with a goal of more than 18 percent of the contract going to small, minority, and disadvantaged businesses.
- In January, we broke ground on the reconstruction of the Northern Bus Garage, which will be LEED-certified and support 150 zero-emission buses. The new bus facility will maintain the historic façade, while adding retail space, streetscape improvements, and a community room for local meetings.

We are honored to service this community and thank you for your continued support. We'll see you on your next ride!

# ABOUT THIS REPORT

The Washington Metropolitan Area Transit Authority's (Metro) Performance Report highlights Metro's fiscal-year-to-date performance on a suite of measures that look retrospectively at how well the agency is delivering its mission to provide safe, equitable, reliable, and cost-effective public transit. These measures follow industry standard and align to the safety performance measures established in the Federal Transit Administration's National Public Transportation Safety Plan. Metro updates performance targets for its measures annually, reflecting the priorities, investments, and improvements anticipated for the coming year. The report communicates performance results relative to these targets, shows performance trends over the prior two years, and identifies actions that staff are taking to continuously improve.

**Colored indicators throughout the report show each measure's FY results against target:**

● **Target met** ● **Target at risk** ● **Target missed**

# ABOUT METRO

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.

# FYTD Scorecard: The Customer Experience Measured

Through Q3 of FY23, Metro met **12 of the 26 measures** with FY23 targets featured in this report

- Target met
- Target at risk
- Target missed
- No target

Metro Ridership | page 10

Metro Customer Satisfaction | page 11-12
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- METROBUS
- METROACCESS

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SYSTEM SAFETY EVENTS:
- RAIL | BUS | METROACCESS

CUSTOMER INJURIES:
- RAIL | BUS | METROACCESS
- FATALITIES

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NTD-REPORTABLE ASSAULTS:
- RAIL | BUS

EMPLOYEE INJURIES:
- RAIL | BUS
- FATALITIES

# RIDERSHIP

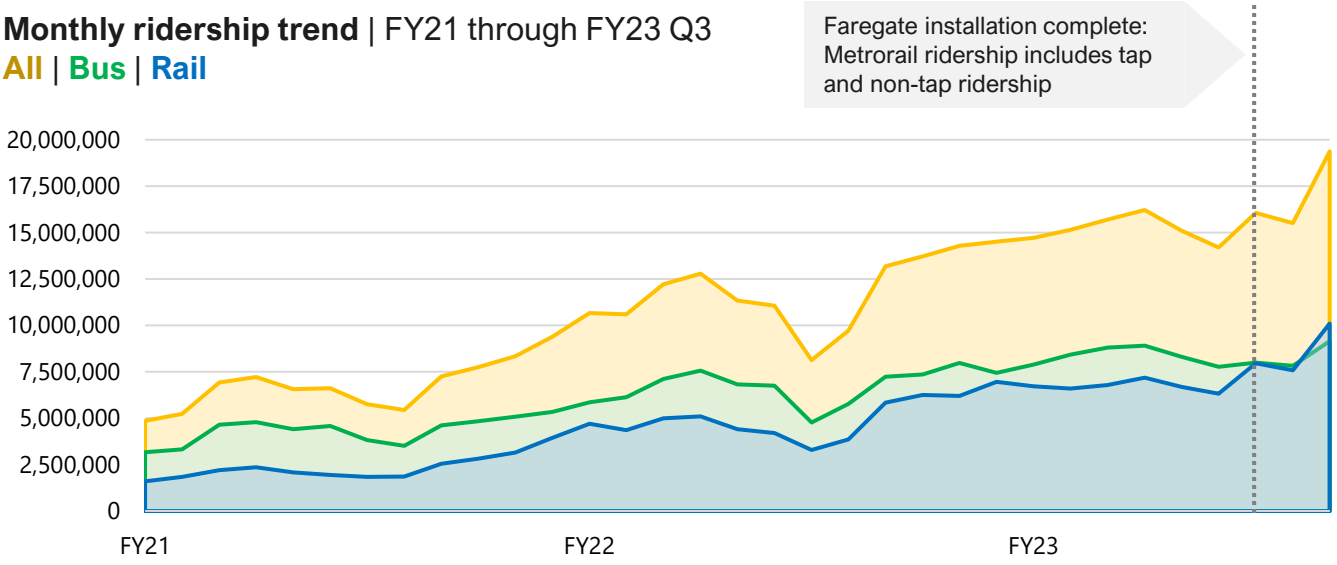
**Metro carried 142.0 million riders across Rail, Bus, and MetroAccess in FY23 through March.** Metrobus ridership accounted for 53 percent of total ridership, exceeding Metrorail ridership by about 9.2 million riders.

In the first three quarters of FY23, **Metrorail** ridership was 65.9 million. Rush hour ridership has been steadily returning; the system is busiest around 8am and 5pm Tuesday through Thursday. The Silver Line extension served more than 1.1 million trips in its first five months of service; ridership has been steadily increasing on the extension, on pace with systemwide increases and trends.

Over 75 million passengers rode **Metrobus** across Q1-Q3. On the Sunday of peak cherry blossom bloom, buses carried 182,000 riders, the highest Sunday since the start of the pandemic. Average weekday ridership through Q3 FY23 was 284,000 and average weekend ridership was 146,000.

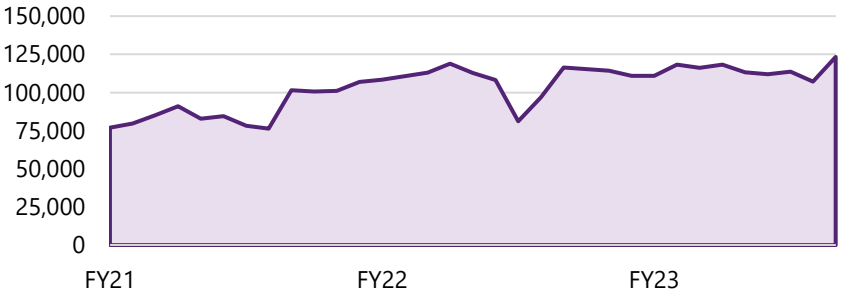
**MetroAccess** ridership was 1.03 million across Q1-Q3. Ridership remained stable through Q3, ranging between 107,000 and 123,000 passengers per month (pre-pandemic ridership was around 200,000 passengers per month). Average weekday ridership through March of FY23 was 4,600.

**Monthly ridership trend** | FY21 through FY23 Q3
**All** | **Bus** | **Rail**




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**)

**Monthly ridership trend** | FY21 through FY23 Q3
**MetroAccess**




Note: Does not include trips taken on Abilities-Ride. In FY23 through March, there were 405,000 additional trips on Abilities-Ride

# CUSTOMER SATISFACTION

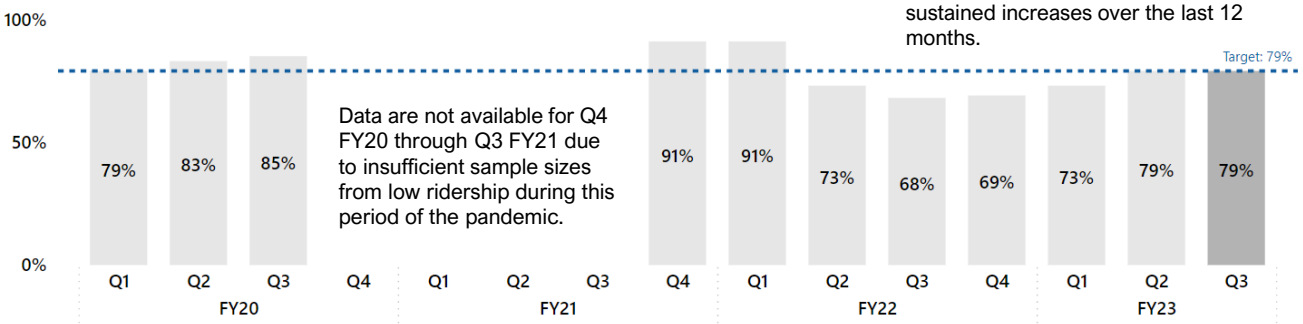
## **79%** customer satisfaction for Metrorail in Q3, meeting target of **79%** or better

Customer satisfaction was consistent with Q2's result. Satisfaction in Q3 remained high thanks to continued, strong reliability and shorter wait times. Average platform wait time slightly decreased further in Q3, significantly shorter compared to wait times a year ago. However, safety remains a concern for customers.

**Measure Details: What and Why**
Customer satisfaction is a gauge of Metro's service quality and a key driver of ridership. It helps Metro leadership understand the impact of its service improvement efforts, and overall public sentiment of Metro. FY23 targets were set to achieve the 5-year average satisfaction level, which would be an increase of 10 percentage points for Metrorail and seven percentage points for Metrobus compared to FY22 year-end performance results.

**Customer Satisfaction** against **dotted line target**
Y: % of customers who were satisfied with their last Metrorail trip | X: quarter
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | Customer satisfaction in Q3 was consistent with Q2 results and sustained increases over the last 12 months.

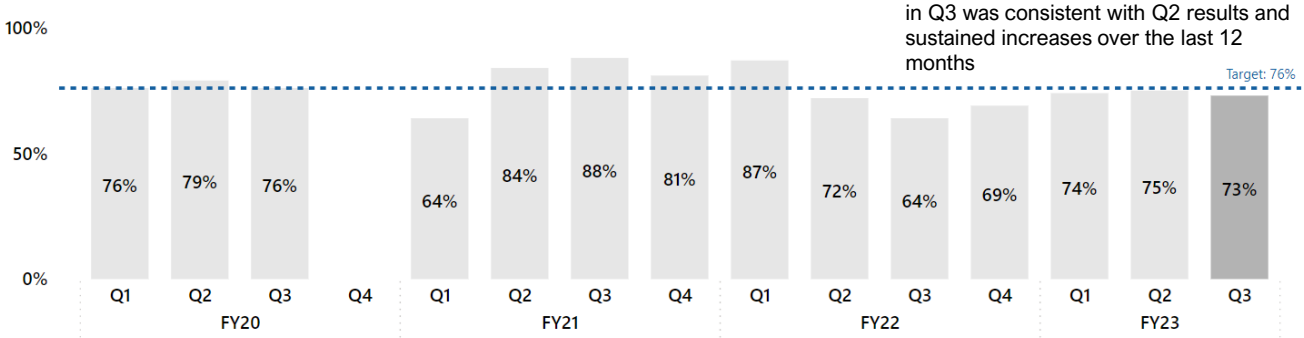



## **73%** customer satisfaction for Metrobus in Q3, missing target of **76%** or better

Bus customer satisfaction remained statistically consistent with the past two quarters. Satisfaction is higher than the same time period last fiscal year but slightly below pre-pandemic satisfaction rates (Q1-Q3 of FY20). Both wait times and reliability stayed strong for Metrobus through Q3, and customers are overall more satisfied with these than they were at this time last year.

**Customer Satisfaction** against **dotted line target**
Y: % of customers who were satisfied with their last Metrobus trip | X: quarter
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | Customer satisfaction in Q3 was consistent with Q2 results and sustained increases over the last 12 months



# CUSTOMER SATISFACTION (CONTINUED)

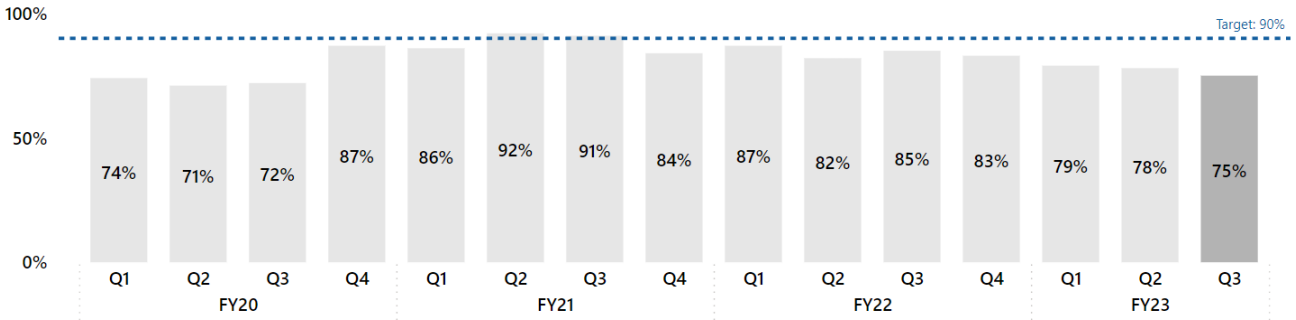
## **75%** customer satisfaction for MetroAccess in Q3, missing target of no less than **90%**

MetroAccess customer satisfaction remained statistically the same in Q3 compared to Q2, returning to levels seen pre-pandemic. Satisfaction rose in the pandemic (FY21 and FY22) as MetroAccess suspended shared rides in order to enable social distancing.

**Measure Details: What and Why**
Customer satisfaction is a gauge of Metro's service quality and a key driver of ridership. It helps Metro leadership understand the impact of its service improvement efforts, and overall public sentiment of Metro. The FY23 target was set to improve three percentage points over the average level achieved in FY21 and FY22 (through Q3).

**Customer Satisfaction** against **dotted line target**
Y: % of customers who were satisfied with their last MetroAccess trip | X: quarter
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | Customer satisfaction has steadily fallen in FY23 as shared rides resumed and regional traffic has picked up. Customer satisfaction peaked in the middle of the pandemic, in Q2-Q3 FY21.




Customers reported higher satisfaction with on-time arrivals in Q3 than in Q2. However, concerns with discourteous behaviors from drivers or service representatives increased from Q2 to Q3.

To improve satisfaction with arriving to destinations on time, the call center assigned designated personnel to monitor the "Late Board", proactively identifying operators and trips experiencing delays. This helped decrease the rate of excessively late trips from Q2 to Q3, contributing to improved customer satisfaction in this area.

To address discourteous behaviors from drivers, MetroAccess is encouraging drivers to not rush, be polite, and take their time with customers, as well as creating a training video about being a professional driver. Drivers have also started receiving de-escalation training from MTPD. While these concerns increased this quarter, the portion of customers who reported a problem with MetroAccess services decreased by nine percentage points from Q2 to Q3, and the majority of customers were satisfied with the resolution of their service problems.

# RAIL MISSED SERVICE

**3.6%** of scheduled rail service missed, meeting target of no more than **6%**

Single-tracking and reduced frequencies due to weekday evening track work accounted for almost one-fifth of missed rail service, followed by service disruptions caused by rail vehicles, signaling, and Metro Police activities. About 12 percent of missed service was due to operator or train availability.

**Measure Details: What and Why**
Missed Service monitors Metro's "guarantee of service"—whether Metro is providing all the service that was scheduled and committed to. The target was set to improve over the average performance from FY20-FY22, which was seven percent.

**Rail Missed Trips** against **dotted line target**
Y: % of rail service delivered | X: month
*Direction of desired performance:* ***down***

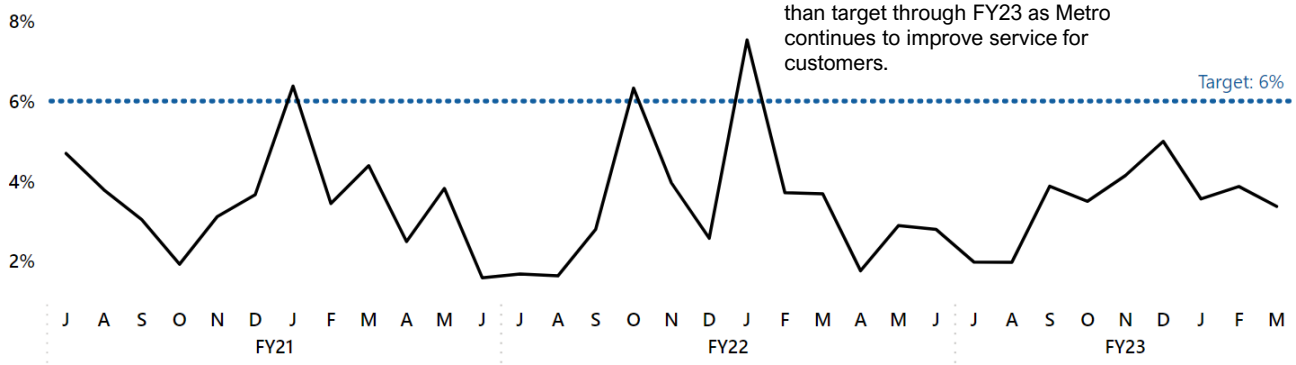
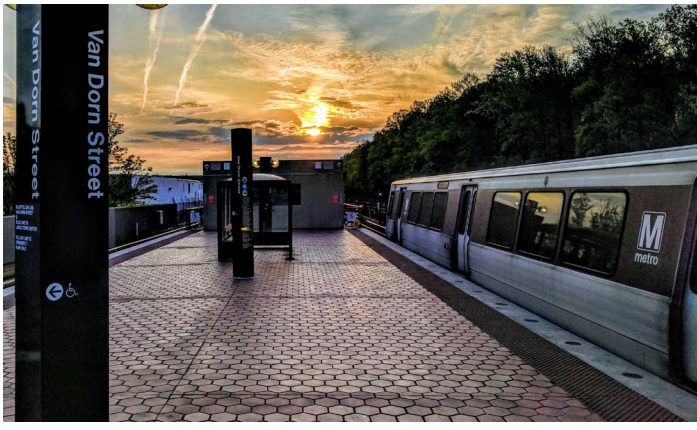



**Chart takeaway** | Missed trips are better than target through FY23 as Metro continues to improve service for customers.

Missed service increased slightly through Q2 of the fiscal year but declined in Q3. Metro continues to accelerate the hiring and training of new train operators. Forty-one new operators were certified and 116 more are in training as of Q3. At the same time, an increasing number of 7000-series trains are available for service. As of March, more than 40 7000-series trains run in daily service, accounting for 51 percent of rail mileage. Both of these factors have enabled Metrorail to keep missed service due to train and operator availability low.

Starting late February, Metro built late-night trackwork into its service schedule, which boosted the number of trips met during this period. These schedule changes accommodate planned improvements, provide a more realistic schedule for Metrorail to meet, and improve clarity for customers.

Overnight and weekend maintenance is essential in preventing major system failures and keeping the system in a long-term state of good repair. Staff actively work to identify opportunities to improve the efficiency of overnight track work to minimize the amount of maintenance conducted during the day.



# BUS MISSED TRIPS

**1.4%** of scheduled bus trips missed (no target in FY23; lower performance is better)

Missed trips have been cut in half over the past nine months, falling from 1.9 percent in July to 1.0 percent in March, averaging just 1.0 percent for all Q3. Metro's performance on bus missed trips is stronger than the industry average of five to 15 percent.

**Measure Details: What and Why**
Missed Service monitors Metro's "guarantee of service"—whether Metro is providing all the service that was scheduled and committed to. FY23 is the first year Metro has been able to aggregate all data sources needed to accurately report bus missed trips. Due to the lack of historical data to identify trends, no target has been set for FY23.

**Percent of Scheduled Trips that were Missed |** FY23 to date
Y: % of trips missed | X: month
*Direction of desired performance:* ***down***

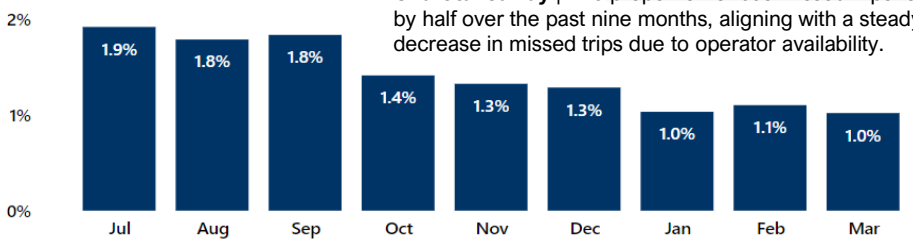
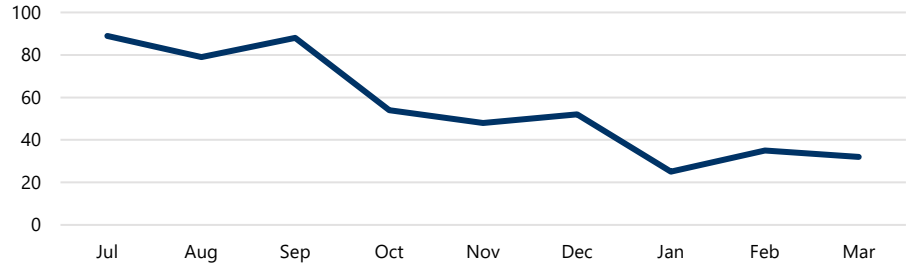



**Chart takeaway** | The proportion of bus missed trips fell by half over the past nine months, aligning with a steady decrease in missed trips due to operator availability.

**Average Daily Missed Trips due to Operator Availability**
FY23 to date
Y: average # of trips missed | X: month
*Direction of desired performance:* ***down***




Missed trips happen in two ways: the bus never leaves the depot to deliver service, or the bus is out on the road and service is interrupted due to collisions, mechanical issues, or customer medical emergencies.

Because bus operator availability plays the largest role in these two performance drivers, Metro has been actively working to recruit operators. Metrobus reached 2,774 active operators at the end of March 2023, the highest number seen in two fiscal years. The most recent class of new bus operators has 80 students, the largest class to ever start training. Additionally, operator absenteeism decreased in Q3 compared to earlier in the fiscal year.

Metrobus has continued to focus on ensuring that the last trip of the day on every route is never missed—making sure that riders can count on Metro to get home.

# BUS PREDICTION AVAILABILITY

**93.9%** of scheduled trips with real-time prediction data (no target in FY23; higher values are better)

Bus prediction availability measures the share of scheduled trips for which Metro provides real-time arrival predictions. Metro's tool busETA—along with third-party applications (apps) like Google Maps, Apple Maps, or Transit—display these predictions. Prediction availability improved across FY23: 95.2 percent of scheduled trips had predictions in Q3 up from 92.7 percent in Q1.

**Measure Details: What and Why**
Customers rely on predictions in busETA or other third-party applications to plan their trips when taking Metrobus. Real-time location data is used to predict arrival times when the bus is running ahead or behind schedule. FY23 is the first year that Metro began archiving its prediction data. Due to the lack of historical data to identify trends, no target has been set for FY23.

## Bus Prediction Availability | FY23 Q1-Q3

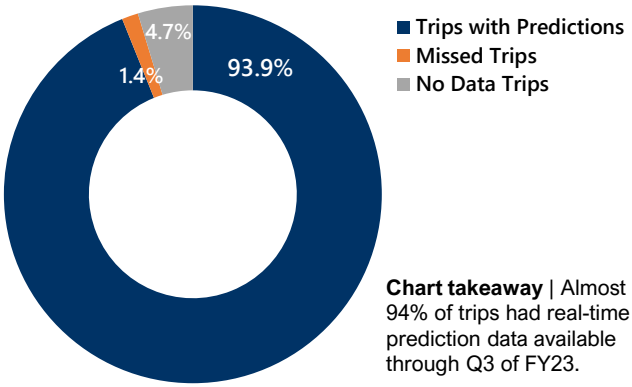



**Chart takeaway** | Almost 94% of trips had real-time prediction data available through Q3 of FY23.

Routes with the lowest prediction availability:

| | |
|---|---|
| X3 | 78.1% |
| 11C | 80.8% |
| U4 | 82.4% |
| B27 | 83.1% |
| A4 | 83.6% |
| W8 | 86.3% |
| S35 | 86.3% |
| W6 | 86.3% |
| W2 | 87.3% |
| W1 | 87.4% |

**Chart takeaway** | Through Q3 of this fiscal year, the X3 had the lowest percentage of trips with real-time data available for predictions.

Eight out of ten of the lowest performing routes are *not* part of the Frequent Service Network, meaning that they run every 20 minutes or longer. The W2 and A4 are Frequent Service Network routes.

Over 60 percent of customers use apps to plan their trips, often timing their arrivals at stops based on real-time information. Real-time prediction data may be unavailable because 1) the trip was missed or 2) the GPS on a bus was malfunctioning, leading to no data available.

Performance on both root issues improved from Q1 to Q3: the percent of missed trips fell from 1.9 to 1.1 percent, and the percent of trips with no data available fell from 5.4 to 3.8 percent. These improvements had a positive effect on prediction availability.

Metrobus actively monitors buses that aren't reporting location data, working with vendors to fix broken units within three business days. Through Q3 of FY23, Metrobus repaired GPS units on 65 vehicles. Additionally, Metrobus conducts campaigns and coaching to ensure all operators log on to enable GPS devices, with a new campaign launched in January 2023.

Metro has taken steps to improve how data is displayed in busETA and on signs at bus stations. Metro removed "ghost buses" (buses that are scheduled but aren't actually running) from busETA in December of 2022 and made other updates to the GTFS-RT data to reduce lags in sharing data with third-party applications. At bus stops, displays were corrected to keep prediction information on-screen for a late bus until it arrives. These screens will also start displaying crowding statuses beginning in May.

# BUS PREDICTION ACCURACY

**86.5%** of real-time predictions that were accurate (no target in FY23; higher values are better)

Metro provides real-time arrival predictions for customers via the busETA tool along with signs at bus stops. Third-party apps like Google Maps, Apple Maps, and Transit also consume these predictions—although these apps may adjust predictions based on additional data sources. Prediction accuracy increased in Q3 compared to Q2, from 85.9 percent to 87.4 percent.

**Measure Details: What and Why**
Customers rely on predictions in busETA or other third-party applications to plan their trips when taking Metrobus. Predicted arrival times must be close to actual arrival times to reduce excess customer wait time for customers. FY23 is the first year that Metro began archiving its prediction data. Due to the lack of historical data to identify trends, no target has been set for FY23.

## Bus Prediction Accuracy | FY23 Q1-Q3

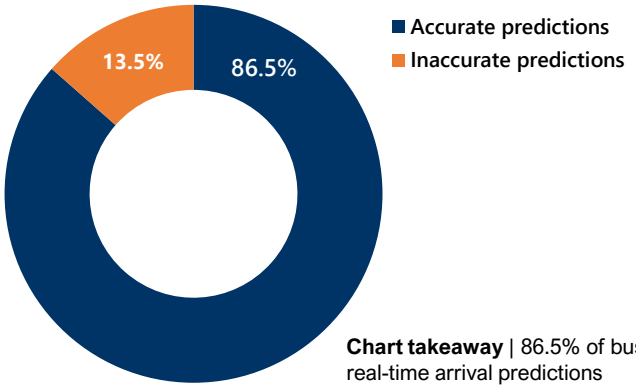



**Chart takeaway** | 86.5% of bus real-time arrival predictions provided to customers were accurate across Q1-Q3.

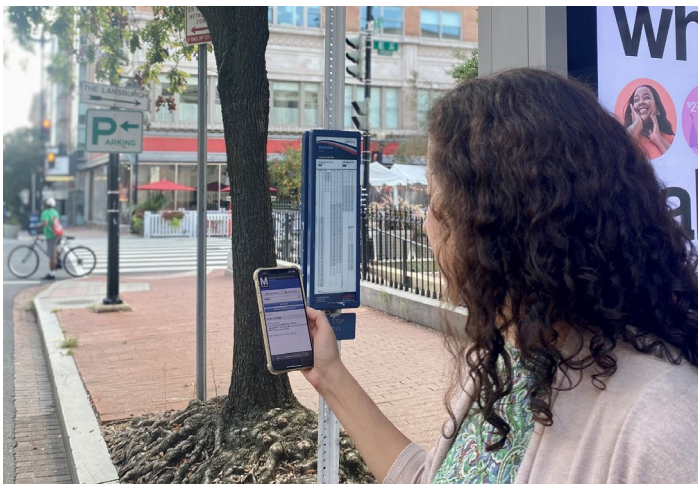
Routes with the lowest prediction accuracy:

| | |
|---|---|
| D34 | 63.2% |
| D31 | 69.1% |
| W5 | 72.6% |
| 3Y | 73.4% |
| 3F | 73.7% |
| S41 | 76.7% |
| D33 | 77.2% |
| A33 | 77.2% |
| W47 | 77.7% |
| X3 | 78.5% |

**Chart takeaway** | The D34, D31 and W5 routes had the lowest levels of prediction accuracy. Many of the lowest performing routes are school routes which only operate for several trips in the morning and afternoons.

To calculate prediction accuracy, Metro uses the standard developed by the Massachusetts Bay Transit Authority, which compares the predicted time of arrival to actual time of arrival. Because customers rely more on predictions in the near-term, this methodology only evaluates predictions that are within 30 minutes of arrival time. Additionally, thresholds for what counts as an "accurate arrival" are more stringent as a bus approaches a stop. See the definitions section at the end of this report for more information on this methodology.

Prediction accuracy starts with the bus schedule. Large deviations from the schedule, such as when buses are very late or very early, make it harder to predict arrivals. In addition, construction or roadway blockages—which slow buses down and lead to inconsistent travel times—also negatively impact prediction accuracy. Metro is developing new ways to track trips with poor predictions to better identify root causes and improve performance. Additionally, Metro implemented changes in Q3 to reconcile differences between busETA and the signs at bus stops that display predictions.



# RAIL CUSTOMER ON-TIME PERFORMANCE

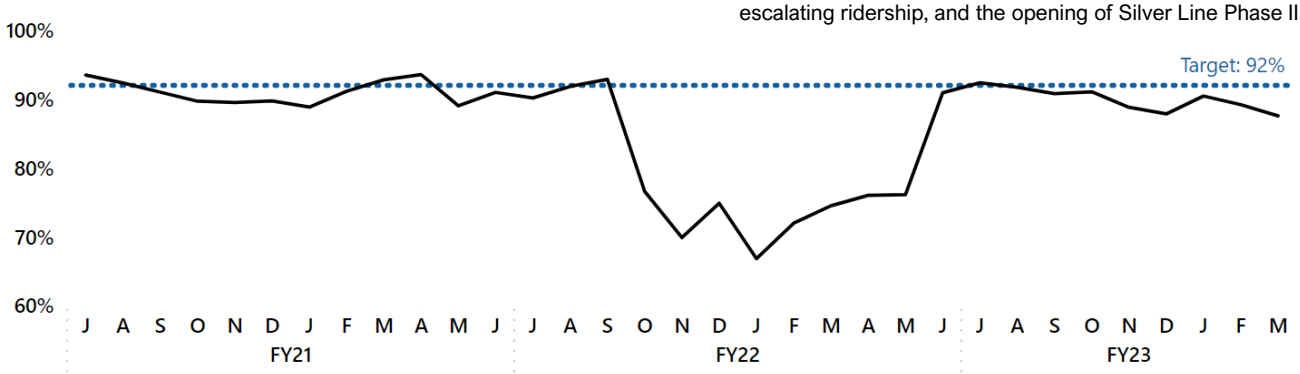
## **90%** of rail customer trips completed on-time, missing target of at least **92%**

Metro continues to improve rail service frequencies as more 7000-series trains return to service. These improvements mean lower wait times for customers. However, on-time performance declined across Q2 and Q3 as staff adapt to these new, more complex schedules.

**Measure Details: What and Why**
Metrorail On-Time Performance is a key measure of service reliability. Rail customer trips are "on-time" if they include waits shorter than the scheduled headways, train journeys that travel at expected speeds, and operational faregates, elevators, and escalators that do not delay travel to and from the platform. The FY23 target was set to improve over the five-year average performance of 89 percent.

**Rail On-Time Performance** against **dotted line target**
Y: % of on-time customer trips | X: month
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | After falling in FY22 during the sidelining of the 7000-series trains following the Blue Line derailment in October 2021, Rail Customer OTP met target in Q1 FY23, but fell below target in Q2 and Q3 as Metro continues to adapt to operational changes such as train count increases, escalating ridership, and the opening of Silver Line Phase II.




Unplanned service disruptions lowered on-time performance by about 8.5 percentage points through Q3. Common causes of delay include Metro Transit Police responses to customer incidents, breakdowns of rail vehicles, switch or track circuit failures, or track issues. Midday, late night, and weekend single-tracking or shutdowns for planned maintenance lowered on-time performance by about 1.5 percentage points. Metro's prioritization of critical repairs to rail infrastructure helps to ensure that the system remains in a state of good repair and minimizes delays due to track, switch, or power failures.

To improve performance, Metro continues to return more 7000-series cars to service. The daily average count of these trains in service has gone up dramatically across the fiscal year, from about eight a day in July 2022 to over 40 in March 2023.

Metrorail added service four times in Q3. These improvements initially focused on peak periods during the mid-week to accommodate changing commuting pattens, before expanding to all time periods. As service frequency ramps up however, operational stability and reliability is challenged, impacting Metro's customer on-time performance results.

Thanks to service frequency improvements, 69 percent of trips are faster in March compared to July. Trip delays are also shorter, as more trains are available to provide service when disruptions occur. Of the 10 percent of trips that are late, the average delay fell from 8 minutes in July 2022 to 6.7 minutes in March.

# BUS ON-TIME PERFORMANCE

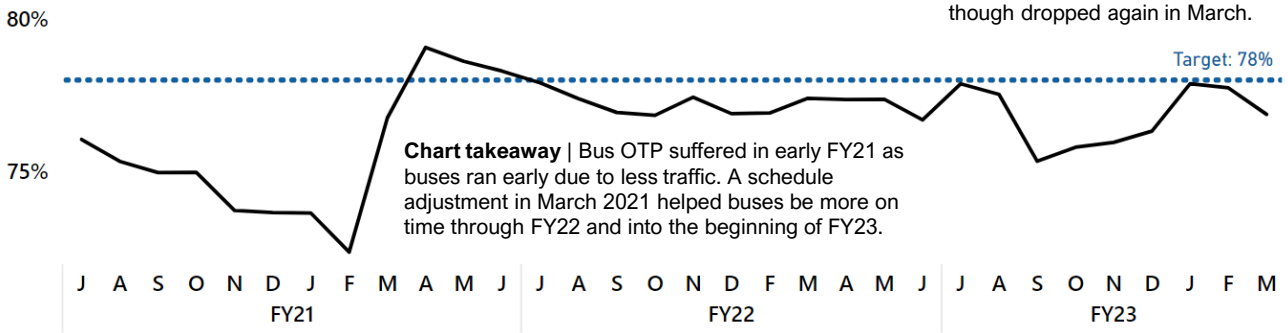
## **77%** of bus service on-time, missing target of no less than **78%**

After the sharp drop in September, bus on-time performance (OTP) slowly improved in Q2 and hit target for January and February of Q3. In FY23 through March, buses with 20-minute frequencies were 78 precent on time. Buses with frequencies of 12 or fewer minutes—in addition to buses with frequencies longer than 20 minutes—were 76 percent on time.

**Measure Details: What and Why**
Metrobus On-Time Performance is a key measure of service reliability. Buses are considered "on-time" if they are no more than two minutes early or seven minutes late to the major stops on the route schedule. The FY23 target was set to improve over average performance in FY20 and FY22 (77 percent).

**Metrobus OTP** against **dotted line target**
Y: % of on-time buses | X: month
*Direction of desired performance:* ***up*** ↑

In September of FY23, OTP dropped as traffic increased to pre-pandemic levels. OTP slowly improved over Q2, and in Q3 hit target for January and February, though dropped again in March.




Several factors influence bus OTP: bus availability and reliability; bus operator availability; bus operator coaching and training; the accuracy of the bus schedule; disruptions such as customer illness or criminal incidents; and other incidents such as construction, special events, and weather.

In Q3, Metro focused on ensuring that the technology on each bus that sends real-time information to customers was working correctly at the start of each trip. Improving this data flow ensures customers know when their bus is arriving, and also improves Metro's ability to collect information on OTP.

In Q3 Metro also designated a team of street supervisors to focus on improving OTP for a set of priority routes that were not performing to Metro's target. These routes are selected to focus on areas with higher populations of low-income people and people of color.

# METROACCESS ON-TIME PICK-UP PERFORMANCE

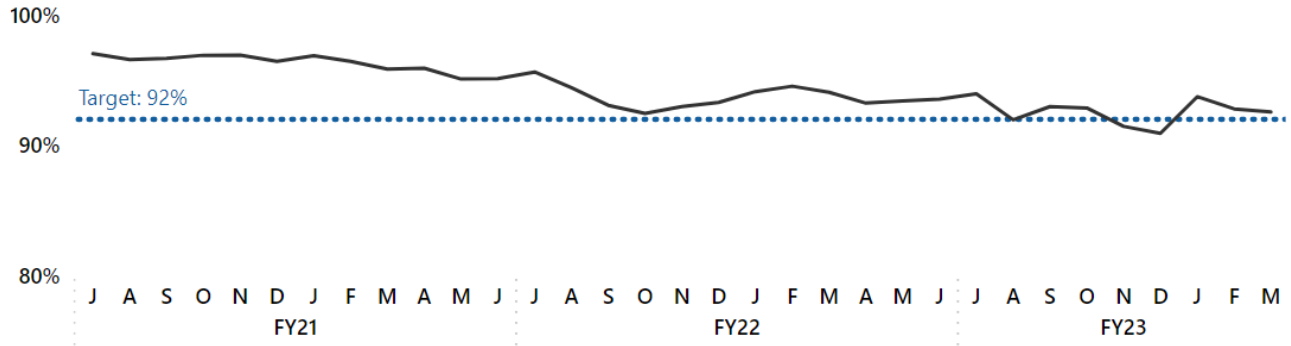
**92.6%** of MetroAccess customers picked up on-time, meeting target of no less than **92%**

Reduced ridership (64 percent of pre-pandemic demand), coupled with sufficient vehicle resources and leveraging Abilities-Ride partners, have led to strong on-time pick-up performance (OTP) in the first three quarters of FY23 even as the number of shared rides increased.

**Measure Details: What and Why**
"On-time" means the vehicle arrives at the pick-up location within the scheduled 30-minute pick-up window. MetroAccess on-time pick-up performance is essential to delivering quality service to the customer. The FY23 target was set to maintain the average performance over the last five years: 92 percent.

**MetroAccess OTP** against **dotted line target**
Y: % of on-time stops | X: month
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | OTP surged during the pandemic when shared rides were suspended and traffic eased. As normal activities and shared rides resumed, OTP has decreased.




OTP continues to meet target in FY23, with performance increasing from Q2 (91.8 percent) compared to Q3 (93.0 percent). One of the key strategies used by MetroAccess to increase on-time pick-up performance is to dynamically adjust the system's scheduling parameters and leverage available taxis and Ubers when trips are projected late throughout the day.

MetroAccess has assigned more staff dedicated to monitoring the "Late Board" so that they can adjust trips that are projected to be late. This helped decrease the rate of excessively late trips from 1.9 percent in Q2 to 1.5 percent in Q3.

# ELEVATOR AVAILABILITY

**98.3%** of elevators available on average, meeting target of at least **97.5%**

Of the 306 elevators in the system, about five were out of service for maintenance at any given time through Q3. Slightly under half of hours out of service were the result of planned capital work to rehabilitate or replace older assets in the system. The remaining outages were attributed to other work such as unit failures, related fixes, or preventive maintenance.

**Measure Details: What and Why**
Elevator availability measures how often elevators are operating for customers. Elevators are essential in providing equal access to Metrorail. The FY23 target factors in the average number of units expected to be out of service for capital rehabs and replacements and aims to reduce the number of units out of service for other reasons by five percent compared to performance over the past three years.

**Elevator Availability** against **dotted line target**
Y: % availability | X: month
*Direction of desired performance:* ***up*** ↑

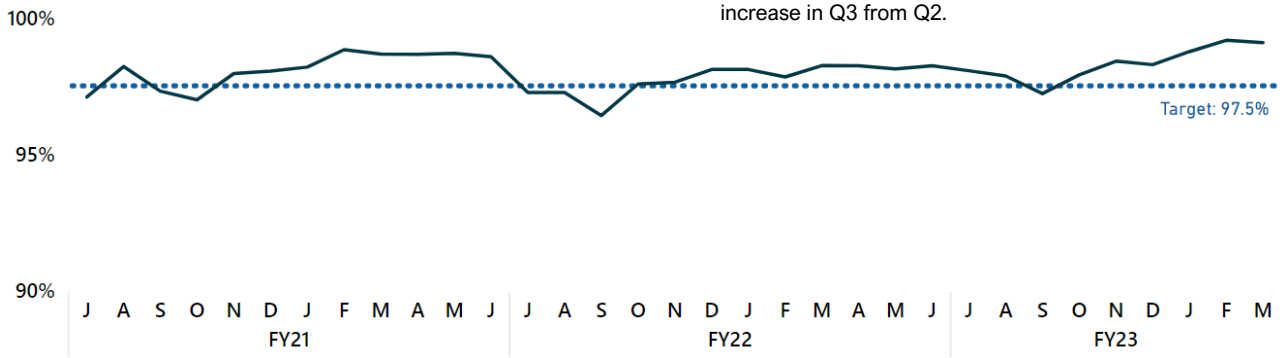



**Chart takeaway** | Metro's investments in rehabilitating and replacing units, conducting preventive maintenance, and quickly responding to outages have enabled strong performance over the past two years. Availability saw an increase in Q3 from Q2.

Metro continues to make progress on a 2014 contract to replace 102 elevators—over a third of all units. By the end of FY23 Q3, 99 elevators were complete with all 102 slated for completion in early 2024.

**Elevator Availability Breakdown**
FY23 Q1-Q3

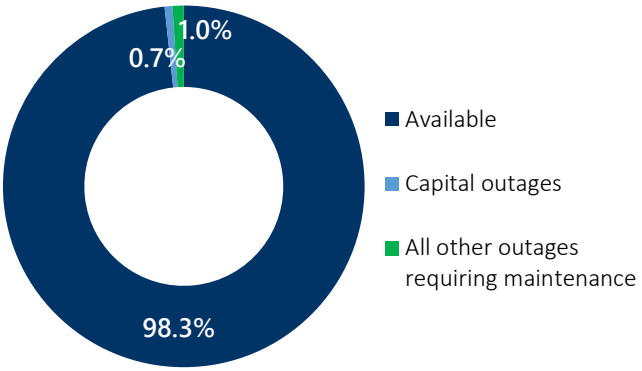



**Chart takeaway** | Over half of the hours that elevators were unavailable were due to non-capital work such as unit failures, related fixes, or preventive maintenance.

# ESCALATOR AVAILABILITY

**93.4%** of escalators available on average, meeting target of at least **92.9%**

About 43 of Metro's 642 escalators were out at any given time in FY23 through March. The improvement in Q3 performance was due to a decrease in time out of service due to both capital and unplanned outages.

**Measure Details: What and Why**
Escalator availability measures how often escalators are operating for customers. Units are unavailable when they require corrective maintenance or major rehab/replacement. This measure does not count when units are temporarily out of service and only need to be reset. The FY23 target aims to reduce the number of units out of service for maintenance purposes by 10 percent compared to performance over the past three years.

**Escalator Availability** against **dotted line target**
Y: % availability | X: month
*Direction of desired performance:* ***up*** ↑

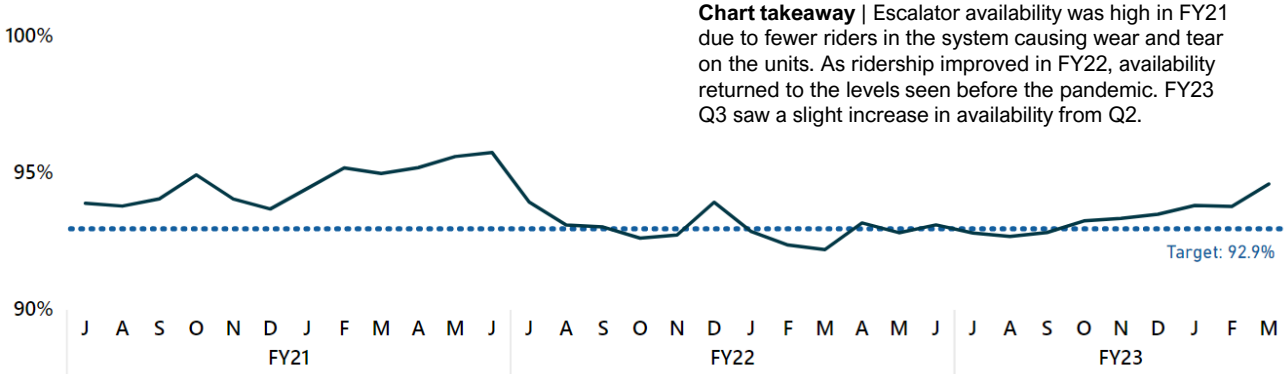



**Chart takeaway** | Escalator availability was high in FY21 due to fewer riders in the system causing wear and tear on the units. As ridership improved in FY22, availability returned to the levels seen before the pandemic. FY23 Q3 saw a slight increase in availability from Q2.

Capital work continued to be the main reason for escalator outages through Q3, accounting for 55 percent of outage hours. This work is necessary to keep the units in a state of good repair and help reduce unplanned breakdowns.

The time units were out of service to address failures or conduct preventive maintenance decreased between Q2 and Q3 by over 10 percent. Units broke down about five percent less frequently and the average time to repair an escalator fell by about eight percent.

Metro continues its multi-year contract to replace 130 escalators across the system, with 48 completed since April 2021 and another 23 scheduled for completion by the end of FY23.

**Escalator Availability Breakdown**
FY23 Q1-Q3

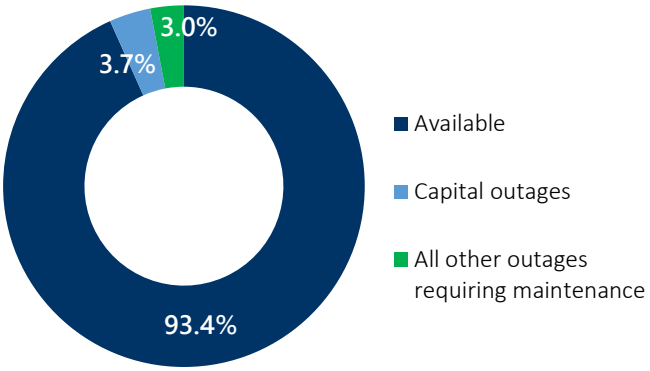



**Chart takeaway** | Over half of the hours that escalators were unavailable were due to capital work such as planned rehabilitations and replacements of older assets.

# RAIL CROWDING

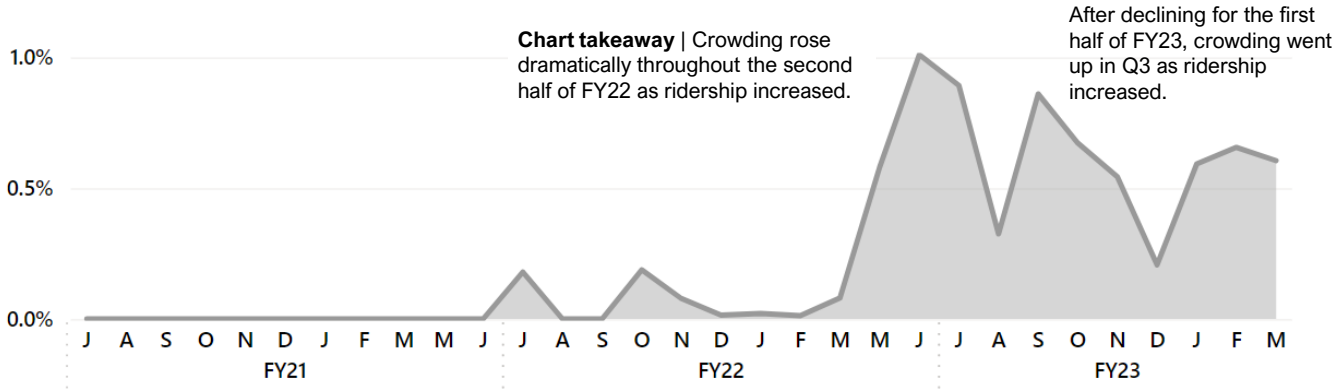
**0.6%** of passenger time in crowded conditions through FY23 Q3 (no target in FY23; lower values are better)

Metrorail crowding increased in Q3 after a lull in December, in line with ridership increases this quarter. Despite this, Metro has been able to keep crowding in check by increasing the amount of service provided: in Q3, the number of daily trips increased by 24 percent from Q1.

**Measure Details: What and Why**
Rail crowding evaluates how often customers may be uncomfortable on crowded trains. Crowded conditions are defined as > 100 passengers per car, which is when all seats are occupied and about 35 customers are standing.

## Rail Crowding

Y: % passenger time in crowded conditions | X: month
*Direction of desired performance:* ***down***




At the beginning of FY23, Metro returned to the pre-pandemic definition of crowding outlined in the WMATA Service Standards: an average of 100 people per railcar. The chart above uses this standard for all months to better show the trend in crowding over time.

Reduced service following the October 2021 derailment and removal of the 7000-series trains, combined with increases in rail ridership, led to more crowding at the end of FY22 and into Q1 of FY23. After a seasonal dip in Q2, crowding increased in Q3 as ridership returned.

However, even as ridership approaches pre-pandemic levels, crowding is limited to specific locations and times in the system. For example, a customer riding between Metro Center and Gallery Place is 12 times more likely to experience crowding than the system average.

**Rail crowding by line** | FY23 Q1-Q3

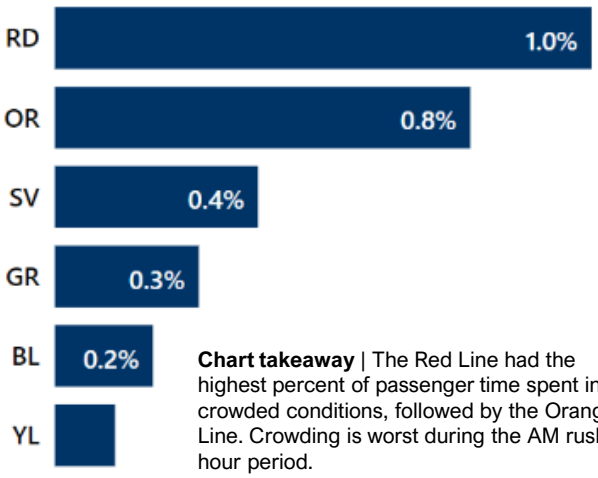



**Chart takeaway** | The Red Line had the highest percent of passenger time spent in crowded conditions, followed by the Orange Line. Crowding is worst during the AM rush hour period.

The most crowded segments in the system are on the Red Line between Metro Center and Union Station, on the Green Line between L'Enfant Plaza and Navy Yard, and on the Orange/Silver Lines between Rosslyn and Court House.

# BUS CROWDING

**2.4%** of passenger time in crowded conditions through FY23 Q3 (no target in FY23; lower values are better)

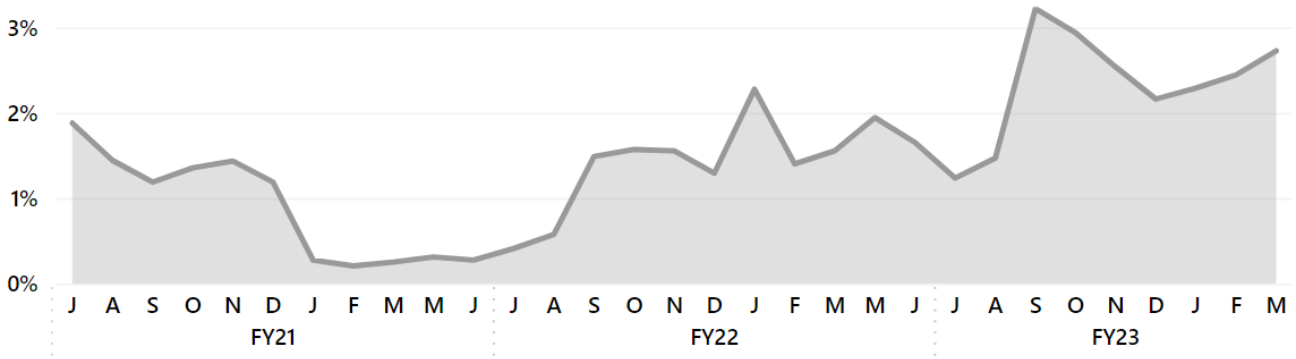
Metrobus crowding increased throughout Q3 after a peak in crowding in September 2022 not seen since before the pandemic. The Q3 result aligns with seasonal trends, including improved weather and cherry blossom tourism. The most crowding still occurs during weekdays between 6am-9am and 3pm-7pm.

**Measure Details: What and Why**
Bus crowding evaluates how often bus customers may be uncomfortable on crowded vehicles. Crowding is defined as >40 passengers per bus for a 40-foot bus, which is when all seats are occupied on the vehicle. During weekday rush hours periods, crowding is defined as >120% of seated capacity (48 people) for BRT, framework, and coverage routes.

## Bus Crowding

Y: % passenger time in crowded conditions | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | Crowding increased in Q3 of FY23 following a seasonal dip in Q2. March was the second highest of any month since the pandemic began.




At the beginning of FY23, Metro returned to the pre-pandemic definition of crowding outlined in the WMATA Bus Service Guidelines: 120 percent of the seated capacity of a bus (48 passengers in a 40-foot bus) during rush hours for bus rapid transit, framework, and coverage routes*; and 100 percent of the seated capacity (40 passengers in a 40-foot bus) for all other times and routes. The chart above uses this standard for all months to better show the trend in crowding over time.

Crowding is concentrated on specific routes, with about 30 routes accounting for most of the crowding in the system and the remaining seeing very little. When customers do experience crowding, it is often for only a few stops on their journey. The figure to the right shows the top 10 most crowded routes in Q1-Q3 of FY23. Six of the top 10 routes are school routes.

**Bus crowding by route** | Most crowded routes, FY23 Q1-Q3

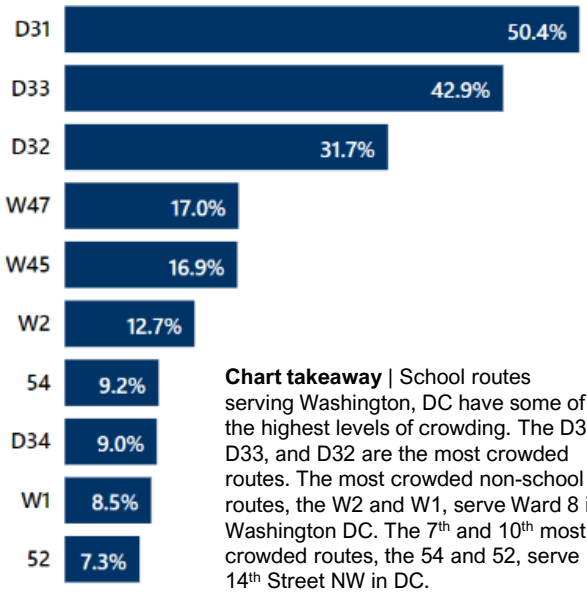



**Chart takeaway** | School routes serving Washington, DC have some of the highest levels of crowding. The D31, D33, and D32 are the most crowded routes. The most crowded non-school routes, the W2 and W1, serve Ward 8 in Washington DC. The 7th and 10th most crowded routes, the 54 and 52, serve 14th Street NW in DC.

*See pages 5-6 of the Metrobus Service Guidelines for explanations of these route types.

# RAIL FLEET RELIABILITY

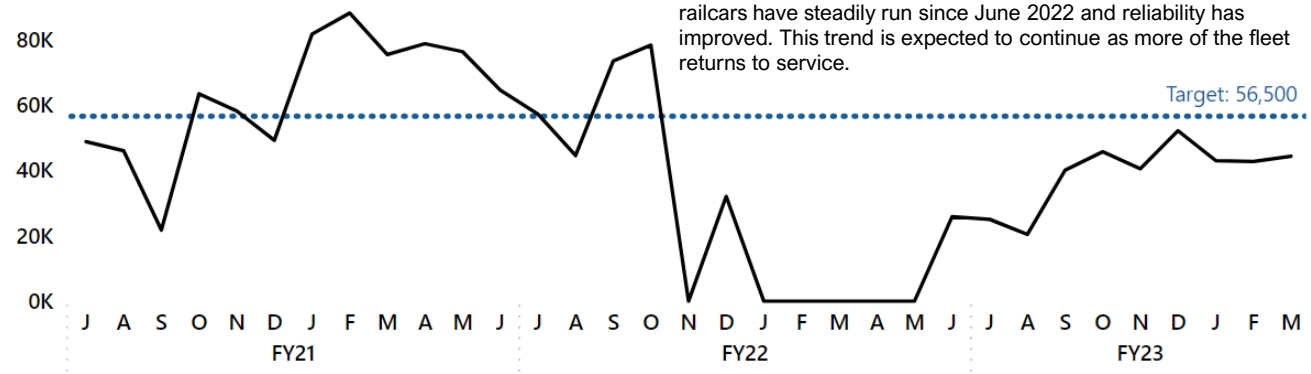
## 7000-series fleet: **41,789** miles between failure, missing target of at least **56,500**

Reliability of the 7000-series fleet has gradually increased over FY23 as more trains are returned to service, approaching target in Q2 but falling slightly in Q3. By late March Metro was consistently running 40 or more of these trains, up from eight in July 2022. The reliability of the 7000-series fleet in FY23 is over two times better than the legacy fleet.

**Measure Details: What and Why**
Rail fleet reliability is a measure of the quality of service Metro provides customers. It communicates the effectiveness of Metro's railcar maintenance and engineering programs. This measure is also part of required reporting to the National Transit Database (NTD). The FY23 target was set to improve 5 percent over average performance in FY20-FY22 (53,700 miles for the 7000-series and 13,500 for the legacy fleet).

**Rail Fleet Reliability** against **dotted line target**
Y: fleet miles between failure | X: month
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | The 7000-series railcars have traditionally been the most reliable part of Metro's fleet, consistently traveling more than 50,000 miles between failure prior to the derailment of a 7000-series train in October 2021. After briefly returning in December 2021, railcars have steadily run since June 2022 and reliability has improved. This trend is expected to continue as more of the fleet returns to service.

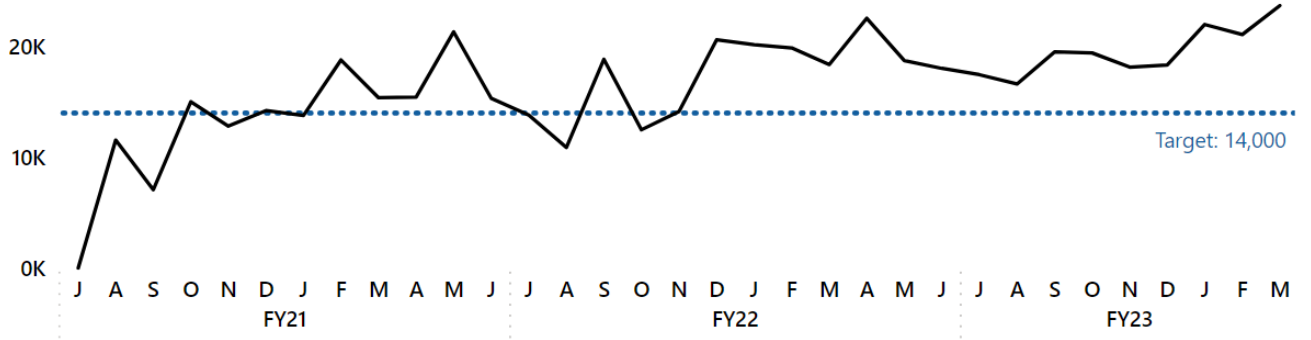



## Legacy fleet: **19,277** miles between failure, meeting target of **14,000**

The legacy fleet is comprised of over 500 2000-, 3000-, and 6000-series cars that range from 17 to 40 years old. These cars provided 64 percent of service through Q3 FY23 and continued to deliver their best performance in decades thanks to stronger inspection and maintenance practices, and engineering programs to address failure-prone components.

**Rail Fleet Reliability** against **dotted line target**
Y: Mean Distance Between Failure| X: Month
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | Legacy fleet reliability remained strong and exceeded the target through Q3 FY23.



# BUS FLEET RELIABILITY

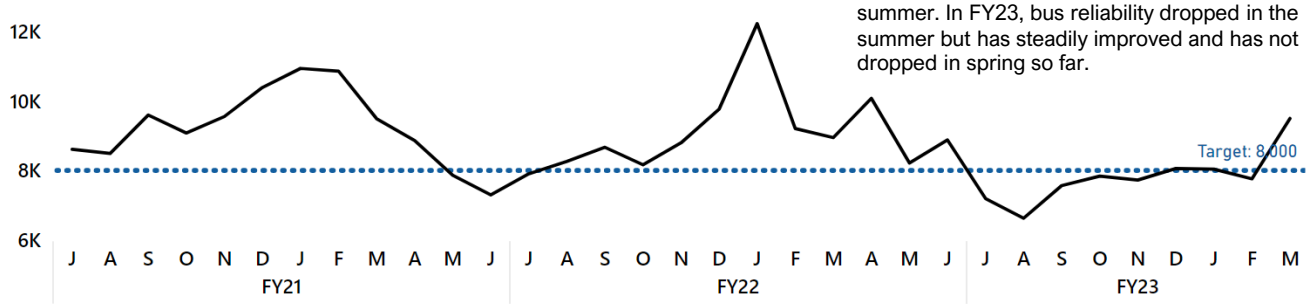
## **7,743** miles between failure FY23 to date, missing target of **8,000**

While average performance this fiscal year is below target, reliability improved steadily and was above target in Q3 at 8,399 miles between failure. Results vary by fuel type: The clean diesel fleet, which includes Metro's newest buses, performed at 10,830 miles between failure, followed by the CNG fleet (8,530 miles) and the hybrid fleet (6,350 miles), Metro's oldest buses.

**Measure Details: What and Why**
Bus fleet reliability is a measure of the quality of service Metro provides customers. It communicates the effectiveness of Metro's bus maintenance and engineering programs. This measure is also part of required reporting to the National Transit Database (NTD). The FY23 target was set to improve 5 percent over average performance over the past five years (7,500 miles).

**Bus Fleet Reliability** against **dotted line target**
Y: fleet miles between failure | X: month
*Direction of desired performance: up ↑*

**Chart takeaway** | Bus fleet reliability is typically seasonal, improving in winter and falling in summer. In FY23, bus reliability dropped in the summer but has steadily improved and has not dropped in spring so far.




Bus fleet reliability is seasonal, generally improving in winter because the lower outdoor temperatures prevent the engines from overheating. However, if there are long stretches of below-freezing temperatures, this can cause other issues such as freezing water in the air pressure systems.

Similar to the efforts to recruit bus operators, Metro has been working to fill vacancies among bus maintenance staff. In Q3, Metrobus launched the Technical Skills Program, a program to recruit and train people for mechanical and technical roles to maintain buses. The program is currently evaluating a robust pool of applicants.

In addition to recruiting new staff, in Q3 Metrobus instituted a Back-to-Basics refresher initiative with current technical staff to focus on best practices to ensure buses run smoothly for the long term.

After delays from the ongoing global supply chain challenges, in Q3 Metro is taking delivery of new buses that include "infotainment" screens and USB charging ports. Metro currently has 17 out of 95 of these new buses. Additionally, Metro issued a "notice to proceed" to two vendors to manufacture five new electric buses each.

# METROACCESS FLEET RELIABILITY

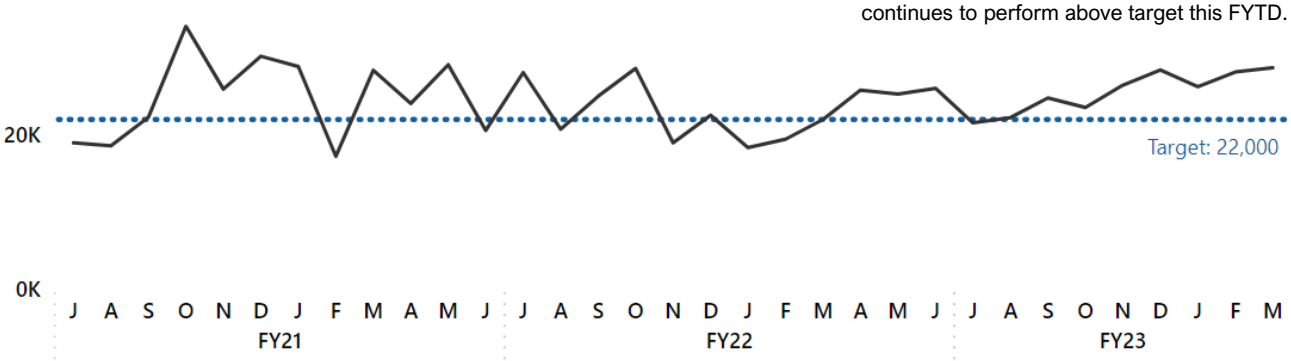
## **25,300** miles between failure, meeting target of at least **22,000**

MetroAccess has sustained high levels of reliability in the first three quarters of FY23 by consistently replacing vans at the end of their useful life. Staff plans to continue to replace vans with sedans, which have shown fewer maintenance-related issues. Additionally, MetroAccess will be adding over 20 ramp-equipped minivans to the fleet by June 2023.

**Measure Details: What and Why**
Minimizing vehicle breakdowns and maintaining a state of good repair for the fleet enables on-time pick-ups for customers and reduces the likelihood of safety incidents. This measure is also part of required reporting to the National Transit Database (NTD). The FY23 target was set to continue performance levels achieved in FY22.

**MetroAccess Fleet Reliability** against **dotted line target**
Y: fleet miles between failure | X: month
*Direction of desired performance:* ***up*** ↑

**Chart takeaway** | Reliability generally exceeded target during the pandemic and continues to perform above target this FYTD.




To sustain strong fleet reliability, MetroAccess replaced 50 vans with 50 new sedans in Q3. Sedans are more reliable both because they are new and because they have fewer parts than vans that could cause failures. Up to 300 ramp-equipped minivans are scheduled to replace 300 aging vans in FY23 and FY24. MetroAccess also conducts quarterly third-party audits to assess the overall condition of the vehicles, which are maintained by the department's contractors.

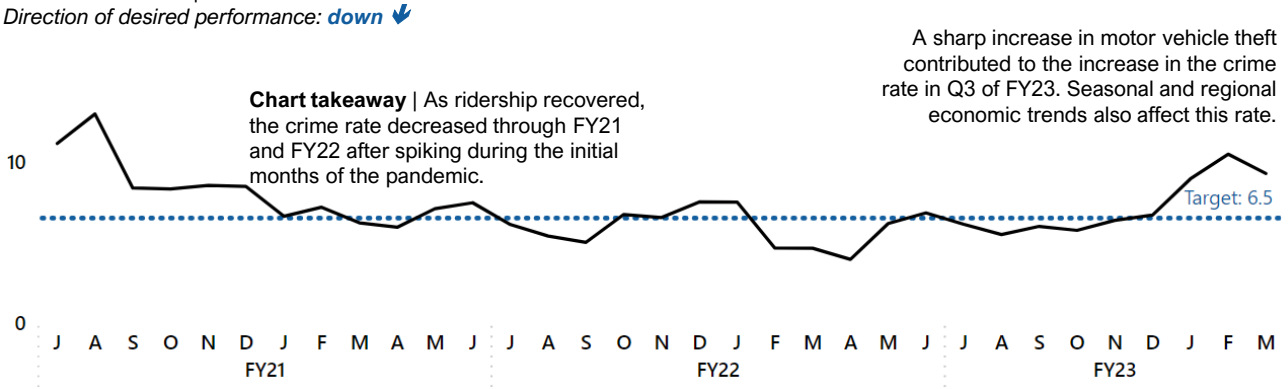
# PART 1 CRIME RATE

## **7.2** Part 1 crimes per million passengers, missing target of no more than **6.5**

There are two main types of Part 1 crimes: crimes against persons and crimes against property. The rate of *crimes against persons* continued to fall, with about 1.1 crimes per million passengers compared to 1.6 the same time last year. The rate of *crimes against property* was up, with 6.1 crimes per million passengers in Q3 compared to 4.3 the same time last year. In particular, Q3 saw a sharp increase in motor vehicle theft.

**Measure Details: What and Why**
This measure evaluates how secure customers and employees are while riding the Metro system. This measure includes incidents that meet a set of criteria determined by the FBI. The FY23 target was set to improve five percent over average performance for FY21-FY22 (6.8 Part 1 crimes per million passengers).

**Part 1 Crime Rate** against **dotted line target**
Y: Part 1 crime rate | X: month
*Direction of desired performance:* ***down***

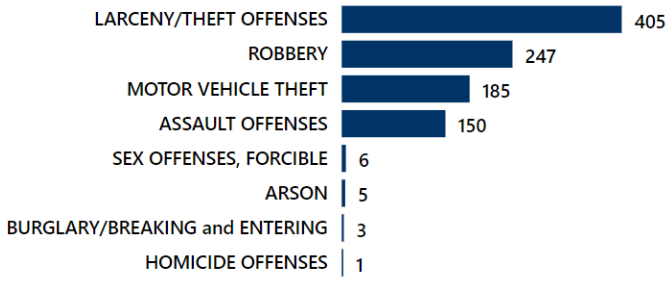



There were a total of 1,002 Part 1 crimes in FY23 through March. The majority—61 percent—occurred in the rail system, 26 percent in Metro parking lots, and 13 percent on buses or at bus stops. By far the most common type of crime was theft/robbery, followed by motor vehicle theft, then aggravated assault (see chart). Parking lot crimes more than tripled in Q3 compared to Q2, with motor vehicle thefts going up fivefold. Arrests and citations are up 116 percent from the same time last year.

In Q3, Metro entered a joint safety partnership with other agencies including DC's Metro Police Department to increase patrols on the system, especially during rush hours. On an average day, an extra 90 officers are in the system to help customers, with 15 Metro stations now staffed.

In Q3, Metro expanded its NARCAN program: All MTPD police officers and crisis intervention specialists now carry the life-saving drug used to help prevent deaths from drug overdose (one officer administered a life-saving dose to someone on the first day they carried NARCAN). Additionally, MTPD's new Crisis Intervention Specialists interacted with over 120 people in Q3. Metro is planning to hire six additional staff for the program in the coming months.

**Number of Part 1 Crimes by type |** Q1-Q3 FY23



# RAIL SYSTEM SAFETY EVENTS

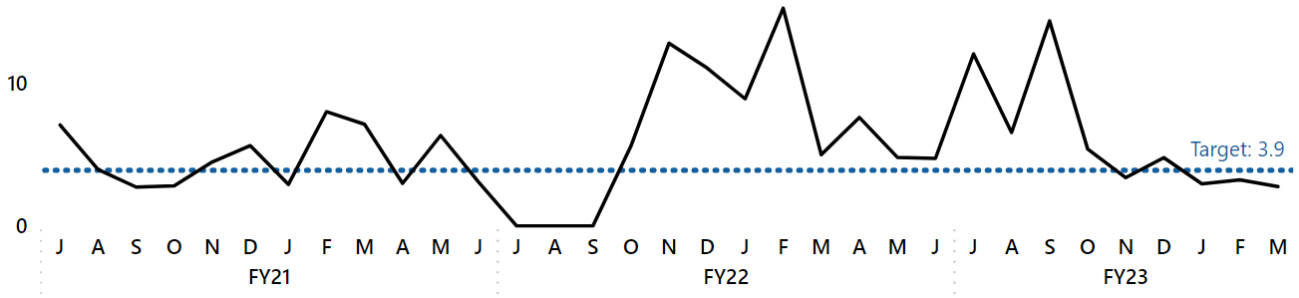
## **5.6** Rail safety events per 10 million revenue miles, missing target of no more than **3.9**

There have been 29 major safety events—those meeting the "Major" threshold for reporting to FTA's National Transit Database—so far in FY23. Six of these incidents occurred in Q3, a significant improvement from the past two quarters.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes incidents that meet the criteria of a National Transit Database (NTD) major safety event, such as collisions that meet an injury, fatality, substantial damage, or evacuation threshold. The FY23 target was set to improve five percent over average performance over the past five years.

**Rail Safety Event Rate** against **dotted line target**
Y: # events per 10m revenue miles | X: month
*Direction of desired performance:* ***down*** ↓

**Chart takeaway** | Rail Safety Event Rate decreased across the fiscal year, reaching the lowest point in March 2023.




Of the 29 events through Q3 of FY23, twelve were smoke/fire incidents, six involved persons struck by trains, five were maintenance vehicle derailments, and one involved a collision between a train and a MTPD vehicle in a yard. There were four gas leaks, and one customer-caused event. Seven of these events resulted in evacuations, three of which were smoke/fire incidents, three involving gas leaks, and one where a customer vandalized a train.

To help customers contemplating suicide, Metro's Suicide Prevention and Awareness Taskforce has been has worked to enhance visibility of the Suicide and Crisis Lifeline number in stations. The nationwide phone number on these signs is available for individuals to speak with trained crisis counselors at any time. In addition, MTPD's Crisis Intervention Specialists work with officers to assist customers in need.

Although the incidents where customers are struck by trains are largely out of Metro's control, Metro takes action to ensure that operators are trained to deal with these situations before they occur. Initial operator training—and now recently refresher training—includes material on what operators should look for and how to handle such situations. Metro's Employee Assistance Program is a resource for operators and other staff when these incidents do occur.

# BUS SAFETY EVENTS

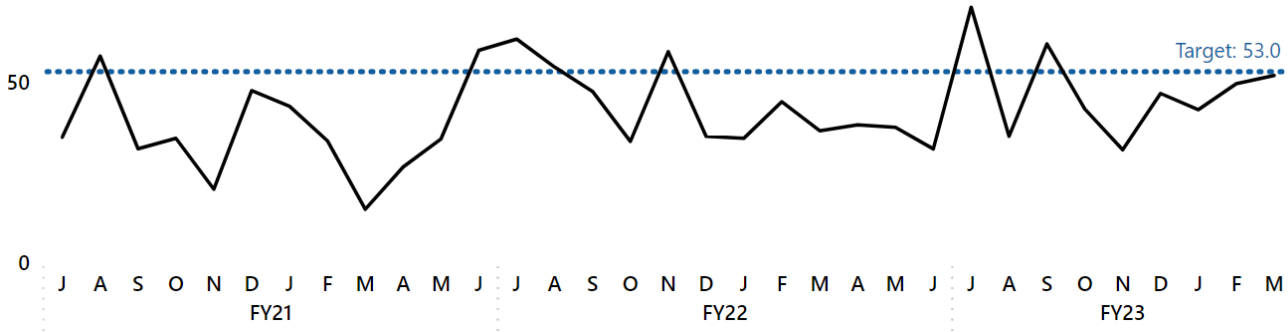
**47.7** Bus safety events per 10 million revenue miles, exceeding target of no more than **53.0**

There were 136 major bus-related safety events among the 28.5 million revenue miles traveled in FY23 through March. There were 128 collisions, four fires, and four incidents that were not collisions but resulted in multiple customer injuries.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes incidents that meet the criteria of a National Transit Database (NTD) major safety event. The FY23 target was set to improve 15 percent over average performance over the past five years.

**Bus Safety Event Rate** against **dotted line target**
Y: # events per 10m revenue miles | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | The Bus Safety Event Rate has remained better than target for the past two and a half years except for a few months where incidents spiked, including July and September of FY23.




Major bus safety events result in injuries that require at least one person to be transported from the scene for medical attention or result in major damage to the bus or another vehicle. There were 128 bus collisions in FY23 through March that met these criteria. Metro's investigations determined that about two-thirds of them were non-preventable.

Reducing collisions is a high priority for Metrobus. In Q3, Metro held five "safety blitzes" in higher-risk locations such as Minnesota Ave and Benning Road where supervisors and safety staff communicated changes in traffic patterns to operators, observed hazards such as illegally parked cars, and shared safe driving practices to adapt to these risks.

Additionally, Metro sends targeted messaging to bus operators twice a month that focus on a particular safe driving technique or standard operating procedure to keep these skills and practices fresh and front of mind.

# METROACCESS SAFETY EVENTS

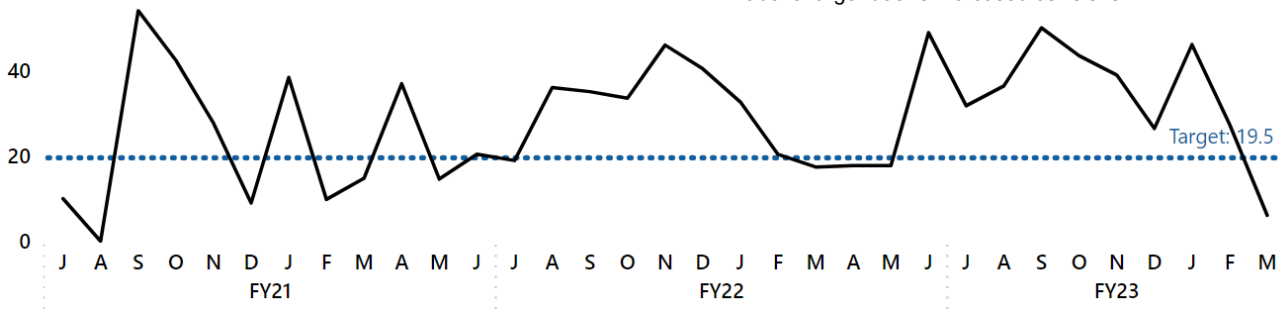
**33.9** MetroAccess safety events per 10 million revenue miles, missing target of no more than **19.5**

There were 47 major safety events for MetroAccess in the first three quarters of FY23, compared to 44 in the first three quarters of FY22. Forty-five of the events were collisions, one was a smoking vehicle that needed to be towed, and one was a passenger assistance incident.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes incidents that meet the criteria of a National Transit Database (NTD) major safety event. The FY23 target was set to improve upon performance levels achieved in FY22.

**MetroAccess Safety Event Rate** against **dotted line target**
Y: # events per 10m revenue miles | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | As traffic levels picked up throughout FY22 and into FY23, the safety event rate was generally above target due to increased collisions.




Although the safety event rate missed target, major safety events are trending downward overall – from 17 safety events in Q2 to 12 in Q3.

MetroAccess launched its *Incident Free in '23* safety campaign: broadcasting daily safety messages over the in-vehicle radio and including them on trip manifest coversheets. Monthly campaign themes for Q3 were winter safety, driving down distractions, and being aware/prepared. Earlier this fiscal year, MetroAccess also conducted its first annual Safety Summit with contractor leadership, safety staff, and operators. During the summit, Metro managers and contractor leadership developed a vision for safety in MetroAccess service and reviewed how to create a safety culture, including leveraging data tools to identify training opportunities, monitoring incident trends, and better allocating road supervisor resources to respond to incidents in a timelier manner.

In addition, MetroAccess implemented a "Ready for Work" checklist last quarter that requires all operators to be interviewed before going into service, reducing the likelihood of a preventable collision from non-alertness.

MetroAccess continues to strengthen a revised Local Safety Committee process with contractors that is more fully aligned with Metro policy to more proactively identify and address risks and increase safety communications to frontline employees.

To address collision-related incidents, MetroAccess continues to update DriveCam units (620 total) and activated in-vehicle behavior recognition and alerting capability focused on distractions. This technology alerts vehicle operators about unsafe or potentially unsafe behaviors at the time of detection and creates an event clip for coaching.

# RAIL SYSTEM CUSTOMER INJURIES

**11.8** Rail customer injuries per 10 million revenue miles, meeting target of no more than **20.6**

There were 61 customer injuries in the rail system through the third quarter of FY23. Fifty-five of these were slips/trips/falls, two-thirds of which occurred on an escalator. The remaining injuries included four attempted suicides and two customer assaults.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes injuries in which customers require immediate medical attention away from the scene. The FY23 target was set to improve 15 percent over average performance over the past five years.

**Customer Injury Rate** against **dotted line target**
Y: # injuries per 10m vehicle revenue miles | X: month
*Direction of desired performance:* ***down***

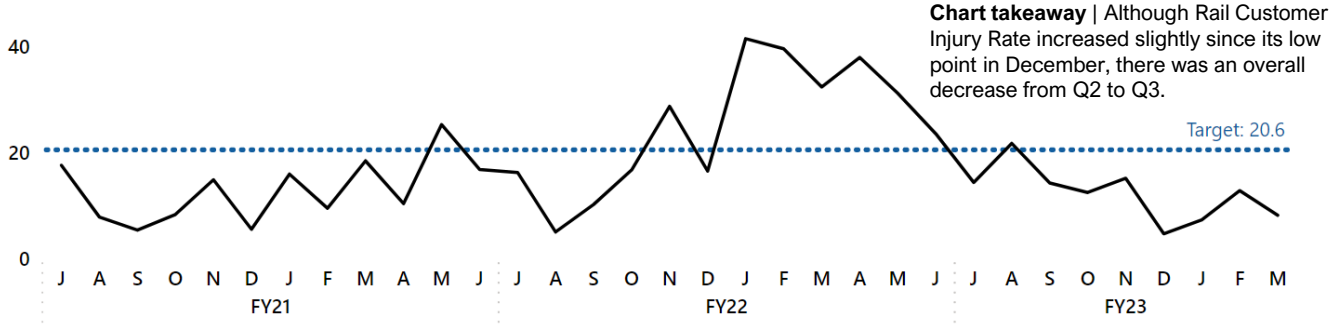



**Chart takeaway** | Although Rail Customer Injury Rate increased slightly since its low point in December, there was an overall decrease from Q2 to Q3.

The rate of rail customer injuries to vehicle revenue miles continues to decrease across the fiscal year. Although the same number of customer injuries occurred in Q3 compared to Q2, rail revenue miles travelled also went up as Metro increased service frequencies on all lines, resulting in a lower rate of injury. Both the customer injury rate and the number of injuries decreased compared to the same period in FY22.

Metro's Elevator/Escalator team, working with the Safety Department, continued its pilot signage campaign this quarter. So far, Metro has installed signs with safety guidelines for customers on the ends of escalators at L'Enfant, Foggy Bottom, and Bethesda stations with installation planned for four more stations. Metro will analyze safety data in future quarters to evaluate the pilot's effectiveness.

# BUS CUSTOMER INJURIES

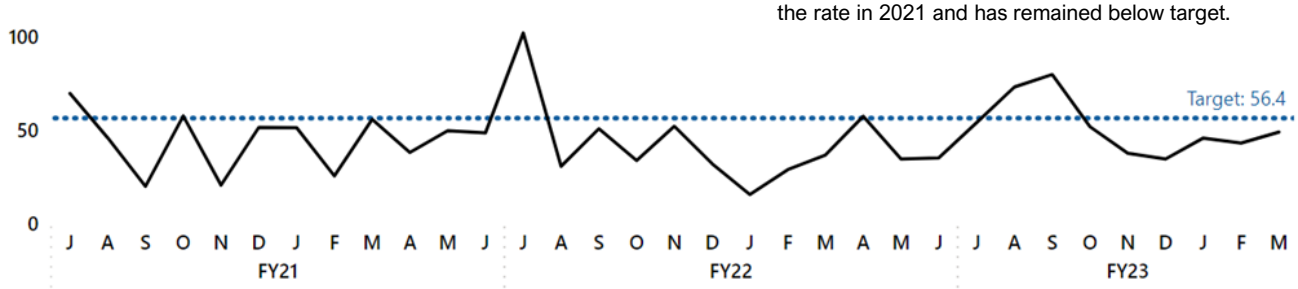
**52.2** Bus customer injuries per 10 million revenue miles, meeting target of no more than **56.4**

There were 149 bus customer injuries in FY23 through March: 80 slip/trip/falls, 59 related to collisions, and 10 other types of injuries. Many of the slip/trip/fall injuries occur due to the motion of the bus or when the bus brakes suddenly to avoid a collision.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes injuries in which customers require immediate medical attention away from the scene. The FY23 target was set to improve 15 percent over average performance over the past five years.

**Bus Customer Injury Rate** against **dotted line target**
Y: # injuries per 10m vehicle revenue miles | X: month
*Direction of desired performance:* ***down*** ↓

**Chart takeaway** | Bus Customer Injury Rate was trending upwards in January through September of 2022. However, starting in October 2022, the customer injury rate declined to be more in line with the rate in 2021 and has remained below target.




To improve bus customer safety, Metro continued to focus on reducing hard braking, a lead cause of bus customer injuries. Supervisors held a "safety blitz" at North Capitol and H Street NW/NE to remind operators of strategies to reduce hard braking.

Additionally, during a standard safety practice of supervisor "ride-alongs", mentors and managers coached operators on maintaining a safe following distance behind other vehicles, another strategy to reduce hard braking.

Another strategy implemented in Q3 was sending reminders to operators that—when the bus announcement system is not working—the operator should announce major stops to help customers maintain awareness and prepare to disembark. While making these announcements, operators also remind customers to hold onto straps and rails as they move through the bus.

**Note:** Metro tracks and reports fatalities in addition to injuries. The fatality metric does not include suicides or homicides. There have not been any Metrobus customer or employee fatalities in FY23. However, there have been two collisions in which other vehicles crashed into Metrobuses that were stopped—and in each of these collisions, one person (in the striking vehicle) was killed.

Metro values the safety of every person in the region it serves, working to prevent all collisions and contribute to a safe driving environment on its roadways.

# METROACCESS CUSTOMER INJURIES

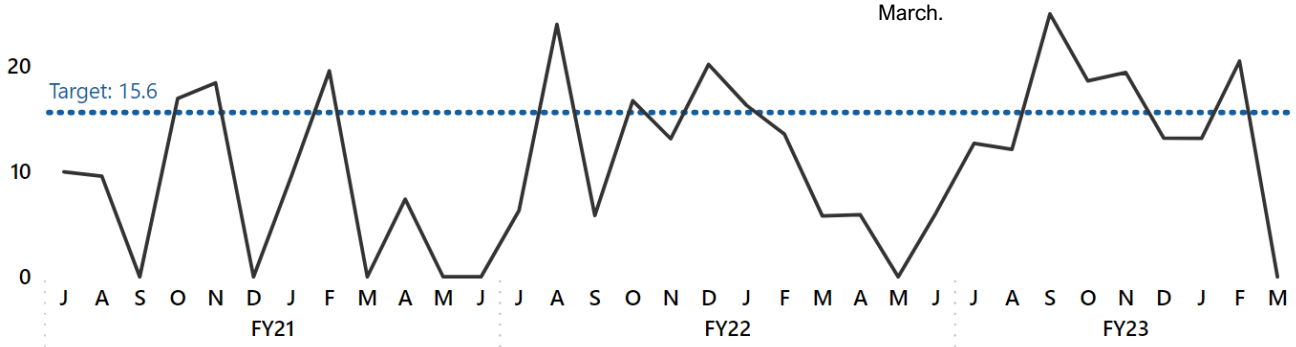
**14.8** MetroAccess customer injuries per 10 million revenue miles, meeting target of no more than **15.6**

Twenty-one MetroAccess customers were injured in the first three quarters of FY23, compared to 19 in the first three quarters of FY22. Fifteen injuries were related to collisions and six were slips/trips/falls. Customer injury rate met target in January and March, with customer injury rates of 13.1 and zero, respectively.

**Measure Details: What and Why**
Safety is a core Metro value. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes injuries in which customers require immediate medical attention away from the scene. The FY23 target was set to improve 15 percent over average performance over the past five years.

**MetroAccess Customer Injury Rate** against **dotted line target**
Y: # injuries per 10m vehicle revenue miles | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | FY23 through Q3 has a slightly higher injury rate than this time period one year prior but fell significantly lower in March.




For assistance-related injuries, MetroAccess is updating a door-to-door service training video with an occupational therapist to include additional guidance on working with different mobility aids and properly assisting customers. The therapist also conducted a train-the-trainer session on assisting customers using sedans. In addition, 100 MetroAccess operators will take MTPD's de-escalation training to lower the number of conflicts involving customers.

To drive down injuries related to wheelchair securement, MetroAccess is creating a securement training video with the same occupational therapist, and implemented a requirement that all operators renew their wheelchair securement certification twice per year, approximately every six months. Because of reduced ridership, operators can sometimes go long periods of time without securing a customer's wheelchair in the vehicle. This can dull their ability to safely secure wheelchairs, a cause of customer injuries. In the first half of FY23, 1,055 out of 1,064 active operators, over 99 percent, have current certifications (the other operators will not be placed in service until re-certification/initial certification is completed).

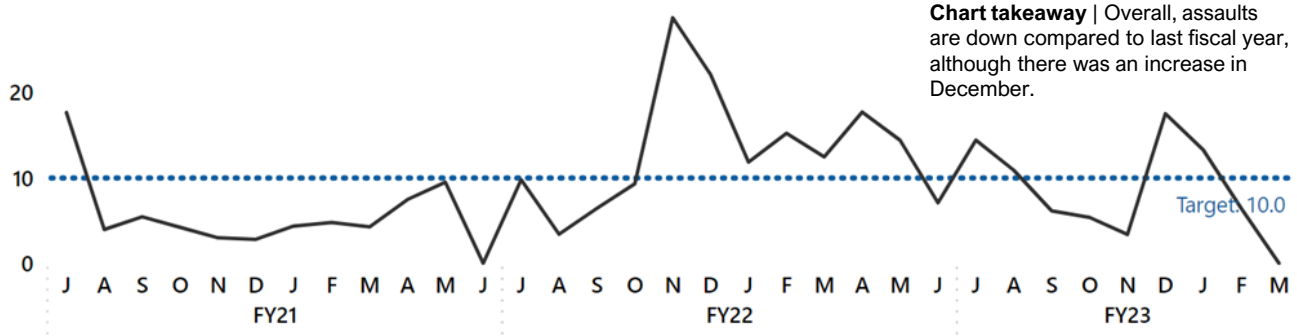
# RAIL EMPLOYEE/CUSTOMER ASSAULTS

## **8.3** Rail customer and employee assaults per 10 million vehicle revenue miles, meeting target of no more than **10**

Nine rail employee assaults and 34 customer assaults occurred through Q3 of FY23, compared to 14 employee assaults and 35 customer assaults during the same time period in FY22. The assault rate for rail has decreased in recent months, reaching zero during the month of March.

**Measure Details: What and Why**
This is a measure of customer and employee security while on the Metro system. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes incidents in which customers and employees are unlawfully physically assaulted and require immediate medical attention away from the scene. The FY23 target was set to improve over FY22.

**Rail NTD-Reportable Assault Rate** against **dotted line target**
Y: # assaults per 10m vehicle revenue miles | X: month
*Direction of desired performance:* ***down***




Although Metrorail assaults are trending lower than they were at this time last year, multiple incidents involving gun violence have occurred this year, impacting both customers and employees. As part of a new partnership with DC's Metropolitan Police Department and other regional agencies, additional officers now join MTPD officers on patrol at stations with higher crime rates, reducing response times and increasing police visibility. As of March 2023, officers are on duty in 15 stations throughout the day. Metro's new Crisis Intervention Specialists also interact with customers in need and help de-escalate situations.

Metro continues to advise Rail Station Managers against engaging in potentially unsafe situations, and both Station Managers and Rail Supervisors have been participating in de-escalation training and learning dispute resolution strategies.

Counseling services are available to all staff to deal with the stress and trauma of assaults.

# BUS EMPLOYEE/CUSTOMER ASSAULTS

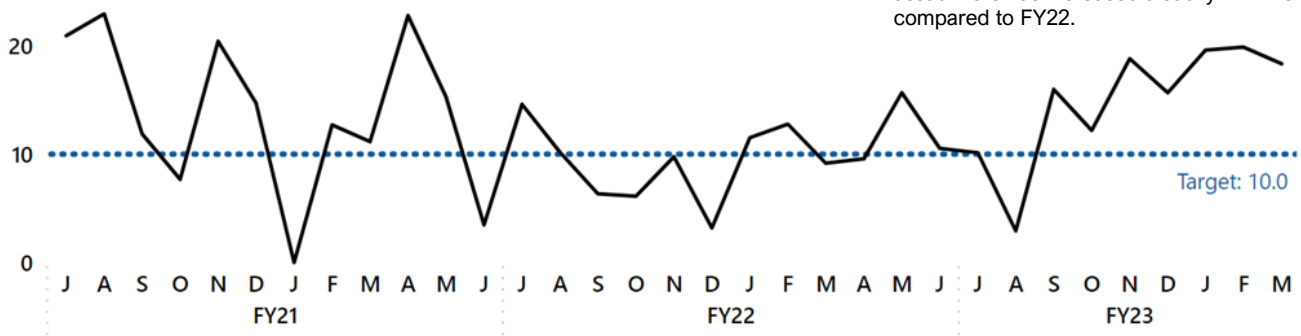
**14.7** Bus customer and employee assaults per 10 million vehicle revenue miles, missing target of no more than **10**

There were 38 bus customer assaults and four bus employee assaults in FY23 through March, compared to 20 customer and five employee assaults in the same period of FY22.

**Measure Details: What and Why**
This is a measure of customer and employee security while on the Metro system. This measure is part of Metro's Agency Safety Plan and aligns with the measures in the National Public Transportation Safety Plan published by the Federal Transit Administration. It includes incidents in which customers and employees are unlawfully physically assaulted and require immediate medical attention away from the scene. The FY23 target was set to improve over FY22.

**Bus NTD Reportable Assault Rate** against **dotted line target**
Y: # assaults per 10m vehicle revenue miles | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | Bus employee/customer assault rate has increased steadily in FY23 compared to FY22.




In response to an increase in bus operator assaults, Metrobus has partnered with the Metro Transit Police Department on several efforts. MTPD officers continue to have a stronger presence at locations with higher crime, and also ride bus routes with high ridership such as the 70 and the X2. While in the field, MTPD officers coach bus operators on security practices to reduce conflict.

Metrobus supervisors continue to coach bus operators not to raise disputes with customers who are in violation of Metro policies in order to not escalate situations. Instead, bus operators call a manager or allow MTPD to intervene. In addition, bus operators no longer wake up customers asleep on the bus at the end of a route, but rather allow MTPD officers to do so.

# RAIL EMPLOYEE INJURIES

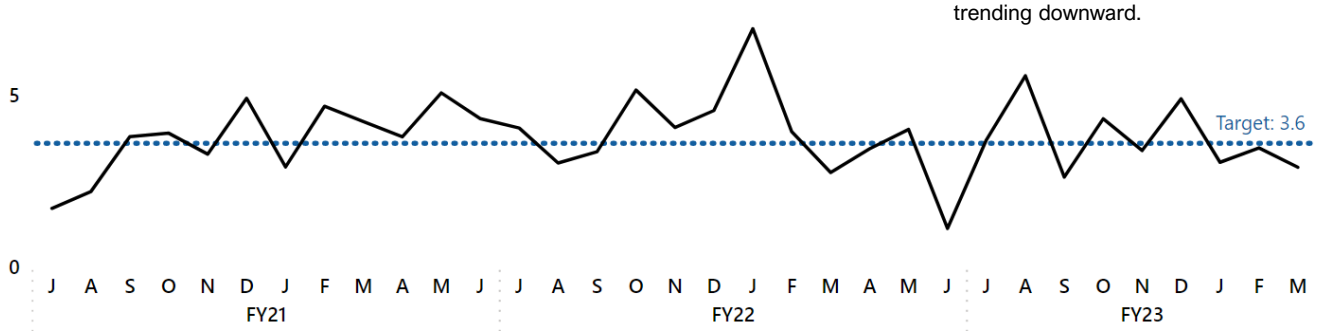
## **3.7** Rail employee injuries per 200,000 work hours, missing target of no more than **3.6**

Rail system employees reported 157 injuries through March of FY23. Slightly over half of these injuries involved rail operators or station managers, while the rest involved maintenance employees.

**Measure Details: What and Why**
Measuring employee injuries is important in helping maintain a safe environment for Metro's employees at work. This measure includes employee injuries that meet the Occupational Safety and Health Administration (OSHA) reporting criteria. The FY23 target was set to maintain average performance levels achieved over the past five years.

**Rail System Employee Injury Rate** against **dotted line target**
Y: # of injuries per 200,000 work hours | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | Rail employee injury rate is lower than it was during the same period last year. Although it is currently missing target, the rate is trending downward.




Over 40 percent of injury categories reported by operations staff were stress cases. The second most common category was slips/trips/falls. For maintenance staff, the most frequent injury type was slips/trips/falls, followed by "struck by/against", and "lifting/lowering" injuries.

There were 40 stress cases during the first three quarters of FY23, an increase from the 33 that occurred during this same time period of FY22. Assault cases, however, have fallen by over 50 percent from FY22. There were six this fiscal year to date, compared to 13 last year.

Reducing employee stress and assault injuries is a top concern for Metro. One cause of stress employee injuries is the aftermath of incidents involving persons struck by a train. Metro's new Crisis Intervention Specialists work to provide immediate attention to operators and employees who are involved in or witness such incidents, as does Metro's Employee Assistance Program. Rail Operations also continues training staff on de-escalation and dispute resolution.

# BUS EMPLOYEE INJURIES

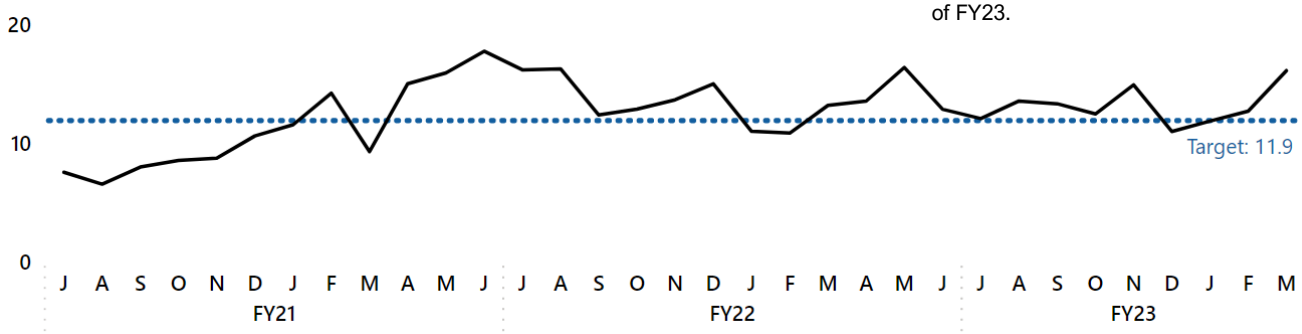
**12.7** Bus employee injuries per 200,000 work hours, at risk of missing target of no more than **11.9**

There were 371 bus employee injury reports in FY23 through March. This is a four percent decrease from the same period last fiscal year. Collision-related injury reports (111) were the most common, followed by stress injury reports (109) and slip/trip/falls (51).

**Measure Details: What and Why**
Measuring employee injuries is important in helping maintain a safe environment for Metro's employees at work. This measure includes employee injuries that meet the Occupational Safety and Health Administration (OSHA) reporting criteria. The FY23 target was set to maintain average performance levels achieved over the past five years.

**Bus Employee Injury Rate** against **dotted line target**
Y: # of injuries per 200,000 work hours | X: month
*Direction of desired performance:* ***down***

**Chart takeaway** | The bus employee injury rate steadily increased over FY21, then stabilized in FY22 through the first half of FY23, and then increased in Q3 of FY23.




At Metro, all employees are responsible for safety and have the right and the responsibility to make recommendations to improve. In Q3, Metrobus launched a safety campaign to shift employee mindset: If we reduce the incidence of all risky behaviors, the risk of major safety events and injuries also declines.

This initiative is in addition to Metro's standard practice of holding bimonthly Local Safety Committee meetings where employees raise issues and discuss possible solutions. If the risk or hazard is likely to exist in other areas, then the local committees raise it to the bus-wide Departmental Safety Committee so that all employees can be aware of the risk and implement mitigation strategies.

Front-line managers have also continued to increase ride-alongs with bus operators to identify instances where an operator deviates from standard safety procedures. A manager will then coach the operator on the spot to improve their safe driving practices.

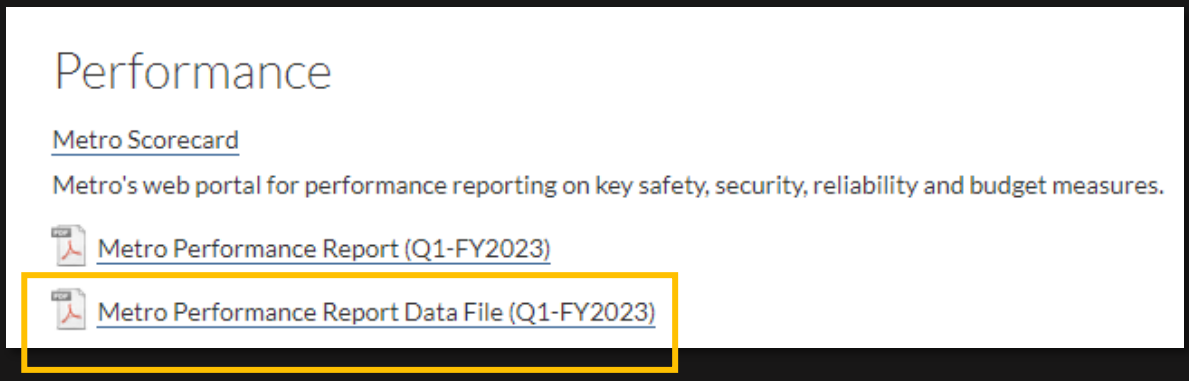
# APPENDIX:

## PERFORMANCE MEASURE DEFINITIONS

Included in this PDF

## PERFORMANCE MEASURE DATA TABLES

Included as a new downloadable spreadsheet file under the “Performance” section of the Public Records page at wmata.com



# PERFORMANCE MEASURE DEFINITIONS

## RIDERSHIP

**How is it measured?**

Metrorail passenger trips + Metrobus passenger boardings + MetroAccess passenger trips

Ridership is a measure of total service consumed and an indicator of value to the region. Drivers of this indicator include service quality and accessibility.

**What does this mean and why is it key to our strategy?**

Passenger trips are defined as follows:

- **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 but does not include shuttles operated by a contracted vendor.
- **MetroAccess** reports passenger trips. A passenger traveling from an origin to a destination is counted as one passenger trip. Passengers include customers, personal care attendants (PCAs), and companions in accordance with ADA regulations.

*Metro does not include bus shuttle passenger trips in its budget or published ridership forecasts.

## CUSTOMER SATISFACTION

**How is it measured?**

Survey respondent rating = Number of survey respondents (active riders) who marked their last Metrorail/Metrobus/MetroAccess trip as “very satisfactory” OR the second highest category in a five-point scale ÷ Total number of respondents

**What does this mean and why is it key to our strategy?**

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.

Customer satisfaction is defined as the percent of customer survey respondents who rated their *last trip within a 30-day period* on Metrobus, Metrorail, or MetroAccess as a “5” or “4” in the customer satisfaction survey, with “5” denoting “very satisfied” and “1” denoting “very unsatisfied”. Metro distributes this survey through address-based sampling on a biweekly basis, and respondents must meet specific criteria to participate. Results are summarized quarterly.

## METRORAIL SERVICE MISSED

**How is it measured?**

Percentage of service missed = Number of revenue service stops missed ÷ Number of scheduled revenue stops

**What does this mean and why is it key to our strategy?**

Missed Service monitors Metro's "guarantee of service"—whether Metro is providing all the service that was scheduled and committed to. It helps to offer more clarity on the relative magnitude of various operational issues on daily rail operation, for example, operator or railcar shortage, and incident response strategy. It is an important indicator of transit service quality and productivity. Those missed stops can have a negative impact on the perceived reliability of rail service and can result in longer customer wait times, missed transfers, etc. which lead to customer inconvenience and dissatisfaction.

## METROBUS SERVICE MISSED

**How is it measured?**

Percentage of service missed = Number of trips missed ÷ Number of scheduled trips

**What does this mean and why is it key to our strategy?**

Metrobus service missed tells us whether Metro is meeting its level of service that we have committed to our customers through the budget and scheduling process. It is also a key measure of reliability; when trips are missed, customers experience much longer wait times than expected and it reduces the overall confidence in the system. Monitoring whether service was delivered helps Metro understand where there are issues with staffing, planning and scheduling, bus availability and reliability, and service interruptions.

## METROBUS PREDICTION AVAILABILITY

**How is it measured?**

Percentage prediction availability = Number of trips with real time prediction made available in GTFS-RT ÷ Number of scheduled trips

**What does this mean and why is it key to our strategy?**

Prediction availability communicates how likely it is that Metro is using real time location information to generate the predicted arrival times of buses that customers see on BusETA or other third-party trip planning applications. When real time location information is not available, applications will either provide no prediction information for the bus or substitute the scheduled arrival time. Both of these alternatives are far less reliable than real time data and negatively impact the customer experience through extended wait times and lack of clarity on when their next bus will arrive.

Predictions can be unavailable for two main reasons:

1. Missed Trips: No real time location information was provided because service was cut for the scheduled trip

2. Bus Communication Failure: No real time location information was provided because of a technical issue with the bus. In these cases, service is provided, but customers do not have real time location information to track it.

## METROBUS PREDICTION ACCURACY

**How is it measured?**

Percentage prediction accuracy = Number of accurate predictions ÷ Number of predictions

**What does this mean and why is it key to our strategy?**

Bus Prediction Accuracy measures the quality of Metro's real time arrival prediction data that customers use to plan their trips through BusETA and other third-party trip planning applications. The predictions are compared to the actual time the bus arrived at the stop according to Metro internal records.

**Which predictions are evaluated?**

To make the measure as customer focused as possible, only the most meaningful predictions are evaluated. Buses begin making predictions well before they begin service on a particular trip and can make predictions for stops hours before they are scheduled to arrive. Customers typically only use prediction information to plan in the very near term and are mostly only looking for the next arrival. To account for this, predictions made well in advance are thrown out, and only predictions made within 30 minutes of the bus's arrival are evaluated.

**What is considered accurate?**

Bus Prediction Accuracy is measured by comparing the predicted time of arrival to the actual time of arrival. A perfect prediction is when the predicted arrival time and the actual arrival time match exactly, but it is rare for a predicted and actual arrival to match to the second. The goal is not to be perfect, but to provide customers with enough good information so they can effectively plan their trips and are not waiting long periods of time for the bus. Therefore, the measure creates a range of allowable error within which a prediction is considered accurate, and if the prediction falls outside that range, it is considered inaccurate.

The accuracy range follows two key principles:

1. **As the bus gets closer to the stop, predictions should become more accurate.** Errors have greater customer impact when the bus is closer to the stop. Customers are more likely to use these predictions and a two minute difference has a greater impact if the bus is five minutes away than when the bus is 25 minutes away

2. **A bus arriving before its predicted arrival (Early) is worse than a bus arriving after its predicted arrival (Late).** If customers follow predictions exactly, they will miss their bus if the bus was earlier than its prediction.

Using these principles, the following time ranges are used to determine whether a prediction is accurate:

| Time before arrival | Lower Bound (Early) | Upper Bound (Late) |
|---|---|---|
| 0-3 mins | -1 min | 1 min |

| | | |
|---|---|---|
| **3-6 mins** | **-1.5 mins** | **2 mins** |
| **6-12 mins** | **-2.5 mins** | **3.5 mins** |
| **12-30 mins** | **-4 mins** | **6 mins** |

**Prediction Accuracy is the number of predictions that fall within these ranges out of all predictions made within 30 minutes of a bus's arrival.**

## METRORAIL CUSTOMER ON-TIME PERFORMANCE (MYTRIPTIME)

**How is it measured?**

Percentage of customer journeys completed on time = Number of journeys completed on time ÷ Total number of journeys

**What does this mean and why is it key to our strategy?**

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

**How is it measured?**

Percentage of bus service delivered on-time = Number of timepoints delivered on time based on a window of 2 minutes early and 7 minutes late ÷ Total number of timepoints delivered

"Timepoints" are major stops on a bus route that are used to create bus schedules. Note that this metric only includes service delivered and does not include missed trips.

**What does this mean and why is it key to our strategy?**

Bus on-time performance (OTP) communicates the reliability of bus service, which is a key driver of customer satisfaction and ridership.

Factors that can affect OTP include: traffic congestion, detours, inclement weather, scheduling, vehicle reliability, operational behavior, or delays caused by the public (crime, protests, medical emergencies, etc.)

## METROACCESS ON-TIME PICKUP PERFORMANCE

**How is it measured?**

Adherence to Schedule = Number of vehicle arrivals at the pick-up location within the 30-minute on-time widow ÷ Total stops

**What does this mean and why is it key to our strategy?**

This indicator illustrates how closely MetroAccess adheres to customer pick-up windows on a system-wide basis. MetroAccess customers schedule trips at least one day in advance, and are given a 30-minute pick-up window. MetroAccess on-time pick-up performance is essential to delivering quality service to the customer.

## ELEVATOR / ESCALATOR AVAILABILITY

**How is it measured?**

In-service percentage = Hours in service ÷ Operating hours

Hours in service = Operating hours – Hours out of service

Operating hours = Operating hours per unit x number of units

**What does this mean and why is it key to our strategy?**

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.

Availability is the percentage of time that Metrorail escalators or elevators in stations and parking garages are in service during operating hours.

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.

## METRORAIL CROWDING

**How is it measured?**

Percentage of passenger time spent on vehicles exceeding crowding guidelines = Number of crowded passenger minutes ÷ Total number of passenger minutes

**What does this mean and why is it key to our strategy?**

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 of 100 passengers per car. In FY23, WMATA returned to the pre-pandemic definition of crowding.

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.

## METROBUS CROWDING

**How is it measured?**

Percentage of passenger time spent on vehicles exceeding crowding guidelines = Number of crowded passenger minutes ÷ Total number of passenger minutes

**What does this mean and why is it key to our strategy?**

Crowding is a key driver of customer satisfaction with Metrobus service. Crowding measures the percentage of passenger time spent on vehicles that exceed crowding guidelines per WMATA service standards of 120% of seated capacity during peak for BRT, framework, and coverage routes, 100% off peak and at all times on commuter routes. In FY23, WMATA returned to the pre-pandemic definition of crowding.

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.

## METRORAIL FLEET MEAN DISTANCE BETWEEN FAILURE

**How is it measured?**

Mean Distance Between Failure (MDBF) = Total railcar revenue miles ÷ Total number of failures occurring during revenue service

**What does this mean and why is it key to our strategy?**

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 Failure communicates 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.

## METROBUS FLEET MEAN DISTANCE BETWEEN FAILURE

**How is it measured?**

Mean Distance Between Failures (MDBF) = Total bus mileage ÷ Total number of bus mechanical failures occurring during revenue service

In other words, the average number of miles a bus drives before it experiences a mechanical failure that interrupts revenue service.

**What does this mean and why is it key to our strategy?**

Mean Distance Between Failures is used to monitor trends in vehicle breakdowns that cause buses to go out of service in order to plan corrective actions. Factors that influence bus fleet reliability include vehicle age, quality of maintenance program, original vehicle quality, and road conditions such as inclement weather and road construction.

## METROACCESS FLEET MEAN DISTANCE BETWEEN FAILURE

How is it measured?

Mean Distance Between Failures (MDBF) = Total MetroAccess vehicle odometer miles ÷ Total number of mechanical failures occurring during revenue service

**What does this mean and why is it key to our strategy?**

The number of total miles traveled before a mechanical breakdown requiring the vehicle 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 or sedans to go out of service and to plan corrective actions. Factors that influence MetroAccess fleet reliability include vehicle age, quality of maintenance program, original vehicle quality, and road conditions affected by inclement weather and road construction.

## PART 1 CRIME RATE

**How is it measured?**

Part I Crime Rate = Number of Part 1 Crimes ÷ (Number of passengers ÷ 1,000,000)

In other words, the number of crimes per million passenger trips

**What does this mean and why is it key to our strategy?**

The FBI's Uniform Crime Reporting program classifies the following as Part 1 Crimes: Criminal Homicide, Forcible Rape, Robbery, Aggravated Assault, Burglary, Larceny, Motor Vehicle Theft, and Arson. To calculate Metro's Part 1 Crime Rate, MTPD looks at these crimes committed in the following areas: 1) on buses and bus stops, 2) on trains and in rail stations, 3) at Metro-owned parking lots, 4) at other Metro Facilities such as rail yards, bus divisions, headquarters, and MetroAccess vehicles, and 5) in a non-WMATA location but involving WMATA or MTPD property.

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 influence whether customers feel safe in the system.

## SAFETY EVENT RATE

**How is it measured?**

Safety Event Rate = Number of safety events that meet "major event" National Transit Database (NTD) reporting criteria ÷ (Total vehicle revenue miles ÷ 10 million)

In other words, the number of reportable safety events per ten million miles driven while vehicles are in revenue service

**What does this mean and why is it key to our strategy?**

Safety events that are included in this measure are: collisions, fires, derailments, hazardous material spills, acts of God, and a few other uncommon safety occurrences.

Customer and employee safety is the highest priority for Metro and a key measure of quality service. Customers expect a safe and reliable ride each day. The safety event rate is an indicator of how well the service is meeting this safety objective.

## CUSTOMER INJURY RATE

**How is it measured?**

Customer injury rate = Number of customer injuries reported to the National Transit Database (NTD) ÷ (Total vehicle revenue miles ÷ 10 million)

In other words, the number of customer injuries per ten million miles driven while vehicles are in revenue service

**What does this mean and why is it key to our strategy?**

The customer injury rate is based on National Transit Database (NTD) Reporting criteria. This measure includes customers injured during Metro operations when the injury 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.

## CUSTOMER / EMPLOYEE FATALITY RATE

**How is it measured?**

Fatality Rate = Number of fatalities reported to the National Transit Database (NTD) ÷ (Total vehicle revenue miles ÷ 10 million)

In other words, the number of fatalities per ten million miles driven while vehicles are in revenue service

**What does this mean and why is it key to our strategy?**

The Federal Transit Agency's Public Transportation Agency Safety Plan identified the fatality rate as a key safety performance measure. Reducing the number of fatalities is a top priority for all transit agencies. This measure includes customer and employee fatalities due to Metro operations and excludes those from suicide, homicide, trespassers, illnesses, drug overdoses, or other natural causes. It also includes all fatalities that occur in a collision involving a Metro vehicle, including those in other vehicles who are not Metro customers or employees.

## NTD-REPORTABLE ASSAULT RATE

**How is it measured?**

NTD-Reportable Assault Rate = Number of employee and customer assaults reported to the National Transit Database (NTD) ÷ (Total vehicle revenue miles ÷ 10 million)

In other words, the number of reportable assaults per ten million miles driven while vehicles are in revenue service

**What does this mean and why is it key to our strategy?**

The Federal Transit Administration criteria for reporting assaults is any unlawful physical assault upon an employee or customer of Metro while on Metro property that results in immediate medical attention away from the scene. These are different criteria than those used by OSHA in the employee injury rate.

Customer and employee safety is the highest priority for Metro and a key measure of quality service. Customers expect a safe and reliable ride each day. The assault rate is an indicator of how well the service is meeting this safety objective.

## EMPLOYEE INJURY RATE

**How is it measured?**

Employee injury rate = Number of employee injuries reported to the Department of Labor ÷ (Total work hours ÷ 200,000)

200,000 hours is equivalent to 100 employees working full-time for one year. In other words: the number of employees injured per 100 employees

**What does this mean and why is it key to our strategy?**

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.