



# Cleaning & Repair Standards

September 26, 2024



# Table of Contents

<b>About this Report .....</b>	<b>1</b>
Overview .....	1
Public Feedback.....	2
Revised Standards and Preliminary Metrics.....	7
Cleaning .....	7
Vandalism & Graffiti.....	9
Repairs.....	12
Strategies for High-Maintenance Stations .....	12
Expenditures.....	15
Workforce Strategies.....	16
Code of Conduct & Transit Rider Investment Program.....	18
Modernizing Data & Business Applications .....	18
<b>Appendix A: Cleaning and Repair Standards &amp; Preliminary Metrics .....</b>	<b>19</b>
Routine Cleaning .....	19
Deep Cleaning .....	20
Inspections.....	21
Removal of Reported Graffiti and Vandalism.....	22
Repair of Broken Glass .....	23
Repair of Heat and Light .....	24
Repair of Damages Due to Car Crashes.....	24
Repair of Elevator Outages.....	25

## About this Report

The report on Cleaning & Repair Standards is submitted annually to the Minnesota Legislature to satisfy the requirements of [Minnesota Statutes, Section 473.412](#), which requires the Metropolitan Council to adopt standards on cleanliness and repair of transit vehicles and stations and submit a report on October 1 each year on transit cleanliness and the ridership experience to the chairs and ranking minority members of the legislative committees with jurisdiction over transit policy and finance.

## Overview

**Legislative Requirement:** The standards must address cleaning requirements for transit stations and vehicles operated by the council; a strategy for discovering and removing vandalism, graffiti, or other defacement to transit stations or vehicles operated by the council; a proposal for the timely repair of damage to transit stations and transit vehicle fixtures, structures, or other property used for the purpose of supporting public transit; any other cleanliness standards necessary to provide a quality ridership experience for all transit users.

**Legislative Requirement:** The report under paragraph (a) must provide information on the council's cleanliness standards required under subdivision 2, including whether the council adopted new cleanliness standards or revisions to current cleanliness standards.

On September 27, 2023, the Metropolitan Council authorized Metro Transit staff to develop cleaning and repair standards for stations and vehicles as required by Minnesota Statutes section 473.412, including procedures for cleaning at defined minimum intervals, procedures for inspections at defined minimum intervals, methods for timely removal of graffiti and vandalism, methods for timely repair of damages most impactful to the customer experience, and methods to measure and report on cleaning and repair activities.

Consistent with Minnesota Statutes, Section 473.412, the Council submitted a [Cleaning and Repair Standards Report](#) in September 2023, which included initial standards for cleaning and repairs focused on improving the customer experience and other reporting requirements. This year's report reflects amendments to Section 473.412 enacted in May 2024.

The Council also submitted a [Transit Safety and Rider Experience Report](#) in February 2024, consistent with [Minnesota Statutes, Section 473.4077](#). This report is required on February 15 of each year and describes the Council's overall efforts to increase transit safety and improve the rider experience.

The current Cleaning & Repair Standards are attached in Appendix A and address:

1. Cleaning
2. Inspections
3. Removal of graffiti and vandalism
4. Repair of damages most impactful to the customer experience, focused on the following priorities:
  - broken glass
  - heat & light
  - damages due to car crashes
  - elevators
5. Methods to measure and report on cleaning and repair activities

## Public Feedback

**Legislative Requirement:** The Metropolitan Council must provide information on the council's website on how the council solicits public feedback on cleanliness and rider experience at transit stations and on transit vehicles. The council must post conspicuous notice of the public feedback options at each light rail transit station and bus rapid transit station operated by the council.

**Legislative Requirement:** A report prepared under this subdivision must include information gathered from the required public feedback on cleanliness and rider experience required in subdivision 2, paragraph (b).

## Reported Issues

Consistent with Minnesota Statutes, Section 473.412, as of February 1, 2024, Metro Transit posted new signage at each light rail, bus rapid transit station and transit center (nearly 250 locations), with details on how the public can provide feedback on situations that require cleaning or repair. An example of the signage is shown in Figure 1. Both the QR code on the sign and the Metro Transit website link to a webpage, [metrotransit.org/contact-us](https://metrotransit.org/contact-us), which directs customers to submit feedback via phone, chat, text, email or using an online form. Metro Transit has posted the same information on interior cards in all buses and light rail vehicles.



Figure 1: Report Problems Sign

In early 2024, Metro Transit implemented a streamlined process for routing and responding to reported facilities issues. Prior to February 2024, reported facilities issues received via employees and the public were tracked through separate processes. Beginning in February 2024, reported facilities issues received via phone, chat, text, email or online form from both the public and employees are tracked through a consolidated process (a tracking method called Special Situation Report or “SSR”), resulting in reduced duplication of reported issues and quicker dissemination of issues to responsible departments.

A variety of personnel report issues every day, including bus operators, train operators, street supervisors, rail supervisors, TRIP Agents, and supplemental security officers. Staff participating in monthly Great Day in Transit events report facility repair needs, along with connecting with riders, assisting with fare payment, and greeting frontline staff. [Adopt-a-Stop](#) volunteers also regularly report special maintenance needs and vandalism or suspicious activity; the number of adopted stops has grown to 485 transit stops and stations as of August 2024.

From January to June 2024, Metro Transit maintenance divisions created work orders resolving issues reported by either the public or employees for over 1,400 public facilities issues and over 900 vehicle issues. (This only includes reported issues, not all issues that are regularly addressed through routine cleaning and repair activities.) See Table 1 and Table 2. Litter/cleaning and broken glass were the most commonly reported public facilities issues; public facilities include BRT stations, rail stations, bus shelters, park & rides and transit centers. Biohazards are the most commonly reported vehicle issues for buses and light rail vehicles.

Because the processes for customers to report issues and for Metro Transit to track and resolve issues has been improved, fewer duplicate issues are documented. As a result the total volume of reported facilities issues that are tracked has not substantially changed during the first half of 2024, compared with the same period in 2023.

Table 1: Number of Reported Public Facilities Issue Work Orders Resulting from an SSR (January-June 2024)

Type of Issue	Q1 2024	Q2 2024	Total
Litter/Cleaning	255	230	485
Broken Glass	137	211	348
Biohazards	105	169	274
Graffiti/Vandalism	55	63	118
Heat/Light Repair	59	22	81
Other Repairs	56	94	150
<b>Total</b>	<b>667</b>	<b>789</b>	<b>1,456</b>

**Table 2: Number of Reported Vehicle Issue Work Orders Resulting from an SSR (January-June 2024)**

Asset Type	Type of Issue	Q1 2024	Q2 2024	Total
Bus	Graffiti/Vandalism	37	45	82
Bus	Biohazards	175	145	320
Light Rail Vehicle	Graffiti/Vandalism	88	25	113
Light Rail Vehicle	Biohazards	243	161	404
<b>Total</b>		<b>543</b>	<b>376</b>	<b>919</b>

## Public Engagement Comments

In addition to reported issues that are disseminated to maintenance divisions to resolve, Metro Transit has also gathered public feedback on cleaning and repairs through other engagement methods, including:

- Over 7,500 comments received through Metro Transit Forward events and an online survey gathered Fall 2023 to Spring 2024
- Comments received through a survey of over 1700 light rail riders in Spring 2024
- Over 250 customer complaints/suggestions received January-June 2024

Through these engagement methods, people tell us that the cleanliness and repair of transit vehicles and stations is a big concern, one that is closely tied to safety concerns, and that they want to see cleanliness improve on transit vehicles and at waiting facilities. Frequent concerns mentioned are litter and trash scattered around, broken glass, broken heat or lights, broken seats, and biohazards. Smoking and drug use are frequently mentioned. Urine, due to its lingering odor, is a major issue for riders. Trash and liquids on the floors and seats of vehicles is a common complaint. Unclean conditions and disrepair, especially if it seems like it's been left unaddressed, bother people. Elevators and enclosed waiting areas are reported as particular problems areas. People notice and appreciate improvements in cleanliness and repair and the staff who do the work.

## Survey Questions

Metro Transit conducted surveys of nearly 1,800 bus and rail riders in Fall 2023 and over 1,700 light rail riders in Spring 2024. Both surveys asked whether people find stops/stations and vehicles clean and comfortable, and both surveys found that most riders do not agree that stops/stations or buses/trains are clean and comfortable. See Figure 2 and Figure 4.

Surveys also show that cleanliness is an important priority for transit riders. When asked which safety initiatives would make riders feel safer, four out of five bus and rail riders surveyed in Fall 2023 said that cleaner stops or stations would improve their sense of safety. See Figure 3. When asked which areas of service are most important, light rail users surveyed in Spring 2024 selected comfort (comfortable journey, cleanliness) fourth most often, after security, availability and reliability. See Figure 5.

Metro Transit riders also answer survey questions on cleanliness while riding transit routes via [Transit App](#), a mobile app that helps users find nearby transit stops and routes, plan transit trips, and navigate their transit trips with real-time tracking. Once a user is on a trip and clicks Go!, the app has a feature called Rate-My-Ride that asks the user quick, simple questions about their current transit trip. During a seven-week pilot period in spring 2024, the question "How clean is the inside of this vehicle?" was answered over 11,000 times, and 6% of respondents answered "it's dirty," with higher rates for BRT and LRT routes. During the same period, the question "How's this stop" was answered over 6,700 times by people on bus or BRT routes, and 10% of respondents said that their stop was "not great." See Figure 6 & 7.

In summary, survey responses show that cleanliness is an important aspect of service that makes most people feel safer riding our system. When survey respondents are asked about their overall impressions of cleanliness at stops/stations and on vehicles, most do not find them clean and comfortable. However, when answering while on their actual trips (via Transit App), most respondents found stations/stops/vehicles "okay" or "not bad."

Figure 2: Fall 2023 Survey of Bus and Rail Riders

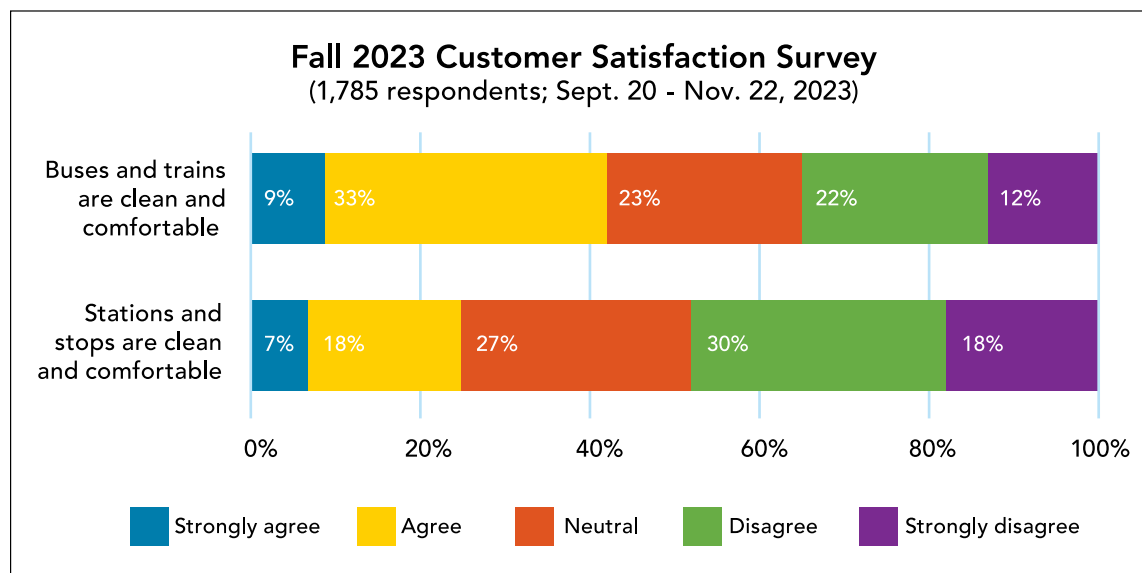


Figure 3: Fall 2023 Survey of Bus and Rail Riders

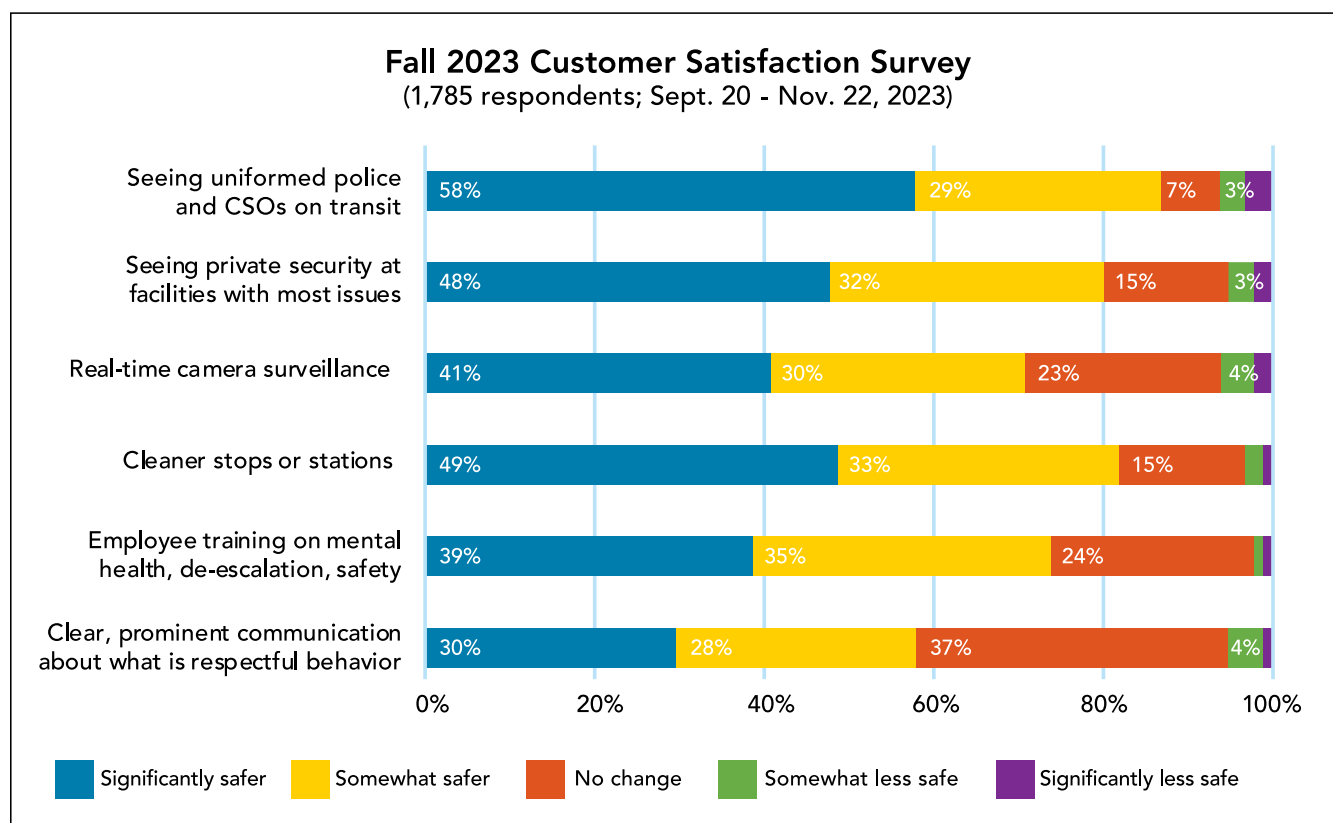


Figure 4: Spring 2024 Survey of Light Rail Riders

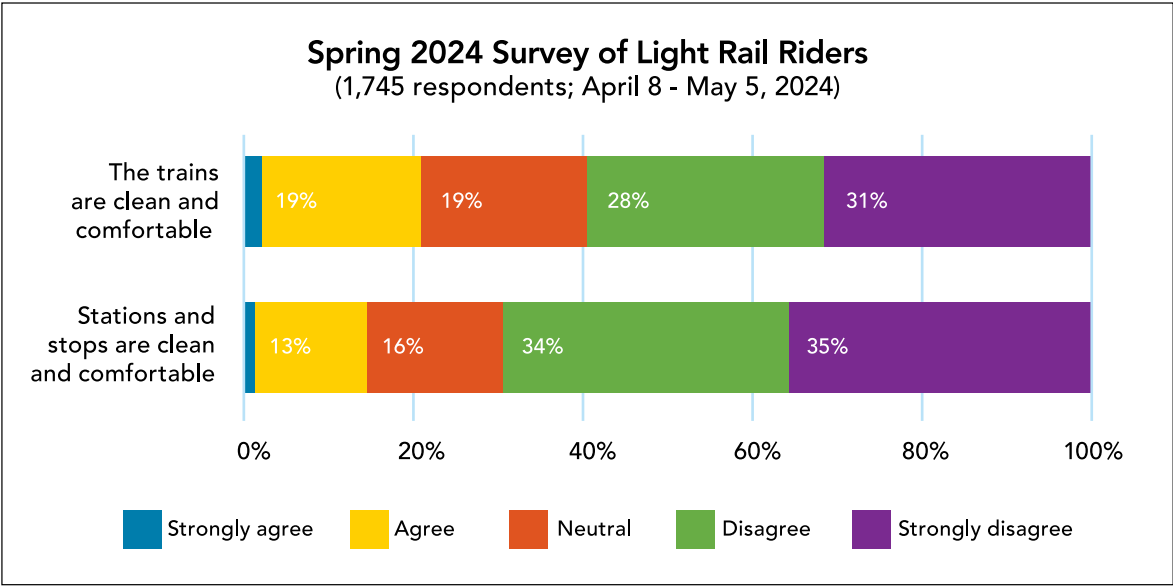


Figure 5: Spring 2024 Survey of Light Rail Riders

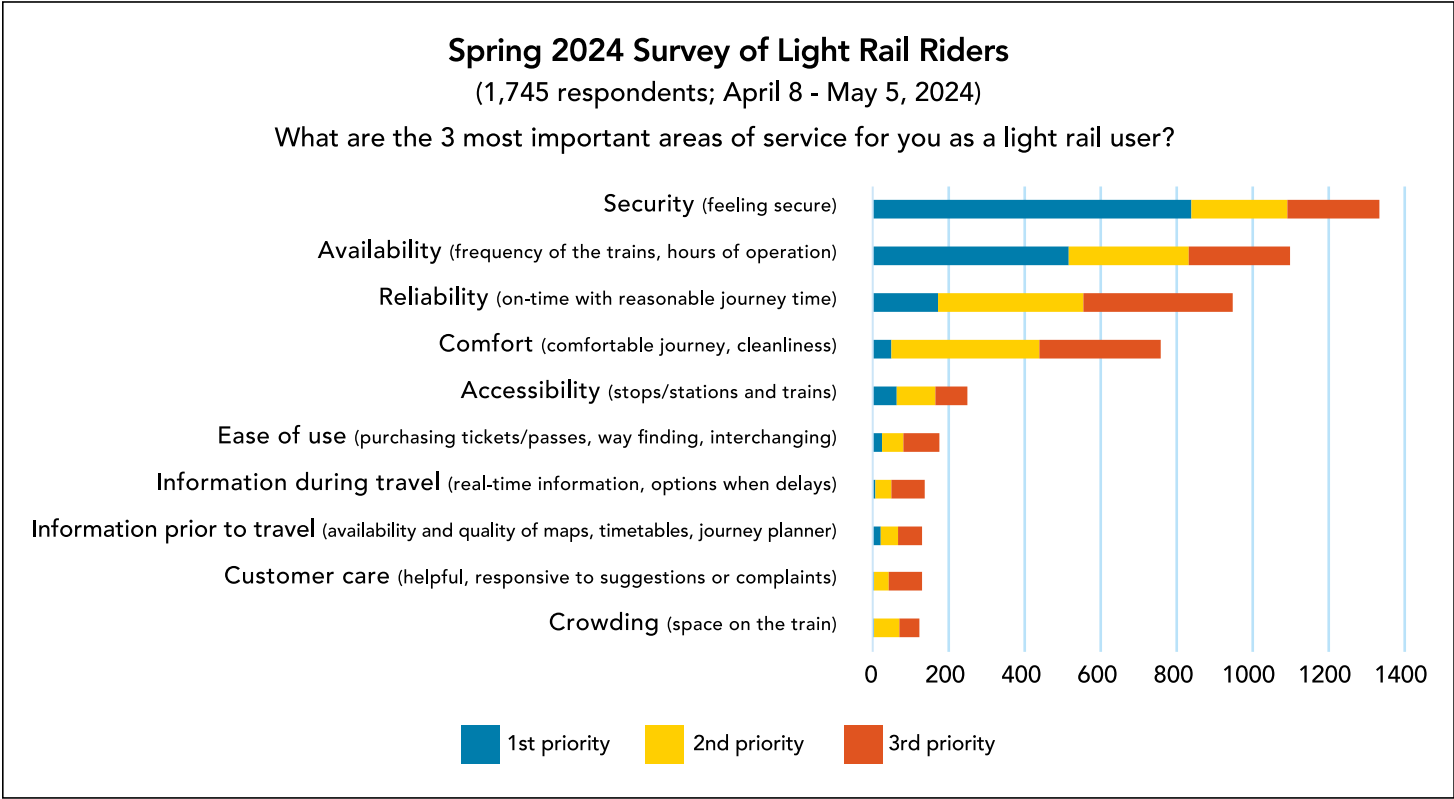


Figure 6: Transit App Rate-My-Ride Responses "How clean is the inside of this vehicle?" (March 21-May 9, 2024 pilot)

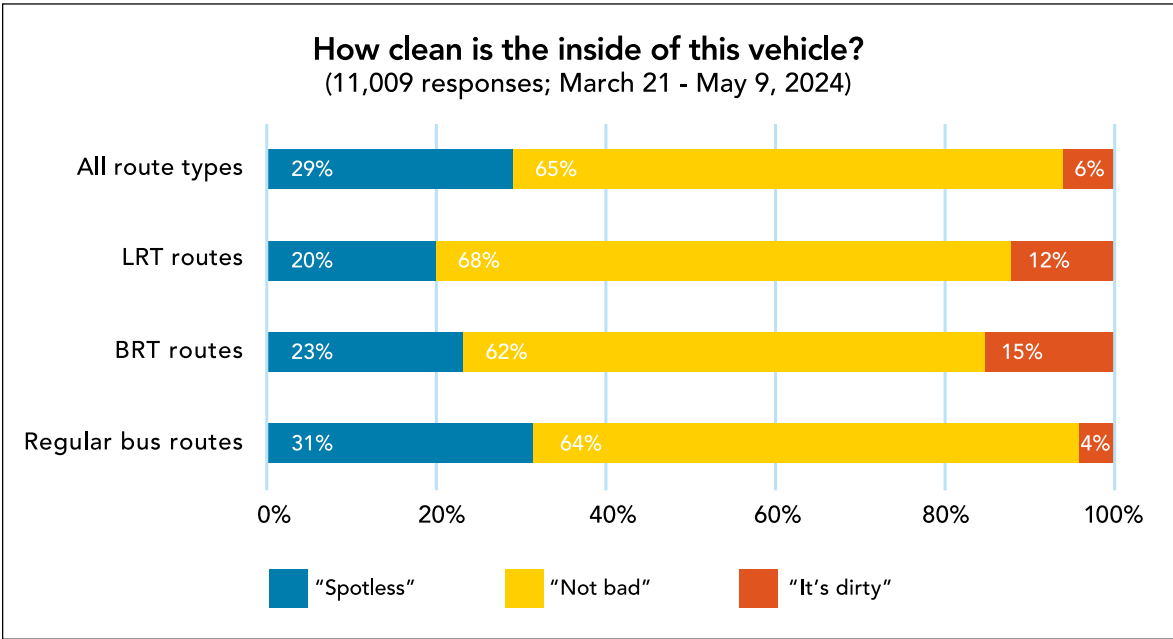
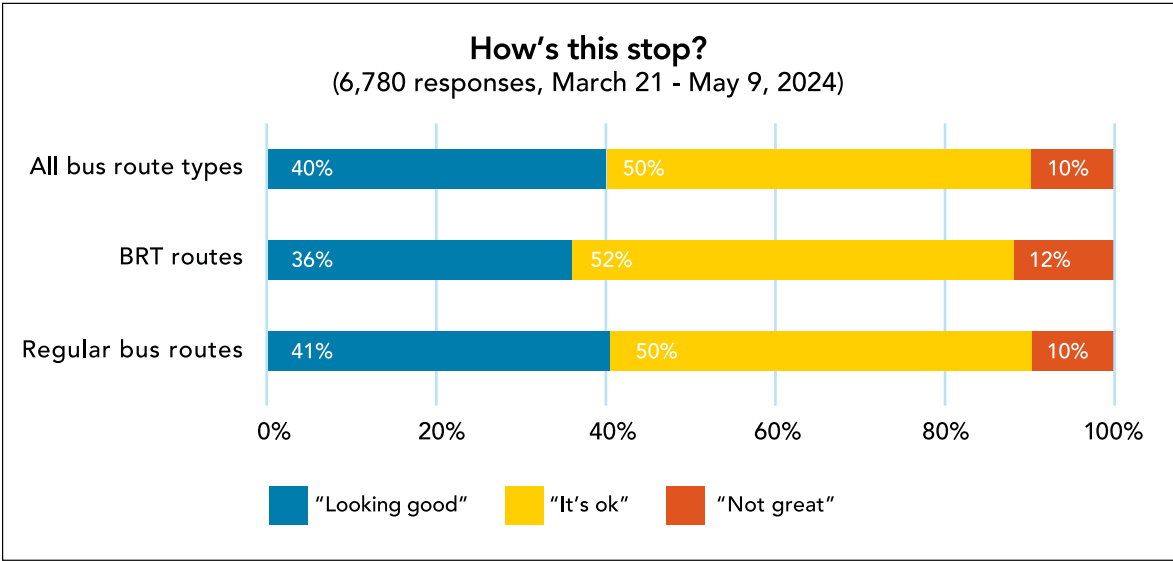


Figure 7: Transit App Rate-My-Ride Responses "How's this stop?" (March 21-May 9, 2024 pilot)



## Revised Standards and Preliminary Metrics

**Legislative Requirement:** The council must consider and recommend revisions to cleanliness standards based on the collection of public feedback and must summarize feedback received by the council in the report.

Since the 2023 report, the Cleaning & Repair Standards in Appendix A are largely unchanged, but preliminary metrics have been added. Metrics are not available for all standards at this time, and the metrics and their underlying data will continue to be updated and improved. The standards will also continue to change and be improved over time as implementation progresses.

## Cleaning

### Vehicle Cleaning

In April 2024, a new program to clean on-route bus rapid transit (BRT) vehicles between trips at Mall of America and Brooklyn Center Transit Center was initiated, and Rosedale Transit Center was added in June 2024. These bus vehicles have the highest ridership and are typically in service for longer periods of the day. This program is similar to the light rail vehicle cleaning program at terminal platforms (Union Depot, Mall of America, and Target Field) that has been in place since 2020. During the first two months of the program, buses were cleaned between trips over 1,800 times. Plans are already in process to grow the on-route bus cleaning program to cover all METRO BRT routes. A similar on-route bus cleaning program was implemented at the State Fair Transit Hub during the 2024 fair.

In 2024, new bus seats were tested and received favorable reviews. One advantage of these seats is the ability to be quickly and easily cleaned on-route. Plans are in process to retrofit new seats into the existing fleet starting with A Line BRT vehicles and to standardize them on future bus orders.

**Figure 8: New bus seats**



**Figure 9: On-Route Bus Cleaning at Transit Centers**



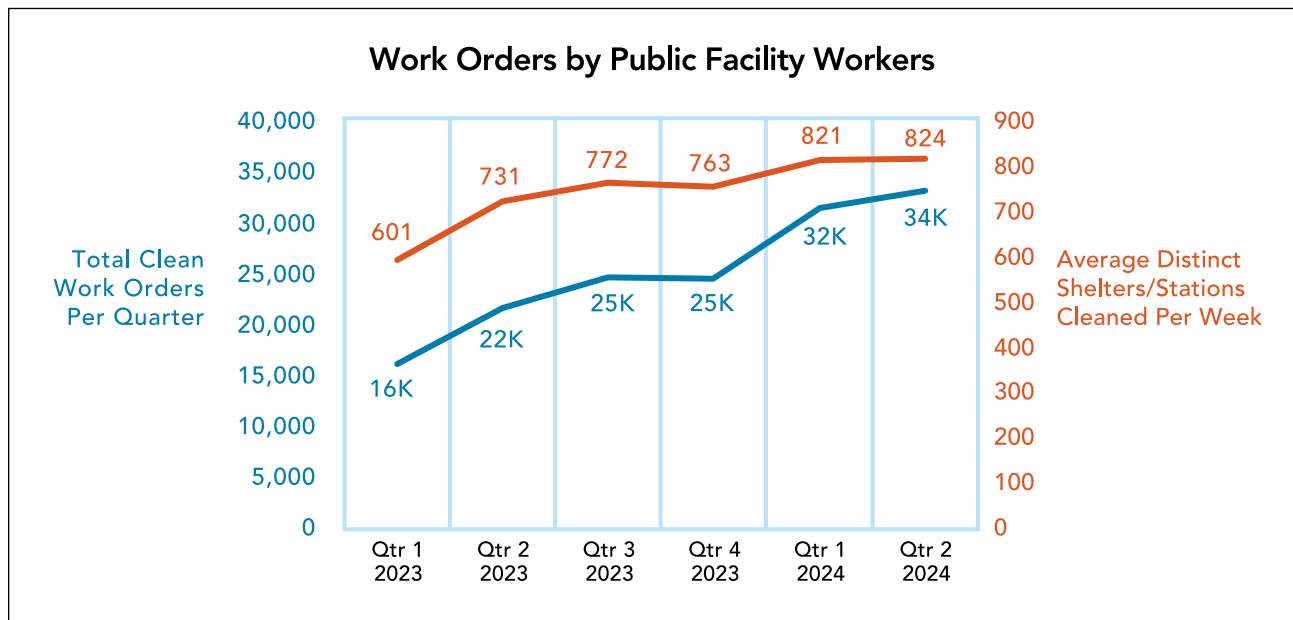
## Facilities Cleaning

Over 60 Public Facilities Workers clean public facilities throughout the week. Their work includes routine cleaning, pressure-washing, biohazard removal, graffiti removal, broken glass clean-up, operator restroom cleaning, and snow removal. During the first half of 2024, Public Facilities Workers completed over 60,000 work orders for these activities.

More accurate data about cleaning is being collected, and more cleaning is being performed at public facilities. The number of total work orders by Public Facility Workers has doubled over the past 18 months, and the number of distinct shelters/stations receiving at least one cleaning visit per week has increased from 600 locations in Q1 2023 to over 800 locations in Q2 2024. See Figure 10. This is due to better tracking of work completed, as well as an increase in staffing levels to perform the work. Improvements were made to the existing mobile application employees use to report public facilities cleaning work orders, making it easier to capture accurate data using existing business systems. Weekly reports are distributed to supervisors to monitor the number of weekly cleaning visits for each location compared with the standard interval in the cleaning and repair standards. While the standard interval for routine cleaning is not yet being met for all locations, more locations are being cleaned more frequently.

Appendix A provides more details on the standards and preliminary metrics for cleaning activities.

**Figure 10: Work Orders by Public Facility Workers**



## Vandalism & Graffiti

**Legislative Requirement:** the report must include whether the council has adopted preventative measures against vandalism or graffiti.

Sacrificial anti-graffiti clings are standard on vehicle windows and make it easier to remove graffiti and etching. Clear polycarbonate material and perforated metal panels are currently being tested in shelters and stations to deter graffiti and glass breakage.

Metro Transit is successfully using public art to deter graffiti vandalism.

- An anti-graffiti repeating-pattern vinyl wallpaper designed by a local artist was successfully installed on the interior walls of Lake St/Midtown Station in 2023, and similar anti-graffiti wallpapers is being installed in 2024 in the elevator tower at Franklin Station and in the skyway at Central Station. See Figures 11 & 12.
- Painted murals have also been successfully implemented to deter graffiti. Three crossing houses with frequent graffiti received murals in 2023, and two more are being installed in 2024. See Figure 13. Anti-graffiti coating on surfaces makes it easy to remove graffiti when it does occur. The mural installed on the exterior walls of Lake St/Midtown Station has an anti-graffiti coating that allows maintenance staff to keep the exterior walls of this station looking clean. See Figure 14.
- Bus shelter art clings have been installed at locations with frequent glass breakage and have been shown to reduce glass breakage. Metro Transit has an ongoing program to rotate art clings at 10-15 shelters per year. See Figures 15 & 16.

A Light Rail Platform Study, expected to be completed in 2024, will include additional recommendations to deter graffiti and vandalism at LRT stations. The goal of this study is to identify potential design measures that will improve perceptions and experience of safety for customers and staff across the light rail system. The study uses Crime Prevention Through Environmental Design (CPTED) as a framework to understand how the built environment at stations relates to crime, vandalism and non-transit activities. The study identifies best practices from transit research databases and peer agencies that improve safety through clear sightlines, ease of maintenance, and activity support at stations. Elements that are considered in this study include vandalism-resistant amenities, limited access points, CCTV, real-time communication, seating and shelters, facilities for frontline staff, elevators, heaters, and trash receptacles.

In addition, Metro Transit is deploying [layers of presence](#) at stations and on vehicles to deter behavior that results in damage and excessive cleaning requirements. These layers of presence include police officers, community service officers, Transit Rider Investment Program (TRIP) Agents, and supplemental security officers. [Adopt-a-Stop](#) volunteers also regularly report special maintenance needs and vandalism or suspicious activity.

Appendix A provides details on the standards and preliminary metrics for graffiti removal activities.

Figure 11: Lake St/Midtown Station Interior Before Anti-Graffiti Wallpaper Installed



Figure 12: Lake St/Midtown Station Interior After Anti-Graffiti Wallpaper Installed



Figure 13: Crossing House Mural on Graffiti-Prone Surface



Figure 14: Lake St/Midtown Station Mural with Anti-Graffiti Coating



Figure 15: Broken Shelter Glass



Figure 16: Bus Shelter Art Cling to Deter Glass Breakage



## Repairs

**Legislative Requirement:** the report must include the frequency, type, and location of repairs.

The cleaning and repair standards address the repair of four types of damages most impactful to the customer experience:

- **Repair of Broken Glass:** From January to June 2024, 902 work orders to clean up broken glass (both broken shelter window glass and other broken glass on the ground) were completed for public facilities, and 531 work orders to replace broken glass were completed. Four out of five work orders occurred at bus shelters and light rail stations.
- **Repair of Broken Heat/Light:** From January to June 2024, 161 work orders for broken heat/light in public facilities were completed.
- **Repair of Damages due to Car Crashes:** From January to June 2024, 4 standard bus shelters and 4 BRT platforms were damaged due to car crashes.
- **Repair of Elevator Outages:** From January to June 2024, rider alerts for elevator outages in public facilities operated by Metro Transit were issued at three light rail stations, two commuter rail stations, one BRT station, and one park & ride structure. The locations with the most extensive elevator outages were Franklin Station, Lake St/Midtown Station, I-35W & Lake St Station, and West Bank Station.

See Appendix A for preliminary performance metrics and information about the types of locations for these repairs.

## Strategies for High-Maintenance Stations

**Legislative Requirement:** the report must include whether specific transit stations needed a higher proportion of cleaning or repairs and detail the council's strategy to resolve identified and persistent concerns at those locations.

Maintenance requirements for transit stations and shelters vary depending on type of infrastructure, ridership, and activity at the station and in the surrounding area. Table 5 shows locations with the most cleaning work orders during the first half of 2024, based on number of total work orders and number of work orders resulting from reported issues. This is a snapshot of the types of locations requiring a high proportion of cleaning and repairs. Locations requiring the most cleaning and repairs can change over time.

Factors that influence cleaning requirements include:

- **Facility Size.** Light rail stations have the largest platform areas and require more maintenance than arterial BRT platforms or bus shelters. Transit centers have multiple shelters/stations, operator restrooms, and typically higher ridership.
- **Indoor Spaces.** Facilities with vertical circulation, elevators or other indoor spaces require more maintenance both because they are larger facilities and because indoor spaces tend to attract more non-transit uses.
- **Special Events.** Special events require more maintenance than typical days, and Metro Transit deploys additional cleaning staff to stations at stadiums on game days.
- **Ridership.** Locations with higher ridership typically require more maintenance because there are more people. Locations with low ridership and less foot traffic, however, can also make it easier for people to use transit facilities for non-transit activities, leading to more maintenance needs.
- **Non-Transit Activity.** Locations with large numbers of people using a facility for purposes other than getting on or off transit vehicles require more cleaning.

Metro Transit is deploying [layers of presence](#) at stations and on vehicles to deter behavior that results in damage and excessive cleaning requirements. These layers of presence include police officers, community service officers, Transit Rider Investment Program (TRIP) Agents, and supplemental security officers. The presence of personnel at stations enhances safety for riders, enhances safety for maintenance staff, and deters excessive damage and litter. Supplemental security officers are currently serving 8 locations as of August 28, 2024:

- Airport Terminal 1 & 2 Stations
- Brooklyn Center Transit Center
- Central Station
- Chicago-Lake Transit Center
- Franklin Ave Station
- I-35W & Lake St Station
- Lake St/Midtown Station
- Uptown Transit Station

Metro Transit deploys maintenance staff and contractors to perform cleaning & repair activities where they are needed the most. Stations requiring the most cleaning receive more frequent cleaning visits.

Metro Transit optimizes facility design to deter damage and excessive cleaning through both small scale and large scale improvements. Large indoor spaces have been temporarily closed at Uptown Transit Station, Chicago-Lake Transit Center, and lower-ridership park & ride structures. The elevator towers at Franklin Station are undergoing repairs, expected to be completed in September 2024, following significant misuse, vandalism and public safety issues.

Major station renovations are planned for [Lake Street/Midtown Station](#) and Franklin Station. These stations both have vertical circulation and have been in use for over 20 years. Station renovations offer the greatest opportunity to improve station design and incorporate lessons learned and feedback from a variety of stakeholders. The goals of the Lake St/Midtown Station renovation include:

- Providing more consistent and reliable access for all users by adding a pedestrian ramp from the street level to the station on the south side of Lake Street, along with new, larger elevators that will be closer to Lake Street bus stops, and wider stairways (escalators will be removed).
- Making the station easier to maintain over time by providing facilities staff more functional spaces to work out of and limiting the use of glass (for instance, existing glass platform shelters will be replaced by a larger overhead canopy).
- Reorienting station entrances to more directly face Lake Street, improving sightlines, wayfinding, and bus connections.

The Franklin Station redesign project will have similar priorities and begin design in 2025. The Light Rail Platform Study, previously mentioned, will also recommend best practices for design of high-maintenance locations, such as elevator design and operations and vandalism and graffiti prevention.

Metro Transit also began testing a new elevator monitoring system in summer 2024. The system provides real-time notifications of elevator failures, resulting in faster identification of issues for repair, and supports tracking the cause of outages. If successful, the system will support improved elevator operations and data reporting.

**Table 5: Stations with Highest Number of Public Facility Worker Clean Work Orders (January-June 2024)**

Station Location	Facility Attributes	Top 15 Number of Total Clean Work Orders	Top 15 Number of Reported Issue Clean Work Orders
10th St Station (Green Line)	LRT	X	X
38th St Station (Blue Line)	LRT, transit center	X	X
46th St Station Blue Line)	LRT, transit center	X	X
50th St Minnehaha Station (Blue Line)	LRT		X
Brooklyn Center Transit Center	Transit center, indoor		X
Cedar Riverside Station (Blue Line)	LRT		X
Chicago Lake Transit Center	Transit center	X	
Chicago Ave & 34th St Station	Arterial BRT	X	
Dale St Station (Green Line)	LRT	X	X
East Bank Station (Green Line)	LRT	X	
Franklin Ave Station	LRT, indoor, elevator	X	
Hamline Ave Station (Green Line)	LRT	X	
I-35W & Lake St Station (Orange Line)	BRT, indoor, elevator	X	X
I-35W & 46th St Station (Orange Line)	BRT, indoor, elevator		X
Lake St/Midtown Station (Blue Line)	LRT, indoor, elevator		X
Mall of America Station (Blue Line)	LRT, transit center, indoor, elevator	X	X
Maplewood Mall Transit Center	Transit center, indoor, elevator for parking	X	X
Nicollet Mall Station (Green/Blue Line)	LRT		X
Snelling Ave Station (Green Line)	LRT, stadium	X	X
West Bank Station (Green Line)	LRT, indoor, elevator	X	X
U.S. Bank Stadium Station (Green/Blue Line)	LRT, stadium	X	

## Expenditures

**Legislative Requirement:** the report must include the total expenditures for cleaning and repairing transit stations and transit vehicles.

Cleaning and repair of transit stations and vehicles are part of Metro Transit's overall maintenance programs.

In 2023, over \$151 million of \$450 million in operating expenses were allocated to selected cost centers within seven maintenance divisions that perform cleaning and repairs: Bus Maintenance, Commuter Rail, Light Rail Systems Maintenance, Light Rail Vehicle Maintenance, Public Facilities Maintenance, Revenue Operations, and Transit Information.

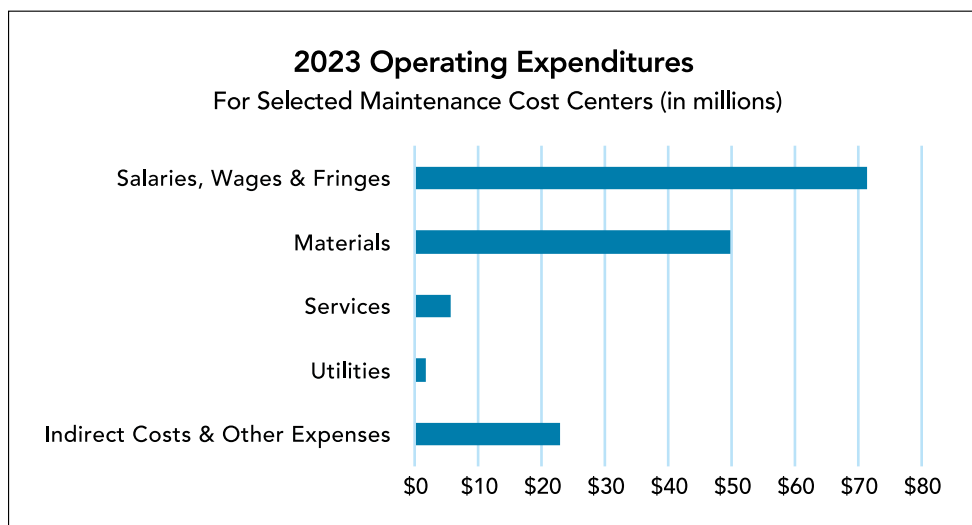
Salaries, wages and fringes are the largest cost, followed by materials & supplies, and contracted services. Materials & supplies include fuel and parts for both revenue vehicles and non-revenue vehicles. The public facilities maintenance cost center includes stations and other public facilities, but excludes support facilities, such as bus garages, maintenance facilities and administrative buildings. Utility costs for public facilities are included, but utilities for light rail vehicle propulsion, electric bus charging, and support facilities are not included. The Transit Information cost center includes sign maintenance as part of a larger department cost center. Costs for commuter rail maintenance are proportionately higher in 2024 than in 2023 due to an increase in Northstar service on weekdays and for special events at Target Field.

Forecasted Expenses for the first half of 2024 are over \$76 million. See Table 6 and Figure 16.

**Table 6: Operating Expenditures for Selected Maintenance Cost Centers (in millions)**

Maintenance Division	2023	January-June 2024 Forecasted
Bus Maintenance	\$81.8	\$42.6
Commuter Rail Maintenance	\$4.2	\$3.0
Light Rail Vehicle Maintenance	\$27.9	\$13.6
Public Facilities Maintenance	\$16.6	\$8.5
Rail Systems Maintenance	\$11.1	\$6.2
Transit Information	\$3.5	\$1.7
Ticket Vending Machine Repairs	\$6.3	\$3.0
<b>Total</b>	<b>\$151.3</b>	<b>\$78.5</b>

**Figure 16: Operating Expenses in Selected Maintenance Cost Centers by Expense Type**



## Workforce Strategies

**Legislative Requirement:** the report must include recommendations to address workforce challenges for the implementation and maintenance of cleanliness and repair standards adopted by the council, including whether the council-maintained agreements with third-party services for cleaning and repair.

Filling vacant budgeted positions remains a challenge to implementing the cleaning & repair standards, particularly as maintenance needs grow with implementation of new METRO lines.

In 2024, Metro Transit budgeted additional Cleaner and Helper positions for cleaning BRT buses and LRT vehicles between trips, new Track Laborer positions focused on light rail track cleaning, and additional administrative and supervisory positions to support public facilities cleaning and repairs. For the 2025 budget, Metro Transit has proposed to add Public Facilities Worker and Technician positions to clean and repair stations and additional Track Laborer positions focused on light rail track cleaning.

Table 7 shows the number of budgeted and filled full-time equivalents (FTEs) for selected positions that are directly related to cleaning and repair-related work, excluding administrative and supervisory positions. Between July 2023 and July 2024, Metro Transit filled 27 vacancies for these positions, increasing the number of filled positions from 233 to 260 FTEs over a 12-month period. The number of budgeted positions in 2024 available to be filled is 318 FTEs and is proposed to grow to 361 FTEs with the proposed 2025 budget. This will allow for an additional 100 positions to be filled through 2025 to support the growing METRO system and an enhanced maintenance service level for the existing system.

Metro Transit is pursuing a combination of strategies to fill these vacancies:

- offering hiring bonuses and employee referral bonuses
- increased the shift differential for all ATU employees performing overnight work
- implemented a market adjustment to salaries for equipment, vehicle and facilities technicians
- expanding apprenticeship programs to train candidates for maintenance positions
- conducting advertising campaigns on transit vehicles, at shelters and stations, via social media, and on [Metro Transit's website](#)

**Figure 17: Advertising for Maintenance Workers on a Bus Shelter**



**Table 7: Budgeted Cleaning & Repairs-Related Positions (excludes supervisors)**

Division	Job Type	Filled July 2023	Filled July 2024	2024 Approved Budget	2025 Proposed Budget
Bus Maintenance	Cleaner	31	36	37	37
Bus Maintenance	Helper	51	44	51	52
Commuter Rail	Cleaner, Rail	0	6	6	6
Facilities Maintenance	Public Facilities Technician	23	23	32	44
Facilities Maintenance	Public Facilities Worker	50	61	72	96
LRV Maintenance	Cleaner, Rail	0	3	12	12
LRV Maintenance	LRT Helper	25	26	42	42
Rail Systems	SCADA/Comm Electronic Tech	8	8	8	8
Rail Systems	Signals Technician	15	16	18	18
Rail Systems	Track Laborer	0	0	2	8
Rail Systems	Track Maintainer	12	15	15	15
Transit Info Field Ops	Systems Field Technology Tech	2	2	3	3
Transit Info Field Ops	Transit Info Serv Installer	2	2	3	3
Revenue Operations	Revenue Equip Electronic Tech	14	18	17	17
<b>Total</b>		<b>233</b>	<b>260</b>	<b>318</b>	<b>361</b>

Metro Transit uses third-party service contracts for some cleaning and repair services. These services are typically used when there are staffing shortages, geographically distant facilities, or specialized services. Third-party services currently used include:

- Cleaning of light rail vehicles between trips at Union Depot, Mall of America and Target Field. Due to staffing shortages, a contractor is temporarily performing some of these services as of August 2024.
- Janitorial services at Red Line Stations, I-394 corridor park & rides, I-35 & Kenrick Park & Ride, and bus shelters on Marquette/2nd Avenues in Minneapolis.
- Supplemental cleaning of some bus shelters and Brooklyn Center Transit Center.
- Elevator and escalator maintenance.
- Replacement of glass at facilities with custom glass sizes.
- Repairs of locks, gates, doors and fences.
- Snow removal at most park & rides.
- Landscape maintenance at some park & rides, rail stations, and transit centers.
- Specialized biohazard cleaning services on light rail vehicles.
- Specialized facilities clean up.
- Specialized graffiti removal on public art.
- Port-a-potties at stations.
- Building glass cleaning.
- Parking lot sweeping.
- Services to support major repairs of BRT platforms, typically due to car crashes.

## Code of Conduct & Transit Rider Investment Program

**Legislative Requirement:** the report must include any recommendations for additions to the transit rider code of conduct under section 473.4065 or the transit rider investment program under section 473.4075.

On December 13, 2023, the Council adopted a Code of Conduct for public transit use. The Code of Conduct allows authorized transit representatives to order a person to depart transit property for violations if the person continues to violate the Code of Conduct after being warned once to stop. The Code of Conduct is posted on Metro Transit's website at [metrotransit.org/rider-rules](https://metrotransit.org/rider-rules). In February 2024, Metro Transit posted rider rules at all light rail platforms, bus rapid transit stations, and transit centers (see Figure 18).

In October 2023, the Council adopted policy that established the Transit Rider Investment Program (TRIP) and resolution for a fee schedule for administrative citations. In December 2023, Community Service Officers began issuing the administrative citations for fare non-compliance. In February 2024, TRIP personnel began their work in accordance with Minn. Stat. 473.4075.

The [Transit Safety and Rider Experience Report](#), includes annual reporting on Code of Conduct and TRIP, consistent with Minnesota Statutes, section 473.4075.

Figure 18: Rider Rules Signs



## Modernizing Data & Business Applications

The Metropolitan Council is actively working to procure a new Enterprise Asset Management Solution (EAMS), which will significantly enhance Metro Transit's ability to plan, track, and report on cleaning and repair work, preventive maintenance, and overall asset management. The computerized maintenance management system that Metro Transit maintenance divisions currently use to manage work orders, TXbase, is over 20 years old and was designed before the system included rail and bus rapid transit lines. TXbase does not provide modern industry-standard functionality, such as mobile capabilities, to support Metro Transit's diverse asset base and complex processes. A core element of the Cleaning & Repair Standards is the ability to track performance measures compared with the standards. The new EAMS tool and associated business process improvements are critical to Metro Transit's efforts to track performance and improve cleaning and repairs. Procurement of a new solution is underway, and implementation activities are planned for 2025-26.

Metro Transit is also actively working to procure a new Customer Relationship Management (CRM) System to support customer feedback collection, tracking, and response. The objective of this work is to enhance issue reporting and resolution through all channels, thereby improving overall customer experience and internal business operational efficiency. The CRM system will integrate with other back-end systems, including the work order management modules of the EAMS system. Procurement of a new CRM solution is expected to begin in 2024, and implementation activities are planned for 2025.

# Appendix A: Cleaning and Repair Standards & Preliminary Metrics

This section describes current service level standards for cleaning and repairs. These standards are expected to change and be improved over time, as Metro Transit works on implementation and can continue to evaluate the outcomes of these standards.

Preliminary metrics are also included in this year’s report. The quality and availability of data for these metrics varies, and metrics are not available for all standards. Work is actively underway to improve the completeness and accuracy of data related to the cleaning and repairs. These metrics will continue to be updated and improved.

## Routine Cleaning

### Vehicles

Routine cleaning of all transit vehicles occurs nightly at the maintenance facility in preparation for the next service day; this includes litter removal, sweeping, and sanitizing high-touch surfaces.

In addition to nightly cleaning of vehicles at the maintenance facility, light rail vehicles are also cleaned between each trip at the three terminal stations 7 days a week from 6am to 8pm. A similar program for BRT vehicles was initiated in April 2024 at Mall of America and Brooklyn Center Transit Center. This includes walking through each train car, picking up trash, wiping down flat surfaces with visible dirt or stains, picking up trash and performing quick sweep/mop where needed, and reporting biohazards, graffiti, cracked windows or safety hazards.

If there is a biohazard or damage to the vehicle that interferes with public safety, operators may request a replacement bus or light rail vehicle, and the vehicle will be returned to the maintenance facility for cleaning or repairs. The Transit and Rail Control Centers triage issues like this and determine how to dispatch the most appropriate response for the situation.

Table 8: Vehicle Routine Cleaning

Asset Type	Standard Interval
Light Rail Vehicle	1 day & between trips at terminal stations
Commuter Rail Coach Car	1 day
Buses	1 day

### Facilities

Routine public facility cleaning includes emptying trash, picking up litter, cleaning spills, wiping down touch screens, wiping down glass, wiping down benches, removing graffiti and stickers, and reporting vandalism and other damage for repair. Some stations have low maintenance needs; these facilities will be visited and checked at the minimum frequency, but may not require cleaning every visit. Some facilities have high maintenance needs; these facilities may be visited and cleaned more than the standard interval.

If a biohazard is reported at a station or shelter, a work order is created for special cleaning, and that work order is prioritized for completion as soon as possible on the same day.

Table 9: Facilities Routine Cleaning & Preliminary Performance Metric (January-June 2024)

Asset Type	Standard Interval	% Compliance with Standard (Jan.-June 2024)	Average Interval (Jan.-June 2024)
LRT Stations	1 day	91%	9.5 times/wk
Commuter Rail Stations	1 day	50%	5.7 times/wk
Dedicated & Highway BRT Stations	1 day	100%	12.5 times/wk
Arterial BRT Stations	1 day	32%	5.7 times/wk
Transit Centers	1 day	79%	10.9 times/wk
Park & Ride Structures	2 days	100%	4.3 times/wk
Bus Shelters	7 days	94%	1.2 times/wk

## Deep Cleaning

A deeper cleaning of the interior of vehicles occurs on a defined interval: approximately every six weeks for buses (45 days) and light rail vehicles (6,500 miles) and monthly for commuter rail coach cars. Deep cleaning of facilities (typically pressure-washing) is scheduled to occur at least twice a year: once in the fall and once in the spring (pressure-washing cannot be performed during winter months). Facilities with high maintenance needs may require more frequent deep cleaning, and many locations receive more frequent pressure-washing than twice a year. Metro Transit is continuing to evaluate whether to provide a more frequent deep cleaning standard for stations in the future. Litter removal in the light rail track bed and right-of-way is performed as part of regular track maintenance, keeping it clear of vegetation, litter, used needles, etc. Litter removal in bus guideways is similar.

Table 10 shows the standard interval and preliminary performance metric for deep cleaning.

**Table 10: Deep Cleaning Service Level Standard & Preliminary Performance Metric (January-June 2024)**

Asset Type	Standard Interval	% Compliance with Standard	Filled July 2024
Light Rail Vehicle	6500 miles	98%	not available
Commuter Rail Coach Car *	12 months	not available	not available
Buses	45 days	94%	not available
LRT Stations	6 months	94%	3.8 times/6 mos
Commuter Rail Stations	6 months	100%	2.5 times/6 mos
Dedicated & Highway BRT Stations	6 months	83%	3.5 times/6 mos
Arterial BRT Stations	6 months	93%	2.3 times/6 mos
Transit Centers	6 months	93%	5.2 times/6 mos
Park & Ride Structures	6 months	75%	1.5 times/6 mos
Bus Shelters	6 months	66%	1.3 times/6 mos
LRT Track Bed and right-of-way	6 months	100%	not available
Bus Guideway and right-of-way	6 months	not available	not available

\* The standard interval for deep cleaning commuter rail coach cars was incorrectly reported in the 2023 report and is corrected here.

## Inspections

In addition to routine cleaning and deep cleaning work, inspections are an important means of discovering and reporting cleaning and repair issues. Vehicle preventive maintenance inspections occur at defined intervals: 5,500 miles for light rail vehicles, 90 days for commuter rail, and 6,000 miles for buses. Facilities preventive maintenance inspections are typically scheduled every 30 days. LRT track inspections occur at least weekly. Fare equipment is inspected every 30 days. Bus stop signs are inspected at least once every two years, if not inspected through other repairs or information updates.

**Table 11: Inspections Service Level Standard**

Asset Group	Asset Types	Standard Interval
Vehicles	Light Rail Vehicle	5,500 miles
Vehicles	Commuter Rail Coach Car	92 days
Vehicles	Buses	6,000 miles
Facilities	LRT Stations	30 days
Facilities	Commuter Rail Stations	30 days
Facilities	Dedicated & Highway BRT Stations	30 days
Facilities	ABRT Stations	30 days
Facilities	Transit Centers	30 days
Facilities	Park & Ride Structure Buildings	30 days
LRT Infrastructure	LRT Trackbed and right-of-way, Signals, Communications, & Traction Power structures	varies by inspection procedure
Bus Infrastructure	Bus guideway and right-of-way	to be developed
Transit Information Signage	Bus stop signs	24 months
Transit Information Signage	Schedule displays	12 months
Transit Information Signage	Real-time signs	30 days
Fare Equipment	Fare equipment at stations	30 days

## Removal of Reported Graffiti and Vandalism

Graffiti is routinely discovered and removed immediately through the cleaning and inspections practices previously described. Graffiti may also be discovered through employee and customer reports. The City of Minneapolis also notifies Metro Transit of graffiti discovered through their graffiti management program and sends an email to the responsible staff. Graffiti removal on vehicles is handled by bus and rail maintenance departments.

Light rail operating and maintenance agreements with the cities of Minneapolis, Saint Paul, and Bloomington require Metro Transit to remove graffiti consistent with city ordinances.

During winter, graffiti removal at outdoor facilities is extremely difficult due to freezing, lack of water, and chemicals that are ineffective in cold temperatures. Some graffiti at outdoor facilities is not removed during winter months. Some locations may be difficult to reach and require special equipment or services to remove graffiti; these situations are expected to require more than 7 days to remove graffiti.

**Table 12: Graffiti Removal Service Level Standard**

Asset Group	Type of Graffiti	Removal Goal
All assets	Any graffiti that has offensive content	as soon as possible, but no more than 24 hours
Vehicles	Light rail vehicles, commuter rail coaches, buses	1 day, same as routine cleaning standard
Facilities, Bus & Rail Infrastructure	Graffiti on easy-to-remove surfaces (glass, metal, etc)	3 days outside winter
Facilities, Bus & Rail Infrastructure	Graffiti on difficult-to-remove surfaces, materials and locations (concrete surfaces, certain graffiti materials, graffiti located on bridge or adjacent to traffic lane, etc)	7 days outside winter
Transit Information Signage	Bus stop signs, schedule displays, and real-time information display screens	1 business day if graffiti is covering transit information; otherwise 7 days

Table 13, Table 14 and Table 15 provide preliminary metrics on graffiti removal resulting from reported issues via Special Situation Reports (SSRs). These tables only include reported issues, not all graffiti removal performed as part of routine cleaning.

**Table 13: Vehicle Graffiti Removal Preliminary Metric (January-June 2024)**

Vehicle Type	Number Graffiti Work Orders Resulting from an SSR	% of Reported Incidents Addressed within 1 day
Light Rail Vehicle	113	99%
Commuter Rail Coach Car	0	--
Buses	82	90%

**Table 14: Facility Graffiti Removal Preliminary Metric (January-June 2024)**

Facility Type	Number Graffiti Work Orders Resulting from an SSR	% of Reported Incidents Addressed within 7 days	Average Removal Time
LRT Station	38	90%	2.9 Days
BRT Station	5	100%	1.6 Days
Commuter Rail Station	0	--	--
Park & Ride Structure	0	--	--
Arterial BRT Station	20	95%	2.8 Days
Transit Center	1	100%	3.0 Days
Bus Shelter	52	92%	2.1 Days
<b>Total Work Orders</b>	<b>116</b>		

## Repair of Broken Glass

Broken glass is one of the most common types of damage to public facilities and shelters. Broken glass may also occur on vehicles, requiring them to be removed from service for repairs. Glass repair is a priority because it is a public safety hazard.

Newer LRT and BRT stations and bus shelters have standard glass sizes, and glass repair can be completed quickly by staff because spare glass pieces are available. Older LRT stations, parking structures, custom shelters, transit centers and elevator towers typically have custom glass sizes, and the glass repair requires the services of a vendor and a longer repair timeline. If glass replacement cannot be replaced in a timely manner, a temporary insert, such as a wood panel, will be installed.

**Table 16: Broken Glass Repair at Public Facilities Service Level Standard**

Activity	Repair Goal
Clean up broken glass	24 hours
Replace broken glass at facilities with standard glass sizes	3 days
Replace broken glass at facilities with custom glass sizes	14 days

Table 17 is a preliminary metric on glass clean-up and glass replacement. The data for the metric does not distinguish between facilities with custom glass sizes and facilities with standard glass sizes. The number of total work orders to clean-up broken glass exceeds the number of work orders to replace broken glass because cleaning up broken glass includes any broken glass on the ground, not just broken window glass. In addition, most repairs for custom glass sizes are completed by vendors and are not currently recorded in work orders.

**Table 17: Broken Glass Repair Preliminary Metric (January-June 2024)**

Facility Type	Number of Glass Clean-up	Average Glass Clean-Up Time	Number of Glass Replacement Work Orders	Average Glass Replacement Time
LRT Station	291	less than 1 day	148	4.2 Days
BRT Station	24	less than 1 day	6	4.3 Days
Commuter Rail Station	27	less than 1 day	0	--
Park & Ride Structure	3	less than 1 day	1	1.1 Days
Arterial BRT Station	110	less than 1 day	56	3.1 Days
Transit Center	35	less than 1 day	18	2.4 Days
Bus Shelter	412	less than 1 day	302	4.0 Days
<b>Total Work Orders</b>	<b>902</b>		<b>531</b>	

# Repair of Heat and Light

Heat and light in stations and shelters are an essential feature for customers waiting to board buses or trains. Metro Transit electricians conduct regular inspections of electrical infrastructure at rail and BRT stations and respond to employee and customer reports of heat and light outages.

There are some constraints on timely repair of heat and light at stations and shelters. Underground repairs cannot be completed during winter months. If the issue is related to an Xcel electrical service, not a heat or light fixture, the timeline will be dependent on Xcel.

Table 18 shows the service level standard and number of work orders for repair of heat and light. The current business process for closing electrical repair work orders does not document actual completion dates and will be improved for future reporting on repair time.

Table 18: Repair of Broken Heat/Light Service Level Standard & Preliminary Metric (January-June 2024)

Facility Type	Standard Repair Time	Number of Repair Work Orders (Jan.-June 2024)
LRT Station	7 days	39
BRT Station	7 days	10
Commuter Rail Station	7 days	2
Park & Ride	7 days	3
Arterial BRT Station	7 days	34
Transit Center	7 days	9
Bus Shelter	7 days	64
Total Work Orders		161

# Repair of Damages Due to Car Crashes

Car crashes at shelters and BRT platforms can cause significant damage to bus stop signs, shelters, pylons, fare equipment, and electrical or communications cabinets. These types of incidents occur several times a year and, with the growth in BRT stations, are becoming an increasing challenge. For standard shelters that are damaged, spare shelters are typically available, and replacement shelters can be installed quickly. For BRT platforms, the damage may require special parts, special equipment (such as a crane) and contracted services to complete the repairs, requiring a longer repair timeframe.

Damage from car crashes at rail infrastructure, such as tracks and crossing gates, can also have a major impact on rail operations. Repair of these types of damages are not included in these standards because they have a less direct impact on the customer experience than damage to shelters and stations.

Table 19: Service Level Standard for Repairs Resulting from Car Crashes

Asset Group	Asset Types	Repair Goal
Facilities	Clean up damage	24 hours
Facilities	Standard shelters	7 days
Transit Information Signage	Bus stop signs, Schedule Displays	14 days
Facilities	Custom shelters, Arterial BRT stations, Dedicated & Highway BRT stations and associated infrastructure	6 months

From January to June 2024, 4 standard bus shelters were damaged due to car crashes. The average repair timeframe for these incidents was 2.5 days. When a bus shelter is hit by a vehicle, it is usually removed from the site to either be repaired or replaced by a new shelter.

From January to June 2024, 2 BRT shelters were damaged due to car crashes: the northbound Orange Line at I-35W & 66th St Station in Richfield and the northbound C Line shelter at Penn Ave & Plymouth Ave in Minneapolis. In addition, two BRT platforms damaged during 2023 were awaiting repairs as of January 2024: the B Line shelter at eastbound Lake St & Hiawatha Ave and the pylon at southbound Orange Line at I-35W & 66th St Station. As of August 2024, repairs have not yet been substantially completed for these four locations. Process improvements are underway to reduce the time to repair BRT platforms, including procuring spare parts and equipment.

**Table 20: Preliminary Performance Metric for Repairs Resulting from Car Crashes**

Facility Type	Standard Repair Goal	Number of Incidents (Jan.-June 2024)	% of Repairs meeting Standard Repair Goal (Jan.-June 2024)
Standard Shelters	7 days	4	100%
Transit Information Signage	14 days	not available	not available
BRT Platforms (includes shelters and pylons)	6 months	4	0%

## Repair of Elevator Outages

Vandalism and damage to elevators and escalators is a maintenance challenge, resulting in outages that have a significant impact on ADA accessibility and the customer experience. Elevators and escalators are maintained by licensed elevator mechanics through contracted services. The contractor also performs monthly elevator and escalator preventive maintenance inspections. In many cases, elevators can be returned to service within a few hours, unless special parts are required.

**Table 21: Service Level Standard for Elevator Repairs**

Asset Group	Asset Types	Repair Goal
Facilities	all stations and public facilities with elevators	24 hours

Data on elevator outages and response times for repairs is not currently available, but information on rider alerts for elevator outages is recorded. From January to June 2024, rider alerts for elevator outages in public facilities operated by Metro Transit were issued at three light rail stations, two commuter rail stations, one BRT station, and one park & ride structure. The locations with the most extensive elevator outages were Franklin Station, Lake St/Midtown Station, I-35W & Lake St Station, and West Bank Station.

Metro Transit began testing a new elevator monitoring system in summer 2024. The system provides real-time notifications of elevator failures, resulting in faster identification of issues for repair, and supports tracking the cause of outages. If implemented following testing, this system will provide the data to accurately monitor and report on elevator outages in the future.