Seattle Department of Transportation

2024 ANNUAL STREETCAR OPERATING REPORT

Seattle Department of Transportation

November 2025

Contents

Executive Summary

For over 18 years, the Seattle Streetcar system has been providing reliable and modern transit service to Seattle residents, workers, and visitors. The City of Seattle owns and funds the Seattle Streetcar, and partners with King County Metro (Metro) to operate the system on the City's behalf.

The Seattle Streetcar system consists of two streetcar lines:

- South Lake Union Streetcar (SLU) opened in 2007.
- First Hill Streetcar (FHS) opened in 2016.

In accordance with Ordinance 124946, this report provides an update on Seattle Streetcar operations, performance, and financial metrics in 2024.

2024 HIGHLIGHTS

Systemwide ridership continued to grow in 2024 – 80% of pre-pandemic ridership levels

In 2024, there were **1,492,360** riders using the Seattle Streetcar system.

Ridership continued to rebound from the significant declines seen during the COVID-19 pandemic. Overall, system ridership was up 6% over 2023 and reached 80% of total pre-pandemic ridership in 2019 (which exceeds Metro's recovery rate at 69% during the same period).[1] Productivity on the SLU and FHS lines, as measured by riders per revenue hour, also increased in 2024, up 7% compared to 2023.

Fare programs continued equitable access to transit for Seattle Streetcar riders, while fare revenue continued to grow in 2024.

To advance SDOT's mission to provide safe and affordable access to places and opportunities, we renewed existing fare policies in 2024 that continued to expand access to transit and align better with our regional transit partners, such as King County Metro and Sound Transit. We also continued to track the progress of existing fare programs and participated in an ongoing Metro-led evaluation.

Key highlights included:

- **Renewed ORCA LIFT fares at $1.00** as an extended pilot program through December 2025.
- **Renewed participation in the Subsidized Annual Pass Program** on a pilot based through December 2025.

These policies had minimal impact on fare revenue based on preliminary calculations.

Overall, in 2024, there was a 10% increase in fare revenue over 2023, although fare revenue collection is still 58% lower than pre-pandemic levels in 2019.

[1]As reported in the 2019 and 2024 APTA Public Transportation Ridership Reports, Metro ridership reached 69% of 2019 ridership in 2024. 2024 National Transit Database (NTD) Ridership reports for King County Metro Bus Operations have not been uploaded, and data may slightly differ from that included in NTD reports due to differences in data calculation procedures and in periods of time covered.

The Streetcar Safety and Security Program continued to expand and increase effectiveness.

- Increased streetcar security presence on streetcars from four hours of contracted service per day to eight hours per day.
- Staff focused security deployment and planned operational safety changes for 2025 in response to rapidly changing safety and security conditions along S Jackson Street.
- Ongoing operator safety and training programs resulted in one preventable streetcar collision in 2024. (A preventable collision is one that could have been prevented by better adhering to rules or procedures.)

Continued progress on spot improvements to enhance safety, performance, and reliability.

The SDOT Transit Spot Improvements Program completed several projects to increase safety for people walking, biking, and rolling around the streetcar tracks, and to improve streetcar travel time and reliability. Projects included:

- Adding "look legends" to warn pedestrians while crossing streetcar tracks, and
- Restricting left turns for vehicles exiting the Westin Hotel and installing safety posts to both improve safety and reliability at Westlake Avenue and Stewart Street.

SDOT and Metro renewed the Interlocal Agreement (ILA), governing the operating partnership between the agencies.

SDOT and Metro continue to strengthen the operating partnership between the agencies, leveraging Metro's operational expertise with SDOT's program management and asset maintenance expertise. As part of the ILA renewal, SDOT secured Metro's continued financial support for the SLU line for the next five years at $1.7 million per year.

SDOT continued to steward the streetcar system as it ages, responding to emerging maintenance needs across both lines and reinvesting in assets to provide safe, reliable and attractive service.

- Two rail repairs, one each on South Lake Union and First Hill lines, were completed by SDOT crews. Staff inventoried the system and foresaw the need for continued spot rail repairs as the system ages.
- In August 2024, the South Lake Union Streetcar line closed for 26 days due to the failure of multiple parts in succession at two Traction Power Substations (TPSS), which provide power to operate the streetcars. King County Metro operations staff procured additional replacement parts identified process improvements to better manage inventory for high-risk parts.
    - SDOT Streetcar Program staff and King County Metro staff organized a retrospective analysis to understand the root cause of these multiple part failures and subsequent service suspension. From this analysis came recommendations to improve parts management processes, develop communication protocols, update the existing Streetcar Maintenance Plan, conduct condition assessments of major electrical components like TPSS, and amend our Interlocal Agreement (ILA) with Metro clarify maintenance planning roles and responsibilities.
- Streetcar program staff initiated a study for repair or replacement of the First Hill Streetcar batteries, which are experiencing multiple parts failures and are no longer supported by the supplier. Without repair or replacement, First Hill Streetcar vehicles will continue to be taken out of service, meaning decreasing frequency of service. The study will be available in 2025 and present options for repair and replacement to support reliable operations going forward on the First Hill line.

Introduction

Seattle City Ordinance 124946 requires the Seattle Department of Transportation (SDOT) to submit a report to the Chair of the City Council's Sustainability and Transportation Committee (now the Transportation and Seattle Public Utilities Committee) on the operations of all operating streetcar lines. This requirement has been in place since December 2015.

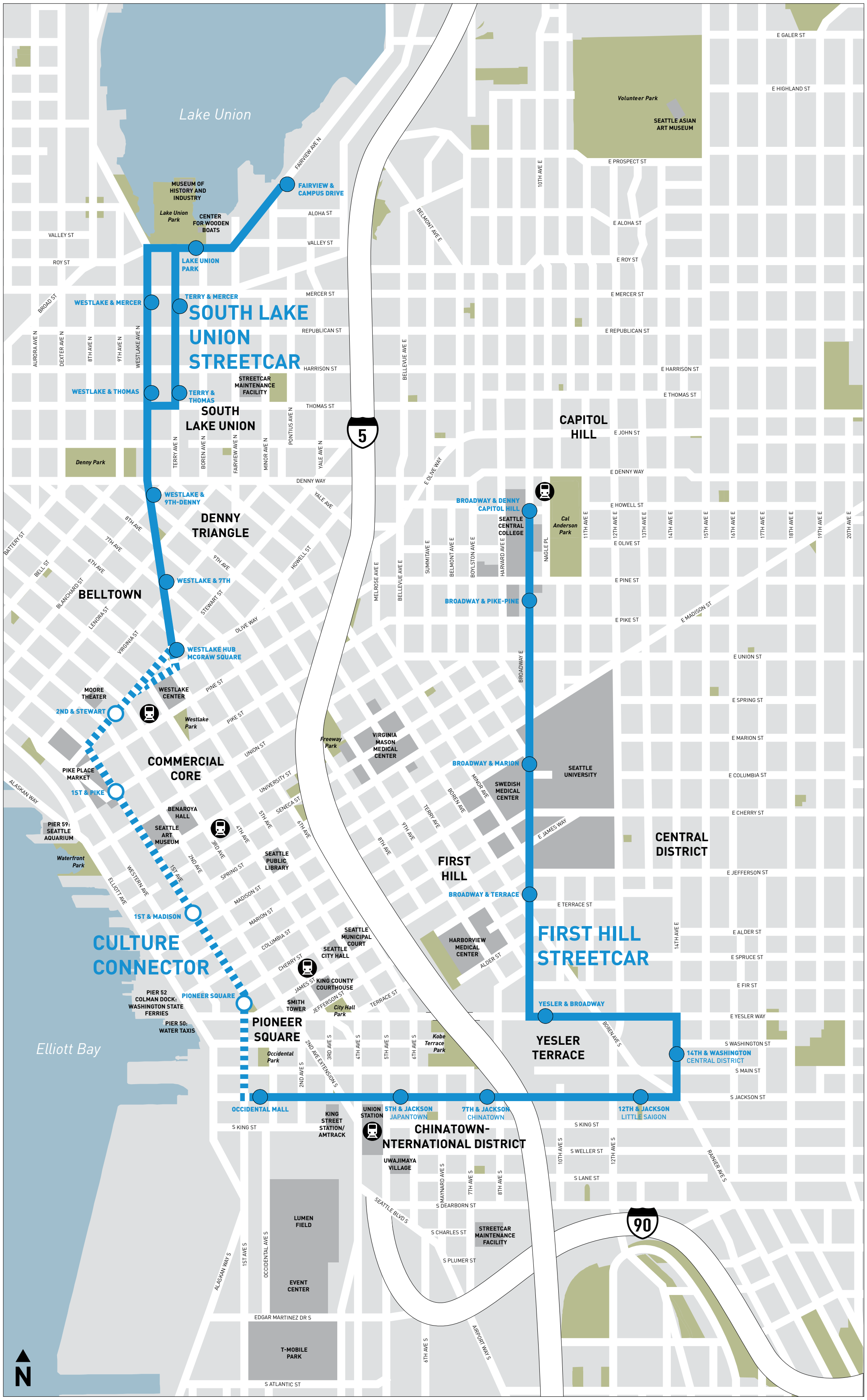
Ordinance 124946 states:

> *"The report shall include both performance metrics and financial metrics; and will include data for the past 5 years, estimates for the current year, and projections for the next 5 years. Performance metrics shall include ridership, farebox recovery ratio, productivity (riders per revenue hour), fare evasion, and reliability. Financial metrics shall include costs, including operating payments to King County, SDOT direct costs and contingency, and major maintenance expenditures; revenues, including farebox recovery, sponsorships and donations, grants, and intergovernmental revenues; and actual use of funds from the Consolidated (Residual) Cash Pool1F for interim financing. Financial reporting shall identify variances from financial projections included in the Adopted Budget. The report shall include a narrative to describe any significant operational policy changes and explain any significant variation from budgeted projections. SDOT may adjust the performance and financial metrics with the written concurrence of the Chair of the Transportation Committee, to reflect changes to reporting methods from King County or other sources of data. The report shall be submitted in writing to the Chair of the Transportation Committee."*

In 2019, SDOT entered an Interlocal Agreement with King County Metro, whereby operating costs for FHS and SLU are reconciled by June 30 of each year. Through the reconciliation process, Metro compiles all actual costs incurred to operate the streetcars and compares the amount to invoices paid by SDOT monthly throughout the year, with a financial settlement as needed. It takes Metro three months to produce the final actual costs incurred, as financial systems close out the previous year during the first quarter. Once reconciliation is complete, SDOT can prepare the analysis included in the annual report. This reconciliation process only happens once a year. Since 2019, SDOT has prepared an annual report which aligns with this annual reconciliation process, rather than the bi-annual report requested in Ordinance 124946.

Figure 1 shows the South Lake Union and First Hill Streetcar segment alignments along with the proposed Culture Connector (formerly the Center City Connector or C3 project) route.

FIGURE 1: SEATTLE STREETCAR SYSTEM MAP



SOUTH LAKE UNION STREETCAR

The South Lake Union Streetcar was approved by the City Council in 2005 in response to efforts to develop the South Lake Union neighborhood into a biotechnology and biomedical research hub. The $56.4 million line was funded nearly 50% by property owners along the alignment and the remainder by federal, state, and local funds.

The SLU line is 1.3 miles long and operates through mixed traffic. The alignment currently consists of approximately 90% dedicated right of way (both business and transit access and streetcar-only lanes). Once the Rapid Ride J line project is completed, the alignment will be in approximately 95% dedicated right of way. The line is served by a fleet of four Inekon vehicles operating in mixed right-of-way and powered exclusively by an overhead contact system. SLU operates an average 10- to 15-minute service frequency from 6:00am – 9:00pm weekdays, 7:00am-9:00pm Saturdays and 10:00am-7:00pm Sundays.

The SLU line started operations on December 12, 2007. It conveniently connects thousands of jobs in the South Lake Union neighborhood to the downtown core and additional regional transit connections at Westlake. There are nine stops along the alignment leading to restaurants, retail, businesses, and Lake Union's 12-acre waterfront park. The southern terminus at Westlake/McGraw Square is a block away from Monorail and the Link Light Rail station at Westlake Center. SLU is served by an Operations and Maintenance Facility (OMF) located at 318 Fairview Ave N.

FIRST HILL STREETCAR

The First Hill Streetcar connects major medical facilities, Seattle Central College, Seattle University, and a variety of neighborhoods to the King Street mobility hub, which provides connections to Sounder trains, Link light rail, and regional bus transit. Construction of the First Hill Streetcar line was funded by Sound Transit. Due to high construction and engineering risks, Sound Transit removed the proposed First Hill station from the North Link preferred route in July 2005 and funded a streetcar connection instead. It was approved by the Seattle City Council in December 2008. Construction began in late April 2012, and operation began in January 2016.

The First Hill Streetcar line consists of 10 stops and is 2.5 miles long. It operates with six streetcar vehicles, provides an average 15- to 20-minute service frequency from 5:00am-10:30pm weekdays, 6:00am-10:30pm Saturdays and 10:00am-8:00pm Sundays. FHS is served by an OMF located at 848 7th Ave S.

CULTURE CONNECTOR (FORMERLY CENTER CITY CONNECTOR)[2]

The Culture Connector (formerly the Center City Connector or C3) is an identified project that would connect the South Lake Union and First Hill streetcars. It would create new north-south connections from Stewart St in Westlake to Jackson St in Pioneer Square and allow for unified streetcar line. In 2023, a Culture Connector Delivery Assessment was undertaken to update project assumptions, cost estimates, and delivery approaches. The report was released in early 2024 and is available on the project website. While the project is not active, the Culture Connector is part of the long-term transportation network, as identified in the Council-adopted Seattle Transportation Plan. For the purposes of this report, future year projections include only SLU and FHS operations.

[2]During Council's budget discussions in the fall of 2024, Council removed all unsecured funding from the Culture Connector project, and no appropriations were included in the 2025-2030 Adopted CIP.

Operations Highlights

GOVERNANCE STRUCTURE AND BUDGET OVERVIEW

The South Lake Union and First Hill Streetcar lines are owned by the City of Seattle and operated by King County Metro (Metro). This partnership, including respective roles, responsibilities, and funding commitments, is detailed in the 2019 Interlocal Agreement (ILA) between the City of Seattle and King County. This agreement was executed in December 2019 and replaced the 2014 Amended & Restated ILA between the City of Seattle and King County. An amendment was executed in 2022 clearly defining safety roles and responsibilities to align with updated federal requirements. Another amendment was executed in 2024, renewing Metro's funding support to the City of Seattle for the next five years at $1.7 million per year. The latest amendment also secured increased access to more of Metro's agency-wide services, such as enhanced customer information through social media and transit alerts and participation in County-led customer surveying, data collection, performance reporting, and analysis.

Metro, as operator of the system, employs approximately 62 operators, supervisors, and maintenance staff dedicated to streetcar operations. While nearly all day-to-day operations and maintenance responsibilities reside with Metro under the ILA, SDOT is responsible for decisions regarding safety, overall budget and financial planning, representation of the streetcar in regional planning efforts, level of service, fare policy and enforcement, and long-term asset management.

In addition to revenues and expenses from Metro, the overall streetcar operations and maintenance budget includes revenue generated from the streetcar sponsorship program, federal grants, a contribution from the Seattle Transit Measure, and cash fares collected directly by SDOT from streetcar ticket vending machines. It also includes costs directly incurred by SDOT for such items as labor for program management and safety oversight, asset repairs, right-of-way maintenance, and other operations and maintenance activities not performed by Metro.

SAFETY & SECURITY

The Seattle Streetcar is a Rail Transit Agency (RTA) subject to oversight by the Washington State Department of Transportation (WSDOT), which serves on behalf of the federal government as the State Safety Oversight Agency (SSOA) for the State of Washington. In July 2019, the FTA's Public Transportation Agency Safety Plan (PTASP) final rule (49 CFR Part 673) became effective. The final rule made major changes to the safety requirements and responsibilities of rail transit agencies, the largest of which required SDOT to develop a PTASP based on Safety Management System (SMS) principles and methods.

Under these regulations, SDOT employs a Chief Safety Officer (CSO) who reports directly to the Accountable Executive (the SDOT Director) on streetcar safety. The CSO has direct responsibility for implementing the safety plan as well as the associated Safety Management System (SMS) which is designed to broaden the culture of safety within a transit agency.

Many of the day-to-day responsibilities governing safety and security continue to be administered by Metro as the operator, including accident notification, reporting, and investigation. SDOT is responsible for safety certification, safety oversight, and internal safety auditing. SDOT is also the owner of the Transit Asset Management Plan (TAMP), which is referenced by the PTASP and reinforces State of Good Repair decision making.

Highlights of the safety program in 2024 include expanded FTA regulatory guidance via new safety performance requirements, requiring SSO agencies to implement risk-based inspections providing them with more visibility into agency activities that impact safety risk, increased incidents of security incidents, specifically on the South Jackson Corridor, and efforts to respond to continued safety incidents on streetcar.

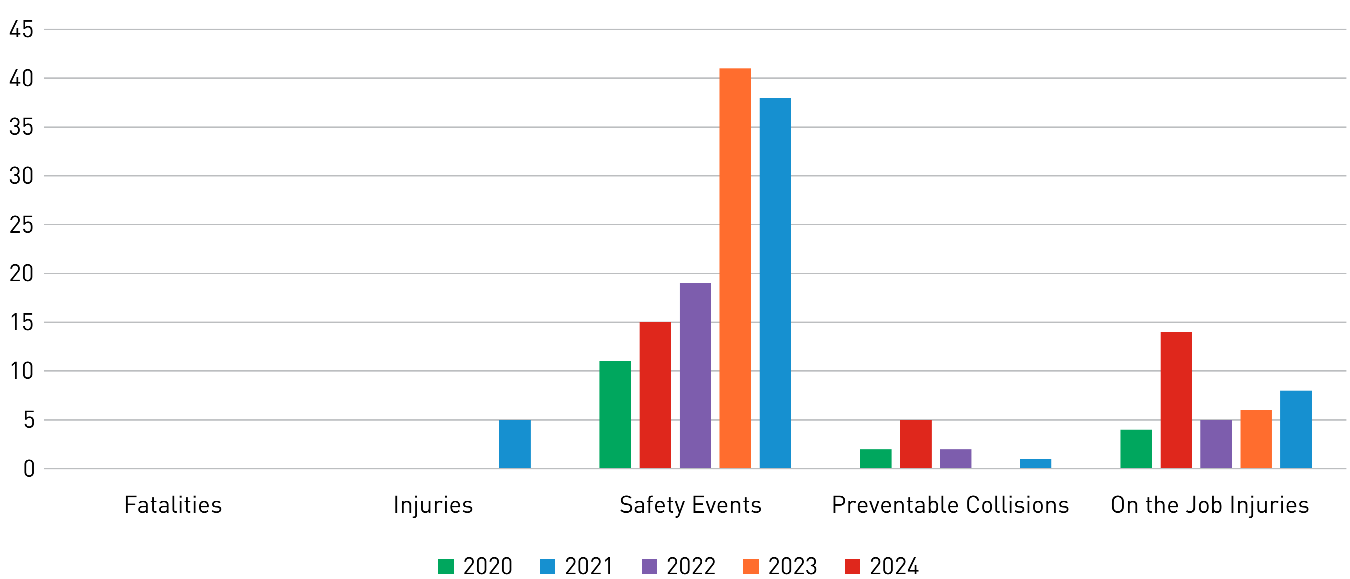
Safety Report

Operational safety is measured by data generated by safety events. A safety event is defined as:

> *"A reportable event meeting the National Transit Database (NTD) threshold for collision, fire, derailment, hazardous material spill, act of God or other incident that requires medical attention for one person and meets the reportable threshold."*

In 2024, on-the-job injuries and reportable injuries both increased slightly while overall safety events reduced. There was only one preventable collision. The low number of preventable collisions continues to be a noteworthy achievement for the streetcar program. Like in 2023, most safety events, 29 total, were emergency handle pulls. Emergency handle pull safety events are when a rider pulls the emergency handle outside of an emergency situation to exit the vehicle between stops (often when the vehicle is slowed or stopped by traffic). These continue to be a concern for the operation, and new warning signs indicating the dangers of pulling the handle when not at a platform are installed to discourage this activity. Streetcar operations also completed a live-scale simulated fire exercise in the First Hill streetcar facility in collaboration with Seattle Fire Department.

FIGURE 2: SEATTLE STREETCAR SAFETY EVENTS JANUARY 2020 -DECEMBER 2024



Security Report

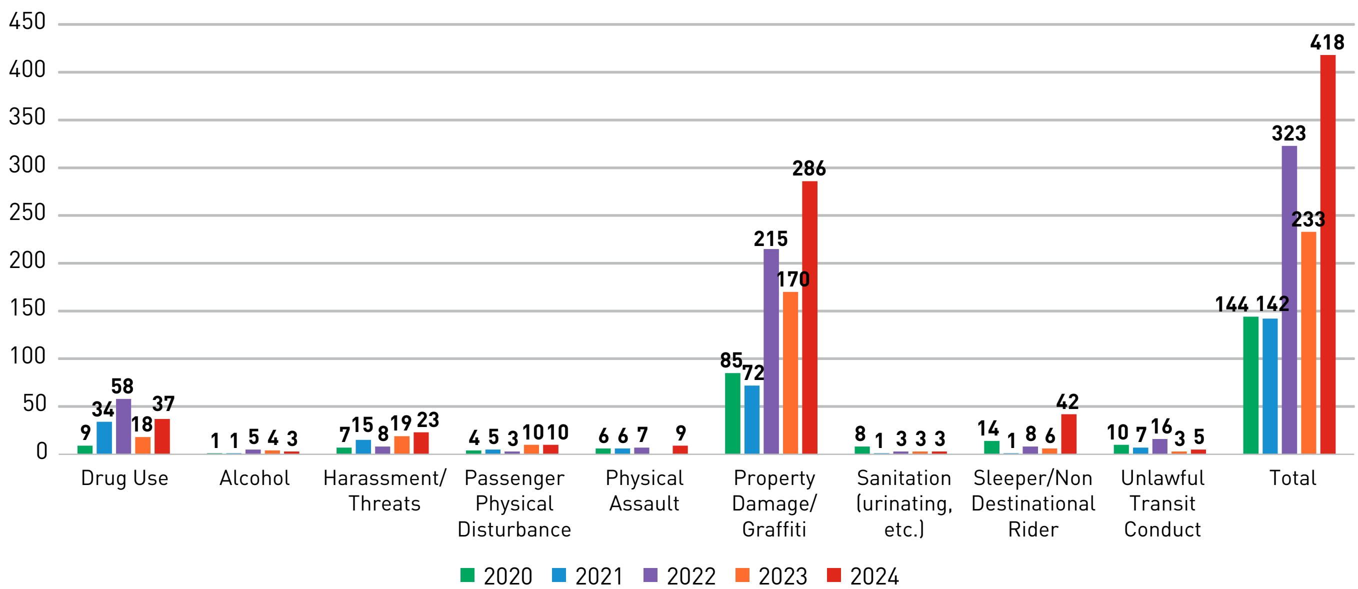
Like many transit agencies, streetcar saw an increase in security-related incidents on streetcars and platforms since the COVID-19 pandemic. Observed behaviors onboard and on platforms that include verbal abuse, intimidation and physical assault on passengers and employees. Since 2021, Metro deployed privately contracted security personnel on streetcar service. Security staff are trained to be customer service representatives first and security de-escalation second with the ability to call on law enforcement as required.

In 2024, security personnel services across the streetcar system doubled from four hours per day to eight hours per day, seven days a week across both lines. The implementation of security enforcement is consistent with the Metro Safety, Security, and Fare Enforcement (SaFE) Reform initiative[3] which guides Metro's deployment of security staff on Metro Bus Operations. This provides consistency between security service on streetcar and bus systems. Feedback from the public continues to be positive related to the presence of security personnel on board streetcars and at platforms.

In 2024, the number of security incidents was higher than 2023, increasing by 79%. Most of these incidents (68%) were graffiti on streetcar shelters and vehicles which is easily removed with cleaning supplies. Reported incidents of drug usage increased as did the presence of non-destination riders which correlated with the temporary closure of Metro bus stops at S Jackson and 12th Ave due to safety concerns for bus operators and waiting passengers. These incidents occurred late in the year and continued into early 2025 before declining.

Figure 3 shows the number and types of reported security incidents from 2020 to 2024. Security incidents are defined by FTA as *"an incident that poses a security risk to passengers or employees such as vandalism or assault. Security incidents can occur on the streetcar, on the platform, or occur as a result of an outside incident that overlaps with streetcar service."*

FIGURE 3: SEATTLE STREETCAR SECURITY INCIDENTS JANUARY 2020-DECEMBER 2024



[3]kingcounty.gov/en/dept/metro/about/policies/safe-reform-initiative

Performance Metrics

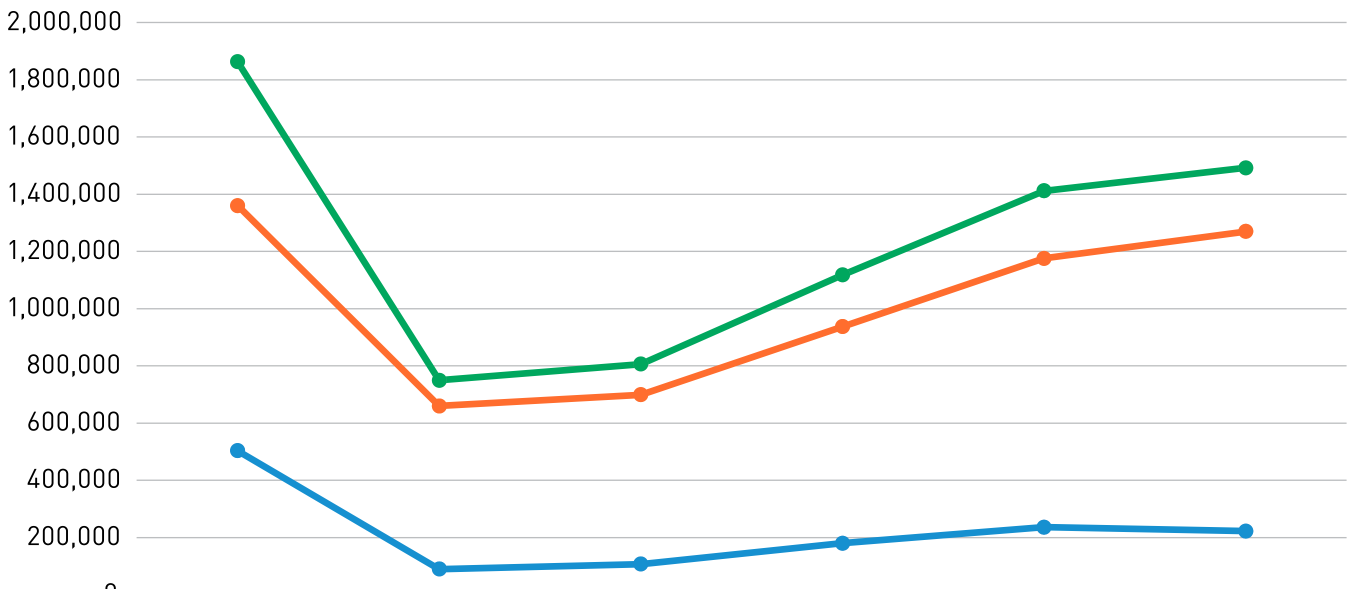
RIDERSHIP

Ridership on the Seattle Streetcar system continues to recover from the COVID-19 pandemic with continuous growth since 2021. Overall, the streetcar system had a combined systemwide ridership of 1,492,360 riders, which is approximately 80% of pre-pandemic ridership in 2019 (1,863,409). These numbers are higher than the ridership recovery percentages that King County Metro Bus Operations are seeing[4], with approximately 69% of pre-pandemic ridership.

Systemwide ridership increased by approximately 6% (approximately 80,472 more rides in 2024) compared to 2023. SDOT collects Streetcar ridership numbers via automatic passenger counters installed onboard vehicles. These numbers are validated by King County Metro before being sent to the National Transit Database (NTD). Ridership trends from 2019 to 2024 are shown in Figure 4.

- 2024 ridership on the First Hill Line[5] increased by approximately 8% over 2023. 2024 ridership on First Hill was like Metro's bus routes 48 and 75.
- 2024 ridership on the South Lake Union Line[6] decreased by approximately 6% over 2023. 2024 ridership on South Lake Union was like Metro's bus routes 27 and 125.

FIGURE 4: SEATTLE STREETCAR RIDERSHIP (NATIONAL TRANSIT DATA BASE REPORTED) 2019-2024



	2019	2020	2021	2022	2023	2024
SLU	503,374	89,414	107,145	180,211	236,121	222,592
FHS	1,360,035	660,029	698,975	937,394	1,175,767	1,269,768
Total	1,863,409	749,443	806,120	1,117,605	1,411,888	1,492,360

[4]As reported in the 2019 and 2024 APTA Public Transportation Ridership Reports.

[5]As reported by King County Metro to the National Transit Database.

[6]As reported by King County Metro to the National Transit Database.

TABLE 1: RIDERSHIP ACTUALS AND PROJECTIONS 2019-2028

	Actuals						Projected			
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FHS	1,360,035	660,029	698,975	937,394	1,175,767	1,269,768	1,307,861	1,347,097	1,387,510	1,429,135
SLU	503,374	89,414	107,145	180,211	236,121	222,592	229,270	236,148	243,232	250,529
Totals	**1,863,409**	**749,443**	**806,120**	**1,117,605**	**1,411,888**	**1,492,360**	**1,537,131**	**1,583,245**	**1,630,742**	**1,679,665**

Based on analysis of data since 2020, combined with ongoing observations, ridership is projected to plateau around 80% of 2019 values, and then increase around 3% annually after that. Metro Bus Operations are seeing similar trends with rapid post-pandemic growth beginning to plateau.

FHS is projected to reach the 2019 annual baseline in early 2025. SLU is projected to reach the 2019 annual baseline after the current projection period, based on current trends. However, the 2024 Commute Seattle Report showed a 3% increase in public transit trips for Center City commuters which shows an ongoing trend of transit ridership recovery systemwide. Lower ridership numbers in 2024 for South Lake Union Streetcar are likely due to a service suspension from August 9 until September 4, because of a full power outage caused by multiple part failures at two Traction Power Substations (TPSS).

Actual ridership and updated projections are located within Table 1.

RELIABILITY

Reliability is measured based on the arrival time of a given streetcar at designated points along the route between 7:00am and 7:00pm, relative to the scheduled arrival time. A streetcar is "on-time" if it arrives within a five-minute window prior to or later than the scheduled time at the designated time point. This is consistent with Metro Bus Operations measure of reliability.

Overall reliability in 2024 decreased for both lines. Reliability for the FHS line slightly decreased in 2024 from 83% to 80%, which is in line with Metro Bus Operations (78% as of March 2024)[7]. Reliability on the SLU line also decreased from 61% to 56%. The largest factor in reliability is general purpose traffic on the streetcar lines, which have limited sections of transit-only lanes. Both lines had large increases in reliability after 2020 largely due to decreasing pandemic travel trends. Decreases in reliability in 2024 are attributed to increasing general purpose travel across both alignments and battery failures on First Hill Streetcar which required vehicles to be removed from service, creating a gap in arrivals of the streetcar line. As employers such as Amazon in South Lake Union have returned to office three times a week starting in 2023, South Lake Union Streetcar has seen decreases in reliability with increased general-purpose travel.

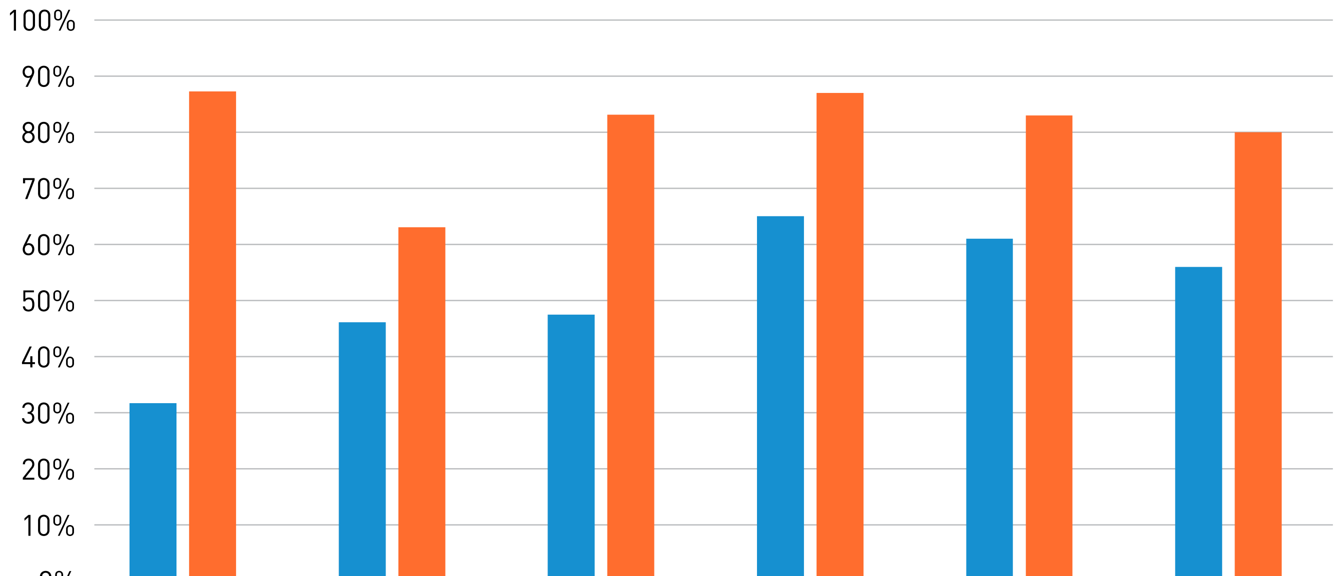
[7]Per Metro's 2024 System Evaluation Report

Data collection is another variable in analyzing trends over time. In 2022, SDOT switched real time information software from NextBus to Swiftly, which improved some of the accuracy of streetcar's reliability data. Metro is upgrading Seattle Streetcar's Computer-Aided Dispatch/ Automatic Vehicle Location (CAD/AVL) system in 2025 and 2026, which will provide train dispatch and real-time tracking. This should also improve data collection for both on-time performance and passenger boardings.

In 2024, SDOT also made a capital improvement to improve streetcar reliability along the South Lake Union line. The SDOT Transit Spot Improvement program installed safety posts and restricted left turns for vehicles exiting the Westin Hotel at Westlake and Stewart. This was both a safety hazard and caused reliability issues as vehicles tried to turn left as streetcars were advancing along Westlake.

Figure 5 shows the average annual percentage of time each line was operating "on-time."

FIGURE 5: SEATTLE STREETCAR ON-TIME PERFORMANCE 2019-2024[8]



	2019	2020	2021	2022	2023	2024
SLU	32%	46%	48%	65%	61%	56%
FHS	87%	63%	83%	87%	83%	80%

[8]Data begins at 2016 for FHS as that is when revenue service began for the line.

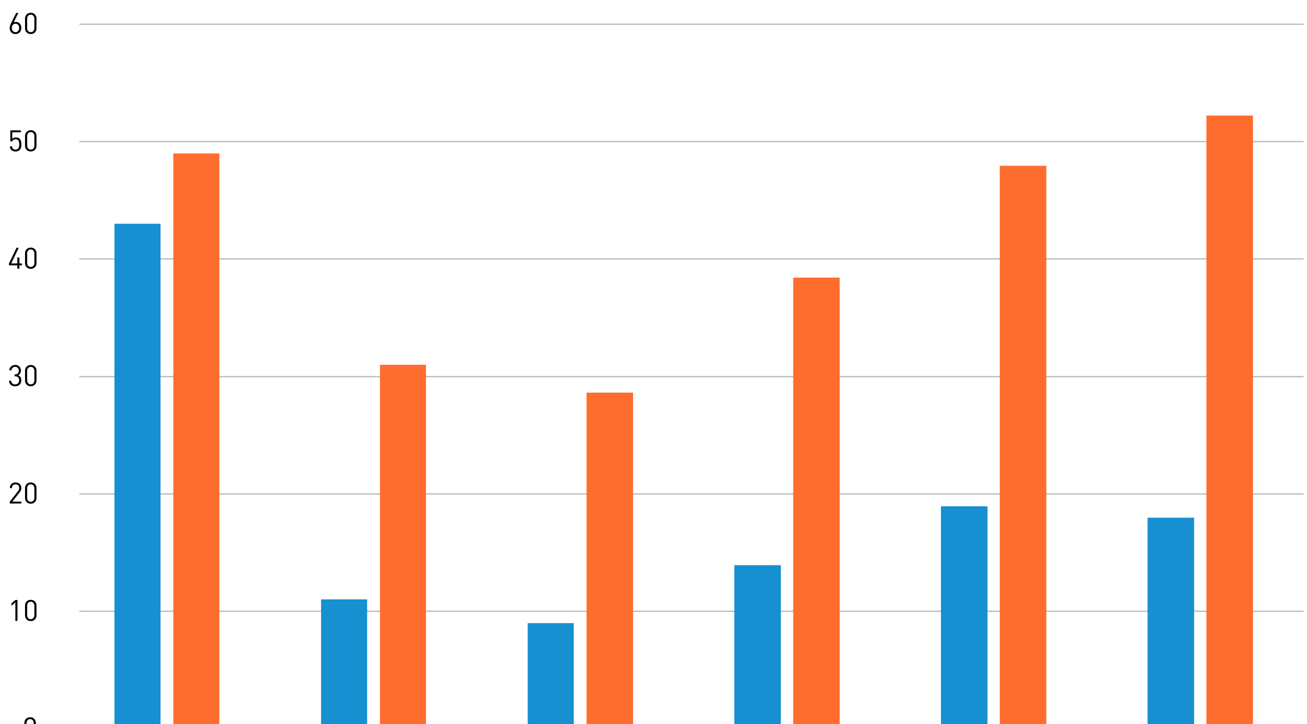
PRODUCTIVITY

Productivity on the SLU and FHS lines, as measured by riders per revenue hour, increased in 2024. Productivity is measured by calculating the number of riders, compared to the number of hours streetcar is operating scheduled service, or revenue hours[9]. Transit agencies use this indicator to manage service. SLU operated approximately 12,374 revenue hours, serving 18 riders per revenue hour. This is a 5% decrease from 2023, likely due to the August service suspension. FHS operated approximately 24,321 revenue hours, serving 52 riders per revenue hour. This is a 9% increase from 2023 and has surpassed 2019 levels (49 riders per revenue hour). 2024 productivity trends for SLU are slightly lower and FHS is twice that of overall Metro Bus system productivity (average of 22 riders per revenue hour[10]). Figure 6 shows the productivity of each line.

PERFORMANCE AND SAFETY IMPROVEMENTS

In 2024, the SDOT Transit Spot Improvement Program completed projects along both lines to increase safety for streetcar operators, reduce operational conflicts, and improve streetcar travel time and reliability. A platform extension at Westlake and Denny to accommodate streetcars and RapidRide buses was also completed in 2023. Table 2 outlines the safety improvement locations and dates completed.

FIGURE 6: SEATTLE STREETCAR PRODUCTIVITY 2019-2024



	2019	2020	2021	2022	2023	2024
SLU	43	11	9	14	19	18
FHS	49	31	29	38	48	52

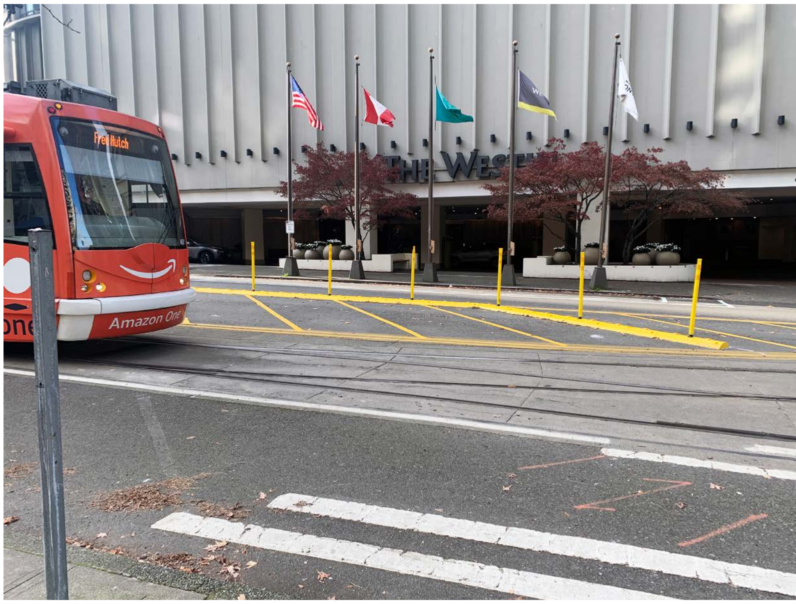
[9]Revenue Hours are defined as the number of hours streetcars are operating scheduled service. This time does not include layover or deadhead time.

[10]Based on an average of the data provided on Metro's Productivity Performance Report.

TABLE 2: 2024 STREETCAR SPOT IMPROVEMENTS

Location	Project	Date Completed
Valley and Fairview Ave	"Look Legends" to warn pedestrians	Q1 2024
Westlake Ave and Stewart St	Restrict left turns coming out of Westin Hotel and install safety posts	Q4 2024

"Look Legends" to warn pedestrians



Restrict left turns coming out of Westin Hotel and install safety posts

Financial Metrics

OPERATIONS AND MAINTENANCE COSTS

In 2020, the COVID-19 pandemic impacted streetcar operations through reduced service hours due to staffing and budget constraints compared to 2019, lower fare revenues, and ongoing asset maintenance challenges such as shelter damage. In 2024, SDOT continued to operate service at reduced levels (compared to 2019 service levels).

- For First Hill, there is a reduced span of service (ending at 10:30 PM instead of 1:00 AM) and service levels of every 15 minutes during non-peak hours instead of every 12 minutes.
- For South Lake Union, there is a reduced span of service (ending at 9:00 PM most days, instead of 11:00 PM). Service levels are the same as 2019 at every 12 minutes during peak hours, every 15 minutes during non-peak hours.

Short-term asset maintenance needs continued to increase, as streetcar shelter and vehicle damage due to vandalism increased 68% compared to 2023 (per 2024 Streetcar security incident data). While both streetcar lines experienced incidents of vandalism, the FHS line continued to experience higher levels. The most common form of vandalism was graffiti, broken glass, and scratched polycarbonate on streetcar shelters. In 2021, streetcar staff installed polycarbonate at shelters, instead of glass, and continue to expand use of this material whenever a glass shelter breaks. While polycarbonate is a more expensive material than glass, it is far more resilient to damage. From preliminary calculations, polycarbonate appears to be a lower cost option long-term, with reduced costs from ordering glass and installing graphics less often.

SDOT continued to reinvest in assets to provide safe, reliable and attractive service and respond to emerging maintenance needs as the system ages (South Lake Union is 18 years old, First Hill is 9 years old). 2024 maintenance projects included:

- a major rail repair on FHS,
- a drain grate repair on SLU,
- replacing broken parts after multiple failures at two TPSS on the SLU line,
- initiating a project to replace broken automatic passenger counters, train dispatch, and real time tracking technology on streetcar vehicles, and
- initiating a study for repair or replacement of the First Hill Streetcar batteries, which are experiencing multiple parts failures and are no longer supported by the supplier. The study will be available in 2025 and present options for repair and replacement to ensure the First Hill line continues reliable operations.

Systemwide, in 2024, operations and maintenance costs for the Seattle Streetcar increased by 21%, largely driven by an Amalgamated Transit Union (ATU) contract increase for King County Metro Streetcar employees. Additionally, there were increased costs due to purchasing parts needed for brake overhauls, starting a technology project to replace broken automatic passenger counters and real time tracking technology on streetcar vehicles, increasing maintenance needs, and increasing streetcar security levels. SDOT does not see all operation and maintenance costs as expenses in SDOT's accounting system, as King County Metro credits some revenues against invoices. Actual costs incurred in SDOT's accounting system are offset by federal relief dollars, ORCA fare revenue, and Metro operating contributions.

SDOT-only expenses in 2024 increased by 23% compared to 2023 due to a broken rail repair on First Hill and a track drain repair on South Lake Union utilizing SDOT crews.

In 2024, SDOT finished billing the $1.2 million from the American Rescue Plan Act (ARPA) for 2022 and 2023 streetcar operations expenses, which continued to provide relief from lost fare revenue. With this billing complete, the level of federal funding to support the streetcar is expected to be lower in future years.

Detailed financial metrics, including historic and projected operations and maintenance costs, can be found in Tables 3, 4, 5 and 6. These tables show both gross and net expenditures, as fare revenue, federal grant credits or King County Metro operating contributions are seen as credits on King County Metro operating invoices. SDOT's financial system does not reflect these financial line items as these are credits netted against KCM Operating Invoices and are not directly received through SDOT's accounting system.

FUNDING

Public transit systems require revenue sources outside of fare revenue to meet operating and maintenance expenses. In 2024, the Seattle Streetcar revenue sources included fare revenue (through ORCA and ticket vending machine sales), sponsorships, contributions from King County Metro and Amazon, and grants. The City also invests other transportation revenues, Seattle Transit Measure funding (in 2024), to fund streetcar service. These revenues are noted in the Operating Transfer In section of tables 3, 4, 5, and 6.

The City has benefited from substantial external funding to support operations, especially for the First Hill line, for several years. However, in recent years, several sources have expired or declined. As part of the agreement to build the FHS line, Sound Transit provided 10 years of operating funding that expired in 2023. Regular annual amount of federal funds allocated through the Puget Sound Regional Council (PSRC) are now being distributed through a more competitive PSRC process that the streetcar will not be guaranteed to receive annually.

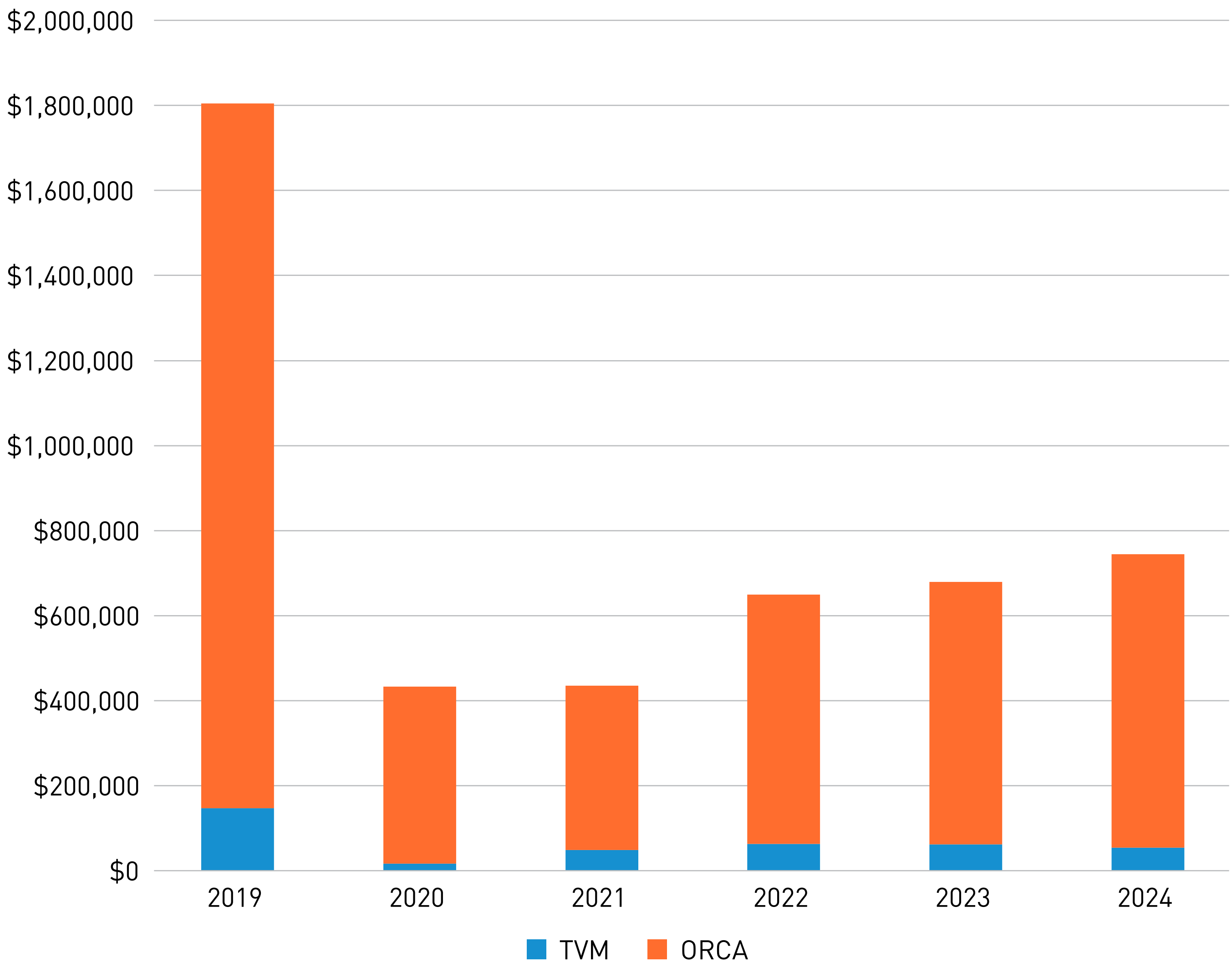
Additionally, one-time pandemic-era federal funds allocated directly to City and provided as a credit from Metro on invoices have been fully utilized. Cumulatively, this has led to a substantial increase in the amount of City funding needed to operate the streetcar. Additionally, there has been increased pressure on Commercial Parking Tax funding, which has been the historic funding local source for streetcar. Seattle Transit Measure funds replaced Commercial Parking Tax as a local funding source since 2023.

FARE REVENUE

Overall, fare revenue increased 10% in 2024 compared to 2023. ORCA fare revenue saw 12% growth in 2024, compared to 2023. This is likely due to the stable increase in streetcar ridership and ORCA card usage across both lines. Streetcar ticket vending machines (TVMs), which sell streetcar-only tickets, saw a decrease of 12% which could be due to several factors such as increased enrollment in ORCA products and the low number of streetcar-only trips being taken by transit riders.

A detailed outline of both ticket vending machine and ORCA fare sales can be found in Figure 7.

FIGURE 7: FARE REVENUE COLLECTED 2019-2024



Fare Policies

Since 2022, SDOT has made several fare policy decisions to expand equitable access to transit. Starting September 1, 2022, along with Metro and Sound Transit, SDOT implemented zero-dollar fares for streetcar passengers 18 and under as part of a state-wide free youth fares program. Agencies throughout King County made this change simultaneously to create a seamless regional ridership experience.

Other fare policies in 2022 that expanded equitable access included lowering the ORCA LIFT fare from $1.50 to $1.00 on a pilot basis starting September 2022, which was consistent with Metro and Sound Transit. In 2024, this pilot and the Subsidized Annual Pass Program were renewed until December 2025. As the Seattle Streetcar is a Metro-operated service and included in the ORCA system, renewing these programs ensured that low-income streetcar passengers aren't disproportionately impacted by these changes. Without a $1.00 ORCA LIFT fare change or subsidized annual pass renewal, low-income passengers would have needed to load extra funds onto their ORCA cards to transfer to streetcar from other modes.

SDOT analyzed the fare revenue impact of all these programs and found the financial impact to not be significant. The Subsidized Annual Pass Program resulted in $29,935 in foregone revenue in 2024. The ongoing ORCA LIFT fare reduction to $1.00 and the free Youth Fare Adoption in September 2022 appear to have minimal impact on foregone fare revenue as well (about $3,762 for ORCA LIFT, and $11,537 for youth fares in 2024).

Overall, the reduced fare programs enrollment is continuing to grow in the region, with 47% more transit riders regionwide enrolling in ORCA LIFT in 2024 compared to 2023, and 55% more riders enrolling in Subsidized Annual Pass in 2024 compared to 2023. Streetcar also saw a large increase in ORCA LIFT (24%) riders and Subsidized Annual Pass (9%) riders in 2024 compared to 2023.

SDOT continues to monitor the impact of these fare programs through reviewing Metro data on enrollment and revenue impacts, as well as participating in multi-agency coordination meetings with those participating in these fare programs.

Farebox Recovery and Fare Evasion

Fare revenue increased in 2024 (10%) compared to 2023. Total fare revenue per boarding on streetcar increased in 2024, averaging $0.53, compared to $0.48 in 2023.

Fare evasion is the percentage of riders who do not purchase or possess the fare media required to travel. There was no active fare enforcement on the Seattle Streetcar system in 2024, and Streetcar Operation Supervisors paused conducting fare inspection surveys on both streetcar lines since March 2020. In 2025, fare enforcement will begin on Seattle Streetcar consistent with Metro bus operations.

Fare evasion data is calculated using ORCA and ticket vending machine fare transactions compared to National Transit Database (NTD) validated passenger unlinked trip data[11]. This comparison shows the percentage of fare-paying passengers, compared to all passengers.

Based on this data, overall, the rate of non-payment system-wide decreased slightly to 63% in 2024, compared to 64% in 2023. The rate of non-payment for FHS increased slightly in 2024 to 71%, compared to 69% in 2022. The rate of non-payment for SLU decreased significantly to 16% in 2024, compared to 40% in 2023. For comparison, Sound Transit's fare evasion rate was 45% in 2023.

[11]Unlinked Passenger Trips is the number of times passengers board public transportation vehicles.

Streetcar's overall fare evasion rates could also be increasing due to the adoption of free youth fares in September 2022 and associated low levels of ORCA tapping as youth riders can ride without presenting fare media. The lower SLU fare evasion rate could be due to higher levels of ORCA tapping with increasing commute trips and fares being collected. Streetcar passengers using institution-paid ORCA Passport continue to be the largest contributors to fare revenue.

In 2024, Streetcar Program staff launched a marketing campaign to both promote the SLU Streetcar as a commute and daily trip option and enroll more SLU businesses in ORCA Business Passport Accounts. The Streetcar Program and Transportation Options Team collaborated to create and send out postcards to 1,339 small to mid-sized South Lake Union businesses from October 3 - December 31, promoting both ORCA Business Passport Accounts and the South Lake Union Streetcar as a travel option.

Tables 7 and 8 show historic and actual ridership and estimated non-payment data. Farebox recovery ratios are the percentage of an agency's overall operating costs funded by the fares it collects. Farebox recovery ratios evaluate farebox revenue compared to operating costs. Fare evasion rates compare total riders to fare paying riders.

In 2024, systemwide, farebox recovery ratios decreased to 5% from 6% in 2023. The farebox recovery ratios for FHS and SLU were approximately 4% and 7%, respectively. In 2023, farebox recovery ratios for FHS and SLU were approximately 5% and 9%, respectively. This is likely due to fare revenues not increasing by much in 2024 compared to rising operating costs. Farebox recovery ratios are expected to increase in 2025 due to the start of fare enforcement and an increase in fares, both which will align with Metro bus operations.

By comparison, in 2023 Sound Transit Link Light Rail farebox recovery rate was reported at 16%, and King County Metro bus, trolley bus, and DART service recovery rate were reported at 8.4%[12] . These figures compare to 20% (ST) and 12% (King County) respectively for 2019 and demonstrate the dramatic loss of farebox revenue for transit agencies in the region. Farebox recovery per line is outlined in Tables 3, 4, 5, 6, 7, and 8.

[12] 2024 NTD-reported farebox recovery ratios for Sound Transit and King County were not yet available.

TABLE 3: SOUTH LAKE UNION HISTORIC AND CURRENT OPERATING FUNDING AND EXPENSES

Revenue	2020	2021	2022	2023	2024	Adopted Budget 2025	Projected 2025
SDOT							
Fare Revenue - TVM[13]	$169,000	$47,000	$61,000	$60,000	$153,000	$46,000	$60,000
Lease Revenue	$89,000	($89,000)					
Sponsorship	$85,000	$86,000	$108,000		$107,000	$44,000	$94,000
Federal Grants	$705,000		$314,000		$1,269,000		$770,000
Contribution from Metro[14]	$1,550,000						
Other Private Contributions - Amazon	$245,000	$267,000	$264,000	$281,000	$282,000		
Operating Transfer In[15]	$1,669,000	$1,683,000	$1,738,000	$1,879,000	$6,765,000	$3,246,000	$2,240,000
Total Revenue	**$4,512,000**	**$1,994,000**	**$2,485,000**	**$2,220,000**	**$8,576,000**	**$3,336,000**	**$3,164,000**
Expenditures							
SDOT	$313,000	$488,000	$531,000	$648,000	$639,000	$629,000	$629,000
Metro Gross[16]	$3,215,000	$3,552,000	$3,300,000	$4,343,000	$6,061,000	$5,733,000	$6,1855,000
Fare Revenue - ORCA		($124,000)	($217,000)	($181,000)	($265,000)	($242,000)	($242,000)
Federal Grants[17]		($250,000)	($630,000)				
Contribution from Metro		($1,597,000)	($1,644,000)	($1,694,000)	($1,745,000)	($1,700,000)	($1,700,000)
Metro Net	$3,215,000	$1,581,000	$809,000	$2,468,000	$4,051,000	$3,791,000	$4,243,000
Total Expenditures	**$3,528,000**	**$2,069,000**	**$1,340,000**	**$3,116,000**	**$4,690,000**	**$4,420,000**	**$4,872,000**

[13]Ticket Vending Machine (TVM) includes ORCA and TVM fare revenue received directly by SDOT. Since 2021, KCM has credited ORCA fare revenue against their operating invoices. These amounts are reflected in the blue section under expenses
[14]As of 2021, KCM's South Lake Union Operating contribution is shown as invoice credits and not directly received by SDOT.
[15]Intradepartmental transfers made from SDOT managed Transportation Fund using Commercial Parking Tax funding through 2022. The funding was switched to the Transportation Benefit District Fund starting in 2023.
[16]KCM Operating Costs displayed here show true operating costs (not what is deducted from the invoices). Net operating costs are shown below with deductions removed.
[17]CARES, CRRSAA, and ARPA credits were deducted from KCM Operating Invoices and not directly received by SDOT.

TABLE 4: SOUTH LAKE UNION PROJECTED FUNDING AND EXPENSES

Revenues	2026	2027	2028	2029	2030
SDOT					
Fare Revenue - TVM[18]	$60,000	$60,000	$61,000	$62,000	$63,000
Sponsorship	$97,000	$99,000	$101,000	$103,000	$104,000
Federal Grants					
Operating Transfer In[19]	$2,720,000	$2,040,000			
Total Revenue	**$2,877,000**	**$2,199,000**	**$162,000**	**$165,000**	**$167,000**
Expenditures					
SDOT	$651,000	$684,000	$708,000	$733,000	$759,000
Metro Gross[20]	$5,923,000	$6,582,000	$6,746,000	$6,916,000	$7,261,000
Fare Revenue - ORCA	($296,000)	($303,000)	($309,000)	($315,000)	($345,000)
Contribution from Metro	($1,744,000)	($1,744,000)	($1,744,000)	($1,744,000)	($1,744,000)
Metro Net	$3,883,000	$4,535,000	$4,693,000	$4,857,000	$5,172,000
Total Expenditures	**$4,534,000**	**$5,219,000**	**$5,401,000**	**$5,590,000**	**$5,931,000**

TABLE 5: FIRST HILL HISTORIC AND CURRENT FUNDING AND EXPENSES

						Adopted Budget	Projected
Revenues	2020	2021	2022	2023	2024	2025	2025
SDOT							
Sponsorship		($17,000)				$65,000	$140,000
Federal Grants	$650,000	$688,000		$471,000	$2,527,000	$433,000	$518,000
Contribution from Sound Transit[21]	$5,000,000	$5,000,000	$5,000,000	$5,000,000			
Miscellaneous Revenue	$28,000	$4,000	$60,000	$111,000	$56,000	$142,000	$76,000
Operating Transfer In	$3,881,000	$3,613,000	$3,529,000	$3,647,000	$3,435,000	$6,954,000	$8,960,000
Total Revenue	**$9,559,000**	**$9,288,000**	**$8,589,000**	**$9,229,000**	**$6,018,000**	**$7,594,000**	**$9,694,000**
Expenditures							
SDOT	$1,120,000	$741,000	$915,000	$745,000	$916,000	$941,000	$941,000
Metro Gross[22]	$6,879,229	$8,811,000	$7,852,000	$8,862,000	$9,924,000	$9,079,000	$9,882,000
Fare Revenue - ORCA	($265,000)	($263,000)	($369,000)	($437,000)	($442,000)	($584,000)	($584,000)
Federal Grant Credits		($1,030,000)	($1,331,000)				
Metro Net	$7,423,000	$7,518,000	$6,152,000	$8,425,000	$9,482,000	$8,495,000	$9,298,000
Total Expenditures	**$7,734,229**	**$8,259,000**	**$7,067,000**	**$9,170,000**	**$10,398,000**	**$9,436,000**	**$10,239,000**

[18]See note 19
[19]See note 21
[20]See note 22
[21]The Sound Transit contribution to FHS of $5 million annually concluded in 2023.
[22]See note 22

TABLE 6: FIRST HILL PROJECTED FUNDING AND EXPENSES

Revenues	2026	2027	2028	2029	2030
SDOT					
Sponsorship	$145,000	$148,000	$151,000	$154,000	$155,000
Federal Grants	$410,000	$410,000	$418,000	$425,000	$435,000
Miscellaneous Revenue	$10,000	$10,000	$10,000	$10,000	$10,000
Operating Transfer In	$10,880,000	$8,160,000			
Total Revenue	**$11,445,000**	**$8,728,000**	**$579,000**	**$589,000**	**$600,000**
Expenditures					
SDOT	$974,000	$989,000	$1,027,000	$1,065,000	$1,090,000
Metro Gross[23]	$9,385,000	$10,599,000	$10,964,000	$11,342,000	$11,909,000
Fare Revenue - ORCA	($602,000)	($620,000)	($639,000)	($658,000)	$689,000
Metro Net	$8,783,000	$9,979,000	$10,325,000	$10,684,000	$12,598,000
Total Expenditures	**$9,757,000**	**$10,968,000**	**$11,352,000**	**$11,749,000**	**$13,688,000**

TABLE 7: FIRST HILL STREETCAR PERFORMANCE HISTORIC AND ESTIMATED

	Actuals						Projected			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Ridership	1,360,035	660,029	698,975	937,394	1,175,767	1,269,768	1,307,861	1,347,097	1,387,510	1,429,135
Farebox Recovery Ratio	12%	3%	3%	4%	5%	4%	6%	5%	5%	5%
Productivity	49	31	29	38	48	52	54	55	57	59
"Fare Evasion"	20%	23%	69%	68%	69%	71%	70%	69%	69%	69%
Reliability (On-Time Performance)	87%	63%	83%	87%	83%	80%	80%	80%	80%	80%

TABLE 8: SOUTH LAKE UNION PERFORMANCE HISTORICAL AND ESTIMATED

	Actuals						Projected			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Ridership	503,374	89,414	107,145	180,211	236,121	245,440	283,807	292,321	301,090	310,123
Farebox Recovery Ratio	20%	5%	4%	7%	9%	7%	11%	10%	10%	10%
Productivity	43	11	9	14	19	18	19	19	20	20
"Fare Evasion"	7%	3%	11%	16%	40%	16%	15%	15%	15%	15%
Reliability (On-Time Performance)	32%	46%	48%	65%	61%	56%	56%	56%	56%	56%

[23] See note 22

SPONSORSHIP

In 2024, SDOT continued to see an increase in sponsorship revenue with the agency, Intersection, managing the sponsorship program.

As the contract began in March 2023, SDOT receives payment for each year's sales at the end of the annual term. 2024 earned revenue from March 2024 to March 2025 was $233,796, an 118% increase from 2023 revenue at $107,378. Due to the payment structure, 2023 revenue will be reflected in the 2024 Operations Report financial tables (where 2024 revenue will be reflected in 2025). With this model, SDOT expects this to create a more predictable yearly revenue source for the streetcar program.

OPERATING CONTRIBUTIONS

Metro contributions to the SLU line continued to be the largest source of streetcar funding in 2024. The Metro contribution to SLU of $1.55 million annually, with slight increases each year, continued under the Interlocal Agreement (ILA) through 2024. In 2024, SDOT renegotiated the operating ILA with Metro to include a financial commitment of $1.7 million annually through 2029 with no yearly increases. The Sound Transit contribution to FHS of $5 million annually concluded in 2023. 2024 was the last year for the Amazon operating contribution to the SLU line.

FEDERAL RELIEF GRANT FUNDING

From 2020 to 2021, federal relief funds for the COVID-19 pandemic provided significant financial support for streetcar operations. The final relief funds from ARPA were disbursed in 2024 for 2022 expenses.

Detailed financial metrics, including historic and projected funding sources, can be found in Tables 3, 4, 5, and 6. Actuals in these tables show costs credited to Metro invoices such as ORCA fare revenue, federal grant credits, or Metro operating contributions, though SDOT's financial system does not reflect these financial line items as these are credited from Metro Operating Invoices and are not directly received through SDOT's accounting system.

Conclusion

2024 IN REVIEW

In 2024, the Seattle Streetcar system continued to see significant signs of recovery from the impacts of the COVID-19 pandemic. The streetcar experienced meaningful ridership and fare revenue growth in 2024, compared to 2023.

- Systemwide, the Seattle Streetcar ridership increased by 6% in 2024 (1,492,360) compared to 2023 (1,411,888).
- Streetcar fare revenue increased 10% in 2024 compared to 2023.

Operations and maintenance costs for the Seattle Streetcar increased by 21%, largely due to an ATU contract increase for King County Metro Streetcar employees. Additional increases were due to purchasing parts needed for brake overhauls, a technology project to replace broken automatic passenger counters and real time tracking technology on streetcar vehicles, increasing maintenance needs, and increasing streetcar security levels. This includes the full operations and maintenance expenses to run the streetcar, not the actuals paid by SDOT (with fare revenue, operations contributions, and federal grant credits deducted). Additionally, external funding sources for streetcar are declining with the sunsetting of Sound Transit funding, final disbursement of federal relief funding, and decreased availability of Commercial Parking Tax funding. Seattle Transit Measure funding has replaced Commercial Parking Tax as the local funding source.

The streetcar safety program continued to mature, focusing on addressing safety incidents onboard streetcars and at platforms and responding to new federal requirements.

LOOKING AHEAD

SDOT anticipates streetcar operations, ridership, and fare revenue to continue to track with Metro performance as transit systems continue to recover in 2025. As shown in 2024 data, the Seattle Streetcar continues to be a key inter-neighborhood connector and is experiencing steadily increasing ridership from low levels in 2020 due to the pandemic.

Program wide, SDOT will be actively addressing a range of streetcar issues in 2025, including:

- System Stewardship: Continuing to steward the streetcar system as it ages, responding to emerging maintenance needs across both lines and reinvesting in assets to provide safe, reliable and attractive service. In 2025, this includes:
- Evaluating options to overhaul FHS batteries to preserve streetcar service levels.
- Repairing broken rails on FHS and SLU lines.
- Working with Metro on technology repairs to standardize with Metro bus and repair broken automatic passenger counting equipment.
- Rider Safety and Security: Continuing to reduce security incidents onboard streetcars and on platforms by providing consistent streetcar security and law enforcement coverage, specifically, by partnering with King County Metro Transit Police as the law enforcement agency on streetcar and introducing fare enforcement.

- Fare Enforcement: Beginning a phased approach for fare inspection in line with King County Metro and proposing fare changes in line with King County Metro and Sound Transit.
- Expanding accessibility and affordability: Continue to support low-income fare programs in partnership with Metro such as a human service bus ticket ORCA pilot.
- Federal Safety Regulations: Continuing to implement federal safety regulation changes resulting from the Bipartisan Infrastructure Law (BIL).
- Link Light Rail Extensions: Working with Sound Transit on mitigation efforts for the Ballard Link Extension, the construction of which likely means potential significant impacts to the operations of both SLU and FHS lines.

Appendix: Chart Captions

Figure 1: Map of Seattle Streetcar System
This map shows the two existing streetcar lines (South Lake Union and First Hill). The South Lake Union line connects downtown to South Lake Union. The First Hill line connects the Pioneer Square, Chinatown-International District, Central District, Yesler Terrace, First Hill, and Capitol Hill neighborhoods. The map shows a dotted line where the future Culture Connector path is along First Avenue.

Figure 2: Seattle Streetcar Safety Events January 2020-December 2024
This chart shows Streetcar safety events, including fatalities, injuries, safety events, preventable collisions, and on-the-job injuries, from 2020-2024. The chart shows that there were zero fatalities and few injuries during this period (with none from 2022-2024). In 2024 there were lower safety events, and slightly higher preventable collisions, and higher on-the-job injuries in 2024, compared to 2023.

Figure 3: Seattle Streetcar Security Incidents January 2020-December 2024
This chart shows Streetcar security incidents from 2020-2024. These incidents include drug use, alcohol use, harassment/threats, passenger physical disturbance, physical assault, property damage/graffiti, sanitation events (urinating, etc.), sleeping/non destination rider, and unlawful transit conduct. The chart shows that in 2024, the number of security incidents was higher than 2023 in some areas. Most of these incidents were graffiti on streetcar shelters and vehicles, reported incidents of drug usage, and the presence of non-destination riders.

Figure 4: Seattle Streetcar Ridership (National Transit Database Reported) 2019-2024
This chart shows ridership for both the South Lake Union and First Hill Streetcar lines from 2019 to 2024. The chart shows the drop in ridership for both lines during the COVID-19 pandemic in 2020, and that ridership has been steadily increasing for both lines since 2021.

Figure 5: Seattle Streetcar On-Time Performance 2019-2024
This chart shows on-time performance for both the South Lake Union and First Hill Streetcar lines from 2019 to 2024. This chart shows that overall reliability decreased for both lines in 2024 (61 to 56% for South Lake Union and 83% to 80% for First Hill).

Figure 6: Seattle Streetcar Productivity 2019-2024
This chart shows streetcar productivity for both the South Lake Union and First Hill Streetcar lines from 2019 to 2024. Productivity is the number of riders in a vehicle during an hour in service. This chart shows that productivity increased from 48 to 52 for First Hill and slightly decreased from 19 to 18 for South Lake Union in 2024.

Figure 7: Fare Revenue Collected 2019-2024
This chart shows streetcar fare revenue collected for both the South Lake Union and First Hill Streetcar lines from 2019 to 2024. The chart shows visually how much of the fare revenue consists of ORCA and ticket vending machine revenue, with ORCA making up 93% of revenue and ticket vending machine revenue making up 7% in 2024. Overall fare revenue increased by 10% in 2024 compared to 2023.

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