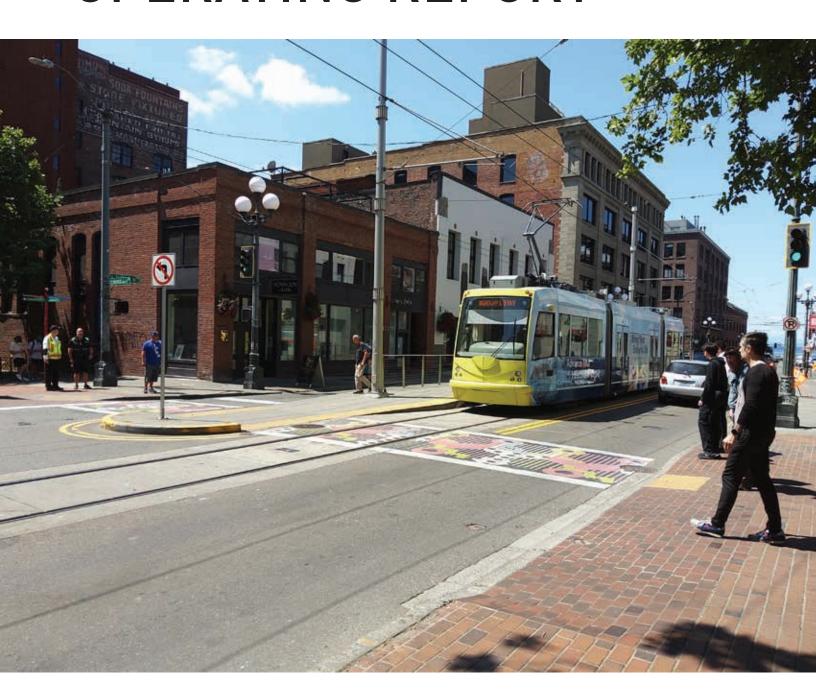
Seattle Department of Transportation

# 2022 ANNUAL STREETCAR OPERATING REPORT





# CONTENTS

1. E	EXECUTIVE SUMMARY	4
2. II	NTRODUCTION	6
	2.1 South Lake Union Streetcar	8
	2.2 First Hill Streetcar	
	2.3 Culture Connector (formerly Center City Connector)	
3. 0	OPERATIONS HIGHLIGHTS	10
	3.1 Governance Structure and Budget Overview	10
	3.2 Safety & Security	
4. P	PERFORMANCE METRICS	14
	4.1 Ridership	14
	4.2 Reliability	
	4.3 Productivity	
	4.4 Performance and Safety Improvements	
5. F	FINANCIAL METRICS	19
	5.1 Operations and Maintenance Costs	19
	5.2 Funding	
	5.3 Fare Revenue	
	5.4 Sponsorship	
	5.5 Federal Relief Grant Funding	
6. C	CONCLUSION	29
	6.1 2022 in Review	
	6.2 Looking Ahead	29

## **FIGURES**

Figure 1: Seattle Streetcar System Map	7
Figure 2: Seattle Streetcar Safety Events January 2020-December 2022	
Figure 3: Seattle Streetcar Security Incidents January 2020-December 2022	13
Figure 4: Seattle Streetcar Ridership (National Transit Data Base Reported) 2017-2022	14
Figure 5: Total Quarterly Ridership 2019-2023	15
Figure 6: Seattle Streetcar On-Time Performance 2009-2022	16
Figure 7: Seattle Streetcar Productivity 2016-2022	17
Figure 8: Fare Revenue Collected 2018-2022	20
TABLES	
Table 1: Ridership Actuals and Projections 2023-2028	16
Table 2: 2022 Streetcar Spot Improvements	
Table 3: South Lake Union Historic and Current Operating Funding and Expenses	
Table 4: South Lake Union Projected Funding and Expenses	
Table 5: First Hill Streetcar Historic and Current Funding and Expenses	25
Table 6: First Hill Projected Funding and Expenses	26
Table 7: First Hill Streetcar Performance Historic and Estimated	
Table 8: South Lake Union Performance Historical and Estimated	27

## 1. EXECUTIVE SUMMARY

For over 15 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 2022.

### 2022 highlights include:

Systemwide ridership continued to grow in 2022, exceeding the rate of growth of Metro bus services.

In 2022, there were **1,117,000** 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 39% over 2021, and reached 60% of total prepandemic ridership in 2019. This annual growth exceeded the ridership trends of Metro Bus Operations, which increased 26% in 2022.

New fare policies expanded equitable access to transit for Seattle Streetcar riders, while fare revenue continued to grow in 2022.

To advance SDOT's mission to provide safe and affordable access to places and opportunities, we adopted new fare policies in 2022 that expanded access to transit and align better with our regional transit partners, such as King County Metro and Sound Transit.

These new policies include:

- Zero-dollar fares for streetcar passengers
   18 and under, connecting youth to
   the freedom of transit in our City. This
   update was adopted in partnership with
   other regional transit agencies as part
   of the State's Move Ahead Washington
   transportation package.
- Reduced ORCA LIFT fares from \$1.50 to \$1.00 as a pilot program through 2023.
- Renewed Subsidized Annual Pass Program until December 2024.

All three policies have had minimal impact on fare revenue based on preliminary calculations.

Overall, in 2022, there was a 49% increase in fare revenue over 2021. This significant increase reflects a stabilization from pandemic trends, although fare revenue collection is still decreased compared to pre-pandemic levels in 2019 by 64%.

<sup>&</sup>lt;sup>1</sup>As reported in the 2019 and 2022 APTA Public Transportation Ridership Reports, Metro ridership was 48% less in 2022, compared to 2019. 2022 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.

### SDOT continued work on spot improvement projects to enhance safety, performance, and reliability.

SDOT's transit spot improvements program completed several projects to increase safety for people walking, biking, and rolling around the streetcar tracks, as well as to improve streetcar travel time and reliability.

### Projects included:

- Installing sidewalk markings at McGraw square to improve safety by reminding people to look both ways.
- Adding street markings and posts near streetcar tracks in South Lake Union to improve safety for bicyclists.
- Painting cross hatching throughout the SLU alignment to improve streetcar performance and reliability. Reliability on the SLU line improved from 48% to 65% in 2022.

### SDOT restarted efforts on the Culture Connector (formerly the Center City Connector) project.

In 2022, Director Spotts led walks with community stakeholders along 1st Avenue to share a vision for a linear entertainment-arts-culture district connected by the streetcar. SDOT also assessed approaches for restarting work on the Culture Connector project.

### SDOT and Metro staff continued to respond to the ongoing impacts of the COVID-19 pandemic.

The pandemic required streetcar operations to respond to continued safety and health measures in support of ongoing federal, state, and local regulations. These measures included continued signage and audio messages relaying COVID-19 related safety rules and recommendations, as well as mask dispensers onboard streetcar vehicles.

Service on the FHS and SLU streetcars also continued to have reduced service hours from 2019 levels based on staffing availability and ongoing SDOT budget reductions.

# 2. 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:

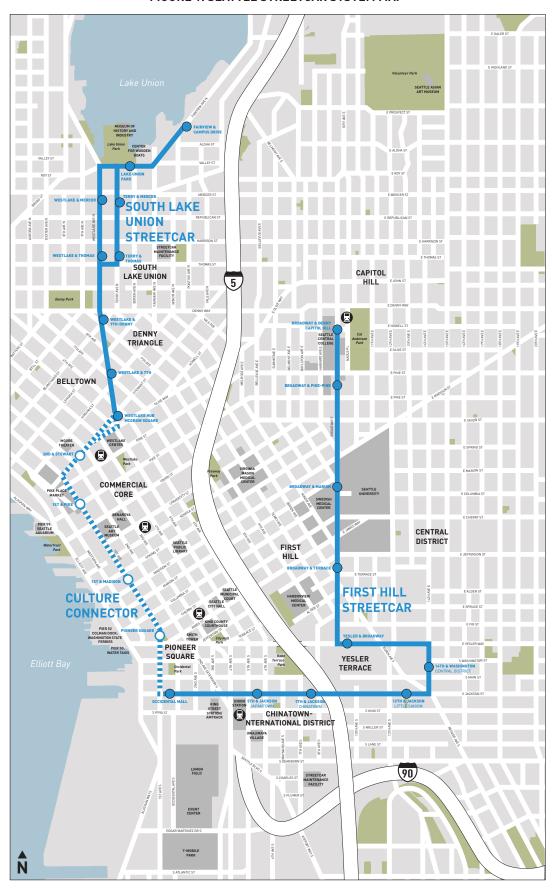
"The report shall include both performance metrics and financial metrics; and will include data for the past 5 years, estimates for the current year, and projections for the next 5 years. Performance metrics shall include ridership, farebox recovery ratio, productivity (riders per revenue hour), fare 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 Pool<sup>2</sup> 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 or 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 for a Q3 delivery 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.

<sup>&</sup>lt;sup>2</sup>An interfund loan for streetcar operations is currently supported by the City's Transportation Fund.

FIGURE 1: SEATTLE STREETCAR SYSTEM MAP



### 2.1 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 line is served by a fleet of four Inekon vehicles operating in mixed rightof-way and powered exclusively by an overhead contact system. SLU operates an average 10- to 15-minute service frequency from 6:00 am -9:00 pm weekdays, 7:00 am-9:00 pm Saturdays and 10:00 am-7:00 pm 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.

### 2.2 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 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.

### 2.3 CULTURE CONNECTOR *(FORMERLY CENTER CITY)* CONNECTOR

The Culture Connector (formerly the Center City Connector or C3) project would join the existing SLU and the FHS lines, creating new north-south connections from Stewart St in Westlake to Jackson St in Pioneer Square. The project could be funded through a combination of local and federal funds, including a Federal Transit Administration (FTA) Small Starts grant. The project is currently in the FTA Small Starts Project Development process and has a \$50M allocation in the federal Capital Investment Grant (CIG) program. A brief history is provided below.

 From 2012-2018, SDOT designed the Center City Connector project to connect the existing South Lake Union streetcar line with the First Hill Streetcar, which was under construction and opened in 2016. In 2014, Seattle City Council approved the Locally Preferred Alternative (LPA) and the project was approved for entry into the FTA Small Starts Project Development phase. SDOT successfully designed the project to be ready for bid, worked with funding partners to identify grant funding, and secured environmental approvals from the FTA to advance the project. A Finding of No Significant Impact (FONSI) for the project was issued by FTA in 2017. SDOT also worked with Seattle Public Utilities and Seattle City Light to design and construct a first phase of utility adjustments to accommodate the project.

- In March 2018, SDOT paused all work on the project pending an independent review of operating and capital costs led by the City Budget Office. In January 2019, the Durkan Administration announced that the results of the third-party analyses showed that the overall capital cost of the project was significantly higher than the budget passed in 2017.
- In August 2019, City Council authorized \$9 million in funding for critical design and planning work needed to advance the project. Then-Mayor Durkan also announced plans to work with community members, the City Council, transit partners, businesses, and stakeholders to move forward on the project. In September 2019, the Durkan Administration proposed a new tax on Transportation Network Company (TNC) trips, the proceeds of which can be used as local funding to close the capital budget gap for the project. City Council approved the new TNC tax in December 2019.
- In June 2020, SDOT paused the project again due to significant decline of revenues for the City and funding partners related to the COVID-19 pandemic.

- The 2022 Budget included \$2.4 million funded by TNC revenues to prepare a delivery assessment to enable SDOT to update key project information and provide analysis to support decision-makers in determining the future of the project. In 2022, amid ongoing financial challenges with TNC revenues post-pandemic, this work was paused.
- Greg Spotts began as SDOT Director in September 2022 following appointment by Mayor Bruce Harrell and confirmation by the City Council. Director Spotts saw a vision for the streetcar as the backbone of a linear arts and entertainment district that connects neighborhoods across Seattle. As a newly invigorated concept of the Culture Connector, SDOT assessed approaches for restarting work.

For the purposes of this report, future year projections include only SLU and FHS operations.

# 3. OPERATIONS HIGHLIGHTS

### 3.1 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 regarding the Seattle Streetcar. 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.

Metro, as operator of the system, employs approximately 55 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, 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, Sound Transit contributions<sup>3</sup>, federal grants, a contribution from the commercial parking tax, 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.

### 3.2 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), as authorized by the Moving Ahead for Progress in the 21st Century Act (MAP-21), 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 now has 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.

In 2021, the federal government passed the Bipartisan Infrastructure Law (BIL). While most of the bill was focused on providing funding to states and cities, there were minor changes to PTASP requirements. Notably, new benchmarks requiring a PTASP approval committee comprised

<sup>&</sup>lt;sup>3</sup>Under the Funding and Cooperative Agreement between Sound Transit and the City of Seattle for the First Hill Streetcar project, Sound Transit provides an annual contribution of \$5.0M to First Hill Streetcar operations and maintenance through 2023.

of a 50/50 mix of management and front-line labor were added to annual requirements. Each year, this group is required to review the revised PTASP prior to adoption. In 2022, SDOT worked with King County to identify union-represented members to fill this committee. This committee met three times at the end of 2022 to review and approve the PTASP.

A Streetcar Safety and Security Review Committee (SSRC) was launched in late 2022. This new committee, comprising a mix of SDOT and King County Metro employees, is designed to place a better focus on identified hazards associated with streetcar operation, SDOT staff from teams including Transit and Mobility, Transportation Operations, and Vision Zero meet with Metro personnel from the Streetcar Section, Safety, Security and Facilities. The intent of this committee is to speed up implementation of safety mitigations by improving the connection between those requesting changes and those implementing changes. Requests for changes come from Metro frontline employees, Metro managers, and SDOT streetcar staff. This committee is chaired by the Streetcar Chief Safety Officer and meets monthly.

### 3.2.1 Safety Report

Operational safety, defined as the potential for harm or property damage, remained relatively flat in 2022 as a function of total incidents when compared to 2021. Figure 2 below demonstrates the numbers broken down along officially adopted metrics in the Streetcar PTASP. 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."

Some examples of safety events include a collision in an intersection, a passenger pulling the emergency handle to stop the train when not at a platform, or a collision with an automobile that required that automobile to be towed from the scene.

A preventable collision is one that could have been prevented by better adhering to rules or procedures. A preventable collision is not always considered a safety event, as the outcome may not have met the threshold for reporting the incident to state safety oversight. 2022 was a banner year for preventable collisions with only two occurring all year.

On-The-Job injuries (OJI) were also significantly reduced in 2022 owing to improvements made to streetcars to improve operator comfort while operating streetcars. OJI's are not considered safety events as defined by the passage above.

The overall increase in safety events is a result of a 2022 regulatory change to broaden reporting requirements. Previous incidents that would not have been a reportable event, such as a passenger pulling an emergency handle to exit the streetcar, were included in 2022 data and show increased numbers when compared to 2021.

Overall, operational safety was highly regarded in 2022 with the very low number of preventable collisions indicative of overall operator adherence to rules and procedures.

20 16 14 12 8

Safety Events

**2020 2021 2022** 

FIGURE 2: SEATTLE STREETCAR SAFETY EVENTS JANUARY 2020 - DECEMBER 2022

### 3.2.2 Security Report

Fatalities

In response to rising numbers of securityrelated incidents on streetcars and platforms in 2021, SDOT worked with Metro to begin deployment of privately contracted security personnel on streetcar service. In 2022, SDOT and Metro observed behaviors onboard and on platforms that included verbal abuse. intimidation and physical assault on passengers and employees. Security staff are trained to be customer service representatives first and security de-escalation second with the ability to call on law enforcement in cases where they are required. Fare enforcement is not a component of this deployment.

Injuries

Security officers provide an average of four hours of presence per day, seven days a week. Metro has struggled with security officer shortages throughout 2022, which impacted Streetcar's deployment often resulting in less than four hours of security service. To address this, Metro hired a second security contractor in late 2022. The implementation of security enforcement is consistent with the Metro Safety, Security, and Fare Enforcement (SaFE) Reform initiative4 which guides Metro's deployment of security staff on Metro Bus Operations. This provides consistency between security service on streetcar and bus transit.

Preventable Collisions

On the Job Injuries

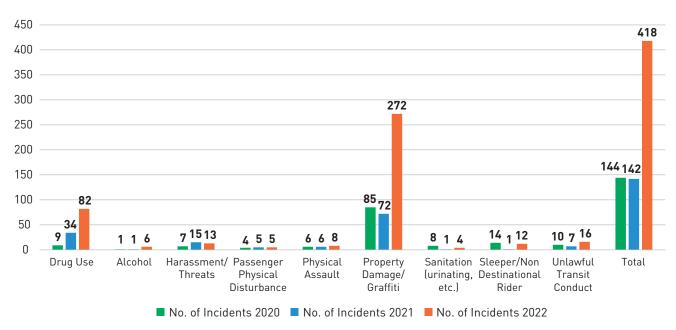
As a result of this emphasis on security, feedback from the public is positive. However, rates of incidents in 2022 continued to increase compared to 2021. Metro will continue to increase the security presence on streetcar in 2023 as more security staff becomes available.

<sup>4</sup>https://kingcounty.gov/depts/transportation/metro/about/ safety-security/safe-reform-initiative.aspx

Figure 3 shows the number and types of reported security incidents from 2020 to 2022. Security incidents are defined 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."

Property Damage / Vandalism continues to be the leading type of incident with rates nearly quadrupling compared to 2021. Drug use was the second leading cause, more than doubling compared to 2022.

FIGURE 3: SEATTLE STREETCAR SECURITY INCIDENTS JANUARY 2020-DECEMBER 2022



# 4. PERFORMANCE METRICS

### 4.1 RIDERSHIP

Ridership on the Seattle Streetcar system continues to be impacted by the COVID-19 pandemic but has seen continuous growth since 2021. Overall, ridership increased by approximately 39% in 2022 between both lines (approximately 311,485 riders) compared to 2021. 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 2017 to 2022 are shown in Figure 3. Quarterly ridership from 2019 to 2023 is shown in Figure 5 and highlights the consistent increase in ridership since 2021.

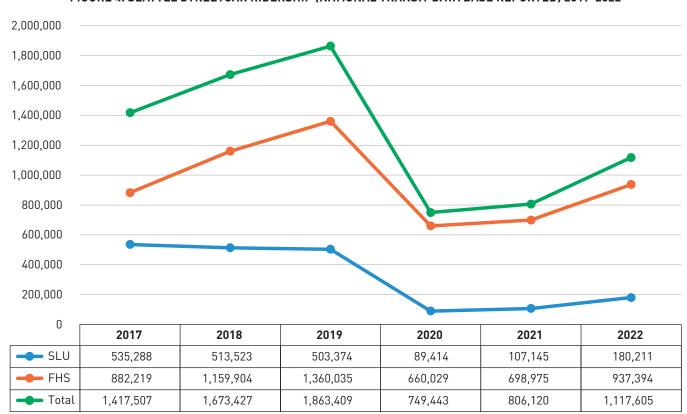


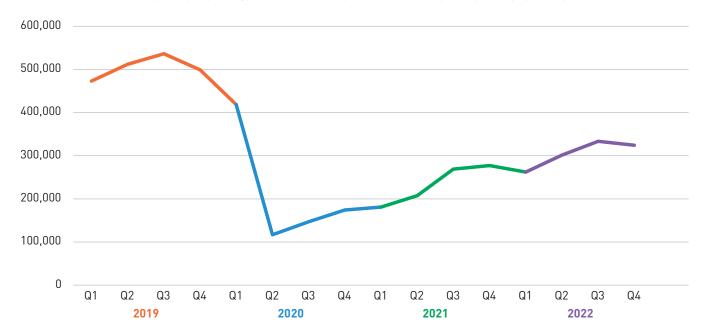
FIGURE 4: SEATTLE STREETCAR RIDERSHIP (NATIONAL TRANSIT DATA BASE REPORTED) 2017-2022

- 2022 ridership on the First Hill Line<sup>5</sup> increased by approximately 34% over 2021.
- 2022 ridership on the South Lake Union Line increased by approximately 68% over 2021.

<sup>&</sup>lt;sup>5</sup>As reported by King County Metro to the National Transit Database.

<sup>&</sup>lt;sup>6</sup>As reported by King County Metro to the National Transit Database.

FIGURE 5: TOTAL QUARTERLY RIDERSHIP 2019-2023 FOR FHS AND SLU LINES



Overall, the streetcar system had a combined systemwide ridership of 1,117,605 riders, which is approximately 60% 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<sup>7</sup>, with approximately 51% of pre-pandemic ridership. Following gains in ridership in 2022, ridership continues to incrementally increase for both streetcar lines in 2023.

In years prior, staff assumed 3% year-over-year growth in ridership for projection purposes. The COVID-19 pandemic disrupted ridership starting in 2020, making trend analysis from 2020 and beyond challenging. For this reason, SDOT has continued to use 2019 as the data comparison baseline for current and future year projections, and revised projection assumptions through 2024 based on observed growth in 2021 and 2022.

Projections used 2% per month growth in 2022, 3% per month growth in 2023, and 3% annual growth over the previous year in 2024-2026. FHS is projected to reach the 2019 annual baseline in mid-2023. SLU is not projected to reach the 2019 annual baseline until after the current projection period, based on current trends.8 2022 actual ridership was within 5% of the projected amount. As of the first quarter of 2023, ridership trends seem on track to align with current projections.

Actual ridership and updated projections are located within Table 1.

<sup>&</sup>lt;sup>7</sup>As reported in the 2019 and 2022 APTA Public Transportation Ridership Reports, as 2022 NTD Ridership reports for King County Metro Bus Operations have not been uploaded. Data may slightly differ from that included in Federal Transit Administration reports due to differences in data calculation procedures and in periods of time covered.

<sup>&</sup>lt;sup>8</sup>Ridership trends in this report do not include 2023 returnto-work trends such as Amazon or other major employers. The 2023 Annual Operations Report will include these trends.

**TABLE 1: RIDERSHIP ACTUALS AND PROJECTIONS 2019-2028** 

		Acti	ıals				Proje	ected		
Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
FHS	1,360,035	660,029	698,975	937,394	1,423,666	1,466,376	1,510,368	1,555,679	1,602,349	1,650,419
SLU	503,374	89,414	107,145	180,211	383,310	385,967	397,546	409,473	421,757	434,410
Totals	1,863,409	749,443	806,120	1,117,605	1,806,976	1,852,343	1,907,914	1,965,152	2,024,106	2,084,829

### 4.2 RELIABILITY

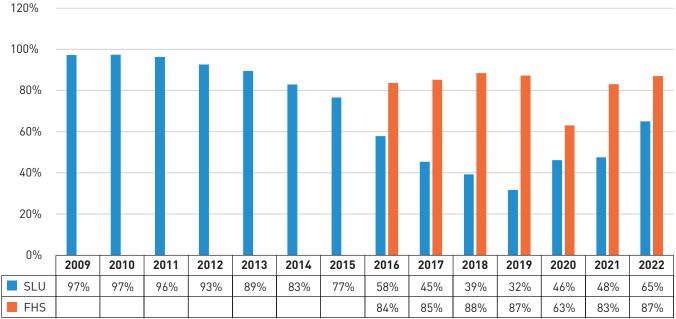
Reliability is measured based on the arrival time of a given streetcar at designated points along the route between 7:00am and 7:00pm, relative to the scheduled arrival time. A streetcar is "on-time" if it arrives within a window five minutes prior to or later than the scheduled time at the designated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

Overall reliability in 2022 improved for both lines. Reliability for the FHS line improved in 2022 from 83% to 87%, which is in line with Metro Bus Operations. Reliability on the SLU line improved from 48% to 65%. In 2022, SDOT switched real time information software from NextBus to Swiftly, which improved the accuracy of streetcar's reliability data.

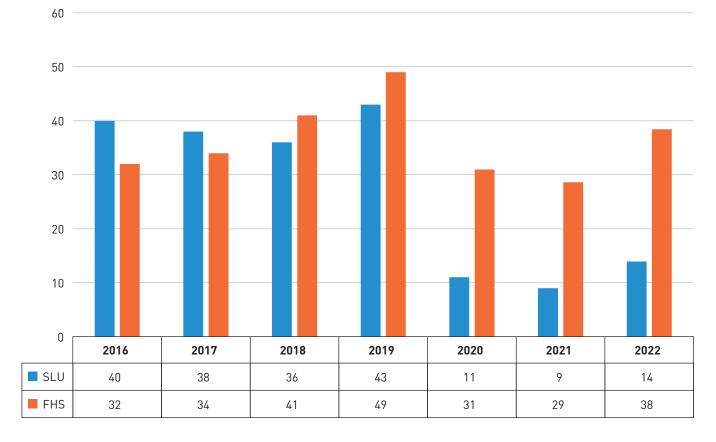
In 2022, SDOT also made several capital improvements to improve streetcar reliability along the South Lake Union line. The Transit Spot Improvement team installed cross hatchings to prevent cars from blocking the streetcar tracks at Terry Avenue and Thomas Street and installed tuff posts to prevent parked cars from blocking streetcar tracks at Westlake Avenue and Thomas Street, and at Westlake Avenue and John Street. On-time performance increased significantly for SLU in 2022. SDOT also initiated a performance analysis study in 2022 for both SLU and FHS, which will identify other capital projects to improve service reliability and performance.

Figure 6 shows the average annual percentage of time each line was operating "on-time."

FIGURE 6: SEATTLE STREETCAR ON-TIME PERFORMANCE 2009-20229



<sup>&</sup>lt;sup>9</sup>Data begins at 2016 for FHS as that is when revenue service began for the line.



### 4.3 PRODUCTIVITY

Productivity on the SLU and FHS lines, as measured by riders per revenue hour, increased in 2022. Productivity is measured by calculating the number of riders, compared to the number of hours streetcar is operating scheduled service, or revenue hours<sup>10</sup> (number of riders per revenue hour.) Transit agencies use this indicator to manage service. SLU operated approximately 12,943 revenue hours, serving 14 riders per revenue hour. FHS operated approximately 24,406 revenue hours, serving 38 riders per revenue hour. 2022 productivity trends for both FHS and SLU are in line with Metro's Bus Operations' productivity. Figure 7 shows the productivity of each line.

### 4.4 PERFORMANCE AND SAFETY **IMPROVEMENTS**

In 2022, SDOT continued work on spot improvement projects to improve safety, performance, and reliability. The SDOT Transit Spot Improvements Program completed work on several spot improvements along the South Lake Union line to increase safety for pedestrians and people on bicycles around streetcar tracks, reduce disruptive conditions identified through operations, and improve streetcar travel time and reliability. A platform extension at Westlake and Denny to accommodate streetcars and RapidRide buses was planned for 2022 but delayed due to workforce availability. While no spot improvements were completed along the First Hill line in 2022, several are scheduled to be completed in 2023.

Table 2 outlines the safety improvements locations and dates completed.

<sup>&</sup>lt;sup>10</sup>Revenue Hours are defined as the number of hours streetcars are operating scheduled service. This time does not include layover or deadhead time.

### **TABLE 2: 2022 STREETCAR SPOT IMPROVEMENTS**

Location	Project	Date Completed
McGraw Square	Install "look legends"	Q1
Terry Ave and Mercer Street	Install bicycle markings to guide bicyclists away from Streetcar tracks	Q1
Terry and Thomas	Install cross hatchings to prevent cars from blocking streetcar tracks	Q1
Westlake and Thomas	Install tuff posts to prevent parked cars from blocking streetcar tracks	Q1
Westlake and John	Install tuff posts to prevent parked cars from blocking streetcar tracks	Q1



"Look legends" at McGraw Square



Terry Avenue and Mercer Street bicycle markings



Terry Avenue and Thomas Street tuff posts and striping



Westlake Avenue and John Street tuff posts and striping

# 5. FINANCIAL METRICS

### **5.1 OPERATIONS AND MAINTENANCE** COSTS

In 2022, the COVID-19 pandemic continued to impact streetcar operations through reduced service hours due to staffing and budget constraints, lower fare revenue, and ongoing asset maintenance challenges such as shelter damage. In 2022, there was continuation of the 10% reduction of service (compared to 2019 service levels) due to the COVID-19 pandemic impact on Commercial Parking Tax (CPT) funds, a primary source of funding for the streetcar.

- For First Hill, this included a reduced span of service (ending at 10:30 PM instead of 1:00 AM) and service levels of every 15 minutes instead of every 10–12 minutes.
- For South Lake Union, this included a reduced span of service (ending at 9:00 PM most days, instead of 11:00 PM) and service levels of every 15 minutes most of the day plus added peak trips, instead of every 10-12 minutes.

Asset maintenance challenges such as streetcar shelter and vehicle damage continued to be an issue in 2022. While both SLU and FHS experienced incidents of vandalism, the FHS line continued to experience higher levels. The most common form of vandalism was spray paint graffiti and broken glass on streetcar shelters. In 2021, streetcar staff piloted using polycarbonate at shelters, instead of glass, and expanded use of this significantly throughout 2022. While polycarbonate is a more expensive material than glass, it is far more resilient to damage and wear and tear. From preliminary calculations, polycarbonate appears to be a lower cost option long-term, with reduced costs from ordering glass and installing graphics less often.

Systemwide, in 2022, operations and maintenance costs for the Seattle Streetcar decreased by 5% because reduced service levels continued for both lines.

SDOT does not see all operation and maintenance costs as actual expenses in SDOT's accounting system, as some contributions are seen in credits against invoices. While overall costs decreased 5%, actual expenses paid by SDOT in 2022 decreased by 18%, compared to 2021. Actual costs incurred in SDOT's accounting system are offset by federal relief dollars, ORCA fare revenue, and Metro operating contributions. 2021 expenses also included a reconciliation payment, while in 2022 SDOT received a reconciliation credit of \$219.566 for South Lake Union and \$38,353 for First Hill.

In 2023, SDOT will begin billing the \$1.2 million from the American Rescue Plan Act (ARPA) for 2022 streetcar operations expenses, which will continue to provide relief from lost fare revenue. ARPA will have a significant impact in offsetting large expenses from 2022.

Detailed financial metrics, including historic and projected operations and maintenance costs, can be found in Tables 3, 4, 5 and 6. Note that these tables reflect when invoices and reconciliation costs were paid by accounts payable, not when they were incurred.

- These tables show costs credited on King County Metro invoices such as ORCA fare revenue, federal grant credits or King County Metro operating contributions.
- 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 and expenses in these tables may not balance exactly, as the amounts displayed are based on certain Financial Plan values which program out pooled costs and revenues between Streetcar lines instead of independently per line.

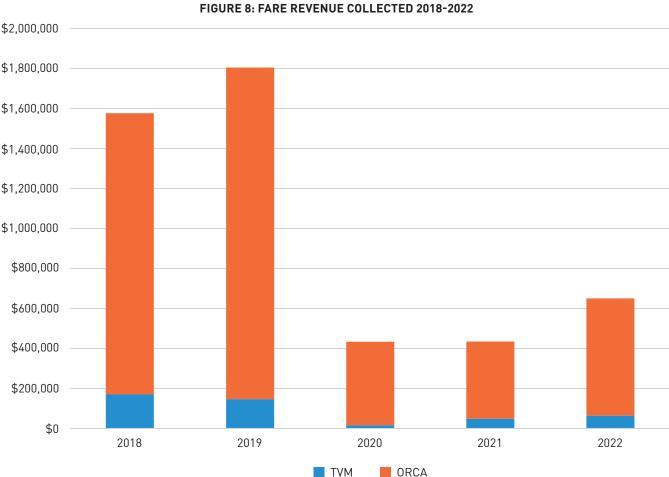
### 5.2 FUNDING

In 2022, the Seattle Streetcar revenue sources included fare revenue (through ORCA and ticket vending machine sales), sponsorships, contributions from King County Metro and Sound Transit, Commercial Parking Tax Revenue, and grants. Almost all public transit systems require revenue sources outside of fare revenue to meet operating expenses. Seattle Streetcar fare revenues and partner operating contributions do not fully cover operating and maintenance costs. As such, the city invests other transportation revenues, such as Commercial Parking Tax, to maintain service levels.

### 5.2.1 Fare Revenue

Overall, fare revenue increased 49% in 2022 compared to 2021.11 Both streetcar ticket vending machines (TVMs), which sell streetcaronly fares, and ORCA fare revenue, saw significant growth in 2022, compared to 2021. This is likely due to the consistent increase in streetcar ridership across both lines.

A detailed outline of both ticket vending machine and ORCA fare sales can be found in Figure 8.



### 5.2.1.1 Fare Policies

In 2022, SDOT made several fare policy decisions to expand equitable access to transit. Starting September 1, 2022, SDOT implemented zerodollar fares for streetcar passengers 18 and under as part of a state-wide free youth fares program. King County Metro (Metro) and Sound Transit announced plans to adopt their policies by September 1, 2022, and streetcar elected to do the same to create a seamless regional ridership experience.

Implementation of the youth fare policy was consistent with the Streetcar Operating Ordinance 124601. Section 2 of the ordinance states that "The City's policy objective for Seattle Streetcar fares is to provide consistency between streetcar and light rail service within the City of Seattle. To the extent practicable, the City intends that Seattle Streetcar fares will be consistent with Link Light Rail's base fare." The Sound Transit ILA also states that "The City will determine the fares to be charged to passengers consistent with regional fare policy and the City or any Third-Party Operator will collect and retain fare box revenue".

Other fare policies in 2022 that expanded equitable access, included SDOT 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. This pilot has since been renewed through 2023. SDOT also renewed pilot participation in the Subsidized Annual Pass Program until December 2024. 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 another system in ORCA (Purse) to transfer to streetcar from other modes. If they did not, they would accrue negative balances on their cards, and potentially have their cards blocked from use.

SDOT analyzed the fare revenue impact of all these programs and has found the financial impact to not be significant. The Subsidized Annual Pass Program resulted in \$46,786 in foregone revenue in 2022. The ORCA LIFT fare reduction to \$1.00 in August and the free Youth Fare Adoption in September do not have enough data (since both were adopted in September 2022) to show how significant the impacts were, but estimates do not show a significant impact. Preliminary estimates indicate that the September 2022 ORCA LIFT fare changes from \$1.50 to \$1.00 resulted in about \$1,000 in foregone revenue in 2022, and free youth fares appears to only result in ~\$300 in foregone revenue in 2022. (This figure may be artificially low due to low tapping rates for youth passengers.) 2023 data will help further demonstrate trends of those fare program changes. SDOT is monitoring 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.

### **5.2.1.2 Farebox Recovery and Fare Evasion**

Total fare revenue per boarding on streetcar increased in 2022, averaging \$0.58, compared to \$0.54 in 2021.<sup>11</sup>

Fare evasion is the percentage of riders who do not purchase or possess the fare media required to travel. There is no active fare enforcement on the Seattle Streetcar system, and Streetcar Operation Supervisors have paused conducting fare inspection surveys on both streetcar lines since March 2020.

<sup>&</sup>lt;sup>11</sup>At the time of writing this report, First Hill TVM data was not yet confirmed. In order to provide a meaningful comparison to 2021, First Hill TVM data was left out of both years when comparing revenues and farebox recovery. This ensures the comparison is reflective of analogous data, and not skewed because of missing data.

Since the 2021 Annual Report, SDOT implemented a new method to calculate the evasion rate more directly than in past years. Prior to the COVID-19 pandemic, supervisors conducted fare surveys for one hour per day, resulting in calculations based on a sample size that may have underestimated the amount of non-payment by riders. In this report, fare evasion data is calculated using ORCA and ticket vending machine fare transactions compared to National Transit Database (NTD) validated passenger unlinked trip data<sup>12</sup>. 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 60% in 2022, compared to 61% in 2021. The rate of non-payment for FHS has decreased slightly in 2022 to 68%, compared to 69% in 2021. The rate of non-payment for SLU increased to 16% in 2022, compared to 11% in 2021. As discussed in Section 3.2.2, security staff were added in 2022. While not conducting fare enforcement, it is possible increased security presence may result in slight reduced fare evasion in 2022 on FHS. The SLU fare evasion rate increase could be due to the significant increase in ridership in 2022.

Tables 7 and 8 shows historic and actual ridership and estimated non-payment of rates data, otherwise known as "fare evasion."

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, where fare evasion rates compare total riders to fare paying riders.

In 2022, systemwide, farebox recovery ratios increased to 5% from 3% in 2021. The farebox recovery ratios for FHS and SLU were approximately 7% and 4%, respectively. In 2021, farebox recovery ratios for FHS and SLU were approximately 4% and 3%, respectively. The 2021 Streetcar Operations Report listed the farebox recovery rates for SLU and FHS at 8% and 3%, respectively. However, after analyzing the methodology, SDOT felt calculating farebox recovery using actuals from invoice cost data, which has King County Metro's contributions already deducted from them, was not the most accurate way to calculate this as fare revenue is already deducted. The estimates in this report are more accurate as they include fare revenue as a proportion of true operating costs without deductions.

By comparison, in 2021 Sound Transit Link Light Rail fare recovery rate was reported at 10%, and King County Metro bus, trolley bus, and DART service recovery rate was reported at 7%<sup>13</sup>. 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.

<sup>&</sup>lt;sup>12</sup>Unlinked Passenger Trips is the number of times passengers board public transportation vehicles.

<sup>&</sup>lt;sup>13</sup>2022 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

			Histo	Historical		Adopted	Actual	Adopted	Projected
		2018	2019	2020	2021	2022	2022	2023	2023
Funding									
King County Metro Contribution <sup>14</sup>		\$1,500,000	\$1,550,000	\$1,550,000	\$1,596,500	\$1,644,395	\$1,644,395	\$1,693,726	\$1,693,726
Fare Revenue		\$730,067	\$775,379	\$168,758	\$170,520	\$343,437	\$278,150	\$613,000	\$613,000
	ORCA <sup>15</sup>	\$625,702	\$688,146	\$152,442	\$123,869	\$217,251	\$552,000	\$552,000	\$309,093
	Ticket Vending Machines	\$104,365	\$87,233	\$16,316	\$46,651	\$34,344	\$40,899	\$61,000	\$61,000
FTA Grants		\$52,249	\$97,573	\$504,237	\$250,120	\$300,000	\$944,165	\$141,000	\$141,000
	Grants - 5307	\$52,249	\$97,573			\$300,000	\$314,122	\$141,000	\$141,000
	CARES/CRRSAA/ARPA Grants								
	CARES/CRRSAA/ARPA Credits16			\$504,237	\$250,120		\$630,043		
Other		\$548,820	\$576,043	\$447,339	\$263,507	\$423,000	\$372,546	\$440,000	\$440,000
	Sponsorship	\$192,500	\$211,723	\$85,219	\$86,207	\$160,000	\$108,250	\$168,000	\$168,000
	318 Fairview Lease	\$127,320	\$127,320	\$89,340	(\$89,340)				
	Amazon Contribution	\$229,000	\$237,000	\$245,000	\$266,640	\$263,000	\$264,296	\$272,000	\$272,000
	Tech Adjustment			\$27,780					
Commercial Parking Tax Funding		\$215,316	\$2,159,474	\$1,668,622	\$1,683,238	\$1,737,943	\$1,737,943	\$1,823,580	\$1,823,580
Total Funding <sup>17</sup>		\$3,046,452	\$5,158,469	\$4,338,956	\$3,963,885	\$4,448,775	\$4,977,199	\$4,711,306	\$4,711,306
Expenses									
Operations and Maintenance		\$3,612,215	\$3,788,077	\$3,070,223	\$3,789,242	\$4,324,358	\$3,861,873	\$4,474,986	\$4,474,986
	King County Metro <sup>18</sup>	\$3,154,660	\$3,410,686	\$3,034,379	\$3,300,812	\$3,787,604	\$2,986,878	\$3,990,012	\$3,990,012
	SDOT	\$457,555	\$377,391	\$493,969	\$488,430	\$536,754	\$874,995	\$484,974	\$484,974
Reconciliation				(\$458,125)					
Total Expenses		\$3,612,215	\$3,788,077	\$3,070,223	\$3,789,242	\$4,324,358	\$3,861,873	\$4,474,986	\$4,474,986

\*KCM's South Lake Union Operating contribution is credited against invoices and not directly received by SDOT nor displayed in the financial plan.

50RCA Fare Revenue is credited against KCM Operating invoices and is not directly received by SDOT nor displayed in the financial plan.

<sup>\*</sup>For this 2022 analysis, CARES, CRRSAA, ARPA and reconciliation credits are deducted from KCM Operating Invoices and are not directly received by SDOT nor are they displayed in the financial plan.

<sup>&</sup>lt;sup>7</sup>Funding and expenses in these tables may not balance exactly, as the amounts displayed are based on certain Financial Plan values which program out pooled costs and revenues between Streetcar lines instead of independently per line.

<sup>8</sup>KCM Operating Costs displayed here include costs from notes 12, 13, and 14, to show true operating costs (not what is deducted from the invoices). The financial plan shows the costs incurred by SDOT, which do not include these costs as they are deducted from invoices.

# TABLE 4: SOUTH LAKE UNION PROJECTED FUNDING AND EXPRENSES

				Projected		
		2024	2025	2026	2027	2028
Funding						
King County Metro Contribution <sup>19</sup>		\$1,744,539	\$872,269 20	\$872,269	\$872,269	
Fare Revenue		\$624,447	\$636,073	\$655,157	\$674,812	\$695,056
	ORCA <sup>21</sup>	\$562,692	\$572,466	\$589,641	\$607,330	\$625,550
	Ticket Vending Machines	\$61,755	\$63,607	\$65,516	\$67,481	\$69,506
FTA Grants		\$146,215	\$151,332	\$156,629	\$162,111	\$167,785
	Grants – 5307	\$146,215	\$151,332	\$156,629	\$162,111	\$167,785
	CARES/CRRSAA/ARPA Grants					
	CARES/CRRSAA/ARPA Credits <sup>22</sup>					
Other		\$458,000	\$184,000	\$192,000	\$200,000	\$208,000
	Sponsorship	\$176,000	\$184,000	\$192,000	\$200,000	\$208,000
	Amazon Contribution	\$282,000				
Seattle Transit Measure Transfer		\$3,366,000				
Commercial Parking Tax Funding			\$3,366,000	\$3,366,000	\$3,366,000	\$4,285,187
Total Funding <sup>23</sup>		\$6,339,201.00	\$5,209,674	\$5,242,055	\$5,275,192	\$5,356,028
Expenses						
Operations and Maintenance		\$4,629,820	\$4,848,515	\$5,077,761	\$5,318,073	\$5,569,994
	King County Metro <sup>24</sup>	\$3,990,013	\$4,189,514	\$4,398,989	\$4,618,939	\$4,849,886
	SDOT	\$639,807	\$659,001	\$678,771	\$699,134	\$720,108
Reconciliation						
Total Expenses		\$4,629,820	\$4,848,515	\$5,077,761	\$5,318,073	\$5,569,994

<sup>19</sup>See note 12.

<sup>21</sup>See note 13.
<sup>22</sup>See note 14.
<sup>23</sup>See note 15.
<sup>24</sup>See note 16.

<sup>&</sup>lt;sup>20</sup>In 2024, SDOT anticipates renegotiating the operating ILA with Metro; if a new ILA is not approved, Metro's contribution drops to \$872,000 and provides a commitment of a Metro contribution through 2027.

TABLE 5: FIRST HILL STREETCAR HISTORIC AND CURRENT FUNDING AND EXPENSES

			Historical	rical		Adopted	Actual	Adopted	Projected
		2018	2019	2020	2021	2022	2022	2023	2023
Funding									
Sound Transit		\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,00025
Fare Revenue		\$846,077	\$1,029,463	\$264,633	\$277,180	\$849,037	\$389,480	\$854,200	\$854,200
	ORCA <sup>26</sup>	\$780,878	\$970,065	\$264,633	\$262,640	\$798,095	\$369,233	\$802,948	\$802,948
	Ticket Vending Machines	\$65,199	\$59,398		\$14,540	\$50,942	\$20,246	\$51,252	\$51,252
FTA Grants		\$258,185		\$650,409	\$1,718,071	\$2,031,031	\$1,331,031	\$312,077	\$1,515,241
	Grants – 5307	\$258,185				\$700,000		\$312,077	\$312,077
	CARES/CRRSAA/ ARPA Grants			\$650,409	\$688,201				\$1,203,164
	CARES/CRRSAA/ ARPA Credits <sup>27</sup>				\$1,029,870	\$1,331,031	\$1,331,031		
Other		\$152,631			(\$17,089)	\$16,000		\$22,000	\$22,000
	Sponsorship	\$152,631			(\$17,089)	\$16,000		\$22,000	\$22,000
Commercial Parking Tax Funding		\$1,229,557	\$6,952,063	\$3,881,378	\$3,612,776	\$3,528,552	\$3,528,552	\$3,702,612	\$3,702,612
Total Funding <sup>28</sup>		\$7,486,450	\$12,981,526	\$9,796,420	\$10,590,938	\$11,424,620	\$10,249,063	\$9,890,889	\$11,094,053
Expenses									
Operations and Maintenance		\$8,096,831	\$8,795,010	\$8,256,948	\$9,551,188	\$9,666,145	\$8,767,264	\$9,748,428	\$9,748,428
	King County Metro <sup>29</sup>	\$7,337,722	\$7,794,924	\$6,879,229	\$8,216,053	\$8,001,713	\$7,851,790	\$8,401,799	\$8,401,799
	SDOT	\$759,109	\$1,000,086	\$1,119,874	\$325,996	\$1,664,432	\$915,474	\$1,346,629	\$1,346,629
Reconciliation				\$257,845	\$1,009,139				
Total Expenses		\$8,096,831	\$8,795,010	\$8,256,948	\$9,551,188	\$9,666,145	\$8,767,264	\$9,748,428	\$9,748,428

25The Sound Transit contribution to FHS of \$5 million annually concludes in 2023.

<sup>&</sup>lt;sup>26</sup>See note 13.
<sup>27</sup>See note 14.
<sup>28</sup>See note 15.
<sup>29</sup>See note 16.

TABLE 6: FIRST HILL PROJECTED FUNDING AND EXPENSES

Funding				2000		
Fundina		2024	2025	2026	2027	2028
Sound Transit Contribution						
Fare Revenue		\$1,038,540	\$1,208,295	\$1,244,544	\$1,281,879	\$1,320,335
	ORCA <sup>30</sup>	\$976,952	\$1,135,797	\$1,169,871	\$1,204,966	\$1,241,115
	Ticket Vending Machines	\$61,588	\$72,498	\$74,673	\$76,913	\$79,220
FTA Grants		\$322,999	\$334,304	\$346,005	\$358,115	\$370,649
	Grants – 5307	\$322,999	\$334,304	\$346,005	\$358,115	\$370,649
	CARES/CRRSAA/ ARPA Grants					
	CARES/CRRSAA/ ARPA Credits <sup>31</sup>					
Other		\$22,000	\$22,000	\$28,000	\$28,000	\$29,120
	Sponsorship	\$22,000	\$22,000	\$28,000	\$28,000	\$29,120
Seattle Transit Measure Transfer		\$6,834,000				
Commercial Parking Tax Funding			\$6,834,000	\$6,834,000	\$6,834,000	\$8,700,229
Total Funding <sup>32</sup>		\$8,217,539	\$8,398,599	\$8,452,549	\$8,501,994	\$10,420,333
Expenses						
Operations and Maintenance		\$9,760,000	\$10,229,069	\$10,721,201	\$11,237,360	\$11,778,729
	King County Metro <sup>33</sup>	\$8,370,000	\$9,262,983	\$9,726,132	\$10,212,439	\$10,723,061
	SDOT	\$1,390,000	\$80,996\$	\$995,069	\$1,024,921	\$1,055,669
Reconciliation						
Total Expenses		\$9,760,000	\$10,229,069	\$10,721,201	\$11,237,360	\$11,778,729

<sup>30</sup>See note 13. 31See note 14. 32See note 15. 33See note 16.

TABLE 7: FIRST HILL STREETCAR PERFORMANCE HISTORIC AND ESTIMATED

		-	Historical					Estimated		
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Ridership <sup>34</sup>	1,159,904 1,360,035	1,360,035	660,029	698,975	937,394		1,466,376	1,423,666 1,466,376 1,510,368	1,555,679 1,602,349	1,602,349
Farebox Recovery Ratio	10%	12%	3%	3%	%7	%6	11%	11%	11%	11%
Productivity <sup>35</sup> (Riders/Revenue Hour)	41	67	31	29	38	51	53	24	26	28
"Fare Evasion"36	20%	20%	23%	%69	%89	%89	%89	%89	%89	%89
Reliability (On-Time Performance)	%88	87%	%89	83%	87%	87%37	87%	87%	87%	87%

# TABLE 8: SOUTH LAKE UNION PERFORMANCE HISTORICAL AND ESTIMATED

			Historical					Estimated	ted	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Ridership <sup>38</sup>	513,523	513,523 503,374	89,414	107,145	180,211	383,310	385,967	397,546	409,473	421,757409,473
Farebox Recovery Ratio	20%	20%	2%	%4	7%	14%	13%	13%	13%	13%
Productivity (Riders/ Revenue Hour) <sup>39</sup>	36	43	11	6	14	32	32	33	34	35
"Fare Evasion" <sup>40</sup>	%6	7%	3%	11%	16%	11%	11%	11%	11%	11%
Reliability (On-Time Performance)	39%	32%	%97	%87	%29	65%41	%29	%29	%29	%29

<sup>™</sup>Estimated Rider projections for 2023 are based on observed growth in 2021 and 2022, 2023-2027 assume 3% annual ridership growth.

352023-2027 revenue hours based on 2019 revenue hours.

<sup>36</sup> Previous fare evasion rates were calculated through KCM fare inspection surveys and potentially underestimated non-payment. Starting in 2021, fare evasion rates nave been calculated by comparing the amount of "fare paying passengers" to NTD validated passenger numbers. Future projections assumed flat non-payment rates.

<sup>37</sup> Projections for On-Time Performance assume a flat amount, as on-time performance improvement depends on capital improvements implemented along the alignment.

<sup>®</sup>Estimated Rider projections for 2023 are based on observed growth in 2021 and 2022, 2023-2027 assume 3% annual ridership growth. 3023-2027 revenue hours based on 2019 revenue hours.

<sup>&</sup>lt;sup>10</sup>Previous fare evasion rates were calculated through KCM fare inspection surveys and potentially underestimated non-payment. Starting in 2021, fare evasion rates have been calculated by comparing the amount of "fare paying passengers" to NTD validated passenger numbers. Future projections assumed flat non-payment rates.

Projections for On-Time Performance assume a flat amount, as on-time performance improvement depends on capital improvements implemented along the alignment.

### 5.3 SPONSORSHIP

Sponsorship on both lines continued to lag in 2022. Sponsorship revenue in 2022 was \$108,250 from one sponsorship. One vehicle was sponsored by Kaiser Permanente on the SLU line.

However, to optimize sponsorship opportunities and attract relevant expertise, SDOT released a request for proposals (RFP) for sponsorship program management in 2022. From that process, SDOT selected Intersection as the new organization to manage the sponsorship program starting in 2023. This agency has significant experience in selling transit sponsorships (working with all other major Puget Sound agencies, including King County Metro and Sound Transit) and has several sponsors lined up for 2023.

In the first year, SDOT will receive payment from Intersection as both an annual quarantee of \$50,000 and an additional payment aligned with 60% of net revenues. For instance, if there is \$200,000 in net revenue in the first year, SDOT will receive a total of \$120,000 comprised of the \$50,000 guarantee and \$70,000, representing 60% of the \$200,000 in net revenues generated. Each year's maximum annual quarantee will reflect 75% of the previous year's net revenue and is expected to increase each year. SDOT expects this to create a more predictable revenue source for the streetcar program and streamline program administration.

### 5.4 OPERATING CONTRIBUTIONS

Metro and Sound Transit contributions to the SLU and FHS lines, respectively, continued to be the largest sources of streetcar funding in 2022. The Sound Transit contribution to FHS of \$5 million annually concludes in 2023, while the 2020 Metro contribution to SLU of \$1.55 million annually, with slight increases each year (\$1,644,395 in 2022), will continue under the Interlocal Agreement (ILA) through 2024. In 2024, SDOT anticipates renegotiating the operating ILA with Metro; if a new ILA is not approved, Metro's contribution drops to \$872,000 and provides a commitment of a Metro contribution through 2027.

### 5.5 FEDERAL RELIEF GRANT **FUNDING**

In 2022, federal relief grant funding continued to provide significant support for streetcar due to the COVID-19 pandemic. In 2020, the Coronavirus Aid Relief and Economic Security Act (CARES) and Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), both provided funding to transit agencies. In 2021 a third act, the American Rescue Plan Act (ARPA) provided additional relief during the pandemic.

- In 2020, the City of Seattle was directly awarded \$688,000 from the CARES Act for streetcar operations and an invoice credit of \$1.2 million<sup>42</sup> from King County Metro.
- In 2021, the City was directly awarded CRRSAA funds for streetcar operations of \$785,000, as well as an invoice credit from King County Metro of \$1.3 million.
- In 2021, the City was also directly awarded \$1.2 million from ARPA for streetcar operations, and an invoice credit of \$2 million from King County Metro which will be realized as 2022 monthly invoice offsets.

CARES and CRRSAA funds were expended in 2022 for 2021 operating expenses, and ARPA funds will be expended in 2023 for 2022 operating 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 King County Metro invoices such as ORCA fare revenue, federal grant credits, or King County Metro operating contributions, though SDOT's financial system does not reflect these financial line items as these are credited from KCM Operating Invoices and are not directly received through SDOT's accounting system.

<sup>&</sup>lt;sup>42</sup>King County Metro submits all NTD reporting for Seattle Streetcar and receives subsequent funding packages based off these reporting metrics. Proportional credits for Seattle Streetcar's NTD submissions for CARES, CRRSAA, and ARPA funding were all distributed to SDOT.

# 6. CONCLUSION

### **6.1 2022 IN REVIEW**

In 2022, the Seattle Streetcar system saw significant signs of recovery from the impacts of the COVID-19 pandemic. The streetcar experienced meaningful ridership and fare revenue growth in 2022, compared to 2021, as more employees returned to some level of in-person work and the sense of concern about riding transit due to the COVID-19 pandemic decreased.

Streetcar expenses in 2022 decreased by 5%, with 2022 methodology incorporating the full operations and maintenance expenses to run streetcar, not the actuals paid by SDOT (with fare revenue, operations contributions, and federal grant credits deducted).

In 2022, the three major funding packages for COVID-19 relief from 2020 to 2021 helped continue to offset the reduced fare revenue as streetcar's ridership recovers from pandemic levels. In 2022, SDOT completed billing for CARES and CRRSAA FTA funding for 2021 expenses. SDOT also applied \$2 million in Metro operating invoice credits towards 2022 expenses. These credits were negotiated based on funding Metro received on behalf of operating the streetcar. In 2023, SDOT will begin billing the \$1.2 million from ARPA that was allocated directly to SDOT for streetcar operations expenses in 2022.

The streetcar safety program continued to mature, launching new processes to improve the rollout of safety improvements, as well as implementing a new committee to meet federal regulatory changes. SDOT implemented security improvements, as well. However, trends indicate more action is needed and SDOT continues to work with Metro to improve rider experience onboard as well as off-board.

### **6.2 LOOKING AHEAD**

SDOT anticipates streetcar operations, ridership, and revenue to continue to track with Metro performance as transit systems continue to recover in 2023. As shown in 2022 data, the Seattle Streetcar continues to be a key interneighborhood connector and experienced steadily increasing ridership from low levels in 2020 due to the COVID-10 pandemic.

However, overall behavior changes following the pandemic complicate ridership projections for the upcoming year. The latest Commute Seattle mode share survey shows that in 2022, 46% of respondents worked remotely for some portion of their week, and weekday travel patterns have changed with remote work being more prevalent on Mondays and Fridays. For the SLU Streetcar, employer actions such as Amazon's delayed return to office in South Lake Union impacted ridership in 2022. Streetcar Program staff will continue to monitor trends in 2023, as Amazon employees begin to return to South Lake Union offices effective May 1, 2023.

Program wide, SDOT will be actively addressing a range of streetcar issues in 2023, including:

- Initiating a Streetcar Program Management Plan, to develop longer term strategies around program management, fare policies, financial planning, and performance metrics.
- Preparing a Culture Connector delivery assessment, to inform decision-making on how to proceed with the project.
- Supporting Metro as they seek to address streetcar workforce challenges for hard-tofill maintenance positions.
- Expanding accessibility and affordability on transit through low-income fare programs in partnership with King County Metro.
- Planning for upcoming major expenses, such as major vehicle maintenance and streetcar switch heaters, to allow the streetcar to provide reliable service during snow events.

- Onboarding Intersection as the new agency to manage the streetcar sponsorship program and create a predictable sponsorship revenue source for streetcar.
- Continuing to implement federal safety regulation changes resulting from the Bipartisan Infrastructure Law (BIL).
- Working to reduce security incidents onboard streetcars and on platforms by providing consistent streetcar security coverage.
- Working with Sound Transit on mitigation efforts for the West Seattle-Ballard Link Extension, the construction of which poses potential significant impacts to the operations of both SLU and FHS lines.



Seattle Department of Transportation 700 5th Avenue, Suite 3800 PO Box 34996 Seattle, WA 98124-4996 (206) 684-ROAD (7623) www.seattle.gov/transportation

