

Seattle Department of Transportation

SEMI-ANNUAL STREETCAR REPORT



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Seattle
Department of
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S T R E E T C A R

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INTRODUCTION

In December 2015, the Mayor signed Ordinance 124946, requiring the Seattle Department of Transportation (SDOT) to submit a report to the Chair of City Council's Sustainability and Transportation Committee at least bi-annually on the operations of all operating streetcar lines.

Ordinance 124946 states:

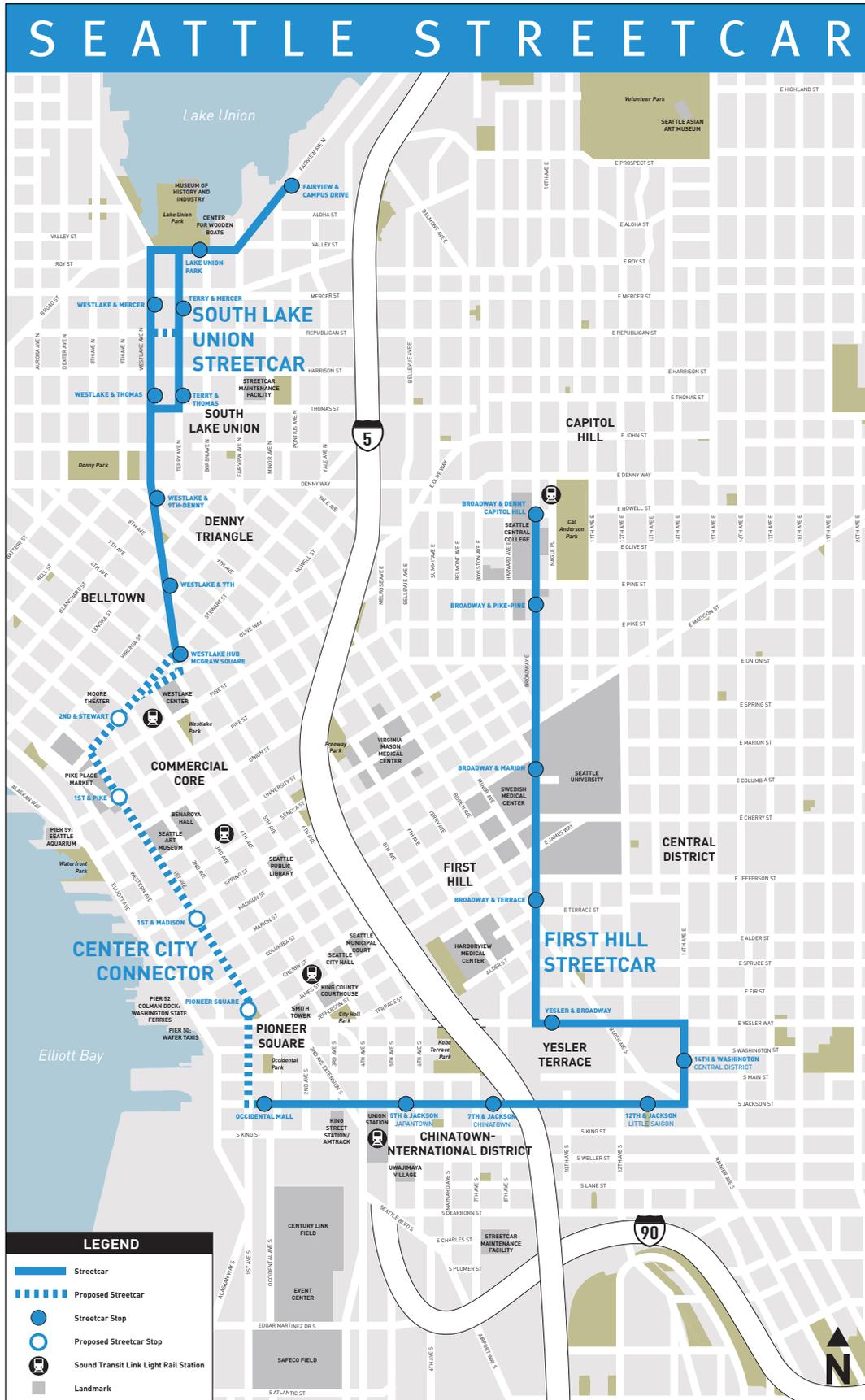
"The report shall include both performance metrics and financial metrics; and will include data for the past 5 years, estimates for the current year, and projections for the next 5 years. Performance metrics shall include ridership, farebox recovery ratio, productivity (riders per revenue hour), fare 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 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."*

*An interfund loan for streetcar operations is currently supported by the City's Transportation Fund. Legislation for the 2019-2020 Proposed Budget states that the loan is supported by the Move Seattle Levy Fund.

The Seattle Streetcar system consists of two separate, modern streetcar lines: the South Lake Union Streetcar (SLU) and the First Hill Streetcar (FHS). A project to expand and unify the system by connecting these two separate lines along First Avenue and Stewart Street, the Center City Connector, was paused at the direction of the Mayor in March 2018. The project was paused because initial assessments revealed that the capital costs had risen. In addition, local press reports indicated a difference in projected operating costs between SDOT and Metro. The project is currently undergoing an independent review under the direction of the City Budget Office and work remains paused pending direction to continue the project (discussed in more detail later in this report). In October 2018, in accordance with FTA requirements, SDOT completed and submitted its Transit Asset Management Plan covering the City of Seattle's transit assets including the streetcar lines.

Figure 1 shows the South Lake Union and First Hill Streetcar segment alignments along with the Center City Connector.

FIGURE 1. SEATTLE STREETCAR SYSTEM



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 right of way and powered exclusively by an overhead contact system (OCS). SLU operates an average 10- to 15-minute service frequency most hours of the day it operates, seven days a week.

The SLU 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 the Westlake HUB. 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 Link Light Rail stations at Westlake Center.

First Hill Streetcar

The First Hill Streetcar connects major medical facilities, Seattle University, and mixed income communities to the King Street and Colman Dock Mobility Hubs. 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 constructed a streetcar connection instead.

The First Hill Streetcar line is 2.5 miles long. It operates with 6 vehicles, provides an average 10- to 18-minute service frequency most hours of the day it operates, seven days a week.

The line was funded as part of the Sound Transit 2 mass transit expansion ballot measure approved by voters in November 2008. It was approved by the Seattle City Council in December 2008. Sound Transit developed an interlocal agreement with the City of Seattle for the City to design and construct the transit line. Construction began in late April 2012.

The line opened with a soft launch on January 23, 2016, with 2 weeks of free rides until the grand opening on February 13, during the Lunar New Year celebrations in Chinatown- International District.

Center City Connector

The Center City Connector (C3) project is an expansion of the Seattle Streetcar system that will 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 is funded through a combination of local and federal funds, including an FTA Small Starts grant.

SDOT has been advancing the C3 project since its inclusion in the 2012 Transit Master Plan and 2016 update. City Council approved the Locally Preferred Alternative for the project in summer 2014. In fall of 2015, the project was submitted for an FTA Small Starts grant requesting \$75 million and the project was recommended at this funding level as part of the President's FY 2017 budget in February 2016. \$50 million was included in the 2017 federal budget appropriations bill. In fall of 2016, City Council approved the local match to fully fund the project. FTA granted environmental clearance in February 2017. SDOT has not yet signed a Small Starts Grant Agreement with the FTA.

A contract to purchase 10 new streetcar vehicles from CAF USA was executed in September 2017, initial utility relocation work began in November 2017, and in early 2018, SDOT received bids for a second utility relocation package and major civil (track) construction. In March 2018, at the direction of Mayor Durkan, SDOT paused all work on the C3 project pending an independent review of operating and capital costs led by the City Budget Office. That review is currently underway with the assistance of a third-party consultant, KPMG.

In addition, vehicle suitability issues have necessitated additional engineering work to address compatibility with the current streetcar system and proposed design of C3. The project remains on hold pending the results of the review and a final decision by the Mayor to resume or terminate the project.

It should be noted that the operating plan for Seattle Streetcar system as expanded by the C3 project introduces major changes to the operating and service profile of the system. Under the proposed plan, service on the existing SLU and FHS lines will be lengthened into two loops which will overlap along a stretch of dedicated right of way along First Avenue. Several operational, capital, and funding issues remain to be resolved for the C3 project.

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

Should a decision to proceed with the C3 project be made, it is expected that construction activity, tie-ins to existing lines, testing activities, and Operations and Maintenance Facility construction could all impact operations on SLU and FHS.

OPERATIONS GOVERNANCE STRUCTURE AND BUDGET

The South Lake Union and First Hill Streetcar lines are owned by the City of Seattle and operated by King County Metro (KCM). This partnership, including respective roles and responsibilities, funding commitments, and estimated revenues and expenses is detailed in the 2014 Amended and Restated Interlocal Agreement between the City of Seattle and King County regarding the Seattle Streetcar (ILA).

The ILA, which expires in December 2019, includes schedules of estimated quarterly costs for each line through the term of the agreement as well as estimated ORCA fare revenue, fixed contributions from KCM¹, and the anticipated payment from the City of Seattle to fund the costs incurred by KCM to operate and maintain the two streetcar lines.

In addition to revenues and expenses described in the ILA, the overall streetcar operations and maintenance budget includes revenue generated from the streetcar sponsorship program, Sound Transit contributions², federal grants, 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 oversight, repairs, right-of-way maintenance, station stop cleaning, and other operations and maintenance activities not performed by KCM.

Although the annual SDOT budget for the streetcar program, including SDOT's quarterly payments to KCM for streetcar operations and maintenance, is based on the schedule of costs and revenues estimated in the 2014 ILA, actual costs submitted by KCM have substantially exceeded the costs that were projected in the ILA in 2014. Likewise, actual ORCA fare revenue reported by King County has come in below the ILA estimates.

To address the differences, KCM, as permitted under the ILA, has submitted a request for reconciliation of actual and estimated costs and revenues as well as an associated invoice for additional payment in the amount of approximately \$1.4 million for 2016 and \$1.8 million for 2017. An additional reconciliation request is anticipated based on 2018 estimated costs and revenues. A summary of actual vs. estimated KCM expenses and revenues is shown in Table 1.

SDOT is currently working with KCM to review reported costs and revenues and reach agreement on KCM's request for additional funding. A supplemental funding request is being submitted for third quarter 2018 for additional funding needed to reconcile the 2016 amount. The 2019-2020 Proposed Budget includes budget authority to pay for the 2017 reconciliation amount and the estimated 2018 reconciliation amount.

¹Under the ILA, KCM provides an annual contribution to the operations and maintenance of the South Lake Union line through 2019. For 2018, this contribution is scheduled to total \$1.5M.

²Under a separate 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.

TABLE 1: KING COUNTY METRO STREETCAR RECONCILIATION ESTIMATES 2016-2018

South Lake Union Streetcar	2016			2017			2018 (Projected)		
	ILA/Invoiced	Actual	Variance	ILA/Invoiced	Actual	Variance	ILA	"Budget/Estimated"	Variance
KCM Revenues									
Fare Revenue (ORCA)	\$866,000	\$595,117	\$(270,883)	\$940,000	\$658,355	\$(281,645)	\$1,103,000	\$728,313	\$(374,687)
King County Contribution	\$1,400,000	\$1,400,000	\$0	\$1,450,000	\$1,450,000	\$0	\$1,500,000	\$1,500,000	\$0
Total KCM Revenues	\$2,266,000	\$1,995,117	\$(270,883)	\$2,390,000	\$2,108,355	\$(281,645)	\$2,603,000	\$2,228,313	\$(374,687)
KCM Expenses									
Operating Expense (KCM Costs)	\$2,780,000	\$2,724,432	\$(55,568)	\$2,860,000	\$2,895,347	\$35,347	\$2,950,000	\$3,196,715	\$246,715
Fare Inspection	\$128,308	\$128,308	\$0	\$127,486	\$127,486	\$0	\$131,789	\$131,789	\$0
Total KCM Expenses	\$2,908,308	\$2,852,740	\$(55,568)	\$2,987,486	\$3,022,833	\$35,347	\$3,081,789	\$3,328,503	\$246,715
Total SLU Revenues LESS Expenses	\$(642,308)	\$(857,623)	\$(215,315)	\$(597,486)	\$914,478	\$(316,992)	\$(478,789)	\$(1,100,191)	\$(621,402)
First Hill Streetcar									
KCM Revenues									
Fare Revenue (ORCA)	\$1,070,000	\$654,963	\$(415,037)	\$1,110,000	\$709,780	\$(400,220)	\$1,860,000	\$856,229	\$(1,003,771)
Total KCM Revenues	\$1,070,000	\$654,963	\$(415,037)	\$1,110,000	\$709,780	\$(400,220)	\$1,860,000	\$856,229	\$(1,003,771)
KCM Expenses									
Operating Expense (KCM Costs)	\$5,280,000	\$6,094,519	\$(814,519)	\$5,440,000	\$6,567,926	\$(1,127,926)	\$5,600,000	\$7,275,284	\$(1,675,284)
Total KCM Expenses	\$5,280,000	\$6,094,519	\$(814,519)	\$5,440,000	\$6,567,926	\$(1,127,926)	\$5,600,000	\$7,275,284	\$(1,675,284)
Total FHS Revenues LESS Expenses	\$(4,210,000)	\$(5,439,557)	\$(1,229,557)	\$(4,330,000)	\$(5,858,146)	\$(1,528,146)	\$(3,740,000)	\$(6,419,055)	\$(2,679,055)
Combined Invoiced/Estimated	\$(4,852,308)	\$(6,297,180)	\$(1,444,872)	\$(4,927,486)	\$(6,772,624)	\$(1,845,138)	\$(4,218,789)	\$(7,519,246)	\$(3,300,457)

Notes:

1. Budget/Estimated amounts in the table above have been developed by KCM. Final 2018 reconciliation will be performed after 2018 year-end close-out.
2. Note that this table only includes streetcar operations and maintenance expenses incurred by King County Metro and revenues collected by King County Metro.

SOUTH LAKE UNION STREETCAR

The sections below discuss Financial and Performance Metrics for the SLU.

South Lake Union Streetcar – Financial Metrics, Past 5 Years:

The table below provides a financial snapshot of the South Lake Union line for the last five years. Data shown here are based on updated operating cost and ORCA fare revenue estimates, which have been the basis of the 2016 and 2017 KCM reconciliation requests and KCM’s 2018-2020 projections.

TABLE 2. SOUTH LAKE UNION STREETCAR FINANCIAL METRICS 2013-2017

	Historical				
	2013	2014	2015	2016	2017
Costs	\$2,857,984	\$3,094,273	\$3,130,465	\$3,027,802	\$3,369,119
Operating & Maintenance	\$2,857,984	\$3,094,273	\$3,130,465	\$3,027,802	\$3,369,119
<i>Metro/KCM</i>	\$2,683,116	\$2,725,742	\$2,798,008	\$2,852,740	\$3,022,833
<i>City</i>	\$174,868	\$368,531	\$332,457	\$175,062	\$346,286
Revenues	\$1,380,226	\$1,616,079	\$3,022,992	\$2,795,233	\$3,051,237
Metro/KCM Contribution	\$-	\$-	\$1,350,000	\$1,400,000	\$1,450,000
Fares	\$855,820	\$521,188	\$551,276	\$736,833	\$759,148
<i>ORCA</i>	\$756,504	\$418,036	\$465,698	\$595,117	\$658,355
<i>Pay Stations & Passes</i>	\$99,316	\$103,152	\$85,578	\$141,716	\$100,793
FTA Funding	\$279,496	\$514,900	\$551,688	\$54,442	\$194,057
<i>Grants – 5307/5309</i>	\$189,185	\$348,035	\$545,578	\$54,442	\$194,057
<i>Capital Improvement</i>	\$90,311	\$166,865	\$6,110	\$-	\$-
Other	\$244,910	\$579,991	\$570,028	\$603,958	\$648,032
<i>Sponsorship</i>	\$244,910	\$512,986	\$324,082	\$300,618	\$337,692
<i>318 Fairview Lease</i>	\$-	\$67,005	\$89,340	\$89,340	\$89,340
<i>Amazon Contribution</i>	\$-	\$-	\$156,606	\$214,000	\$221,000
Surplus/(Deficit)	\$(1,477,758)	\$(1,478,194)	\$(107,473)	\$(232,569)	\$(317,882)

Notes:

1. City Operating Costs - 2013-2016 taken from June 2017 Semi Annual Report. 2017 based on actuals.
2. Metro/KCM Contribution – Per 2014 ILA.
3. ORCA – 2013-2017 reflect KCM actuals, though it should be noted that actual boardings were not used as basis until 2014, when streetcar was officially included in ORCA system.
4. Grants 5309/5307 – 2013 taken from June 2017 Semi Annual Streetcar Report. 2014-2017 reflect actual amounts drawn on federal grants.
5. Sponsorship – 2013-2016 taken from June 2017 Semi Annual Streetcar Report. 2017 reflects actual receipts.
6. Amazon Contribution – Per 2015 commitment letter.
7. End Fund Balance as of 12/31/17: \$3,602,138 (outstanding principal of interfund loan)

South Lake Union Streetcar – Financial Metrics, Future Projections:

The table below provides financial metrics projected for 2018 through 2023. Data shown here

are based on updated operating cost and ORCA fare revenue estimates, which have been the basis of the 2016 and 2017 KCM reconciliation requests and KCM's 2018-2020 projections.

TABLE 3. SOUTH LAKE UNION STREETCAR FINANCIAL METRICS 2018-2023

	Projections					
	2018	2019	2020	2021	2022	2023
Costs	\$3,726,503	\$4,211,265	\$4,320,121	\$4,524,067	\$4,737,848	\$4,961,945
Operating & Maintenance	\$3,726,503	\$4,211,265	\$4,320,121	\$4,524,067	\$4,737,848	\$4,961,945
<i>Metro/KCM</i>	\$3,328,503	\$3,625,795	\$3,717,087	\$3,902,942	\$4,098,089	\$4,302,993
<i>City</i>	\$398,000	\$585,470	\$603,034	\$621,125	\$639,759	\$658,952
Revenues	\$3,010,687	\$3,127,177	\$1,681,746	\$1,799,990	\$1,929,355	\$2,071,038
Metro/KCM Contribution	\$1,500,000	\$1,550,000	\$-	\$-	\$-	\$-
Fares	\$832,130	\$912,635	\$1,001,458	\$1,102,807	\$1,215,041	\$1,339,347
<i>ORCA</i>	\$728,313	\$805,704	\$891,319	\$989,364	\$1,098,194	\$1,218,996
<i>Pay Stations & Passes</i>	\$103,817	\$106,931	\$110,139	\$113,443	\$116,846	\$120,352
FTA Funding	\$194,057	\$172,042	\$172,123	\$172,123	\$172,123	\$172,123
<i>Grants – 5307/5309</i>	\$194,057	\$172,042	\$172,123	\$172,123	\$172,123	\$172,123
<i>Capital Improvement</i>	\$-	\$-	\$-	\$-	\$-	\$-
Other	\$484,500	\$492,500	\$508,165	\$525,060	\$542,192	\$559,568
<i>Sponsorship</i>	\$255,500	\$255,500	\$263,165	\$271,060	\$279,192	\$287,568
<i>318 Fairview Lease</i>	\$-	\$-	\$-	\$-	\$-	\$-
<i>Amazon Contribution</i>	\$229,000	\$237,000	\$245,000	\$254,000	\$263,000	\$272,000
Surplus/(Deficit)	\$(715,817)	\$(1,084,087)	\$(2,638,375)	\$(2,724,077)	\$(2,808,492)	\$(2,890,907)

Notes:

1. Metro/KCM Operating Costs – 2018-2020 are based on KCM estimates. 2021-23 assume 5% annual growth from 2020 projected.
2. City Operating Costs – 2018 taken from June 2017 Semi Annual Report. 2019 based on projected 2019 budget forecast, 2020-2023 assume 3% annual growth from 2019 projected. Maintenance costs in 2018 are consistent with City's 2017/2018 budget.
3. Metro/KCM Contribution - Per 2014 ILA through 2019.
4. ORCA - 2018-2020 reflect KCM estimates. 2021-23 assumes 11% annual increase.
5. Pay Stations & Passes - Assumes 3% annual increase from 2018-2023.
6. Grants 5307/5309 - 2018 assumes same level of draw as 2017. Ability to draw down grant proceeds lags federal fiscal year and federal award timing. For federal fiscal year 2018 award, proceeds are not expected to be available for draw until calendar year 2019. Assumes approximately 40% of 2018 grant award allocated to SLU and annual full draw down of this amount starting in 2019 budget year.
7. Sponsorship - 2018 reflects projections based on agreements as of May 2018.
8. Amazon Contribution – Per 2015 commitment letter.

South Lake Union Streetcar – Performance Metrics, Past 5 Years

The table below shows performance metrics for SLU for the past five years:

TABLE 4. SOUTH LAKE UNION STREETCAR - PERFORMANCE METRICS 2013-17

	2013	2014	2015	2016	2017
Ridership	760,933	707,712	622,219	518,248	534,763
Farebox Recovery Ratio	30%	17%	18%	24%	23%
Productivity (Riders/Revenue Hour)	64	58	51	40	35
Fare Evasion	Not available	4.10%	4.90%	4.40%	4.80%
Reliability (On-Time Performance)	89%	83%	77%	58%	41%

Notes:

1. Ridership numbers for 2013-2015 are totals for Unlinked Passenger Trips (UPT) as reported by KCM to the National Transit Database (NTD). 2016-2017 ridership is the SLU component of the UPT total reported to the NTD.
2. Farebox recovery ratio is calculated as the quotient of total fares and total operating and maintenance costs.
3. Productivity is calculated as the quotient of ridership and revenue hours as reported by KCM. 2013-2017 is taken from June 2017 Semi-Annual Streetcar Report.
4. Fare Evasion data is provided by KCM. This data is based on regular ridership surveys conducted by KCM staff.
5. Reliability or on-time performance is the percentage of streetcar trips on-time or between five minutes early and five minutes late. KCM has a target of at least 80% of bus trips being on-time at its key stops. It also uses a different definition for its regular bus service: between one and a half minute early and five and a half minutes late.

South Lake Union Streetcar – Performance Metrics, Future Projections:

The following table provides estimated and projected performance metrics for 2018 through 2023. Upon opening of the C3, these projections will change significantly, as will this streetcar reporting approach.

TABLE 5. SOUTH LAKE UNION PERFORMANCE METRICS PROJECTED, 2018-2023

	2018	2019	2020	2021	2022	2023
Ridership	550,806	567,330	584,350	601,880	619,937	638,535
Farebox Recovery Ratio	22%	22%	23%	24%	26%	27%
Productivity (Riders/Revenue Hour)	36	38	39	40	41	42
Fare Evasion	<5%	<5%	<5%	<5%	<5%	<5%
Reliability (On-Time Performance)	80%	90%	90%	90%	90%	90%

Notes:

1. Ridership estimates conservatively assume 3% annual ridership increase.
2. Productivity based on 2017 actual total of 15,113 revenue hours.

South Lake Union Streetcar – Proposed Operations Improvements

In early 2018, SDOT reported to City Council’s Sustainability and Transportation Committee on efforts it undertook in 2017 to analyze and identify spot improvements aimed at improving SLU speed and reliability. The focus was on key locations where congestion is causing delay to streetcar operations and smaller scale improvements that would not require major capital work. The following table shows the three locations that were analyzed, recommended improvements, and expected benefits.

TABLE 6. SLU - PROPOSED OPERATIONS IMPROVEMENTS

Location	Proposed Improvement	Streetcar Benefit	Status
Broad Street/ Westlake Avenue	Restrict southbound right turning vehicles	Reduce travel time by 2 minutes per trip during PM peak period	Expected implementation - Fall 2018
Terry Avenue (between Mercer Street and Thomas Street)	Northbound transit-only lane	Reduce travel time between 1 and 2 minutes per trip during PM peak period	Outreach work concluded May 2018; planned installation Fall 2018.
	Restrict eastbound left turns from Thomas Street to Terry Avenue		
Fairview Avenue (between Yale Avenue and Valley Street)	Southbound transit-only lane	Reduce travel time 6 minutes per trip during PM peak period	To be included as part or Roosevelt Multimodal Corridor project

SDOT is committed to owning and operating a streetcar system that is as safe as possible for all users of our transportation system, including people biking. SDOT expects to continue working with a streetcar/bike design group, as done last year for C3 design, to improve SLU and FH Streetcar and bike network integration. SDOT will solicit input from the streetcar/bike design group during the design of SLU and FH speed and reliability improvements.

FIRST HILL STREETCAR

The next sections discuss Financial and Performance Metrics for the FHS.

First Hill Streetcar – Financial Metrics:

Since the First Hill Streetcar line has been in operation for only slightly over two years, 2016-2023 are shown on Table 7 below. Data shown here are based on updated operating cost and ORCA fare revenue estimates which have been the basis of the 2016 and 2017 KCM reconciliation requests and KCM 's 2018-2020 projections.

TABLE 7. FIRST HILL STREETCAR FINANCIAL METRICS 2016-2023

	Historical			Projections						
	2016	2017	2018	2019	2020	2021	2022	2023		
Costs	\$7,124,764	\$7,714,003	\$8,421,361	\$8,846,937	\$9,420,579	\$9,865,652	\$10,332,199	\$10,821,271		
Operating & Maintenance	\$7,124,764	\$7,714,003	\$8,421,361	\$8,846,937	\$9,420,579	\$9,865,652	\$10,332,199	\$10,821,271		
Metro/KCM	\$6,094,519	\$6,567,926	\$7,275,284	\$7,586,907	\$8,122,748	\$8,528,886	\$8,955,330	\$9,403,096		
City	\$1,030,245	\$1,146,077	\$1,146,077	\$1,260,030	\$1,297,831	\$1,336,766	\$1,376,869	\$1,418,175		
Revenues	\$5,863,760	\$5,919,349	\$6,234,271	\$6,364,425	\$6,515,896	\$6,644,217	\$6,786,352	\$6,943,812		
Sound Transit Contribution	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000		
Fares	\$736,406	\$769,349	\$917,586	\$1,047,861	\$1,197,456	\$1,323,969	\$1,464,242	\$1,619,784		
ORCA (2)	\$654,963	\$709,780	\$856,229	\$984,664	\$1,132,363	\$1,256,923	\$1,395,185	\$1,548,655		
Pay Stations & Passes	\$81,443	\$59,569	\$61,356	\$63,197	\$65,093	\$67,046	\$69,057	\$71,129		
FTA Funding	\$-	\$-	\$258,185	\$258,064	\$258,185	\$258,185	\$258,185	\$258,185		
Grants – 5307/5309	\$-	\$-	\$-	\$258,064	\$258,185	\$258,185	\$258,185	\$258,185		
Other	\$127,354	\$150,000	\$58,500	\$58,500	\$60,255	\$62,063	\$63,925	\$65,842		
Sponsorship	\$127,354	\$150,000	\$58,500	\$58,500	\$60,255	\$62,063	\$63,925	\$65,842		
Surplus/(Deficit)	\$(1,261,005)	\$(1,794,654)	\$(2,187,091)	\$(2,482,512)	\$(2,904,683)	\$(3,221,435)	\$(3,545,847)	\$(3,877,460)		

Notes:

1. Metro/KCM Operating Costs - KCM actuals used for 2016-2017, KCM estimates for 2018-2020. Assumes 5% growth annually 2021-23.
2. City Operating Costs - 2016 taken from June 2017 Semi Annual Streetcar Report. 2017 based on actuals. 2018 assumes 0% growth from 2017 actual. 2019 based on projected budget request. 2020-23 inflated at 3% annually.
3. Sound Transit Contribution - Per 2014 Sound Transit Funding and Cooperative Agreement.
4. ORCA - KCM actuals for 2016-17, KCM estimates for 2018-20. 2021-23 assumes 1% annual increase.
5. Pay Stations & Passes - 2016 taken from June 2017 Semi-Annual Streetcar Report. 2017 reflects actual receipts. 2018 assumes 3% increase from 2017, then 3% annual increase from 2018-23.
6. Grants - 5309/5307 - 2018 assumes no draw down of federal grant funds. Ability to draw down grant proceeds lags federal fiscal year and federal award timing. For federal fiscal year 2018 award, proceeds are not expected to be available for draw until calendar 2019. Assumes 60% of 2018 grant award allocated to FHS and annual full draw down of this amount starting in 2019 budget year.
7. Sponsorship - 2016-2017 taken from June 2017 Semi-Annual Streetcar Report. 2018 projection based on agreements as of May 2018.

First Hill Streetcar – Performance Metrics

Table 8 shows historic and projected performance metrics for the First Hill Streetcar.

TABLE 8. FIRST HILL STREETCAR - PERFORMANCE METRICS 2016-2023

	2016	2017	2018	2019	2020	2021	2022	2023
Ridership	840,049	882,219	908,686	935,946	964,025	992,945	1,022,734	1,053,416
Farebox Recovery Ratio	10%	10%	11%	12%	13%	13%	14%	15%
Productivity (Riders/Revenue Hour)	32	30	31	31	32	33	34	35
Fare Evasion	7.50%	13.50%	<10%	<8%	<6%	<6%	<6%	<6%
Reliability (On-Time Performance)	84%	84%	80%	90%	90%	90%	90%	90%

Notes:

1. Ridership numbers for 2016-2017 are totals for UPT as reported by KCM to the NTD. 2016-17 is the FHS component of the UPT total reported to the NTD.
2. Farebox recovery ratio is calculated as the quotient of total fares and total operating and maintenance costs.
3. Productivity is calculated as the quotient of ridership and revenue hours as reported by KCM. 2016-2017 taken from June 2017 Semi-Annual Streetcar Report. 2018-2023 based on 2017 actual total of 29,755 revenue hours.
4. Fare Evasion data is provided by KCM. This data is based on regular ridership surveys conducted by KCM staff.
5. Reliability or on-time performance is the percentage of streetcar trips on-time or between five minutes early and five minutes late. KCM has a target of at least 80% of bus trips being on-time at its key stops. It also uses a different definition for its regular bus service: between one and a half minute early and five and a half minutes late.

Fare Revenue vs. Ridership

For 2017, fare revenue for the First Hill line totaled \$769,349 while ridership totaled 882,219, for an average fare per rider of approximately \$0.87. For the South Lake Union line, 2017 fare revenue totaled \$759,148, with ridership of 534,763 for an average fare per rider of approximately \$1.42.

First Hill Streetcar – Proposed Operations Improvements:

In 2017 SDOT completed two speed and reliability projects on Broadway Avenue at Pike and Pine Streets to improve First Hill Streetcar performance. In March 2018, SDOT presented a suite of proposed and completed spot improvements to both streetcar lines to improve speed and reliability. A summary of these improvements is shown below:

TABLE 9. FHS PROPOSED OPERATIONS IMPROVEMENTS

Location	Proposed Improvement	Streetcar Benefit	Status
Broadway Avenue (between Pine and Madison Streets)	Southbound transit-only lane and red-painted treatment	Reduce travel time by approximately 2-3 minutes per trip during PM peak period	Outreach work concluded May 2018; planned installation Fall 2018.
East Yesler Way (between Boren and 14th Avenues)	Yesler Way/Boren Avenue: restrict afternoon peak left turning vehicles (eastbound and westbound)	Reduce travel time between 20 and 50 seconds per trip during PM peak period	Complete
	Yesler Way/12th Avenue: restrict left turning vehicles		Complete
	Yesler Way/14th Avenue: Synchronize signal and improve stop bar visibility		Complete
South Jackson Street (between Occidental and 14th Avenues)	Transit signal priority at 2nd, 5th, and Maynard Avenues	Reduce travel between 40 and 70 seconds per trip during PM peak period	Complete
	Restrict on-street parking east of 12th Avenue		Complete

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