

# Update on the Seattle Streetcar

August 31, 2018



City of Seattle

# Key Questions

In March 2018, *The Seattle Times* published a report on the increased potential operating costs of the Seattle streetcar, including the Center City Connector (C3). SDOT did an initial analysis, which revealed increased capital costs as well. Before moving forward on this project, Mayor Durkan wanted the following questions answered:

- What are the capital costs of building the C3 streetcar?
- How much has the City spent on the project thus far? What would be the additional capital costs if the project does not move forward?
- What are historical, current and forecasted operations and maintenance (O&M) costs of the SLU, First Hill and C3 streetcar lines?
- What are the historical and current ridership numbers and future ridership assumptions on the current lines and proposed C3?
- What are the long-term financial projections for the streetcar, including agency contributions and sponsorships?
- What are the risks to the City for moving forward? Not moving forward?

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# Overview of the Seattle Streetcar

- The Seattle Streetcar System currently operates two separate Streetcar lines, designated as the South Lake Union Streetcar (SLU) and the First Hill Streetcar (FHS). These two separate lines have been in operation since 2007 and 2016, respectively.
- The SLU and FHS lines are both owned by the City and operated by King County Metro.
- There are some key sources of revenue that go to annual operating costs including: farebox revenues; Sound Transit contribution (\$5M annually which expires in 2023); FTA contribution (\$430K); King County Metro (\$1.9M annually which expires in 2019); and sponsorships. There has been no dedicated revenue source from the City, but the City has been covering all operating shortfalls and some capital shortfalls.

# Historic Operational Costs of the Streetcar

From 2013 - 2017, the South Lake Union Streetcar (SLU) and the First Hill Streetcar (FHS) have been operating with a deficit with no dedicated City revenue source. The total operating debt is **\$7.1 million**, which includes approximately \$500,000 in additional operational deficit of SLU owed to King County Metro.

Line	Year of annual operation (\$ millions)																			
	2013				2014				2015				2016				2017			
	Revenues <sup>1</sup>	Operation cost	Net operating deficit	Cumulative operating deficit	Revenues <sup>1</sup>	Operation cost	Net operating deficit	Cumulative operating deficit	Revenues <sup>1</sup>	Operation cost	Net operating deficit	Cumulative operating deficit	Revenues <sup>1</sup>	Operation cost	Net operating deficit	Cumulative operating deficit	Revenues <sup>1</sup>	Operation cost	Net operating deficit	Cumulative operating deficit
SLU	\$1.4	\$2.9	(\$1.5)	(\$1.5)	\$1.6	\$3.1	(\$1.5)	(\$3.0)	\$3.0	\$3.1	(\$0.1)	(\$3.1)	\$2.8	\$3.0	(\$0.2)	(\$3.3)	\$3.1	\$3.4	(\$0.3)	(\$3.6)
FHS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	\$5.9	\$7.1	(\$1.2)	(\$1.2)	\$5.9	\$7.7	(\$1.8)	(\$3.0)
<b>Total</b>	<b>\$1.4</b>	<b>\$2.9</b>	<b>(\$1.5)</b>	<b>(\$1.5)</b>	<b>\$1.6</b>	<b>\$3.1</b>	<b>(\$1.5)</b>	<b>(\$3.0)</b>	<b>\$3.0</b>	<b>\$3.1</b>	<b>(\$0.1)</b>	<b>(\$3.1)</b>	<b>\$8.7</b>	<b>\$10.1</b>	<b>(\$1.4)</b>	<b>(\$4.5)</b>	<b>\$9.0</b>	<b>\$11.1</b>	<b>(\$2.1)</b>	<b>(\$6.6)</b>

<sup>1</sup> Note that the SLU streetcar began operations in 2007. Cumulative operating deficit not shown is approximately \$550K..

<sup>2</sup> Revenues include KCM contributions, farebox revenue, FTA funding, sponsorships and contributions.

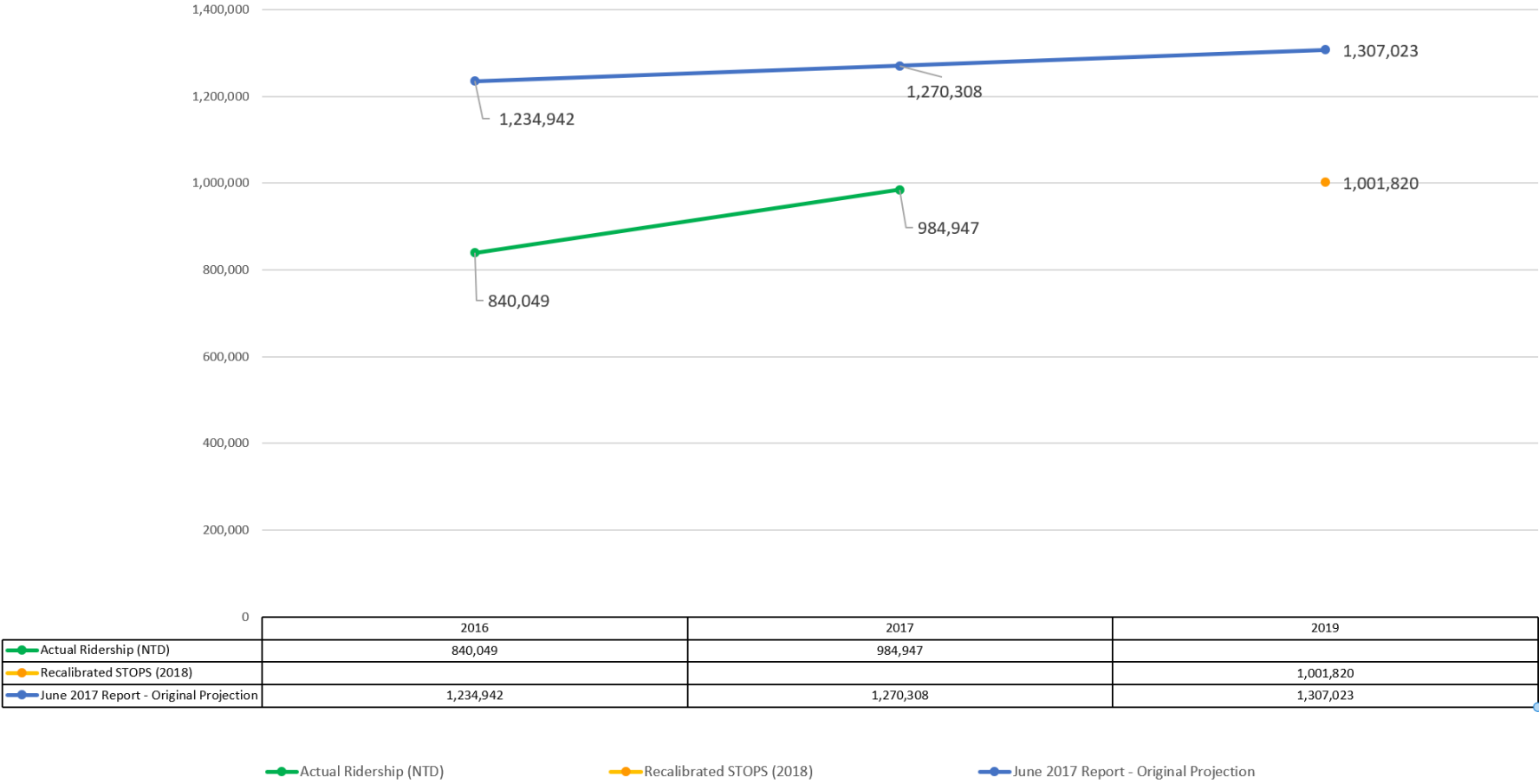


# Summary of Existing Debt by City of Seattle

Existing Operating Liabilities	Debt in Millions
SLU Cumulative Operating Deficit	\$3.6
SLU King County Metro Reconciliation (2016/2017)	\$.5-.6
FHS Cumulative Operating Deficit	\$.2
FHS King County Metro Reconciliation (2016/2017)	\$2.8
<b>TOTAL Operating Liabilities</b>	<b>\$7.1-\$7.2</b>
Existing Capital Liabilities	
SLU Capital Costs	\$4.4
FHS Capital Costs	\$6.4
<b>TOTAL Capital Liabilities</b>	<b>\$10.8</b>
<b>TOTAL Existing Liabilities</b>	<b>\$17.9-\$18 million</b>

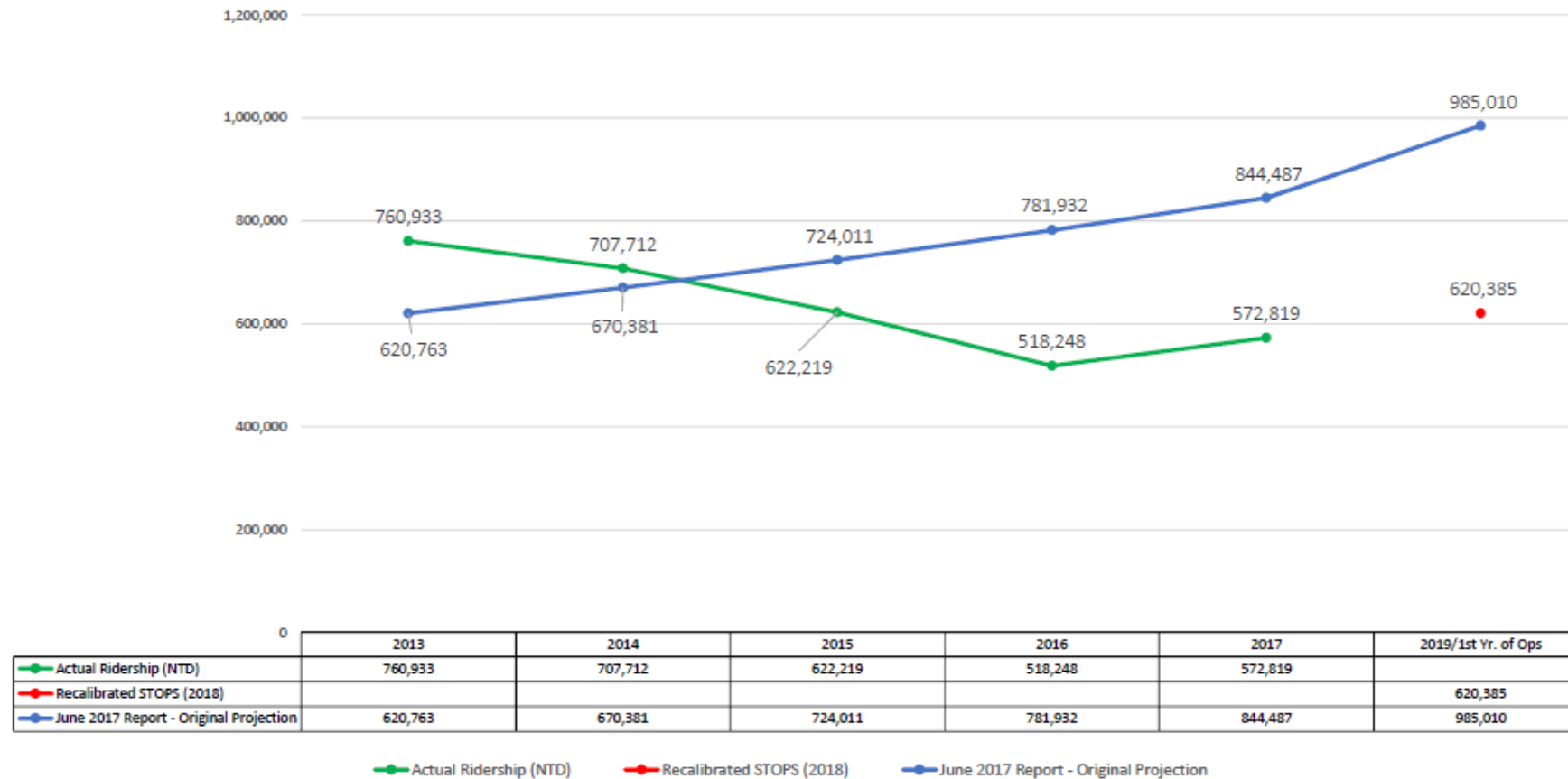


# First Hill Streetcar Annual Ridership



- First Hill began operations in March 2016
- Actual ridership source = King County Metro submittals to National Transit Database (NTD)
- Recalibrated 2018 STOPS model calculated daily weekday total for FHS at 3,396 riders and SLU at 2,103 riders for a total of 5,499 riders. Original 2014 STOPS model calculated daily weekday total for FHS at 5,440 riders and has SLU at 3,159 riders for a total of 8,599 riders.
- June 2017 Report - Original Projection numbers are taken from June 2017 Streetcar Semi Annual Report presented to Sustainability & Transportation Committee on June 29, 2017. These numbers have not been verified for accuracy.

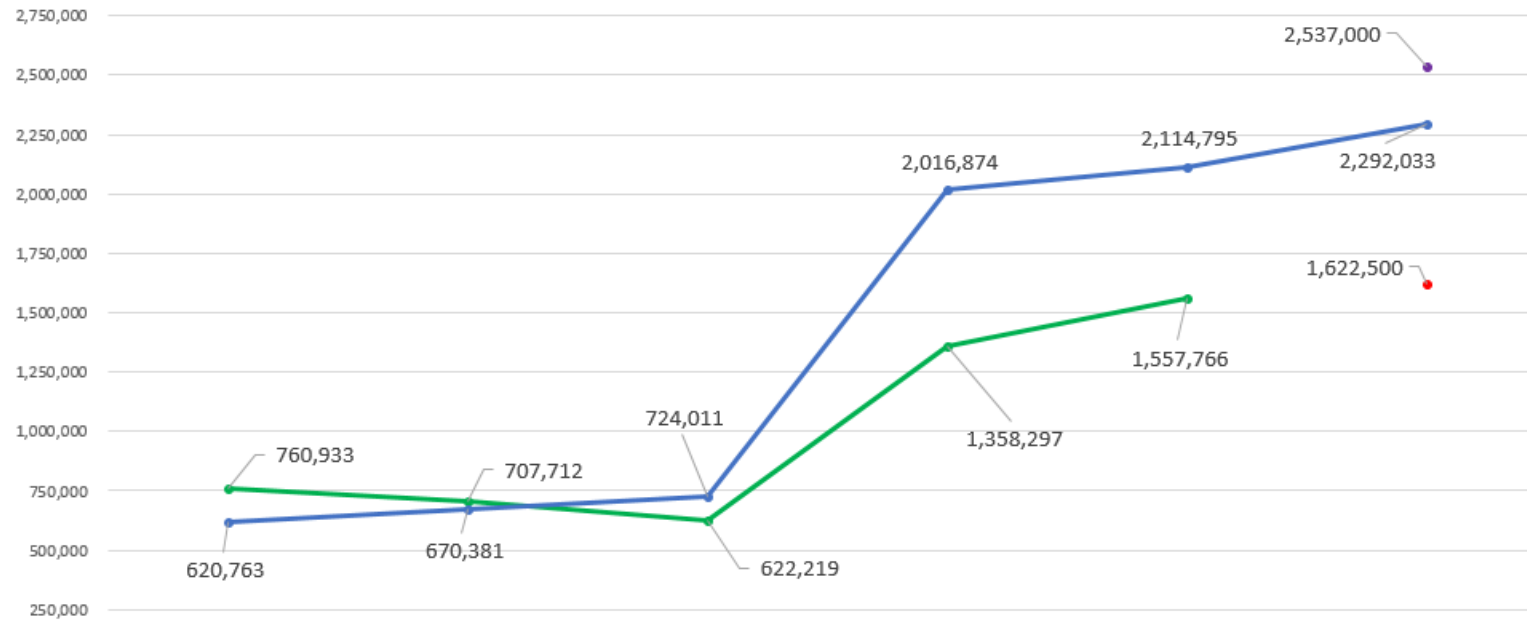
# South Lake Union Streetcar Annual Ridership



- Actual ridership source = King County Metro submittals to National Transit Database (NTD)
- Recalibrated 2018 STOPS model calculated daily weekday total for FHS at 3,396 riders and SLU at 2,103 riders for a total of 5,500 riders. Original 2014 STOPS model calculated daily weekday total for FHS at 5,440 riders and has SLU at 3,159 riders for a total of 8,600 riders.
- June 2017 Report - Original Projection numbers are taken from June 2017 Streetcar Semi Annual Report presented to Sustainability & Transportation Committee on June 29, 2017. These numbers have not been verified for accuracy.



# Current Combined Ridership



	2013	2014	2015	2016	2017	2019/1st Yr. of Ops
Actual Ridership (NTD)	760,933	707,712	622,219	1,358,297	1,557,766	
Original STOPS (2014)						2,537,000
Recalibrated STOPS (2018)						1,622,500
June 2017 Report - Original Projection	620,763	670,381	724,011	2,016,874	2,114,795	2,292,033

—●— Actual Ridership (NTD)    
 —●— Original STOPS (2014)    
 —●— Recalibrated STOPS (2018)    
 —●— June 2017 Report - Original Projection

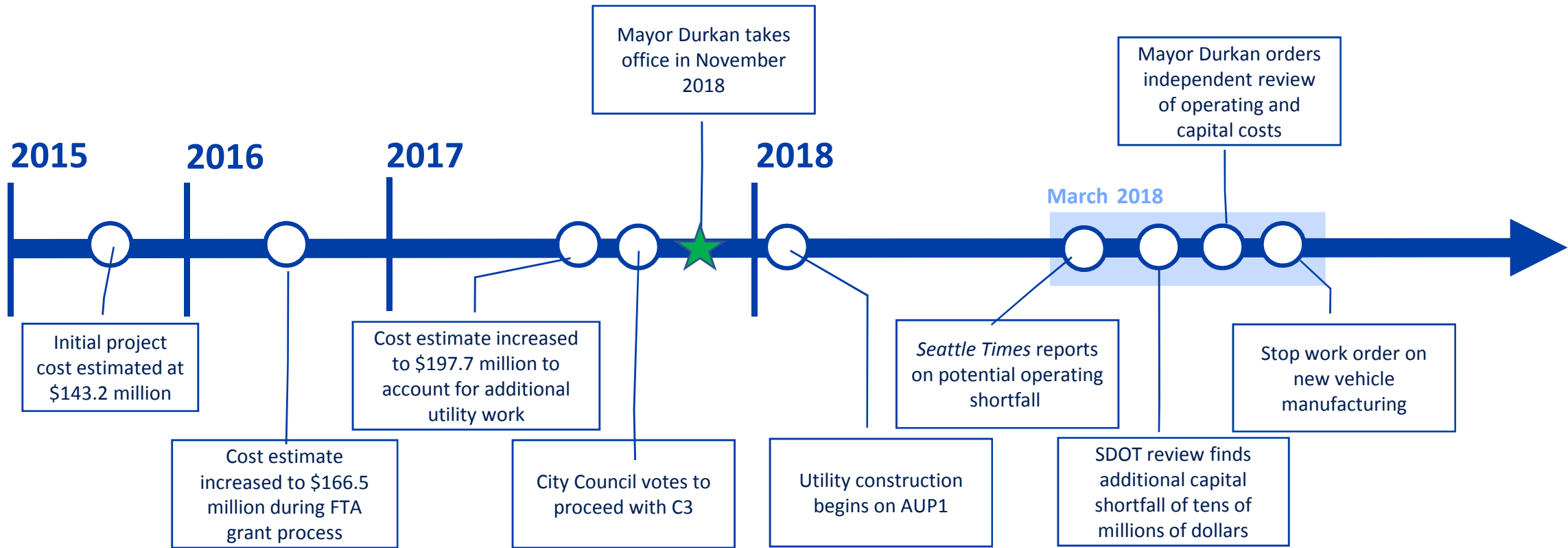
- Actual ridership source = King County Metro submittals to National Transit Database (NTD)
- KPMG Year One of Operations totals taken from KPMG report (2022)
- Recalibrated 2018 STOPS model calculated daily weekday total for FHS at 3,396 riders and SLU at 2,103 riders for a total of 5,500 riders. Original 2014 STOPS model calculated daily weekday total for FHS at 5,440 riders and has SLU at 3,159 riders for a total of 8,600 riders.
- June 2017 Report - Original Projection numbers are taken from June 2017 Streetcar Semi Annual Report presented to Sustainability & Transportation Committee on June 29, 2017. These numbers have not been verified for accuracy.

# Center City Connector: Estimated Capital Costs

Year	Capital Costs	Description
2015	\$143.2 million	In late 2015, the Project team developed a baseline cost estimate that included adopted Capital Improvement Program (CIP) budgets for SPU water, drainage, and wastewater work and SCL work.
2016	\$166.5 million	Project costs increased to \$166.5 million.
2016	\$177 million	In late 2016, a budget was submitted to the FTA for the Small Starts Grant Agreement (SSGA) process, which increased the budget to \$177 million primarily for FTA required contingency – this includes only reimbursable public utility work by SDOT.
2017	\$197.7 million	In 2017, the full project cost estimate totaled \$197 million in the Capital Improvement Program (CIP) budget to include additional utility work by the SPU and SCL.
2018	\$236.1 million - \$252.4 million	Based on independent review completed by KPMG of capital costs, which includes public utility work by SPU and SCL.



# C3 Timeline



# Summary of Current C3 Plan

## Build with current service plan

Continue with the current plan and assume SDOT existing service approach to entire system

- Annual Ridership in Year 5 of Operations: **5.8M (Low) to 6.9M (High)**
- Net annual operating expenses (with agency and sponsorship contributions) in Year 5 of Operations: **(\$2.6M) deficit to \$1.9M surplus**
- Net annual operating expenses (without agency contributions) in Year 5 of Operations: **(\$9.9M) to (\$5.4M) deficit**
- Total capital expenses including necessary public utility work: **\$252.4M (includes \$31M spent as of May 2018)**

*Agency contributions include FTA contribution (\$430,000) and sponsorships (\$980,000). Sound Transit contribution (\$5M) agreement expires in 2023, and King County Metro (\$1.9M) agreement expires in 2019. Net annual operating expenses include renegotiated contribution. Additional KCM reconciliation is not included in any of these options. Operating costs could be higher depending on an updated ILA, expected in 2019.*



# Summary of C3 (Alternative Operating Plan)

## Build with alternative service plan

Continue with the current plan using CAF vehicles and assumed KPMG alternative demand-driven operating plan with reduced train frequency and shorter operating hours, resulting in lower operating and maintenance costs

- Annual Ridership in Year 5 of Operations: **5.4M (Low) to 6.3M (High)**
- Net annual operating expenses (with agency and sponsorship contributions) in Year 5 of Operations: **\$2.7M to \$6.1M surplus**
- Net annual operating expenses (without agency and contributions) in Year 5 of Operations: **(\$4.7M) to (\$1.2M) deficit**
- Total capital expenses including necessary public utility work: **\$241.9M (includes \$31M spent as of May 2018)**

*Agency contributions include FTA contribution (\$430,000) and sponsorships (\$980,000). Sound Transit contribution (\$5M) agreement expires in 2023, and King County Metro (\$1.9M) agreement expires in 2019. Net annual operating expenses include renegotiated contribution. Additional KCM reconciliation is not included in any of these options. Operating costs could be higher depending on an updated ILA, expected in 2019.*



# Summary of Not Moving Forward on C3

## No build with current service plan

Continue with the current plan using current vehicles and assumes SDOT existing service approach on FHS and SLU

- Ridership in Year 5 of Operations: **1.5M (Low) to 1.8M (High)**
- Net annual operating expenses (with agency and sponsorship contributions): **(\$0.1M) deficit to \$1.9M surplus**
- Net annual operating expenses (without agency contributions): **(\$7.4M) to (\$5.4M) deficit**
- Total capital expenses which only includes Advanced Utility Package 1: **\$55.4M (includes \$31M spent as of May 2018)**

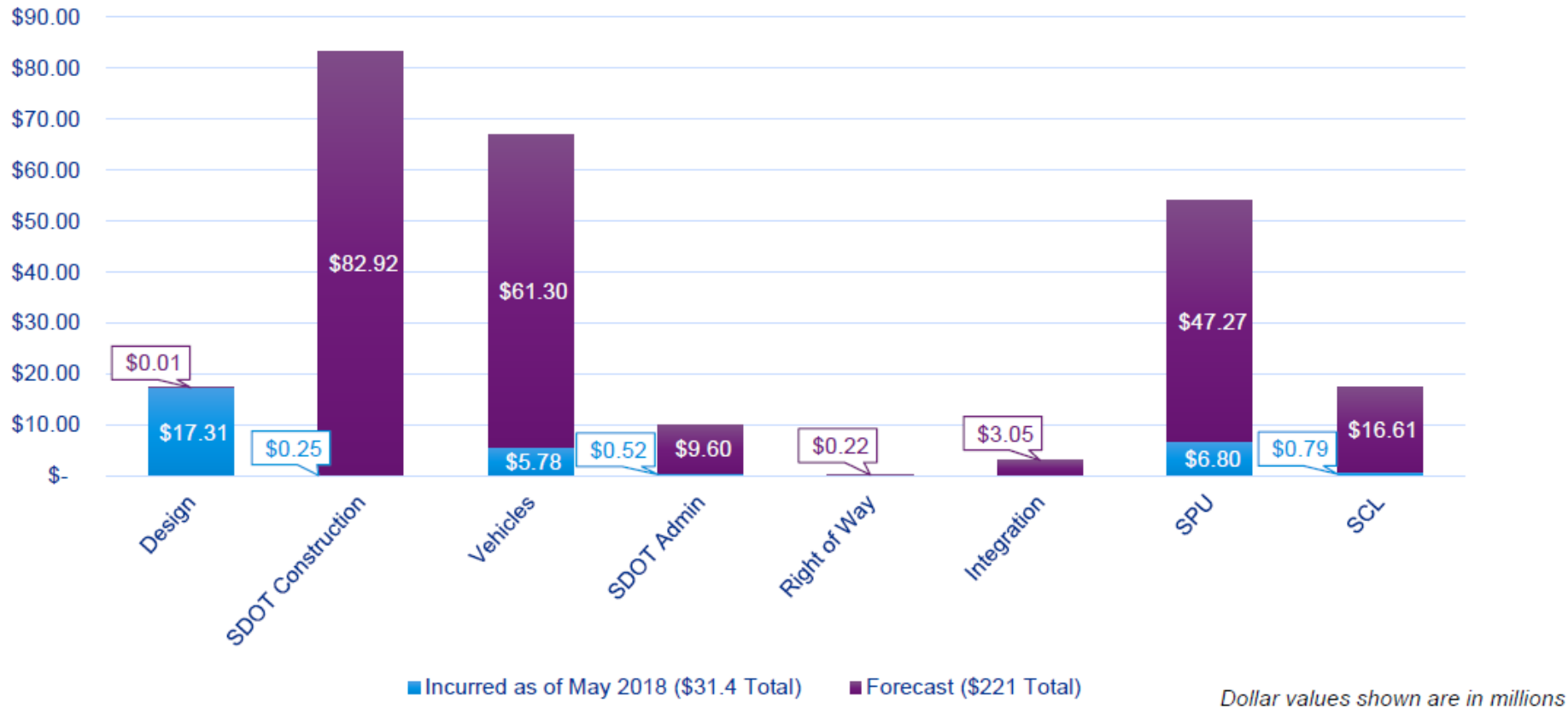
*Agency contributions include FTA contribution (\$430,000) and sponsorships (\$980,000). Sound Transit contribution (\$5M) agreement expires in 2023, and King County Metro (\$1.9M) agreement expires in 2019. Net annual operating expenses include renegotiated contribution. Additional KCM reconciliation is not included in any of these options. Operating costs could be higher depending on an updated ILA, expected in 2019.*



# Summary of Options

Option	Summary
Build with current service plan	<ul style="list-style-type: none"> <li>• Annual Ridership in Year 5 of Operations: <b>5.8M (Low) to 6.9M (High)</b></li> <li>• Annual operating expenses (with contributions) in Year 5 of Operations: <b>(\$2.6M) deficit to \$1.9M surplus</b></li> <li>• Net annual operating expenses (without contributions) in Year 5 of Operations: <b>(\$9.9M) to (\$5.4M) deficit</b></li> <li>• Total capital expenses: <b>\$252.4M (includes \$31M spent as of May 2018)</b></li> </ul>
Build with alternative service plan	<ul style="list-style-type: none"> <li>• Annual Ridership in Year 5 of Operations: <b>5.4M (Low) to 6.3M (High)</b></li> <li>• Annual operating expenses (with contributions) in Year 5 of Operations: <b>\$2.7M to \$6.1M surplus</b></li> <li>• Annual operating expenses (without contributions) in Year 5 of Operations: <b>(\$4.7M) to (\$1.2M) deficit</b></li> <li>• Total capital expenses: <b>\$241.9M (includes \$31M spent as of May 2018)</b></li> </ul>
No build with current service plan	<ul style="list-style-type: none"> <li>• Ridership in Year 5 of Operations: <b>1.5M (Low) to 1.8M (High)</b></li> <li>• Annual operating expenses (with agency and sponsorship contributions): <b>(\$0.1M) deficit to \$1.9M surplus</b></li> <li>• Annual operating expenses (without agency and sponsorship contributions): <b>(\$7.4M) to (\$5.4M) deficit</b></li> <li>• Total capital expenses: <b>\$55.4M (includes \$31M spent as of May 2018)</b></li> </ul>

# Projected Capital Costs of Build with Current Service Plan: \$252.5 Million

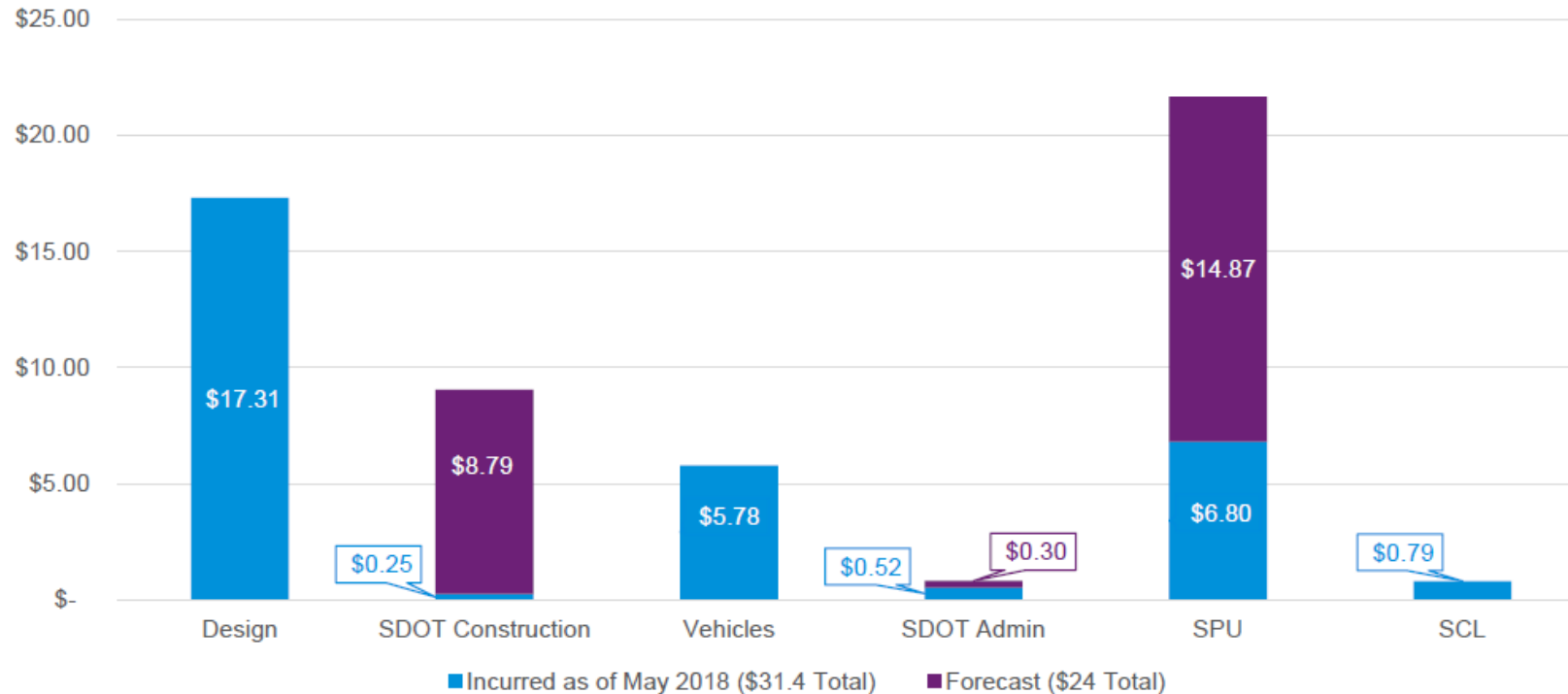


This includes an anticipated \$75M in funding from FTA.

Note: The capital costs displayed in these options are representative of the actual project and design costs to-date, as well as anticipated project and design costs to complete each option. There are risks and costs associated with contract negotiations, integration, and potential cost litigation that are not captured in the dollar figures shown. Additional coordination between SDOT, the City, and each respective contract owner will need to occur before final risk, integration, and litigation costs can be identified.



# Projected Capital Costs No Build with Current Service Plan: \$55.41 Million



Dollar values shown are in millions

Note: The capital costs displayed in these options are representative of the actual project and design costs to-date, as well as anticipated project and design costs to complete each option. There are risks and costs associated with contract negotiations and potential cost litigation that are not captured in the dollar figures shown. Additional coordination between SDOT, the City, and each respective contract owner will need to occur before final risk and litigation costs can be identified.



# Schedule Forecast Assumptions

Assessment of a conservative schedule to continue the Project, as of the date of this report, assumed an in service date of May 2022. Key risks include:

- **FTA Review:** The City indicated that this review may take eight months based on their discussions with FTA. Recent discussions with the FTA indicate that the duration of the review may now take between 12 to 18 months to complete.
- **Engineering and Design Review:** For cost certainty at the time of bids, we assume the City will want to study the existing conditions (platforms, maintenance facilities, storage yards, etc.) at the SLU and FHS lines and incorporate changes into the contract documents as required to accommodate the larger CAF vehicles. This review is underway and will likely impact the decision date of the Project.
- **Utility and Track Bid:** As of June 2018, it was assumed advertisement for bids on the combined utilities and track infrastructure contract could occur in June 2019, which should have allowed the City to issue the NTP to the successful bidder in late October 2019. Based on numerous internal project reviews and expected FTA timelines, this assumption will likely need to be extended.
- In June 2018, using the more conservative schedules developed by the project manager for both the utility and track infrastructure work, and adding reasonable schedule contingencies, a more conservative streetcar in-service date was expected to be May 2022. Based on information that has become available since this initial review in June 2018, it is reasonable to assume that the Project in-service date will extend further.



# Operating Cost Summary (First Year of Operations)

Line	Year of annual operation (\$ millions)									
	2022		2023		2024		2025		2026	
	Revenues <sup>3</sup>	Operation Cost <sup>2</sup>	Revenues <sup>3</sup>	Operation Cost <sup>2</sup>	Revenues <sup>1</sup>	Operation Cost <sup>2</sup>	Revenues <sup>1</sup>	Operation Cost <sup>2</sup>	Revenues <sup>1</sup>	Operation Cost <sup>2</sup>
<b>Option 1</b> <i>Continue with current plan</i>	\$14.91 (High) \$13.55 (Low)	\$16.73 (High) \$14.22 (Low)	\$15.22 (High) \$13.82 (Low)	\$17.4 (High) \$14.79 (Low)	\$10.54 (High) \$9.1 (Low)	\$18.1 (High) \$15.39 (Low)	\$10.86 (High) \$9.38 (Low)	\$18.82 (High) \$16.00 (Low)	\$11.21 (High) \$9.67 (Low)	\$19.57 (High) \$16.63 (Low)
<b>Option 3</b> <i>Terminate with current plan</i>	\$8.21 (High) \$7.86 (Low)	\$9.16 (High) \$7.79 (Low)	\$8.31 (High) \$7.95 (Low)	\$9.52 (High) \$8.09 (Low)	\$3.41 (High) \$3.03 (Low)	\$9.91 (High) \$8.42 (Low)	\$3.52 (High) \$3.14 (Low)	\$10.3 (High) \$8.76 (Low)	\$3.63 (High) \$3.23 (Low)	\$10.71 (High) \$9.10 (Low)

<sup>1</sup> Revenues do not include KCM contributions, FTA funding, and Sound Transit contributions.

<sup>2</sup> Assuming an average fare of \$1.49, any change in ridership will result in an adjustment to total revenue (i.e. 100,000 riders equals \$149,000 revenue). <sup>2</sup> Assuming an average fare of \$1.49, any change in ridership will result in an adjustment to total revenue (i.e. 100,000 riders equals \$149,000 revenue). Additional KCM reconciliation is not included in any of these options. Operating costs could be higher depending on an updated ILA, expected in 2019.

<sup>3</sup> Revenues for years 2022 and 2023 include the Sound Transit contribution, which expires in late 2023. Revenues for these years do not include KCM contributions and FTA funding.

*Note: A range of -15 percent was applied to base case numbers utilizing FTA guidance provided for estimates on past transit projects to reflect potential variances.*

Agency contributions include FTA contribution (\$430,000) and sponsorships (\$980,000). Sound Transit contribution (\$5M) agreement expires in 2023, and King County Metro (\$1.9M) agreement expires in 2019. Net annual operating expenses include renegotiated contribution. Additional KCM reconciliation is not included in any of these options. Operating costs could be higher depending on an updated ILA, expected in 2019.

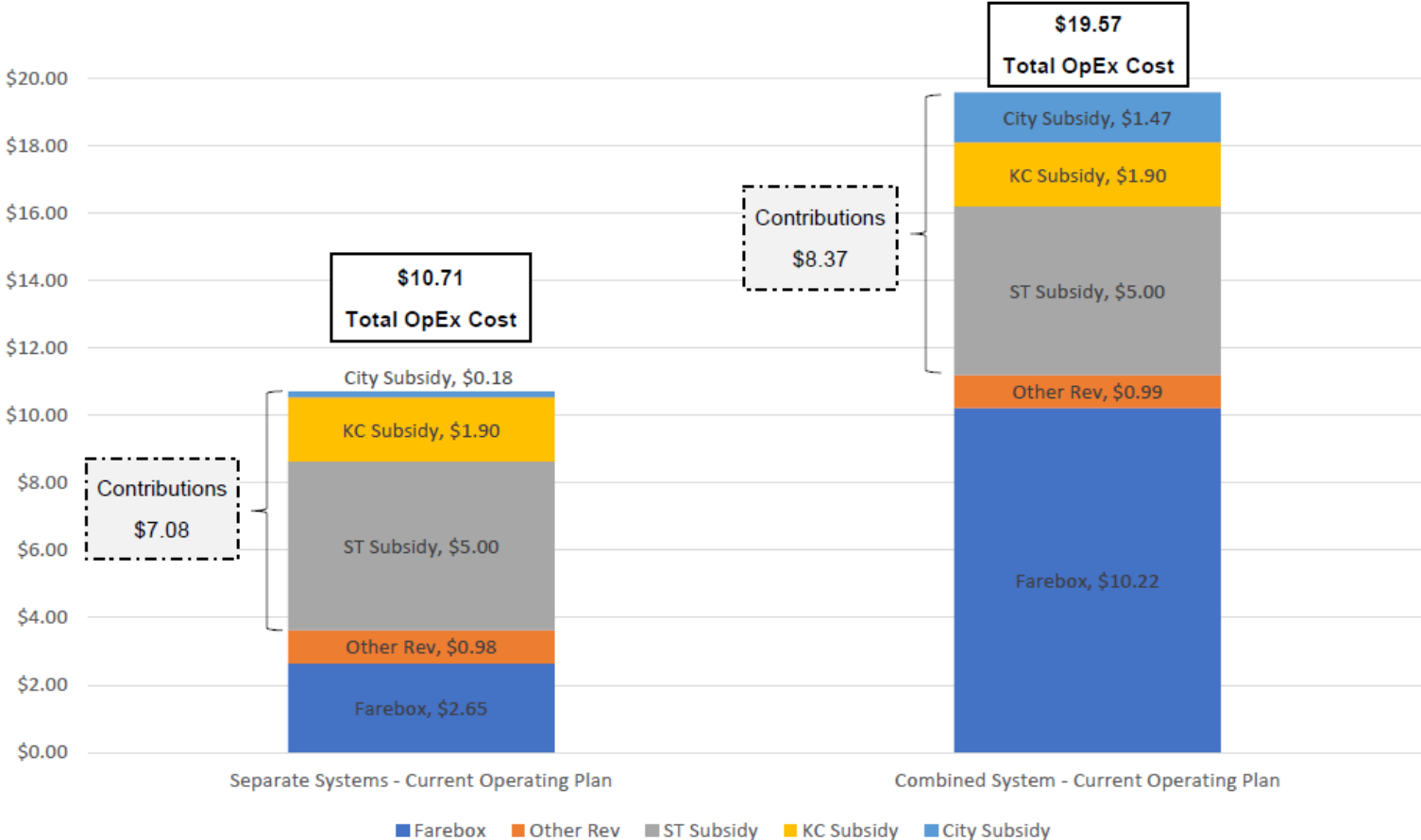
# Ridership Summary (First Year of Operations)

Line	Year of annual operation (Trips per year in millions)				
	2022	2023	2024	2025	2026
	Ridership	Ridership	Ridership	Ridership	Ridership
Option 1 <i>Continue with current plan</i>	6.08 (High) 5.17 (Low)	6.26 (High) 5.32 (Low)	6.45 (High) 5.48 (Low)	6.65 (High) 5.65 (Low)	6.86 (High) 5.83 (Low)
Option 3 <i>Terminate with current plan</i>	1.58 (High) 1.34 (Low)	1.63 (High) 1.39 (Low)	1.67 (High) 1.42 (Low)	1.73 (High) 1.47 (Low)	1.78 (High) 1.51 (Low)

*Assumes 3.0 percent annual increase in ridership.*



# Sources of Revenue for Operations (Fifth Year of Operations)



Dollar values shown are in millions

Note: Agency contributions include FTA contribution (\$430,000) and sponsorships (\$980,000). Sound Transit contribution (\$5M) agreement expires in 2023, and King County Metro (\$1.9M) agreement expires in 2019. Net annual operating expenses include renegotiated contribution.

# Key Risks for Continuing

- \$75 million FTA Small Starts Grant. In addition to uncertainty around transit funding under President Trump, FTA has indicated they are reviewing the project.
- Uncertainty around the final project scope, schedule and costs. Further analysis is needed to determine additional scope needs related to vehicle interface with existing infrastructure.
- Sound Transit, KCM, and FTA operating contributions or grants may not be extended by the grantors past the current expiration dates.
- Contract commitments and delay claims may require additional negotiation or legal review.
- Reconciliation with KCM may lead to higher operating costs.
- Coordination with other major construction projects during period of maximum constraint.

**CITYLAB**

**The \$1.4 Billion Transit Fund the U.S. Government Won't Release**

LAURA BLISS AUG 15, 2018



# Key Risks for Not Moving Forward

- Project costs incurred to date, committed costs, and liabilities are estimated to exceed \$55.4 million, which may require alternative funding sources.
- Sound Transit, KCM, and FTA operating contributions or grants may not be extended by the grantors past the current expiration dates.
- Reconciliation with KCM may lead to higher operating costs.
- Contract commitments and termination claims may require additional negotiation or legal review.



# Next Steps

- **Additional Engineering Analysis and Design** – Additional engineering analysis and design work is being performed to review necessary design changes to integrate the full streetcar system, including, but not limited to: platform design, rail vehicle suitability (rail car length, weight and dynamic envelope) current platforms and C3 platform design. This work began August 2018 and will be used to develop a revised scope and cost estimate for the project.
- **Coordination with FTA** – As the scope, schedule, and budget for the project are revised based on the additional engineering work, SDOT will need to work closely with FTA, which will conduct additional reviews to ensure the readiness of the project to receive FTA funding. Funding has not been secured until the FTA signs the full funding grant agreement. This process is likely to take a minimum of eight months and could take much longer. This will further delay the project and increase the estimated escalation and contingency costs, as well as other project time-related costs.
- **Community Outreach and Public Input** – Mayor Durkan continues meeting and talking about the challenges and opportunities with neighborhoods, stakeholders and businesses impacted by this project.





# Next Steps (Continued)

- **Evaluation of Budget Options Moving Forward** – Both moving forward and not moving forward have fiscal impacts, especially if the FTA’s review takes an estimated 12 – 18 months. The 2018 budget included \$197.7M for the Capital Improvement Program (CIP) budget including \$67.5M in transportation bonds. SDOT and CBO are evaluating if bonding could potentially be used for other transportation capital projects.
- **Litigation Risks:** The City Attorney’s office is performing a legal risk assessment to gain an understanding of the legal and potential cost exposure of any claims, litigation or cost recovery that may arise from the decision to continue or terminate the Project.

