

C-01e: Additional potential light rail station in the vicinity of SR 99 and Harrison Street

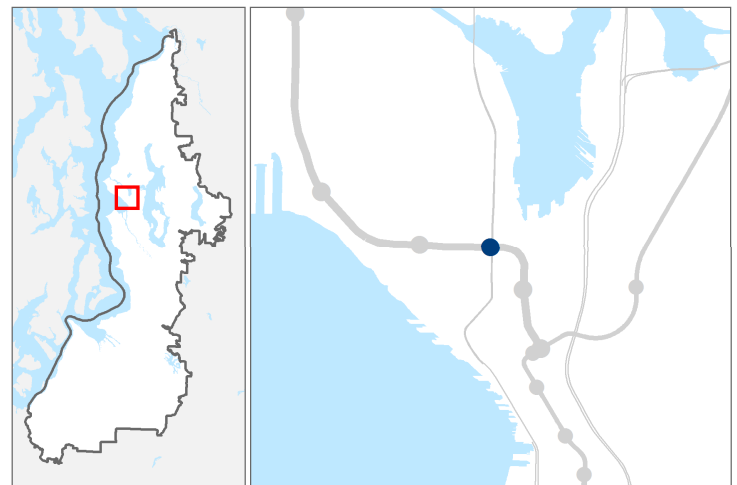
Project Number	C-01e
Subarea	North King
Primary Mode	Light Rail
Facility Type	Station
Length	N/A
Version	ST Board Workshop
Date Last Modified	11-25-2015

SHORT PROJECT DESCRIPTION

This project reflects the additional cost, ridership and other evaluation criteria related to an additional tunnel station consistent with the alignments of C-01b and C-01c in the vicinity of SR 99 and Harrison Street.

Note: The elements included in this representative project will be refined during future phases of project development and are subject to change.

PROJECT AREA AND REPRESENTATIVE ALIGNMENT



KEY ATTRIBUTES

REGIONAL LIGHT RAIL SPINE <i>Does this project help complete the light rail spine?</i>	No
CAPITAL COST <i>Cost in Millions of 2014 \$</i>	\$367 — \$393
RIDERSHIP <i>2040 daily boardings</i>	3,000 — 4,000
PROJECT ELEMENTS	<ul style="list-style-type: none"> • One tunnel station • Station would be approximately 400 feet long to accommodate 4-car trains • Purchase of 1 light rail vehicle • Peak headways: 6 minutes • 1 percent for art per Sound Transit Policy • Non-motorized access facilities (bicycle/pedestrian), transit-oriented development (TOD)/planning due diligence, bus/rail integration facilities, and sustainability measures (see separate document titled "Common Project Elements")
NOT INCLUDED	<ul style="list-style-type: none"> • No parking included • See separate document titled "Common Project Elements"
ISSUES & RISKS	<ul style="list-style-type: none"> • Light rail currently operates in Seattle and specific station area standards are codified; light rail is included in the Comprehensive Plan and other planning documents

C-01e: Additional potential light rail station in the vicinity of SR 99 and Harrison Street

Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, number of stations, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

Long Description:

This project would examine the additional cost, ridership and other evaluation criteria related to an additional tunnel station in the vicinity of SR 99 and Harrison Street. The potential station would be included in either C-01b or C-01c, both of which include a tunnel alignment between the Uptown and South Lake Union neighborhoods.

Assumptions:

- For non-motorized station access allowances, the SR 99/Harrison station is categorized as an Urban station
- For bus/rail integration, facilities have been assumed at the SR 99/Harrison station

Environmental:

Sound Transit will complete project-level state and federal environmental reviews as necessary; provide mitigation for significant impacts; obtain and meet the conditions of all required permits and approvals; and strive to exceed compliance and continually improve its environmental performance.

Utilities:

Utility relocation as needed to complete the project, including fiber optics, sewer, water, overhead electric/communications, etc.

Right-of-Way and Property Acquisition:

- Property acquisitions for station entrances and bus/rail integration facility

Potential Permits/Approvals Needed:

- Building permits: Electrical, Mechanical, Plumbing
- Utility connection permits
- Construction-related permits (clearing and grading, stormwater management, street use, haul routes, use of city right-of-way)
- Master use
- Land use approvals (Conditional use, design review, site plans, Comprehensive Plan or development code consistency, Special Use Permits)
- All required local, state, and federal environmental permits
- NEPA/SEPA and related regulations

Project Dependencies:

- C-01b or C-01c

Potential Project Partners:

- City of Seattle
- King County
- Transit partner serving project: King County Metro
- FTA

C-01e: Additional potential light rail station in the vicinity of SR 99 and Harrison Street

Cost:

Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, number of stations, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

In Millions of 2014\$

ITEM	COST	COST WITH RESERVE
Agency Administration	\$19.65	\$21.03
Preliminary Engineering & Environmental Review	\$9.89	\$10.58
Final Design & Specifications	\$19.75	\$21.13
Property Acquisition & Permits	\$69.47	\$74.33
Construction	\$201.43	\$215.53
Construction Management	\$17.77	\$19.02
Third Parties	\$3.95	\$4.23
Vehicles	\$5.30	\$5.67
Contingency	\$19.75	\$21.13
Total	\$366.97	\$392.65

Design Basis:












Conceptual

The costs expressed above include allowances for TOD planning and due diligence, Sustainability, Bus/rail integration facilities, and Non-Motorized Access. These allowances, as well as the costs for Parking Access included above, are reflected in the following table. Property acquisition costs are not included in the table below, but are included within the total project cost above.

ITEM	COST	COST WITH RESERVE
TOD planning and due diligence	\$0.02	\$0.02
Sustainability	N/A	N/A
Parking access	N/A	N/A
Non-motorized (bicycle/pedestrian) access	\$4.39	\$4.70
Bus/rail integration facilities	\$2.75	\$2.95

C-01e: Additional potential light rail station in the vicinity of SR 99 and Harrison Street

Evaluation Measures:

MEASURE	MEASUREMENT/RATING	NOTES	
 <p>Regional Light Rail Spine Does project help complete regional light rail spine?</p>	No		
 <p>Ridership 2040 daily station boardings</p>	3,000 — 4,000	Daily boardings would be reduced by 1,500 – 2,000 at adjacent stations	
 <p>Capital Cost Cost in Millions of 2014 \$</p>	\$367 — \$393		
 <p>Annual O&M Cost Cost in Millions of 2014 \$</p>	\$2.37		
 <p>Travel Time In-vehicle travel time along the project (segment)</p>	0.7 min	Approximate travel time added to alignment due to additional station	
 <p>Reliability Quantitative/qualitative assessment of alignment/route in exclusive right-of-way</p>	N/A		
 <p>System Integration Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities</p>	Medium-High	Opportunity for integration with bus service on SR 99 / Aurora Avenue North	
	<p>Ease of Non-motorized Access Qualitative assessment of issues and effects related to non-motorized modes</p>	Medium	
	<p>Percent of Non-motorized Mode of Access Percent of daily boardings</p>	70-80%	
 <p>Connections to PSRC-designated Regional Centers Number of PSRC-designated regional growth and manufacturing/industrial centers served</p>	2 centers	Serves edge of Uptown and South Lake Union	
	<p>Land Use and Development/TOD Potential Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations</p>	High	Very strong support in local and regional plans; approx. 55% land is compatibly zoned
	<p>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</p>	High	Very strong market support
	<p>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</p>	Pop/acre: 2014: 20; 2040: 30 Emp/acre: 2014: 45; 2040: 77 Pop+Emp/acre: 2014: 81; 2040: 122	
 <p>Socioeconomic Benefits Existing minority / low-income populations within 0.5 mile of potential station areas</p> <p>2014 and 2040 population within 0.5 mile of potential station areas</p> <p>2014 and 2040 employment within 0.5 mile of potential station areas</p>	32% minority; 15% low-income Pop: 2014: 9,800; 2040: 14,800 Emp: 2014: 21,900 2040: 37,900		

For additional information on evaluation measures, see <http://soundtransit3.org/document-library>