

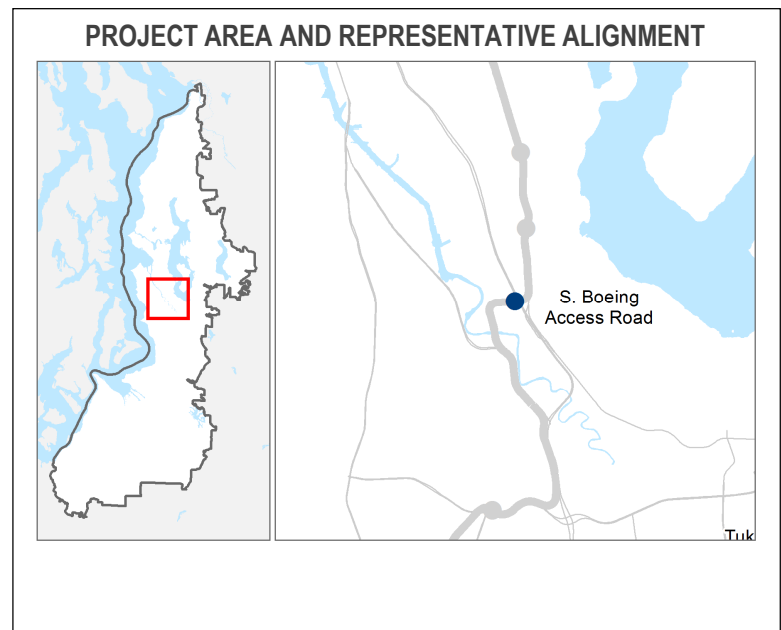
C-09: Infill Light Rail Station: Boeing Access Road

Project Number	C-09
Subarea	North King
Primary Mode	Light Rail
Facility Type	Infill Station
Length	N/A
Version	ST Board Workshop
Date Last Modified	12-30-2015

SHORT PROJECT DESCRIPTION

This project would provide a new infill station on the Central Link light rail line in the vicinity of Boeing Access Road and I-5.

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



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>	\$124 — \$133
RIDERSHIP <i>2040 daily boardings</i>	3,000 — 4,000
PROJECT ELEMENTS	<ul style="list-style-type: none"> • One elevated station • Station would be approximately 400 feet long to accommodate 4-car trains • Purchase of 1 light rail vehicle • Peak headways: 6 minutes • Bus transfer and layover facility • At-grade Park and Ride lot with 300 stalls • 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"> • See separate document titled "Common Project Elements"
ISSUES & RISKS	<ul style="list-style-type: none"> • This project would require the construction of a new station while maintaining operations on the existing Central Link light rail line • The project is adjacent to active freight and passenger rail lines and I-5 • The project could impact wetland areas south of the site • Traffic analysis would be required to examine impact of new signal at the intersection of Boeing Access Road and the station entrance on traffic flow at nearby ramps to I-5 • Impacted by C-10 Boeing Access Road Sounder Station • Light rail exists in Tukwila and is a permitted use; light rail is mentioned in the Comprehensive plan

C-09: Infill Light Rail Station: Boeing Access Road

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 construct a new station between I-5 and the BNSF railroad and to the south of Boeing Access Road. Key project elements include the following:

- Aerial station on Central Link light rail with side platforms
- Bus transfer and layover facility
- 300 stall at-grade parking lot
- Roadway connection from Boeing Access Road to the bus transfer and layover facility
- Modifications to Boeing Access Road to accommodate pedestrian and vehicle access to the station including a new signal
- Design would accommodate pedestrian connection from potential new commuter rail stop adjacent to the station. (The description and cost estimate for the pedestrian connection to the commuter rail station is provided in the template for project C-10)

Assumptions:

- Construction could be accomplished with an active Central Link light rail service
- For non-motorized station access allowances, the Boeing Access Road is categorized as a Suburban station
- For bus/rail integration, facilities have been assumed at the Boeing Access Road 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 acquisition required for this proposed infill station, including BNSF

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:

None, although the utility of the station would be enhanced significantly with the construction of an adjacent station for the Sounder commuter rail line to facilitate intermodal transfers (see project C-10).

Potential Project Partners:

- Cities of Seattle and Tukwila
- WSDOT
- Transit partner serving project: King County Metro
- FTA
- FHWA
- BNSF
- King County

C-09: Infill Light Rail Station: Boeing Access Road

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	\$6.61	\$7.07
Preliminary Engineering & Environmental Review	\$3.71	\$3.97
Final Design & Specifications	\$7.39	\$7.90
Property Acquisition & Permits	\$10.08	\$10.78
Construction	\$75.34	\$80.61
Construction Management	\$6.65	\$7.11
Third Parties	\$1.68	\$1.79
Vehicles	\$5.30	\$5.67
Contingency	\$7.39	\$7.90
Total	\$124.14	\$132.83

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	\$0.22	\$0.23
Sustainability	\$2.74	\$2.93
Parking access	\$3.08	\$3.30
Non-motorized (bicycle/pedestrian) access	\$8.79	\$9.40
Bus transfer facilities	\$2.75	\$2.95

C-09: Infill Light Rail Station: Boeing Access Road

Evaluation Measures:

MEASURE	MEASUREMENT/RATING	NOTES	
 Regional Light Rail Spine <i>Does project help complete regional light rail spine?</i>	No		
 Ridership <i>2040 daily station boardings</i>	3,000 — 4,000	Ridership would decrease without Sounder station (C-10)	
 Capital Cost <i>Cost in Millions of 2014 \$</i>	\$124 — \$133		
 Annual O&M Cost <i>Cost in Millions of 2014 \$</i>	\$1.63		
 Travel Time <i>In-vehicle travel time along the project (segment)</i>	0.7 min	Approximate travel time added to corridor due to additional station	
 Reliability <i>Quantitative/qualitative assessment of alignment/route in exclusive right-of-way</i>	N/A		
 System Integration <i>Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities</i>	Medium	Medium-low number of existing daily transit connections vicinity of Boeing Access Road and opportunities for integration with realigned bus service	
	Ease of Non-motorized Access <i>Qualitative assessment of issues and effects related to non-motorized modes</i>	Low	Low intersection density providing non-motorized access with SR 900 and open space as barriers
	Percent of Non-motorized Mode of Access <i>Percent of daily boardings</i>	25-35%	
 Connections to PSRC-designated Regional Centers <i>Number of PSRC-designated regional growth and manufacturing/industrial centers served</i>	2 centers	North Tukwila and Duwamish MICs	
	Land Use and Development/TOD Potential <i>Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations</i>	Low	Very limited support in local and regional plans; approx. 0% land is compatibly zoned
	<i>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</i> <i>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</i>	Medium-Low Pop/acre: 2014: 3; 2040: 4 Emp/acre: 2014: 2; 2040: 3 Pop+Emp/acre: 2014: 5; 2040: 7	Limited market support
 Socioeconomic Benefits <i>Existing minority / low-income populations within 0.5 mile of potential station areas</i> <i>2014 and 2040 population within 0.5 mile of potential station areas</i> <i>2014 and 2040 employment within 0.5 mile of potential station areas</i>	83% minority; 12% low-income Pop: 2014: 1,600; 2040: 2,100 Emp: 2014: 900; 2040: 1,700		

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