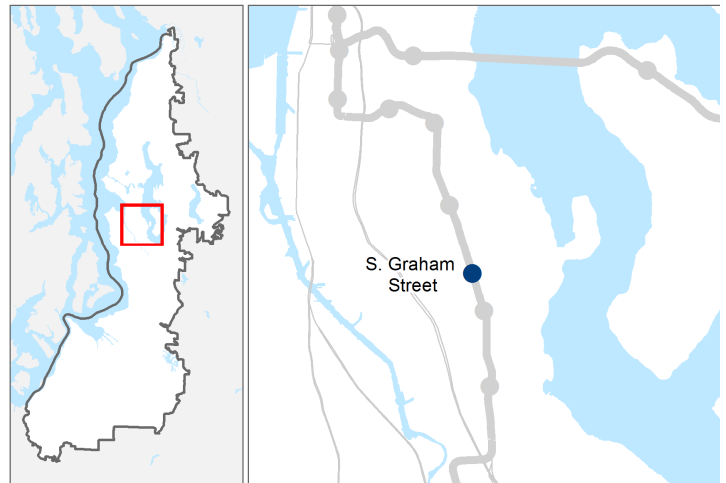


# C-08: Infill Light Rail Station: Graham Street

<b>Project Number</b>	C-08
<b>Subarea</b>	North King
<b>Primary Mode</b>	Light Rail
<b>Facility Type</b>	Infill Station
<b>Length</b>	N/A
<b>Version</b>	ST Board Workshop
<b>Date Last Modified</b>	11-25-2015

## PROJECT AREA AND REPRESENTATIVE ALIGNMENT



### SHORT PROJECT DESCRIPTION

This project would provide a new infill station on the Central Link light rail line in the vicinity of Graham Street.

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

### KEY ATTRIBUTES

<b>REGIONAL LIGHT RAIL SPINE</b> <i>Does this project help complete the light rail spine?</i>	No
<b>CAPITAL COST</b> <i>Cost in Millions of 2014 \$</i>	\$66 — \$71
<b>RIDERSHIP</b> <i>2040 daily boardings</i>	4,000 — 5,000
<b>PROJECT ELEMENTS</b>	<ul style="list-style-type: none"> <li>• One at-grade station</li> <li>• Station would be approximately 400 feet long to accommodate 4-car trains</li> <li>• Purchase of 1 light rail vehicle</li> <li>• Peak headways: 6 minutes</li> <li>• 1 percent for art per Sound Transit policy</li> <li>• Non-motorized access facilities (bicycle/pedestrian), transit-oriented development (TOD)/planning due diligence, and sustainability measures (see separate document titled “Common Project Elements”)</li> </ul>
<b>NOT INCLUDED</b>	<ul style="list-style-type: none"> <li>• Parking not included</li> <li>• See separate document titled “Common Project Elements”</li> </ul>
<b>ISSUES &amp; RISKS</b>	<ul style="list-style-type: none"> <li>• Additional station would increase travel time along the line</li> <li>• This project would require the construction of a new station while maintaining operations on the existing Central Link line; likely impacts during construction would include single track operations of the Central Link line between Othello and Mt. Baker stations, lane closures and detours on Martin Luther King Way and impacts to local access</li> <li>• Utility relocation and construction</li> <li>• 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</li> </ul>

## C-08: Infill Light Rail Station: Graham 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 construct a new station on Martin Luther King Way between Graham Street and Morgan Street along the existing Central Link light rail line. This project would affect approximately 1/3 of a mile of Martin Luther King Way. Key project elements include the following:

- Widening of Martin Luther King Way to accommodate the station and tapering to the north and south of the station
- Modifications to existing sidewalks, landscaping, drainage, utilities and street lights along Martin Luther King Way in the station vicinity
- New pedestrian signal
- Modifications to the Martin Luther King Way/Graham Street intersection

### Assumptions:

- No additional parking assumed
- Construction would be accomplished with an active Central Link light rail service
- For non-motorized station access allowances, the Graham Street station is categorized as an Urban 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.

### 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:

N/A

### Potential Project Partners:

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

## C-08: Infill Light Rail Station: Graham 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	\$3.56	\$3.81
Preliminary Engineering & Environmental Review	\$1.54	\$1.64
Final Design & Specifications	\$3.04	\$3.25
Property Acquisition & Permits	\$14.92	\$15.97
Construction	\$31.01	\$33.18
Construction Management	\$2.74	\$2.93
Third Parties	\$0.81	\$0.86
Vehicles	\$5.30	\$5.67
Contingency	\$3.04	\$3.25
<b>Total</b>	<b>\$65.95</b>	<b>\$70.57</b>

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	\$1.82	\$1.95
Parking access	N/A	N/A
Non-motorized (bicycle/pedestrian) access	\$4.39	\$4.70
Bus/rail integration facilities	N/A	N/A

## C-08: Infill Light Rail Station: Graham Street

## Evaluation Measures:

MEASURE	MEASUREMENT/RATING	NOTES	
 <b>Regional Light Rail Spine</b> <i>Does project help complete regional light rail spine?</i>	No		
 <b>Ridership</b> <i>2040 daily station boardings</i>	4,000 — 5,000	Daily boardings would be reduced by 2,000 – 3,000 at adjacent stations	
 <b>Capital Cost</b> <i>Cost in Millions of 2014 \$</i>	\$66 — \$71		
 <b>Annual O&amp;M Cost</b> <i>Cost in Millions of 2014 \$</i>	\$1.63		
 <b>Travel Time</b> <i>In-vehicle travel time along the project (segment)</i>	0.7 min	Approximate travel time added to corridor due to additional station	
 <b>Reliability</b> <i>Quantitative/qualitative assessment of alignment/route in exclusive right-of-way</i>	N/A		
 <b>System Integration</b> <i>Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities</i>	Medium-Low	Medium-low number of existing daily transit connections	
	<b>Ease of Non-motorized Access</b> <i>Qualitative assessment of issues and effects related to non-motorized modes</i>	Medium	Medium intersection density providing non-motorized access with some large parcels as barriers
	<b>Percent of Non-motorized Mode of Access</b> <i>Percent of daily boardings</i>	70-80%	
 <b>Connections to PSRC-designated Regional Centers</b> <i>Number of PSRC-designated regional growth and manufacturing/industrial centers served</i>	0 centers		
	<b>Land Use and Development/TOD Potential</b> <i>Quantitative/qualitative assessment of adopted Plans &amp; Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations</i>	Medium	Moderate support in local and regional plans; approx. 25% land is compatibly zoned
	<i>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</i>	Medium	Moderate market support
	<i>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</i>	Pop/acre: 2014: 16; 2040: 20 Emp/acre: 2014: 3; 2040: 4 Pop+Emp/acre: 2014: 19; 2040: 24	
	<b>Socioeconomic Benefits</b> <i>Existing minority / low-income populations within 0.5 mile of potential station areas</i>	81% minority; 25% low-income	
	<i>2014 and 2040 population within 0.5 mile of potential station areas</i>	Pop: 2014: 8,200; 2040: 10,200	
	<i>2014 and 2040 employment within 0.5 mile of potential station areas</i>	Emp: 2014: 1,300; 2040: 1,900	

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