

## P-02 – P-09: HCT Planning studies

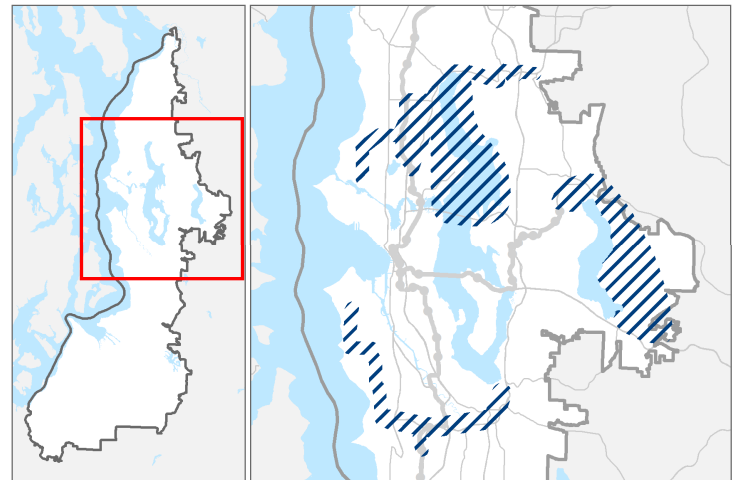
<b>Project Number</b>	P-02 – P-09
<b>Subarea</b>	East King
<b>Primary Mode</b>	HCT
<b>Facility Type</b>	Study
<b>Length</b>	N/A
<b>Version</b>	ST Board Workshop
<b>Date Last Modified</b>	11-25-2015

### SHORT PROJECT DESCRIPTION

The planning studies will help to identify the range of alternatives, evaluate potential routes and station locations and terminals, inform local comprehensive planning, prepare for formal environmental review and engineering, and position the Sound Transit Board to evaluate options and establish priorities for implementation in future phases of high capacity transit investments in the region.

*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

<b>REGIONAL LIGHT RAIL SPINE</b> <i>Does this project help complete the light rail spine?</i>	N/A
<b>CAPITAL COST</b> <i>Cost in Millions of 2014 \$</i>	\$26 — \$28
<b>RIDERSHIP</b> <i>2040 daily boardings</i>	N/A
<b>PROJECT ELEMENTS</b>	<ul style="list-style-type: none"> <li>• P-02: HCT Study: Issaquah Highlands to Overlake via Sammamish, Redmond</li> <li>• P-03: HCT Study: Access and Connection on NE 145th from State Route 522 to Link Light Rail</li> <li>• P-04: HCT Study: Northern Lake Washington Crossing</li> <li>• P-05: HCT Study: Light Rail Extending from West Seattle to Burien and SeaTac Airport Station</li> <li>• P-06: HCT Study: Light Rail Directly Linking Burien to Tukwila and Renton</li> <li>• P-07: HCT Study: Light Rail from Ballard to Crown Hill</li> <li>• P-08: HCT Study: Light Rail on SR 522</li> <li>• P-09: HCT Study: Light Rail from Ballard to Bothell via Greenwood, North Seattle, and Lake City</li> </ul>
<b>NOT INCLUDED</b>	<ul style="list-style-type: none"> <li>• Completion of Preliminary Engineering and project development</li> <li>• NEPA/SEPA environmental documentation</li> <li>• Identification of a preferred alternative</li> </ul>
<b>ISSUES &amp; RISKS</b>	<ul style="list-style-type: none"> <li>• Potential timing and coordination with a future system planning process</li> <li>• Coordination with jurisdictions and partner transit agencies</li> </ul>

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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:

The planning studies would help to identify the range of alternatives, evaluate potential routes and station locations and terminals, inform local comprehensive planning, prepare for formal environmental review and engineering, and position the Sound Transit Board to evaluate options and establish priorities for implementation in future phases of high capacity transit investments in the region. The studies will include public outreach, preliminary environmental assessment, ridership forecasting, and conceptual engineering and cost estimating.

The studies include:

- P-02: HCT Study: Issaquah Highlands to Overlake via Sammamish, Redmond

This study would examine potential future upgrades in existing service and/or improved connections along the corridor from Issaquah Highlands to Overlake via Sammamish/Redmond. The corridor is approximately 12 miles long. The study would be completed in coordination with local transit partners to examine a variety of options for service provision and to maximize opportunities for regional integration. The study should include examination of all of Sound Transit's HCT modal options, as well as potential connections to HCT options already included in the Long-Range Plan.

- P-03: HCT Study: Access and Connection on NE 145<sup>th</sup> from State Route 522 to Link Light Rail

This study would examine options to provide improved east-west connections along NE 145<sup>th</sup> Street for communities and jurisdictions along State Route 522 to Link light rail at the planned station to be constructed at 145<sup>th</sup> Street as part of the Lynnwood Link Extension project. Options to be studied could include improved service and supporting capital improvements along 145<sup>th</sup> Street, and will consider operational configurations that connect with communities along the SR 522 corridor. The study would be completed in coordination with local transit partners to examine a variety of options for service provision and to maximize opportunities for regional integration.

- P-04: HCT Study: Northern Lake Washington Crossing

This study would examine options for expanding high-capacity transit connections across northern Lake Washington that may be needed when ridership demand exceeds available capacity. This study would examine alternatives including and parallel to SR 522 and SR 520, as well as connections from Sand Point to Kirkland, and Redmond and/or Bellevue. The study area is approximately 6 miles long and 12 miles wide. This study can consider potential upgrades in existing service and/or improved connections. It should be completed in coordination with local transit partners to examine a variety of options for service provision and to maximize opportunities for regional integration.

- P-05: HCT Study: Light Rail Extending from West Seattle to Burien and SeaTac Airport Station

This study would examine a light rail extension from West Seattle to Burien, including the connection from Burien to the light rail spine. The corridor is approximately 11 miles long. The study would be completed in coordination with local transit partners to examine a variety of options for service provision and to maximize opportunities for regional integration.

- P-06: HCT Study: Light Rail directly linking Burien to Tukwila and Renton

This study would examine a light rail extension from Burien to Tukwila and Renton. The corridor is approximately 7 miles long. The study would be completed in coordination with local transit partners to examine a variety of options for service provision and to maximize opportunities for regional integration.

- P-07: HCT Study: Light Rail from Ballard to Crown Hill

This study would examine a future extension of a Ballard to Downtown Seattle light rail line from Market Street to the vicinity of NW 85<sup>th</sup> Street. The study would advance design and analysis conducted as part of the Ballard to Downtown Seattle Transit Expansion Study.

- P-08: HCT Study: Light rail on SR 522

This study would examine a future extension of light rail along SR 522 and connections to the existing light rail system.

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- P-09: HCT Study: LRT from Ballard to Bothell via Greenwood, North Seattle, and Lake City

This study would examine a future extension of a Ballard to Downtown light rail line from Market St. to destinations north and east, and the potential future operational configurations that could feasibly connect these smaller centers.

### Assumptions:

The studies could include the following elements:

- Public Involvement
- Planning
- Conceptual design
- Station area assessment
- Access considerations
- Appraisals and rights-of-entry

### Environmental:

N/A

### Utilities:

N/A

### Right-of-Way and Property Acquisition:

N/A

### Potential Permits/Approvals Needed:

N/A

### Project Dependencies:

N/A

### Potential Project Partners:

- Project partners will include transit agencies, local jurisdictions & the Washington State Department of Transportation based on the specific locations/corridors where the studies are focused.

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**Cost:**  
Sound Transit has developed a conceptual scope of work for completing a study on this project for the purpose of generating a representative range of costs and elements to be included in the study. 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. Representative project elements that would be included in this study are subject to refinement during later stages of project development if the project being studied is ultimately advanced as part of the next Long-Range Plan and the next system plan (i.e., beyond ST3). If the project is advanced, final decisions on specific project elements will be determined through future phases of project development following approval by voters. 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	\$4.81	\$5.15
Preliminary Engineering & Environmental Review	\$19.20	\$20.55
Final Design & Specifications	N/A	N/A
Property Acquisition & Permits	N/A	N/A
Construction	N/A	N/A
Construction Management	N/A	N/A
Third Parties	N/A	N/A
Vehicles	N/A	N/A
Contingency	\$2.40	\$2.57
<b>Total</b>	<b>\$26.41</b>	<b>\$28.27</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	N/A	N/A
Sustainability	N/A	N/A
Parking access	N/A	N/A
Non-motorized (bicycle/pedestrian) access	N/A	N/A

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## Evaluation Measures:

MEASURE	MEASUREMENT/RATING	NOTES
 <b>Regional Light Rail Spine</b> <i>Does project help complete regional light rail spine?</i>	N/A	
 <b>Ridership</b> <i>2040 daily station boardings</i>	N/A	
 <b>Capital Cost</b> <i>Cost in Millions of 2014 \$</i>	\$26 — \$28	
 <b>Annual O&amp;M Cost</b> <i>Cost in Millions of 2014 \$</i>	N/A	
 <b>Travel Time</b> <i>In-vehicle travel time along the project (segment)</i>	N/A	
 <b>Reliability</b> <i>Percentage 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>	N/A	
	<b>Ease of Non-motorized Access</b> <i>Qualitative assessment of issues and effects related to non-motorized modes</i>	N/A
	<b>Percent of Non-motorized Mode of Access</b> <i>Percent of daily boardings</i>	N/A
 <b>Connections to PSRC-designated Regional Centers</b> <i>Number of PSRC-designated regional growth and manufacturing/industrial centers served</i>	N/A	
	<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>	N/A
	<i>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</i>	N/A
	<i>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</i>	N/A
	<b>Socioeconomic Benefits</b> <i>Existing minority / low-income populations within 0.5 mile of potential station areas</i>	N/A
	<i>2014 and 2040 population within 0.5 mile of potential station areas</i>	N/A
	<i>2014 and 2040 employment within 0.5 mile of potential station areas</i>	N/A

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