West Seattle and Ballard Link Extensions
West Seattle & Ballard Link Extensions

Motion No. M2019-51
Identifying Alternatives for DEIS

23 May 2019
New approach to project development

ST2 process

ST3 process

*Sound Transit Board identifies preferred alternatives and other alternatives to study in the EIS
City of Seattle Partnering Agreement

- Partnering agreement executed December 2017
- Identifies project schedule milestones including:
  - Board *identification of preferred alternative*: Q1/Q2 2019
What is a preferred alternative?

- SEPA / NEPA term
- Makes clear to public *where project is headed*
- "Preference" among alternatives to be considered
- *Not a final decision* or obligation
- Board to also identify *other DEIS alternatives* in coordination with FTA
Screening process

Level 1: Broad range of initial alternatives

Level 2: Refine remaining alternatives

Level 3: Further evaluation

EIS: Preferred Alternative(s) and other EIS alternatives
Today’s Board action

Identification of preferred alternative and other EIS alternatives informed by:

- **Technical evaluation results** presented publicly during the scoping period
- **Public feedback** gathered during scoping period and documented throughout the year
- **Racial Equity Toolkit**, including findings from evaluation results and community input
Community engagement and collaboration

<table>
<thead>
<tr>
<th>Community engagement and collaboration</th>
<th>LEVEL 1 Alternatives Screening</th>
<th>LEVEL 2 Alternatives Screening</th>
<th>LEVEL 3 Alternatives Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2018</strong></td>
<td>JAN</td>
<td>FEB</td>
<td>MAR</td>
</tr>
<tr>
<td><strong>Early Scoping Period</strong></td>
<td>Early Scoping Open Houses (multiple locations)</td>
<td>Multiple Locations</td>
<td>Level 1 Recommendation</td>
</tr>
<tr>
<td><strong>2019</strong></td>
<td>JAN</td>
<td>FEB</td>
<td>MAR</td>
</tr>
</tbody>
</table>

Meeting dates subject to change.
External engagement overview

During Alternatives Development Phase: Jan 2018 – April 2019

- 5,600+ comments and questions
- 25 email updates
- 26 fairs, festivals, tabling events
- 17 open houses, forums, workshops
- 189 community briefings
- 14 Stakeholder Advisory Group meetings
- 7 Elected Leadership Group meetings
- 3 online open houses
System Expansion Committee recommendations
Preferred alternative

Other DEIS alternatives

Need further assessment

System Expansion Committee Preferred alternative
System Expansion Committee Other DEIS alternatives
West Seattle (Avalon and Junction)
Elevated options in Alaska Junction result in higher guideway in Delridge

<table>
<thead>
<tr>
<th>41st elevated station</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>41st elevated station</td>
<td>-</td>
</tr>
<tr>
<td>41st, 42nd or 44th tunnel stations</td>
<td>+$700M</td>
</tr>
</tbody>
</table>

Comparative estimates greater than ST3 Representative Project are shown in italics

**Key differentiators**

West Seattle (Avalon and Junction)

North-south oriented 41st elevated station has more residential effects

More business effects with elevated guideway along Fauntleroy

Less business and residential effects with 41st, 42nd and 44th tunnel stations

East-west oriented 41st elevated station complicates future extension south
Concerns about potential residential displacement and neighborhood impacts in the Junction with elevated alignment and station.

Some interest in consolidating Avalon and Alaska Junction stations.

“Stay out of Junction” if elevated.

General support for tunnel.

General support for Junction station in 41st/42nd vicinity.

Scoping feedback **West Seattle (Avalon and Junction)**
ELG discussion

West Seattle (Avalon and Alaska Junction)

- Support for retaining Avalon Station, but continue to evaluate potential cost savings opportunities including consolidating stations and implications for ridership
- Support for looking for opportunities to minimize community impacts and create high quality transfer environment for both Avalon and Alaska Junction station locations
- Support for underground alignment to support TOD potential
- Support for a modified ST3 Representative project (Alaska Junction station oriented North/South and staying east of the Alaska Junction on Fauntleroy or in the vicinity of Jefferson Square)
41st/42nd and Fauntleroy elevated station options (oriented north/south and staying east of the Junction)
Interbay and Ballard
Movable bridge has most in-water effects; most affects Fishermen’s terminal

15th Ave station location is closer to center of urban village

14th Ave station location allows for better bus integration

High fixed bridge has some maritime business effects

Tunnels avoid in-water and maritime business effects

Less property effects on 14th Ave

| Movable bridge crossing / Elevated station at 15th | - |
| Fixed bridge crossing / Elevated station at 14th | +$100M |
| Tunnel crossings / Tunnel stations at 14th or 15th | +$350M |

Comparative estimates greater than ST3 Representative Project are shown in italics

**Key differentiators** Interbay and Ballard
Little support for movable bridge due to concerns about service reliability and greater potential maritime business, freight, and in-water impacts.

More support for tunnel crossing and station; some concerns about tunnel cost.

Interest in station further west in Ballard.

Support for station at 15th as closer to center of urban village.

Concern about maritime business, freight, and visual effects of elevated crossing and station.

Support for station at 14th to lessen potential property impacts and traffic/freight impacts on 15th.

More support for fixed bridge than movable bridge.

Scoping feedback Interbay and Ballard
Interbay and Ballard

- General support for tunnel option across Salmon Bay
- Interest in continuing to study the fixed bridge in the DEIS as an elevated alternative to the tunnel option
- Potential refinements to the Ballard Station should optimize bus/rail integration and access to the Ballard urban village (such as improved connections across 15th Avenue NW)
- Mixed opinions about the new Tunnel with 20th tunnel station option and requests for more information to inform Sound Transit Board discussions – concerns about potential disruption to the neighborhood and feasibility, but interest in serving Ballard further west with a tunnel
High fixed bridge with 14th elevated station

Tunnel with 14th and 15th tunnel station options

**ELG recommendations** **Interbay and Ballard**
Next steps
Environmental Review

WE ARE HERE

2019 | 2020 | 2021
--- | --- | ---
Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1

- EIS kickoff
- Conceptual Engineering
- Develop DEIS
- Station planning activities
- Publish DEIS and public comment period

ST Board confirms or modifies PA
West Seattle & Ballard Link Extensions
DSTT Capital Improvements

Motion No. M2019-52

Contract modification with HNTB Corporation

23 May 2019
Contract Modification

- Motion No. M2017-119 Authorized Contract with HNTB
- Option to modify contract for each phase of project development

Scope

- Phase 1: Alternatives Development – complete
- Phase 2: Draft EIS and Conceptual Engineering – this action
- Phase 3: Final EIS and Preliminary Engineering
Phase 2 Scope

- Draft EIS analysis and related design support
- Advanced conceptual engineering and geotechnical analysis
- Station planning and urban design
- Permit streamlining, agency coordination
- Community outreach and engagement
- Study of potential improvements to existing Westlake Station
West Seattle & Ballard Link Extensions: Authorized Project Allocation $285.9M

Uncommitted $250.8M

Preliminary Engineering $27.1M

Agency Administration and Third Party $8M


Approved  Today’s Action  Future Action
West Seattle & Ballard Link Extensions: Board Approves Contract Amendment
$59.9M (Total contract $60.3M)

PROJECT DEVELOPMENT

ALLOCATION

$285.9M

COMMITMENTS

Const.
F/D

Uncommitted $190.9M

Preliminary Engineering $59.9M

Preliminary Engineering $27.1M

Agency Administration and Third Party $8M


Approved  Today’s Action  Future Action
DSTT Capital Improvements: Authorized Project Allocation $10M

Uncommitted $9.71M

Agency Administration and Preliminary Engineering $0.29M
**DSTT Capital Improvements:** Board Approves Contract Amendment $0.4M (Total contract $60.3M)

<table>
<thead>
<tr>
<th>ALLOCATION</th>
<th>COMMITMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Const.</td>
<td></td>
</tr>
<tr>
<td>F/D</td>
<td></td>
</tr>
<tr>
<td>Project Development</td>
<td>$10M</td>
</tr>
</tbody>
</table>

Uncommitted $9.31M

- **Final Design $0.4M**
- **Agency Administration and Preliminary Engineering $0.29M**
SAG recommendations
<table>
<thead>
<tr>
<th>Segment</th>
<th>ST3 Representative Project</th>
<th>West Seattle Elevated/ C-ID 5th /Downtown 6th/ Ballard Elevated</th>
<th>West Seattle Tunnel/ C-ID 4th /Downtown 5th/ Ballard Tunnel</th>
<th>Scoping feedback</th>
<th>SAG recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Seattle (Avalon/Junction)</td>
<td>41st elevated station (east-west oriented)</td>
<td>41st elevated station (north-south oriented)</td>
<td>41st, 42nd, or 44th tunnel station</td>
<td>Pigeon Ridge Tunnel or Yancy/Andover</td>
<td>TBD</td>
</tr>
<tr>
<td>West Seattle (Delridge)</td>
<td>N of Andover station</td>
<td>S of Andover station</td>
<td>N of Genesee station</td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Duwamish crossing</td>
<td>South crossing</td>
<td>South crossing</td>
<td>North crossing</td>
<td>Pigeon Ridge Tunnel alignment</td>
<td>TBD</td>
</tr>
<tr>
<td>SODO/ Chinatown-ID</td>
<td>E3 elevated / 5th shallow station</td>
<td>E3 at grade / 5th shallow or deep station</td>
<td>E3 at grade / 4th shallow or deep station</td>
<td>Elevate new and existing SODO station</td>
<td>TBD</td>
</tr>
<tr>
<td>Downtown</td>
<td>5th and Republican</td>
<td>6th and Mercer</td>
<td>5th and Harrison</td>
<td>NA</td>
<td>TBD</td>
</tr>
<tr>
<td>Smith Cove</td>
<td>Prospect St station</td>
<td>Galer St station</td>
<td>Prospect St station</td>
<td>NA</td>
<td>TBD</td>
</tr>
<tr>
<td>Interbay/ Ballard</td>
<td>Movable bridge with 15th elevated station</td>
<td>High fixed bridge with 14th elevated station</td>
<td>Tunnel with 14th or 15th tunnel station</td>
<td>Tunnel with 20th tunnel station</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Segments with comparative estimates greater than ST3 Representative Project are shown in italics. Estimates not available for “Scoping feedback” suggestions.
<table>
<thead>
<tr>
<th>Segment</th>
<th>SAG recommendation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Seattle (Avalon/Junction)</td>
<td>41st or 42nd tunnel station</td>
<td>Support for Delridge station locations that are farther south</td>
</tr>
<tr>
<td>West Seattle (Delridge)</td>
<td>N of Genesee station</td>
<td>Pigeon Ridge Tunnel (former purple line)</td>
</tr>
<tr>
<td>Duwamish crossing</td>
<td>South crossing</td>
<td></td>
</tr>
<tr>
<td>SODO/Chinatown-ID</td>
<td></td>
<td>Majority interest in studying all options</td>
</tr>
<tr>
<td>Downtown</td>
<td>5th and Harrison</td>
<td></td>
</tr>
<tr>
<td>Smith Cove</td>
<td>Prospect St station</td>
<td></td>
</tr>
<tr>
<td>Interbay/Ballard</td>
<td>Tunnel with 15th tunnel station</td>
<td>General support for tunnel crossing and serving the Ballard urban village</td>
</tr>
</tbody>
</table>

**SAG Recommendation:** *If 3rd party funding is secured*
### Segment | SAG recommendation | Notes
--- | --- | ---
West Seattle (Junction) | Elevated station with refinements | Interest in a modified ST3 Representative Project Alaska Junction station, oriented North/South staying east of the Alaska Junction
West Seattle (Delridge) | 41st or 42nd tunnel station with consolidated Alaska and Avalon |  
Duwamish crossing | N of Genesee station |  
SODO/ Chinatown-ID | South crossing | Majority interest in studying all options
Downtown | 5th and Harrison |  
Smith Cove | Prospect St station | Mixed opinions, with interest in studying fixed bridge and tunnel. No support for movable bridge.
Interbay/ Ballard | Prospect St station |
ELG recommendations
Summary

West Seattle elevated and tunnel options

Smith Cove station options

Ballard elevated and tunnel options

CID station options

Midtown to Westlake alignment options
<table>
<thead>
<tr>
<th>Segment</th>
<th>ST3 Representative Project</th>
<th>ELG recommendations (low estimate)</th>
<th>ELG recommendations (high estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Seattle (Avalon/Junction)</td>
<td>41st elevated station (east-west oriented)</td>
<td>Elevated station with refinements (+$0)</td>
<td>41st, 42nd tunnel station (+$700M)</td>
</tr>
<tr>
<td>West Seattle (Delridge)</td>
<td>N of Andover station</td>
<td>Station north of Genesee with refinements (+$0)</td>
<td>Station north of Genesee with refinements (+$0)</td>
</tr>
<tr>
<td>Duwamish crossing</td>
<td>South crossing</td>
<td>South crossing (+$0)</td>
<td>South crossing (+$0)</td>
</tr>
<tr>
<td>SODO/CID</td>
<td>E3 elevated / 5th shallow station</td>
<td>E3 at grade / 5th shallow (-$200M) or deep station (+$0)</td>
<td>E3 at grade / 4th shallow (+$300M) or deep station (+$500M)</td>
</tr>
<tr>
<td>Downtown</td>
<td>5th and Republican</td>
<td>5th and Harrison (+$0)</td>
<td>5th and Harrison (+$0)</td>
</tr>
<tr>
<td>Smith Cove</td>
<td>Prospect St station</td>
<td>Galer St station (+$100M)</td>
<td>Prospect St station (+$200M)</td>
</tr>
<tr>
<td>Interbay/ Ballard</td>
<td>Movable bridge with 15th elevated station</td>
<td>High fixed bridge with 14th elevated station (+$100M)</td>
<td>Tunnel with 14th or 15th tunnel station (+$350M)</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>+$0 to +$200M</td>
<td>+$1,550M to +$1,750M</td>
</tr>
</tbody>
</table>

Segments with comparative estimates greater than ST3 Representative Project are shown in italics.
Does not include alternatives suggested during EIS Scoping as comparative estimates are not available.

**ELG Recommendations**

Comparative estimates
Third party funding