West Seattle and Ballard Link Extensions

JuNO
March 25, 2019
Identifies mode, corridor, number of stations, general station locations

Informs cost, schedule, operating needs

**ST3 Representative project**

- Identifies mode, corridor, number of stations, general station locations
- Informs cost, schedule, operating needs
West Seattle project timeline

**PLANNING** 2017–2022
- Alternatives development
- Board identifies preferred alternative
- Draft Environmental Impact Statement
- Final Environmental Impact Statement
- Board selects project to be built
- Federal Record of Decision

**DESIGN** 2022–2025
- Final route design
- Final station designs
- Procure and commission station and public art
- Obtain land use and construction permits
- Property acquisition/relocation

**CONSTRUCTION** 2025–2030
- Groundbreaking
- Construction updates and mitigation
- Safety education
- Testing and pre-operations

**START OF SERVICE** 2030

**VOTER APPROVAL** 2016

---

**2016**
- Alternatives development
- Board identifies preferred alternative
- Draft Environmental Impact Statement
- Final Environmental Impact Statement
- Board selects project to be built
- Federal Record of Decision

**2017–2022**
- Public involvement

**2022–2025**
- Public involvement

**2025–2030**
- Public involvement
2017–2019

Alternatives development
Board identifies preferred alternative*

2019–2022

Draft Environmental Impact Statement
Final Environmental Impact Statement
Board selects project to be built
Federal Record of Decision

*The Sound Transit Board identifies preferred alternatives and other alternatives to study in the Environmental Impact Statement.
**Alternatives development process**

**LEVEL 1**
- Alternatives development
- Early-2018
  - Conduct early scoping
  - Study ST3 representative project and alternatives
  - Screen alternatives

**LEVEL 2**
- Alternatives development
- Mid-2018
  - Technical analysis
  - Refine and screen alternatives

**LEVEL 3**
- Alternatives development
- Late-2018 / Early-2019
  - Refine and screen alternatives
  - Conduct Environmental Impact Statement (EIS) scoping

*The Sound Transit Board identifies preferred alternatives and other alternatives to study.*
Community engagement and collaboration

<table>
<thead>
<tr>
<th>LEVEL 1 Alternatives Screening</th>
<th>LEVEL 2 Alternatives Screening</th>
<th>LEVEL 3 Alternatives Screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>JAN</td>
<td>FEB</td>
<td>MAR</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Early Scoping Period</td>
<td>Community Update</td>
<td>EIS Scoping Period</td>
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<tr>
<td>Early Scoping Open Houses</td>
<td>Multiple Locations</td>
<td>EIS Scoping Open Houses</td>
</tr>
<tr>
<td>(multiple locations)</td>
<td>Level 1 Recommendation</td>
<td>(multiple locations)</td>
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<tr>
<td>Level 1 Briefing</td>
<td>Level 2 Recommendation</td>
<td>Preferred Alternative</td>
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<tr>
<td></td>
<td></td>
<td>Recommendation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identification of Preferred</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative and other</td>
</tr>
<tr>
<td></td>
<td></td>
<td>alternatives to study in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EIS</td>
</tr>
</tbody>
</table>

Meeting dates subject to change.
West Seattle Briefings and Events

- Early Scoping Open House (2/13/18)
  - 344 sign-ins
- Nucor (3/7/18)
- Junction Neighborhood Organization (4/2/18, 4/26/18, 7/26/18, 9/18/18, 11/19/18)
- Southwest District Council (4/4/18)
- West Seattle Transportation Coalition (4/26/18)
- Delridge/Avalon/Alaska Junction Neighborhood Forum (5/5/18)
  - 140 sign-ins
- Fauntleroy Business Association (5/24/18)
- Pigeon Point Neighborhood Council (6/11/18)
- Southwest Youth & Family Services (6/29/18)
- Neighborhood House at High Point (7/26/18)
- Drink & Link in Delridge (8/8/18)
- Delridge Day (8/11/18)
- West Seattle Open House (9/8/18)
  - 140 sign-ins
West Seattle Briefings and Events

- Online Open House (9/6 – 9/23/18)
  - 140 West Seattle surveys submitted
- West Seattle Transportation Coalition (9/27/18)
- DNDA (10/9/18, 10/24/18)
- Delridge Way SW Businesses (10/15/18)
- Feet First – West Seattle Walk & Talk (10/16/18)
- Tiburon Condominiums (11/15/18)
- WestSide Baby (12/6/18)
- Delridge Community Center (1/9/19)
- White Center Community Development Association (1/16/19)
- Community briefing at Youngstown Cultural Arts Center (1/16/19)
- West Seattle Open House (2/27/19)
  - 260 sign-ins
- West Seattle Democratic Women (2/28/19)
- Delridge Station Community Workshop (3/12/19)
  - 94 sign-ins
## Level 3 alternatives screening

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELG Meeting #7</td>
<td>March 29</td>
<td>CID and Delridge station focus</td>
</tr>
<tr>
<td>SAG Meeting #14</td>
<td>April 17</td>
<td>Level 3 recommendations</td>
</tr>
<tr>
<td>ELG Meeting #8</td>
<td>April 26</td>
<td>Level 3 recommendations</td>
</tr>
<tr>
<td>Sound Transit Board System Expansion Committee</td>
<td>May 9</td>
<td>Identify preferred alternative (and other EIS alternatives)</td>
</tr>
<tr>
<td>Sound Transit Board Full Board</td>
<td>May 23</td>
<td>Identify preferred alternative (and other EIS alternatives)</td>
</tr>
</tbody>
</table>
Early scoping, Levels 1 and 2 Recap
**Level 1 alternatives development**

**LEVEL 1**
Alternatives development

- Early-2018
  - Conduct early scoping
  - Study ST3 representative project and alternatives
  - Screen alternatives

**LEVEL 2**
Alternatives development

- Mid-2018
  - Technical analysis
  - Refine and screen alternatives

**LEVEL 3**
Alternatives development

- Late-2018 / Early-2019
  - Refine and screen alternatives
  - Conduct Environmental Impact Statement (EIS) scoping

**PREFERRED ALTERNATIVE**

*The Sound Transit Board identifies preferred alternatives and other alternatives to study in the Environmental Impact Statement (EIS).*
West Seattle/Duwamish Public feedback – May 2018

Consider tunnel from Avalon to station at Fauntleroy/Alaska

Mixed opinions on Junction station location

Support for north-south station orientation

Support for tunnel in the Junction area

Isolated Delridge Station

Support for shifting Delridge station south

Support for purple alignment

Mixed opinions on consolidating stations

Mixed opinions on usage of open space

Support for purple alignment

Consider shifting Golf Course alignment north
Do not carry forward
West Seattle Bridge/Fauntleroy

Do not carry forward
Yancy Street/West Seattle Tunnel

Modify alignment to avoid Section 4(f) impacts to golf course

West Seattle/Duwamish Level 1 Recommendations
Level 2 alternatives development

**LEVEL 1**
Alternatives development
- Early-2018
  - Conduct early scoping
  - Study ST3 representative project and alternatives
  - Screen alternatives

**LEVEL 2**
Alternatives development
- Mid-2018
  - Technical analysis
  - Refine and screen alternatives

**LEVEL 3**
Alternatives development
- Late-2018 / Early-2019
  - Refine and screen alternatives
  - Conduct Environmental Impact Statement (EIS) scoping

*The Sound Transit Board identifies preferred alternatives and other alternatives to study in the Environmental Impact Statement (EIS).*
West Seattle/Duwamish Level 2 alternatives
General support for a centrally located tunneled Junction Station at 41st/42nd.

Support for a lower height guideway.

General support for station that straddles Fauntleroy; tunnel desirable.

Support for locating station east of Junction if elevated. Concern about close station spacing and distance from Junction.

General support for North crossing due to less environmental effects; also interest in minimizing freight effects.

Concern about the cost of tunnels.

General support for the off-street lower height Delridge Station with more development potential.

West Seattle/Duwamish Public feedback – Sep 2018
West Seattle/Duwamish Level 2 alternatives

- Do not carry forward Oregon Street/Alaska Junction/tunnel
- Do not carry forward Pigeon Ridge/West Seattle tunnel
- Add a new elevated alternative with Alaska Junction station oriented north/south and Delridge Station further south

- Do not carry forward Oregon Street/Alaska Junction/elevated
Level 3 alternatives development

**LEVEL 1**
Alternatives development
- Early-2018
  - Conduct early scoping
  - Study ST3 representative project and alternatives
  - Screen alternatives

PUBLIC INVOLVEMENT

**LEVEL 2**
Alternatives development
- Mid-2018
  - Technical analysis
  - Refine and screen alternatives

PUBLIC INVOLVEMENT

**LEVEL 3**
Alternatives development
- Late-2018 / Early-2019
  - Refine and screen alternatives
  - Conduct Environmental Impact Statement (EIS) scoping

PUBLIC INVOLVEMENT

PREFERRED ALTERNATIVE*
- Early-2019

*The Sound Transit Board identifies preferred alternatives and other alternatives to study in the Environmental Impact Statement (EIS).
Level 3 alternatives
Summary of Level 3 alternatives

- ST3 Representative Project
  - West Seattle Elevated/ C-ID 5th Ave/ Downtown 6th Ave/ Ballard Elevated
    - C-ID station options: 5th Ave Cut-and-Cover and 5th Ave Mined

- West Seattle Tunnel/ C-ID 4th Ave/ Downtown 5th Ave/ Ballard Tunnel
  - Junction station options: 41st Ave, 42nd Ave and 44th Ave
  - C-ID station options: 4th Ave Cut-and-Cover and 4th Ave Mined
  - Ballard station options: 14th Ave and 15th Ave
Level 3 alternatives
ST3 Representative Project  West Seattle/Duwamish
West Seattle Elevated/ C-ID 5th Ave/ Downtown 6th Ave/ Ballard Elevated

West Seattle/Duwamish
West Seattle Tunnel/ C-ID 4th Ave/ Downtown 5th Ave/ Ballard Tunnel  

West Seattle/Duwamish

Junction tunnel station options
- 41st Ave
- 42nd Ave
- 44th Ave

Delridge Station further south and west

North crossing of Duwamish
Level 3 Alternatives West Seattle/Duwamish
Level 3 evaluation results
Purpose and need

<table>
<thead>
<tr>
<th>Purpose Statement</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide high quality rapid, reliable, and efficient peak and off-peak LRT service to communities in the project corridors as defined in ST3.</td>
<td></td>
</tr>
<tr>
<td>Improve regional mobility by increasing connectivity and capacity through downtown Seattle to meet the projected transit demand.</td>
<td></td>
</tr>
<tr>
<td>Connect regional centers as described in adopted regional and local land use, transportation, and economic development plans and Sound Transit’s <em>Regional Transit Long-Range Plan</em>.</td>
<td></td>
</tr>
<tr>
<td>Implement a system that is consistent with the <em>ST3 Plan</em> that established transit mode, corridor, and station locations and that is technically feasible and financially sustainable to build, operate, and maintain.</td>
<td></td>
</tr>
<tr>
<td>Expand mobility for the corridor and region’s residents, which include transit dependent, low income, and minority populations.</td>
<td></td>
</tr>
<tr>
<td>Encourage equitable and sustainable urban growth in station areas through support of transit-oriented development, station access, and modal integration in a manner that is consistent with local land use plans and policies.</td>
<td></td>
</tr>
<tr>
<td>Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built and social environments through sustainable practices.</td>
<td></td>
</tr>
</tbody>
</table>
Evaluation criteria

- Reliable service
- Travel times
- Regional connectivity
- Transit capacity
- Projected transit demand
- Regional centers served
- ST Long-Range Plan consistency
- ST3 consistency
- Technical feasibility
- Financial sustainability
- Historically underserved populations
- Station area land use plan consistency
- Modal integration
- Station area development opportunities
- Environmental effects
- Traffic operations
- Economic effects

17 criteria consistent in all levels of evaluation
Evaluation measures

- 50+ quantitative and/or qualitative measures
- Ratings for Lower, Medium and Higher performing
- Key differentiators and considerations among alternatives
Comparative estimates

Purpose: To *inform comparison* of Level 3 alternatives

- **Comparative estimates** for end-to-end alternatives
  - Consistent methodology (2018$; construction, real estate, etc.)
  - Based on *limited conceptual design* (less than 5% design)
  - Does not establish project budget

- **Project budget** established during final design (~ 2024)
Project budget

- Comparative estimates (2019)
- Establish project budget (2024)

More design/greater certainty
<table>
<thead>
<tr>
<th>Evaluation Measures</th>
<th>ST3 Representative</th>
<th>West Seattle Elevated/C-ID 5th Ave/Downtown 6th Ave/Ballard Elevated</th>
<th>West Seattle Tunnel/C-ID 4th Ave/Downtown 5th Ave/Ballard Tunnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Potential service interruptions/recoverability</td>
<td>Lower</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>LRT travel times (minutes)</td>
<td>6 to 7 / 13 to 14</td>
<td>6 to 7 / 13 to 14</td>
<td>6 to 7 / 13 to 14</td>
</tr>
<tr>
<td>Transit travel time savings (minutes)</td>
<td>12 to 20</td>
<td>12 to 20</td>
<td>12 to 20</td>
</tr>
<tr>
<td>Improve regional mobility by increasing connectivity and capacity through downtown Seattle to meet projected transit demand.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network integration</td>
<td>Lower</td>
<td>Medium</td>
<td>Higher</td>
</tr>
<tr>
<td>Passenger carrying capacity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Average weekday trips on West Seattle/ Ballard extensions (2042)</td>
<td>35,000 to 40,000 / 120,000 to 163,000</td>
<td>35,000 to 39,000 / 120,000 to 158,000</td>
<td>35,000 to 41,000 / 125,000 to 165,000</td>
</tr>
<tr>
<td>Connect regional centers as described in adopted regional and local land use, transportation, and economic development plans and Sound Transit’s Regional Transit Long-Range Plan.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSRC growth centers served</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Pop/job densities served (2040)</td>
<td>38 / 39</td>
<td>39 / 39</td>
<td>37 / 38 to 39</td>
</tr>
<tr>
<td>Accommodates future LRT extension</td>
<td>Lower</td>
<td>Medium</td>
<td>Higher</td>
</tr>
<tr>
<td>Implement a system that is consistent with the ST3 Plan that established transit mode, corridor, and station locations and that is technically feasible and financially sustainable to build, operate, and maintain.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode, route and stations per ST3</td>
<td>Higher</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Potential ST3 schedule effects</td>
<td>Higher</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Potential ST3 operating plan effects</td>
<td>Lower</td>
<td>Medium</td>
<td>Higher</td>
</tr>
<tr>
<td>Engineering constraints</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
</tr>
<tr>
<td>Constructability issues</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
</tr>
<tr>
<td>Operational constraints</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
</tr>
<tr>
<td>Capital costs (2018$)</td>
<td>-</td>
<td>+$400M</td>
<td>+$500M</td>
</tr>
<tr>
<td>Annual O&amp;M costs on West Seattle/ Ballard extensions (2018S in millions)</td>
<td>$25 to $30 / $55 to $60</td>
<td>$25 to $30 / $55 to $60</td>
<td>$25 to $30 / $55 to $60</td>
</tr>
<tr>
<td>Expand mobility for the corridor and region’s residents, which include transit dependent, low income, and minority populations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-income/minority opportunities (activity nodes/rental units)</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Low-income population</td>
<td>3% / 37%</td>
<td>3% / 37%</td>
<td>3% / 37%</td>
</tr>
<tr>
<td>Minority population</td>
<td>34% / 34%</td>
<td>34% / 35%</td>
<td>34% / 34%</td>
</tr>
<tr>
<td>Youth population</td>
<td>7% / 10%</td>
<td>7% / 10%</td>
<td>7% / 10%</td>
</tr>
<tr>
<td>Elderly population</td>
<td>14% / 11%</td>
<td>14% / 12%</td>
<td>14% / 11%</td>
</tr>
<tr>
<td>Limited English Proficiency population</td>
<td>7% / 8%</td>
<td>7% / 8%</td>
<td>7% / 7 to 8%</td>
</tr>
<tr>
<td>Disabled population</td>
<td>12% / 11%</td>
<td>12% / 11%</td>
<td>12% / 11%</td>
</tr>
</tbody>
</table>

(1) Within station walksheds; (2) Within 15 minute ride on connecting high frequency transit

**Level 3 evaluation** – Part 1 of 2

**Overview of Key Differentiators**
### Evaluation Measures

<table>
<thead>
<tr>
<th>Evaluation Measure</th>
<th>ST3 Representative</th>
<th>5th Ave Cut-and-Cover International District/Chinatown Station</th>
<th>41st Ave Alaska Junction/4th Ave Cut-and-Cover/14th Ave Ballard</th>
<th>42nd Ave Alaska Junction Station</th>
<th>44th Ave Alaska Junction Station</th>
<th>4th Ave Mined International District/Chinatown Station</th>
<th>15th Ave Ballard Station</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Encourage equitable and sustainable urban growth in station areas through support of transit-oriented development, station access, and modal integration in a manner that is consistent with local land use plans and policies.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility with Urban Centers/Villages (1)</td>
<td>58%</td>
<td>56%</td>
<td>55 to 58%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Station land use plan consistency</td>
<td>Higher</td>
<td>Higher</td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger transfers</td>
<td>Higher</td>
<td>Higher</td>
<td>Medium</td>
<td>Higher</td>
<td>Higher</td>
<td>Medium</td>
<td>Higher</td>
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<tr>
<td>Activity nodes served (1)</td>
<td>302</td>
<td>298</td>
<td>Higher</td>
<td>300 to 303</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bus/rail and rail/rail integration (1)</td>
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<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bicycle infrastructure and accessibility (1)</td>
<td>19%</td>
<td>13%</td>
<td>18 to 19%</td>
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<tr>
<td>Pedestrian/limited mobility accessibility</td>
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<td>Higher</td>
<td>Higher</td>
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<tr>
<td>Development potential (1)</td>
<td>14%</td>
<td>14%</td>
<td>13 to 14%</td>
<td></td>
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<tr>
<td>Equitable development opportunities</td>
<td>Lower</td>
<td>Medium</td>
<td>Higher</td>
<td></td>
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<tr>
<td><strong>Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built and social environments through sustainable practices.</strong></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Historic properties/Landmarks (1)</td>
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<td>20</td>
<td>40</td>
<td></td>
<td></td>
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<td>Potential archaeological resource effects (1)</td>
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<td>Lower</td>
<td>Lower</td>
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<tr>
<td>Parks/recreational resource effects (acres)</td>
<td>1.4</td>
<td>5.3</td>
<td>1.2</td>
<td></td>
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<tr>
<td>Water resource effects (acres)</td>
<td>0.8</td>
<td>0.5</td>
<td>&lt;0.1</td>
<td></td>
<td></td>
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<tr>
<td>Fish and wildlife habitat effects (acres)</td>
<td>15.0</td>
<td>6.0</td>
<td>15.0</td>
<td></td>
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<td>Hazardous materials sites (1)</td>
<td>50</td>
<td>60</td>
<td>40</td>
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<tr>
<td>Visual effects to sensitive viewers (miles)</td>
<td>2.5</td>
<td>1.7</td>
<td>1.2</td>
<td></td>
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<tr>
<td>Noise/vibration sensitive receivers (1)</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Potentially affected properties</td>
<td>Medium</td>
<td>Lower</td>
<td>Higher</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Residential unit displacements</td>
<td>Medium</td>
<td>Lower</td>
<td>Higher</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Business displacements (square feet)</td>
<td>Higher</td>
<td>Lower</td>
<td>Higher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction impacts</td>
<td>Lower</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
<td>Medium</td>
</tr>
<tr>
<td>Burden on minority/low-income</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
<td>Lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic circulation and access effects</td>
<td>Lower</td>
<td>Medium</td>
<td>Lower</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects on transportation facilities</td>
<td>Lower</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects on freight movement</td>
<td>Lower</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business and commerce effects</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Within station walksheds and/or defined buffer of alignment; (2) On properties that overlap with the project footprint

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**Level 3 evaluation – Part 2 of 2**

**Overview of Key Differentiators**
Key considerations

- West Seattle stations and guideway
- Duwamish Waterway crossing
- SODO and Chinatown/Int’l District
- Downtown tunnel route
- Smith Cove-Interbay
- Salmon Bay crossing
- Ballard terminus station

Key considerations
Key considerations

- West Seattle stations and guideway
- Duwamish Waterway crossing
- SODO and Chinatown/Int’l District
- Downtown tunnel route
- Smith Cove-Interbay
- Salmon Bay crossing
- Ballard terminus station
Key considerations

West Seattle Stations and Guideway

**ST3 Representative Project**
- East-west oriented elevated Alaska Junction Station complicates future LRT extension; constrained terminal station on SW Alaska Street
- High guideway on SW Genesee Street
- Park effects may require 4(f) avoidance alternative
- Delridge Station problematic proximity to freeway/Nucor

**West Seattle Elevated**
- More displacements between Alaska Junction and Avalon stations; similar number of displacements in Delridge
- Greatest disruption to neighborhood around Alaska Junction Station
- High guideway on SW Genesee Street
- Park effects may require 4(f) avoidance alternative

**West Seattle Tunnel**
- Fewer displacements w/ tunnel Alaska Junction Station; similar number of displacements in Delridge; Lower Delridge Station in neighborhood
- Tunnel facilitates lower guideway on SW Genesee St, but could increase implementation schedule and require 3rd Party funding
- Park effects may require 4(f) avoidance alternative
West Seattle:

Key differentiators

- Station location
- Potential property effects
- Guideway height in Delridge
- Comparative Estimate
<table>
<thead>
<tr>
<th>Key Differentiators</th>
<th>Elevated Alaska/41st</th>
<th>Elevated 41st South of Alaska</th>
<th>Tunnel 41st/Alaska</th>
<th>Tunnel 42nd/Alaska</th>
<th>Tunnel 44th/Alaska</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Station location</strong> (Alaska Junction)</td>
<td>Farther away from bus routes on California Ave</td>
<td>Farther away from bus routes on California Ave</td>
<td>Closer to bus routes on California Ave than 41st</td>
<td>Closer to bus routes on California Ave than 41st and 42nd</td>
<td></td>
</tr>
<tr>
<td><strong>Property effects</strong> * (Residential units potentially displaced)</td>
<td>Avalon/Junction 60 to 90 Delridge Less than 40</td>
<td>Avalon/Junction 90 to 120 Delridge Less than 40</td>
<td>Avalon/Junction Less than 30 Delridge Less than 40</td>
<td>Avalon/Junction 30 to 60 Delridge Less than 40</td>
<td></td>
</tr>
<tr>
<td><strong>Property effects</strong> * (Sq. ft. of businesses potentially displaced)</td>
<td>Avalon/Junction 25,000 to 35,000 Delridge See Duwamish Crossing</td>
<td>Avalon/Junction 15,000 to 25,000 Delridge See Duwamish Crossing</td>
<td>Avalon/Junction 5,000 to 15,000 Delridge See Duwamish Crossing</td>
<td>Avalon/Junction 5,000 to 15,000 Delridge See Duwamish Crossing</td>
<td></td>
</tr>
<tr>
<td><strong>Guideway height in Delridge</strong></td>
<td>Higher</td>
<td>Higher</td>
<td>Lower</td>
<td>Lower</td>
<td>Lower</td>
</tr>
</tbody>
</table>
| **Comparative Estimate (2018)$** ** | - | + $700M | + $700M | + $700M | **

* Potential displacement numbers are for alternative comparison only and is based on limited engineering and existing conditions. The assessment does not include potential permanent or temporary easements or area for construction staging, traction power substations (TPSS) or underground station entrances.

** Compared to ST3 Representative Project

West Seattle Comparison Summary

2/19/2019
The next phase of planning
PUBLIC INVOLVEMENT

**PLANNING**

2017–2019

- Alternatives development
- Board identifies preferred alternative*

2019–2022

- Draft Environmental Impact Statement
- Final Environmental Impact Statement
- Board selects project to be built
- Federal Record of Decision

*The Sound Transit Board identifies preferred alternatives and other alternatives to study in the Environmental Impact Statement.
What is an Environmental Impact Statement?

• Starts with scoping
• Evaluates reasonable range of alternatives
• Identifies potential impacts
• Identifies potential mitigation
What is EIS Scoping?

- Part of the federal and state environmental review process
- **Public comment period** until April 2
- Seeking public *feedback on scope of EIS*
  - Range of alternatives
  - Topics to study
  - Purpose and need
- Helps *inform Board decision* on what to study in EIS*

* Scope of EIS also subject to Federal Transit Administration (FTA) oversight
Environmental Impact Statement (EIS)

What is typically studied in an EIS?
Environmental Impact Statement (EIS)

What is typically studied in an EIS?

- Ridership
- Transit
- Regional and local traffic
- Non-motorized facilities and modes
- Freight movement
- Marine navigation
- Aviation
- Construction traffic
Environmental Impact Statement (EIS)

What is typically studied in an EIS?

**Transportation**
- Ridership
- Transit
- Regional and local traffic
- Non-motorized facilities and modes
- Freight movement
- Marine navigation
- Aviation
- Construction traffic

**Natural Environment**
- Air quality and greenhouse gas emissions
- Ecosystems and fish and wildlife habitat
- Water resources
- Geology and soils
Environmental Impact Statement (EIS)

What is typically studied in an EIS?

Transportation
- Ridership
- Transit
- Regional and local traffic
- Non-motorized facilities and modes
- Freight movement
- Marine navigation
- Aviation
- Construction traffic

Built Environment
- Air quality and greenhouse gas emissions
- Ecosystems and fish and wildlife habitat
- Water resources
- Geology and soils

Natural Environment
- Noise and vibration
- Economic effects
- Visual resources
- Parks resources
- Land use
- Acquisitions, displacements and relocations
- Energy use
- Hazardous materials
- Public services and utilities
- Impacts on low income and minority populations
- Cultural, historic and archaeological resources
- Construction impacts
PUBLIC INVOLVEMENT

2017–2019
Alternatives development
Board identifies preferred alternative*

2019–2022
Draft Environmental Impact Statement
Final Environmental Impact Statement
Board selects project to be built
Federal Record of Decision

*The Sound Transit Board identifies a preferred alternative(s) and other alternatives to study in the Environmental Impact Statement.

Anticipated publication date: Late 2020
Acquisition/relocation process

Before DEIS publication (mid 2020)
- Sound Transit contacts potentially affected property owners

After DEIS publication (late 2020)
- Sound Transit Board confirms or modifies preferred alternative

After FEIS publication (2022)
- Sound Transit Board selects project to be built

During final design (2022-2026)*
- Sound Transit identifies full / partial acquisitions
- Sound Transit Board authorizes property purchases
- Sound Transit will prepare an appraisal to determine fair market value of property needed for the project
- Sound Transit will provide full relocation services to people and businesses displaced by the project, including referrals to comparable properties and payment of moving costs
- Sound Transit staff are available to support property owners and tenants through this process

*West Seattle: Design is expected to begin in 2022 and be completed in 2025.
Ballard and downtown Seattle Light Rail Tunnel: Design is expected to begin in 2023 and be completed in 2026.
How to provide scoping comments

- **Comment online:** wsblink.participate.online
- **Email us:** wsbscopingcomments@soundtransit.org
- **Leave a voicemail:** 833-972-2666
- **Mail us:**
  - West Seattle and Ballard Link Extensions, c/o Lauren Swift, Sound Transit, 401 S. Jackson St., Seattle, WA 98104
Thank you!

(soundtransit.org/wsblink)