Why we are here

Hilltop Tacoma Link Extension Update

• Information only briefing of current project status
Today’s Presentation

• Project Overview
• Financial Snapshot
• Risk and Contingency Management
• Remaining Work
• Construction Work Underway
• Light Rail Vehicles
• Community Engagement
• Key Issues and Challenges
• Questions
Hilltop Tacoma Link Extension (HTLE)

Project Overview

- 2.4 mile extension
- Seven new station platforms
- Five new vehicles
- Operations and Maintenance Facility expansion
- Revenue Service Date: TBD
## Current HTLE Financial Snapshot

<table>
<thead>
<tr>
<th>Project Re-Baseline Budget</th>
<th>$252.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Committed</td>
<td>$219.3</td>
</tr>
<tr>
<td>Incurred</td>
<td>$183.0</td>
</tr>
</tbody>
</table>

- Financials as of August 2021
- Project re-baselined in June 2020
- Year of Expenditure dollars
- 67% project scope completion
May 2021

- **Quantitative Risk Assessment**
  - Remaining work – what risks remain, identify new risks and apply a probability
  - Quantifies cost and schedule risks from a pre-mitigation and post-mitigation perspective

### Risk Probability Matrix

<table>
<thead>
<tr>
<th>None</th>
<th>Negligible</th>
<th>Very Low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
<th>Extremely High</th>
<th>Ultra High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$0.0M</td>
<td>$0.0 - $0.1M</td>
<td>$0.1M - $0.5M</td>
<td>$0.5M - $1.0M</td>
<td>$1.0M - $3.0M</td>
<td>$3.0M - $5.0M</td>
<td>$5.0M - $10.0M</td>
<td>$10.0M - $25.0M</td>
</tr>
<tr>
<td>Schedule</td>
<td>0.0 Month</td>
<td>0.0 - 0.25 Month</td>
<td>0.25 - 0.5 Month</td>
<td>0.5 - 1.0 Month</td>
<td>1.0 - 3.0 Months</td>
<td>3.0 - 6.0 Months</td>
<td>6.0 - 12.0 Months</td>
<td>12.0 - 24.0 Months</td>
</tr>
</tbody>
</table>
Observations

May 2021

• **Quantitative Risk Assessment – Top Risks**
  ✓ Rapid utilization of available schedule float
  ✓ Progress of construction/LRV manufacturing
  ✓ LRV Testing and Commissioning

• **Post-Primary Mitigation Results**
  ✓ High likelihood of exceeding project budget
  ✓ High likelihood of delay to baseline revenue service date
  ✓ Ongoing challenges due to global pandemic
Risk Mitigations – Primary and Secondary

**Primary**
- QRA Workshop
  - Identified mitigations and adjusted risk score accordingly

**Secondary**
- Executive Leadership Commitments
  1. Sound Transit
  2. City of Tacoma
  3. Contractor
  4. LRV Car Builder

**Results**
- Revenue Service Window: May 2022 - September 2022
Remaining Work

Civil
- Station Platforms
- Curb and gutter; ADA ramps
- Roadway restoration
- 9th and Commerce cutover

Systems
- OCS Wiring and Registration
- TPSS Stations
- Signalization

Testing and Commissioning
- Infrastructure
- Light Rail Vehicles

Pre-Revenue Service
Heading 1
9th/Commerce to Stadium Way/Division Avenue
Heading 2 – Stadium District

Stadium High School to Division Ave./MLK
Heading 3 - Hilltop District
MLK/Division Street to MLK/S.19th
Operations and Maintenance Facility
E. 25th Street
Light Rail Vehicles

Brookville, PA
Supplies and Source

Supplies from Europe
- Brake System
- Propulsion System
- Pantograph
- Door Systems
- Wheels
- Articulation Joints
- Axle
- Gearbox
- Track
- Brake
- Master Controller
- Equipment Mounting Hardware
- HVAC
- Ground Brush & Hardware
- Roof Top Electrical

Supplies from Malaysia
- Secondary Suspension Spring
- Rubber Materials
- Export

Reasons for Supply Interruption

- Staff at factories out sick or quarantined due to COVID impacting production workflow.
- Government shutdowns.
- Sub-contractor material delays and cost increases—(Ex. steel, rubber, and electronics)
- Customs constraints (Ex. Czech Republic- customs only open 1 day a week)

- Staff at factories out sick or quarantined due to COVID impacting production workflow
- Multiple government shutdowns
- Sub-contractor material delays and cost increases
**Raw Steel**

### Pricing
- Significant price increase per ton since August 2020
- Inventories remain low at all levels
- Demand is stronger compared to the COVID influenced lows of last year.

### Transportation
- Shortages of containers and vessels are adding to the wide-spread logistical challenges.
- Import and Export customs ability constrained.
- Backup of ships stuck offshore, unable to dock at port due to shortages of workers and equipment.
- Ports operating around 60% capacity, with some ports closed for several hours a day.
Community Engagement

Sound Transit wants to hear from you about new fare that will begin on Tacoma Link when the Hilltop Extension opens in 2022. You can provide input in an online survey or email at fares@soundtransit.org. Call 800-201-4000 or attend a virtual public hearing on July 15. More information is available on the survey. For more information, visit https://bit.ly/3swq4t. Please provide feedback by July 25. Thank you for your input!
Key Issues and Challenges

• Maintaining a high level of safety awareness and accident prevention
• Supply chain issues due to global pandemic
• Expected construction contract claims
• Stakeholder and neighborhood impacts during construction
• Impacts to operations - cutovers
• Extreme cost and schedule pressure on available contingencies and project float
• Public outreach during construction
Thank you.

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