Why we are here

Hilltop Tacoma Link Extension Update
• Information only briefing of current project status

Today’s Proposed Board Actions
• To inform the Board about recommendations to increase the project budget, revise revenue service date and increase contingency for construction and professional services contracts
Today’s Presentation

- Project Overview
- Financial Snapshot
- Risk and Contingency Management
- Cost and Schedule Drivers
- Lessons Learned
- Construction Work – Ongoing and Remaining
- 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
- 76% complete
Current HTLE Financial Snapshot

<table>
<thead>
<tr>
<th>Project Baseline Budget</th>
<th>$252.7</th>
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</thead>
<tbody>
<tr>
<td>Committed</td>
<td>$226.4</td>
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<tr>
<td>Incurred</td>
<td>$204.0</td>
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- Financials as of December 2021
- Project baselined in September 2017, budget rebaseline June 2020
- Year of Expenditure dollars
- Trends indicate the baseline budget of $252.7M requires more funding to address updated estimate at completion due to delay to completion of the work and start of revenue service.
Risk and Contingency Management

May 2021

• Top Risks
  ✓ Available float
  ✓ LRV
  ✓ Testing and Commissioning

• Post-Primary Mitigation Results
  ✓ Insufficient budget
  ✓ Delay
  ✓ Pandemic

January 2022 - Preliminary

• Top Risks
  ✓ Testing and Commissioning
  ✓ LRV
  ✓ Permanent Power

• Post-Primary Mitigation Results
  ✓ Insufficient budget
  ✓ Delay
  ✓ Pandemic
Cost and Schedule Drivers

• Construction
  o Change orders due to design revisions and contractor performance issues meeting planned production rates delayed substantial completion of the contract.

• Administration and professional services
  o Extended duration of the construction contract requires longer period of service for design support during construction, construction management professional services and Agency staff.

• Tacoma LRV
  o Settlement of claims due to manufacturing delays by car builder and associated longer period of service for testing and inspection support.
Lessons Learned

For at-grade construction in City ROW, the agency should consider:

**Design**
- Engineering procedures
- Civil/systems integration
- Design submittal timelines

**Construction**
- Contract delivery method – allocation of risk
- Change management
- Use of incentives
- Ensure adequate contingencies

**Third Parties**
- Agreements – roles and responsibilities during construction

**Vehicles**
- Allow time for concept verification for car builder
Ongoing- Construction
Ongoing - LRV
Remaining Work

Civil
• Station Finishes
• Curb and gutter; ADA ramps
• Roadway restoration
• 9th and Commerce cutover

Systems
• OCS Wiring and Registration
• TPSS Stations - power
• Signalization

Vehicles

Testing and Commissioning
• Infrastructure
• Light Rail Vehicles

Pre-Revenue Service
**Key Issues and Challenges**

- Maintaining a high level of safety awareness and accident prevention
- Tight budget and limited contingency
- Likely construction contract claims
- Stakeholder and neighborhood impacts during construction
- Contractor performance
- Public outreach during construction
- Impacts to operations - cutovers
Today’s Proposed Board Actions
Hilltop Tacoma Link Extension

• **Resolution No. R2022-03** – Amend the Adopted 2022 Budget by increasing the baseline budget by $30,000,000, partially offset by $20,700,000 in secure American Rescue Plan federal funds

• **Motion No. M2022-10** – Amend construction specific contracts due to delay to completion of the work and extended consultant services

• **Motion No. M2022-11** – Amend Construction Service Agreement with City of Tacoma for extension of permit support and inspection services due to delay to completion of the work.

• **Approved by the System Expansion Committee** – **Motion No. M2022-09** – To amend vehicle specific contracts with Tacoma LRV manufacturer and vehicle inspection and testing consultant.
Hilltop Tacoma Link Extension: Baseline Budget: $252.75M

Allocation: $252.75M

Commitments:
- Construction $157.2M
- Vehicles $32.9M
- Construction Services $11.5M
- Final Design $14.0M
- Agency Admin, PE, Third Party, ROW and System Testing & Startup $31.3M

Uncommitted $5.7M

Approved
Today’s Action
Future Action
Hilltop Tacoma Link Extension: Board approves $30M for additional authorized project allocation

<table>
<thead>
<tr>
<th>ALLOCATION</th>
<th>$ COMMITMENTS</th>
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<tr>
<td>Construction</td>
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<tr>
<td>Project Development</td>
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<tr>
<td>Agency Admin., PE, Third Party, ROW and System Testing &amp; Startup</td>
<td>$31.3M</td>
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<tr>
<td>Final Design</td>
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Uncommitted $30M
Uncommitted $5.7M

Construction $157.2M
Hilltop Tacoma Link Extension: Baseline Budget: $282.75M

Allocation $ Commitments

- Project Development
- Construction

$282.75M

- Construction $157.2M
- Vehicles $32.9M
- Construction Services $11.5M
- Final Design $14.0M
- Agency Admin., PE, Third Party, ROW and System Testing & Startup $31.3M

Uncommitted $35.7M

Approved  Today’s Action  Future Action
Hilltop Tacoma Link Extension: Board approves $18.4M in final design, construction services and vehicles phase
Thank you.