

US 2 Trestle Capacity Improvements and Westbound Trestle Replacement PEL Study

Technical Working Group, Meeting #3 Summary January 27, 2025; 9:00 a.m. Microsoft Teams

Meeting Purpose

The Washington State Department of Transportation (WSDOT) hosted the third meeting of the Technical Working Group (TWG) for the US 2 Trestle Capacity Improvements and Westbound Trestle Replacement PEL Study to seek input on active transportation concepts and integration, share the pre-screening and Level 1 screening results, and introduce the process to develop preliminary system-level alternatives.

TWG attendees:

- Adam Osbekoff, Snoqualmie Tribe
- Aaron Halbert, Washington State
 Transportation Commission
- Ben Romanaggi, City of Lake Stevens
- Cara Craig, Port of Everett
- Chris Simmons, Community Transit
- Corey Hert, City of Everett
- Elisa Albury, FHWA
- Kathryn Boris, Community Transit
- Kelly Snyder, Snohomish County
- Matthew Pahs, FHWA
- Michael Villnave, FHWA
- Mohammad Uddin, Snohomish County
- Paul Hagglund, Port of Everett
- Russell Wright, City of Lake Stevens
- Sharon Love, FHWA
- Tom Hood, City of Everett

Consultant team attendees:

- Anne Broache, WSP
- Ben Rodenbough, WSP
- Chris Wellander, WSP
- Elise Van Deventer, PRR
- Fred Young, Parametrix
- Jared Nakamoto, WSP
- Jennifer Rash, PRR
- Kate Bradbury, Parametrix
- Larissa King-Rawlins, WSP
- Laurence Idos, PRR
- Michael Horntvedt, Parametrix

WSDOT participants:

- April Delchamps, WSDOT
- Josh Shippy, WSDOT
- Kyengo Ndile, WSDOT
- Lisa Sakata, WSDOT
- Oteberry Kedelty, WSDOT
- Rory Renfro, WSDOT
- Sanaz Malaki, WSDOT



Welcome and Introductions

WSDOT and the study team welcomed attendees to the third TWG meeting with a safety moment and chat introductions. April Delchamps then reviewed the study schedule, TWG meeting progression and the meeting purpose and agenda.

Study Progress: Prescreening and Level 1 results

Chris Wellander recapped the second TWG meeting as it related to concept development. He shared that most concepts reviewed at TWG meeting 2 received a "pass" or "neutral" scores for the pre-screening based on Purpose and Need statement. Two concepts failed the pre-screening and did not move forward for further evaluation: TW1 failed on multiple mobility and resiliency criteria, while TW8 failed multiple resiliency criteria in the US 2 corridor.

He then reviewed the qualitative Level 1 criteria and shared what has changed since TWG meeting 2:

- Westbound ramps to California Street open in all concepts
- Ramp meters included on ramps to I-5
- No HOV ramp meter bypasses except transit routes
- Additional active transportation concepts

Chris then described that active transportation concepts were developed and scored separately before the study team paired the highest-scoring active transportation concepts with roadway concepts and did a full Level 1 assessment.

Summary of Level screening results

For the west interchange area, the study team looked at 14 concepts and carried forward 6 that scored above average. For the trestle, the study team looked at 13 concepts and 8 moved forward. And for the east end, the study team looked at 14 concepts and 7 moved forward.

West Interchange - Westbound (WW)

- <u>WW6 & WE-AT-04</u>: The WW6 roadway concept includes a single-lane off-ramp that expands to three lanes at Everett Avenue and Summit Avenue, a dual-lane ramp meter at the northbound I-5 on-ramp and maintains the California Street exit with potential for transit priority while providing two lanes to southbound I-5. This concept pairs well with an HOV lane on the north side of the westbound trestle. The active transportation concept includes an elevated facility along the north side of the westbound trestle, grade-separated ramp crossings, and either expansion or reallocation of space on the off-ramp to California Street.
- <u>WW7 & WE-AT-08</u>: The WW7 roadway concept is like WW6 but shifts the Everett Avenue off-ramp to connect at the northbound I-5 on-ramp. This design would best pair with an HOV lane on the north side of the westbound trestle. The corresponding active transportation concept includes an elevated facility along the south side of the westbound trestle, featuring grade-separated crossings as it traverses westbound US 2 and approaches California Street, like the previous active transportation concept.
- <u>WW8 & WE-AT-09</u>: The WW8 roadway concept keeps connections to northbound I-5 and California Street but replaces the Everett Avenue ramp with a new two-lane ramp to Hewitt Avenue. Additionally, the connection to southbound I-5 includes an HOV lane for most of the ramp. This design would pair best with an HOV lane on the south side of the



westbound trestle. The active transportation connection features an elevated facility along the north side of the westbound trestle with a spur to Everett Avenue. Like the previous concepts, it includes grade-separated ramp crossings and uses the California Street off-ramp.

- 4. <u>WW9 & WE-AT-08</u>: The WW9 roadway concept closely resembles WW7 but adds an HOV lane on the ramp to southbound I-5. This design would pair well with an HOV lane on the south side of the westbound trestle. The active transportation concept stays consistent with previous designs, featuring an elevated facility along the south side of the trestle, crossing under US 2, and connecting to California Street.
- 5. <u>WW10 & W-AT- 14</u>: The WW10 roadway concept builds on an alternative from the Everett I-5/US 2 Interchange Planning Study, introducing a local off-ramp with one general-purpose lane and one HOV lane to a new Waterfront Access Road connecting to Pacific Ave. It also includes an HOV lane on the two-lane ramp to southbound I-5. This would best fit with an HOV lane on the south side of the WB trestle. The active transportation concept features an elevated facility along the south side of the westbound trestle, with grade-separated crossings of ramps and US 2, continuing along the north side of the California Street off-ramp.

Comments/questions

• Corey Hert, City of Everett, shared in the chat and thanked the study team for adding the WW10 concept because it serves transit to Everett Station effectively.

West Interchange - Eastbound (WE)

6. <u>WE4 & WE-AT-14</u>: Of the four eastbound concepts considered for the west interchange, WE4 stood out as the highest-rated option. This concept features a one-lane off-ramp from northbound I-5 that splits into a two-lane off-ramp to Pacific Avenue and a two-lane ramp to eastbound US 2. It includes an HOV lane along the Pacific Avenue ramp that continues on Walnut Street, connecting to the on-ramp from Hewitt Avenue to eastbound US 2. This design allows transit from Pacific Avenue to access the HOV lane, making it compatible with an HOV lane on the south side of the eastbound trestle. It provides strong HOV and transit connections from northbound I-5 and eastbound Pacific Ave and pairs particularly well with WW10, which includes the Waterfront Access Road. The active transportation concept associated with WE4 aligns with the WW10 design.

Comments/questions

- Tom Hood, City of Everett, asked about assumptions on function of the local system for these concepts regarding signals at the Pacific and Hewitt intersection.
 - Michael Horntvedt responded that the concept assumes the traffic system works well. Since this was a qualitative evaluation, the study team did not run models using data, however, the team is starting traffic sensitivity tests to help determine merge lengths, intersection control types, and other factors that will be considered in the next level of evaluation. There will be recommendations for intersection controls, but it is not year clear what the recommendation will be (WSDOT requires evaluating a roundabout first).
- Corey Hert, City of Everett, added in the chat and thanked the study team for analyzing intersection on Hewitt because it was a concern for City of Everett.



- Mohammad Uddin, Snohomish County, asked if WB concepts include infrastructure over or under the I-5 bridge. Mohammad also asked if the I-5 bridge needs to be replaced.
 - Michael Horntvedt shared that one concept is over the I-5 bridge. The team will conduct a more detailed analysis at the next screening level to make recommendations for the I-5 bridge.

Trestle Westbound and Eastbound (TW/TE)

- 1. Westbound Trestle (TW3, TW4, TW5, TW6): The study team identified four top-rated concepts, all assuming a new structure with three full-time travel lanes and standard shoulders. One concept assumes peak shoulder use in addition to the three full-time lanes providing four WB lanes in the peak period (i.e., the City of Everett's assumed "baseline" for interchange planning study). Another concept assumes two lanes plus a barrier separated reversible HOV/Transit lane which we still need to look at for feasibility of connections on each side of the trestle. Because they all have full shoulders, they all have potential for peak-use shoulder HOV/Transit lane on either the north or south side of the trestle.
- Eastbound Trestle (TE4, TE5, TE6, TE7): Four concepts received above-average scores, all assuming a new structure with standard-width shoulders. TE4 closely resembles current conditions but includes a standard-width inside shoulder. Three concepts feature three full-time travel lanes, while one incorporates peak shoulder use (HOV or general purpose). The eastbound trestle replacement is expected to occur sometime after the westbound replacement.

East Interchange - Westbound (EW)

- <u>EW2 & EE-AT-02</u>: This concept features three separate one-lane ramps from each connecting facility, eliminating the need for merging as they join the WB trestle. It also includes an HOV ramp from the 20th Street lower roadway, connecting to a south-side HOV lane. HOVs and transit can access this ramp via a new roundabout at the lower SR 204/20th Street intersection. This design provides a more direct connection from the 20th Street westbound business access transit (BAT) lane to the westbound US 2 HOV lane, minimizing the need for weaving if buses were to enter via the general-purpose ramp. The active transportation facility paired with this option consists of an at-grade path along 20th Street under the trestle, with a grade-separated crossing leading to a shared-use path along the south side of 20th Street to Cavalero Road.
- <u>EW3 & EE-AT-05</u>: This includes one lane from SB SR 204, two lanes from westbound US 2, and one lane from westbound 20th Street. The ramp from 20th Street is a flyover, directing traffic to the north side of the new trestle to align with a north side HOV lane, which also ties in with the 20th Street BAT lane. Additionally, the active transportation facility would be elevated along the north side of the westbound trestle and the flyover ramp from 20th St.

Comments/questions

 Michael Horntvedt added that with a viable two-way connection to Ebey Island from 20th Street, the study team is considering closing the west bound US 2 off-ramp to the lower roadway and Ebey Island to eliminate the weave that occurs now. They would include the on-ramp from Ebey Island on the west end, however. At the east end with the new



two-way local 20th Street bridge across the Ebey Slough, you can get to and from the island without accessing the trestle.

- Ben Romanggi, Lake Stevens, shared a concern about the proposed active transportation connections on 20th Street at 71st Avenue with active transportation travelers crossing four lanes.
- Tom Hood, City of Everett, asked a clarifying question if SR 204 ramp have to merge with the two lanes from US 2. He added that the two lanes converging into one lane would create bottlenecks.
 - Michael Horntvedt said the options EW3 and EW4 give priority to the 20th Street ramp and priority to the HOV lane. He said the sensitivity tests will help the study team figure out how to optimize operations for this area.
- 3. <u>EW4 & EE-AT-05</u>: Concept EW4 is like EW3, with the main difference being that SR 204 merges with 20th Street, and US 2 joins the trestle with two lanes. The active transportation concept stays the same as in EW3.
- 4. <u>EW6 & EE-AT-05</u>: EW6 is like EW4, but with less merging impact due to the trestle assumed to have four lanes for a longer stretch before tapering to three lanes. If paired with a three-lane trestle concept that includes a peak-use shoulder, this could prevent the need for merging during peak times. The active transportation concept stays the same as in the previous two concepts.
- 5. <u>EW8 & EE-AT-03</u>: EW8 includes one lane from SB SR 204, two lanes from westbound US 2 (one general purpose lane and one HOV lane), and two separate ramps from westbound 20th Street (one general purpose lane and one HOV lane, with the HOV lane connecting to the US 2 HOV lane on the south side of the trestle structure). One lane of US 2 merges with the 20th Street general purpose lane ramp, and SR 204 joins as its own lane. The active transportation facility is elevated on the south side of the westbound US 2 on-ramp to the northeast side of the interchange, and another grade-separated crossing to a shared-use path along the south side of 20th Street, extending to Cavalero Road.

Comments/questions

• Ben Romanaggi, Lake Stevens, commented that SR 204 having its own lane and not having to merge may be better since currently it can back up to Lundeen Parkway and this could help.

East Interchange - Eastbound (EE)

On the east side, two eastbound concepts rated the highest, both assuming a two-lane eastbound off-ramp to SR 204, and both being compatible with a two, three, or four-lane eastbound trestle.

6. <u>EE2 & EE-AT-09</u>: EE2 includes a two-lane ramp connection to northbound SR 204 The active transportation facility paired with this concept is an elevated facility along the south side of the eastbound trestle, with a grade-separated crossing under US 2 to a shared-use path along the south side of 20th Street, extending to Cavalero Road.



7. <u>EE5 & EE-AT-09</u>: EE5 is similar to EE2, with the key difference being that one lane from the off-ramp to SR 204 stays elevated above SR 204 to tie into Sunnyside Boulevard. This design eliminates the conflict between northbound SR 204 traffic turning left onto Sunnyside and southbound SR 204 traffic, addressing a significant bottleneck currently in place. The active transportation facility would remain the same as in the previous concept.

A traffic signal or a roundabout at the Sunnyside/SR 204 intersection could be paired with any of the east end concepts. The current traffic sensitivity testing will provide further insight into their effectiveness.

Comments/questions

- Russell Wright, Lake Stevens, suggested that any interchange that ties into Sunnyside Boulevard north of SR 204 should also consider impact on 10th Street.
- Tom Hood, City of Everett, asked for clarification if the east end concepts assume the existing lane configuration on 20th Street. He added that the City of Everett is a big supporter of the two-lane expansion on 20th Street because of its effect on operations on I-5.
 - Michael Horntvedt responded that the assumption is two lanes going uphill from the Lake Stevens Comprehensive Plan.

System-level Alternatives Development

Josh Shippy gave a high-level overview of the process on developing Level 2 System Alternatives. He shared that Level 1 screening focused on corridor concept components by area (west end, trestle, east end) and by direction. Based on the results, the highest-rated concepts will be analyzed for compatibility across the three geographical areas. More traffic analysis tests will be conducted to confirm the operational viability of certain concepts and how they connect with others. This will help identify the best pairings and potential operational issues. The goal is to develop up to five non-tolled system alternatives and two tolled system alternatives for the Level 2 evaluation. Since tolling is not assumed as a given for this study, alternatives will be carried forward to reflect both tolled and non-tolled scenarios.

Josh reviewed an example of a potential system alternative. He stated that the study team looked at all the Level 1 concepts that Chris presented, and using the process just described, developed this draft example of one potential system alternative that would be analyzed in more detail in the Level 2 evaluation. It is not necessarily the highest scoring concept but provides an example of how we would be putting these system alternatives together.

Josh then reviewed draft Level 2 evaluation criteria (quantitative) in each need area.

Comments/questions

 Mohammed Uddin, Snohomish County, suggested the future graphics of concepts should show the grade separation or flyovers so people understand where structures are going.

Environmental Existing Conditions



Lisa Sakata reviewed the Environmental Existing Conditions report and noted it is available if a TWG member wants to review and provide comments. She reiterated that the report provides a summary of a desktop review (using publicly available information sources) off 16 different environmental topics within the PEL Study's preliminary study area:

- 1. Earth (geology and soils)
- 2. Air quality
- 3. Greenhouse gas emissions
- 4. Stormwater best management practice sites and retrofit priorities
- 5. Wetlands and other waters (including mitigation sites and navigable waters)
- 6. Chronic environmental deficiencies
- 7. Climate vulnerability
- 8. Special flood hazard areas

- 9. Habitat connectivity
- 10. Fish passage barriers
- 11. Threatened and endangered species (plants and wildlife)
- 12. Noise walls
- 13. Hazardous materials contamination sites
- 14. Publicly owned parks, recreational areas, and refuges
- 15. Cultural resources
- 16. HEAL Act (community profile)

Next Steps

April Delchamps gave a snapshot of the community engagement for the study. She shared that since the last meeting, the study team followed up with the public and community-based organization partners to share the approved Purpose & Need statement and results of the online open house. She noted that the next round of engagement will resume in late spring or early summer when Level 2 results are ready for public review.

Chris Wellander highlighted that the next meeting is in early spring to share the Level 2 analysis update and the meeting summary and presentation for the meeting will be available on the project website.