I-5 Marvin Rd to Mounts Rd Planning and Environmental Linkages

Technical Advisory Group Meeting #4 Summary

Meeting purpose

The purpose of the Technical Advisory Group (TAG) meeting was to:

- Build awareness of Environmental Existing Conditions
- Discuss Initial (Level 1) Alternatives Evaluation Results
- Gather input on Detailed (Level 2) Alternatives Evaluation Results

Meeting logistics

April 18, 2023, 1:00 p.m. – 3:00 p.m.
Virtual Meeting

Attendees

TAG Participants

- Bill Adamson, South Sound Military & Communities Partnership
- Brad Beach, Nisqually Indian Tribe
- Captain Kristene O'Shannon, Washington State Patrol
- Christine Wolf, Port of Tacoma
- Cody Colt, City of Yelm
- Dan Sacks, Joint Base Lewis McChord
- Dave Smith, City of Olympia
- Emily Bergkamp, Intercity Transit
- Glynnis Nakai, Billy Frank Jr Nisqually National Wildlife Refuge
- Jeanette Dorner, Nisqually Land Trust
- Jennifer Barnes, Puget Sound Regional Council
- Justin Hall, Friends of Nisqually NWRC
- Justin Hall, Nisqually River Council
- Katrina Van Every, Thurston Regional Planning Council
- Klayton Leingang, Pierce County
- Martin Hoppe, City of Lacey
- Melissa Flores Saxe, Sound Transit
- Paul Bucich, City of Lakewood
- Peter Stackpole, Intercity Transit
- Rob LaFontaine, Intercity Transit
- Sallie Donahue, Joint Base Lewis McChord
- Scott Egger, City of Lacey
- Theresa Turpin, Foothill Rails to Trails Coalition
- Tiffany Speir, City of Lakewood
- Scott Moeller, Pierce County Public Works
- Shukri Sharabi, City of DuPont

WSDOT Project Team

- Ashley Carle, WSDOT Project Team Leadership
- John Perlic, Parametrix, WSDOT Project Team Leadership
- Emma Dorazio, PRR
- Jenifer Young, Parametrix
- Kirk Wilcox, Parametrix
- Lauren Wheeler, PRR
- Rachel Durham, Parametrix
- Richard Warren, WSDOT
- Sharese Graham, SCJ Alliance

Meeting Opening, Purpose and Goals

The I-5 Marvin Rd. to Mounts Rd. Planning and Environmental Linkages (PEL) Study Technical Advisory Group (TAG) met for the fourth time on Tuesday, April 18, 2023. The WSDOT study team began the presentation by welcoming participants, reviewing the agenda, and leading the

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TAG through introductions. The study team provided best practices and guidance for engaging using Zoom features during the meeting.

The study team convened the TAG to receive input, facilitate active participation, and build an understanding of the PEL process among local agency representatives. In the fourth TAG meeting, participants will build awareness of Environmental Existing Conditions, discuss initial (Level 1) Alternatives Evaluation results, and provide input on detailed (Level 2) Alternatives Evaluation results.

The responsibilities of the TAG include:

- Representing agencies and resources in the study area
- Providing data and input on direction of study
- Advising on range of alternatives and alternatives evaluation criteria
- Helping to build consensus and support for alternative(s) selection

Schedule and study process

The team reviewed the study schedule and status. The study is on track with the planned schedule, working to reach concurrence point number three in early May, which will focus on the Alternatives Evaluation. Concurrence point number four, planned for the end of June, will focus on the final PEL Report.

The study team provided a recap of Meeting 1, held on January 17, 2023, Meeting 2, held on February 15, 2023, and Meeting 3, held on March 14, 2023. During Meetings 1 - 3, the study team shared the project background and desired outcomes of the study, advisory groups reached consensus on the Conceptual Purpose and Need and Alternatives and existing data sources, and participants shared feedback on the Alternatives Evaluation Process, including Level 1 and Level 2 criteria, and the initial (Level 1) Alternatives Evaluation results.

Existing conditions

Jenifer Young (Parametrix) provided an overview of the list of existing conditions the study team has analyzed. Advisory groups members are encouraged to reach out to the study team for a copy of a report they would be interested in reviewing. Email request to Ashley Carle at Ashley.Carle@wsdot.wa.gov.

Element	Results
Stormwater and Water Quality	*Stormwater* • Drainage is generally collected in catch basins and conveyed by ditches to nearby waterbodies • No treatment except in vicinity of Exits 111 and 116 *Water Quality* • Portions of Nisqually River, McAllister/Medicine Creek & Red Salmon Creek on 303(d) list for temperature, fecal coliform

Wetlands and Streams	*Wetlands*
	• 23 wetlands identified:
	  • 11 Category I
	  • 6 Category II

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	• 6 Category III • Moderate to high biological, chemical, & physical functions *Streams* • Nisqually River, McAllister/Medicine Creek, Red Salmon Creek + unnamed tribes & backwater sloughs
Vegetation, Wildlife, and Fish	*Vegetation* • Mature upland and riparian forest; estuarine and freshwater wetlands • 2 ESA listed plant species *Wildlife* • Study area overlaps with 8 WDFW priority habitat areas • 9 listed and 1 proposed wildlife species *ESA Listed Fish Species* • Bull trout* • Chinook salmon* • Steelhead* • Boccacio rockfish • Yelloweye rockfish ** designated critical habitat in study area*
Floodplains and Sea Level Rise	*Floodplains* • Entire valley mapped as floodplain • Base (100-yr) flood elevation = 15.7 feet at I-5 • FEMA maps are being updated *Channel Migration* • WSDOT has documented Nisqually River migration; avulsion may affect I-5 in 20 years or fewer
Geology and Soils	*Topography and Soil Types* • Upland soils: Vashon till and Vashon advance outwash • Valley soils: Recent alluvial deposits *Geologic Hazards* • Landslides • Liquefaction • Volcanic Hazards
Visual Quality	*Visual Resources* • Built environment around interchanges • Forested areas • Nisqually River Valley

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	Viewers • Travelers on I-5 • Refuge users • Homes and businesses closest to corridor
Air Quality	Air Quality • Nisqually Valley is an environmentally sensitive area • Area is currently in compliance with all AQ standards • I-5 corridor currently exceeding highway design capacity during peak travel periods • Traffic volumes are currently higher than pre-COVID
Cultural and Historic Resources	*Recorded and Known Resources* • 6 archeological sites • 5 inventoried historic resources • Medicine Creek Treaty National Memorial *Survey* • 5% of project area covered by previous intensive survey • Unrecorded aboveground and belowground resources may be present
Noise	*Noise Sources* • I-5 Traffic • WSDOT dBA criteria = 66 • Existing noise levels range from 65-73 dBA *Sensitive Receivers* • Residences adjacent to corridor • Billy Frank Jr. Nisqually National Wildlife Refuge
Hazardous Materials	*Known Sites* • 109 active sites within 1 mile • 37 sites of potential concern within ½ mile • 5 active cleanup sites within ½ mile
Land Use and Farmlands	*Land Use* • City of Lacey • Thurston & Pierce Counties *Farmlands* • Prime & Statewide Importance • Active agricultural production south of I-5 *Section 6(f) Resources* • Billy Frank Jr. Nisqually National Wildlife Refuge

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Section 4(f)	*Recreation* • Eagle's Pride GC • Hawk's Prairie Off-Leash Dog Park • WSU Closed Loop Park Demonstration Garden *Wildlife Refuge* • Billy Frank Jr. Nisqually National Wildlife Refuge *Historic Resources* • Medicine Creek Treaty National Memorial

Discussion

- Brad Beach (Nisqually Indian Tribe) asked about the timeline for consideration of cultural resources. The study team assessed cultural resources during the analysis of current conditions and found recorded and known resources, including 6 archaeological sites, 5 inventoried historic resources and the Medicine Creek Treaty National Memorial. A previous survey was conducted of 5% of the project area and unrecorded aboveground and belowground resources may be present. The study team will continue to assess cultural resources and mitigate impacts during the NEPA process.
- Scott Egger (City of Lacey) asked the study team to clarify whether the map of farmland land use classifications describes soil classification or farmland classification. The study team confirmed that the map shows soils compatible with prime or statewide farmland use, not active farmland, and clarified that areas with urban development are not considered prime and statewide farmland.
- Scott Egger also noted existing sound walls east of Exit 111 and asked how the barrier was incorporated into or impacted the sound analysis, if at all. WSDOT conducted the sound analysis from the residential side of the noise wall to measure any noise impacts to the sensitive receivers. The NEPA process will include further noise analysis to gauge whether the improvements would warrant additional or replaced sound barriers.
- Bill Adamson (South Sound Military & Communities Partnership) asked whether the flood analysis was tied to the US Geological Survey completed last year. The study team had referenced flood impact data from a UW Climate Impacts Group and is also working with USGS to understand fill removal impacts.

Initial Alternatives Evaluation Results

The study team shared the Alternatives Evaluation results with participants prior to the meeting. The recommendation from the Initial (Level 1) Alternatives evaluation included elimination of unreasonable alternatives, including Alternative 1, Alternative 4, and Design Option D. Rationale for the elimination of each alternative and design option are detailed below. Project purpose categories are bolded for reference.

Alternative 1 (Operations Improvements)

- Low performance in the ***Enhance Mobility and Connectivity*** category
    - Higher traffic congestion for GP vehicles, transit, and trucks
    - Does not improve transit travel time compared to GP vehicles

- Highest traffic diversion to local roadways
- Minimal increase in person and freight throughput

- Low performance in the ***Economic Vitality*** category
  - Higher travel time on I-5 for trucks and freight movement
- Similar performance to Alternatives 2, 3, and 4 in other categories

Alternative 4 (Lane Conversion from GP to HOV lane)

- Low performance in the ***Enhance Mobility and Connectivity*** category
  - Higher traffic congestion for GP vehicles and trucks
  - Some traffic diversion to local roadways
  - Minimal increase in person and freight throughput
  - Does not Compliment Local and Tribal Planning Efforts
- Low performance in the ***Economic Vitality*** category
  - Higher travel time on I-5 for trucks and freight movement
- Similar performance to Alternatives 1, 2, and 3 in other categories

Design Option D (high-level, long span bridge)

- Removal of the Nisqually interchange
- Ramp connections to the high-level bridge are not feasible
- Impact to freeway-oriented businesses
- Local street traffic increases
- Higher emergency response times
- Property impacts outside of WSDOT right-of-way
- Highest estimated cost

Of the remaining alternatives and bridge options, participants expressed greatest support for Alternative 2 (84%) and 3 (68%) and bridge Design Options B (67%) and C (85%) during Meeting Series 3. Design Option A (33%) received less support. However, it is the only design option that does not open the South Overflow Channel, and it was maintained on the list of potential design options to address concerns shared by the Billy Frank Jr. Nisqually National Wildlife Reserve.

Discussion

- Bill Adamson (South Sound Military & Communities Partnership) asked whether the study team had considered a hybrid or metered HOV lane for Alternative 2 and Alternative 3. While the study team is not currently analyzing this possibility, it would be compatible on the same footprint as Alternative 2 and Alternative 3.
- Bill Adamson also shared concerns that Design Option A would not provide sufficient fill removal. The study team noted that Design Option A was carried into Detailed (Level 2) Alternatives Evaluation to address concerns shared by the Billy Frank Jr. Nisqually National Wildlife Reserve. Those concerns could also be mitigated for Design Options B and C.
- Katrina Van Every (Thurston Regional Planning Council) acknowledged recent statewide efforts to establish Vehicle Miles Travelled (VMT) performance measures and noted that, pending legislative decisions, VMT targets may influence funding priorities for the state.

The study team will continue monitoring this developing priority and will address VMT modelling during NEPA, which will include a no-build alternative.

Detailed Alternatives Evaluation Criteria Updates
For Detailed (Level 2) Alternatives Evaluation, the study team used the same evaluation criteria as Level 1 analysis, except for the following updates:

- WSDOT congestion relief for General Purpose (GP) vehicles and freight and congestion relief for transit and High Occupancy Vehicles (HOV) into two separate criteria.
- The study team also added criteria for consistency with WSDOT policy.

Additionally, Level 2 analysis uses an expanded rating scale with 5 colors. The study team also added quantitative analysis results to several evaluation criteria and looked at existing conditions of all resources in the corridor that have the potential to be impacted.

Detailed Alternatives Evaluation Results
The study team reviewed the focus of the Detailed (Level 2) Alternatives Evaluation analysis and the descriptions and common features of each remaining alternative and design option before previewing the preliminary results.

The focus of the detailed evaluation is to determine a preferred transportation alternative with multiple bridge Options for more analysis in NEPA. The preferred alternative would provide overall benefit to the environment, would not cause significant environmental impacts identified that cannot be mitigated, and does not involve controversy, and is supported for its combined transportation mobility and environmental benefits without known controversy. The detailed evaluation will also inform whether the Environmental Assessment (EA) process may be appropriate for NEPA if a preferred alternative is recommended in the PEL process.

<u>Enhance mobility and connectivity</u>

Preliminary results

- Alternative 2 is rated higher in the Accommodates Transit modes and Provides Congestion Relief for Transit and HOV's because of the HOV/transit priority lane
- Alternative 2 is rated higher in the Consistency with WSDOT Policies category, related to greenhouse gas emission reduction goals and continuity with the funded I-5 HOV lanes north of Mounts Road.
- Alternatives 3 is rated higher in the Increases Person and Freight Throughput categories

Discussion
Paul Bucich (City of Lakewood) asked the study team to expand on which WSDOT policies are emphasized in the added criteria, noting that the language in the evaluation matrix is vague. The study team shared that alignment with both greenhouse gas (GHG) emission reduction goals and continuity with the funded I-5 HOV lanes north of Mounts Road are prioritized in the consistency with WSDOT policies criteria.

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System resiliency

Preliminary results

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor
- Option C rates highest in reducing the risk of infrastructure failures followed by Option B and Option A
- Longer bridge lengths remove more fill material reducing the risk of infrastructure failure from Nisqually River movement
- Risk of infrastructure failure due to seismic activity is the same for all Options—new bridges will be designed to the same seismic standard

Environmental restoration and ecosystem resiliency

Preliminary results

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor
- The longest bridge (Option C) enables the most environmental restoration and ecosystem resiliency, followed by Option B and Option A
- Option C allows a return to more natural conditions for McAllister Creek as well as the Nisqually River

Economic vitality

Preliminary results

- Alternatives 2 and 3 and all Options do not impact river navigability
- Alternative 3 performs more reliably for freight movement due to a higher level of congestion reduction compared to Alternative 2
- Alternative 2 provides a higher level of transit access to opportunities compared to Alternative 3

Equitable outcomes

Preliminary results

- Alternative 2 and Alternative 3 have the same footprint impact in the corridor, resulting in the same impact on business and residential impacts or displacements
- Alternative 2 and Alternative 3 have the same minimal impact to emergency response
- The longest bridge (Option C) minimizes the flood risk potential for EJ populations the most followed by Option B and Option A

Relative Cost

Preliminary results

- Alternative 2 and Alternative 3 have the same cross-section and construction staging plan, and would result in the same cost depending on the Bridge Option A, B, or C

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- The estimated cost for Option C is highest and Option A the lowest

Discussion

- Christine Wolf (Port of Tacoma) asked how the study team is considering the potential costs or risks related to the potential environmental impacts and mitigation efforts. The study team will perform a Cost Estimation Validation Process (CEVP) and value engineering studies to develop a more accurate estimate. NEPA will also help the study team to develop a narrative about the cost of inaction.
- Bill Adamson (South Sound Military & Communities Partnership) noted the absence of differentiation between the two alternatives for the equitable outcomes and relative cost categories. The study team appreciated the observation and noted that the criteria are still shown to display differing results between Design Options.
- Brad Beach (Nisqually Indian Tribe) asked the study team to confirm which Design Options allow for realignment of McAllister Creek. Design Option B includes a bridge over McAllister Creek, which can also be applied to Option A but is currently not included in the cost estimate.

Summary

The study team reviewed the overview of Level 2 results once more before summarizing the findings of the analysis. Project purpose categories are bolded for reference.

- Alternative 2 rates slightly higher than Alternative 3 overall, with higher ratings in the ***Enhance Mobility and Connectivity*** category.
    - Alternative 2 rates higher in Accommodating Transit Modes and Providing Congestion Relief to HOV/Transit.
    - Alternative 2 has a substantially higher degree of consistency with WSDOT Policy.
- In the ***Economic Vitality*** category:
    - Alternative 2 is rated higher than Alternative 3 for the Multimodal Access to Opportunities Category.
    - Alternative 3 is rated higher than Alternative 2 for the Freight Reliability criteria.
- All ratings in other categories are the same with differences among Options A, B, and C only.
- Option C rates slightly higher than Option B and Option A overall, with higher ratings in the ***System Resiliency***, ***Environmental Restoration,*** and ***Equitable Outcomes*** categories.
- Option C rates lower (highest cost) than Option B and Option A (lowest cost) in the ***Planning Level Cost*** category. The incremental environmental benefit of Option C compared to other options may not be commensurate with the added cost of Option C.
- Option A and Option B both address ***System Resiliency and Environmental Restoration*** by providing a natural connection from the Nisqually River to the north overflow channel.

Discussion

Paul Bucich (City of Lakewood) asked whether criteria are all weighted equally. For the Detailed (Level 2) Alternatives Evaluation, the criteria are all equally weighted. ***Poll #1: Based on the evaluation, which alternative do you support to be evaluated during NEPA?***

a) Alternative 2 – Widen I-5 for HOV lanes (17/21 or 81%)
b) Alternative 3 – Widen I-5 for General Purpose Lanes (11/21 or 52%)

Poll #2: Based on the options, which alternative do you support to be evaluated during NEPA?

1. Design Option A – 3,000 ft (8/18 or 44%)
2. Design Option B – 6,000 ft (14/18 or 78%)
3. Design Option C – 12,000 ft (15/18 or 83%)

Next steps

The study team shared the following next steps:

1. Post meeting materials for review
2. Request Existing Conditions Memo for early review
3. Updated Detailed evaluation results will be sent before May meeting
4. Let us know if you haven't received the May 16 calendar invite

The final TAG meeting for the PEL phase is on May 16, 2023.

The meeting adjourned at 2:31 p.m.