



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

Technical Advisory Group Meeting #2 Summary

Meeting purpose

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

- Confirm Purpose and Need statement.
- Present and gather input on the updated Draft Range of Alternatives.
- Review and gather early input on alternatives evaluation criteria.

Meeting logistics

February 15, 2023, 1:00 p.m. - 2:40 p.m.

Virtual Meeting

Attendees

TAG Participants

- Aubrey Collier, City of Lacey
- Bill Adamson, South Sound Military & Communities Partnership
- Christine Wolf, Port of Tacoma
- Dan Sacks, Joint Base Lewis-McChord
- Dave Smith, City of Olympia
- David Troutt, Nisqually Indian Tribe
- Glynnis Nakai, Billy Frank Jr. Nisqually National Wildlife Refuge
- Jeanette Dorner, Nisqually Land Trust
- Justin Hall, Nisqually River Council and Friends of Nisqually NWRC
- Katrina Van Every, Thurston Regional Planning Council
- Klayton Leingang, Pierce County
- Kristene O'Shannon, Washington State Patrol
- Larry Leveen, ForeverGreen Trails
- Marc Daily, Thurston Regional Planning Council
- Martin Hoppe, City of Lacey
- Matt Kunic, Federal Highway Administration
- Melissa Flores Saxe, Sound Transit
- Paul Bucich, City of Lakewood
- Rob LaFontaine, Intercity Transit
- Sallie Donahue, Joint Base Lewis McChord
- Scott Egger, City of Lacey
- Sharon Love, FHWA
- Shaun Dinubilo, Squaxin Island Tribe of Indians
- Tiffany Speir, City of Lakewood

WSDOT study team

- Ashley Carle, WSDOT
- David Molenaar, WSDOT
- Emma Dorazio, PRR
- Gaius Sanoy, WSDOT
- George Mazur, WSDOT
- Hunter Henderson, WSDOT
- John Perlic, WSDOT
- Kirk Wilcox, Parametrix
- Lauren Wheeler, PRR
- Richard Warren, WSDOT
- Sharese Graham, SCJ Alliance

Prepared by: Emma Dorazio

Reviewed by: Colleen Gants and Lauren Wheeler

Accepted by: Ashley Carle



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 second time on Monday, February 15, 2023. The WSDOT study team began the presentation by welcoming TAG members, reviewing the agenda, and leading the TAG through introductions. The study team then provided best practices and guidance for engaging using Zoom features during the meeting.

The study team shared that the goals of the meeting were to receive TAG input and active participation and for the TAG to understand the PEL process. The proposed outcomes of the meeting were to confirm the Purpose and Need statement, gather input on the updated range of alternatives and gather input on the evaluation criteria for alternatives.

The team reviewed the roles and responsibilities of the TAG: to represent agency and communities in the study area, provide data and input on direction of the PEL Study, advise on alternatives and performance metrics and help build consensus and support for alternative(s) selection at the end of the process.

Schedule

The team reviewed the study schedule and status. The study is on track with the planned schedule, working to reach concurrence point number two in early March, which will focus on the Purpose and Need Statement. Concurrence point number four, planned for the end of June, will focus on the final PEL Report.

John Perlic (Parametrix) provided a recap of Meeting 1, held on January 17, 2023. During Meeting 1, the study team shared the project background and desired outcomes of the study, TAG members reviewed and provided feedback on the Conceptual Purpose and Need and Alternatives and existing conditions data sources, and the team introduced the Alternatives Evaluation Process.

Purpose and Need Statement

The study team presented the updated Project Purpose, which includes changes based on comments and input from the ACG, TAG and EAG. Changes to the Project Purpose are bolded below.

- Enhance mobility **and connectivity** on I-5 for passenger vehicles, freight, transit, and active modes and provide support for increased person **and freight** throughput.
- Improve local and mainline I-5 system resiliency.
- Enable environmental restoration and ecosystem resiliency at the I-5 crossing of the Nisqually River Delta area.
- Support economic vitality through reliable **and efficient** freight movement and access to major employers.

The team then shared updates to the Project Needs. Changes to the Project Needs are bolded on the next page.

Enhance Mobility Needs

- Daily traffic growth on I-5
 - 111,000 (2012) to 125,000 (2019)
 - 1.5% annual growth
 - 106,000 (2020) Covid related
 - 119,000 (2021) rebound post-Covid



- Future 2045 Volumes—20-30% higher than today, or 150,000-160,000 vehicles
- **Truck volumes expected to increase 55% by 2050**
- I-5 JBLM Corridor South project completion in 2024—lane transition from 4 to 3 lanes
- Future southbound I-5 congestion at Mounts Road extends 7+ miles
- Intercity Transit bus service between Olympia, Lakewood, and Tacoma
- **With current growth projections for the area, there is not enough ridership potential to support High Capacity Transit (HCT) services such as light rail or bus rapid transit. Phase 2 of TRPC’s HCT work will further evaluate when in the future developing light rail and/or commuter rail might be prudent from a cost/ridership perspective.**
- Amtrak Cascades passenger rail service
- Regional active transportation connection between Thurston and Pierce County

System Resiliency Needs (no changes)

- Risk of I-5 infrastructure failures from:
 - Climate change and sea level rise impacts
 - Nisqually River channel migration
 - Flooding vulnerability
 - Northbound bridge age (85 years) and Sufficiency Rating (48 out of 100)
 - Substandard vertical and lateral clearance from truss design
 - **Seismic events**
- Effects of I-5 infrastructure failures:
 - Long detours from I-5 lane reductions or closures
 - Congestion increases on arterial streets

Environmental Restoration and Ecosystem Resiliency Needs

- Environmental restoration of natural processes and functions for:
 - Enhancing habitat for salmon and other species
 - Restoring natural tidal flow and river flow
- Ecosystem resiliency from climate change
 - Sea level rise effects on fresh/saltwater mixing zone
 - Extreme river flow event frequency
- **The current configuration of I-5 through the Nisqually River Delta has impinged on natural ecosystems and therefore affected tribal treaty resources. There is a need for the project to restore natural functions to improve the availability of and access to treaty resources for tribes.**

Economic Vitality Needs

- River navigability—commercial fishing for Nisqually Indian Tribe and **all waterway recreational users, including Nisqually Indian Tribe**
- Truck Freight Economic Corridor
- Access to and from regional Port Districts
- Operational viability of JBLM and Washington State National Guard—part of Strategic Highway Network
- Access to destinations at Marvin Road interchange
 - Hawk’s Prairie Business District
 - **Quiemuth Village**



The TAG discussed changes to the updated Purpose and Need language:

- WSDOT will conduct a safety evaluation as part of the project and, although safety did not rise to the level of prioritization in the project Purpose and Need, WSDOT will study corridor safety during design and analysis.
- WSDOT is adopting a “do not preclude” stance related to HCT and noted sufficient right-of-way along the corridor to support future provision of HCT services in the study area.
- Bill Adamson (South Sound Military & Communities Partnership) commented that more options in the Project Needs statement should include environmental ecosystem constraints. Bill said that the topic of environmental ecosystem support was heavily weighted during Legislative advocacy to fund more Nisqually area projects.
 - John Perlic (Parametrix) appreciated the comment.
- Sharon Love (FHA) asked if the update to the Economic Vitality Needs slide, specific to river navigability, should include all commercial users, not just recreational and tribal.
 - Ashley Carle (WSDOT) agreed that was accurate of what was said and will update language in the Economic Vitality Need describing river navigability to include commercial fishing for Nisqually Indian Tribe and all waterway users.
- The study team noted that the definition of HCT included in the draft Project Needs is pulled directly from legislative language.
- Larry Leveen (ForeverGreen Trails) left a question in the chat about whether “need” should be “requirement” on the slide for Environmental Restoration and Ecosystem Resiliency.
 - Ashley Carle (WSDOT) responded that all projects are required to improve the availability of and access to treaty resources, and that the term “need” in the draft Environmental Restoration and Ecosystem Resiliency Needs is used to emphasize this requirement while adhering to language consistent with NEPA definitions.

Poll #1: Do you support this Purpose and Need for the study and adoption into NEPA?

- a) *Yes! (17/17 or 100%)*
- b) *No, I'd like to discuss further with the Study Team. (0/17 or 0%)*

- Tiffany Speir (City of Lakewood) shared in the Zoom chat that she defers on City of Lakewood’s position to Paul Bucich.

Range of alternatives

The study team reviewed the alternatives evaluation process, sometimes called a screening process. The study is moving into Level 1 Evaluation (March 2023) which will be followed by a more detailed Level 2 Evaluation.

John Perlic presented the changes to the to the range alternatives since the first meeting. The study team:

- Added Design Options A, B and C to Alternatives 1 and 4.
- Added Design Option D to Alternatives 2 and 3.
- Included a shared-use path in all alternatives.
- Removed Alternative 5: Local Improvements in Yelm from the alternatives list to planned improvements.



Alternative 1: Operations Improvements

- Operations - Lane management for HOV's
- Land Use - Consistency with local plans
- Transportation Demand Management (TDM) - support for alternative travel modes including **shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)**
- Transit - **Express Bus Service**
- **Includes Design Options A-C**

Alternative 2: Widen I-5 for High Occupancy Vehicle lanes

- Widen I-5 for HOV lanes
- Shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)

Alternative 3: Widen I-5 for General Purpose Lanes

- Widen I-5 for GP lanes
- Shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)

Alternative 4: Convert GP Lanes to HOV Lanes

- Convert I-5 lanes from GP to HOV Lanes
- Shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)
- **Includes Design Options A-C**

Kirk Wilcox (Parametrix) reviewed the design options and conceptual images for each of the designs. Kirk emphasized that the design options provide more space for natural water flow and flood overflow channels in the area.

- Design Option A: 3,000' of elevated structure.
- Design Option B: Extends the bridge section to I-5 south; 6,000' of structure (over 1 mile) allowing the Nisqually to move as desired. McAllister Creek would be closer to original pre-I-5 construction alignments.
- Design Option C: Involves I-5 on structure across the whole valley. Challenge is that I-5 is higher through the Nisqually interchange, requiring ramp structure reconfiguration.
- Design Option D: High Level Long Span Bridge. Removes a local road connection at the existing Nisqually interchange.

After presenting the range of alternatives and design options, the study team paused to take questions and comments from TAG members.

Questions and comments:

- Scott Egger (City of Lacey) asked what the benefits were between a high-span bridge and the other design examples shown.
 - The study team noted that more information about the costs and benefits of each design option will be developed during the evaluation. For now, known benefits of

the high-level long span bridge (Design Option D) include visual aesthetics and fewer piers in the valley and known costs include removal of an I-5 interchange and higher cost of design and construction.

- TAG members noted that any option with an elevated roadway will provide habitat benefits by providing passage for wildlife and reducing habitat fragmentation.
- Bill Adamson (South Sound Military & Communities Partnership) asked which options go over the BNSF railroad.
 - Kirk Wilcox (Parametrix) responded that Option D would be designed to pass over the top of the existing railroad bridges while, at this point in design, it is assumed that Design Options A - C would pass under the railroad. Roadway widening may require railroad bridge reconstruction.
- Larry Leveen (ForeverGreen Trails) asked what the grade change would be for Option D relative to current conditions.
 - Kirk Wilcox (Parametrix) responded that design Option D would reduce the roadway grade change from Lacey compared to the current I-5 configuration and Design Options A-C.
- Glynnis Nakai (Billy Frank Jr. Nisqually National Wildlife Refuge) asked how changes to local roadway traffic may result from removal of local road connections to and from I-5 at the existing Nisqually interchange.
 - Kirk Wilcox (Parametrix) responded that connections would be maintained on the surface roadways for local traffic.
- John Perlic (Parametrix) shared that the alternatives analysis would compare freight and general traffic outcomes between Alternatives 2 and 3, which designate lanes for HOV and GP traffic differentially.
- Christine Wolf (Port of Tacoma) commented on detours during construction for freight drivers, noting that freight drivers will experience challenges navigating on narrower routes.
 - John Perlic (Parametrix) appreciated the comment. John noted that WSDOT will maintain three lanes of traffic on I-5 in both directions during construction.
- TAG members shared questions about the potential impacts of each design option on local roadway infrastructure, especially for Design Option D, which removes the I-5 Nisqually Interchange.
 - John Perlic (Parametrix) responded that during NEPA review, WSDOT will partner with local jurisdictions to study local roadway needs in more detail. If Design Option D is selected, WSDOT would study where traffic from the existing Nisqually Interchange would be diverted and identify potential traffic mitigation projects. WSDOT would also study impacts of traffic diversion on local emergency response times.

- John Perlic (Parametrix) described that once alternatives are screened based on the proposed alternatives, those that are adopted into NEPA will be fully evaluated for potential effects to the built, natural, and human environments.

Poll #2: After reviewing the updated Range of Alternatives, do they include everything you expected?

- Yes! (13/14 or 93%)
- No, I'd like to discuss further with the study team. (1/14 or 7%)

TAG members who requested further discussion with the study team expressed interest in learning more about plans for active transportation users, acknowledging that these details may be beyond the scope of the PEL. The study team noted that plans for local roadway connections will develop over the course of the study and reminded the TAG that all four project alternatives include a shared use path.

Level 1 Alternatives Evaluation Criteria

The WSDOT study team reviewed the Level 1 Alternatives Evaluation Criteria for each Project Purpose category, shared feedback gathered during Agency Coordination Group Meeting 2 on February 13, and provided a high-level overview of how each design option for each alternative will be rated using the evaluation criteria. Below is the proposed criteria matrix. See slides for more detail.

Alternatives	Design Options	Alternative 1 – Operations Improvements			Alternative 2 – Widen I-5 for HOV Lanes				Alternative 3 – Widen I-5 for GP Lanes				Alternative 4 – Convert I-5 Lanes from GP to HOV Lanes			
		A	B	C	A	B	C	D	A	B	C	D	A	B	C	
Enhance mobility and connectivity on I-5 for all modes and providing support for increased person throughput	Accommodates active transportation and transit modes															
	Provides congestion relief for vehicles															
	Effects on adjacent roadways															
	Increases person throughput															
Improve local and mainline I-5 system resiliency	Complementary to local planning															
	Reduces the risk of infrastructure failures															
	Reduces the risk of infrastructure failures due to seismic activity															
Eristle environmental restoration and ecosystem resiliency at the I-5 crossing of the Nisqually River Delta area	Reduces the risk of large vehicle collisions with the Nisqually Bridge															
	Incorporates environmental restoration															
Support economic vitality through reliable freight movement, access to major employers, and sustainable tribal commercial fishing activity	Promotes ecosystem resiliency															
	Freight reliability															
	Multimodal access to jobs															
Support equitable outcomes	River navigability															
	Minimizes property acquisitions requiring business or residential relocations															
Relative cost of alternatives	Minimizes the flood risk potential for EJ populations															
	Planning-level cost comparison															

Rating Scale

Lower Performing

Higher Performing

Design Options

Design Option A – 3,000'

Design Option B – 6,000'

Design Option C – 12,000'

Design Option D – 14,000' – 15,000'



Questions and comments:

The TAG discussed the evaluation criteria for the following Project Purpose.

- **Enhance mobility and connectivity:** WSDOT will consider whether the evaluation can account for potential mitigation of effects on adjacent roadways through local street improvements. During the analysis, WSDOT also studies the effects of traffic diversion on the local street network with a horizon of 2045, including consideration of other planned and funded improvements.
- **System resiliency:** The TAG discussed how overhead or lateral clearance for vehicles reduces collision risks with the bridge structure. Collisions with bridge structures can cause lane closures for several weeks at a time.
- **Environmental restoration and ecosystem resiliency:** Based on feedback gathered in the Agency Coordination Meeting February 13, WSDOT will add evaluation criteria for stormwater and wetland impacts in this category.
- **Economic vitality:** WSDOT will update the language describing access by biking and walking to 'active transportation' access to maintain consistency with other evaluation criteria.
- **Support equitable outcomes:** In addition to the existing evaluation criteria supporting equitable outcomes, the TAG requested a criterion measuring the effects of traffic diversion on local businesses.
- **Relative cost:** Based on feedback gathered in the Agency Coordination Meeting February 13, WSDOT will add evaluation criteria for construction and maintenance in this category.

Poll #3: After reviewing Level 1 Alternatives Evaluation Criteria, does it include everything you expected?

- Yes, the alternatives evaluation criteria meet my expectations and my organization's preferences. (7/11 or 70%)
- The alternatives evaluation criteria include some of what I expected, but not all. (4/11 or 30%)
- No, I would like to provide the project study team with additional alternatives evaluation criteria to consider. (0/11 or 0%)

Next steps

The study team reminded TAG participants of additional opportunities to share feedback and shared to the following next steps:

- WSDOT will post meeting materials for review on the project page.
- TAG participants will review and share additional comments on Level 1 Evaluation Criteria between TAG Meetings 2 and 3.

The next TAG meeting is on March 14, 2023.

The meeting adjourned at 2:37 p.m.