Welcome to the I-5 Marvin Rd. to Mounts Rd. Planning and Environmental Linkages EAG Mtg.

We'll start soon. This meeting will be recorded.

While you're waiting…

- Make sure your audio is working. If your computer doesn't have a mic, you can call in on your phone.
- Find the chat box! If you want to write instead of talk, that's the way to do it.
- Find Raise Hand under reactions
- Change your Participant Name
  - Option #1: Hover over your video and click on ellipses and "Rename"
  - Option #2: Hover over your name under Participant List and click on ellipses and "Rename"

I-5 Marvin Rd. to Mounts Rd. Planning & Environmental Linkages Study

Executive Advisory Group Meeting #2

February 21, 2023

JoAnn Schueler	WSDOT Olympic Region ARA Project Development
Ashley Carle	WSDOT Olympic Region Multimodal Development Manager
John Perlic	Consultant Team Project Manager—Parametrix
Kirk Wilcox	Consultant Team Design Lead—Parametrix

Agenda

1:00 Welcome and Introductions

1:15 Meeting Goals and Outcomes

1:25 Finalize Purpose and Need

1:45 Range of Alternatives

2:15 Review Level 1 Alternatives Evaluation Criteria

2:55 Next Steps

3:00 Adjourn

Welcome and Thank You

WSDOT is engaging project area jurisdictions, including tribes, counties, cities, and national and local resource agencies

Introductions

- We will call your organization name — please respond with your name
- To change your Participant Name in Zoom
  - Hover over your video and click on ellipses and "Rename"
  - Hover over your name under Participant List and click on ellipses "Rename"

EAG Participants

Invited to participate

- City of DuPont
- City of Lacey
- City of Lakewood
- City of Olympia
- City of Tumwater
- City of Yelm
- Federal Highway Administration
- Intercity Transit
- Joint Base Lewis-McChord
- Nisqually Indian Tribe
- Pierce County
- Pierce Transit
- Port of Olympia
- Port of Tacoma
- Puget Sound Regional Council
- Thurston County
- Thurston Regional Planning Council
- Town of Steilacoom

Meeting Participation

Virtual Participation

- Mute yourself when you're not speaking
- "Raise your hand" or use chat box for questions or comments
- Say your name before speaking
- If calling in from your phone:
  - Dial *6 to mute/unmute
  - Dial *9 to raise your hand

Input Opportunities

- Chat box and polls throughout the meeting
- Discussion opportunities at the end of each topic

Meeting Goals and Outcomes

Meeting Goals

- Input and active participation
- Understanding of the process

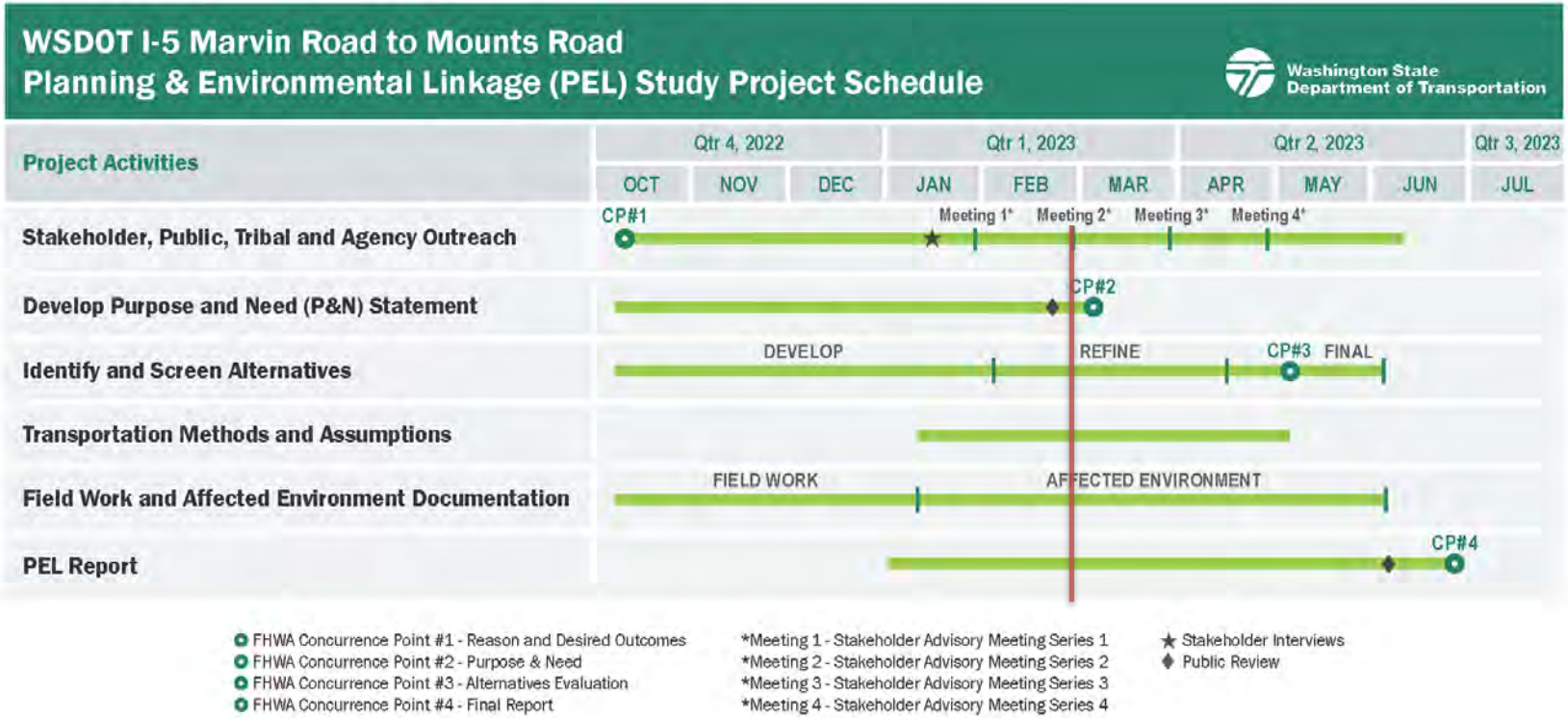
Outcomes

- Confirm Purpose and Need
- Input on *updated* range of alternatives
- Input on alternatives evaluation criteria

Advisory Group Responsibilities

- Represent agencies and communities in the study area
- Provide data and input on direction of study
- Advise on range of alternatives and alternatives evaluation criteria
- Help build consensus and support for alternative(s) selection

Schedule


WSDOT I-5 Marvin Road to Mounts Road
Planning & Environmental Linkage (PEL) Study Project Schedule
Washington State Department of Transportation
Project Activities
Qtr 4, 2022
Qtr 1, 2023
Qtr 2, 2023
Qtr 3, 2023
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
Stakeholder, Public, Tribal and Agency Outreach
CP#1
Meeting 1*
Meeting 2*
Meeting 3*
Meeting 4*
Develop Purpose and Need (P&N) Statement
CP#2
Identify and Screen Alternatives
DEVELOP
REFINE
CP#3
FINAL
Transportation Methods and Assumptions
Field Work and Affected Environment Documentation
FIELD WORK
AFFECTED ENVIRONMENT
PEL Report
CP#4
FHWA Concurrence Point #1 - Reason and Desired Outcomes
FHWA Concurrence Point #2 - Purpose & Need
FHWA Concurrence Point #3 - Alternatives Evaluation
FHWA Concurrence Point #4 - Final Report
*Meeting 1 - Stakeholder Advisory Meeting Series 1
*Meeting 2 - Stakeholder Advisory Meeting Series 2
*Meeting 3 - Stakeholder Advisory Meeting Series 3
*Meeting 4 - Stakeholder Advisory Meeting Series 4
Stakeholder Interviews
Public Review

2023 PEL Advisory Group Meetings

Meeting 1

January:

- Project Background & desired outcomes
- Study Area & Logical Termini
- Stakeholder Review of Conceptual Purpose & Need
- Stakeholder Review of Conceptual Alternatives
- Introduce Alternatives Evaluation Process
- Request for data

Meeting 2

February:

- Review Meeting #1
- Review new information from Meeting #1 questions
- Consensus discussion on Final Purpose and Need
- Stakeholder Review of Level 1 Alternatives Evaluation Criteria

Meeting 3

March:

- Review Meeting #2
- Review new information from Meeting #2 questions
- Stakeholder Review of Level 1 Alternatives Evaluation Results
- Stakeholder Review of Level 2 Alternatives Evaluation Criteria

Meeting 4

April:

- Review Meeting #3
- Review new information from Meeting #3 questions
- Stakeholder Review of Level 2 Alternatives Evaluation Results
- Consensus discussion on Evaluation Results and Alternatives to Advance into NEPA

*Agendas may change slightly as the project progresses.

TAG meetings will precede EAG meetings so that TAG members can brief their EAG members before the EAG meeting.

1

Purpose and Need

Updated Project Purpose

- ***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

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 2025—lane transition from 4 to 3 lanes
- Future southbound I-5 congestion at Mounts Road extends 7+ miles

Enhance Mobility Needs

- Intercity Transit express bus service between Olympia, Lakewood, and Tacoma
- ***Current growth projections do not support High Capacity Transit (HCT) services—light rail or bus rapid transit (BRT) by 2045.***
- ***Alternatives will not preclude future HCT***
- Amtrak Cascades passenger rail service
- Regional active transportation connection between Thurston and Pierce County

System Resiliency Needs

- 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 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***

Updated Project Purpose

- ***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

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

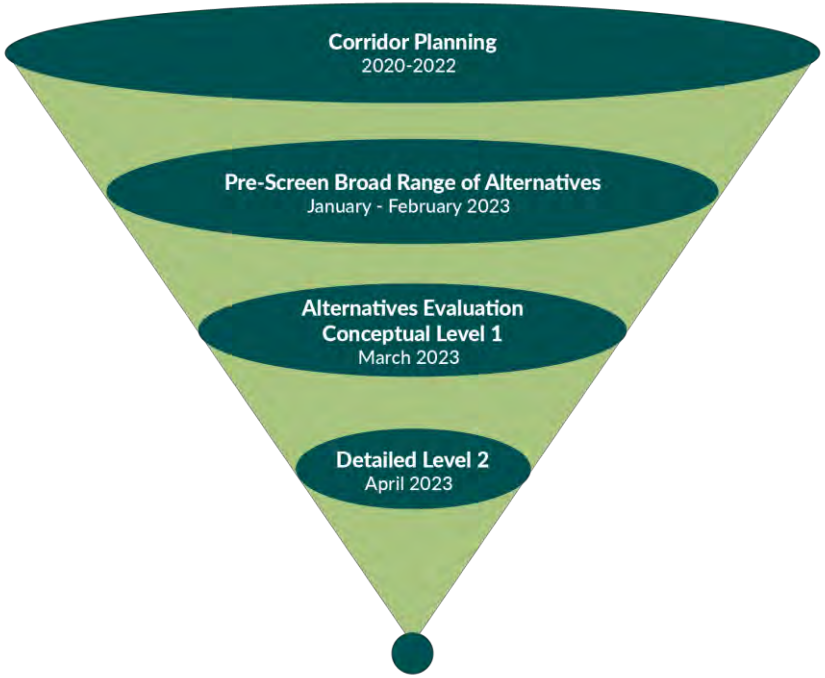
a) Yes!

b) No, I'd like to discuss further with the Study Team.

2

Range of Alternatives

Alternatives Evaluation



PEL Documentation and NEPA Strategy
May-June 2023

Range of Alternatives

- Alternative 1 - Operations Improvements (Design Options A-C)
- Alternative 2 - Widen I-5 for HOV lanes (Design Options A-D)
- Alternative 3 - Widen I-5 for GP lanes (Design Options A-D)
- Alternative 4 - Convert I-5 lanes from GP to HOV Lanes (Design Options A-C)
- ***Changes from Meeting Series #1***
  - ***Added Design Options A, B & C to Alternatives 1 and 4***
  - ***Alternative 5 Local Improvements in Yelm are funded—this was removed from the Alternatives list and moved to planned improvements***
  - ***Added Design Option D to Alternatives 2 and 3—Long span, high level bridge***
  - ***Shared use path included in all alternatives***

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 a ***shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)***
- Transit - ***Express Bus Service***
- ***Includes Design Options A-C***

TDM strategies

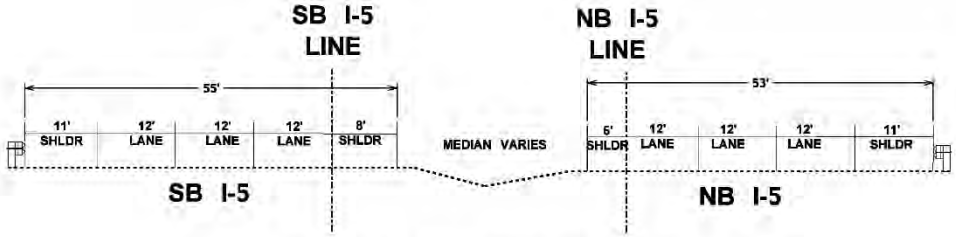
Alternative 2

Widen for HOV Lanes

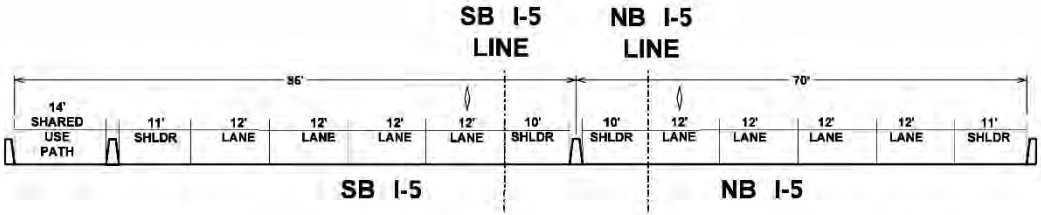
- Widen I-5 for HOV lanes
- Shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)

Alternative 2: Cross Sections

Widen for HOV Lanes



EXISTING I-5 TYPICAL SECTION



CONCEPTUAL I-5 TYPICAL SECTION WITH IMPROVEMENTS

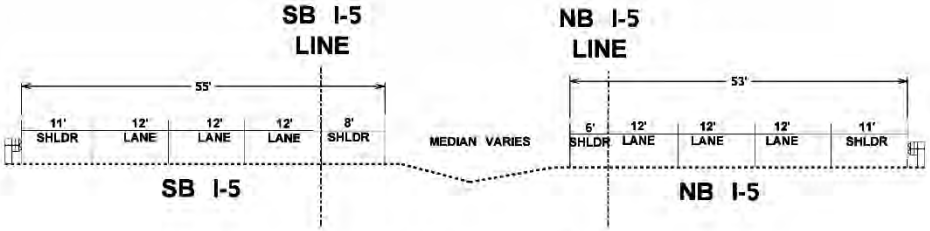
Alternative 3

Widen for GP Lanes

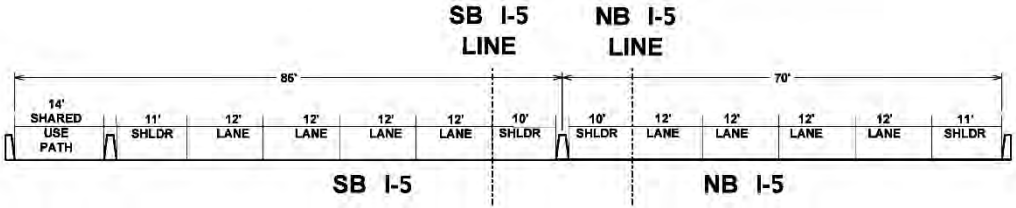
- Widen I-5 for GP lanes
- Shared-use path from Marvin Road Interchange (Exit 111) to Mounts Road Interchange (Exit 116)

Alternative 3: Cross Sections

Widen for GP Lanes



EXISTING I-5 TYPICAL SECTION



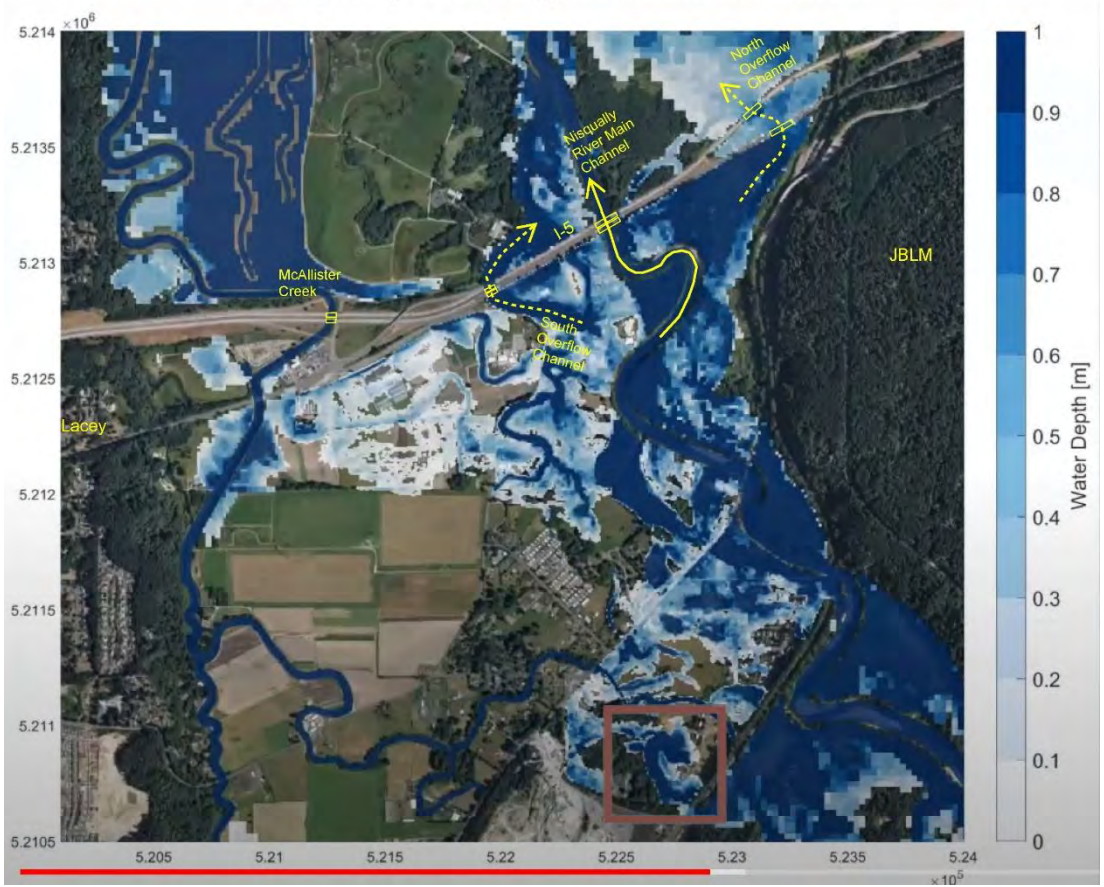
CONCEPTUAL I-5 TYPICAL SECTION WITH IMPROVEMENTS

Alternative 4

Convert GP 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***

Nisqually Existing Flood Overflows



Design Options A-C

Typical structure examples – US 2 Trestle

- Standard precast concrete girder construction
- Spans the Snohomish River floodplain

Design Options A-C

Typical structure examples – SR 520 – New westbound structure

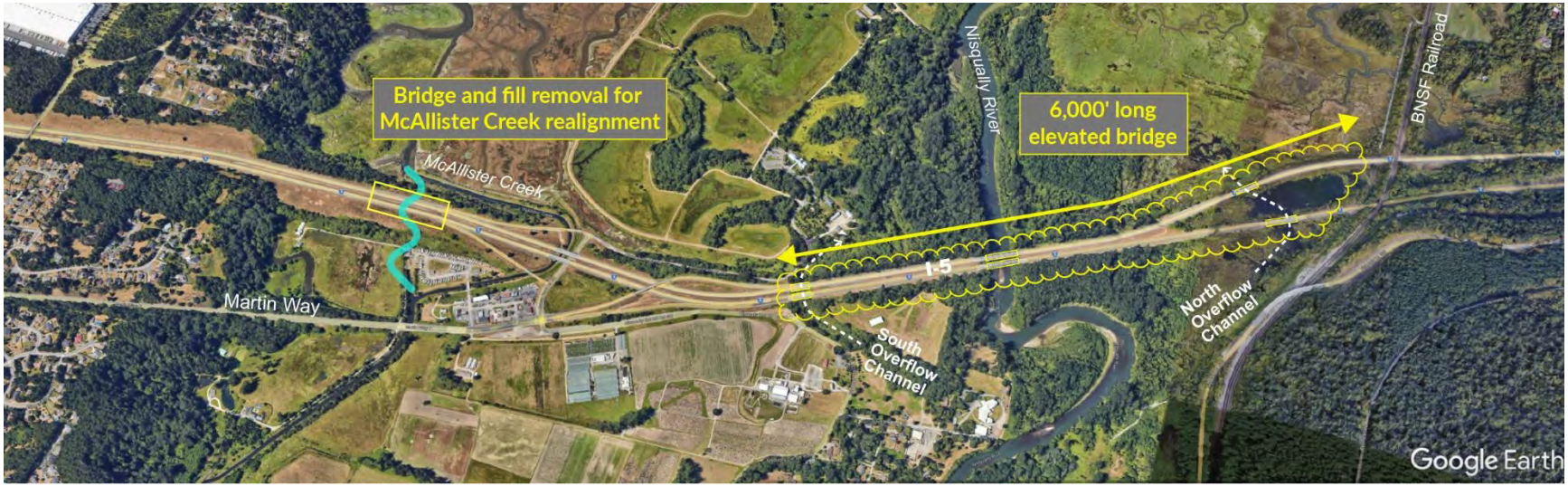
- 160-to-190-foot spans
- Standard precast concrete girder construction
- 15-to- 40-foot typical vertical clearance

Design Option A

Fill removal and additional bridge structure for an approximate 3,000’ length

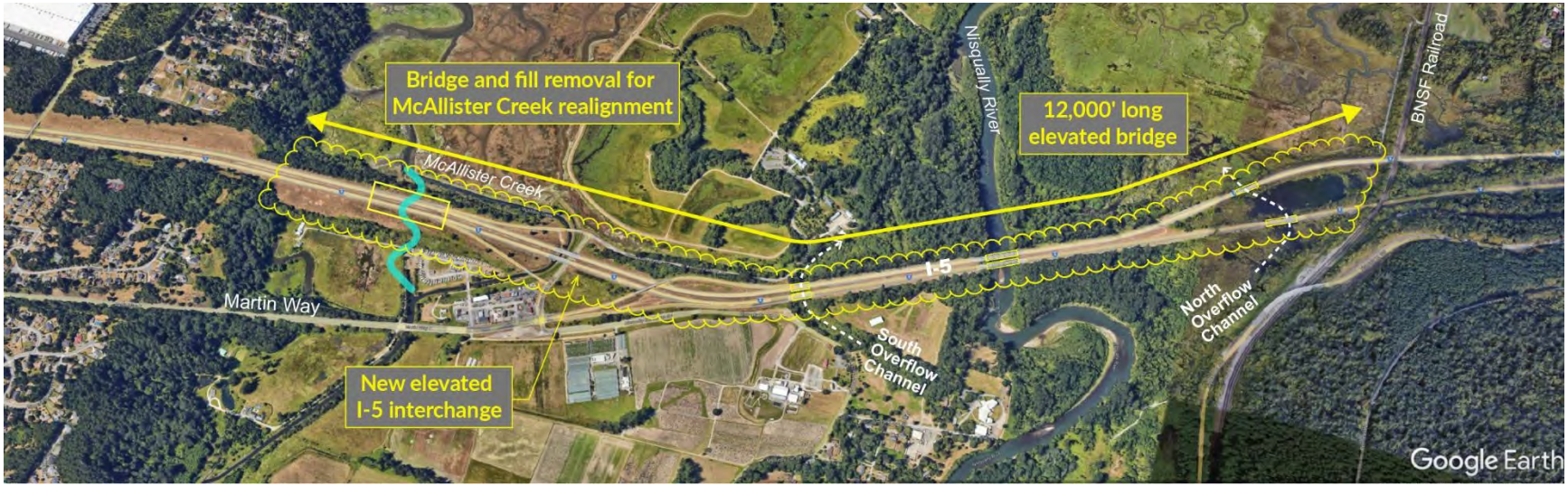
Design Option B

- Fill removal and additional bridge structure for an approximate 6,000’ length
- Bridge and fill removal for McAllister Creek realignment (can also be paired with Option A)



Design Option C

- Fill removal and additional bridge structure for an approximate 12,000’ length
- New elevated I-5 Nisqually interchange



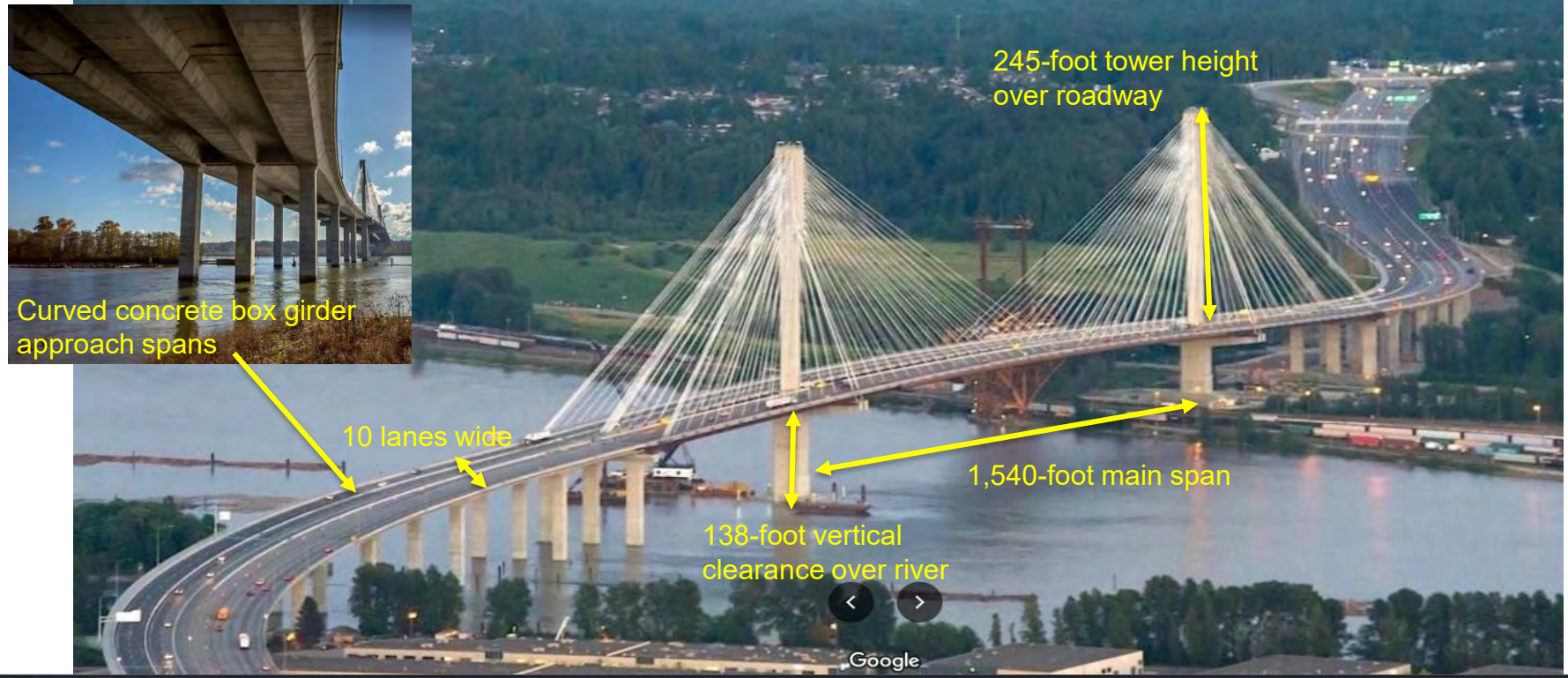
Design Option D

High Level Long Span Bridge

- Fill removal and high-level long span bridge for an approximate 14,000’ length
- 1,200 - 1,500 foot span lengths
- Curvature limitations for long span bridges requires re-alignment of I-5
- Removes local road connection to and from I-5 at the existing Nisqually Interchange

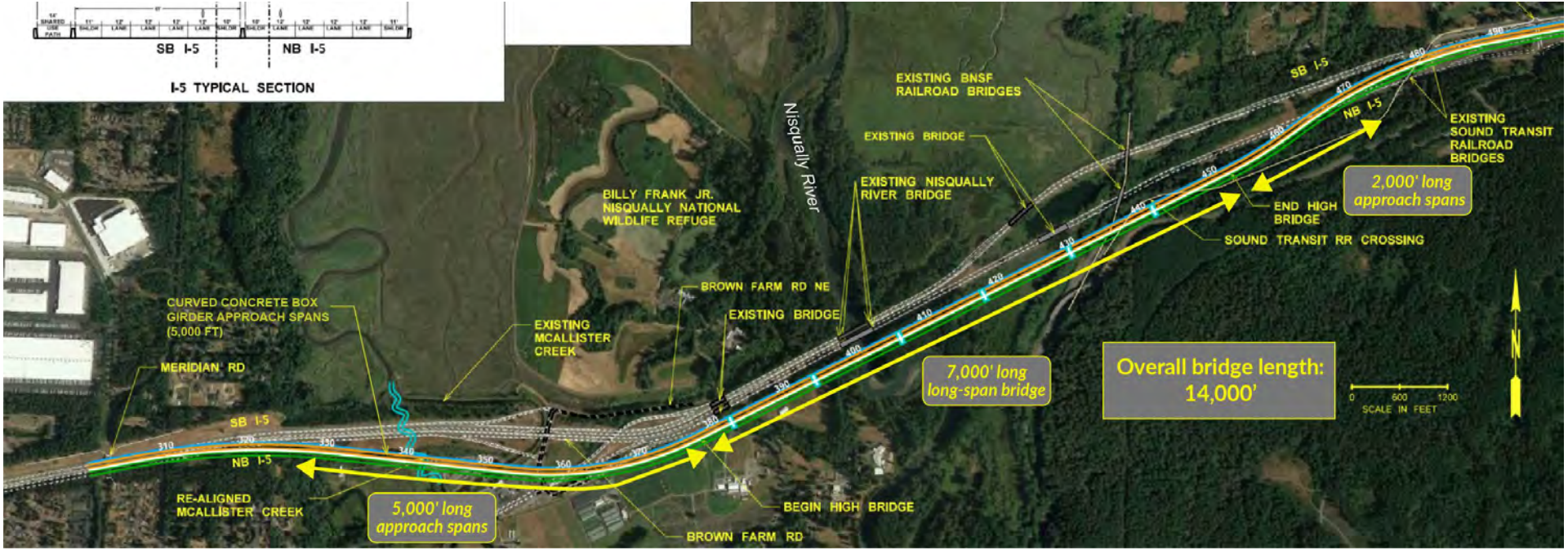
Design Option D

High Level Long Span Bridge – Port Mann Bridge Example



Design Option D

High Level Long Span Bridge – Nisqually crossing



Comments and Questions: Alternatives

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

a) Yes!

b) No, I would like to discuss further with the Study Team.

3

Level 1 Alternatives Evaluation Criteria

	Alternatives	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		
	Design Options	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 and freight throughput	Accommodates active transportation and transit modes														
	Provides congestion relief for vehicles														
	Effects on adjacent roadways														
	Increases person and freight throughput														
	Complementary to local planning														
Improve local and mainline I-5 **system resiliency**	Reduces the risk of infrastructure failures														
	Reduces the risk of infrastructure failures due to seismic activity														
	Reduces the risk of large vehicle collisions with the Nisqually Bridge														
Enable **environmental restoration and ecosystem resiliency** at the I-5 crossing of the Nisqually River Delta area	Incorporates environmental restoration														
	Promotes ecosystem resiliency														
Support **economic vitality** through reliable freight movement, access to major employers, and sustainable tribal commercial fishing activity	Freight reliability														
	Multimodal access to jobs														
	River navigability														
Support **equitable** outcomes	Minimizes property acquisitions requiring business or residential relocations														
	Minimizes the flood risk potential for EJ populations														
Relative capital cost of alternatives	Planning-level capital 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’

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Enhance mobility on I-5 for all modes and providing support for increased person and freight throughput	Accommodates Active Transportation and Transit Modes	Does the alternative accommodate transit and active transportation?
	Provides Congestion Relief for Vehicles	Does the alternative provide congestion relief for general purpose traffic, transit, and trucks?
	Effects on Adjacent Roadways	Does the alternative improve mobility on local streets?
	Increases person and freight throughput	Does the alternative increase person and freight throughput?
	Complementary to Local Planning	Is the alternative complementary to local and tribal planning efforts, including land use plans and transportation plans?

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Improve local and mainline I-5 system resiliency	Reduces the risk of Infrastructure Failures	Does the alternative reduce the risk of infrastructure failure by addressing erosion and channel migration of the Nisqually River?
	Reduces the Risk of Infrastructure Failures due to Seismic Activity	Does the alternative increase resiliency of the Nisqually Bridge by enhancing its ability to withstand seismic activity?
	Reduces the Risk of Large Vehicle Collisions with the Nisqually Bridge	Does the alternative increase overhead or lateral clearance for vehicles on the Nisqually River Bridges, reducing the risk of collisions with the bridge structure?

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Enable environmental restoration and ecosystem resiliency at the I-5 crossing of the Nisqually River Delta area	Incorporates environmental restoration	Does the alternative restore environmental systems by improving fish passage, building and maintaining habitat, reducing impacts to river hydraulics and geomorphology, etc?
	Promotes Ecosystem Resiliency	Does the alternative increase resiliency against the impacts of climate change?

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Support economic vitality through reliable freight movement, access to major employers, and sustainable tribal commercial fishing activity	Freight Reliability	Does the alternative improve freight reliability and reduce economic impacts of freight delay?
	Multimodal Access to Jobs	Does the alternative improve access to jobs by driving, transit, biking, and walking?
	River Navigability	Does the alternative promote equitable access and navigability of the Nisqually River for the Nisqually Indian Tribe and all other waterway users?

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Support Equitable Outcomes	Minimizes Property Acquisitions Requiring Business or Residential Relocations	Does the alternative minimize the number of potential business and residential relocations, especially for environmental justice populations?
	Minimizes the Flood Risk Potential for EJ Populations	Does the alternative address the risk of flooding, particularly for environmental justice populations?

Level 1 Evaluation Criteria

Project Purpose Statement	Evaluation Criteria	Methodology (Qualitative Analysis)
Relative capital cost of alternatives	Planning-level capital cost comparison	How do the alternatives compare for planning-level capital costs?

What We've Heard

- Consider adding stormwater and wetlands impacts to evaluation criteria
- Consider separate evaluation criteria for capital costs and maintenance/operations costs
- Consider emergency vehicle response time impacts
- Impacts to businesses from Option D—Nisqually Interchange loss of access

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

a) Yes, the alternatives evaluation criteria meets my expectations and my organization's preferences.

b) The alternatives evaluation criteria includes some of what I expected, but not all.

c) No, I would like to provide the project study team with additional alternatives evaluation criteria to consider.

	Alternatives	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		
	Design Options	A	B	C	A	B	C	D	A	B	C	D	A	B	C
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	Minimizes the flood risk potential for EJ populations														
Relative capital cost of alternatives	Planning-level capital 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’

4

Next Steps

Next Steps

- Post meeting materials for review
- Review and comment request on Level 1 alternatives evaluation criteria
- Let us know if you haven't received the March 21 calendar invite

Next Steps

*Agendas may change slightly as the project progresses.

TAG meetings will precede EAG meetings so that TAG members can brief their EAG members before the EAG meeting.

Final Comments and Questions

Contact

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