

# US 2 Trestle Capacity Improvements & Westbound Trestle Replacement PEL Study

TECHNICAL WORKING GROUP (TWG)
MEETING #2

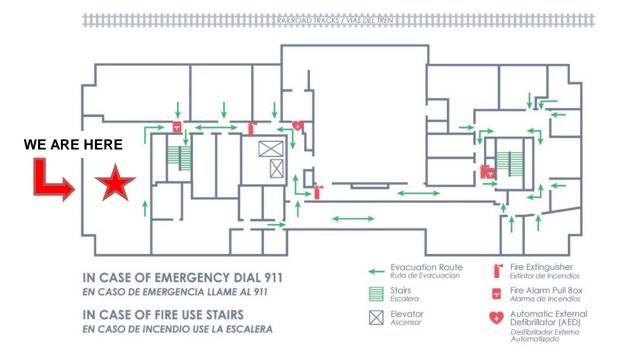
September 13, 2024

# **Safety Moment**

### **Evacuation Plan**

Plan de Evacuación

3201 Smith Ave | Floor 4



### **Introductions**

Please introduce yourself: Name, Organization, Role

### Organizations invited today:

- Boeing
- City of Everett
- City of Lake Stevens
- · City of Marysville
- City of Snohomish
- Community Transit
- Economic Alliance of Snohomish County
- Everett Transit
- FHWA
- Muckleshoot Tribe
- Port of Everett
- PSRC
- Sauk-Suiattle Tribe

- Snohomish County
- Snoqualmie Indian Tribe
- Stillaguamish Tribe
- Suquamish Tribe
- Swinomish Tribe
- Tulalip Tribes
- Washington State Department of Health
- Washington State Patrol
- Washington State Transportation Commission
- WSDOT
- Washington Trucking Association
- Yakama Tribe



## **Agenda Overview**

- Study status and meeting purpose
- Study updates and engagement
- Evaluation framework
- Concept review
- Workshop: New concepts
- Next steps and adjourn

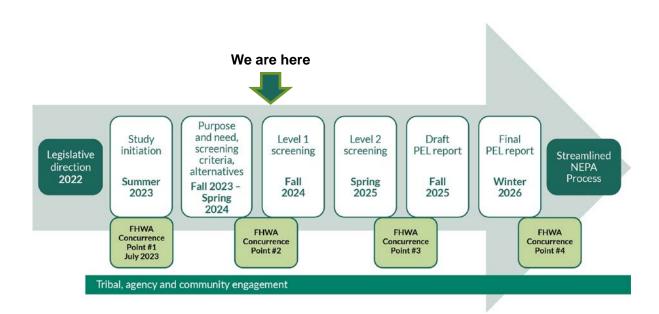
# **Meeting purpose**

- Study updates and engagement
- Review draft Level 1 evaluation criteria
- Workshop roadway and east/west side concepts

# TWG Meeting #1 Recap

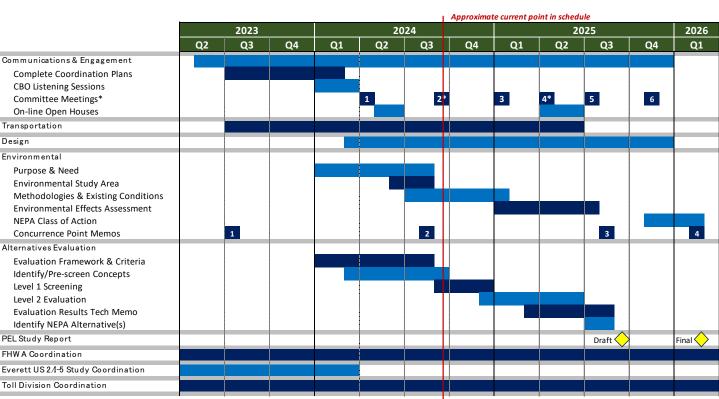
- Reviewed TWG roles and responsibilities
- Presented initial transportation data and analysis
- Reviewed draft purpose and need

# **US 2 Trestle PEL Study status**





### **Summary Milestone Schedule**



<sup>\*</sup>Meeting Series 2 and 4 will only be TWG meetings - No RAC or EAG meetings at these times



# PEL committee meeting recap

#### TWG/EAG/ RAC #1

- Purpose and Need statement
- Existing and future No Build transportatio n conditions
- Review and comment on community profile

#### **TWG #2**

- Analysis framework and screening criteria
- Review options for prescreening and Level 1 screening

#### **TWG #3**

### EAG/RAC #2

- •Level 1 screening results
- Begin packaging system alternatives

#### TWG #4

 Level 2 analysis update

### TWG #5 EAG/RAC

### #3

Level 2
 evaluation
 results and
 potential
 effects

# TWG #6 EAG/RAC #4

 PEL findings, alternatives to take into NEPA, next steps



TWG = Technical Working Group

EAG = Executive Advisory Group

RAC = Resource Agency Committee

# Study Updates & Engagement

### **Community engagement milestones**

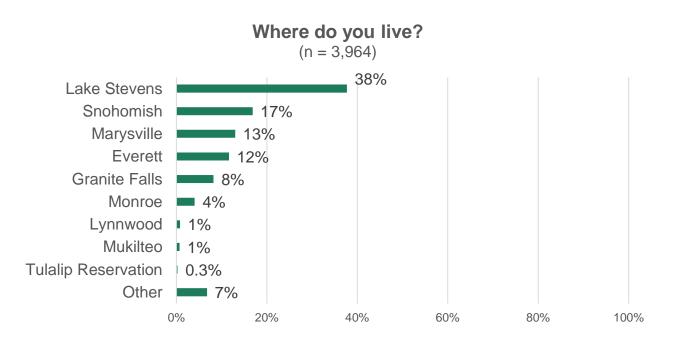
Timeline		Outreach Milestones		
Winter 2024	✓ ✓ ✓	Publish website Finalize communications plan Conduct listening sessions		
Spring 2024	✓ ✓	Establish and facilitate first PEL committee meetings Purpose and Need online open house		
Summer/Fall 2024		TWG Meeting 2 Online open house follow-up		
Winter 2025		TWG Meeting 3 and EAG/RAC Meeting 2		
Spring 2025		Public review of draft alternatives		
Fall 2025		Public review of the draft PEL report		

## Online open house and survey

Online Open House Period: 5/14 through 6/7 Final Participation Statistics

- 3,964 user survey responses
- 140 online form comments
- 5 voicemail comments

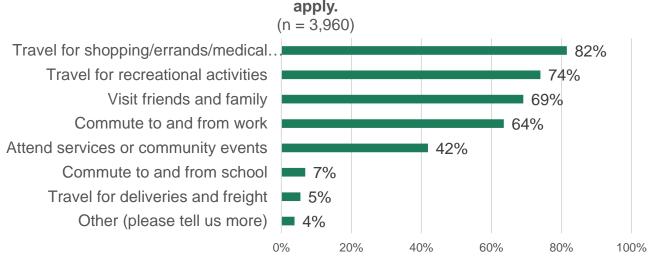
### Most respondents live in Lake Stevens, Snohomish, Marysville, Everett, or Granite Falls



Other responses include: Anacortes, Arlington, Bellingham, Bothell, Camano Island, Duvall, Ebey Island, Edmonds, Gold Bar, Granite Falls, Mt. Vernon, Machias, Mill Creek, Seattle, Shoreline, Smokey Point, Stanwood, Sultan, and Whidbey Island.

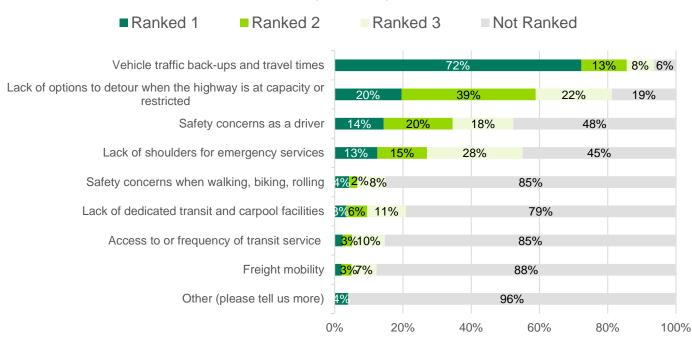
# Types of trip vary, but show its more than commuting

What types of trips do you take on the US 2 trestle? Select all that



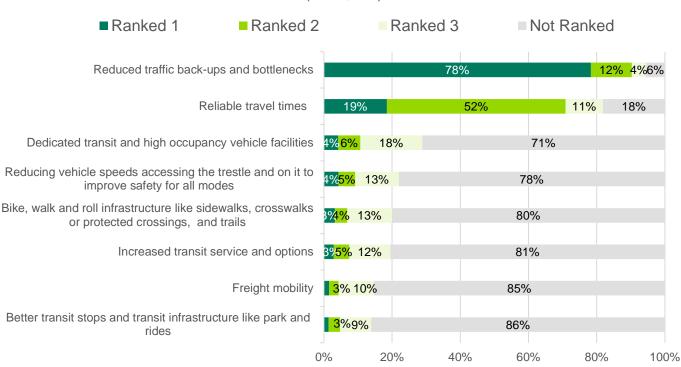
# What are the three biggest challenges when traveling on or near the US 2 trestle? Please rank 1-3, with 1 as biggest challenge.

(n = 3,967)



# What are your top three priorities for improving travel on or near the US 2 trestle?

(n = 3,967)



# Revised Draft NEPA Purpose and Need: Purpose statement

### **Current version, revised with public input:**

The purpose of this PEL Study is to develop long-term transportation solutions connecting to and across the US 2 trestle to improve multimodal mobility, safety and resiliency while equitably serving communities.

#### Redline:

The purpose of this PEL Study is to develop long-term, equitable transportation solutions connecting to and across the US 2 trestle to 1.) improve multimodal mobility, to and across the US 2 trestle, 2.) improve safety, and 3.) address the resiliency of the westbound trestle while equitably serving communities.

# Revised Draft NEPA Purpose and Need: Multimodal Mobility Need statement

**Multimodal Mobility:** The US 2 trestle faces challenges accommodating all transportation modes, which limits equitable travel options.

- Vehicular All motorized vehicles using the US 2 trestle face recurring traffic bottlenecks during the weekday morning and afternoon peak travel periods. (no change)
- Freight Recurring bottlenecks affect the reliability of freight truck movement across
  US 2, which is a designated freight corridor route for the movement of goods.
- High Occupancy Vehicles (HOV) and Transit Due to a lack of dedicated facilities, existing HOV and transit using the US 2 trestle face the same bottlenecks as general\_purpose traffic. (no change)
- Active Transportation There are no bicycle and pedestrian facilities on the
  westbound trestle, existing bicycle and pedestrian facilities on the eastbound trestle
  do not serve all ages and abilities, and there are missing connections to existing
  active transportation facilities at either end of the trestle. (no change)

# Revised Draft NEPA Purpose and Need: Safety Need statement

**Safety:** Serious injury and fatal crashes are reported on WSDOT facilities in the preliminary study area. (No change)

# Revised Draft NEPA Purpose and Need: Resilience Need statement

**Resiliency:** The westbound US 2 trestle, lacks resiliency, which presents which is identified as a primary transportation facility and critical asset, needs improvements to enhance the resilience of the statewide transportation system and to reduce the a risks of disrupted travel on this critical route.

- Seismic resilience The structures that comprise the US 2 trestle, including its east and west connections, do not meet current seismic design standards.
- Asset management WSDOT needs to achieve and sustain a state of good repair for the
   US 2 trestle and reduce related lane closures that can limit or disrupt both directions of
   travel.
- <u>Climate and natural hazard resilience The US 2 trestle, which is identified as a highly critical asset for travelers and freight, needs to maintain its function during extreme weather events.</u>
- Operational resilience The US 2 trestle requires improvements to support and enhance safety for WSDOT staff and properties and to improve response and recovery from incidents.

**Previous version:** The westbound US 2 trestle lacks resiliency, which presents the risk of disrupted travel on this critical route.

### **Resiliency Need statement**







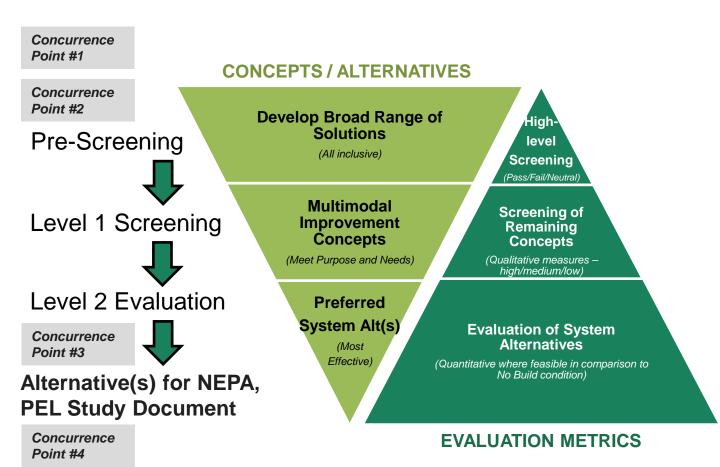
### **Concurrence Point 2 Memorandum**

- Documents the process to develop the draft NEPA Purpose and Need statements
- Attachments to the memo include:
  - Existing and Future No Build Transportation Conditions Memorandum, including the Transportation Methods and Assumptions Memorandum
  - Preliminary Study Area Limits and NEPA Purpose and Need Statements Memorandum
  - Transportation System Resiliency Need Supporting Data Memorandum

### **Evaluation Framework**



### Refresh on Evaluation Framework





### **Draft Evaluation Process**

Concept and Criteria **Development** 

Develop potential

Develop evaluation

criteria for pre-

Level 2

improvement concepts

for trestle and east/west

screening, Level 1, and

multimodal

connections

- Qualitative Screening
- Score concepts as Pass, Neutral, or Fail against each criterion

Pre-Screening:

- Concept will be screened out if at least one criteria receives a "fail" rating.
- Failing concepts may be and refined and prescreening applied again.

Multimodal Multimodal **Improvement Improvement** Concepts

Concepts

Level 1 Screening:

#### Qualitative Screening

- Remaining concepts after prescreening scored as High, Medium or Low for how well they meet a given criterion.
- Thresholds for advancing to Level 2 screening will be determined after initial results are reviewed.
- Remaining concepts after Level 1 will be packaged into system alternatives for Level 2.

Quantitative screening

Level 2 Screening:

System Alternatives

- where possible
- Quantitative results will use 5-point ranking system.
- Potential weighting of individual criteria will be determined after Level 1 screening.
- Qualitative results will be evaluated as High, Medium, and Low.
- Environmental screening

Alternatives for **NEPA Analysis** 

- Review results of **Environmental Impacts** and Benefits analysis for Level 2 alternatives.
- Conduct tradeoff analysis to identify preferred alternative(s).

**FHWA** and **TWG #2 Meeting Input** 



**FHWA** Input

**FHWA** and

TWG #3, **EAG #2, RAC #2** Meeting Input



**FHWA** and **TWG #4** Meeting Input



**FHWA** and TWG #5. EAG #3, RAC #3 **Meeting Input:** Community **Engagement** 

# **Draft Pre-Screening and Level 1 Evaluation Criteria - Multimodal Mobility Need**

Criteria - Murtimodal Mobility Need							
Need Statement Topic	Pre-screening	Level 1 - Multimodal Improvement Concepts					
Multimodal Mobility: Vehicles	Improves conditions for general purpose vehicles to, from, and/or across the US 2 Trestle, without degrading other modes.	<ul> <li>Results in similar or lower general-purpose vehicle delays compared to No Build to, from and across the US 2 trestle.</li> <li>Improves general-purpose vehicle reliability in the corridor.</li> <li>Increases person throughput through the corridor.</li> <li>Provides transportation benefits to vulnerable populations and overburdened communities.</li> </ul>					
Multimodal Mobility: Freight	Improves freight mobility to, from, and/or across the US 2 Trestle.	<ul> <li>Results in similar or lower delay for freight vehicles to, from and across the US 2 trestle.</li> <li>Improves freight travel time reliability in the US 2 trestle corridor.</li> </ul>					
Multimodal Mobility: High Occupancy Vehicles (HOV) and Transit	Improves mobility for transit and HOVs to, from, and/or across the US 2 Trestle.	<ul> <li>Reduces transit/HOV delay compared to general purpose traffic and to No Build.</li> <li>Improves transit system accessibility and connectivity.</li> <li>Improves transit travel time reliability for routes using the US 2 trestle corridor.</li> <li>Improves corridor person throughput for the peak periods.</li> </ul>					
Multimodal Mobility: Active Transportation	<ul> <li>Improves active transportation connections and safety between local active transportation networks and the trestle.</li> <li>Provides safe and continuous active transportation facilities across and/or under the US 2 Trestle.</li> </ul>	<ul> <li>Provides new or improved active transportation connections between local active transportation networks and the trestle.</li> <li>Provides continuous active transportation facilities across and/or under the US 2 Trestle.</li> </ul>					

# **Draft Pre-Screening and Level 1 Evaluation Criteria - Safety Need**

Need Statement Topic	Pre-screening	Level 1 - Multimodal Improvement Concepts
Safety	<ul> <li>Provides improvements that generally improve safety conditions for vehicles.</li> <li>Likely improves safety conditions for pedestrians and/or bicycles.</li> </ul>	<ul> <li>Provides improvements that likely improve safety conditions for motor vehicles in terms of sight distance, design standards (merge lengths, etc.) and reduction of conflict points.</li> <li>Improves safety for active transportation travel to/from and across and/or under the US 2         Trestle based on the following:             <ul> <li>Provides improved visibility for bike/ped modes.</li> <li>Improves safety of active transportation access to transit facilities.</li> </ul> </li> </ul>

# **Draft Pre-Screening and Level 1 Evaluation Criteria (Resiliency Need)**

Need Statement Topics		Pre-screening	Level 1 - Multimodal Improvement Concepts
Resiliency	siliency Seismic	Improves seismic resilience of trestle	Improves seismic resilience of corridor
	Asset Management	Improves the state of repair for facilities in the corridor	Level of improvement to corridor infrastructure, with particular focus on how well it meets roadway, stormwater and structural design standards
	Climate and natural hazard	Improves the ability of the US 2 trestle to maintain its function during extreme weather events	Improves ability of transportation corridor to maintain function during future climate change or natural hazard events
	Operational	Improves the ability of WSDOT staff and properties to safely respond to incidents and eliminates or reduces operational recovery time	Likelihood of lane closures for incident response and recovery     Provides safe space for response teams to operate in
			Ability of concept to affect the reduction of log jam occurrences under the bridge(s) across Ebey Slough

### **DISCUSSION**

(Comments by 9/27/24)

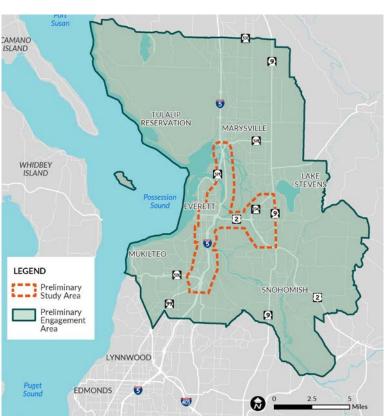


# **Concept Review**



# **Building on recommendations**

- Expanded study area
- Multimodal emphasis
- Robust tribal, agency, and community engagement



## Year 2050 system assumptions

### Roadway

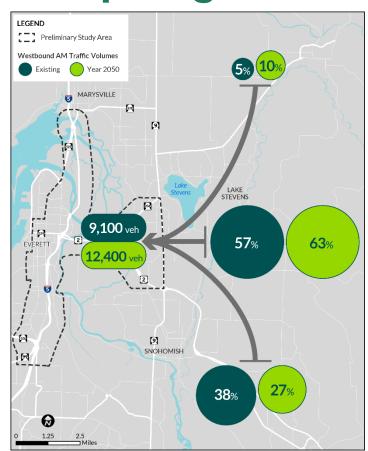
- Trestle in No Build configuration (Existing)
- SR 529 Completed
- SR 526/SR 527 projects open
- 20th Street widening from Cavalero Rd to US 2

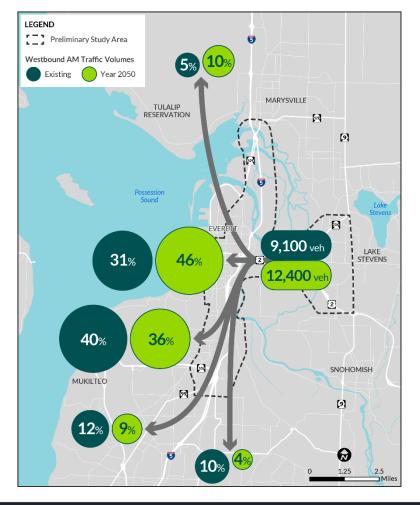
### **Transit**

- Sound Transit Everett Link Extension to Everett Station
- Community Transit Long Range plan (15 min headways across trestle)
- Community Transit Swift BRT Gold Line

# Westbound AM trip origins

- Demands are consistent with local and regional land use growth projections
- Highest growth in demand for US 2 Trestle from Lake Stevens zone
- Increased demand from areas north of Lake Stevens
- Decreased demand from areas south of Lake Stevens





# Westbound AM trip destinations

- Higher demand between the trestle and areas to the north
- Highest growth in demand from the US 2 Trestle is into downtown Everett
- Progressively less demand from the trestle to area south of Everett
- We still see growth to all areas indicating higher traffic volumes than today

Recurring traffic bottlenecks AM peak

(Westbound)

#### **Bottleneck locations:**

- SR 204/20th Street on-ramp
- US 2/SR 204 ramp
- US 2/I-5 ramp connection

#### **Existing travel time variability:**

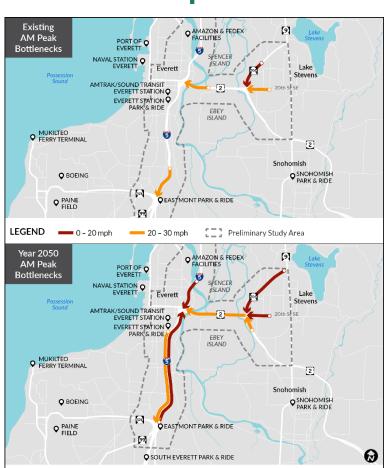
12 to 22 minutes (3 to 13 minutes of delay)

### **Existing speeds:**

Under 30 mph for all travel modes (55 mph posted speed limit on trestle)

# 2050 projected travel time variability:

18 to 48 minutes (9 to 39 minutes of delay)



Recurring traffic bottlenecks PM peak (Eastbound)

#### **Bottleneck locations:**

- SR 204 at Sunnyside Blvd
- East end of the trestle
- US 2/I-5 ramp connection

#### **Existing travel time variability:**

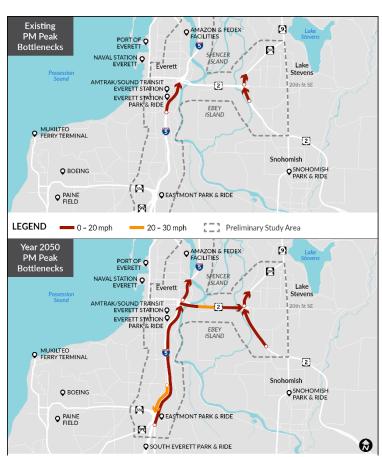
18 to 20 minutes (9 to 11 minutes of delay)

#### **Existing speeds:**

Under 30 mph for all travel modes (55 mph posted speed limit on trestle)

# 2050 projected travel time variability:

36 to 42 minutes (27 to 33 minutes of delay)



## **Key considerations**

- WB US 2 trestle is functionally obsolete
- Traffic bottlenecks
- Freight
- HOV and transit
- Bike/ped
- CT preference for WB HOV/transit lane and Everett Transit Station
- City of Everett preference to separate traffic

### Transit workshop results

### **Transit**

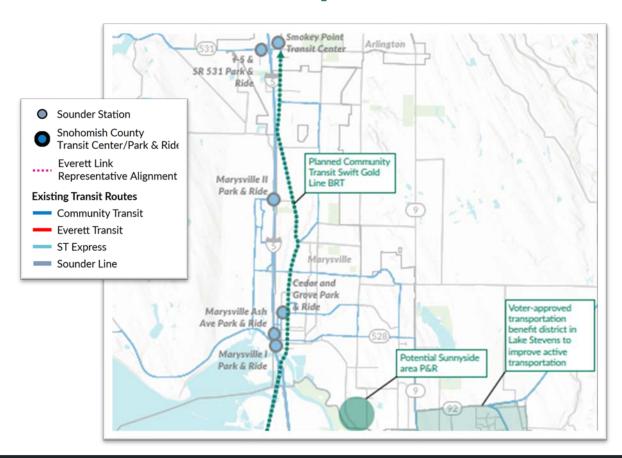
- First/last mile
- Service headways
- Priority at interchanges
- Schools
- Park & Ride lots

### Vanpool/Shuttle/Microtransit

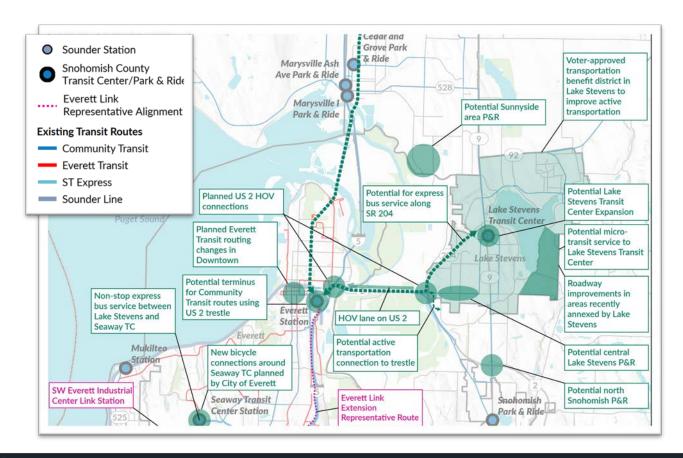
- Vanpools to major employers
- Point to Hub service
- Microtransit pilot
- Employee shuttles



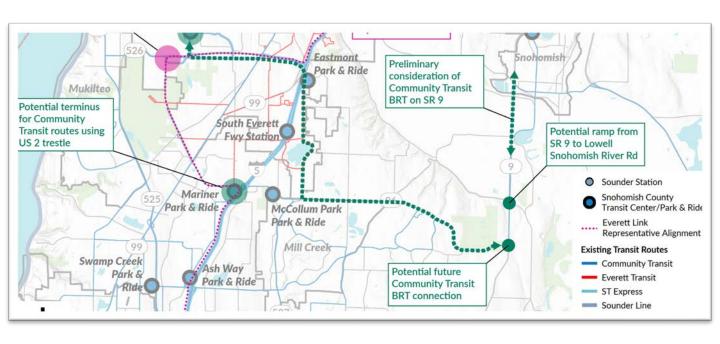
## Transit workshop results (North)



### Transit workshop results (Central)



## Transit workshop results (South)



Active transportation workshop recap

### **Purpose**

- Discuss opportunities for connectivity between new trestle and key destinations
- Brainstorm and outline preliminary connectivity concepts



## Key destinations

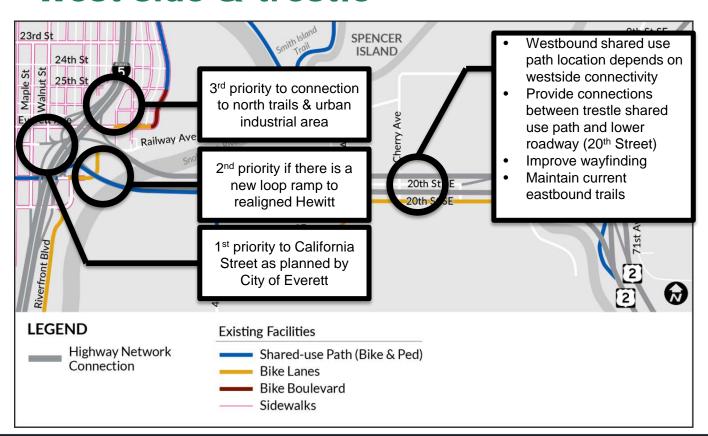
#### West side

- Everett Station
- Everett College
- Angel of the Winds Arena
- Downtown Everett
- Providence Medical Center
- Waterfront/Port of Everett
- Industrial areas/Boeing
- Regional/riverfront trails
- Aquasox
- County campus/courthouse/PUD
- Naval base
- Residential areas

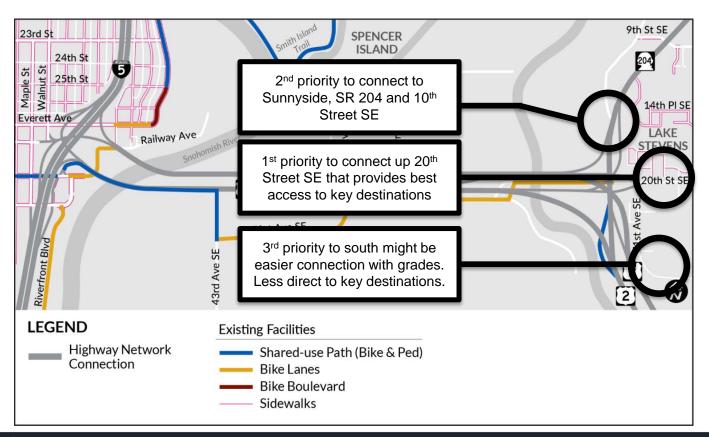
#### East side

- Centennial Trail
- Downtown Lake Stevens/ Snohomish/Monroe/Granite Falls
- Fairgrounds
- Prison
- Flowing Lake/Lake Roesiger
- Trailheads
- Frontier Village
- Wildlife refuge(s)
- up 20th Street SE
- Cavalero State Park
- Residential areas

## Active transportation concepts - West side & trestle



### Active transportation concepts - East side

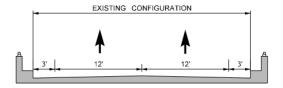


## **Roadway concepts - Trestle**

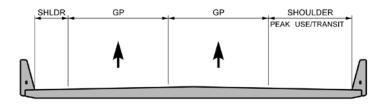




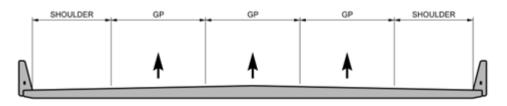
## Roadway concepts - Trestle WB



- No Build
- TW1 11' lanes, 2' inside and 8.25' outside shoulders

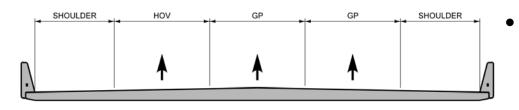


 TW2 – 2 lanes, peak use/transit shoulder

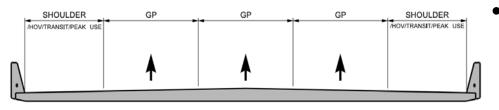


TW3 – 3 GP lanes

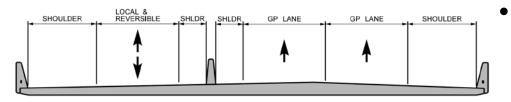
## Roadway concepts - Trestle WB (continued)



TW4 – 2 GP lanes, 1 HOV lane



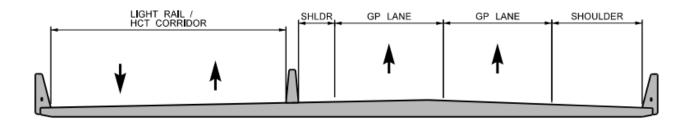
TW5 – 3 GP lanes, 1 Peak use HOV/ transit shoulder



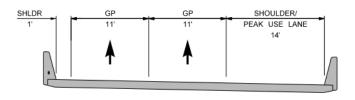
TW6 – 2 GP lanes, 1 reversible HOV/transit lane

## Roadway concepts - Trestle WB (continued)

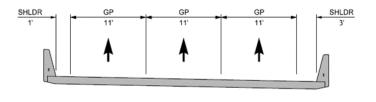
• TW7 – 2 GP lanes, Light Rail/HCT corridor



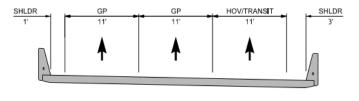
## Roadway concepts - Trestle EB



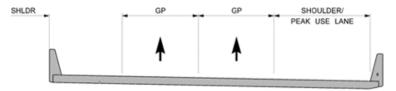
- No Build
  - TE1 2 GP lanes, Peak use HOV/Transit shoulder



TE2 – 3 GP lanes

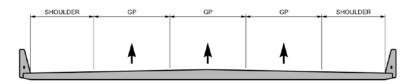


TE3 – 2 GP lanes,
 Full time HOV lane

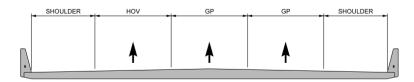


TE4 – New structure
 2 GP lanes, Peak
 use Transit shoulder

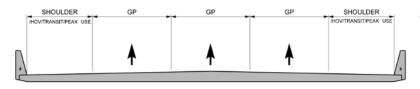
## Roadway concepts - Trestle EB (continued)



TE5 – New structure,
 3 GP lanes



TE6 – New structure,
 2 GP lanes, 1 HOV
 lane



TE7 – New structure
 3 GP lanes, Peak use
 HOV/Transit shoulder

# Introduction for breakout groups

- 2021 PEL
- City of Everett Interchange Planning Study
- US 2 Trestle Capacity Improvements & WB Trestle Replacement Project Team

## **Break**

Form breakout groups

## Breakout Groups: Study area east/west concepts



## **Next Steps**

## PEL Committee/Group Meeting Schedule

#### TWG/EAG/ RAC #1

Purpose and Need statement

### **TWG #2**

- Analysis framework and screening criteria
- Review options for pre-screening
   Level 1 screening

### TWG #3

#### EAG/RAC #2

- Level 1 screening results
- Begin packaging system alternatives

#### **TWG #4**

 Level 2 analysis update

### TWG #5 EAG/RAC

### #3

Level 2
 evaluation
 results and
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### TWG #6 EAG/RAC #4

 PEL findings, alternatives to take into NEPA, next steps

**Next Meeting** 

TWG = Technical Working Group

EAG = Executive Advisory Group

RAC = Resource Agency Committee

## Thank you!

Send comments/questions to:

Jennifer Rash
Study Engagement
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Oteberry Kedelty
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Meeting materials posted on the study website:

https://wsdot.wa.gov/construction-planning/search projects/us-2-trestle-capacity-improvements-westbound-trestle-replacement

