

# SR 520 Project Update

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**Joint Transportation Committee**  
August 13, 2007

# Agenda

- Maintain public safety
  - Description of maintenance and inspection program
  - Overview of catastrophic failure recovery plan
- Implement ESSB 6099
  - Review finance plan
  - Report on high-capacity transit plan
  - Health impact assessment
  - Next steps in mediation process
- Develop the 4 + 2 configuration
  - Environmental process
  - Mobility improvements
  - Design decisions



# Maintenance and Inspection



- On July 14-15, 2007 the annual weekend maintenance and inspection closure occurred.
- There is a current real-time monitoring of the bridge and the wind and wave activity.
- Scheduled monthly night-time closures for maintenance.

# Planning For Catastrophic Failure

- Emergency response plans are currently in place.
- Planning is now underway for a partial or full closure of the corridor due to a catastrophic failure.
- Communications, traffic management, and bridge replacement strategies will be addressed.
- Planning kick-off event took place on August 2.
- Final plan due in April, 2008.



# Implementing ESSB 6099

- We are in the process of developing a finance plan.
- Support the project team in creating a health impact assessment.
- Develop a high-capacity transit plan for the corridor.
- Be a strong supporter of the mediation process.

# Project Costs and Funding

## Project costs

4+2 configuration with  
Montlake interchange:

**\$3.90 billion**

4+2 configuration with  
Pacific Street interchange:

**\$4.38 billion**

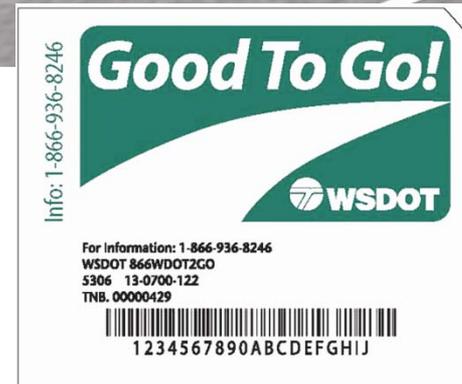
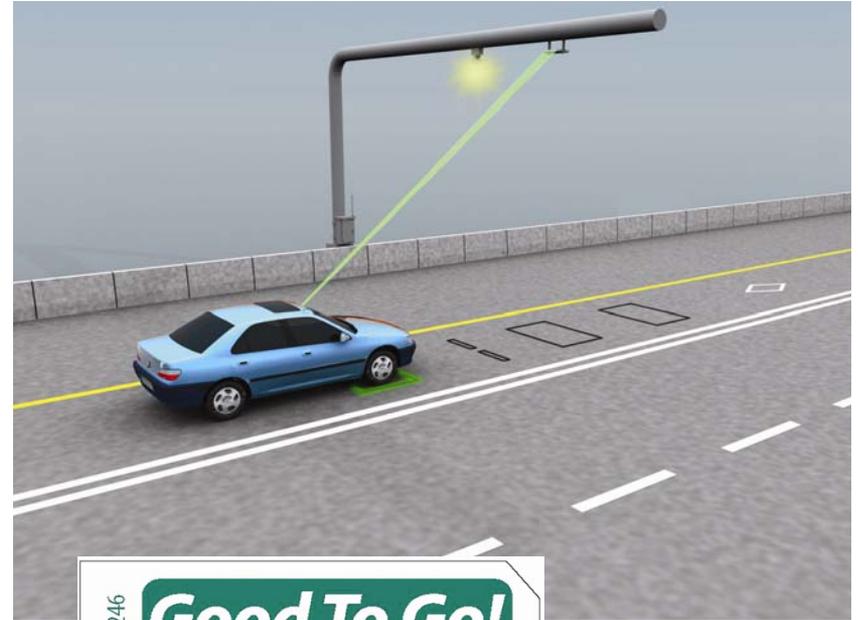
## RTID proposed funding strategy

Federal sources	\$311 million
State gas taxes	\$560 million
State pooled fund	\$600 – 1,100 million
RTID “Roads & Transit” package	\$1,100 million
Tolling	\$700 – 1,200 million
Finance costs savings & sales tax transfer	Up to \$340 million
<b>Total</b>	<b>\$3.30 – \$4.40 billion*</b>

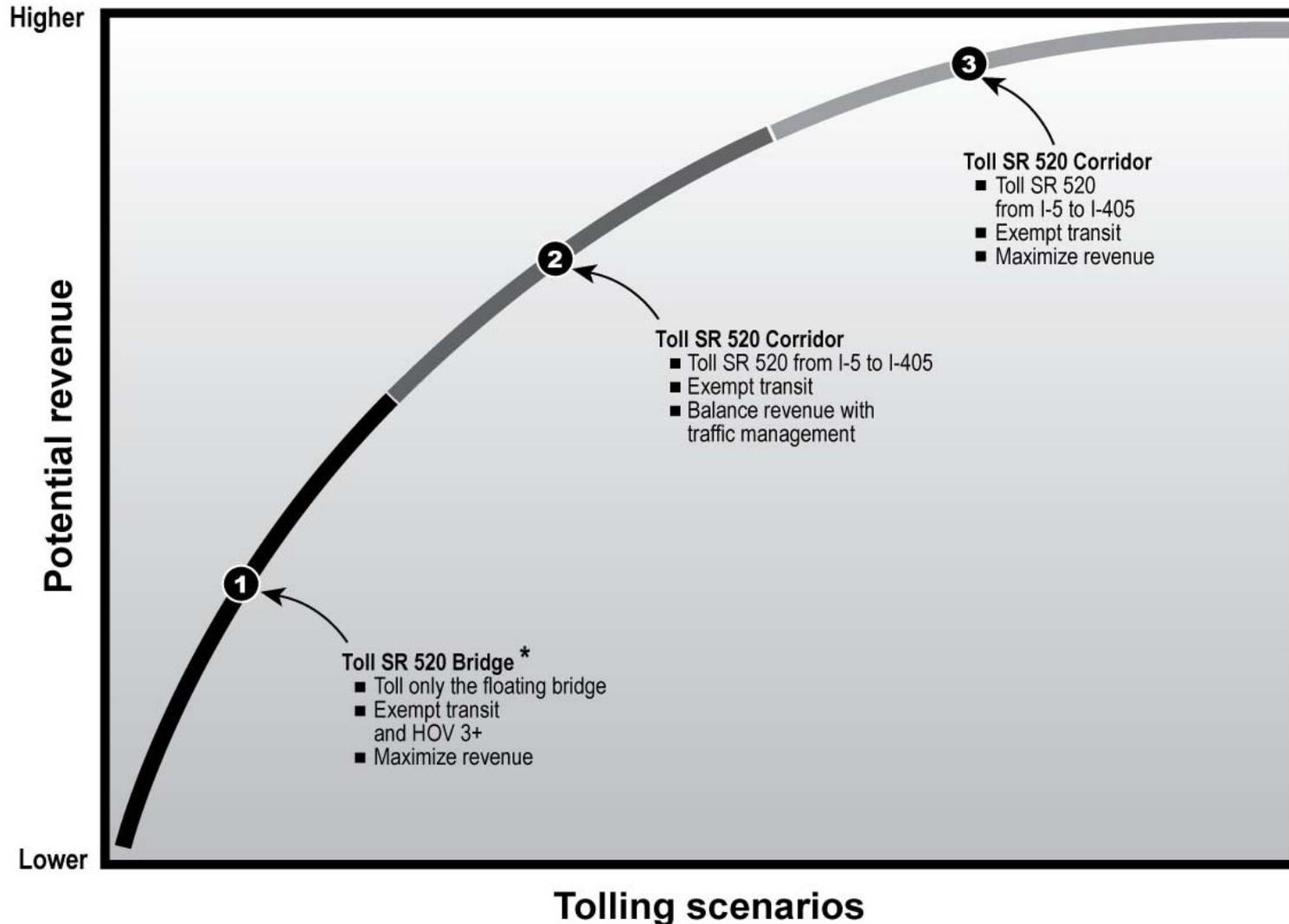
\* The project impact plan due in December 2008 may adjust final project costs.

# Finance Plan

- An updated finance plan is due in January, 2008.
- The updated plan will include options for funding SR 520.
- Potential funding sources will include regional, federal, and tolling monies.



# Draft Toll Scenarios for Analysis



\* Note: Scenario 3 will also be analyzed with an option that begins tolling prior to completion and giving an exemption to transit. Scenarios 1 and 2 could be analyzed using the same option.

# Health Impact Assessment

- First meeting was held on August 1 with Seattle & King County Public Health and Puget Sound Clean Air Agency.
- Interagency agreements and draft scope of health impact assessment will be completed in September, 2007.
- Completed health assessment to be incorporated into the project impact plan which is due in December, 2008.

# High-Capacity Transit Plan

- WSDOT is meeting with representatives of Sound Transit, King County Metro, and the University of Washington to develop a HCT plan outline and plans to submit in October, 2007
- HCT committee is considering existing light rail and bus rapid transit studies to identify additional data-gathering, modeling and general research needs for full report due December, 2008
- Report will look at opportunities for multi-modal station in the Montlake/UW Medical Center area as well as cross-lake travel

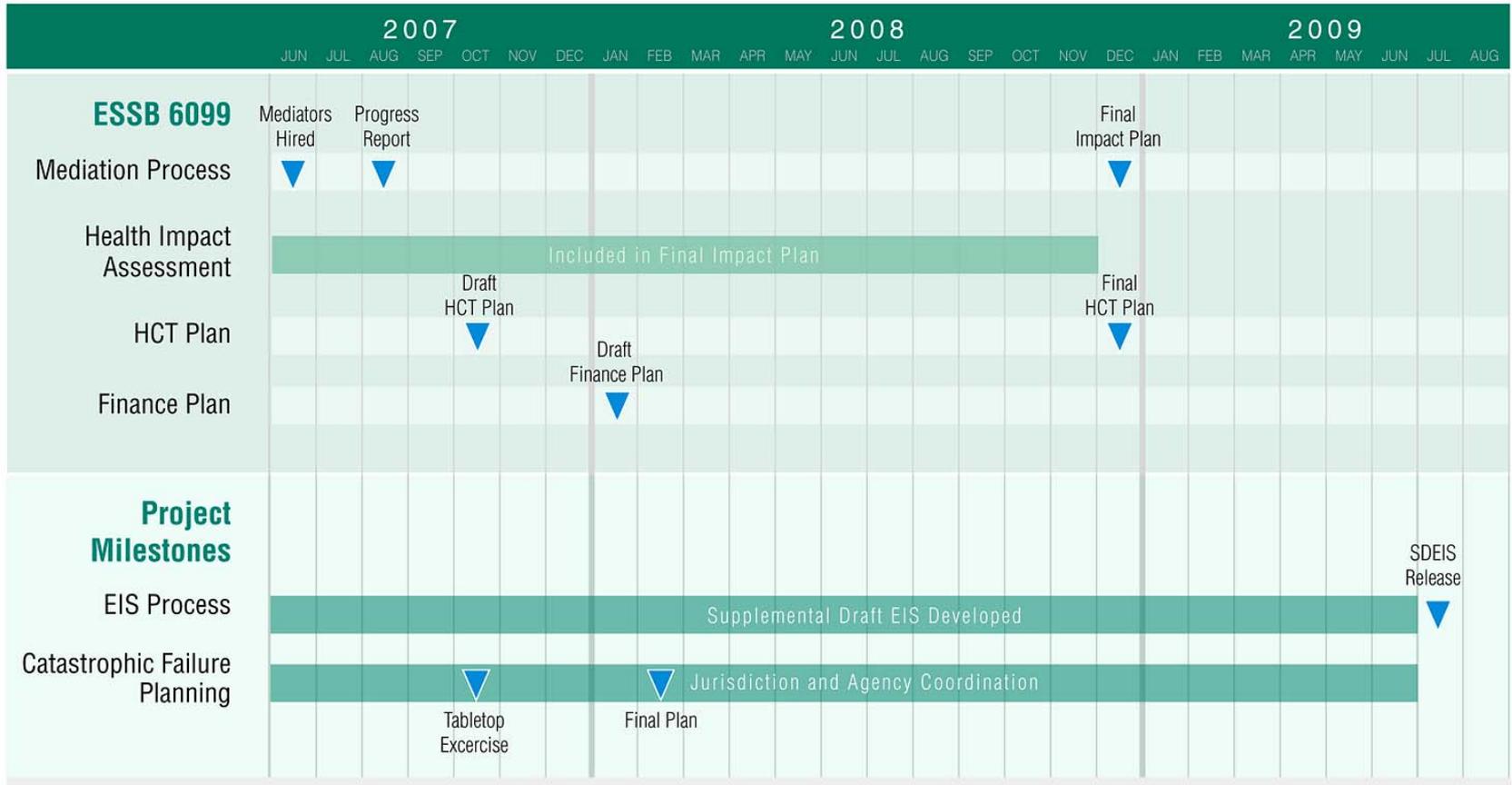
# Mediation Process

- The project team met with mediators in late June.
- Mediators were invited to attend open houses in June.
- We are currently providing any information that is requested.
- Our offices are coordinating timelines to meet legislative and project milestones.

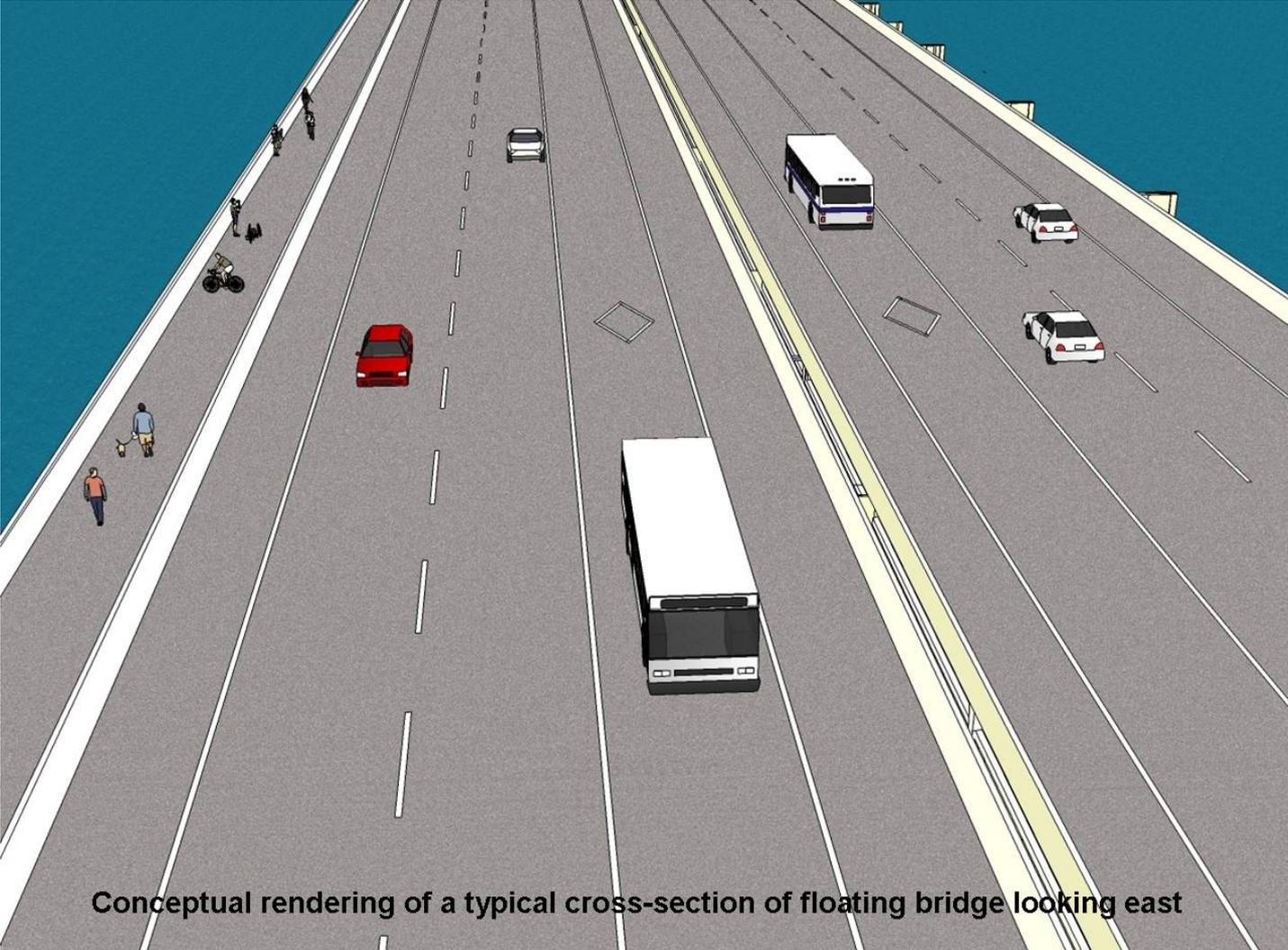
# ESSB 6099 & Project Milestones



## SR 520 Bridge Replacement and HOV Project – Project Schedule 2007-2009



# The 4+2 Configuration



**Typical cross-section of highway.**

# What We Heard:

## *Environmental*

### 1 Arboretum

Minimize effects on wetlands, including shading. Minimize effects to Marsh and Foster Islands.

### 2 Parks

Minimize effects on Arboretum, Fairweather and Wetherill parks. Consider column placement and minimize number of columns. Maintain access to parks and other public spaces during construction.

### 3 Stormwater run-off

Treat stormwater before it enters the lake. Make stormwater treatment ponds be community assets.

### 4 View corridors

Protect the Rainier Vista. Consider views from surrounding neighborhoods on both sides of the lake.



### Corridor-wide Comments

#### Noise

Reduce noise to the extent possible. Consider quieter pavement as an option. Consider clear noise walls.

#### Construction

Minimize noise, vibration, light, and emissions. Narrow the footprint.

#### Air quality

Minimize emissions. Provide incentives for transit riders. Find ways to lessen global warming.

#### Mitigation

Need more information on mitigation proposals and funding.

# Moving Forward: *Environmental*

## Environmental process and permitting

- Meeting regularly with regulatory agencies, jurisdictions, and Tribes to share project information and develop approaches to resolve technical issues
- Continue mitigation planning for natural resources, cultural resources, and parks

## Fish and wildlife

- Developing designs that remove obstacles to fish crossing under SR 520 to reach upstream habitats on the Eastside
- Tracking fish to determine how they travel under the SR 520 bridge in Lake Washington

## Water quality

- Evaluating opportunities to enhance and restore local watersheds
- Developing innovative water quality treatment methods
- Continuing work on the stormwater management plan

## Noise

- Testing quieter pavement on SR 520 between Medina and Bellevue to determine if it effectively reduces roadway noise
- Studying innovative sound wall materials for possible placement on the corridor

## Pontoon construction site

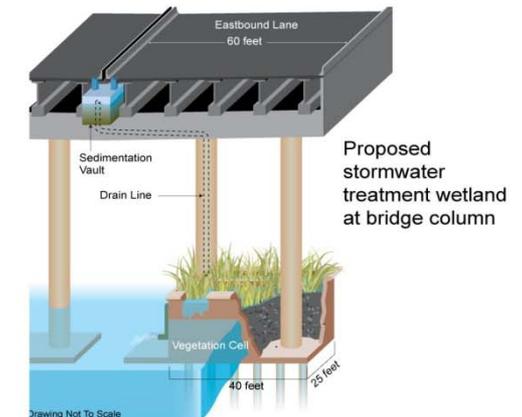
- Evaluating potential construction sites and construction methods



Spawning salmon



Sound wall surface design



# Supplemental Draft EIS

## Topics to be addressed:

- New and/or refined design options for 4+2 corridor
- How and where to potentially construct floating bridge pontoons
- Construction methods
- Mitigation measures
- Will be published in Summer, 2009



# Pontoon Construction Site

- Up to 44 pontoons will be built.
  - Each pontoon is longer than a football field and weighs about 10,000 tons (approximately 80 Boeing 757 planes).
- A potential construction site at the Port of Grays Harbor will be studied.
- Several construction methods will be studied in the Supplemental Draft EIS.
- The selected contractor will be given the flexibility to select an alternative site and/or construction method.



# Quieter Pavement

- A 1.6-mile test site with three types of pavement was installed in July.
- Current study is underway to determine how “quieter pavement” performs.
  - Unique driving conditions;
  - Climate conditions;
  - Durability;
  - Quality and quantity of noise reduction; and
  - Noise reduction performance over a five-year period.



# What We Heard: Traffic, Transit, and Mobility

## 1 Transit

Make the SR 520 corridor convenient for buses. Provide options for light rail and ensure smooth connections to Sound Transit's light rail station.

## 2 Construction

Keep westbound HOV lane on Eastside open during construction.

## 3 I-5 and I-405

Improve connections to both corridors.

## 4 Arboretum

Concern about increased traffic through the Arboretum.



## Corridor-wide Comments

### Bicycle/Pedestrian Access

Provide good connections to existing bike trails on both sides of the lake. Consider a bike-only ramp off SR 520 to Madison Park. Evaluate options to connect to regional path system.

### HOV

Make corridor reliable for transit. Include "inside" HOV lanes. Keep transit stops on the corridor. Provide areas for transfers from local to regional buses.

### Transit stops

Improve transit stop waiting environment.

### Commute

Make the corridor more reliable.

### Access

Maintain access for emergency and utility vehicles during construction.

### Corridor configuration

The 4-, 6-, and 8-lane alternatives each received varying levels of support and opposition.

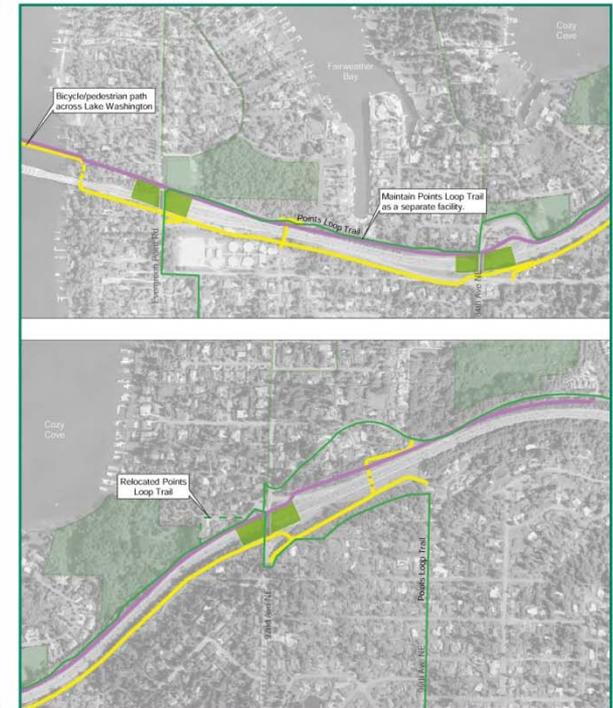
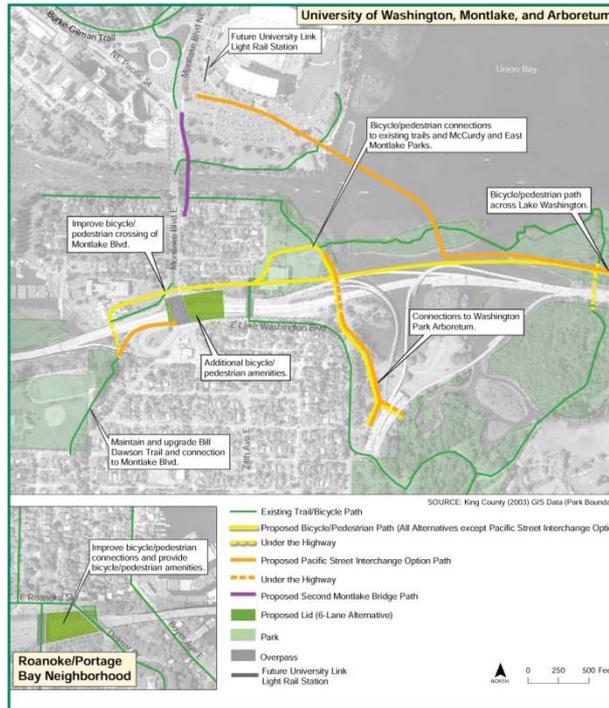
# 4+2 Transportation Improvements

- Will move 25% more people in only 3% more vehicles
- HOV lane system will be complete between Seattle and Redmond
- HOV lanes will connect with the I-5 express lanes
  - Morning commute – westbound SR 520 will connect with southbound I-5
  - Afternoon commute – northbound I-5 will connect with eastbound SR 520
- Full shoulders will improve overall reliability and safety
- A bicycle/pedestrian path will improve commutes for bicycle riders, and provide connectivity to existing paths in Seattle and on the Eastside



# 4+2 Bicycle and Pedestrian Improvements

- WSDOT is evaluating bicycle and pedestrian routes to make them as direct and accessible as possible
- The SR 520 4+2 configuration will create options for:
  - Bike lockers
  - Connections to employment and high-density centers
  - Links to existing and planned local and regional trails
- WSDOT will continue coordination with bicycle advocates



# What We Heard: Design

## 1 Portage Bay

Narrow the mainline footprint. Consider other construction options that do not require temporary work bridges.

## 2 Arboretum and Union Bay Bridge

Evaluate the height and visual impacts of all the interchange options. Reduce the height of the Union Bay Bridge.

## 3 Montlake and Pacific Street Interchange

Narrow the footprint of the interchange designs. Consider local street usage and traffic effects.

## 4 Cultural Resources

Protect cultural resources and places on the Historic Register

## 5 Medina

Design maintenance facility to fit into hillside.



### Corridor-wide Comments

#### Lids

Design lids to be as long as possible. Provide good community connections across highway. Develop aesthetically pleasing public spaces on lids.

#### Properties

Minimize impacts on surrounding properties.

#### Alternate designs

Consider other options (tube/tunnel) that might be able to minimize effects on the Arboretum

#### Interchanges

Minimize footprints of interchanges while optimizing performance  
Keep queue lines on the ramps instead of on local streets.

#### Urban Design

Make SR 520 an attractive corridor. Pay attention to details in the walls, lids, bridges, and other elements.

# Urban Design Vision

## Context

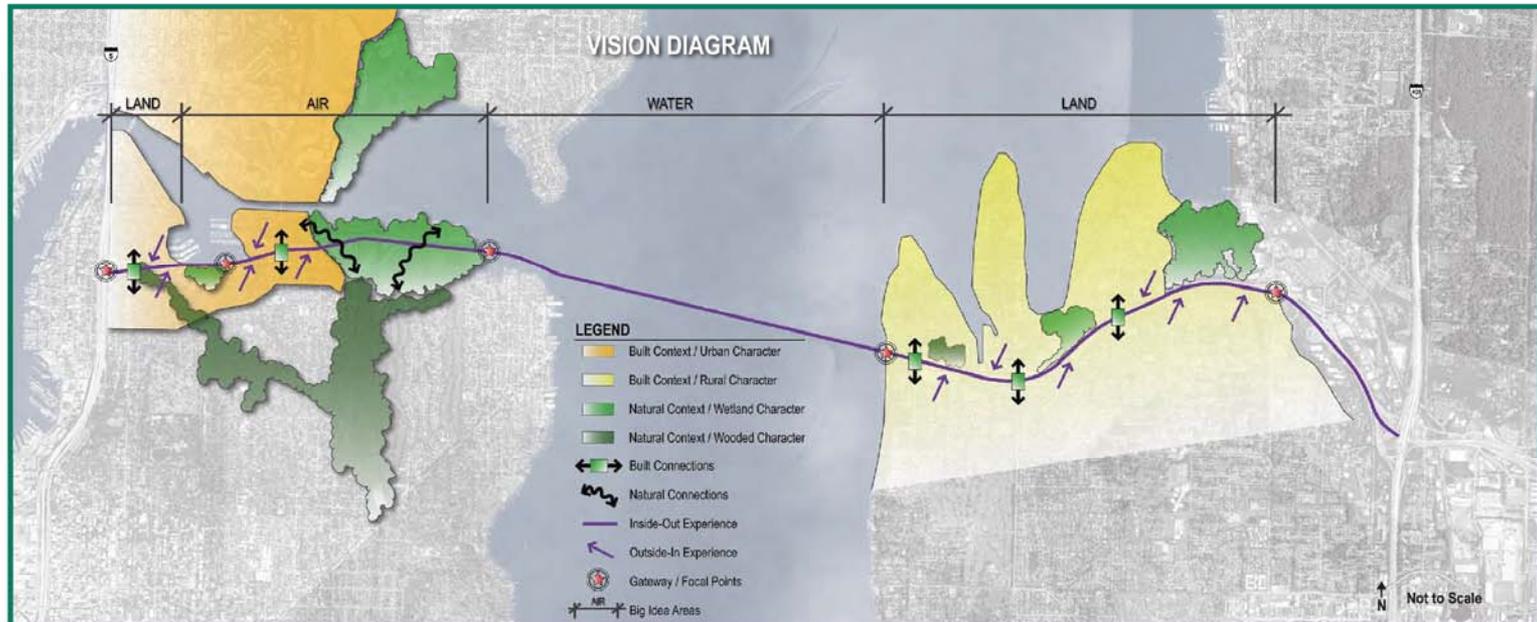
To provide a cohesive, graceful travelway that respects and enhances the surrounding natural and built environments

## Character

By creating structures and landscapes with high quality craftsmanship that reflect natural and contemporary character

## Connections

That reconnect neighborhoods and communities, and restore habitat



# Eastside Design Collaboration

WSDOT and Eastside jurisdictions are collaborating to identify design opportunities and create solutions for the 4 + 2 configuration. Topics include:

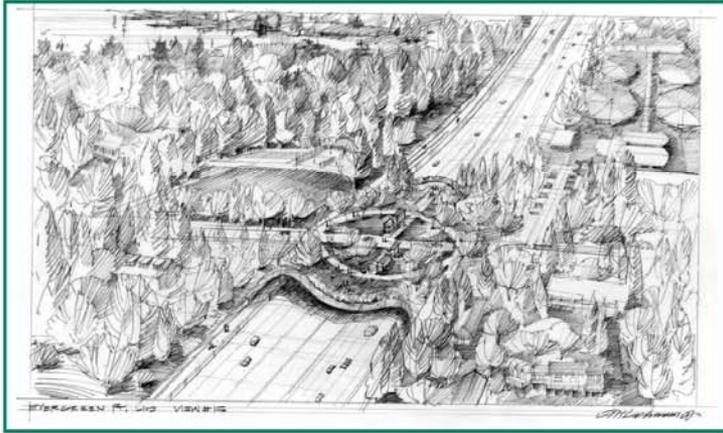
- Mainline design
- Interchange options
- Transit stations
- Lids
- Pedestrian and bike paths
- Retaining walls
- Roadside and landscape
- Sound walls

## Next Steps

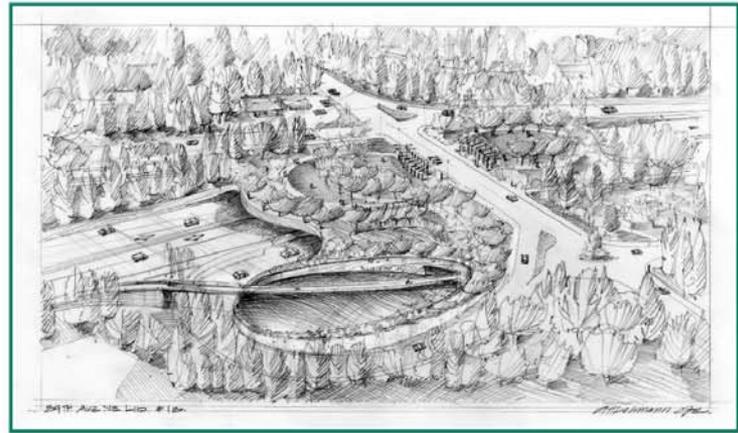
- Council Briefings
- Town Hall Meetings



# Eastside Lid Concepts



Evergreen Point Road

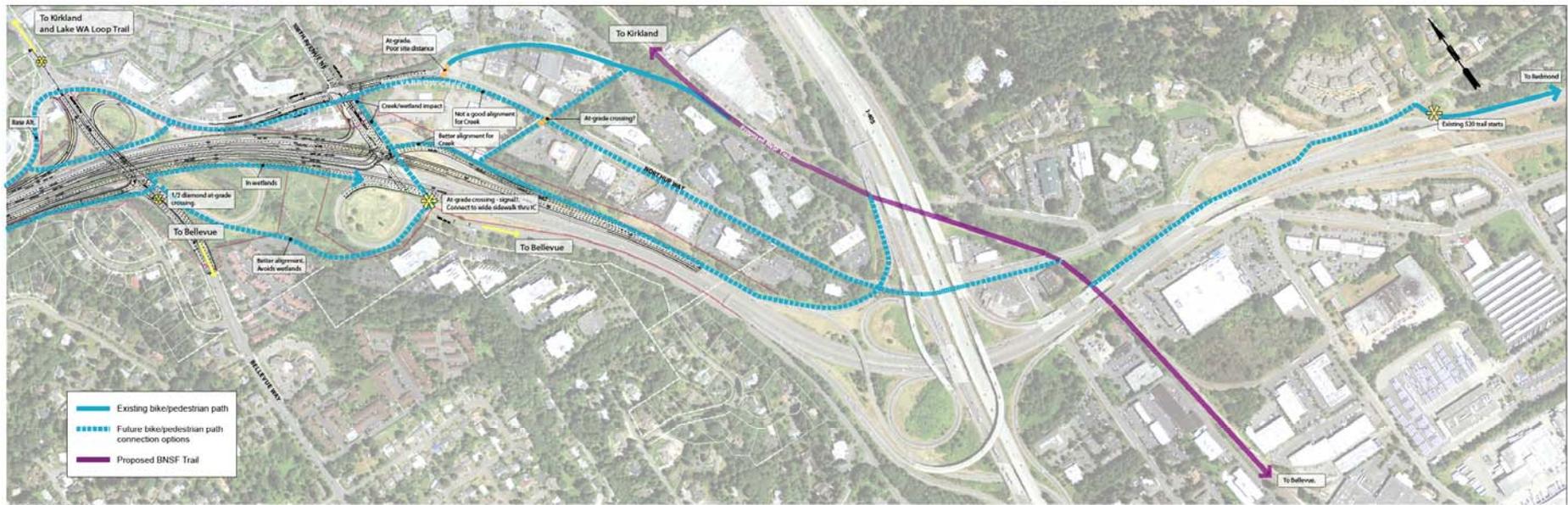


84th Avenue Northeast



92nd Avenue Northeast

# Possible Eastside Bike & Pedestrian Connections



Bellevue Way – 124th Ave Vicinity

# Questions?

For more information please visit the project website at

<http://www.wsdot.wa.gov/projects/SR520Bridge/>

or

Contact our Project Director, Ron Paananen at (206) 382-5270

