SR 520 Bridge Replacement and HOV Project

King County Council Committee of the Whole

Ron Paananen, P.E.
Deputy Administrator
Urban Corridors Office

Julie Meredith, P.E.
SR 520 Program Director

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U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

SOUNDTRANSIT

Presentation Agenda

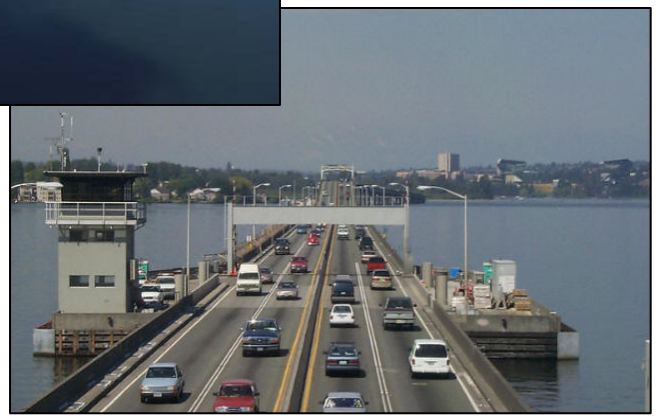
- SR 520 Vulnerabilities
- Overview of Corridor Program
- High Capacity Transit Plan
- Health Impact Assessment
- West side Mediation
- Accelerated Eastside Improvements

SR 520 vulnerabilities

- The SR 520 bridge is vulnerable to earthquakes and windstorms.
- WSDOT is addressing SR 520 vulnerability by:
  - Accelerating the project schedule.
  - Advancing pontoon construction.
  - Developed a catastrophic failure plan.

Portage Bay Bridge – Facing West

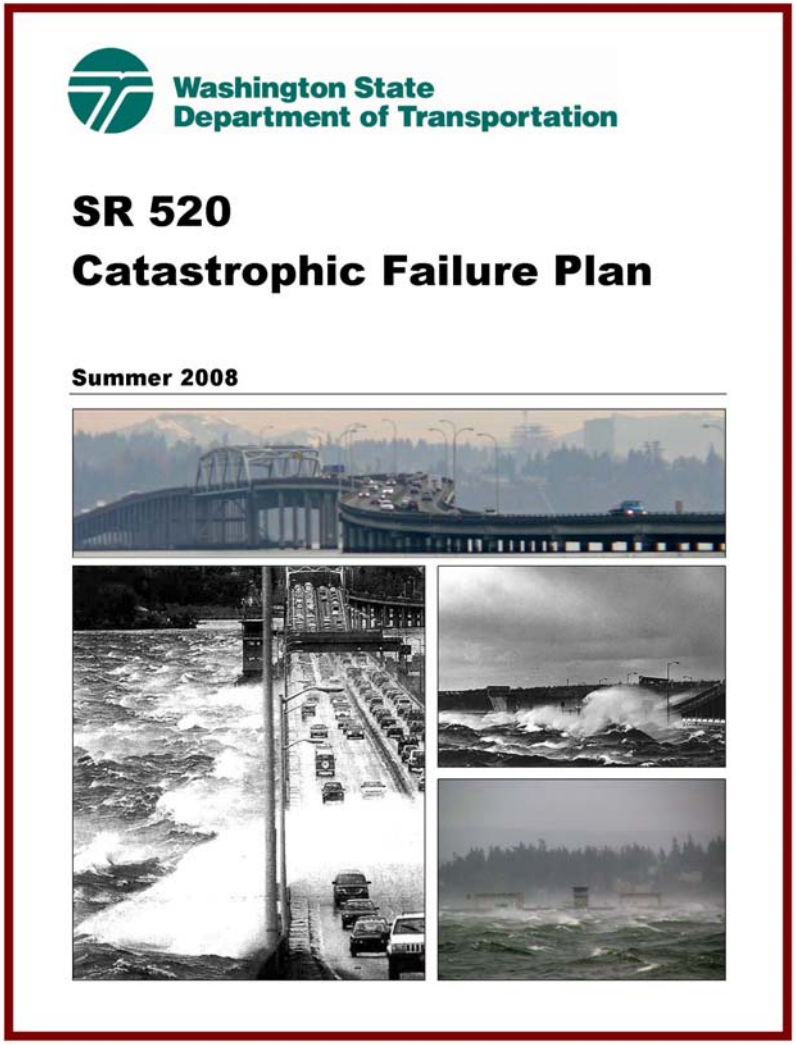
West Approach – Facing Northwest



Midspan of the Floating Bridge – Facing West

Catastrophic Failure Plan

- Builds on established emergency management procedures.
- Highlights short-term and long-term traffic management and communications strategies.
- Was developed in collaboration with emergency responders, jurisdictions, transit agencies and businesses.

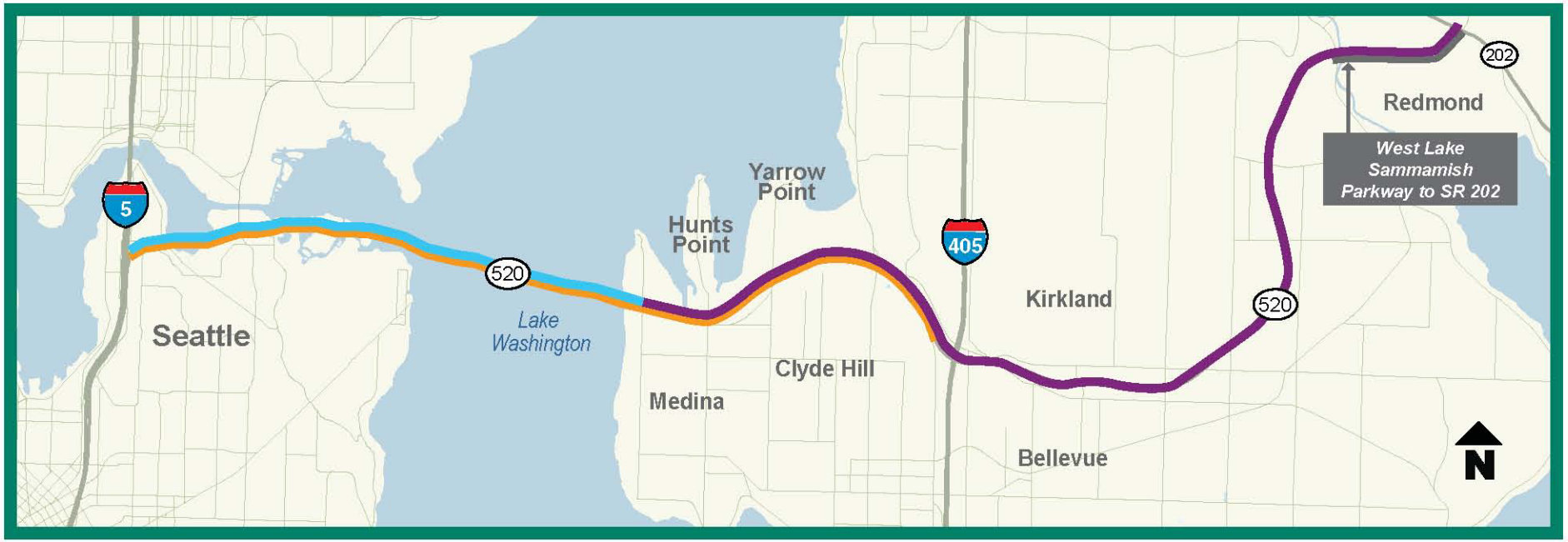


Program Description

The SR 520 Corridor Program will replace the Portage Bay and Evergreen Point bridges and improve existing roadway between I-5 in Seattle and SR 202 on the Eastside.

The SR 520 Corridor Program includes four projects:

- **Urban Partnership** – congestion management tolling from I-5 to I-405.
- **Eastside Transit and HOV** – vicinity of Evergreen Point Road to SR 202.
- **Pontoon Construction Project** – pontoons for catastrophic failure planning.
- **Bridge Replacement and HOV Project** – I-5 to the vicinity of Evergreen Point Road.



Program area map.

Four Environmental Processes

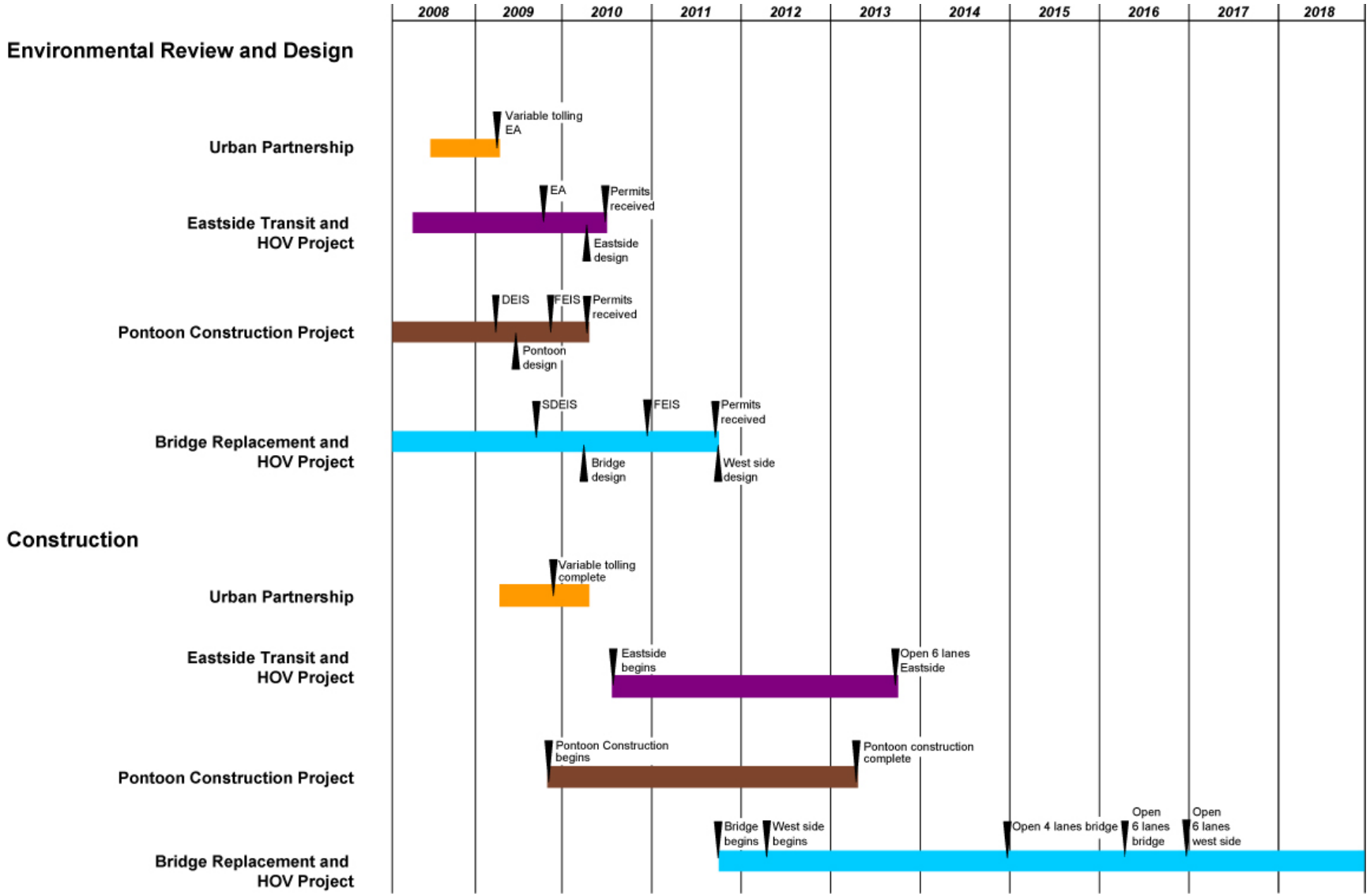
Urban Partnership Environmental Assessment – to study effects of tolling on SR 520 for congestion management.

Eastside Transit and HOV Project Environmental Assessment – to evaluate improvements for transit and HOV from the eastern shore of Lake Washington to the corridor's eastern end at SR 202.

Pontoon Construction Project Draft EIS – to evaluate options to expedite construction of pontoons to be used to restore the floating section of the SR 520 Evergreen Point Bridge in the event of a catastrophic failure, and to construct and store these pontoons until needed.

Bridge Replacement and HOV Project Supplemental DEIS – to study new alternatives for the SR 520 west side interchange; construction techniques, staging and durations; and mitigation.

Program Schedule



4+2 Cost Estimates (year of expenditure; $B)

2006 Project Cost Estimate	$4.38 (1)
2007 Project Cost Estimate	$3.98 (2)
2008 Governor's Schedule Acceleration	$3.7 - $3.9 (3)

(1) Reflects the Governor's Expert Review Panel's recommendation based on worldwide increase in inflation.

(2) From the 2007 Financial Plan, this reflects program cost savings from the change in pontoon configuration and advancement of the pontoon construction project.

(3) Reflects the potential inflation savings from accelerated 2014 (4-Lane) and 2016 (4+2-Lane) openings

SR 520 High-Capacity Transit Plan: 2010 - 2030

Key Questions:

- How do we accommodate growth in the SR 520 corridor on transit – before and after 2030?
- How will planned investments in transit be coordinated to provide maximum benefit?
- What functions will be at the Montlake multimodal station?

Key Planning Assumptions:

- SR 520 High Capacity Transit Until 2030 = Bus Rapid Transit in HOV lane
- SR 520 High Capacity After 2030 = Do not preclude likely dedicated right-of-way, technology undecided

Washington State Department of Transportation

SoundTransit

King County METRO

In cooperation with:

University of Washington

SR 520 Health Impact Assessment

Public Health
Seattle & King County

pscleanair.org
Puget Sound Clean Air Agency

Bridge Replacement and HOV Project

Program area map.

The bridge replacement and HOV project area extends from I-5 to just east of Evergreen Point Way.

West side Mediation Process

- Options agreed to by mediation participants:

  Option A
  - Surface Montlake Interchange with transit variations.

  Option K
  - East Montlake Interchange; tunnel under Montlake Cut and land bridge or berm at Foster Island in the Arboretum.

  Option L
  - East Montlake Interchange; additional
  - bridge crossing Montlake Cut.

- Options will be evaluated in the SDEIS.
- Mediation participants are working on the project impact plan, due at the end of the year.

Alternative A - Transit -Friendly Option

Enlarged view of interchange

CONCEPTUAL
DRAFT - THIS SKETCH ONLY DEPICTS THE IDEA. ENGINEERING, OPERATIONS AND ENVIRONMENTAL ANALYSIS REQUIRED.

NORTH
Not to Scale June 2008

Alternative A - Transit-Friendly Option with possible additions

Enlarged view of interchange

LEGEND

- Ped/Bike Path
- Wall
- Stormwater Facility
- WSDOT Right of Way Line
- Proposed Addition Pending Technical Analysis

CONCEPTUAL
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Alternative K - Parkway Plan

Enlarged view of interchange

LEGEND

- Ped/Bike Path
- Wall
- Stormwater Facility
- Potential Ventilation Tower
- WSDOT Right of Way Line
- Tunnel
- Proposed Addition Pending Technical Analysis

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Alternative L

Enlarged view of interchange

LEGEND

- Ped/Bike Path
- Wall
- Stormwater Facility
- WSDOT Right of Way Line

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SR 520 Pontoon Construction Project

- Advancing pontoon construction
- Exploring possible locations:
  - Existing facility in Tacoma.
  - Evaluating possible new sites in the environmental process to build and store pontoons.

Hood Canal Bridge pontoon construction site, Concrete Technology, 2006

Flooding of the graving dock to launch Homer Hadley Bridge pontoons, Blair Waterway, 1981

Eastside Transit and HOV Improvements

Washington State Legislature
ESHB 2878

"…the department shall develop improvements of traffic flow from the eastern Lake Washington shoreline to the 108th Avenue NE in Bellevue including:

a) Near-term, low-cost enhancements which relocate the high-occupancy vehicle lanes to the inside of the alignment; and

b) A plan for an accelerated improvement project for the construction of median flyer stops, reconfiguration of the interchanges, addition of direct access ramps, community enhancement lids, and pedestrian/bike path connections."

WSDOT submitted this plan last week.

Accelerated Improvements to Address ESHB 2878

- Deliver benefits to drivers and transit riders during pre-construction tolling through Urban Partnership Agreement
  - Technology
  - Transit
  - Telecommuting
- Accelerate construction of corridor improvements
  - Approval of Eastside Transit and HOV Project received from FHWA
  - Travel time benefits for transit and carpools earlier than planned
  - Enhances public safety on the east side of 520

The Lake Washington Urban Partnership

- Part of USDOT initiative to reduce congestion in five geographic regions across the country:
  - Seattle/King County area
  - San Francisco
  - Minneapolis
  - Miami
  - New York City

- The “Four T’s”
  - Tolling
  - Technology and Traffic Management
  - Transit
  - Telecommuting
- Technology: Active Traffic Management
  - Speed harmonization and queue warning
  - Traveler information and dynamic re-routing
- WSDOT, PSRC and King County are leading implementation of comprehensive congestion reduction strategies.

Questions?

For more information visit the project website at:

www.wsdot.wa.gov/projects/SR520Bridge