

SR 520 Bridge Replacement and HOV Program



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Seattle City Council, SR 520 Special Committee
Council Chambers, Seattle City Council

June 13, 2011

2:30 p.m.

Presentation overview

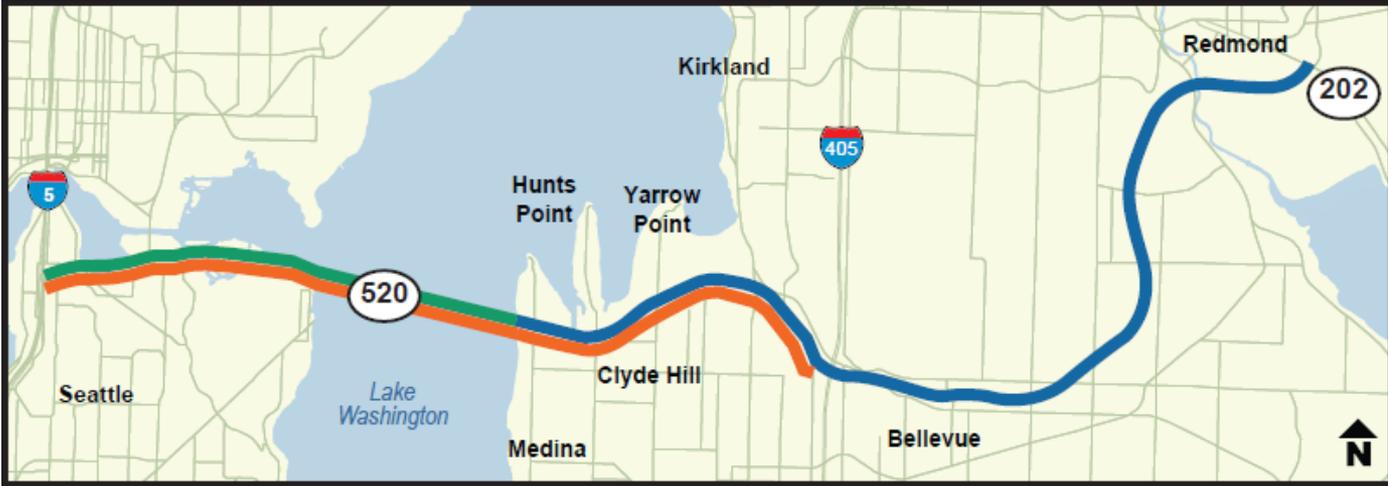
- SR 520 Program overview
- I-5 to Medina Final Environmental Impact Statement
 - Preferred alternative and summary of findings
- Implementation steps in progress
- Agreements and permits
- Next steps



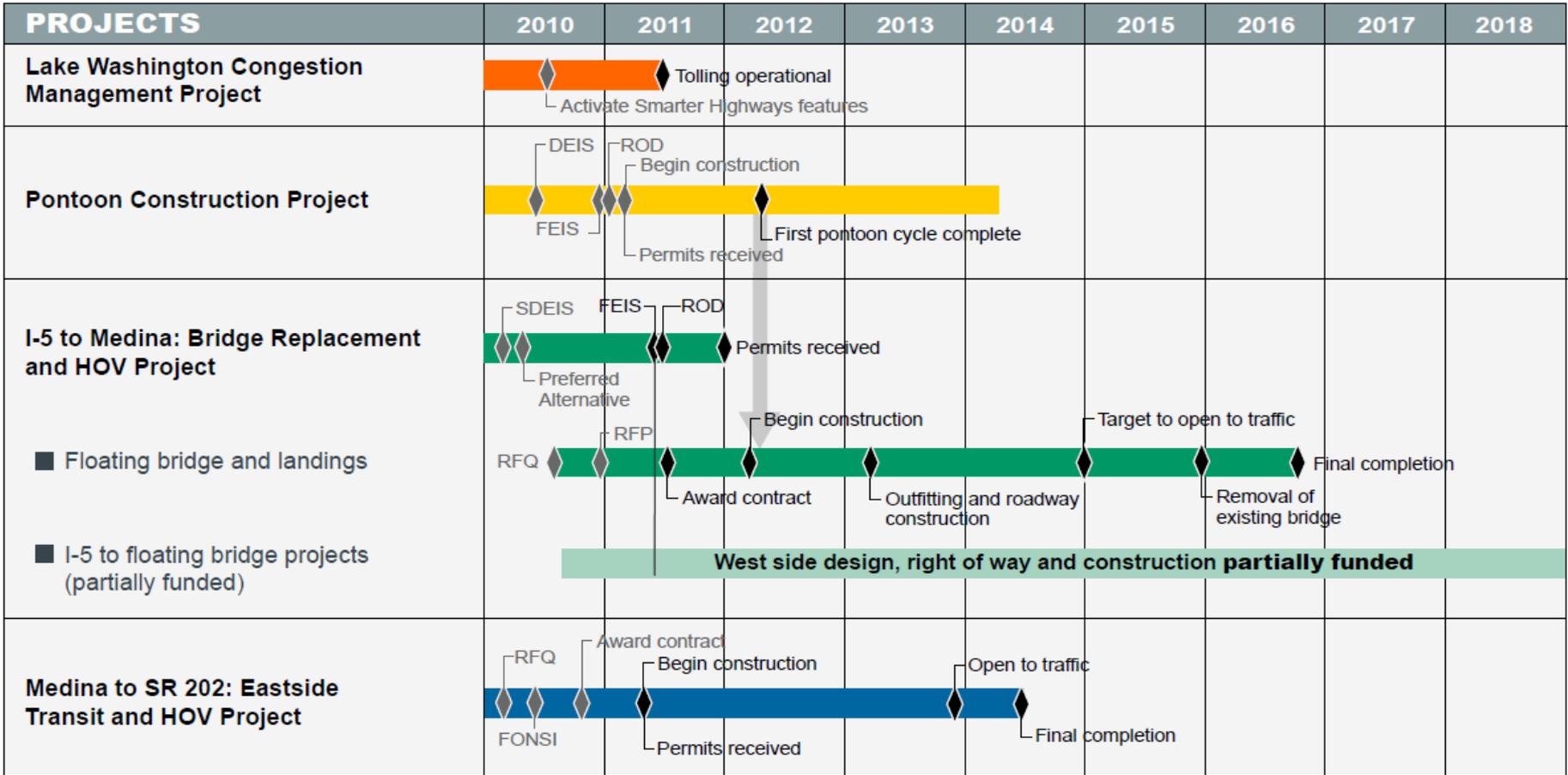
SR 520 program description

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

- I-5 to Medina: Bridge Replacement and HOV Project** – Replaces the SR 520 floating bridge and landings, and interchanges and roadway between I-5 and the eastern shore of Lake Washington.
- Medina to SR 202: Eastside Transit and HOV Project** – Completes and improves the transit and HOV system from Evergreen Point Road in Medina to the SR 202 interchange in Redmond.
- Lake Washington Congestion Management Project** – Implements tolls on the existing SR 520 floating bridge, and activates Smarter Highways features from I-5 to I-405.
- Pontoon Construction Project** – Advances pontoon construction to restore the floating section of the SR 520 bridge in the event of a catastrophic failure and to store those pontoons until needed.

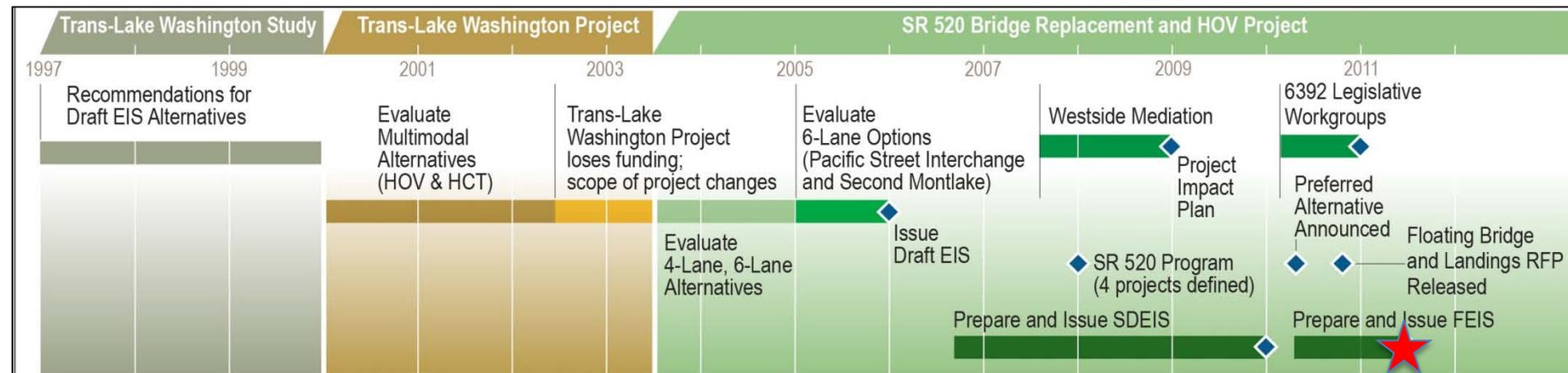


SR 520 program schedule



UPDATED: May 16, 2011

Final Environmental Impact Statement (FEIS): Project timeline



- Final EIS available online: June 9, 2011
- Final EIS Notice of Availability published in Federal Register: June 17, 2011

FEIS: Topics analyzed

- Construction techniques and activities (analyzed for all disciplines)
- Transportation
- Land use and economic activity
- Social elements (including environmental Justice)
- Recreation (including Section 4(f) and Section 6(f))
- Visual quality
- Cultural resources (including Section 106)
- Noise
- Air quality
- Energy and greenhouse gases
- Water resources
- Ecosystems
- Geology and soils
- Hazardous materials
- Navigation
- Indirect and cumulative Impacts



FEIS: Council comments incorporated

- ✓ Designed the corridor to accommodate no more than six-lanes.
- ✓ Reduced width of Portage Bay Bridge
- ✓ Located urban interchange at Montlake
- ✓ Expanded the lid at Montlake
- ✓ Provided dedicated transit/HOV lane on Montlake Boulevard
- ✓ Eliminated Arboretum ramps
- ✓ Lowered height of the floating bridge
- ✓ Began planning for the implementation of Arboretum traffic management and calming
- ✓ Ensured the new bridge is designed to accommodate future light rail
- ✓ Provided funds for Montlake Triangle Project
- ✓ Set triggers based for determining necessity of Second Montlake Bridge

FEIS: Preferred alternative key features

- A six lane corridor with four general purpose lanes, a new transit/HOV lane in each direction, and a new bicycle/pedestrian path.
- Improved transit connections and travel times.
- Accommodation of future light rail.
- Improved bicycle and pedestrian trail connections.
- Landscaped lids that reconnect neighborhoods.
- Noise reduction measures.
- Improved stormwater treatment.
- Park enhancements and new and restored wetland and aquatic habitat.

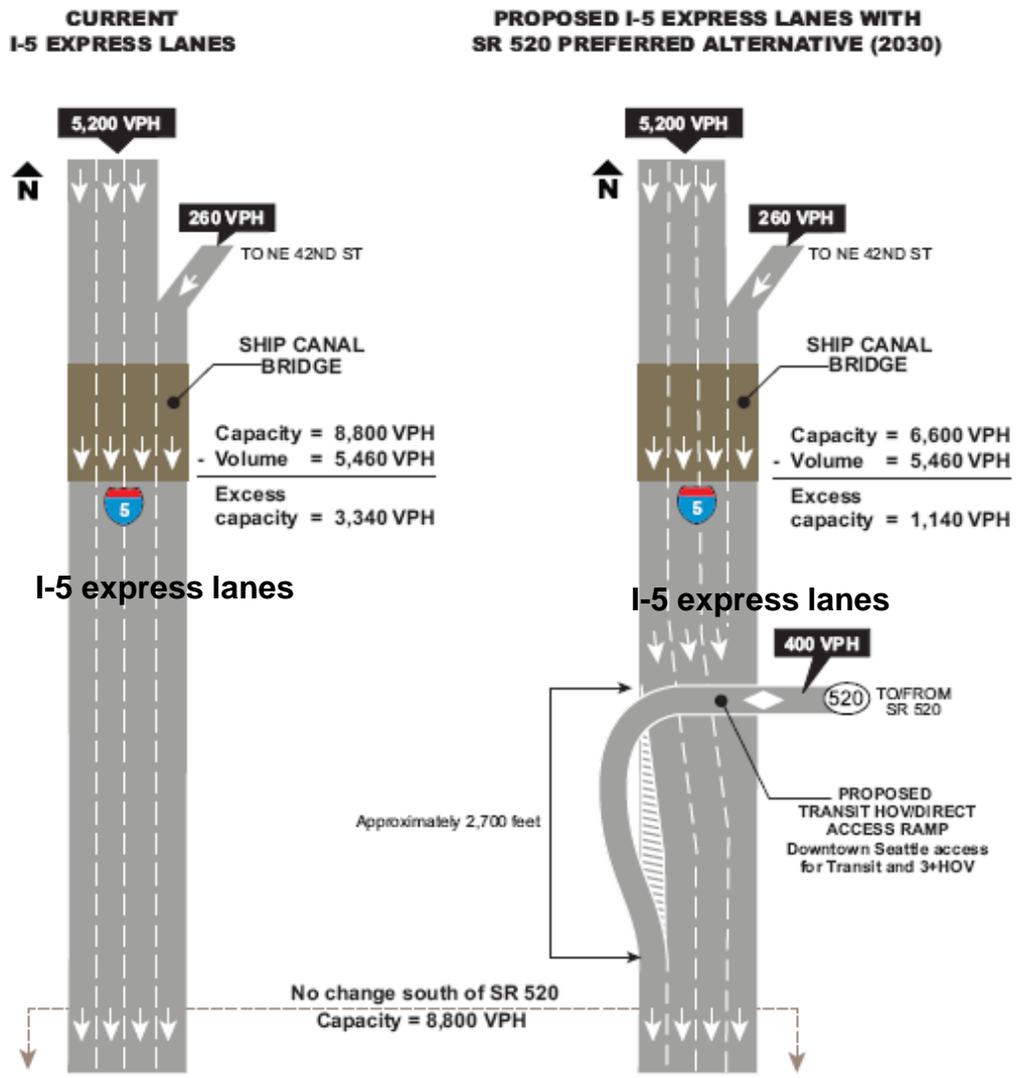


Preferred alternative: I-5 interchange

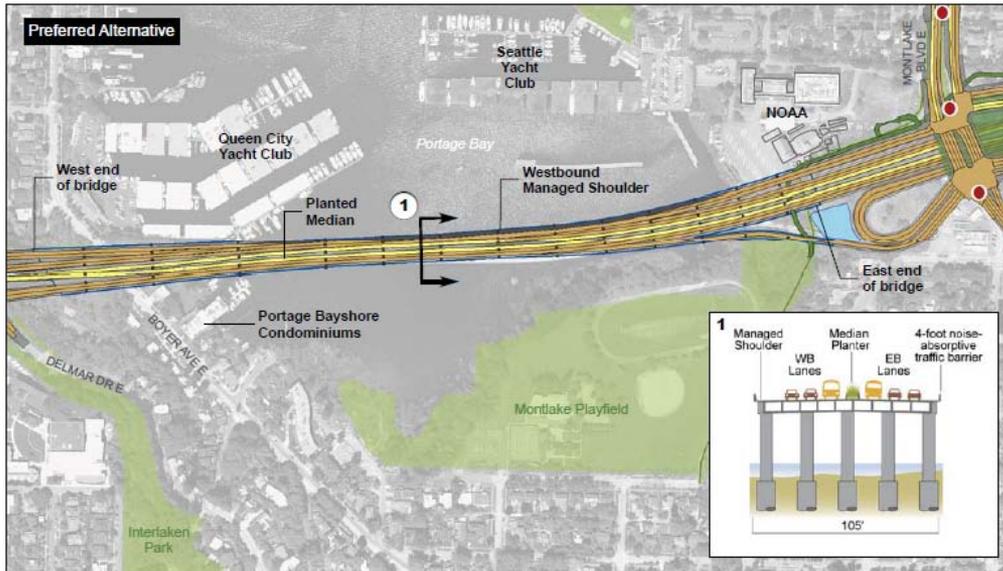


- General-purpose lane (SR 520)
- General-purpose lane (local)
- HOV/transit lane
- On- and off-ramp
- Bicycle and pedestrian path

Preferred alternative: I-5 express lane configuration



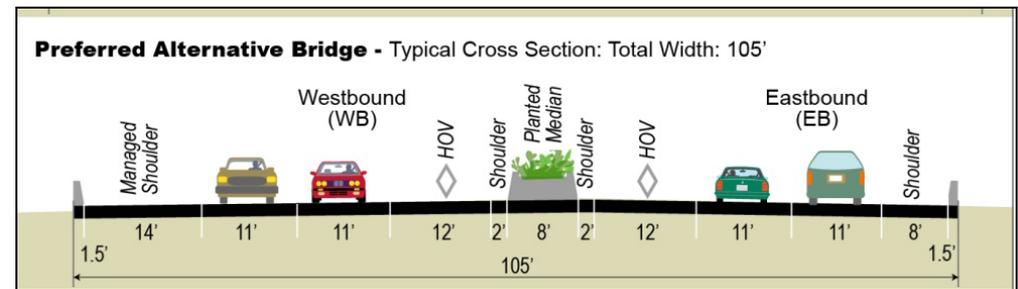
Preferred alternative: Portage Bay area



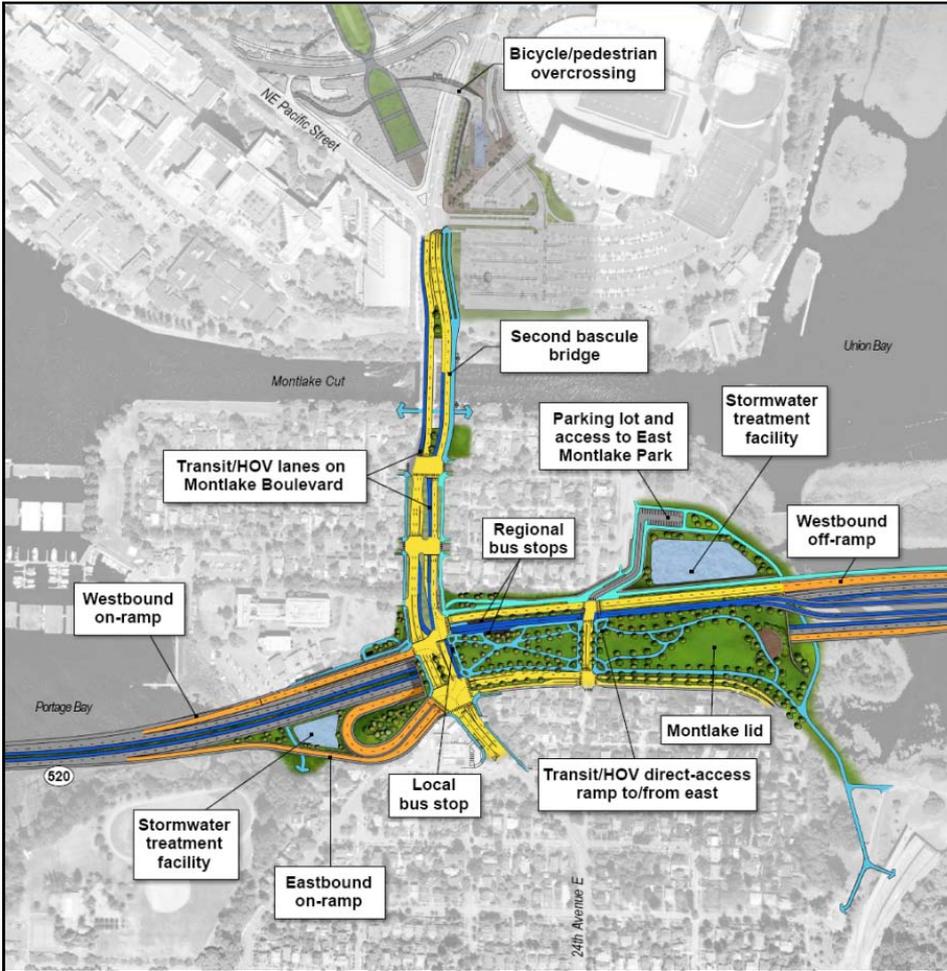
Council comments incorporated:

- ✓ Reduce the width
- ✓ Eliminate auxiliary lane and replace with a managed shoulder
- ✓ Support creating a boulevard design
- ✓ Keep working with the Seattle Design Commission and SDOT as the design refinements continue

- Columns
- Signalized intersection
- ▬ General-purpose lane
- ▬ HOV, direct access, and/or transit-only lanes
- ▬ Existing regional bicycle/pedestrian path
- ▬ Westbound managed shoulder
- ▬ Stormwater treatment facility
- ▬ Lid or landscape feature
- ▬ Pavement



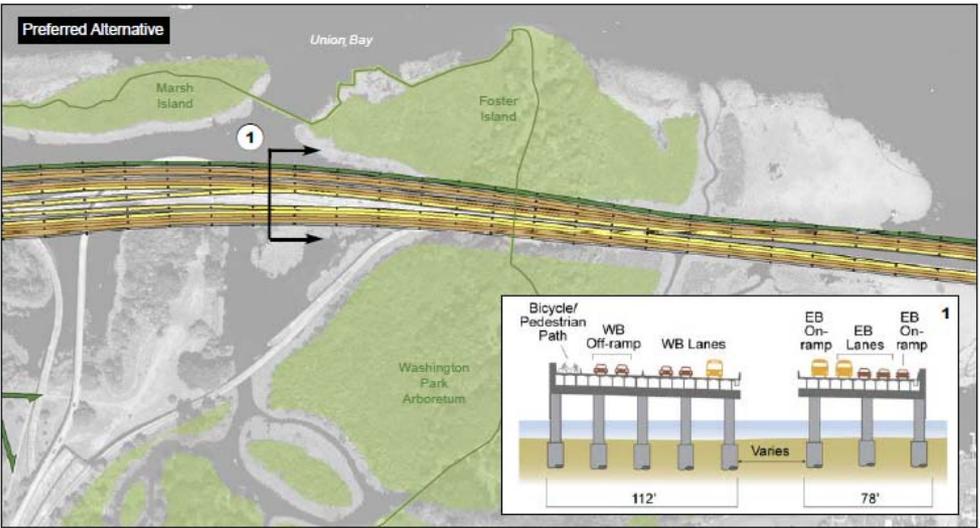
Preferred alternative: Montlake area



Council comments incorporated:

- ✓ Locate transit/HOV ramps at 24th Avenue E. rather than at Montlake Boulevard
- ✓ A new lid over SR 520, between Montlake Boulevard and 24th Avenue E
- ✓ Set triggers for determining necessity of bascule bridge
- ✓ Provide dedicated transit/HOV lanes on Montlake Boulevard and priority signals for transit
- ✓ Enhance the streetscape along Montlake Boulevard
- ✓ Support creating a northbound Montlake bus stop on the new lid.
- ✓ Direct project funds to the Montlake Triangle Project

Preferred alternative overview: West approach area



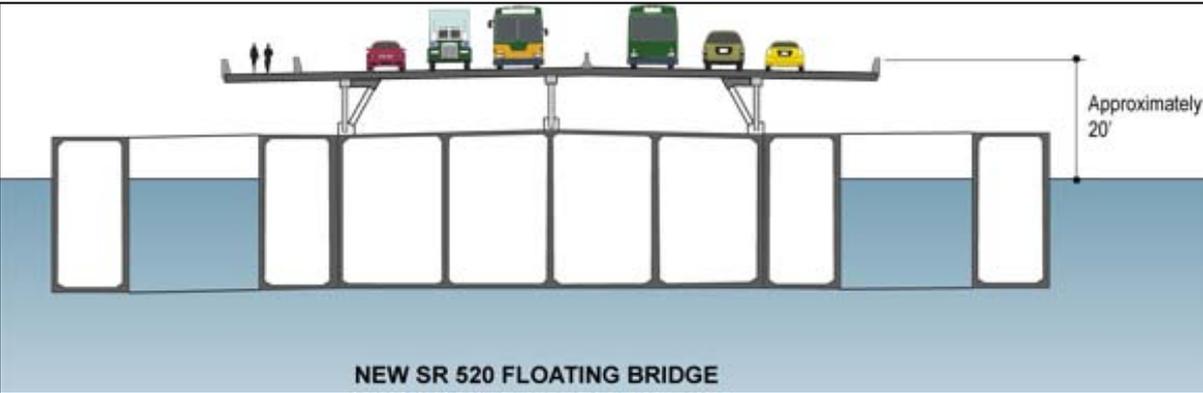
Council comments incorporated:

- ✓ Split the bridge corridor and narrow shoulders through the Arboretum
- ✓ Ensure new bridge is designed and constructed to accommodate high capacity transit



- Columns
- Existing regional bicycle/pedestrian path
- ▬ General-purpose lane
- ▬ HOV, direct access, and/or transit-only lanes
- ▬ Proposed bicycle/pedestrian path
- ▬ Lid or landscape feature
- ▬ Stormwater treatment facility
- ▬ Pavement

Preferred alternative: Floating bridge and landings



Council comments incorporated:

- ✓ Minimize the height of the cross-lake bridge deck
- ✓ Ensure new bridge is designed and constructed to accommodate high capacity transit

Summary of findings: Environmental protections

Achieves greatest overall environmental benefits compared to other alternatives studied:

- Has the lowest park impacts.
- Provides a new approximately 4-acre public park and adds eight acres of new public open space on the lids.
- Affects less wildlife habitat.
- Reduces noise along the corridor.
- Minimizes impacts to the Arboretum and Native American traditional cultural properties.



Washington Park Arboretum

Summary of findings: Recreation and parks

- The preferred alternative has the lowest park impacts.
- Effects to: Bagley viewpoint, Montlake Playfield (submerged lands and undeveloped area), East Montlake Park, Mc Curdy Park, Arboretum, UW Open Space

Proposed mitigation:

- Funding a new park on the Lake Washington Ship Canal.
- Funding for the Arboretum improvements as outlined in Memorandum of Understanding and a potential land conveyance.
- Funding for the Arboretum multi-use trail.
- Restoration of all park properties affected by construction.
- Replacement of the Bagley Viewpoint on the 10th and Delmar lid.



Washington Park Arboretum

Summary of findings: Cultural Resources

- The project area includes a number of historic and cultural resources.
- Section 106 of the NHPA requires agencies to consider the protection of historic and cultural resources when undertaking Federal projects.
- Proposed mitigation is described in the Section 106 Programmatic Agreement signed by:
 - WSDOT
 - Advisory Council of Historic Preservation
 - Federal Highway Administration
 - US Army Corps of Engineers
 - National Oceanic and Atmospheric Administration
 - Washington State Historic Preservation Officer
 - 20 consulting parties, including the city of Seattle, with a demonstrated interest in cultural resources



*Historic home in the Roanoke Park
Historic District*



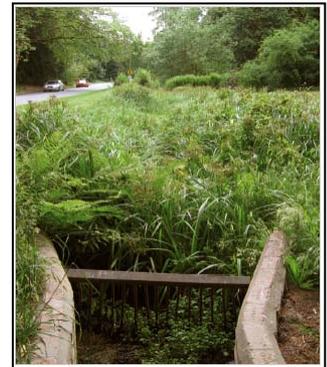
*Historic home in the Montlake
Historic District*

Summary of findings: Noise

- Once the project is constructed, traffic noise will be reduced.
- WSDOT is incorporating noise-reducing elements.
- Other project design elements may further reduce noise.
- Because of the noise reductions achieved by design changes, noise walls are not proposed in the Seattle portion of the project area.

Summary of findings: Ecosystems

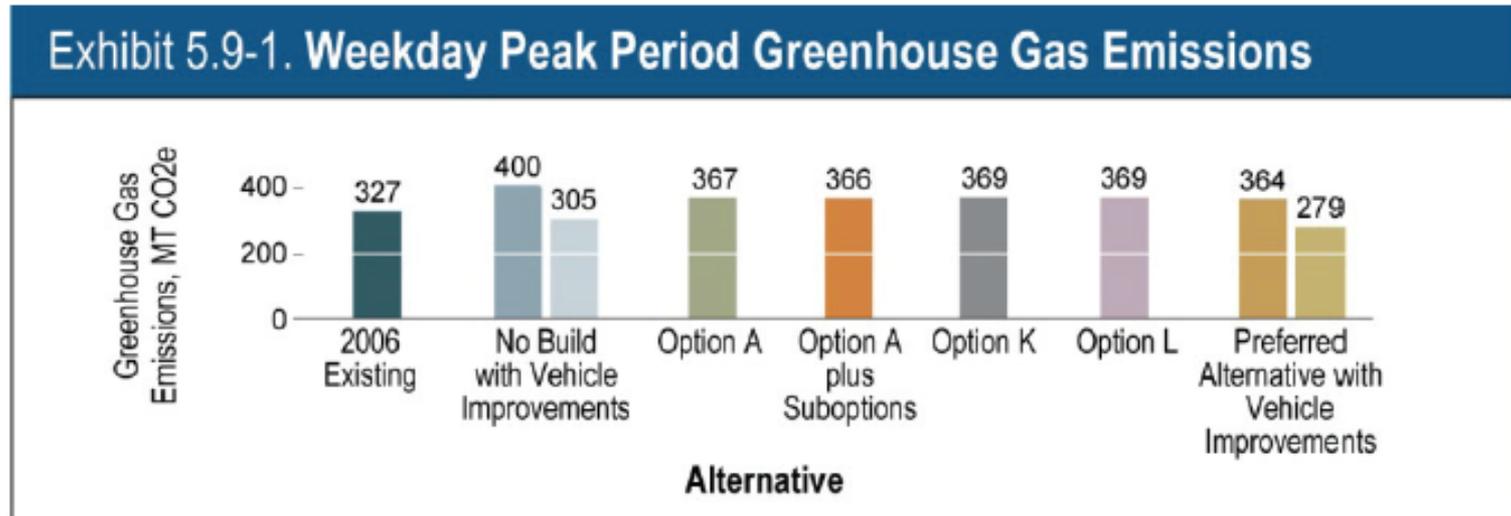
- The preferred alternative is the Least Environmentally Damaging Practicable Alternative under the Corps of Engineers' wetland regulations.
- Mitigation: Compensatory mitigation for effects to wetlands is required. Wetland and aquatic mitigation is proposed at the following locations:
 - Washington Park Arboretum in Seattle
 - WSDOT Peninsula
 - Union Bay Natural area south of Arboretum
 - Magnuson Park in Seattle
 - Cedar River floodplain in King County
 - Bear Creek in Redmond
 - Taylor Creek near south Lake Washington
 - Under the SR 520 east approach in Medina
 - Seward Park in Seattle
 - South Lake Washington



Arboretum Creek.

Summary of Findings: Energy and Greenhouse Gases

- Reduces annual vehicle miles traveled on SR 520 by five to ten percent and greenhouse gas emissions by almost 10 percent.



Summary of findings: Transportation

- Completes the transit/HOV system.
- Adds new commuting options.
- Accommodates bus rapid transit.
- Moves more people daily fewer vehicles.
- Reduces traffic volumes through the Arboretum.



Summary of findings: Transportation

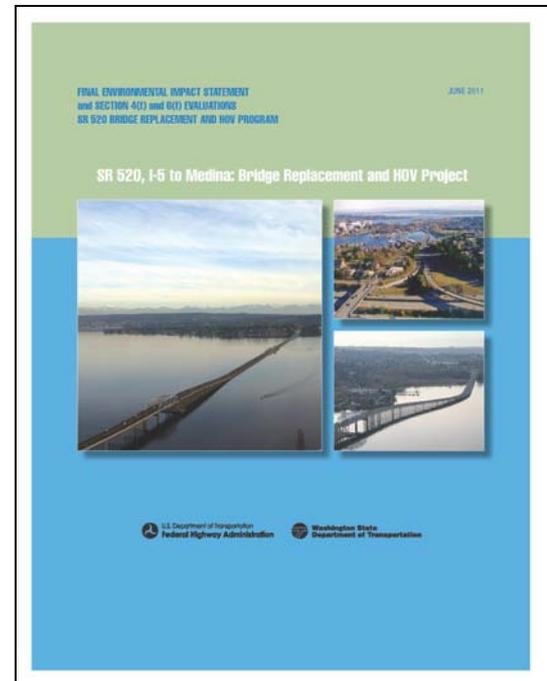
Drivers, buses and carpools traveling on key regional routes will get to their destinations faster when this project is complete. The FEIS shows:

- **SR 520 corridor:** Up to 25 minutes faster on SR 520 between I-5 and Redmond.
- **I-5 corridor:** Up to 24 minutes faster on I-5 between I-90 and N.E. 45th Street.
- **Montlake Boulevard:** Up to 12 minutes faster on local streets in the Montlake area



How can the public view the FEIS?

- SR 520 program website: www.wsdot.wa.gov/projects/sr520bridge.
- Local public libraries in the greater Seattle area.
- Call WSDOT at 206-770-3500 to request a free executive summary and DVD or to purchase a printed copy of the document for \$60.



Implementation: Montlake Triangle Project

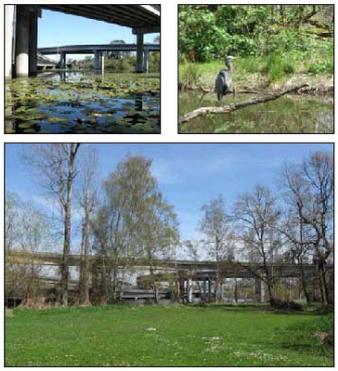


Implementation: Arboretum mitigation projects

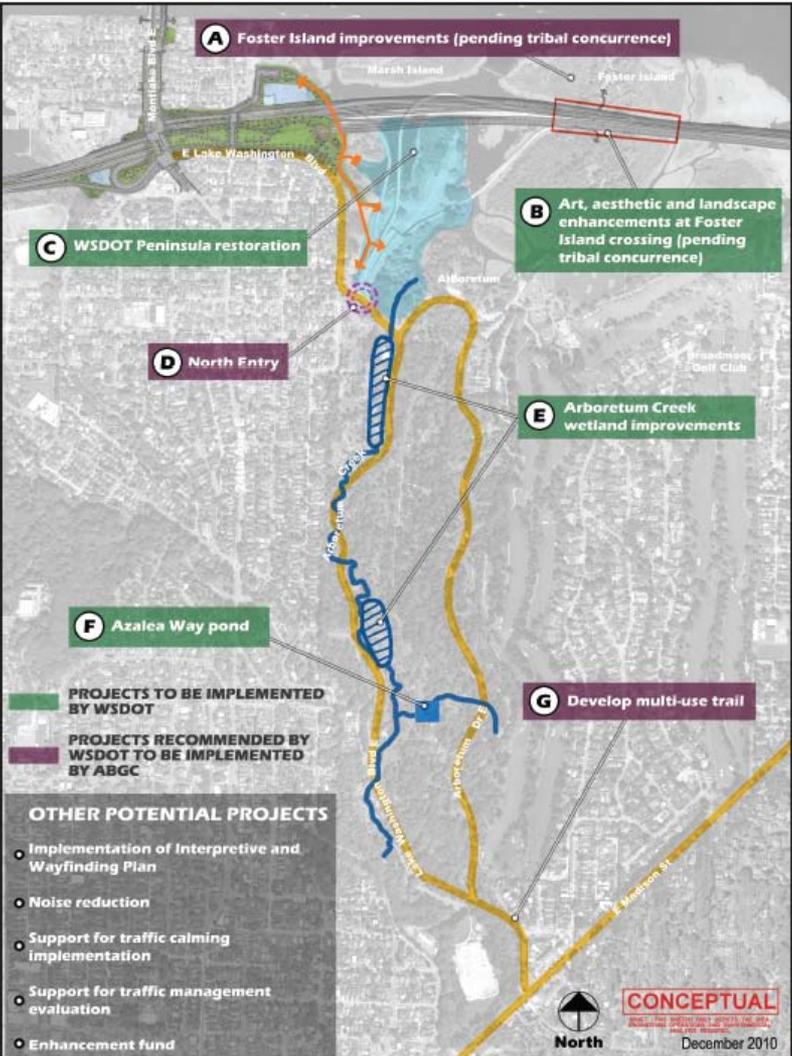
Washington State Department of Transportation
SR 520 Bridge Replacement and HOV Program
 I-5 to Modina: Bridge Replacement and HOV Project

Washington Park Arboretum Mitigation Plan

December 22, 2010



Washington State Department of Transportation



Projects identified in the 2010 Arboretum Mitigation Plan.

Implementation: Arboretum traffic calming

- WSDOT is working in partnership with SDOT to implement traffic calming through the Arboretum.



Potential traffic calming strategies

Implementation: Neighborhood traffic management planning

- WSDOT is launching an effort in partnership with SDOT on a neighborhood traffic management plan for the Montlake Boulevard and 23rd Avenue corridor.



Traffic on Montlake Boulevard

Implementation: Second Bascule Bridge triggers

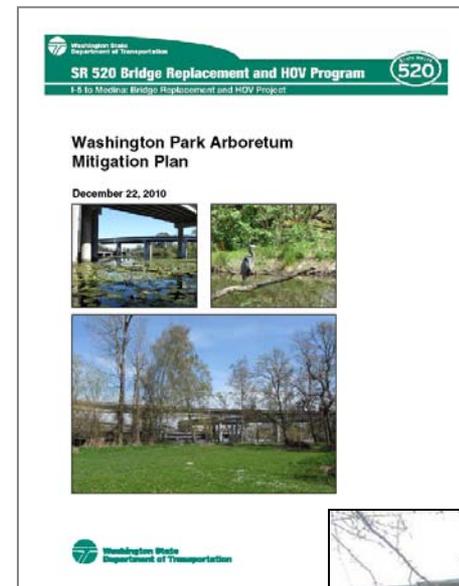
- City of Seattle is leading an effort with WSDOT to establish three separate metrics to trigger the construction of the second bascule bridge.
 1. Travel time
 2. Shared use path levels of service
 3. SR 520 operations.



Existing Montlake Bascule Bridge

Agreements

- ✓ Arboretum Memorandum of Understanding
- ✓ Section 106
 - Arboretum Traffic Calming
 - Parks and Recreation staff and Arboretum scoping project services agreement
 - Department of Planning and Development staff project services agreement
 - Permits (Federal, State, and Local)



Arboretum Mitigation Plan



Broadway Avenue East, Betterton-Hillman House, Roanoke Park Historic District

Next steps

- I-5 to Medina Project
- Public involvement
- City of Seattle coordination



Questions?

For more information:

Visit: www.wsdot.wa.gov/projects/SR520Bridge

E-mail: SR520Bridge@wsdot.wa.gov

Call: 1-888-520-NEWS (6397)

Mail: Washington State Department of Transportation
SR 520 Bridge Replacement and HOV Program
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Seattle, WA 98101