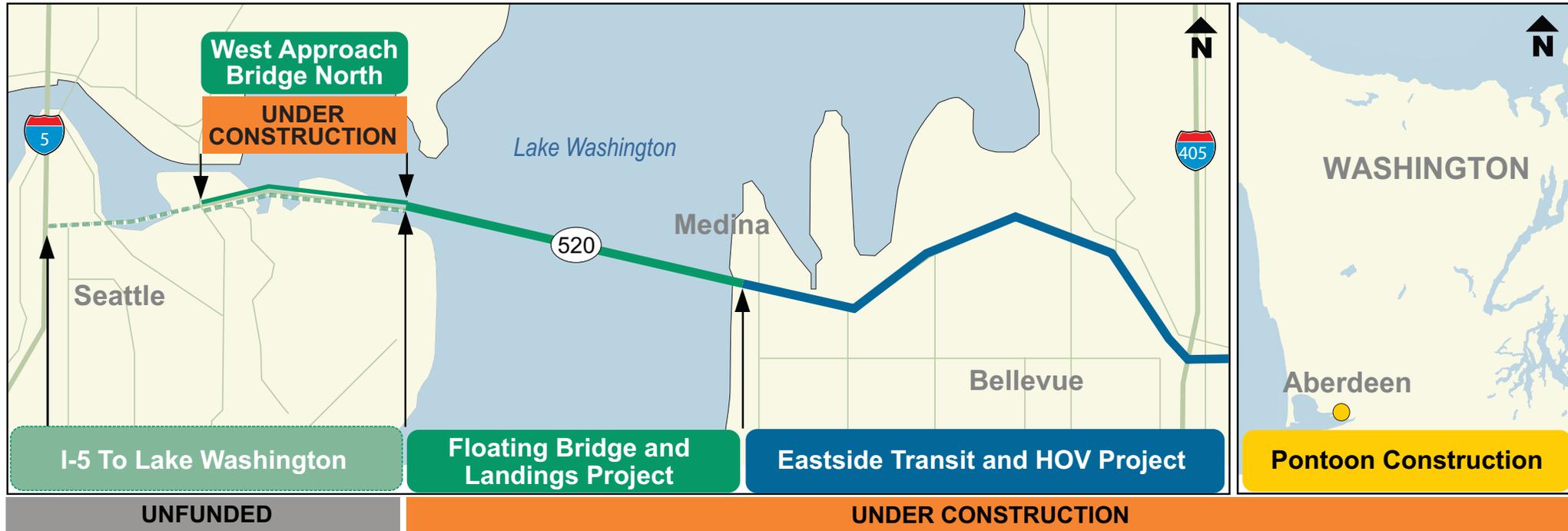


SR 520 Program overview and schedule



Eastside Transit and HOV Project: Completion 2014

Pontoon Construction in Aberdeen: Completion 2015

New Floating Bridge: Completion Spring 2016

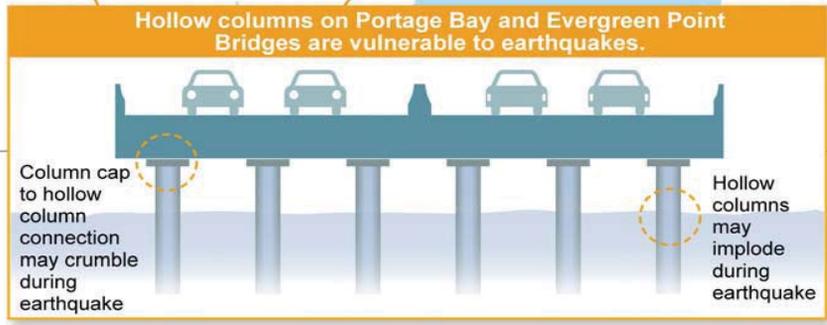
West Approach Bridge North: Completion Summer 2017

Remaining west side corridor: Depends on additional funding

SR 520 structural vulnerability



A torn cable joint found during a routine inspection in February 2006. The cables connect the floating bridge pontoons to their underwater lakebed anchors.



The inside of a hollow bridge support column that was damaged by a barge in 1999.

SOURCE: Photos from <http://www.wsdot.wa.gov/Projects/SR520Bridge/Photos/Damage.htm>.



The SR 520 floating bridge and structures are nearing the end of their design lives and are at risk of catastrophic failure.

SR 520 Program costs and funding

Updated: April 2014

SR 520 program cost estimate <i>2009 legislative budget cap: \$4.65 billion</i>		\$4.3 B
Funding received to date <i>Based on 2014 Legislative authorization</i>		\$2.9 B
State funding (Nickel and TPA)	\$0.58 B	
Federal funding	\$0.2 B	
SR 520 Account (tolling and future federal funds)	\$1.65 B	
TIFIA loan	\$0.30 B	
Deferred sales tax	\$0.16 B	
Unfunded need <i>Based on 2012 CEVP cost estimate*</i>		\$1.4 B

* Note: WSDOT is currently conducting the next CEVP cost estimate update, with results expected in late 2014.



SR 520 job creation and construction around the state

SR 520 construction activities are taking place at multiple locations in Washington state.



Grays Harbor

- Pontoon construction
- Pontoon moorage
- Casting basin construction

340 direct jobs
June 2014

Port of Tacoma

- Pontoon construction
- Pre-cast concrete elements
- Pontoon moorage and outfitting

183 direct jobs
June 2014

Kenmore

- Pre-cast concrete elements
- Deck sections
- Anchors

72 direct jobs
June 2014



Lake Washington

- Bridge assembly
- Bridge Maintenance Facility
- East and West Approach connections
- Decommission existing bridge

311 direct jobs
June 2014

Eastside

- Highway widening
- Culvert installation
- Lid construction

484 direct jobs
June 2014



West Connection Bridge

- Bridge assembly

70 direct jobs
June 2014

TOTAL

1,460 direct jobs
June 2014

In addition to direct employment listed above, SR 520 construction creates opportunities for vendors, suppliers and other services like restaurants and retail.

SR 520 Bridge Replacement and HOV Program

Medina to SR 202: Eastside Transit and HOV Project



Medina to SR 202: Eastside Transit and HOV Project

We are moving forward with transit and HOV improvements on the Eastside, including:

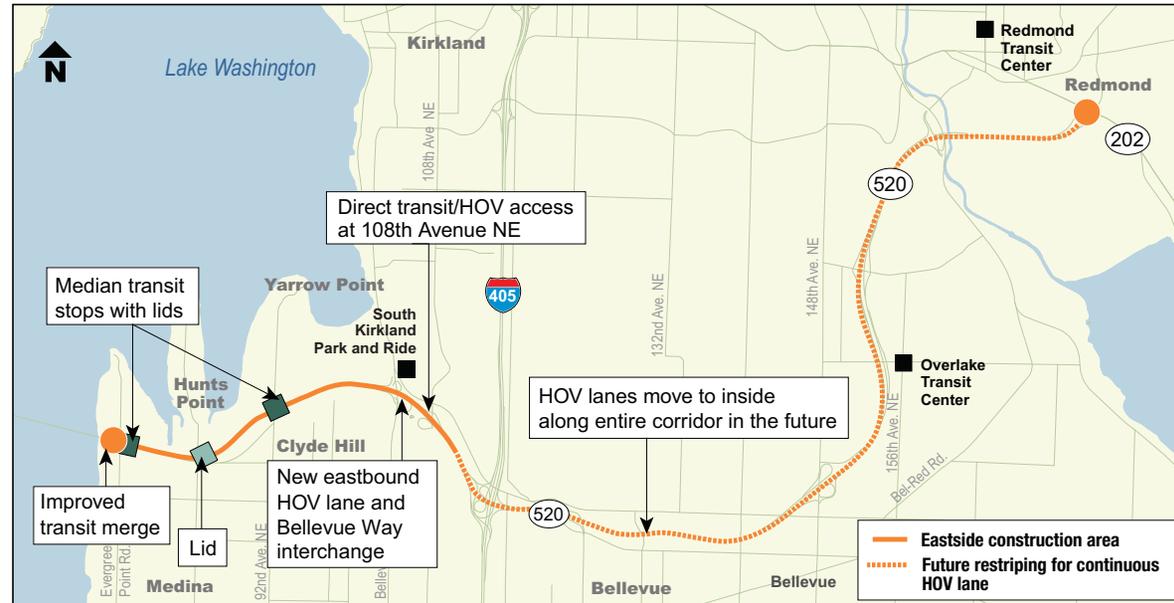
- Transit/HOV lanes in both directions through the entire Eastside corridor.
- Wider, safer shoulders.
- Median transit stops at Evergreen Point Road and 92nd Avenue Northeast.
- Direct-access ramp to and from 108th Avenue Northeast for carpools and transit.
- Regional bicycle and pedestrian path with connections to local trails.

Environmental and community enhancements:

- Wider, fish-friendly culverts.
- Noise reduction techniques.
- Stormwater treatment and detention facilities.
- New lids at Evergreen Point Road, 84th Avenue Northeast and 92nd Avenue Northeast.

Project schedule:

- Construction start: Spring 2011
- Open to traffic: 2014



A bus picks up passengers at the new Evergreen Point Road median transit stop in Medina, which opened in summer 2014.



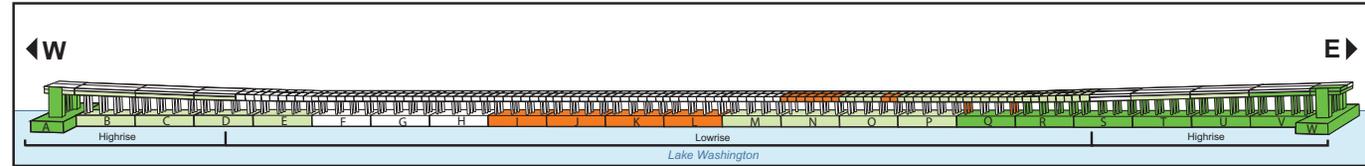
Crews pave the the new alignment of eastbound SR 520 during a weekend closure in summer 2014.

Floating bridge and pontoon construction



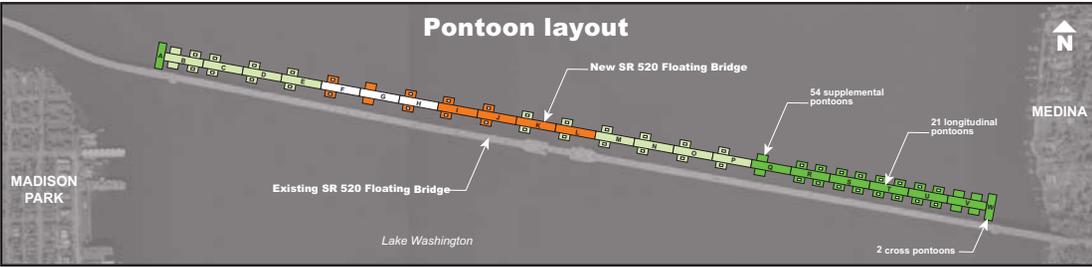
○ Floating bridge construction sites

Floating bridge assembly



GRAPHIC KEY AND FACTS

- 776 low-rise roadway deck sections
 - 23 high-rise roadway deck spans
 - 331 girders
 - 772 columns
 - 21 longitudinal pontoons + 2 cross pontoons
- In Final Location
■ Construction Complete
■ Under Construction
■ Future Construction



- Updated: Sept. 4, 2014**
- Current number of pontoons on Lake Washington: 50
 - Total number of pontoons constructed to date: 60
 - Pontoons currently under construction: 14
- Low-rise roadway deck includes pre-cast deck panels being constructed in Kenmore.
- 233 out of 776 pre-cast deck panels have been constructed.
- High-rise roadway deck includes girders and cast-in-place deck.
- 1 out of 23 cast-in-place deck spans have been constructed.
 - 201 out of 331 girders have been constructed. 61 of 331 have been placed.
- The number of columns shown is a representation of the total number of columns.
- 164 out of 772 columns have been constructed.

Note: not to scale, for illustrative purposes only



View of floating bridge assembly on Lake Washington, looking northeast.



Aerial view of floating bridge construction on Lake Washington, looking south.

SR 520 corridor design history



OTHER DESIGN RESOURCES INFORMING SR 520 I-5 TO MEDINA BRIDGE REPLACEMENT AND HOV PROJECT



Seattle Parks Foundation
Bands of Green
(2002)



City of Seattle
Bicycle Master Plan
(2007)



City of Seattle
Pedestrian Master Plan
(2009)



Washington Park Arboretum
North Entry Conceptual Design
(2011)



City of Seattle
Neighborhood Plans
(ongoing)

SR 520 mitigation overview map

Note: these mitigation materials show projects that have been constructed as well as others where the layout shown is conceptual and has not been finalized. For projects that are tied to the unfunded portion of the SR 520 program, design will begin once funding is secured.

1 Bryant Building



Parks mitigation located on the northwest end of Portage Bay, north of SR 520.

2 Montlake Triangle



Construction mitigation located just north of the Montlake Cut and SR 520, near the University of Washington.

Graphic credit: University of Washington

3 Washington Park Arboretum



Parks mitigation located in the Arboretum, west of the SR 520 floating bridge.

4 WSDOT Peninsula



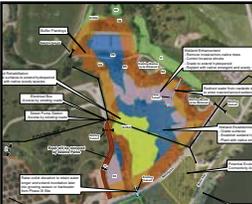
Wetland mitigation located in the Arboretum, near the unused R.H. Thomson ramps

5 Union Bay Natural Area

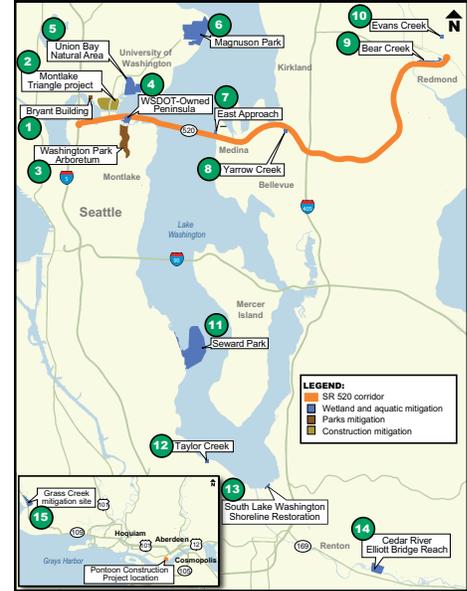


Wetland mitigation located on the north end of Union Bay, west of the SR 520 floating bridge.

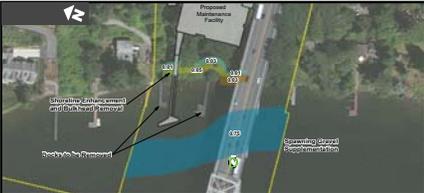
6 Magnuson Park



Wetland mitigation and aquatic located north of SR 520 near Sand Point, on the west end of Lake Washington.



7 East Approach



Aquatic mitigation located at the east end of the SR 520 floating bridge on Lake Washington.

8 Yarrow Creek



Wetland mitigation located just south of SR 520 on the Eastside.

9 Bear Creek



Aquatic mitigation located north of SR 520, near Redmond.

10 Evans Creek



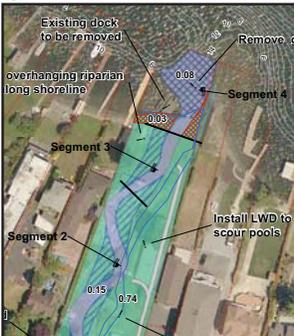
Wetland mitigation located north of SR 520, near Redmond.

11 Seward Park



Aquatic mitigation located near the south end of Lake Washington.

12 Taylor Creek



Aquatic mitigation located in south Seattle, near Lake Washington

13 South Lake Washington shoreline restoration



Mitigation located on the south end of of Lake Washington

14 Cedar River Elliott Bridge Reach



Wetland mitigation and aquatic located southeast of Lake Washington, near Renton.

15 Grass Creek



Wetland mitigation located near Grays Harbor, in southwest Washington.

Building SR 520 in Seattle

September 2014

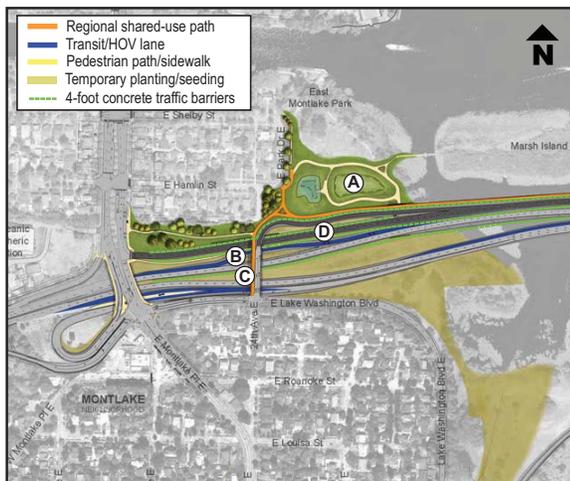
West Approach Bridge North Project

The existing west approach bridge connects the floating bridge to the Montlake interchange. The hollow columns supporting the bridge are vulnerable to a catastrophic earthquake, and the four-lane roadway has narrow shoulders and lacks transit/HOV lanes. The new west approach bridge will be built as two separate structures, a north bridge and a south bridge. At this time, WSDOT is funded to build the north half of the west approach bridge.

When complete, the West Approach Bridge North will connect westbound traffic from the floating bridge to Montlake. It will also feature a new 14-foot-wide regional bicycle/pedestrian path and a dedicated transit/HOV lane.

Eastbound traffic will continue to use the existing west approach structure until funding is provided for the south half of the new west approach bridge.

Construction is scheduled to start in fall 2014 with the new West Approach Bridge North targeted to open to traffic in summer 2017.



Bicyclists and pedestrians will enjoy a 14-foot-wide shared-use path.

LEGEND:

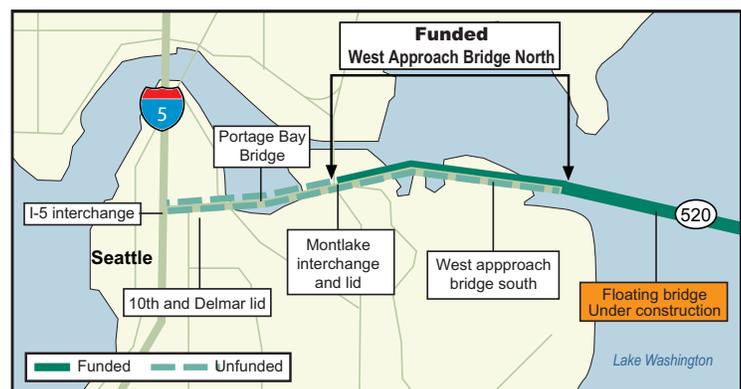
- A New stormwater treatment facility
- B Relocated Montlake freeway transit stop
- C New 24th Avenue East off-ramp and shared-use path
- D Two westbound lanes to Montlake Boulevard

What's next in Seattle?

WSDOT is continuing to seek funding to complete the remaining project elements in Seattle:

- West approach bridge (south half)
- Montlake interchange and lid
- Portage Bay Bridge
- 10th and Delmar area lid
- I-5 interchange

As funding is received, WSDOT will continue to work with the city of Seattle, surrounding neighborhoods and the traveling public to finalize design and construct the remaining portions of the corridor. Construction phasing will be determined as funding is received.



Program contact information

For more information:

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

Email: SR520Bridge@wsdot.wa.gov

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

Address: SR 520 Bridge Replacement and HOV Program
999 3rd Avenue, Suite 900
Seattle, WA 98104

**Sign up here to receive
construction email updates!**

Montlake Historic District Survey and Nomination for the National Register of Historic Places

WSDOT is conducting a survey and inventory of homes in the Montlake neighborhood, submitting a nomination for the neighborhood to be listed on the National Register of Historic Places, and involving the community in this process. WSDOT is completing this work as a mitigation commitment requested by, and in coordination with the Montlake Community Club.

Why is Montlake historic?

The Montlake Historic District is historically significant as a cohesive collection of intact architectural styles that represent the development of early 20th century Seattle. This includes the distinct design styles that typified this period, including Craftsman, Tudor, and Colonial Revival.



Craftsman style house



Modest vernacular house



Tudor Revival house

Anticipated timeline for District Nomination:

- **Fall 2014:** Anticipated First Draft of National Register of Historic Places Historic District nomination report.
- **Winter 2015:** Advisory Council on Historic Preservation Meeting/Governor's Advisory Council Review and Recommendation (three review meetings per year).
- **Winter/Spring 2015:** National Park Service 45-60 day review period.
- **Spring 2015:** Listing in the National Register.

What are some advantages of being listed in the National Register?

- Recognition and celebration of community history and architectural resources.
- Increased awareness of local design patterns, which could be reflected in future infill development.
- Potentially increased tourism.
- Federal Income Tax Credit (up to 20%) for income-producing buildings (owner-occupied rental properties do not qualify).
- Potentially increased resale value.

What does it NOT mean to be listed in the National Register?

- Listing places no obligations on private property owners.
- Listing does not trigger Seattle Landmark or local district status. There are no restrictions on the use, treatment, transfer, or disposition of private property.
- Listing does not lead to public acquisition or require public access.
- A property will not be listed if, for individual properties, the owner objects, or for districts, a majority of property owners object.

How will air quality be affected?

Air quality is expected to improve in the future primarily because of the introduction of cleaner fuels and more efficient vehicle engines.

How will air quality change as a result of the project?

- As was shared in the Final EIS, the Preferred Alternative is expected to result in fewer criteria pollutant emissions than today (see table at bottom).
- The project will meet air quality standards and will not cause or contribute to violations of the National Ambient Air Quality Standards.
- The Preferred Alternative results in less vehicle emissions than existing conditions and as compared to future “No Build” conditions because it will:
 - Encourage transit use through tolling and improved transit speed and reliability.
 - Encourage biking and walking by improving connections to existing regional and local bicycle and pedestrian trails.
 - Improve traffic flow and reduce congestion (vehicle idling and stop-and-go driving are major sources of transportation emissions).



By encouraging biking, walking, and transit use, the project will result in less vehicle emissions.

Do the refined design concepts change air quality effects?

- There will be no change to overall emissions expected compared to the Preferred Alternative.
- At Montlake lid portals, we expect lower pollutant concentrations because emissions will be distributed more uniformly, on average. Emissions will continue to be well below air quality standards.
- The vent stacks on the lid will no longer be needed.



Intersections modeled for air quality

LEGEND:

- Study intersection (SDEIS Options)
- ⊙ Study intersection (Preferred Alternative)
- Both of the above

Burden emissions analysis

Daily project emission of criteria pollutants (tons per day)

(Update to 2009 Discipline Report)

Alternative	VMT	CO	CO % of SIP Budget	VOCs	NOx	PM 10	PM 2.5
2008 Existing		222	9%	15.5	23.3	0.6	0.4
2008 Revised Existing	11,200,000	226	9%	15.1	23.5	0.6	0.4
2030 Revised No Build	13,100,000	166	7%	7.3	7.2	0.4	0.2
2030 Preferred Alternative	13,100,000	166	7%	7.2	7.1	0.4	0.2

Note: Emissions were calculated using the MOBILE6.2 emission factor for 30 miles per hour and the daily VMT from the Transportation Discipline Report (WSDOT 2009c). State Implementation Plan (SIP) inventory data are from 61 Federal Register (FR) 53323 (October 11, 1996), which was established through the year 2010. Pollutant emissions in ton/day should not be compared to NAAQS which are pollutant concentrations.

SR 520 noise effects and reduction measures

Noise levels with the refined design are expected to be comparable to the noise levels described in the project's final EIS document, and the project is expected to improve noise levels overall for the surrounding community compared to existing conditions.

What are the noise effects?

The Final EIS preferred alternative improved noise levels by:

- Providing 4-foot-high traffic barriers along the corridor
- Reducing the speed limit from Montlake to the I-5 interchange
- Including noise-reduction features like encapsulated bridge joints, noise absorptive materials at lid portals, and quieter pavement

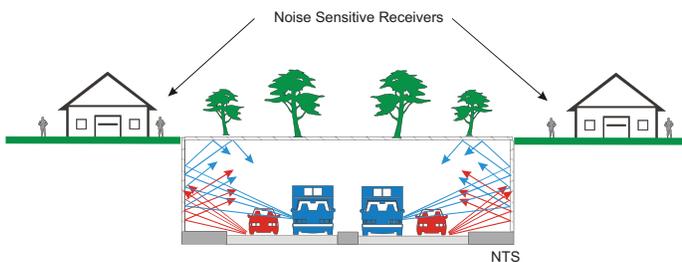
What else can WSDOT do to reduce noise effects?

During final design of refined project concepts, WSDOT will explore additional tools to achieve the same level of noise reduction. Examples include:

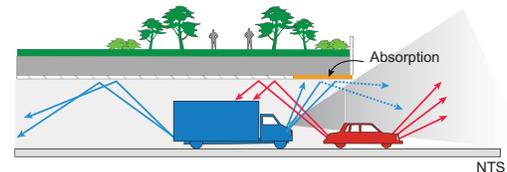
- Incorporating and modifying noise-reducing landscaping features like berms
- Adding noise-absorptive material to portions of retaining walls

Typical noise reduction

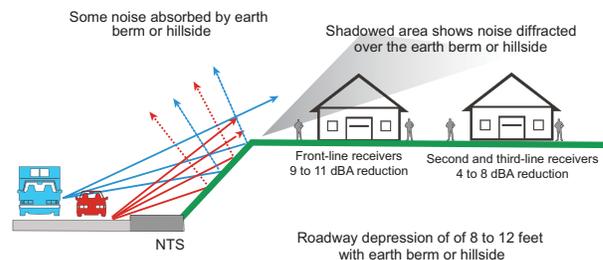
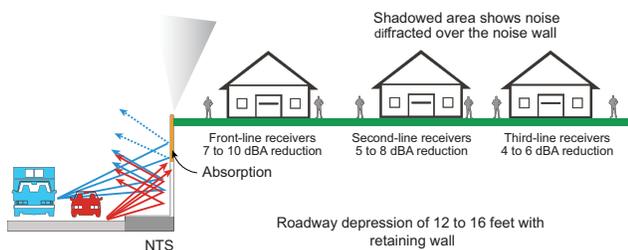
Depressed Corridor with Lid



Lid Portal with Noise Absorption



Above-grade receiver



NTS = not to scale