SR 520 Bridge Replacement and HOV Program

Floating Bridge & Landings Project: West Connection Bridge

Dave Becher, P.E.
Project Director

John Chi, P.E.
Project Engineer

Lynn Peterson
Secretary of Transportation

Julie Meredith, P.E.
SR 520 Program Director

Washington State Department of Transportation

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Seattle, WA
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Presentation agenda

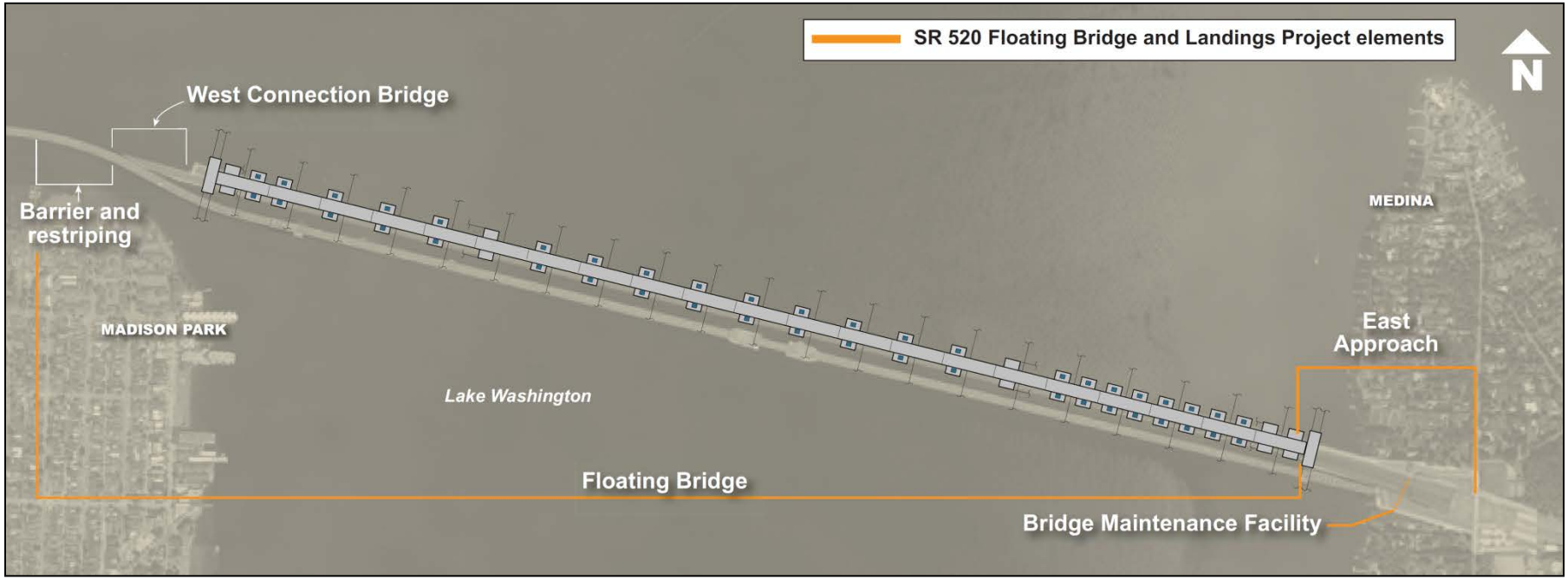
- Program overview
- Floating Bridge and Landings Project
- West Connection Bridge project overview
- Construction activities and possible effects
- How to stay informed

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.

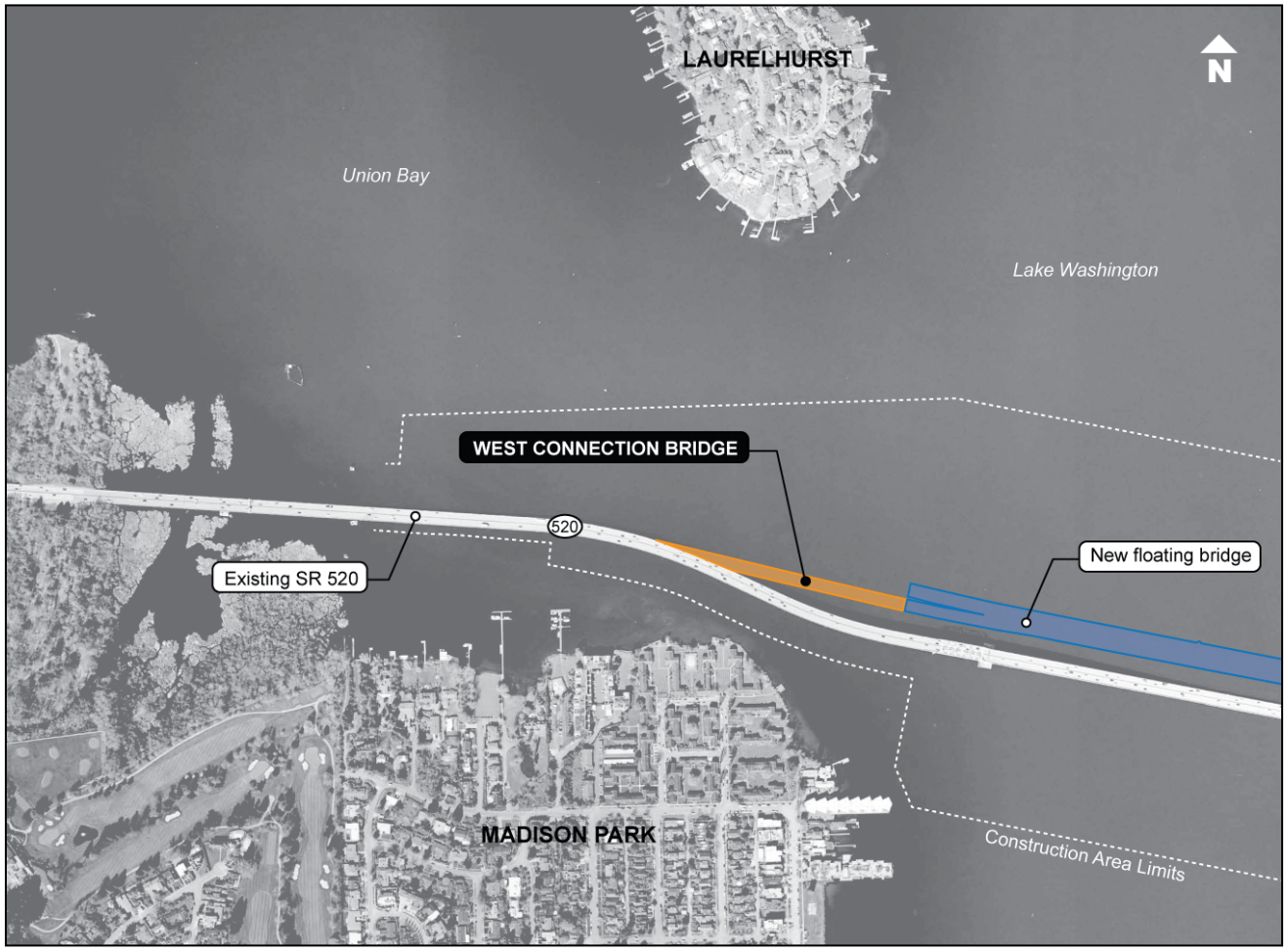
Floating Bridge and Landings Project



Key project elements include:

- Pontoon construction and towing.
- Construction of the East Approach transition.
- Floating bridge assembly with superstructure and roadway construction.
- Building the West Connection Bridge.
- Removal of the existing bridge.

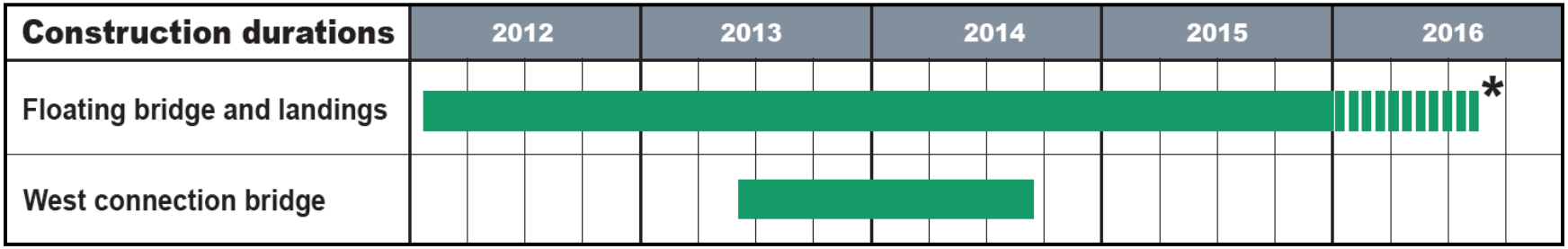
West Connection Bridge: project area



Location of the West Connection Bridge project area.

West Connection Bridge: project timeline

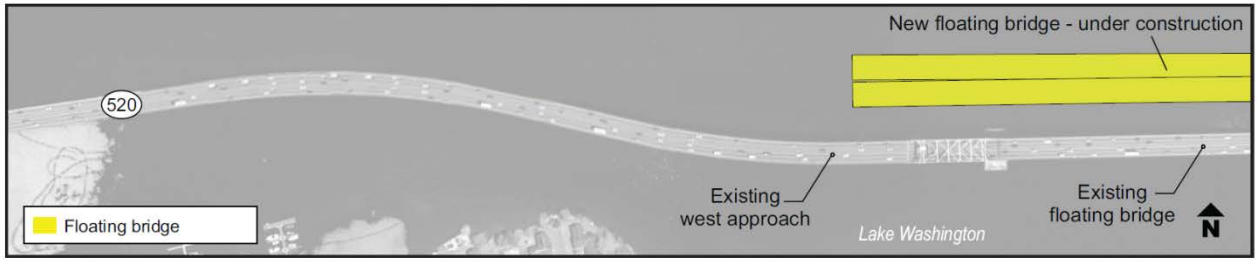
- *April to June 2013* – Pre-construction inspections at Canterbury Shores and Edgewater properties. (COMPLETED)
- *June to July 2013* – Monitoring and survey equipment installation from barges.
- *August 2013* – In-water and over-water construction work begins.
- *April 2014* – In-water work completed.
- *August 2014* – Planned project completion.



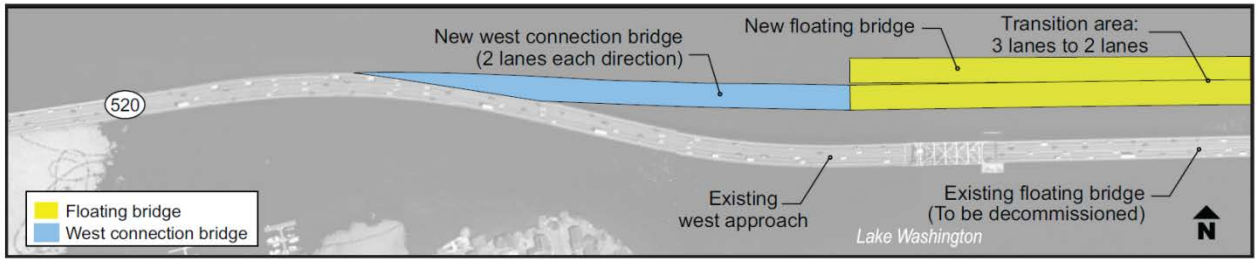
******The contract allows until July 2015 to open the new bridge to traffic. The existing bridge will be removed after the new bridge is opened.*

West Connection Bridge: construction sequence

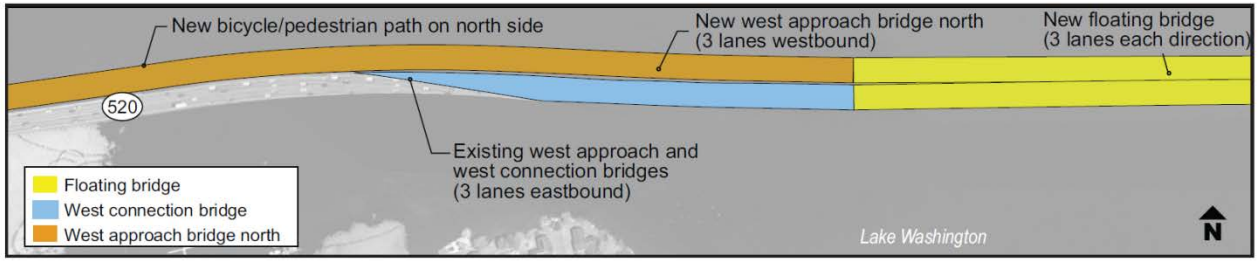
Step 1 - Floating bridge: Work on the new floating bridge is already under way on Lake Washington.



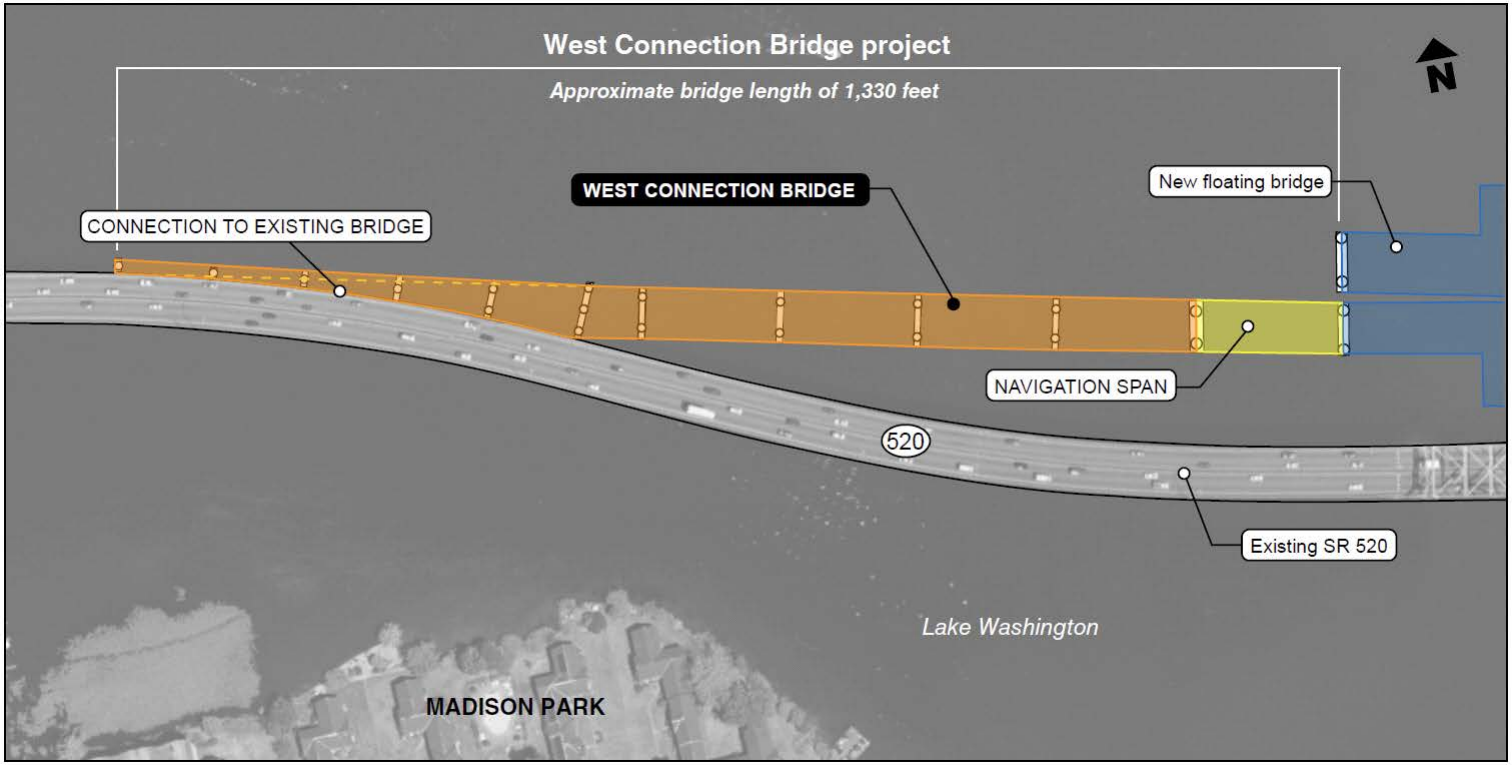
Step 2 - West connection bridge: Later in 2013, we'll build a structure that will connect the new floating bridge to the existing west approach bridge.



Step 3 - West approach bridge north: Starting in summer 2014, we will start work on the West Approach Bridge North. When WABN is complete, westbound traffic will travel on the new structure while eastbound traffic will travel on the existing west approach.

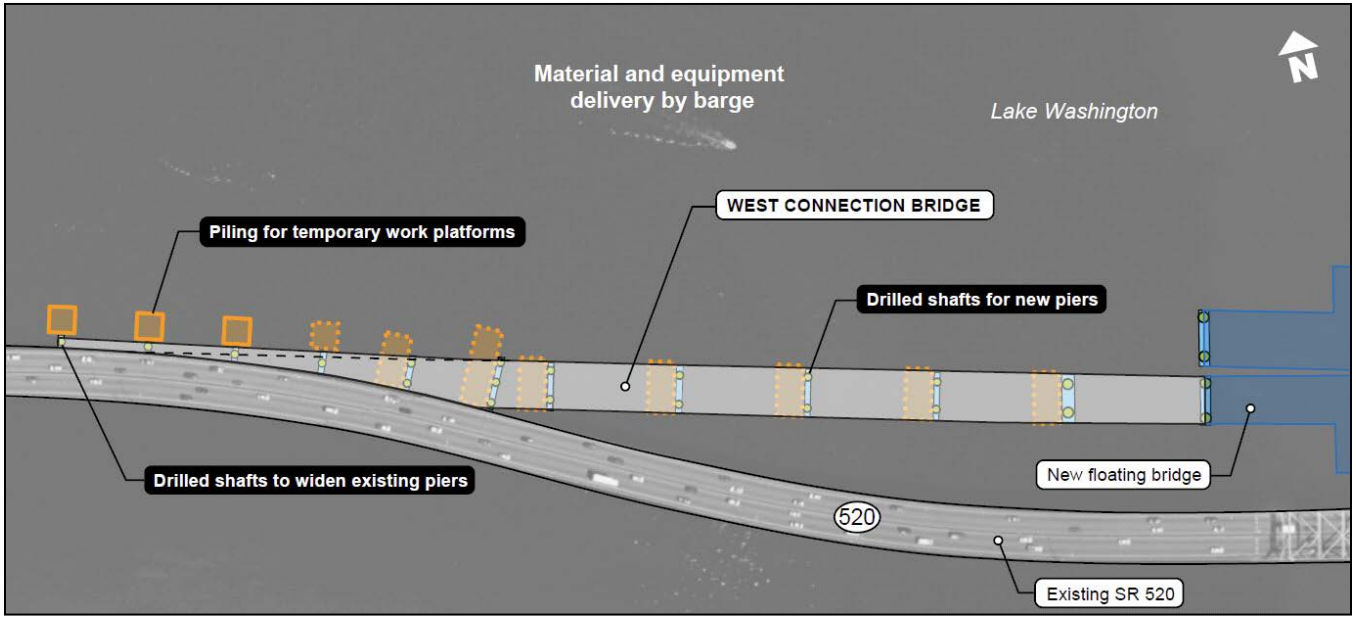


Project construction: bridge elements



- Building 19 new support columns.
- Widening six piers and building five new piers.
- Widening five bridge spans and building six new bridge spans.
- Building a 1,330-foot-long bridge deck connecting the new floating bridge to the existing west approach.

Project construction: work activities



Barge activity	In-water work	Over-water work
Activities • Transporting materials and equipment • Supporting in-water and over-water work **Duration** Summer 2013 – Summer 2014	**Activities** • Installing piles • Constructing temporary work platforms • Drilling shafts • Building bridge columns **Duration** Summer 2013 – Spring 2014	**Activities** • Building cross-beams • Setting precast girders • Pouring concrete deck • Connecting electrical and information technology systems • Bridge rail demolition **Duration** Summer 2013 – Summer 2014

Project construction: approach and best practices

Working days and hours:

- Typical work schedule of Monday through Friday from 7 a.m. to 5 p.m.
- Evening and weekend work will be completed as necessary.
- Nighttime work may require a noise variance with 7 days advance notification to residents.
- Full and westbound-only SR 520 roadway closures.

Best management practices:

- Include the use of special equipment and modified construction techniques.
- Help minimize adverse effects such as noise, vibration, light and air quality impacts.
- Best management practices will be followed throughout construction.

Project construction: possible effects and mitigation

Effect	Sources	Example measures and practices*
Noise	Heavy equipment; pile driving; bridge demolition	• Minimize nighttime work • Limit loud operations to daytime when feasible • Advance noise notification
Vibration	Pile driving; drilled shafts	• Pre-construction inspections • Construction vibration monitoring
Lighting	Marine lighting; work lights	• Minimize nighttime work • Use direction lights and shielding
Traffic control	Highway closures; lane restrictions	• Local traffic effects or haul routes are not anticipated • Material delivery by barge when possible • Advance notification of closures or lane restrictions

** All work will adhere to best management practices (BMPs).*

Community construction coordination

Community Construction Management Plan (CCMP)

- *Describes measures and practices to minimize adverse project effects.*

Construction hotline

- *Available 24 hours a day, 7 days a week.*

Construction information Web page

- *Single information source for all program-related construction activities.*

Community outreach survey

- *Tell us how you would like to stay informed about project activities.*

How to stay informed

Visit:
Program: www.wsdot.wa.gov/projects/SR520Bridge
Project: www.bitly.com/520WestConnection

E-mail: SR520Bridge@wsdot.wa.gov

Information line: 1-888-520-NEWS (6397)

Construction hotline: 206-708-4657

Mail: Washington State Department of Transportation
SR 520 Bridge Replacement and HOV Program
999 3rd avenue, Suite 900
Seattle, WA 98104