

Recap of Decision to Keep North Portland Harbor Bridge

Background:

In June 2009, the CRC Project Sponsors Council (PSC) directed project staff to analyze the project for potential refinements that could produce cost savings while maintaining the project's environmental, economic, transportation, and safety benefits. After five months of meetings with project partners and reviewing different refinements, the CRC staff prepared a recommendation that was presented to the Project Sponsors Council Dec. 4, 2009, for consideration.

In February 2010, the Governors of Oregon and Washington directed project staff to continue design work using the recommended refinements to reduce the project cost. The refinements included savings of up to \$650 million in highway costs (about 20 percent of the total highway cost). Of that savings \$235 million were attributed to keeping the existing North Portland Harbor bridge along with lowering the highway profile across Hayden Island, a necessary combination. As a result of the cost-saving analysis and decisions on bridge design, CRC subsequently estimated the cost of construction to be within a range of \$3.2 to \$3.6 billion. Previous estimates were \$3.1 - \$4.2 billion.

Considerations used while evaluating the retention of the existing North Portland Harbor bridge included:

- Alternative route (seismic) availability – New ramps will be constructed on each side of the existing North Portland Harbor bridge. These ramps will be designed to meet the required seismic standards and will provide lifeline routes in case the North Portland Harbor bridge is unusable after a seismic event. Consideration will be given to the location of the new ramps and the high likelihood of a future seismic retrofit or replacement of the existing North Portland Harbor bridge.
- Minimized impacts –
 - The replacement of the existing North Portland Harbor bridge would add approximately 20 displacements of floating homes (JBMI), impact Diversified Marine, but would reduce impacts to Columbia Crossings moorages and avoid displacement of Safeway. Further impacts would include Jantzen Beach parking field and redevelopment plans.
 - Replacing the North Portland Harbor bridge would require additional in-water impacts. A new bridge would result in additional piers in the water, more in-water construction duration, and more impervious surface over the water. These would result in greater impacts to threatened and endangered species.
- Interchange geometry – With replacement of the North Portland Harbor bridge, the skew angle of Marine Drive as it intersects with I-5 would increase. Design of the Marine Drive interchange would need to be revisited, a conclusion supported by AASHTO, as the skew angle would be undesirable.
- Cost – The project realized a cost reduction of \$235 million with the re-use of North Portland Harbor bridge (\$110) and lowering the mainline profile across HI (\$125 - required when using existing North Portland Harbor bridge).
- Existing bridge life - The existing North Portland Harbor bridge was constructed in 1985 with a 75-year design life. Upon completion of the CRC construction, the North Portland Harbor bridge would have 40 years remaining of design life.