

# **THE COLUMBIA RIVER CROSSING**

## **Opportunities and Challenges for a Multimodal Transportation Solution**

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## **Introduction: Regional Economic Impacts of Congestion**

The economic success of global gateway regions like the Pacific Northwest is dependent on a strong multi-modal transportation system that promotes the efficient movement of goods through excellent highway, rail, and marine facilities and good connections between these modes. Washington and Oregon have trade and export dependent economies that require good transportation systems that can move goods quickly and cheaply to markets in the U.S. and to Pacific Rim nations. The Pacific Northwest economy is 10% more dependent than the national economy on transportation-intensive industries such as agriculture, manufacturing, and wholesale/retail trade, so freight delays impact this region more than most. Consequently, the future economic health of the Northwest requires significant investments in transportation infrastructure across a variety of modes.

Highways are a particularly important part of the region's transportation system because most freight moves by truck, and even freight that travels by rail, water, or air moves on the highway system at some point. Interstate 5 is the most important highway freight corridor on the West Coast, carrying the region's products to markets across the country and to nearby ports for shipment around the world.

Washington and Oregon are spending billions of dollars securing the Interstate 5 corridor by preserving the existing infrastructure and investing in strategic expansions of capacity. With these immense investments underway, one key chokepoint remains: the Interstate Bridge and its approaches in Oregon and Washington. Congestion on this stretch of I-5—the most congested point on the corridor between Los Angeles and Seattle— is already severe, and it is rapidly getting worse. Currently, about 130,000 vehicles cross the I-5 bridge every day; in the year 2020 the traffic count will reach 175,000. With an additional 1 million people predicted to move into the Portland-Vancouver metro region in the next 25 years, congestion will become nearly a permanent condition during the day. If this congestion is not alleviated, the region's economy will suffer.

Oregon and Washington initiated the Columbia River Crossing project to improve travel efficiency and safety for people and goods traveling between the two states. The project is developing transportation solutions that will reduce congestion and improve safety on a five-mile stretch of Interstate 5 on both sides of the Columbia River that is known as the Bridge Influence Area.

The Bridge Influence Area sits at a key crossroads where the transportation networks that move the region's goods to markets connect, linking modes to one another. The

Columbia River shipping channel, marine and rail terminals at the Port of Vancouver and the Port of Portland, routes to Portland International Airport, and Interstate 5 all come together in or near the Bridge Influence Area. Congestion caused by the Bridge Influence Area affects commerce that flows through all of these facilities.

With congestion in the Bridge Influence Area consuming more and more hours of the day, too many of the goods vital to the region's economic health are bogged down in bridge-related gridlock. Interstate 5 carries more than 13,000 trucks across the Columbia River each day. A lack of highway capacity and other problems in the I-5 Bridge Influence Area causes an estimated 644,000 hours of delay for trucks traveling up the freeway each year, imposing significant additional costs on businesses, and ranking the Interstate Bridge as one of the worst impediments to freight mobility in the United States. This problem will only get worse if nothing is done, and the cost to trucks from being stuck in traffic more than doubles to \$34 million annually by 2020.

Congestion in the Bridge Influence Area causes problems for trucks moving freight to non-highway transportation facilities in the area as well. Trucks have difficulty accessing facilities at the Port of Portland and Port of Vancouver, particularly during rush hour, and travel times of air cargo shipments heading to Portland International Airport are impacted as well.

The outdated Interstate Bridge also causes problems for river traffic on the Columbia River, and this problem will grow in future years as congestion on the bridge increases. The Interstate Bridge includes a lift system—one of the last of its kind on the Interstate system—to allow ships on the Columbia River to pass under the structure. The bridge is raised once a day on average to accommodate large boats, causing traffic delays of up to an hour. Lifts are restricted to non-rush hour periods to avoid causing more gridlock, and as congestion consumes an even greater portion of the day, lifts may be restricted even further. Congestion is predicted to nearly consume daylight hours by 2020, leaving little time for vessels to pass through.

The Columbia River Crossing project is examining solutions that would address these problems. Options being considered include:

- Increasing capacity by expanding the number of lanes on a replacement or supplemental bridge;
- Improving safety by fixing many of the eight interchanges in the Bridge Influence Area to reduce dangerous lane changes and merging;
- Reducing delays by eliminating the bridge lifts;

- Reducing congestion by including high-capacity transit, bike, and pedestrian options that will allow more people to leave their cars behind.

### **The Challenges of Megaproject Development and Delivery**

The project is being developed through a cooperative process that is using innovative approaches to manage the inherent complexity of delivering a bi-state, multimodal megaproject. The project faces a number of very large challenges, including financing the multi-billion dollar cost, developing a multi-modal project, and designing a bridge that enhances the human and natural environment. The challenges associated with all of these issues are magnified by the need to move forward on a very fast timeline. These challenges are likely common to many megaprojects, and the way the two states are addressing each challenge offers insights to the national conversation over how to complete these complex projects. We believe the bi-state effort on the Columbia River Crossing can serve as a national model for addressing the issues associated with these types of projects.

#### *Environmental Streamlining*

The Columbia River Crossing faces a wide array of regulatory and environmental issues, including issues related to salmon listed as threatened under the Endangered Species Act, navigability of the Columbia River, and protection of historic and cultural resources. In order to move this project forward quickly, the project developed an innovative environmental streamlining effort designed to speed up the review and permitting process without lowering the bar on environmental protection. The project's environmental streamlining effort brings regulatory agencies into the project development process, ensuring that they can raise issues at an early stage of development and allow the bi-state project team to address these issues.

Under this effort, the Interstate Collaborative Environmental Process (InterCEP) was established to coordinate and streamline the regulatory reviews and permitting functions of the numerous participating agencies. Members include representatives from key national and state agencies responsible for protecting the region's air, water, wildlife and cultural resources. This committee must formally concur on project decisions affecting their areas of concern at major project milestones. In addition, the committee provides advice and consultation regarding the NEPA process to the Project Development Team at formal concurrence points. They will use a "streamlining" approach patterned after Washington's Signatory Agency Committee processes and Oregon's Collaborative Environmental and Transportation Agreement on Streamlining.

We hope that these efforts will help us successfully navigate the complexities of multiple regulatory processes, and we believe that federal transportation policy can benefit from the lessons the project has to offer in this area and find ways to encourage this type of approach.

#### *Multimodal Elements*

To appropriately address congestion on the I-5 corridor, the Columbia River Crossing project needs to be a multimodal project that incorporates high-capacity transit, which is currently lacking on the existing bridges. Determining the right transit elements for the bridge will be one of the greatest challenges. The region has not yet reached a consensus on the most appropriate type of transit service, which could be light rail, bus rapid transit, express bus service, or some other type of option.

Beyond working out local political issues surrounding which option best meets the region's needs, coordination between the Federal Highway Administration and Federal Transit Administration will also be a significant challenge because these agencies have different processes, timelines, and cultures. This issue of coordination within US DOT presents a significant challenge to multi-modal projects, and we believe this challenge should be addressed by policymakers to ensure that multi-modal projects don't founder due to problems of coordination within US DOT. In particular, US DOT could provide projects like the Columbia River Crossing "megaproject engineers" with authority to resolve problems and coordinate across agencies.

#### *Financing*

Assembling a financing package for the Columbia River Crossing will be a significant challenge. It is too early to estimate the cost for a project that is still weighing decisions about highway improvements, transit solutions, and changes to the current river crossing. The Columbia River Crossing project is now undergoing an extensive cost estimating process, and the results are expected later this year. However, we expect that the cost estimates will be well over \$1 billion.

The project's large cost—far beyond the ability of even two states to fund—will require piecing together a funding package from a variety of sources that looks beyond traditional means of highway project funding. Because the Columbia River Crossing project is of national and regional importance, the two states will work to make sure the project is prepared to receive a significant infusion of federal funding when Congress takes up the highway and transit reauthorization bill beginning in 2009.

In addition, each state will be asked to make a significant contribution, which may require new revenue streams. However, tapping all available public funding sources will likely leave a significant shortfall, so tolling is also under consideration as a financing method. The two current I-5 bridges were paid for by tolling, as were all but one other bridge over the Columbia River. However, tolling is not common in the Northwest, and getting people to accept this method could be something of a challenge.

The two states will be exploring the potential of using innovative finance opportunities to deliver the project. Although it is too early to say whether options such as a public private partnership or private activity bonds or TIFIA loans might be used, all options will be on the table.

In the future, policymakers should consider offering additional innovative finance opportunities that help deliver crucial megaprojects like the Columbia River Crossing. The more tools we have available in the toolbox, the more likely we are to be able to assemble the pieces of the funding package.

### **Corridors of the Future**

We are hopeful that all of these challenges—funding, innovative finance, coordination between federal transportation agencies, and regulatory processes—can be addressed through the innovative approaches we are taking to the project. We hope that the US DOT will be a full partner in this effort and help us by bringing the necessary resources to bear to advance the project.

To that end, earlier this week the two states jointly submitted an application to US DOT asking to designate the I-5 corridor through the Portland-Vancouver metropolitan region a “Corridor of the Future.” Under this new program, part of the congestion relief strategy released by Secretary Norman Mineta earlier this year, US DOT would commit resources to expedite delivery of a megaproject in a priority corridor. The potential benefits include coordination of a more efficient environmental review process, accelerated review under the FHWA’s SEP-15 process, faster approval of innovative finance mechanisms such as private activity bonds and TIFIA credit assistance, priority for tolling programs, and access to DOT experts.

We believe that designation as a Corridor of the Future could position the Columbia River Crossing well for completion under the expedited timeframe the two states have set. While this designation would offer nothing US DOT cannot already provide, we hope that the designation would show US DOT’s commitment to delivering the project

and their willingness to commit the necessary resources to ensure that it moves forward.

The Corridors of the Future program could be a strong first step toward helping states overcome the inherent challenges of delivering complex megaprojects. We hope that the Commission, the Administration, and Congress will wrestle with these issues and take additional steps that will ensure that these crucial projects are not bogged down by regulatory roadblocks and funding challenges.