

## Common Sense Alternative, Version II Overview



Common Sense Alternative, Version II, is a cost-effective environmentally friendly solution for the Interstate Bridge Replacement.

This presentation is a brief overview of the Common Sense Alternative, and is brought to you by *AORTA*, the Association of Oregon Rail and Transit Advocates.

Note that all of the maps in this presentation include an arrow indicating which direction is north.

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# Common Sense Alternative Version II

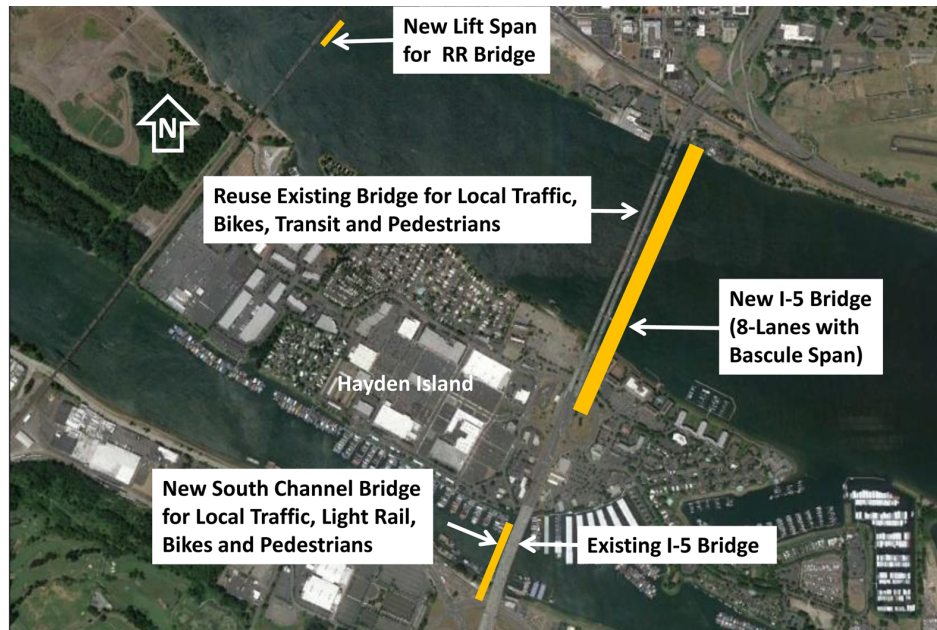
1. Build a new South Channel Bridge
2. Repurpose existing bridge for local traffic
3. Build a new freeway bridge
4. Reconfigure lift span on railway bridge

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The CSA has four major components:

1. Build a new South Channel Bridge connecting Hayden Island with North Portland.
2. Repurpose the existing I-5 bridge for local traffic between Hayden Island and Vancouver Washington. Retaining this existing bridge would avoid the costly demolition of that bridge, currently proposed.
3. Build a **new** I-5 freeway bridge, *in addition to* the existing bridge. This new bridge would be just upstream from the current bridge, and it would have 8 lanes for auto and truck traffic—four in each direction.
4. Finally, the CSA envisions changes to the BNSF railway bridge, farther downstream. The 100-plus year-old swing span on this bridge would be replaced with a lift span that would be aligned with the high point of the current and new I-5 highway bridges. This alignment would eliminate over 90% of the lift events on the current bridge, as explained later in this presentation.

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### Common Sense Alternative II

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This slide shows an overhead view of the proposed bridge configuration.

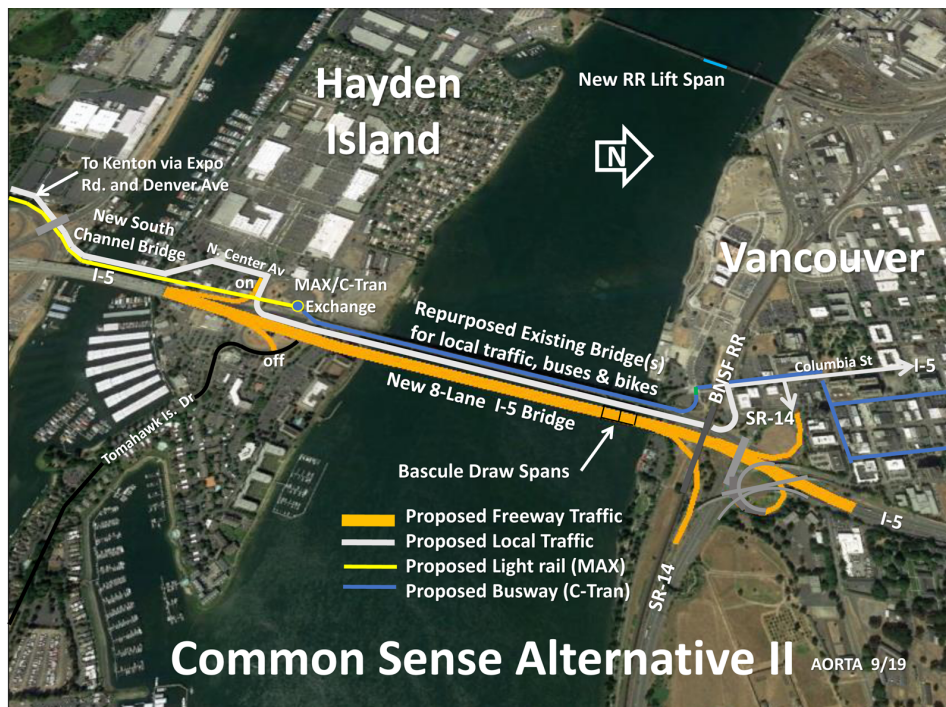
Near the bottom of this photo we see both the existing and new South Channel Bridges, connecting Hayden Island with North Portland.

In the center we see the new I-5 freeway bridge—shown by the wide gold line, and the existing bridge—the double gray line to the left.

Near the center top of this photo is the BNSF railway bridge.

All of these bridges are part of the Columbia River transportation corridor between Oregon and Washington—accommodating river, rail, highway, pedestrian and bicycle traffic.

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This is a more detailed overhead view of the proposed CSA solution for the full river crossing.

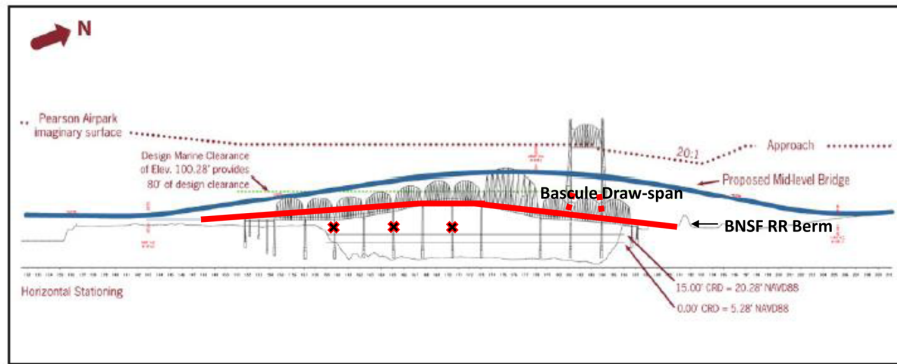
The gray line crossing the south channel shows the existing bridge. This continues as the new freeway bridge, depicted here as the wide gold line. These two bridges would carry interstate traffic only—that is, traffic traveling between Portland and Vancouver, with no need to access Hayden Island. The new bridge would have 8 lanes for auto and truck traffic, a 72-foot river clearance and a bascule draw span. Bicycles and pedestrians could also be accommodated on this bridge.

The narrow white line depicts the route for local traffic, including pedestrians and bicyclists, that would be traveling between Portland and Hayden Island, over the new South Channel Bridge, and between Hayden Island and Vancouver, over the existing bridge.

The short narrow yellow line on the left, between Portland and Hayden Island, denotes the extension of the MAX light-rail line. This also runs over the new South Channel Bridge. MAX trains crossing this new bridge would connect with C-TRAN buses from Vancouver at a new Hayden Island Transit Center. The narrow blue line indicates the route of these C-TRAN buses—over the existing bridge and into downtown Vancouver.



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- ODOT's Preferred Alternative (95')
- Common Sense Alternative II (72')

## Profiles

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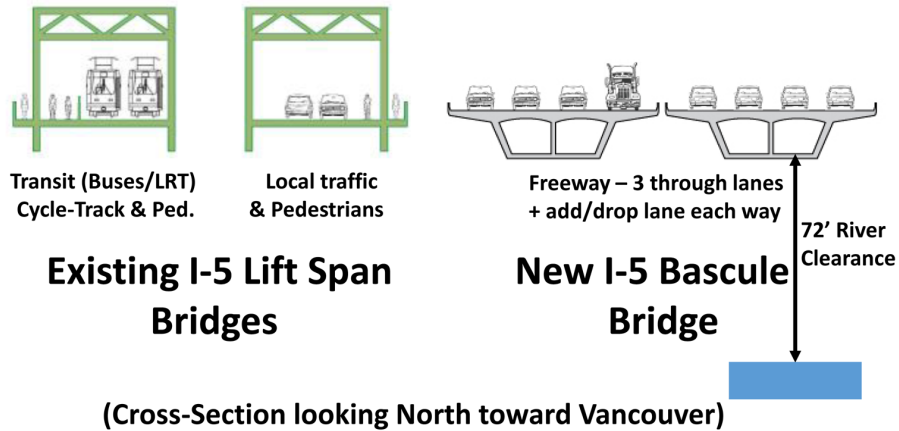
This side profile contrasts the relative height of the CSA (in red) with the previously proposed “Locally Preferred Alternative” depicted by the blue line.

Note that the high point of the CSA is near the river’s center channel, whereas the “Locally Preferred Alternative” shifted the high point north, closer to the location of the existing lift span.

While the CSA has only a 72-foot highest point, as compared to the 95-foot height proposed in 2012, it compensates for this lower height with its bascule draw span, which imposes no new restriction on the height of river traffic, greatly reducing these problems as well as the cost of the project. And since the CSA’s bascule draw span is lined up with the existing lift spans, with their 178-foot clearance, that will be the height limitation as long as the existing bridge remains in place.

Finally, since the CSA has a lower height than the proposed “Locally Preferred Alternative”, it does **not** interfere with aviation from Pearson Field, and does **not** require distortion of the I-5 pathway.

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Here is a cross section of the existing and new I-5 bridges proposed by the CSA.

The green spans depict the existing bridge. The span on the left is for transit vehicles; the one on the right, for local auto and truck traffic—one lane in each direction.

Both these bridges also provide space for bicycles and pedestrians.

Note that the new freeway bridge, shown here on the right, has eight lanes for motor vehicle traffic—four in each direction, and could also accommodate pedestrians and bicyclists.

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Columbia River  
**CROSSING** Current I-5 Bridge + 8-Lane Bascule Freeway Bridge



### Common Sense Alternative II

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Here is a view of the CSA from the Washington side of the river. Compared to the interchange proposed in 2012, the CSA has a much lower elevation and a modest footprint.

Note the new, straight freeway bridge on the left, completely free of local traffic between Hayden Island and Vancouver. Local traffic would travel over the existing I-5 bridge and use the on- and off-ramps to the north, shown here as white and blue lines. Costs for demolition of old ramps, and construction of new ramps, are dramatically reduced.

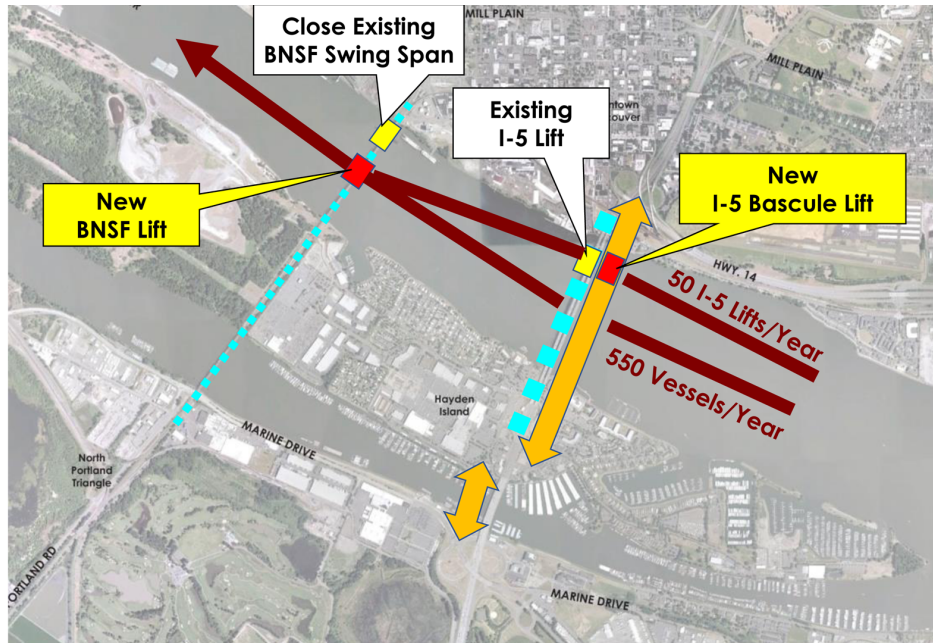
The long, steep grades envisioned by the rejected 2012 proposal are avoided. Problems associated with traffic turbulence, speed variance, capacity constraints and safety are gone.

Furthermore, this new freeway bridge alignment goes *under* the BNSF rail line along the north side of the river. Keeping the I-5 alignment under the railway avoids the high costs as well as many of the problems with the proposed new Vancouver interchanges.

Note that the CSA does *not* tower high above the Vancouver office buildings shown here. It does *not* cast dark shadows over the buildings and living space in the foreground.

The CSA does *not* interfere with aircraft using nearby Pearson Field.

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### Barge Traffic With New Bridge

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The CSA design also includes changes to the BNSF railway bridge, downstream from the I-5 bridge.

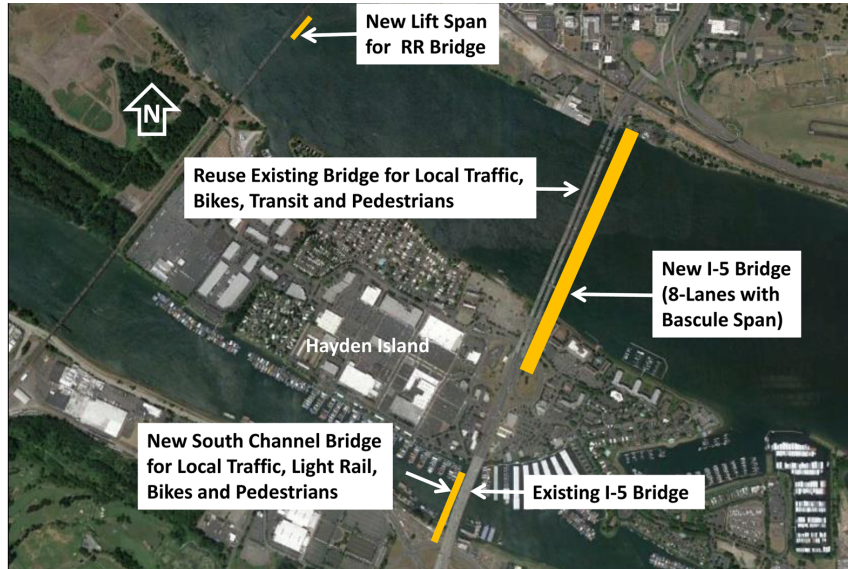
In order for barges and other large ships to go under the high point of the existing I-5 bridge—thereby avoiding a bridge lift—they would have to perform a difficult right-turn maneuver, away from the current swing span on the railroad bridge and toward the center of the river channel. To avoid that maneuver, barge operators choose, instead, to travel under the lift span of the highway bridge, requiring a bridge lift.

The swing span on the railway bridge, however, can be replaced by a lift span that would be wider and closer to the center of the river channel, eliminating the need for this difficult maneuver and allowing river traffic to go under the 72-foot high points of both the existing bridge and the new CSA bridge.

This new lift span on the railroad bridge would eliminate about 90% of the bridge lifts that tie up I-5 traffic today. It would benefit interstate road traffic, river traffic and railway traffic. It is truly a *transportation* project, not just a highway project.



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It is clear from these comparisons that the CSA offers a far better solution to the Oregon-Washington I-5 river crossing, than the “Locally Preferred Alternative” proposed in 2012. It is safer, more esthetically pleasing and better for the environment, while still fulfilling all the purposes and needs identified for the project.

Thank you for watching this overview of the Common Sense Alternative, Version 2. For a more detailed description of the CSA, you can view the 30-minute version of this presentation.

AORTA appreciates your attention, and we hope you will support and advocate for this sensible option for the interstate highway crossing of the Columbia River.