RIVER CROSSING

Columbia River CROSSING

Introducing the Ideas: Crossing the River

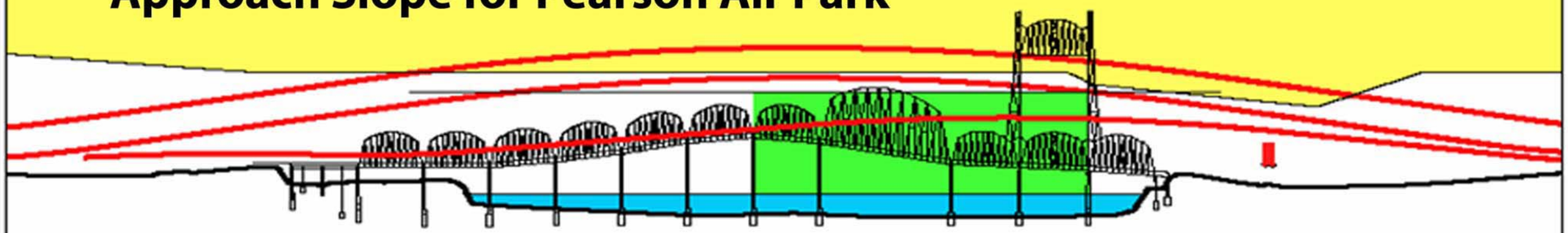
The project team considered 23 ideas for crossing the Columbia River and recommends that 9 advance for more investigation.

Crossing Considerations:

- Flight paths from Pearson Airpark
- Flight paths from Portland International Airport
- Marine Navigation

Columbia River CROSSING

Potential New Bridge Levels (low, mid, high)



Marine Vessel Clearance Requirements

Columbia River CROSSING

Introducing the Ideas: Crossing the River

Safety Facts

On average more than one wreck occurs per day in the project area.

The collision rate is **2 times higher** than similar highways in Oregon.

If the bridge is up, a **collision is 3-4 times more likely** to occur.

There are twice as many accidents during rush hours.

Rear end and side swipe incidents are the most common.

Out-dated highway designs lead to accidents:

- Short driving spaces between interchanges where cars are merging and weaving.
- The curve approaching the bridge in Washington reduces driver reaction time.

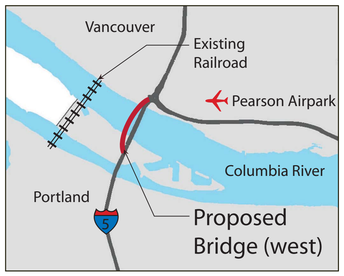
Columbia River CROSSING

Columbia River CROSSING

REPLACEMENT BRIDGES

RIVER CROSSING

All river crossings will include bicycle and pedestrian pathways



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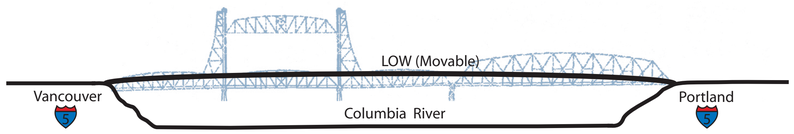


Low Replacement Bridge (RC-1)

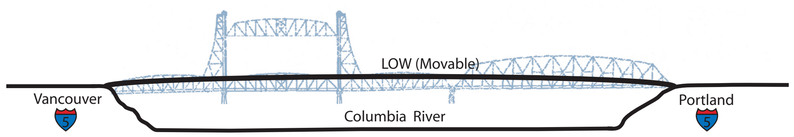
- West of existing bridge
- Movable
- Approximately 65 feet high

Proposal meets all six criteria from the problem definition for the project area.

Yes

No

NORTH



Low Replacement Bridge (RC-2)

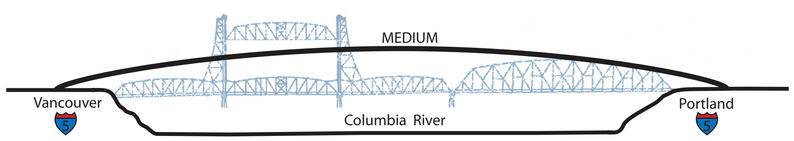
- East of existing bridge
- Movable
- Approximately 65 feet high

Proposal meets all six criteria from the problem definition for the project area.

Yes

No

NORTH



Mid-Level Replacement Bridge (RC-3)

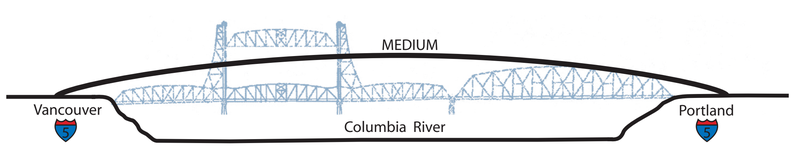
- West of existing bridge
- Approximately 110 feet high

Proposal meets all six criteria from the problem definition for the project area.

Yes

No

NORTH



Mid-Level Replacement Bridge (RC-4)

- East of existing bridge
- Approximately 110 feet high

Proposal meets all six criteria from the problem definition for the project area.

Yes

No

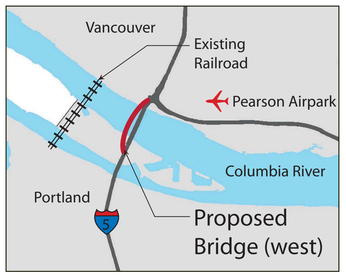
April, 2006

Columbia River CROSSING

SUPPLEMENTAL BRIDGES

RIVER CROSSING

All river crossings will include bicycle and pedestrian pathways



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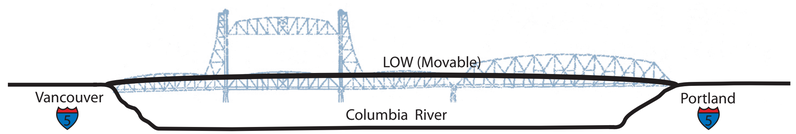


Low Supplemental Bridge (RC-7)

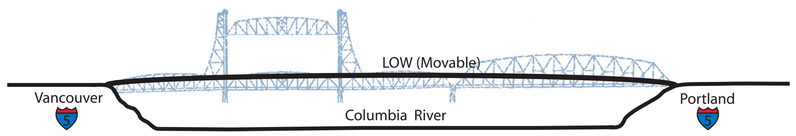
- West of existing bridge
- Movable
- Approximately 65 feet high
- Keeps one or both spans of existing bridge in place

Proposal meets all six criteria from the problem definition for the project area. The continued use of the existing bridge for I-5 traffic requires seismic upgrades to meet current standards. Further analysis is needed to determine if this is feasible.

Yes

No

NORTH



Low Supplemental Bridge (RC-8)

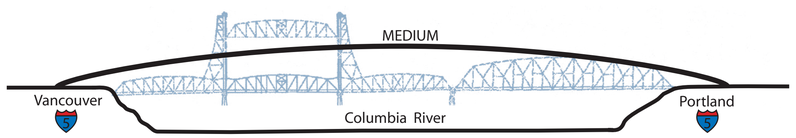
- East of existing bridge
- Movable
- Approximately 65 feet high
- Keeps one or both spans of existing bridge in place

Proposal meets all six criteria from the problem definition for the project area. The continued use of the existing bridge for I-5 traffic requires seismic upgrades to meet current standards. Further analysis is needed to determine if this is feasible.

Yes

No

NORTH



Mid-Level Supplemental Bridge (RC-9)

- West of existing bridge
- Approximately 110 feet high
- Keeps one or both spans of existing bridge in place

Proposal meets all six criteria from the problem definition for the project area. The continued use of the existing bridge for I-5 traffic requires seismic upgrades to meet current standards. Further analysis is needed to determine if this is feasible.

Yes

No

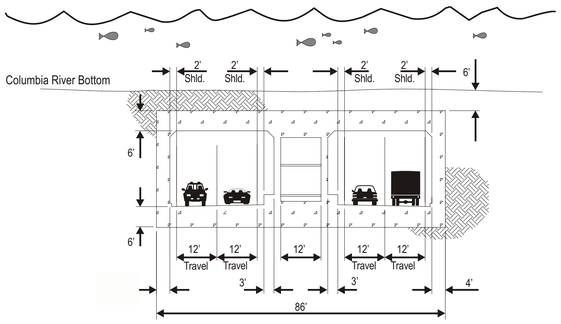
April, 2006

Columbia River CROSSING

SUPPLEMENTAL CROSSINGS

RIVER CROSSING

All river crossings will include bicycle and pedestrian pathways



Supplemental Tunnel (RC-13)

A multi-lane tunnel would surface near Mill Plain Boulevard in Vancouver and near Marine Drive in Portland. It may not serve Marine Drive, Hayden Island or the SR 14 interchange. The proposal would keep one or both spans of existing bridge in place.

Proposal meets five of the criteria from the problem definition. The continued use of the existing bridge for I-5 traffic requires seismic upgrades to meet current standards. Further analysis is needed to determine if this is feasible.

Yes

No

Arterial Crossing with I-5 Improvements (RC-23)

Add new crossing component near the existing I-5 bridges for arterial and transit use to connect downtown Vancouver to Hayden Island. In addition the I-5 bridge would be upgraded to meet seismic standards and safety improvements would be made to I-5 within the bridge influence area.

Proposal meets all six of the problem definition criteria for the project area.

Yes

No

April, 2006

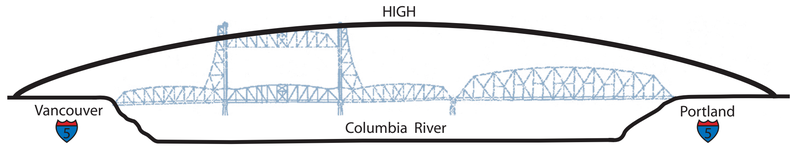
Columbia River CROSSING

REPLACEMENT BRIDGES

RIVER CROSSING

All river crossings will include bicycle and pedestrian pathways

NORTH



High Replacement Bridge (RC-5)

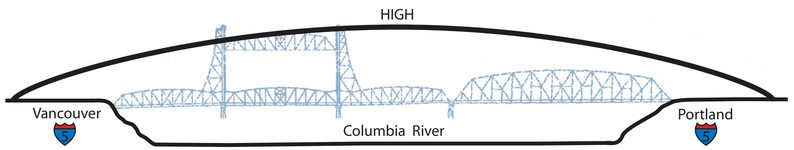
- West of existing bridge
- Approximately 130 feet high, similar to I-205 Bridge

Proposal would unacceptably encroach into airspace of Pearson Airpark and, potentially, Portland International Airport.

Yes

No

NORTH



High Replacement Bridge (RC-6)

- East of existing bridge
- Approximately 130 feet high, similar to I-205 Bridge

Proposal would unacceptably encroach into airspace of Pearson Airpark and, potentially, Portland International Airport.

Yes

No

April, 2006

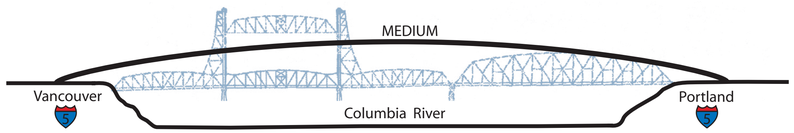
Columbia River CROSSING

SUPPLEMENTAL BRIDGES

RIVER CROSSING

All river crossings will include bicycle and pedestrian pathways

NORTH



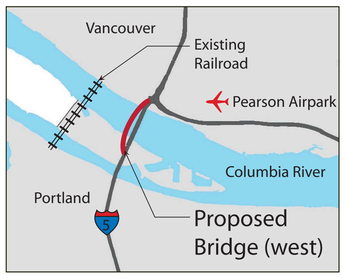
Mid-Level Supplemental Bridge (RC-10)

- East of existing bridge
- Approximately 110 feet high

Proposal would unacceptably encroach into airspace of Pearson Airpark and, potentially, Portland International Airport.

Yes

No



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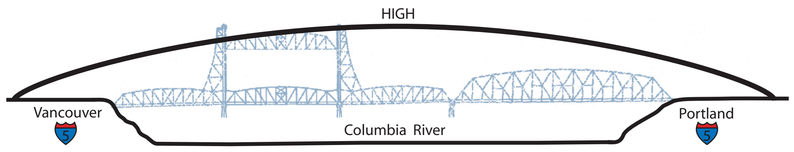


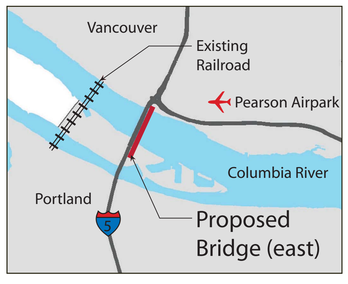
High Supplemental Bridge (RC-11)

- West of existing bridge
- Approximately 130 feet high, similar to I-205 Bridge

Proposal would unacceptably encroach into airspace of Pearson Airpark and, potentially, Portland International Airport.

Yes

No



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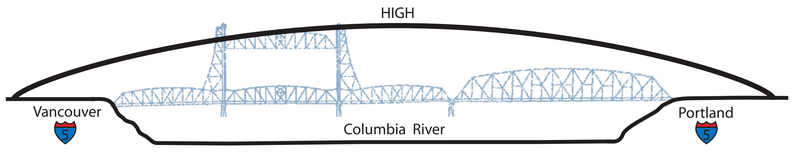


High Supplemental Bridge (RC-12)

- East of existing bridge
- Approximately 130 feet high, similar to I-205 Bridge

Proposal would unacceptably encroach into airspace of Pearson Airpark and, potentially, Portland International Airport.

Yes

No

April, 2006

Columbia River CROSSING

SUPPLEMENTAL CROSSINGS

RIVER CROSSING

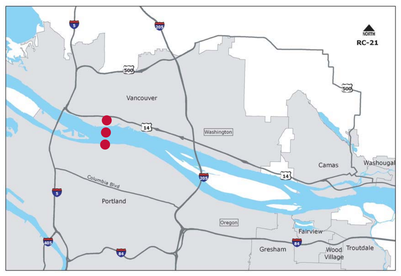
All river crossings will include bicycle and pedestrian pathways

Arterial Crossing without I-5 Improvements (RC-19)
Add new crossing component near the existing I-5 bridges for arterial use to connect downtown Vancouver to Hayden Island.

Because this option would not include improvements to the I-5 bridge or the interchanges in the project area, the proposal does not improve freight mobility, improve traffic safety or address earthquake vulnerabilities.

Yes

No



33rd Avenue Crossing (RC-21)
Add a new arterial crossing east of I-5 to connect Vancouver and Portland near 33rd Avenue in Portland.

Proposal does not meet any of the six criteria identified in the problem definition for the project area.

Yes

No

Multi-Modal Arterial Crossing (RC-22)
Add a new, non-freeway crossing to accommodate 2 to 4 lanes of local traffic, light rail, a southbound auxiliary lane, and bicycles and pedestrians. Reconfigure the interchanges closest to the I-5 bridges, raise the bridge height, and decommission the lift span.

It is not feasible to raise the existing I-5 bridges. The multi-modal proposal also does not improve freight mobility, improve traffic safety, or reduce earthquake vulnerability in the project area.

Yes

No

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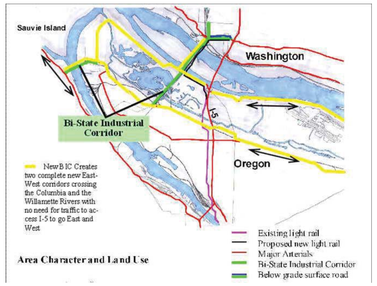
Columbia River CROSSING

NEW CORRIDORS/CROSSINGS

RIVER CROSSING

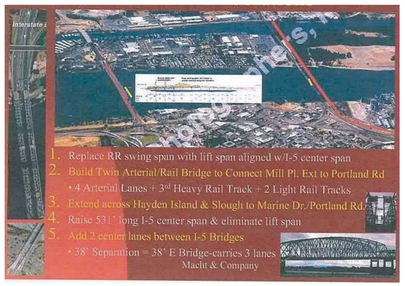
All river crossings will include bicycle and pedestrian pathways



Western Corridor Crossing (RC-14)
A new travel corridor and bridge crossing for freight trains, trucks, cars, buses, bikes/pedestrians, and potentially light rail located west of the existing BNSF railroad. The corridor would begin near Mill Plain and Fourth Plain boulevards in Vancouver, travel through Hayden Island, and connect to Marine Drive near North Portland Road in Portland.

Proposal does not meet four of the six criteria from the problem definition. By focusing efforts on a new travel corridor, this proposal does not improve transit service, traffic safety, bicycle/pedestrian mobility, or earthquake safety within the project area.

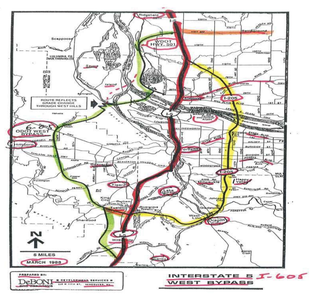
☐ Yes
● No



Arterial Corridor Crossing (RC-15)
A new travel corridor and bridge crossing for freight trains, trucks, cars, buses, bikes/pedestrians, and potentially light rail located west of the existing BNSF railroad. The corridor would begin near Mill Plain and Fourth Plain boulevards in Vancouver, travel through Hayden Island, and connect to Marine Drive near North Portland Road in Portland. In addition, this proposal would improve the existing bridges by raising the height, decommissioning the lift span, and adding two travel lanes.

It is not feasible to widen the existing I-5 bridges to accommodate additional travel lanes. A new highway corridor located west of the railroad does not meet four of the six criteria from the problem definition. By focusing efforts on a new travel corridor, this proposal does not improve transit service, traffic safety, bicycle/pedestrian mobility or earthquake safety within the project area.

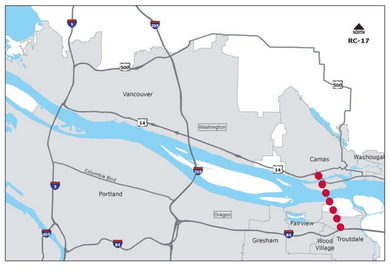
☐ Yes
● No



Western Highway (I-605) (RC-16)
A new western highway to bypass the I-5 corridor and connect suburban Clark and Multnomah counties.

Proposal does not meet any of the six criteria identified in the problem definition for the project area.

☐ Yes
● No



Eastern Corridor Crossing (RC-17)
New bridge east of I-205 to connect Camas and Troutdale.

Proposal does not meet any of the six criteria identified in the problem definition for the project area.

☐ Yes
● No

April, 2006

Columbia River CROSSING

OTHER IDEAS

RIVER CROSSING

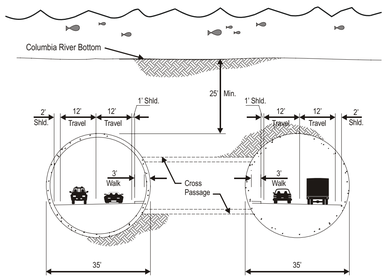
All river crossings will include bicycle and pedestrian pathways

I-205 Improvements (RC-18)
Add a lane in each direction to I-205.

Proposal does not meet any of the six criteria identified in the problem definition for the project area.

☐ Yes

● No



Replacement Tunnel (RC-20)
A multi-lane tunnel to replace the existing bridges would surface near SR 500 in Vancouver and Columbia Boulevard in Portland.

A replacement tunnel does not reduce traffic demand because it would bypass most of the project area. Activity centers would be accessed by a complex series of frontage roads. This proposal does not improve transit service, improve freight mobility, or help bicyclists and pedestrians safely cross the river.

☐ Yes

● No

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What do you think?

Did we leave any ideas out that should be considered?

Should these 9 ideas move forward?

Replacement bridge (RC-1)
Low-level, movable, west of existing bridge

Replacement bridge (RC-2)
Low-level, movable, east of existing bridge

Replacement bridge (RC-3)
Mid-level, west of existing bridge

Replacement bridge (RC-4)
Mid-level, east of existing bridge

Supplemental bridge (RC-7)
Low-level, movable, west of existing bridge

Supplemental bridge (RC-8)
Low-level, movable, east of existing bridge

Supplemental bridge (RC-9)
Mid-level, west of existing bridge

Tunnel to supplement I-5 bridge (RC-13)

Arterial crossing with I-5 improvements (RC-23)

Columbia River CROSSING