

How wide should the freeway be?

Make Freeway 3 Lanes (in each direction)	Add a 4th Lane (in each direction)
Includes projects to widen I-5 to 3 lanes: <ul style="list-style-type: none"> • Delta Park to Lombard • Rose Quarter Area: Fremont Bridge to I-84 • New 4-lane supplemental I-5 bridge 	Adds a 4th lane in each direction from the Fremont Bridge in Portland to the I-205/I-5 interchange north of Vancouver <ul style="list-style-type: none"> • Includes widening in the Rose Quarter area to 3 lanes • New 6-lane supplemental I-5 bridge

Summary of Findings 3 or 4 lanes

Rating Scale



Measure	Baseline 2020	Compared to Baseline	
		3 Lanes	4 Lanes
Reduce auto travel times (Downtown Portland to Salmon Creek in p.m. peak period)	 40 min.	 31 min.	 30 min.
Reduce I-5 & I-205 Congestion (% of congested lane-miles on I-5 & I-205 during the p.m. peak period)	 30%	 19%	 13%
Reduce truck Route Congestion (% of congested lane-miles on truck routes in the study area during the p.m. peak period)	 25%	 21%	 19%
Reduce Spillover Traffic			to some reduction Portland=Yes Vancouver=No
Minimize Environmental Impacts (Bridge) (impacts to natural resources such as fish, wildlife, plants, wetlands)	 Moderate	 Moderate	 Moderate
Minimize Displacements (number of residential and business displacements given conceptual design)	 12 (Rose Quarter)	 +24 (bridge)	 +42 (bridge & interchanges)
Cost (2001 dollars)	 \$291 M	 \$668 M	 \$1,477 M

Summary Details

Make Freeway 3 Lanes (in each direction)	Add a 4th Lane (in each direction)
Travel Time	
<p>Travel times in the I-5 Corridor improve significantly</p> <p>The time to travel between downtown Portland and downtown Vancouver for autos and trucks in the evening peak period:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 30 minutes</i> • <i>"3 lanes" = 21 minutes</i> <p>The time to travel between Salmon Creek and downtown Portland for autos and trucks in the evening peak period:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 38 minutes</i> • <i>"3 lanes" = 31 minutes</i> <p>The time travel savings are entirely attributable to the 4 lane supplemental bridge.</p>	<p>Travel times in the I-5 Corridor improve significantly:</p> <p>The time to travel between downtown Portland and downtown Vancouver for autos and trucks in the evening peak period:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 30 minutes</i> • <i>"4 lanes" = 20 minutes</i> <p>The time to travel between Salmon Creek and downtown Portland for autos and trucks in the evening peak period:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 38 minutes</i> • <i>"4 lanes" = 30 minutes (4th lane as HOV lane)</i> • <i>"4 lanes" = 21 minutes (4th lane as a reversible lane)</i> <p>The time travel savings are entirely attributable to the 6 lane supplemental bridge.</p>
Make Freeway 3 Lanes	Add a 4th Lane
Freeway Performance	
<p>Improves overall congestion levels on the bi-state freeway system during the peak periods of travel.</p> <p>Unless additional vehicle capacity is added across the Columbia River, the number of trips on I-5 cannot increase.</p> <p>Most trips from the Vancouver area have their destination in central Portland and the most direct route is I-5. With a new river crossing, people have a better ability to choose the most direct path for their trip.</p> <p>I-5 corridor volumes increase:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 25,800 vehicles</i> • <i>"3 lanes" = 35,000 vehicles</i> <p>Without improvements on I-5, the I-205 bridge volumes grow. With the improvements on I-5, volumes on the I-205 bridge decrease because some trips that now occur on I-205 would shift to I-5.</p> <p>I-205 corridor volumes decrease:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 32,500 vehicles</i> • <i>"3 lanes" = 25,000 vehicles</i> 	<p>Improves overall congestion levels on the bi-state freeway system during the peak periods of travel.</p> <p>Unless additional vehicle capacity is added across the Columbia River, the number of trips on I-5 cannot increase.</p> <p>Most trips from the Vancouver area have their destination in central Portland and the most direct route is I-5. With a new river crossing, people have a better ability to choose the most direct path for their trip.</p> <p>I-5 corridor volumes increase:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 25,800 vehicles</i> • <i>"4 lanes" = 36,300 vehicles</i> <p>Without improvements on I-5, the I-205 bridge volumes grow. With the improvements on I-5, volumes on the I-205 bridge decrease because some trips that now occur on I-205 would shift to I-5.</p> <p>I-205 corridor volumes decrease:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 32,500 vehicles</i> • <i>"4 lanes" = 23,000 vehicles</i>

<p>Reduces hours of vehicle delay:</p> <p>Truck routes:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 17,100 hours of vehicle delay</i> • <i>"3-lane" = 12,300 hours of vehicle delay</i> • <i>"3-lane" = 11,600 hours of vehicle delay</i> <p>All other roads in study area:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 4360 hours of vehicle delay</i> • <i>"3-lane" = 4330 hours of vehicle delay (with Express bus)</i> • <i>"3-lane" = 4200 hours of vehicle delay (with light rail)</i> 	<p>Reduces hours of vehicle delay:</p> <p>Truck routes:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 17,100 hours of vehicle delay</i> • <i>"4-lane" = 12,000 hours of vehicle delay</i> • <i>"4-lane" = 10,400 hours of vehicle delay</i> <p>All other roads in study area:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = 4360 hours of vehicle delay</i> • <i>"4-lane" = 3890 hours of vehicle delay (with Express bus)</i> • <i>"4-lane" = 3680 hours of vehicle delay (with light rail)</i>
<p>Value of truck hours of delay decreases:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = \$26.5 M</i> • <i>"3-Lane" = \$20M</i> 	<p>Value of truck hours of delay decreases:</p> <ul style="list-style-type: none"> • <i>Baseline 2020 = \$26.5 M</i> • <i>"4-Lane" = \$17M</i>
Make Freeway 3 Lanes	Add a 4th Lane
Environmental Impacts	
Moderate environmental impacts that are difficult to avoid and will need to be mitigated.	Moderate environmental impacts that are difficult to avoid and will need to be mitigated.
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Potential Displacements	
24 displacements.	42 displacements.
All most all of the displacements are on Hayden Island and are due to the new 4 lane supplemental bridge.	Of the displacements, 29 are due to the Vancouver interchange modifications between 4th Plain and SR500. Most of the remainder are due to the new supplemental bridge and are located on Hayden Island.
Make Freeway 3 Lanes	Add a 4th Lane
Cost	
\$668 M (\$2001)	\$1,477 M (\$2001)
Least cost of the freeway options	Highest cost of the road