



Oregon's Transportation Chokepoints: The Top 50 Chokepoints and Remedies for Relief

Published on **May 13, 2010** in Daily Dirt and Pacific Builder & Engineer.



Oregon's 50 Worst Highway, Transit And Multimodal Chokepoints Identified; Chokepoints Lengthen Commutes, Stifle Economic Development And Reduce Quality Of Life In Portland And Throughout The State

The I-5 Columbia River Crossing tops the list of Oregon's worst transportation chokepoints, along with the I-5/I-84/I-405 Interchange, the OR 212/224 Corridor, the I-205/I-5 Interchange and the OR 217/I-5 Interchange. This is according to a new report released today by TRIP, a Washington, DC based national transportation research organization.

TRIP's report, "*Oregon's Transportation Chokepoints: The Top 50 Chokepoints and Remedies for Relief*," ranks the state's urban interchanges, highway segments, bus and rail transit routes, and sections of rural highways that provide inadequate mobility. These transportation chokepoints impede local, regional or interstate travel, diminish the quality of life of residents and visitors, reduce economic competitiveness and stifle economic growth and recovery by hampering commuting, commerce and other travel. In addition to identifying the chokepoints, the report also offers potential improvements for each segment that would ease the burden on travelers and allow for improved mobility.

Oregon's top 50 surface transportation chokepoints include 38 roadway segments or interchanges, nine transit routes or corridors and three multimodal segments, which include both a roadway and a transit chokepoint. According to the TRIP report, the worst transportation chokepoint in Oregon is the I-5 Columbia River Crossing in Portland. This bridge is one of the nation's top freight routes and a key regional commuting corridor. This chokepoint causes the worst congestion in the metro region and is one of the most severe bottlenecks on the I-5 trade corridor. The area is typically congested for four to six hours per day, and is projected to increase to 15 hours congested per day by 2030. The chokepoint could be eased by replacing the current lift bridge (which causes significant congestion when opened daily), extending light rail across the Columbia River into downtown Vancouver, fixing the crowded interchanges and including a bicycle and pedestrian facility over the river.

The ten worst Oregon chokepoints are all located in or near the Portland metro area and include the following segments: the I-5/I-84/I-405 Interchange, the OR 212/224 corridor, the I-205/I-5 Interchange, the OR 217/I-5 Interchange, the OR 99W Newberg – Dundee Bypass, the I-205 / Airport Way Interchange, the interchange at I-5 northbound and I-205 to Nyberg, Cornell Road to 185th Avenue, and the OR 217 Corridor. The report's appendix contains a full list of the 50 worst chokepoints in the state as well as possible solutions to ease each chokepoint.

"This report underscores the need for the Columbia River Crossing project to move forward," said Sandra McDonough, president and CEO of the Portland Business Alliance. "TRIP's findings confirm previous research showing the cost of congestion to the state's businesses and residents. We support TRIP's work to demonstrate how essential transportation infrastructure is to keeping not just our cars and freight, but our whole economy moving."

As part of reversing the current economic downturn and facilitating long-term economic growth, Oregon will need to address its numerous surface transportation chokepoints. Enhancing critical segments of Oregon's surface transportation system will boost the state's economy in the short-term by creating jobs in construction and related fields. In the long term, these improvements will enhance economic competitiveness by improving access and mobility, which will stimulate sustained job growth and improve the quality of life in Oregon.

In 2009, the Oregon legislature approved the Oregon Jobs and Transportation Act (HB 2001), which increased funding for local and state roads, highways and public transit systems, as a result of increased state registration fees, licensing fees and motor fuel taxes. The Act will provide \$100 million for non-road transportation improvements, including public transit and, by 2011, when all fee increases are implemented, will provide an additional \$300 million annually for local and state road and highway improvements. A number of the chokepoints identified in this report, including the I-5/I-205 Interchange, widening of US 26 from Cornell to 185th Avenue, Newberg-Dundee Bypass in Yamhill County, US 97/Murphy Road Interchange in Bend, I-5 Steep Grade Bottlenecks in southern Oregon, and I-84 Spring Creek section, may be significantly improved by funding allocated to specific projects under HB 2001.

"In addition to causing a headache for motorists, Oregon's transportation chokepoints stifle economic development and growth at a time when it is desperately needed. Oregon can't get where it wants to go – in both a literal and an economic sense – without an efficient transportation system" said Will Wilkins, executive director of TRIP.

Following is the executive summary from the report. You can view the full report by [clicking here](#).

Executive Summary

The ease with which residents, visitors and businesses can access desired destinations has a significant impact on the quality of life enjoyed in a region. A reasonable level of mobility provides individuals and organizations with tremendous freedom in accessing activities and opportunities and provides significant freedom in choosing neighborhoods, employment, recreational activities, social and commercial opportunities.

When a transportation facility, including a roadway segment, an interchange, or a transit route, is not adequate to meet the demand for reliable mobility, the facility chokes local, regional or interstate travel, diminishing the quality of life of residents and visitors and reducing business productivity.

Oregon's network of roads, highways and public transit systems allows this fast-growing state to provide safe and efficient travel, while enabling businesses to conveniently serve their customers. However, continued growth in Oregon's population and travel is straining the capacity of the state's surface transportation system and impeding quality of life by constraining commuting, commerce and other travel.

In this report, TRIP looks at the impact of growth on the state's surface transportation system and the potential consequences if Oregon is unable to make needed improvements in its surface transportation system to provide an adequate level of mobility to meet the needs of a fast-growing state.

This report identifies the 50 worst surface transportation chokepoints in the state and the status of projects needed to relieve these chokepoints. Addressing these chokepoints will be critical in maintaining the high quality of life in the state by improving mobility, reducing delays, enhancing environmental quality and supporting economic growth.

The major findings of the report are:

Oregon's quality of life and economic productivity are being reduced by chokepoints in the state's surface transportation system. These chokepoints include major roads, highways and public transit routes that impede routine travel, commuting or commerce, or that place limits on economic development opportunities because of deficient design or a lack of adequate capacity.

- Two recent reports found that the state's businesses, particularly in the Portland area, were responding to increasing traffic congestion by increasing inventories, decentralizing operations to serve the same market, increasing the number of deliveries and drivers because of longer travel times and starting production shifts earlier in the day to avoid peak congestion periods.
- Oregon's top 50 surface transportation chokepoints include urban interchanges and highway segments, public transit routes and sections of rural highways that are unable to meet a region's need for adequate mobility. This constraint on reliable transportation harms business productivity and reduces access to housing, employment, recreation, entertainment and other social functions.
- The top five surface transportation chokepoints in Oregon are located in Portland and include the I-5 Columbia River Crossing, the I-5/I-84/I-405 Interchange, the OR 212/224 Corridor, the I-205/I-5 Interchange and the OR 217/I-5 Interchange. The following chart provides more details on these five chokepoints. Intermodal (roadway and transit) chokepoints are shaded in green, roadway chokepoints are shaded in yellow and transit chokepoints are shaded in purple.

Rank	Region/County	Bottleneck Name	Importance of Route to Transportation Patterns	Describe Chokepoint	Impact of Chokepoint
1	Portland	I-5 Columbia River Crossing, Lombard Int. to SR 500 Int.	Bridge is one of the nation's top freight routes and key regional commuting route. Few alternatives to this route.	Lack of auxiliary lanes, closely spaced interchanges, substandard interchange design and substandard freeway entrance and exit ramp, and substandard median and shoulder widths. Bridge is lift bridge, which causes significant congestion when opened once a day. No high-capacity transit, so buses are only transit option.	Chokepoint causes the worst congestion in the metro region, one of highest bottlenecks on the I-5 trade corridor, congestion last 4-6 hours per day and is projected to increase to 15 hours by 2030. Reduces freight access to Port of Portland. 644,200 hours of freight delay per year. 300 accidents experienced annually.
2	Portland	I-5/I-84/I-405 Interchange	Connects three high-volume freeways.	I-5 is two lanes and ramp connections are one-lane. Several interchange ramps are too closely spaced. I-84 capacity is insufficient for traffic heading onto I-5.	Lack of adequate capacity and design flaws result in poor weaving and merging operations causing significant delays.
3	Portland	OR 212/224 Corridor	As Portland's only designated east-west state freight route south of I-84, OR212/224 provides a vital service for freight movement within the Portland metro area, as well as a principal route to central and eastern Oregon. This corridor is the primary access point to/from I-205 for the Clackamas Industrial Area, which is one of the state's busiest and most critical freight distribution centers.	Capacity constraints at the interchange and at nearby intersections on Highway 212/224 cause congestion on I-205 and on Highway 212/224.	Significant congestion on this corridor impedes commerce and fails to meet the transportation needs of a growing residential area.
4	Portland	I-205/I-5 Interchange	Interstate 5, the West Coast's main trade corridor, and I-205 are two of Oregon's busiest freeways and carry large volumes of freight to and through the Portland metro region.	I-205 southbound narrows from three lanes to a one lane on-ramp to I-5, and vehicles have an extremely short distance to merge onto I-5. The short merge distance also impacts southbound I-5, as traffic is forced to slow to allow vehicles merging from I-205 to join the travel lanes. The I-5 northbound to I-205 northbound connection also lacks extended dual exit lanes.	This lack of an adequate merge lane frequently overwhelms the interchange and contributes to lengthy backups on I-205. As a result of the lack of extended dual exit lanes on I-5 northbound onto I-205 northbound, vehicles exiting I-5 must wait in the right hand travel lane to exit, oftentimes in heavy traffic, rather than having a dedicated lane to ease their transition to I-205.
5	Portland	OR 217/I-5 Interchange	Important interchange serving significant regional travel	The southbound OR 217 to southbound I-5 and southbound I-5 to northbound OR 217 movements experience congestion and queuing from existing signalized ramp terminals.	Lack of adequate interchange capacity results in significant congestion.

- A list of Oregon's top 50 surface transportation chokepoints is included in the report. Additional information on the state's top 50 surface transportation chokepoints, including needed improvements and the funding status of needed improvements, can be found in the Appendix.
- Oregon's top 50 surface transportation chokepoints include 38 roadway segments or interchanges, nine transit routes or corridors and three multimodal segments, which include both a roadway and a transit chokepoint.
- TRIP ranked Oregon's top 50 surface transportation chokepoints by assigning each chokepoint an overall score based on the following factors: volume of daily travel or ridership; the severity of the congestion or crowding; the importance of the route or facility to local, regional and interstate travel; the cost of the needed improvement; whether a route or facility provided mobility to non-motorists; whether a transportation facility was intermodal; the impact of the chokepoint on the environment; and the level of difficulty in using an alternate route or facility.

The approval last year of a comprehensive state transportation funding program and the outcome of ongoing Congressional deliberations over a future federal surface transportation program will have a significant impact on Oregon's ability to relieve many of its surface transportation chokepoints.

- In 2009, the Oregon Legislature approved the Oregon Jobs and Transportation Act (HB 2001), which increased funding for local and state roads and highways and public transit systems, as a result of increased state registration fees, licensing fees and motor fuel taxes.
- The Act will provide \$100 million for non-road transportation improvements, including public transit and, by 2011, when all fee increases are implemented, will provide an additional \$300 million annually for local and state road and highway improvements.

- A number of the chokepoints identified in this report, including the I-5/I-205 Interchange, widening of US 26 from Cornell to 185th Avenue, Newberg-Dundee Bypass in Yamhill County, US 97/Murphy Road Interchange in Bend, I-5 Steep Grade Bottlenecks in southern Oregon, and I-84 Spring Creek section, may be significantly improved by funding allocated to specific projects under HB 2001.
- Federal spending levels for highways and public transit in Oregon are based on the current federal surface transportation program, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which was approved by Congress in 2005. The SAFETEA-LU program expires on December 31, 2010.
- Congress is currently deliberating over a long-range federal surface transportation program to follow SAFETEA-LU. The level of funding and the provisions of a future federal surface transportation program will have a significant impact on Oregon's ability to address many of its surface transportation chokepoints.

Rapid increases in population, vehicle travel and economic activity in Oregon have outpaced improvements to the state's roadway and transit system, resulting in increased congestion. Reduced transportation reliability in the state may become an impediment to economic development and may reduce tourism.

- Between 1990 and 2008, vehicle travel in Oregon increased by 23 percent, from approximately 27 billion miles of travel to approximately 33 billion miles.
- Between 1990 and 2008, Oregon's population increased by 33 percent, from approximately 2.8 to 3.8 million. Oregon's rate of population growth during this period is the eleventh highest among all states and is significantly higher than the 22 percent national increase in population during this period.
- Population gains are expected to continue at a significant rate in Oregon, increasing 28 percent by 2030 to approximately 4.8 million people.
- Despite the nation's recent economic downturn, Oregon has experienced significant economic growth since 1990. From 1990 to 2008, Oregon's gross domestic product (GDP), increased by 71 percent, when adjusted for inflation. This rate of economic growth in Oregon from 1990 to 2008 was the 13th highest in the U.S. and higher than the national average of 52 percent.
- A report from the Reason Foundation found that traffic congestion in the Portland area is expected to more than double by 2030 unless the region's transportation system is improved.
- The Reason Foundation report found that trips in the Portland area take 29 percent longer to complete during rush hours, as compared to non-peak periods of the day. By 2030, the report found that unless major steps are taken to relieve traffic congestion in the Portland urban area, the average rush hour trip will take 75 percent longer to complete than during non-peak hours.
- The Reason Foundation report also found that traffic congestion delays in the Eugene and Salem areas will more than double by the year 2030, unless major steps are taken to relieve traffic congestion.

Relieving traffic congestion in Oregon will save time for travelers and businesses, provide additional employment in the state and increase the productivity of the state's businesses.

- A 2007 report found that if Oregon modernizes and expands key segments of its highway system that by 2025 it would result in an annual increase of \$1.7 billion in business output, would support an additional 16,300 jobs annually and in the Portland area would save the average household 28 hours of travel time annually.

Traffic congestion relief will require a comprehensive approach, which includes expanding the capacity of the state's transportation system, improving the efficiency of the existing system and offering alternatives for some peak-hour trips. In order to accommodate the continued growth in vehicle travel, without experiencing a significant increase in traffic congestion, Oregon will need to both expand the capacity of its roadway and transit systems and make further improvements in the efficiency of its transportation system. These plans should continue to include and enhance:

- Effectively increasing the transportation system through expanded road and highway capacity, improved freight movement corridors, improved public transit system and enhanced sidewalks and bike paths.
- Improving traffic flow and system efficiency through better traffic signalization, ramp metering, faster incident response times and driver information systems.
- Implementing programs to reduce the number of peak-hour vehicle trips, including telecommuting, flextime and ridesharing programs.

All data used in this report is the latest available. TRIP's report is based on information obtained from the Federal Highway Administration (FHWA), the Texas Transportation Institute (TTI), the Oregon Department of Transportation (ODOT), the U.S. Census Bureau and the Reason Foundation.