

Oregon Department of Transportation Frequently Asked Questions

Bridge Program Information

QUESTION: *How often does ODOT inspect bridges?*

ANSWER: Bridges on state highways are inspected at least every two years. Some 78 state-owned bridges are inspected more frequently, due to unique characteristics.

QUESTION: *When were Salem's Willamette River bridges built, when were they widened and when were they last inspected? Does the federal government do inspections?*

ANSWER: Center St. and Marion St. bridges over the Willamette River were built in 1953 and widened in 1984. They were both inspected in September 2005 and are due for another inspection in September 2007. ODOT inspects all state highway bridges; Federal Highway Administration does a quality assurance review of ODOT's program once each year.

QUESTION: *How many freeway bridges does Oregon have? The Minneapolis Bridge reportedly was 40 years old; how many of Oregon's freeway bridges are that age or older? Of those, how many have been retrofitted or otherwise strengthened?*

ANSWER: There are 584 bridges on the five interstate highways in Oregon. The average age of all state highway bridges in Oregon is about 50 years. Interstate bridges are repaired, strengthened and retrofitted as needed. There are currently 280 state highway bridges being strengthened or replaced over a 10-year period.

QUESTION: *The Minneapolis Bridge reportedly was undergoing surface repairs. What does that bode for Oregon's bridge repair program that's currently under way?*

ANSWER: Oregon's OTIA III Bridge Program is mainly focused on structural repairs below the travel surface. However, surface repairs are being included in the OTIA III if we find that those repairs are also needed.

QUESTION: *Is ODOT making any temporary alterations in its bridge/road repair work as a result of this tragedy?*

ANSWER: Oregon will respond to the findings of the National Transportation Safety Board if they make any recommendations after they investigate the failure. It is too early to know what caused the collapse.

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QUESTION: *What is the condition of Oregon's bridges?*

ANSWER: Oregon has 2,683 state bridges; 8 percent of them are structurally deficient (that means 206 that do not conform to standards enacted after the bridge was built) and 21 percent are functionally obsolete (572). If a bridge is unsafe, ODOT closes it to travel. See "Oregon's Bridge Conditions" below.

QUESTION: *How many bridges in Oregon are restricted?*

ANSWER: As of Aug. 1, 2007, 64 bridges on Oregon highways are weight-restricted, meaning vehicles over a certain weight are not allowed to cross. A list of these bridges can be viewed online at <http://www.oregontruckingonline.com/VertClearRestrictions/>; be sure to scroll down to the heading "Bridge Restrictions."

QUESTION: *How often do we inspect the Fremont, Marquam and Ross Island bridges?*

ANSWER: ODOT inspects the Fremont Complex (including the main span and the East and West approach spans) every two years. ODOT's consultant, HDR Engineering, just completed an in-depth fracture critical, fatigue prone, and routine inspection of the approach spans. The inspection of the main Fremont spans over the Willamette River is scheduled for Sept. 2007.

We inspect the Marquam Complex (including the main span and the East and West approach spans) every two years. Consultants Burgess & Niple, Inc. just completed an in-depth fracture critical, fatigue prone, and routine inspection of the main Marquam spans over the Willamette River and ten non-redundant steel caps in the approach spans.

We also inspect the Ross Island bridge every two years. On July 31, 2007, Burgess & Niple began an in-depth fracture critical and fatigue prone inspection of the steel spans via adapted climbing techniques.

QUESTION: *What is our evaluation of the condition of these three bridges?*

ANSWER: The three bridges (bridge complexes) discussed above are in fair to satisfactory condition.

Additional Information

Oregon's Bridge Conditions

Oregon's highway bridges range in age from 90 years to brand new. All were built to the design and construction standards in place at the time. There were major changes in the national design standards, however, in the early 1960s and early 1980s and in 1996.

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Some bridges built earlier than those years have less capacity to carry heavy loads than current standards and have details or connections that must be inspected carefully.

Also, the steel and concrete used in bridge construction today have much higher strength than was available during the 1950s and early 1960s, when the interstate highways were built. To maintain a safe, reliable transportation system, bridges need to be rehabilitated and replaced on an ongoing basis.

Currently, 206 of Oregon's 2,683 highway bridges are classified as being structurally deficient (that is, main support members have reduced load carrying capacity because they are damaged or worn out), and 572 are classified as functionally obsolete (too narrow, low vertical clearance or low design load capacity). These deficient bridges are safe but may have operational limits imposed, as needed.

The cost to address all of these bridge needs is estimated in 2004 dollars to be \$500,000,000 for structurally deficient bridges and \$1,000,000,000 for functionally obsolete bridges — well beyond current funding levels. ODOT does an evaluation that prioritizes these bridges for replacement or repairs during the four-year transportation improvement cycles (the Statewide Transportation Investment Plan, or STIP), which is funded at about \$88,000,000 per year, less a bond payback amount of \$34,000,000 per year.

Since annual STIP funding is not enough to address all the state's transportation needs, ODOT identifies problems during routine inspections that must be handled quickly and those problems are addressed through the Major Bridge Maintenance program, which is funded at about \$8,000,000 per year.

Due to the backlog in repairing bridge problems, there are currently 64 bridges on state highways that are restricted to heavy loads.

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