Frequently asked questions:
"Rough Roads Ahead" & "Seismic Plus" reports

What's the bottom line of these reports?

The studies show Oregon can invest in its roads and bridges now to protect the economy for our children—or not invest and jeopardize our future.

- The transportation system is in good condition today because of significant investments made by the federal government and the Legislature over the last decade, mainly through one-time infusions like the OTIA III State Bridge Program.
- Growing debt service and other factors will reduce ODOT's funding going forward. ODOT will have only a fraction of the money needed to keep aging bridges and pavement in its current condition, so conditions will deteriorate.
- A forecast using a sophisticated economic modeling tool predicts that slower economic growth due to deteriorating conditions will cause Oregon to forfeit 100,000 jobs by 2035.
- Deteriorating conditions will force ODOT to load limit bridges, forcing lengthy truck detours that increase transportation costs for Oregon businesses, making them less competitive—and increasing costs for consumers as well.
- A major Cascadia Subduction Zone earthquake would cause most bridges in western Oregon to collapse or be rendered unusable, making recovery and response difficult. An economic analysis found that strengthening key highways could reduce the state's economic loss by $84 billion after an earthquake, providing a strong return on investment.
- ODOT's Seismic Plus proposal would strengthen key lifeline routes over the next 50 years by retrofitting bridges and repairing them and replacing them where it's more cost effective. This will meet a portion of the bridge needs and help reduce the loss of jobs due to deteriorating system condition—even if Oregon avoids a major earthquake.

What's the goal of releasing these reports?

ODOT wants to demonstrate to the public the need for additional investments in preserving the condition of Oregon's transportation system. This isn't what ODOT needs; it's what Oregon needs.

The seismic retrofit plan calls for decades of work—with some parts of the state not getting immediate attention. How do you justify that?

The report puts priority on lifeline routes that would help recover and rescue people from a major seismic event and would also lead to recovery of the economy. We're going to have to concentrate earlier phases starting in a low seismic vulnerability area—Central Oregon. After a big quake, the rescue uses primarily fixed wing aircraft based in Redmond to fly personnel and materials to resilient airports in the Valley. From there rescuers would use helicopters to provide immediate aid to people.

Oregon 58 (Willamette Highway) connects Central Oregon to the Willamette Valley, running from U.S. 97 north of Chemult to I-5 south of Eugene. It's one of our primary lifeline routes. But it travels through some areas of unstable slopes and landslides. We have some

significant bridges along the route that need to be retrofitted and there are some fairly costly fixes to mitigate potential landslides.

Then the seismic retrofit plan calls for moving up to the Portland metro area and then west and then down south. The Portland Metro area is a significant driver in the state's economy; we identified lifeline routes there that are the minimum amount that would help us recover after an event.

We certainly understand that Southern Oregon needs to be served, too: I-5 and the major routes in that area are addressed in a later phase.

ODOT issued an earlier seismic report last year. What's the difference?

The previous version presented the seismic bridge retrofit as a standalone program. The program cost and implementation approach was simplified by focusing only on seismic retrofit work on bridges and mitigation of unstable slopes along proposed lifeline routes. However, retrofitting bridges in poor health does not make good sense, so in the updated version ODOT has looked for opportunities where it is more cost-effective in the long term to replace aging bridges, as well as for cases where retrofits can be combined with repair projects to extend a bridge's life. This report lays out a comprehensive program that will address seismic vulnerability, as well as mitigate structural deficiencies. This program will deliver longer lasting bridges and a seismically resilient transportation network and economy for Oregon.

Didn't the Oregon Transportation Investment Act—the OTIA State Bridge Program—take care of these bridges?

The OTIA program addressed structural issues due to vertical loads. It didn't address the horizontal loads that come from seismic events. Sometimes repair or replacement of the distressed bridge also solved the seismic issues, but that couldn't always be done.

What are specific bridges that would be seismically retrofitted or repaired/replaced in each area of the state—and when?

Some examples:

- **Slight damage**: Boone Bridge, I-5
- **Slight to moderate** damage: Glenn Jackson Bridge, I-205
- **Moderate** damage: Marquam Bridge, I-5; George Abernathy Bridge, I-205; Fremont Bridge, I-405
- **Extensive** damage: St. Johns Bridge, U.S. 30 Bypass
- **Collapse**: Ross Island Bridge, U.S. 26; Interstate Bridges, I-5; Longview Rainer Bridge, U.S. 30; Astoria-Megler Bridge, U.S. 101; Willamette River, OR 22 EB (Center St., Salem); Willamette River, OR 22 WB & OR 99E Business Route (Marion St, Salem); Yaquina Bay Bridge, U.S. 101; Siuslaw River, U.S. 101 (Florence); Coos Bay, U.S. 101