Managing Oregon's Pavement

Pavement is a critical part of our transportation system and one of the primary assets ODOT maintains and manages statewide. While drivers regularly see the asphalt or concrete pavement surface of our roads, pavement is a structure that includes the surface treatments, rock subbase and soil foundation. Pavement degrades over time due to the cumulative effects of traffic, weather and material aging. Oregonians are accustomed to using the road network and they expect pavement conditions to be smooth and safe statewide.

Actively managing pavement conditions by conducting regular assessment and performing necessary treatment at the appropriate time allows ODOT to preserve the more than 19,000 lane miles of pavement that makes up the state highway system.

Approach

Our overall goal to keep roadways in the best condition possible with available funding occurs by taking a lifecycle cost approach to preservation and maintenance.

Rather than following a "worst first" philosophy, we apply a combination of "fixes" including preventive maintenance seal coats, resurfacing preservation projects, pavement rehabilitation, and reconstruction.

Current funding for maintenance and repair does not keep up with growing needs, therefore, our Pavement Preservation Program follows an asset management strategy to reduce the volume of declining pavement conditions across the system.

Interstate System

The interstate system comprises about 18% of the state system and is our highest priority. The interstate system sees more traffic and higher loads in one year than most roads see in 20 years. Keeping interstate pavement in good repair benefits everyone.

ODOT complies with the Federal Highway Administration (FHWA) requirement to ensure no more than 5% of our interstate pavement inventory is in poor condition. As of 2023, 2.5% of our pavement is in poor condition. However, due to limited funding, our poor pavement percentage is increasing. If it goes above 5% poor condition, we risk losing flexibility in how we spend our federal funds and could be required by FHWA to dedicate more Statewide Transportation Improvement Program (STIP) funds exclusively to interstate pavement until we again meet the requirement.

Increasing traffic volumes result in more wear on the system. Prioritizing interstate pavement condition supports Oregon's economy, driver expectations, and safety for all users.

Priority Routes

The Priority Route system comprises about 26% of the state system and is made up of non-interstate highways that are high-use and critical routes across the state. These routes include US101, US97, US26, US20, US395, OR58 and other routes that connect communities across the Cascades and Coast Range.

These routes have been prioritized for Preservation Program funding through the STIP, however in the 2027-2030 STIP, due to insufficient funding pavement funds will only be used for the Interstate System and no priority routes will be paved through this cycle. The outcomes of this will be severe pavement deterioration. Based on current funding, we anticipate that the amount of rough, rutted and potholed roads will double over the next 10 years.

Regional/District Routes & Low Volume Roads

Region and District level routes are state highways that branch off the priority routes and connect to nearby communities. In the Pavement Program, these routes are subdivided by traffic volume into high traffic volume and low traffic volume routes. High traffic volume Region/District highways comprise about 10% of the state system and examples include large portions of OR99E & 99W, OR214 and 224, and other state highways that function as urban arterials. Low volume roads (LVR) are highways with an average daily traffic of less than 5,000 vehicles. Though these roads are used less than other routes, they are vital links between local communities and the rest of the state. Approximately 46% of the state system are low volume highways. In central and eastern Oregon, 70% of non-interstate highways are low volume roads.

High volume Regional/District routes have been prioritized for Preservation Program funding through the STIP, however due to insufficient funding in the 2027-2030 STIP, none of these routes will be paved. Historically, when roads are classified as low volume, they are no longer competitive for Preservation Program funding through the STIP and have used maintenance funding to provide limited routine maintenance. Given less than 15% of the overall pavement budget supports nearly half the system inventory, cuts to maintenance and the LVR program will have a devastating effect on pavement condition.

We have established a limited funding pool with the Preservation Program to address some of the low volume roads for the 2025-27 budget cycle.

Looking Ahead

We have a long-standing legislative key performance measure (KPM) that 85% or more of our pavement inventory be in "fair or better" condition. For decades we have consistently met or exceeded this target. As the current funding level, Oregon's pavement is deteriorating faster than

we can repair or reconstruct it and is overwhelming our capacity to deliver routine maintenance. Without new funding we will struggle to meet the KPM and expect to see the following in the next 5 to 10 years:

- State highways will continue to deteriorate. We will be unable to deliver paving projects beyond a few interstate projects. Non-interstate paving will cease after 2027.
- Most of the roads currently in fair condition will turn poor. Those roads already deemed poor will further degrade.
- Oregonians will pay more to repair failing pavement than they would to preserve and maintain roads in a good state of repair.
- Oregonians will experience diminished safety, higher vehicle repair costs and decreased speeds where pavement is particularly deteriorated.
- Over time, drivers will experience more potholes and rough roads with the potential need for reduced speed limits and more rough road signs.

Interstate
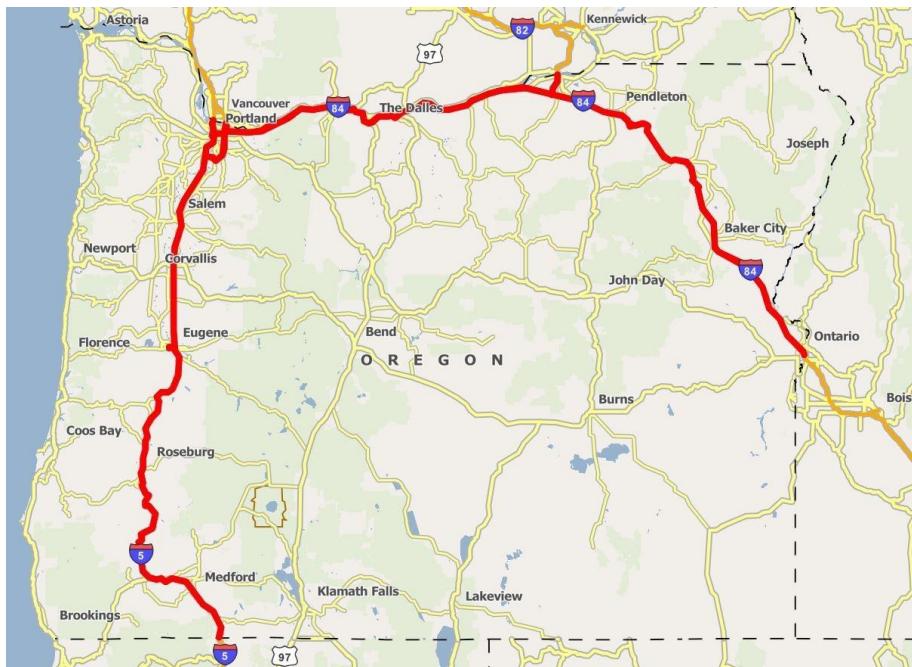
Priority Routes
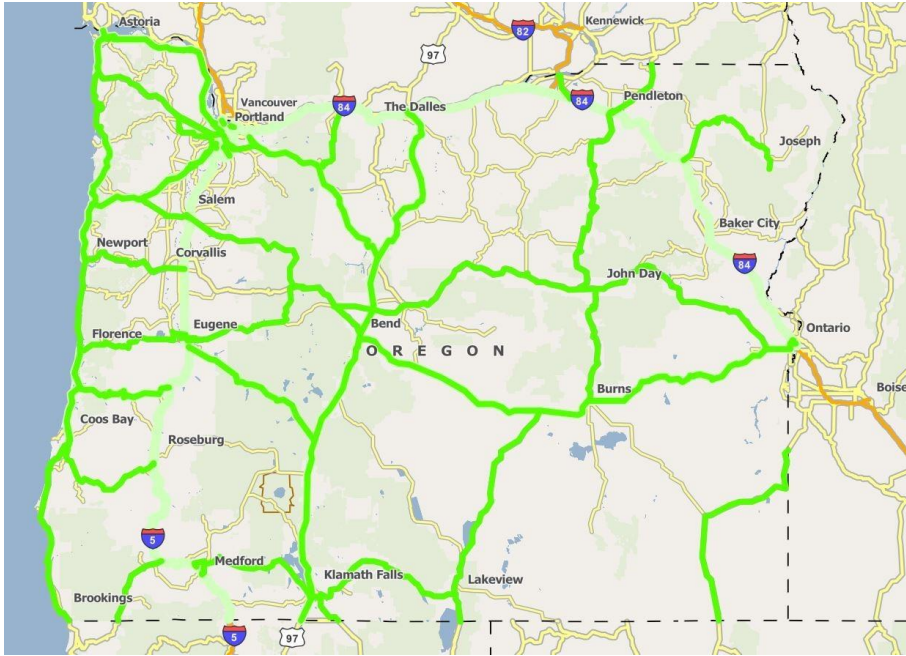
Regional, District & Low Volume Routes

(Blue = Regional, Brown = District, Gree = Low Volume