

Traffic Congestion

Total Lane Miles that are Congested

Our strategy

Safe and efficient mobility is foundational to economic opportunity and livability for all Oregonians. By monitoring mobility, we evaluate performance with respect to connecting people and goods to the markets they wish to reach. As Oregon's population grows, more people, businesses and freight are squeezed onto a transportation system that cannot expand at the same pace. If the Oregon economy continues to grow, we expect to see congestion. More information on the link between economic activity and transportation is available in the 2024 Oregon Statewide Congestion Overview.

While there is no single solution to eliminate congestion, there are different methods available to manage it. This congestion

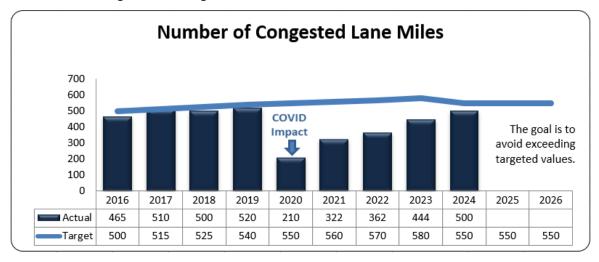
indicator helps Oregon monitor the extent of state highway congestion over time, which will be used to develop solutions to manage and optimize system performance.

About the performance indicator and target

Table 1 illustrates the range of congestion values for this indicator. The "Number of Congested Lane Miles" represents the sum of lane miles at locations where the Ratio of Annual Average Daily Traffic to Hourly Capacity (AADT/C) has a value of 9 (congestion threshold) or higher, which is comparable to the more familiar traffic flow Level of Service (LOS) of E (unstable flow) and F (breakdown flow).

Table 1. Traffic Congesion Levels		
Description	AADT/C	LOS
Uncongested Traffic Flow	< 9	A-D
Congested Traffic Flow	>=9	E-F

The target for this indicator is not a goal to strive for, rather it is a level of congestion to avoid exceeding. While congestion means slower speeds and longer travel times, it also creates other problems, such as reduced system reliability, lower fuel efficiency, reduced air quality and more greenhouse gas emissions. This specific indicator reveals whether the extent of congestion across the state highways is rising or falling over time. Current traffic patterns continue to change as household and commercial travel and freight movement evolves.



Fact

A well-functioning transportation system is foundational to a robust economy. Oregon population has increased 51% since 1990, while total VMT has increased 38%. ODOT oversees 17% of Oregon's lane miles but carries 61% of all VMT.

Mobility, cont.

How we are doing

There are two types of traffic congestion: 1) recurring congestion caused by more trips (high demand) than the system is designed to carry, and 2) non-recurring congestion caused by events such as crashes, other traffic incidents, weather, special events, and construction work zones. Much of the demand for transportation is influenced by economic activity, which is beyond public-sector control.

There are ways in which recurring congestion may be reduced, such as higher vehicle occupancy rates (carpools, public transit, parking fees), reducing vehicle trips and miles traveled (remote work, affordable housing near work sites, services and shopping), roadway operations (ramp meters, variable speeds, road pricing), increased pedestrian and bike use and adding road capacity (new through-lanes). Non-recurring congestion may be reduced by safety-enhancement projects (reduces crashes and the delay they cause), incident response programs (reduces incident clearing times) and roadway operations aimed at enhancing safety and smoothing traffic flow.

Traffic congestion in 2024 has returned to the congestion level measured during prepandemic. There are many factors attributed

to this, but the top may be employers ending or reducing remote work options.



Factors affecting results and what needs to be done

The factors that ODOT can control, we have a three-part approach aimed at providing mobility:

- Optimize use of infrastructure,
- Manage the traffic network, and
- Support transportation options.

We optimize the use of infrastructure by leveraging new technology and choosing investments designed to improve performance and safety. We invest in safety projects to reduce crash-induced congestion and enhancement projects to relieve bottlenecks. Through traffic network management we employ new technology to provide timely information to travelers so they can avoid congested locations. Oregon ranks among the top states for numbers of walk, bike, public transit, shared rides, and remote work. ODOT invests in programs

aimed at providing travelers with transportation options to access goods, services and economic opportunities across the state. Working with local partner agencies, we ensure investments support broad community goals related to the economy, and improve personal and environmental health. This three-part approach is critical to the success of a balanced transportation system.

About the data

The data used to calculate this measure comes from the annual Highway Performance Monitoring System (HPMS) data submittal to FHWA. The HPMS was developed by FHWA to measure the scope, condition, performance, use and operating characteristics of the National Highway System (NHS). This data is also used to determine the apportionment of Federal-aid Highway Program funds to states as well as serves as the primary data source for the biennial "Conditions and Performance Report" to U.S. Congress, which supports the development and evaluation of FHWA's legislative, program and budget planning activities.

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Highway Performance Monitoring System