

Number of Congested Lane Miles - Ratio of Annual Average Daily Traffic to Hourly Highway Capacity

Our strategy

Safe and efficient mobility is foundational to economic opportunity and livability for all Oregonians. As Oregon’s population grows, more people, businesses and freight are squeezed onto a transportation system that cannot expand at the same pace. As long as the Oregon economy continues to grow, we expect congestion to increase. More information on the link between economic growth and transportation is available in the [2022 Oregon Statewide Congestion Overview](#).

While there is no single solution to eliminate congestion, there are different methods available to manage the rate at which congestion increases. This congestion

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

About the target

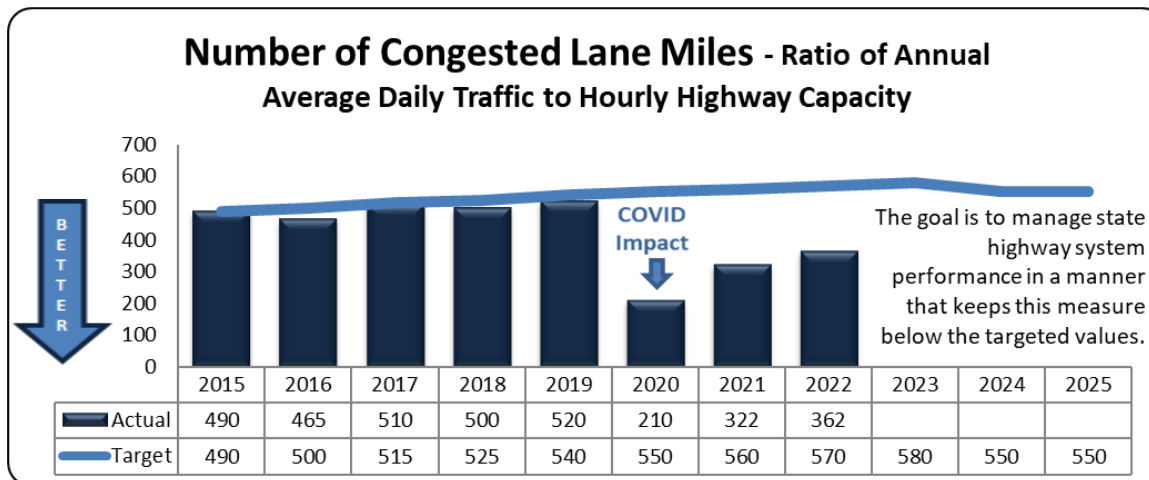
The target for this indicator is not a goal to strive for, rather it is a level of congestion to avoid exceeding. While congestion means slower speeds and longer travel times, it also causes other problems, such as reduced system reliability, lower fuel efficiency, reduced air quality and more greenhouse gas emissions. This specific indicator reveals whether the duration and intensity of congested periods are rising or falling over time. Current traffic patterns continue to

change as travel behavior transitions towards a new normal post-pandemic.

The *Ratio of Annual Average Daily Traffic to Hourly Capacity (AADT/C)* values range from 0 to 12+. Table 1 illustrates the range of congestion values for this indicator. The “Number of Congested Lane Miles” represents locations where the AADT/C has a value of 9 or higher.

How we are doing

There are two types of delay caused by traffic congestion: 1) recurring congestion caused by more trips (demand) than the system is designed to carry, and 2) non-recurring congestion due to events such as traffic incidents, weather, and construction



Fact

A well-functioning transportation system is foundational to a robust economy. Over the last 2 decades Oregon population has increased 25%, employment increased 13% and statewide vehicle-miles-traveled increased 9%.

Mobility, cont.

work zones. Much of the demand for transportation is influenced by economic activity, which is beyond public-sector control. However, there are ways in which recurring congestion may be reduced, such as higher vehicle occupancy rates (carpools, mass transit, parking fees), reducing vehicle trips (tele-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), incident response programs (reduces incident clearing times)



and roadway operations aimed at enhancing safety or smoothing traffic flow.

Factors affecting results and what needs to be done

ODOT has a 3-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, telecommute and shared rides. 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 improving personal and environmental health. This 3-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 Nation’s highways. 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.

Contact Information

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Data Source

[Highway Performance Monitoring System](#)

Table 1. AADT/C Values for Congestion Levels

Description	Ratio Value
Uncongested traffic flow	Less than 7
Transitioning to moderate congestion	7 – 8.99
Moderate congestion to congested conditions	9 – 9.99
Congested and transitioning to very congested	10 – 11.99
Very congested and transitioning to extremely congested	12+