

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

Our strategy

Safe and efficient mobility is foundational to the economic health and livability of all Oregonians. By monitoring highway mobility, we evaluate performance with respect to connecting people and goods to the markets they wish to reach. As Oregon grows, more people and freight are squeezed onto a transportation system that cannot expand to keep pace. As long as the Oregon economy continues to grow, we can expect traffic congestion to increase.

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

congestion increases. This measure will help Oregon monitor the level and extent of congestion over time. This information will be used to apply different techniques designed to manage and optimize system performance.

About the Target

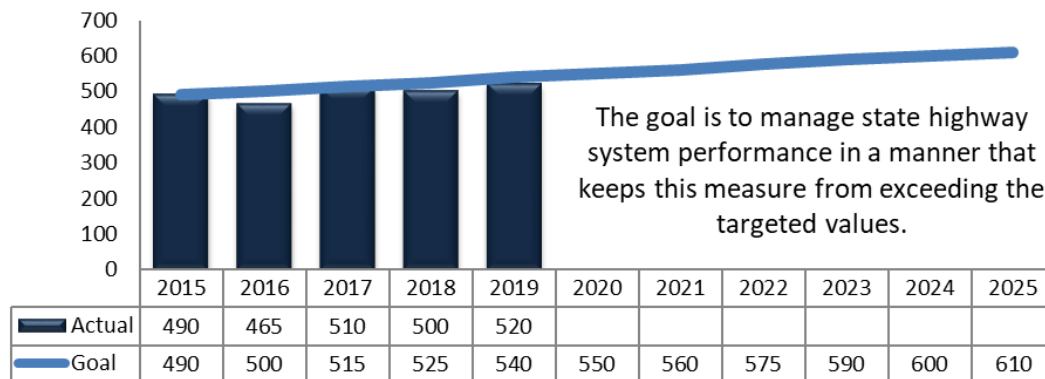
Most people are aware traffic congestion causes slower speeds and longer trip times. However, congestion also causes other problems, such as reducing system reliability, fuel efficiency and air quality. This measure also reveals whether the duration and intensity of congested periods are rising or falling over time.

The *Ratio of Annual Average Daily Traffic to Hourly Capacity* (AADT/C) best suits the objective of monitoring state highway mobility. AADT/C measures both the extent and duration of congestion, highlighting where congestion has spread beyond one peak hour of the day. AADT/C values range from 0 to 14+. Table 1 defines the range of values for this metric. The “Number of Congested Lane Miles” represents locations where the AADT/C is a value of 9 or higher.

How we are doing

There are two distinct types of traffic congestion: 1) recurring congestion caused by more trips (demand) than the system is designed to carry, and 2) non-recurring

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Fact

Currently 520 Oregon state-owned highway lane miles are classified as congested using this measure. This is 4 percent higher than the previous year.

Mobility, cont.

congestion due to events such as traffic incidents, weather, and construction 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 increased pedestrian and bike use, higher vehicle occupancy rates (carpools, mass transit, parking fees), reducing trips/trip length (affordable housing located near work sites, services and shopping; road pricing), roadway operations (ramp meters, variable speeds), and adding road capacity (new 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 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 construction techniques to improve performance and safety. We invest in safety projects to decrease crash-induced congestion and construction projects designed to relieve bottlenecks. Through traffic network management we employ new technology to provide timely information to travelers. These systems help travelers choose alternative modes and routes to avoid congestion caused by crashes and other disruptions. Finally, Oregon ranks among the top states for numbers of walk, bike, ride-transit, telecommute and shared-rides.

Oregon’s strategies to provide transportation options reduce single-vehicle occupancy use, while improving the health of Oregonians, promoting environmental benefits and providing access to jobs, goods and services.

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 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 being 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,
 FHWA

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 – 13.99
Very congested and transitioning to extremely congested	14+