Our strategy
Safe and efficient mobility is foundational to the economic opportunity and livability of all Oregonians. By monitoring 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 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 mobility indicator 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 travel times. However, congestion also causes other problems, such as reducing system reliability, lower fuel efficiency, reduced air quality and higher GHG. Congestion monitoring 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 desire to monitor state highway mobility in Oregon. AADT/C measures both the extent and duration of congestion, highlighting where congestion has spread beyond one hour of the day. AADT/C values range from 0 to 12+. Table 1 illustrates 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 types of delay caused by traffic congestion: 1) recurring congestion caused by more trips (demand) than the

Fact
Since 2017 over 500 Oregon state highway lane miles are classified as congested using this measure. 2020 congestion levels dropped 58% from the impacts of COVID-19 mandates.
system is designed to carry, and 2) non-recurring 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 higher vehicle occupancy rates (carpools, mass transit, parking fees), reducing vehicle trips (affordable housing located 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.

<table>
<thead>
<tr>
<th>Description</th>
<th>Ratio Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncongested traffic flow</td>
<td>Less than 7</td>
</tr>
<tr>
<td>Transitioning to moderate congestion</td>
<td>7 – 8.99</td>
</tr>
<tr>
<td>Moderate congestion to congested conditions</td>
<td>9 – 9.99</td>
</tr>
<tr>
<td>Congested and transitioning to very congested</td>
<td>10 – 11.99</td>
</tr>
<tr>
<td>Very congested and transitioning to extremely congested</td>
<td>12+</td>
</tr>
</tbody>
</table>

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 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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Data Source
Highway Performance Monitoring System