2016 Transportation Attainment Report

Washington’s transportation system: Goals, objectives and performance measures

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Washington State Transportation Commission
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Purpose of the Attainment Report

Biennial transportation attainment reports provide:

- Assessments of progress on the transportation goals and performance of the transportation system
- System-wide performance, not agency-specific
- High-level indicators for each measure presented to allow for a quick assessment of progress
- Information used to make investment decisions and to develop strategies and programs within agencies
Compiled using data and information from these contributors:

- Department of Transportation
- Office of Financial Management
- Washington Traffic Safety Commission
- Department of Licensing
- Department of Ecology
- Washington State Transportation Center
- Washington State Transportation Commission
- National Highway Traffic Safety Administration
- Federal Trade Commission
- Federal Highway Administration
- Federal Transit Administration
- US Census Bureau
- US Army Corps of Engineering
- Federal Aviation Administration
Statewide Legislative Transportation Goals

- **Safety:** To provide for and improve the safety and security of transportation customers and the transportation system
- **Preservation:** To maintain, preserve, and extend the life and utility of prior investments in transportation systems and services
- **Mobility:** To improve the predictable movement of goods and people throughout Washington state, including congestion relief and improved freight mobility
- **Environment:** To enhance Washington's quality of life through transportation investments that promote energy conservation, enhance healthy communities, and protect the environment
- **Stewardship:** To continuously improve the quality, effectiveness, and efficiency of the transportation system
- **Economic vitality:** To promote and develop transportation systems that stimulate, support, and enhance the movement of people and goods to ensure a prosperous economy
Improvements since 2014:

• Reduced passenger injuries on ferries
• Increased amount of pavement in fair or better condition on the NHS
• Reduced amount of structurally deficient bridges by deck area
• Increased Amtrak and ferry ridership
• Improved access to potential habitat for fish
• Increased transit use resulting in more vehicle miles avoided

Where challenges remain:

• Rising traffic, pedestrian and bicyclist fatalities
• Slightly increasing time that ferry vessels are out of service
• Increased demand on the transportation system as a result of population growth
• Reduced percent of Nickel and TPA projects delivered on time
• Increased annual weekday delay on the central Puget Sound region’s major urban highways
Factors influencing transportation system demand:

- State population reached just more than 7 million in 2015; 4.3% growth since 2011; 45.1% growth since 1990
- Number of housing units increased by 105,000 from 2011 through 2015
- Non-farm employment has grown from 2.8 million workers in June 2011 to 3.1 million in June 2015; 9.5% increase
- Vehicle ownership has grown faster than state population; 7.3 million registered vehicles compared to 5.6 million issued drivers licenses in December 2015
- Number of licensed drivers increased on average by 100,000 per year from 2011 to 2015; 7.4% total increase
## On the ground

<table>
<thead>
<tr>
<th>Category</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.6 million licensed drivers</td>
<td>1.2 million lane miles of roads treated for snow and ice control</td>
</tr>
<tr>
<td>4.9 million registered passenger vehicles (2016)</td>
<td>8,158 bridges statewide</td>
</tr>
<tr>
<td>7.3 million total registered vehicles</td>
<td>309 miles of HOV freeway lanes complete</td>
</tr>
<tr>
<td>59.7 billion vehicle miles traveled</td>
<td>346 park-and-ride lots with 57,300 spaces</td>
</tr>
<tr>
<td>3.5 billion gallons of fuel consumed (FY 2016)</td>
<td>31 transit systems</td>
</tr>
<tr>
<td>20.6 miles per gallon fuel economy on average (2014)</td>
<td>214.9 million transit passenger trips</td>
</tr>
<tr>
<td>11,012 miles traveled per licensed driver on average</td>
<td>2,920 vanpools in operation per month on average</td>
</tr>
<tr>
<td>18,699 state highway lane miles</td>
<td>9.1 million vanpool passenger trips</td>
</tr>
<tr>
<td>4,039 interstate freeway lane miles</td>
<td>640,000 state-supported Amtrak Cascades passenger trips</td>
</tr>
<tr>
<td>78,586 county road lane miles (2014)</td>
<td>3,089 miles of freight rail line</td>
</tr>
<tr>
<td>37,752 city road lane miles (2014)</td>
<td>121.8 million tons of rail freight (2014)</td>
</tr>
<tr>
<td>44.1% of daily traffic on county and city roads</td>
<td>284.8 million tons of freight carried by truck</td>
</tr>
<tr>
<td>55.9% of daily traffic on state highways</td>
<td>$137.5 billion of cargo passing through ports</td>
</tr>
</tbody>
</table>
## In the air

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 state-managed airports (9 owned by state)</td>
<td>1.5 million tons of air cargo (2014)</td>
</tr>
<tr>
<td>134 public use airports</td>
<td>20.1 million passenger boardings at SeaTac Airport</td>
</tr>
</tbody>
</table>

## On the water

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.1 million passengers and 10.6 million vehicles carried on state ferries</td>
<td>75 port districts</td>
</tr>
<tr>
<td>22 state ferries, largest system in the nation</td>
<td>3.5 million 20-foot container equivalent units through Seattle and Tacoma ports</td>
</tr>
<tr>
<td>20 state ferry terminals</td>
<td>119.2 million tons of waterborne freight tonnage (2014)</td>
</tr>
<tr>
<td>10 state ferry routes</td>
<td>450 daily state ferry sailings</td>
</tr>
</tbody>
</table>

Objective: Reduce roadway fatalities

- The number of traffic fatalities increased 24.9% between 2013 (454 fatalities) and 2015 (567 fatalities)
- The rate of fatalities per 100 million vehicle miles traveled increased from 0.80 in 2011 to 0.95 in 2015; 18.8% increase
Goal: Safety

Objective: Reduce passenger injuries on Washington State Ferries

- In FY2016, there were 0.42 passenger injuries per million riders
- 10 passenger injuries; 24.1 million total passengers in FY2016
Objective: Reduce fraudulent driver’s licenses and records

- Identity theft complaints numbered 9,043 in 2015; 86.3% increase since 2011
- For every 100,000 residents in Washington, there were 505.7 fraud complaints in 2015 compared to 473.4 complaints in 2011; an increase of 6.8%
Objective: Extend the useful life of pavement on the NHS

- 94% of all Washington pavement on the NHS was in fair or better condition in 2014, remaining steady since 2011
- Percentage of fair or better state owned NHS pavement increased, while locally owned NHS pavement conditions have decreased
Objective: Keep bridges safe and open to traffic

- In 2015, 7.6% of all (state and locally owned) bridges by deck area statewide were structurally deficient, decreasing from 8.1% in 2014
- Washington is ranked 7th in the nation for lowest percent of structurally deficient bridges (by actual number of bridges)
Goal: **Mobility**

Objective: Reduce congestion on urban highways and arterials

- Weekday delay in the central Puget Sound region grew 91.2% from 4.0 million vehicle hours of delay in 2011 to 7.7 million in 2015
- Statewide vehicle miles traveled on all Washington roads was 59.7 billion miles in 2015, an increase of 4.7% from the 57 billion in 2011

**Central Puget Sound region annual hours of weekday delay on major urban highways trending upward since 2011**

2011 through 2015; Weekday delay in millions of vehicle hours and percent of total delay by major urban highway

- Interstate 90 (3.9%)
- Interstate 405 (32.9%)
- Interstate 5 (56.6%)
- State Route 520 (2.8%)
- State Route 167 (3.7%)

**Vehicle miles traveled on Washington state highways outpaces growth on all roads in 2015 compared to 2011**

2011 through 2015; Population in thousands

<table>
<thead>
<tr>
<th>Year (population)</th>
<th>Total Vehicle Miles Traveled (billions)</th>
<th>Vehicle Miles Traveled per person</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State highways</td>
<td>All public roads</td>
</tr>
<tr>
<td>2011 (6,768)</td>
<td>31.455</td>
<td>56.965</td>
</tr>
<tr>
<td>2012 (6,818)</td>
<td>31.214</td>
<td>56.607</td>
</tr>
<tr>
<td>2013 (6,882)</td>
<td>31.649</td>
<td>57.211</td>
</tr>
<tr>
<td>2014 (6,968)</td>
<td>32.177</td>
<td>58.060</td>
</tr>
<tr>
<td>2015 (7,061)</td>
<td>33.335</td>
<td>59.653</td>
</tr>
<tr>
<td>Δ 2015 vs. 2011</td>
<td>1.880</td>
<td>2.688</td>
</tr>
<tr>
<td>%Δ 2015 vs. 2011</td>
<td>6.0%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>


Data source: WSDOT Office of Strategic Assessment and Performance Analysis.

Notes: Central Puget Sound includes King and Snohomish counties.
Goal: Mobility

Objective: Reduce congestion by making systems more efficient

- In 2014, 859.7 million vehicle miles were avoided due to transit use, a statewide increase of 12.9% from 761.5 million vehicle miles avoided in 2010.
- During the same period, the statewide population grew by 3.6% from roughly 6.7 million in 2010 to 7.0 million in 2014.
Objective: Promote walking and biking to improve public health

- Percent of commuters walking or biking held steady from 4.6% in 2011 to 4.7% in 2015
- Observed pedestrian traffic increased 44.5% between 2011 and 2015, and observed bike traffic increased 37.2% between 2011 and 2015
Objective: Increase the number of culverts fixed and potential miles of habitat gained by WSDOT

- WSDOT corrected 63 culverts from 2011 through 2015 (301 total corrections to date), improving access to approximately 240 miles of potential fish habitat (1,000 miles total to date)
Objective: Reduce greenhouse gas emissions caused by transportation

- Transportation-related greenhouse gas emissions decreased by 2.7 million metric tons between 2008 and 2012
- Electric vehicles accounted for 1.6% of new vehicles registrations in 2015
Objective: Deliver 90% of Nickel and TPA projects both on time and on budget

- As of June 2016, 371 of the 421 projects were completed, with 87% on time and 91% on budget
**Goal: Stewardship**

**Objective:** Limit out-of-service time for ferry vessels

- Ferry vessels spent an average of 9.5 weeks per vessel in out-of-service time in FY2016
- The average age of all ferry vessels is 31 years in FY2016

### Out-of-service time per Washington state ferry vessel averaged 9.5 weeks in FY2016

*Fiscal years 2012 through 2016; Average weeks out of service per vessel by class*

<table>
<thead>
<tr>
<th>Vessel class (number of vessels)</th>
<th>FY2012</th>
<th>FY2013</th>
<th>FY2014</th>
<th>FY2015</th>
<th>FY2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumbo Mark II (3)</td>
<td>6.7</td>
<td>3.2</td>
<td>5.9</td>
<td>16.8</td>
<td>14.9</td>
</tr>
<tr>
<td>Jumbo (2)</td>
<td>7.1</td>
<td>21.9</td>
<td>4.1</td>
<td>3.8</td>
<td>5.6</td>
</tr>
<tr>
<td>Evergreen State (2)</td>
<td>12.6</td>
<td>10.0</td>
<td>15.1</td>
<td>15.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Issaquah (6)</td>
<td>6.1</td>
<td>4.0</td>
<td>7.6</td>
<td>8.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Super (4)</td>
<td>8.4</td>
<td>8.3</td>
<td>5.9</td>
<td>5.5</td>
<td>18.2</td>
</tr>
<tr>
<td>Kwa-di Tabil (3)</td>
<td>3.4</td>
<td>6.0</td>
<td>9.8</td>
<td>8.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Olympic (2)³</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5.1</td>
<td>11.4</td>
</tr>
<tr>
<td>All Vessels (22)</td>
<td>7.8</td>
<td>7.5</td>
<td>8.1</td>
<td>9.4</td>
<td>9.5</td>
</tr>
</tbody>
</table>

Data source: WSDOT Ferries Division.

Notes: WSDOT Ferries Division has a goal for average out of service time of eight weeks per year. 1 The numbers of vessels reflect the fleet at the end of FY2016. 2 These calculations are based on 21 vessels in the Ferries system at the time. 3 These calculations are based on 22 vessels in the Ferries system at the time.
Objective: Measure public perception about the condition and needs of the transportation system

- In 2015, 65% of respondents gave the statewide system a C grade (“Average”) or better, and 57% of respondents gave their local system a C grade or better.
Objective: Create and sustain jobs through investments in transportation

- WSDOT’s highway construction program is estimated to create or sustain 28,400 jobs in the 2015-2017 biennium
Goal: Economic Vitality

Objective: Enhance transportation systems to facilitate movement of freight

- Trucks move the most freight by value and by volume in Washington
- In 2014, all modes monitored by WSDOT increased freight tonnage; marine freight had the largest increase at 14.6% since 2010

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**Most freight by value is moved by truck in Washington state**

*2014; Percentages determined by value in millions of dollars*

- $628.5 value
- Truck (59.2%)
- Multiple modes (22.0%)
- Water (2.7%)
- Pipeline (4.5%)
- Air (5.0%)
- Rail (3.7%)
- Other (2.7%)

**Waterborne freight tonnage increase in 2014 in Washington state**

*2010 through 2014, tons in millions*

- Domestic
- Foreign
- Intrastate

Data source: Freight Analysis Framework Data, Federal Highway Administration.
Notes: Percentages may not add to 100 due to rounding.

Note: 1 Intrastate freight is a subset of domestic freight, but is shown separately for clarity. The 2014 edition of the Attainment Report counted intrastate freight twice (first as part of the total domestic freight and as its own category), and the data for all years has been corrected in this graph.
Questions?

For additional information on the 2016 Transportation Attainment Report, please contact:

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