TRANSPORTATION 101
Moving People and Goods
Who is the Washington State Transportation Commission?

An independent, seven-member body of citizens appointed by the Governor for six-year terms – three from east of the mountains and four from the west. The WSDOT Secretary and the Governor’s Office serve as non-voting members.

Roles and Responsibilities

- Proposes transportation policy and finance recommendations to the Governor and Legislature.
- Serves as the State Tolling Authority, adopting state highway and bridge tolls, and setting fares for Washington State Ferries.
- Develops and issues a comprehensive, balanced 20-year statewide transportation plan.
- Conducts a statewide outreach program to gather public input into state transportation policy; to promote transportation education; and to gain understanding of local and regional transportation needs and challenges.
- Provides a public forum for transportation policy development.
What is the Statewide Transportation System?

- 18,000 miles of city streets
- 39,200 miles of county roads and seven county ferries
- Over 7,000 miles of state highways and 21 ferries
- Reservation roads, DNR and Forest Service roads
- 465 miles of Columbia-Snake River barge system
- Over 8 million registered passenger vehicles, trucks and motorcycles
- 32 transit systems
- Sidewalks, bike paths, and bicycles
- Amtrak, Sounder, Link light rail, streetcars
- 75 port districts in 33 of 39 counties
- Freight trains, trucking companies and maritime shipping
- Airports and airlines
Transportation in the Past

Federal
• Federal gas tax money built 90% of the Interstate System.
• Congress last increased the federal gas tax to 18.4 cents/gallon in 1993.

Washington State
• Tacoma Narrows Bridge, both Lake Washington floating bridges, and the I-5 bridges between Vancouver and Portland, were all toll bridges.
• Puget Sound ferries were privately owned and operated until the state bought 16 vessels and 20 terminals in 1951.
• State and local government are contributing a greater share of transportation funding than during the 60s, 70s, and 80s.

Local
• Counties and cities receive a smaller percentage of the state gas tax today than they did 20 years ago. Less than ¼ of the state gas tax is distributed to counties and cities.
Transportation Today: The Big Picture

Federal

- Since 2008, Congress has transferred over $143 billion from the general fund to the Highway Trust Fund and Mass Transit Fund.
- If indexed for inflation since 1993, the current federal fuel taxes would be:
  - Gasoline: about 33 cents per gallon
  - Diesel: about 44 cents per gallon

State

- The $11.8 billion transportation budget for 2021–2023 biennium is less than 8.8% of the total state budget.

Local

- Cities, counties, transit and ports account for about 50% of transportation spending in WA state.

<table>
<thead>
<tr>
<th>Total Spending by Mode (National)</th>
</tr>
</thead>
<tbody>
<tr>
<td>About $300 billion was spent on transportation infrastructure in 2017</td>
</tr>
<tr>
<td>Highways</td>
</tr>
<tr>
<td>Mass Transit</td>
</tr>
<tr>
<td>Aviation</td>
</tr>
<tr>
<td>Water</td>
</tr>
<tr>
<td>Rail</td>
</tr>
</tbody>
</table>
What are the Current Sources of State Transportation Revenue?

**Washington State Transportation 16-Year Funding Sources**

- **Motor vehicle fuel tax**: 39%
- **licenses, permits, and fees**: 22%
- **Bond sales**: 14%
- **Federal funds**: 12%
- **Vehicle sales tax**: 3%
- **Ferry revenues**: 7%
- **Tolls**: 3%

**2015-16 Revenue Package** was projected to generate about $16 billion over 16 years.

**Fares** are projected to raise $377 million for ferry operations in 2021 – 2023 biennium.

**Toll revenue** pays for debt, maintenance, and operations for each tolled facility, as applicable.

**Fuel tax, ferry fare, and toll revenue** is down, due to the pandemic.
Where Does the Gas Tax Go?

Where Does the 49.4¢ State Gas Tax Go?

- **2020**
  - WSDOT: 17.6¢ (37%)
  - Cities & Counties (Local Government): 8.0¢ (16%)
  - 11.8¢ (23%)

- **2029**
  - WSDOT: 24.9¢ (51%)
  - Cities & Counties (Local Government): 8.0¢ (16%)
  - 12.0¢ (24%)

Where Will the 49.4¢ State Gas Tax Go?

- **2020**
  - WSDOT**: 8.0¢ (16%)
  - Cities & Counties (Local Government): 24.9¢ (51%)
  - 12.0¢ (24%)

- **2029**
  - WSDOT**: 8.0¢ (16%)
  - Cities & Counties (Local Government): 24.9¢ (51%)
  - 12.0¢ (24%)

---

Source: WSDOT, 2020

* Includes operations, maintenance, preservation and safety improvements.

** Includes funding for projects specified in the 2003 Nickel, 2005 transportation Partnership, and 2015 Connecting Washington acts, as well as funding to pay off bonds funded by pre-2003 fuel tax.
Local Transportation Revenue Sources

• 79% of city and 65% of county transportation revenue is locally generated.
  o City transportation funds come primarily from the sales tax;
  o County transportation funds mostly come from the property tax;
  o Over 80 cities also collected revenue from a Transportation Benefit District.

• Federal funds contribute 8% to cities’ and counties’ transportation revenue.

• 13% of cities’ transportation revenue and 24% of counties’ comes from the state:
  o 2.96¢ of state gas tax is distributed to cities.
  o 4.93¢ of state gas tax is distributed to counties.
  o 4.07¢ of state gas tax is distributed as grants to local governments.

• Transit revenue typically comes from:
  o Locally-approved sales tax.
  o Fare box receipts.
  o Federal and state grants.

• Port revenue comes from user fees, leases, property tax and grants.
Transportation is the second largest household expenditure nationwide, after housing.

- Census data indicates that the mean transportation costs in the United States per 2-person household is $11,345 per year.
- $10,215 (90%) of those transportation costs comes from the cost of vehicle ownership – the cost of owning/leasing, insurance, financing, maintenance, fuel, and other related expenses.
Washington is Making Big Capital Investments -- But Not Spending Enough on Preservation

- WSDOT needs an average of about $1 billion per year to maintain and preserve the highway backbone of our economy.

- The enacted 2021-23 transportation budget enacted provided WSDOT with $684 million per year.

- The last revenue package (2016) dedicated only 9% of funds to state highway preservation.
Identifying & Planning For Future Needs
2020 Annual Report to Decision Makers

Four Big Ideas to Move Transportation Forward

1. Proactively plan for the emerging Cascadia Mega-Region encompassing Portland-Seattle-Vancouver, B.C.

2. Address growing rural Washington funding needs

3. The new commute is virtual – accelerate statewide broadband deployment

4. Transportation equity is central to achieving free & accessible movement for all
Washington Transportation Plan (WTP) “2040 and Beyond”

• The WSTC is responsible for authoring and updating the WTP every four years.
• The WTP applies to all transportation systems and modes, at all jurisdictional levels – it is not just about the state-owned system.
• The WTP is the state’s 20-year, long-range transportation plan that is consistent with the state’s growth management goals, and sets forth high-level priorities and strategies within the framework of the state’s six statutory policy goals:
  o Preservation
  o Safety
  o Economic Vitality
  o Mobility
  o Environment
  o Stewardship

https://www.wtp2040andbeyond.com/
Washington Transportation Plan “2040 and Beyond”
Statewide Transportation Goals and Policies

CROSS-CUTTING TOPICS
FOR WTP 2040
AND BEYOND
Increasing frequency of severe weather events and disruptions due to climate change will tax resources, infrastructure, and services.

There is a $925 million annual system preservation and maintenance shortfall. This shortfall results in over $1.5 billion underfunded for bridge retrofit and $2.4 billion for state fish passage projects.

Transportation is critical to:

- Emergency response
- Societal recovery
- Business continuity
Transformational Technology – Possible Impacts

How will technology and autonomous vehicles impact transportation, land use, the economy, and the environment?

• More sprawl? Longer commutes?
• Big parking lots not needed?
• Prioritize and manage curb space?
• Congestion pricing? Or surplus roadways?
• Mobility as a Service? Less Public Transportation?
Gas Tax Sustainability Uncertain – What’s Next?
GAS TAX REVENUES DECLINE WITH VEHICLE FUEL EFFICIENCY

Conservative forecasts say Washington’s vehicles will reach a 35 MPG average by 2035—a potential 45% reduction in gas tax revenue per mile driven. As vehicle MPG increases, gas consumption decreases, and thus gas tax revenues decrease as well.

The state gas tax increased in 2015-2016.
TAXING GALLONS HAS FAIRNESS AND EQUITY CHALLENGES

• The gas tax is fair because it is based on a simple principle: user pays, user benefits.
  - The more drivers use the roads, the more gas they purchase, thus the more drivers pay in gas taxes used for the maintenance and construction of roads.

• However, as the adoption of EV’s and hybrids expands, the gas tax has moved more toward a “some users pay/all users benefit” model.

• RUC returns us to the user pay, user benefits principle.
A road usage charge (RUC) is a per-mile charge. Drivers would pay for roads based on actual miles driven, instead of paying based on gallons of gas consumed.

Oregon and Utah have enacted RUC programs and are collecting per-mile charges from drivers. Virginia enacted a program in 2020.
2012 Legislative Mandate: Assess RUC’s suitability as a sustainable, long-term revenue source that could replace the current state gas tax

High-level parameters:

- During a transition period of moving from the gas tax to a road usage charge, drivers would owe one or the other, but not both.

- To compare the gas tax against a road usage charge, analyze and test a per-mile rate that is equivalent to the state’s 49.4 cent/gallon gas tax.
  - *State Gas Tax 49.4 ÷ 20 mpg (state average) = 2.4 cents / mile*

- Provide drivers’ a choice for how their vehicle mileage is collected, reported and paid.
WASHINGTON’S RUC PILOT PROJECT

• **Year-long**, statewide test of Washington-designed RUC system for **2,000** test-drivers

• **Cross-border testing:**
  • City of Surrey, BC
  • Idaho Transportation Department
  • Oregon Department of Transportation

• **Additional partners:** Seattle Electric Vehicle Association and Plug-in America
RUC Pilot Project – Mileage Reporting Options Tested

**ODOMETER READING**
- 28% use
- Post-pay for miles reported quarterly
- Report miles either electronically or in person

**MILEAGE PERMIT**
- 1% use
- Pre-select a block of miles (1,000, 5,000, 10,000)
- Report odometer either electronically or in person every three months
- Obtain additional miles as needed to keep mileage permit valid

**MILEMAPPER SMARTPHONE APP**
- 14% use
- Records miles using a smartphone
- Works with all vehicles
- Navigational GPS can be turned on/off
- Available only on iPhone iOS

**PLUG-IN DEVICES (WITH OR WITHOUT GPS)**
- 56% use
- Automated mileage meter with GPS and non-GPS options
- 37% with GPS
- 19% without GPS
- Plugs into OBD-II ports in vehicles 1996 or newer
- GPS-enabled devices automatically deduct out-of-state miles
ON AVERAGE, RURAL AND LOW-INCOME DRIVERS WILL PAY LESS UNDER RUC THAN THE GAS TAX

Rural & lower income households tend to drive lower MPG vehicles – and therefore pay disproportionately more for roads under the gas tax.

As a result, the average rural and/or low-income drivers will pay less in taxes with RUC than the gas tax.
Tolling – a Funding Source & Operational Tool
Toll Roads & Bridges, Ferry Fares

Nationally, tolls are increasingly used to finance transportation improvements.

Washington uses congestion pricing, variable toll rates, and managed lanes to manage traffic as well as raise revenue.

Toll revenue pays for debt, maintenance, and operations for each tolled facility. Tolling generated about $148 million in FY 2021, down about $31 million from FY 2020.

Ferry Fares are expected to raise about $376 million in the 2021-23 biennium, covering nearly 70% of WSF operating costs.
## Current Toll Facilities in Washington

<table>
<thead>
<tr>
<th>Facility</th>
<th>Key Points</th>
<th>Tolling Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 16 Tacoma Narrows Bridge</td>
<td>• State’s first electronic tolling facility opened July 2007</td>
<td>Flat toll rates repay construction bonds.</td>
</tr>
<tr>
<td>SR 167 HOT Lanes</td>
<td>• State’s first high-occupancy toll lanes launched May 2008</td>
<td>Dynamic toll rates manage traffic performance, no debt issued.</td>
</tr>
<tr>
<td>SR 520 Bridge</td>
<td>• Urban Partnership</td>
<td>Variable toll rates to repay bonds and manage traffic.</td>
</tr>
<tr>
<td></td>
<td>• Pre-construction tolls began Dec. 2011</td>
<td></td>
</tr>
<tr>
<td>I-405 Express Toll Lanes</td>
<td>• First phase between Bellevue &amp; Lynnwood began Sept. 2015</td>
<td>Dynamic toll rates manage traffic performance, no debt issued.</td>
</tr>
<tr>
<td>SR 99 Tunnel</td>
<td>• Opened Feb. 2019</td>
<td>Variable toll rates to repay bonds and manage traffic.</td>
</tr>
<tr>
<td></td>
<td>• Tolling began in Nov. 2019</td>
<td></td>
</tr>
</tbody>
</table>
An Expanding Tolling System

Authorized Future Toll Facilities – Mid 2020s

- I-405 Express Toll Lanes (Renton to Bellevue)
- Puget Sound Gateway Program
  - SR 167 Expressway
  - SR 509 Expressway

Possible Toll Facilities Pending On-Going Analysis and Legislative Approval

- I-5 Columbia River Bridge Replacement
- US 2 Westbound Trestle Replacement
Washington State Tolling

Who’s Involved?

Transportation Commission Serves as the State Tolling Authority

- Seven-member Commission appointed by the Governor
- Sets toll rates and polices within funding requirements
- Establishes advisory committees
- Conducts public outreach & education

Washington State Legislature
- Authorizes toll facilities
- Determines how toll revenue is spent

Transportation Commission
- Sets toll rates and exemptions

WSDOT
- Plans, builds and operates toll facilities

Office of State Treasurer
- Arranges financing and issues debt
Thank you!

wstc.wa.gov
transc@wstc.wa.gov