



Washington State  
Transportation Commission



# 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 22 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 smaller percentage of the state gas tax today than they did 20 years ago. Less than  $\frac{1}{4}$  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 \$9.97 billion transportation budget for 2019–2021 biennium is less than 8.4% of the total state budget.

## Local

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

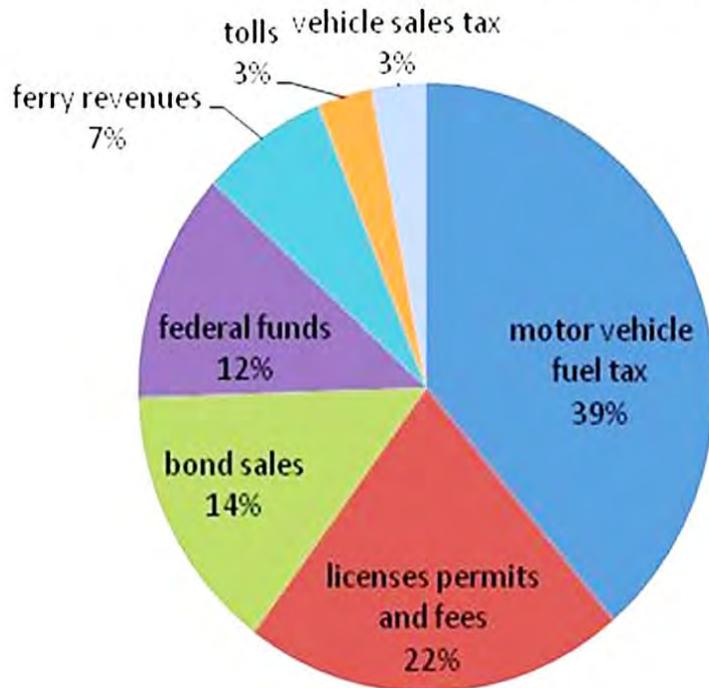
### Total Spending by Mode (National)

About \$300 billion was spent on transportation infrastructure in 2017

Highways	\$177 billion
Mass Transit	\$70 billion
Aviation	\$37 billion
Water	\$10 billion
Rail	\$5 billion

# What are the Current Sources of State Transportation Revenue?

## Washington State Transportation 16-Year Funding Sources



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

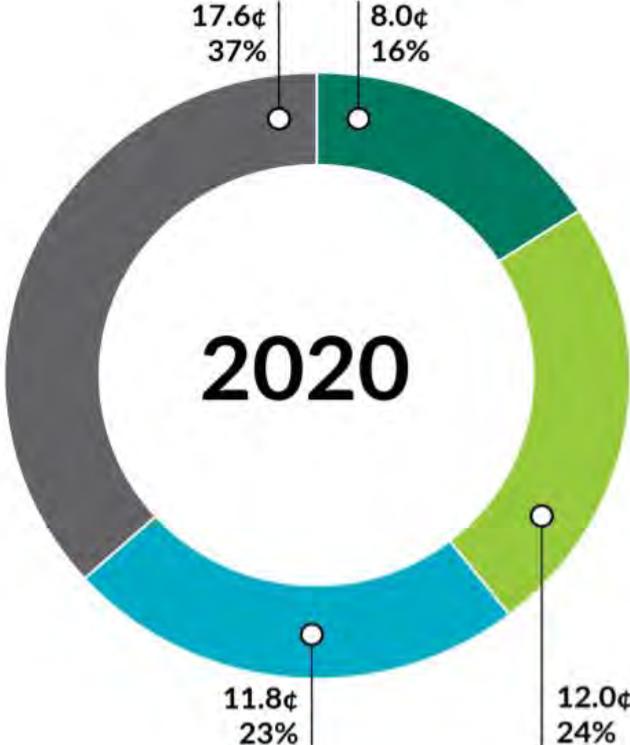
**Fares** were projected to raise \$407 million for ferry operations in 2019 – 2021 biennium.

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

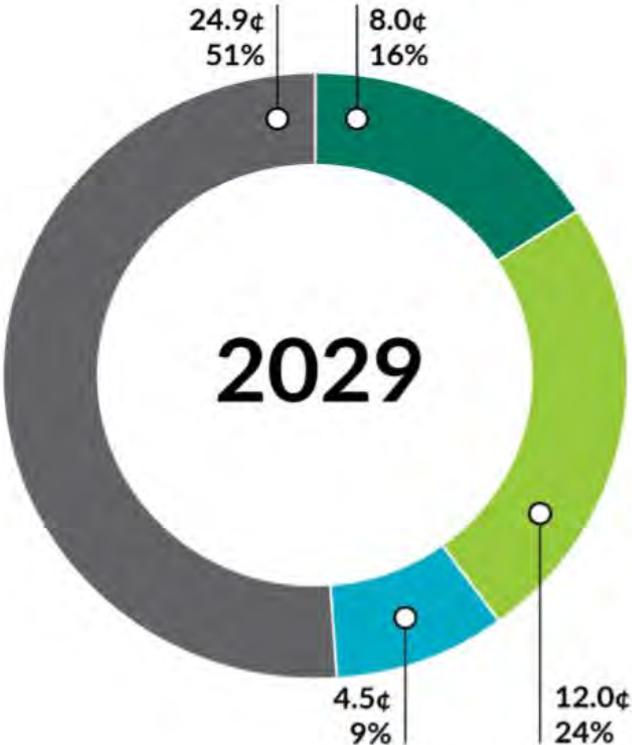
**Fuel tax, sales tax, fare and toll revenue** is down, due to the pandemic.

# Where Does the Gas Tax Go?

Where Does the 49.4¢ State Gas Tax Go?



Where Will the 49.4¢ State Gas Tax Go?



- WSDOT\*
- Cities & Counties (Local Government)
- Legislatively Directed Investments\*\*
- Debt Service\*\*

\* 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.

Source: WSDOT, 2020

# Local Transportation Revenue Sources

- 79% of city and 65% of county transportation revenue is locally generated.
  - City transportation funds come primarily from the sales tax;
  - County transportation funds mostly come from the property tax;
  - Prior to I-976, over 80 cities also collected revenue from a Transportation Benefit District.
- Federal funds contribute 8% to cities' and counties' transportation revenue.
- 24% of counties' transportation revenue and 13% of cities' comes from the state:
  - 2.96¢ of state gas tax is distributed to cities.
  - 4.93¢ of state gas tax is distributed to counties.
  - 4.07¢ of state gas tax is distributed as grants to local governments.
- Transit revenue typically comes from:
  - Locally-approved sales tax.
  - Fare box receipts.
  - Federal and state grants.
- Port revenue comes from user fees, leases, property tax and grants.



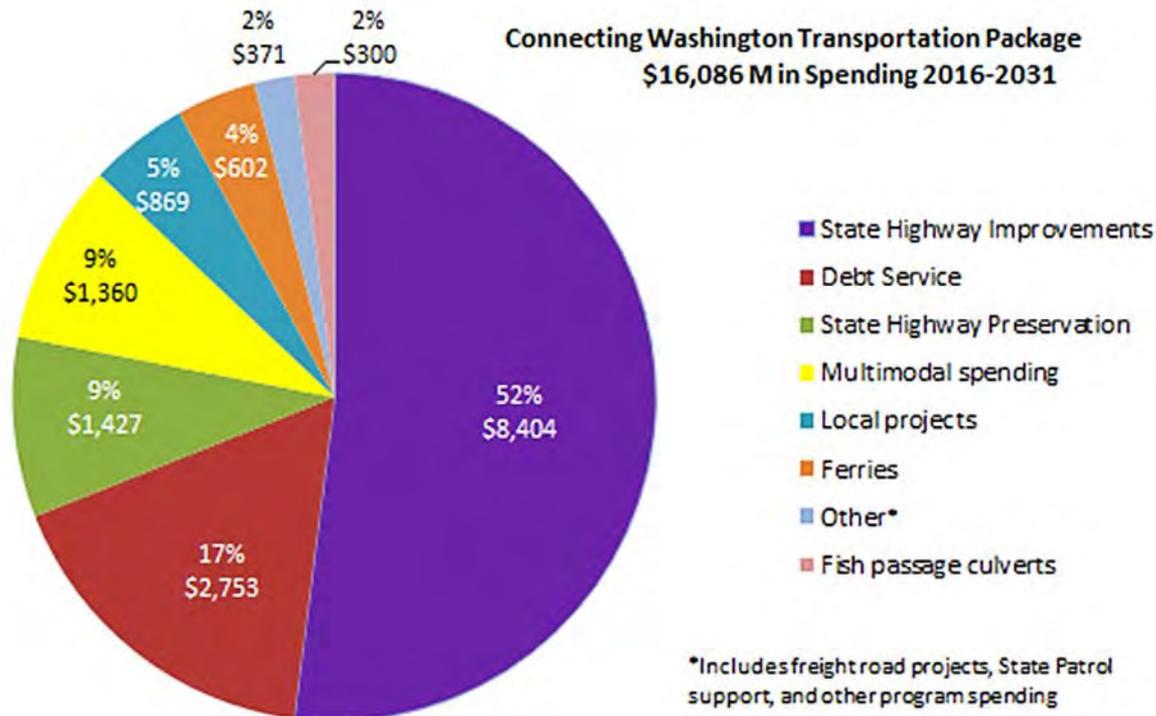
# The Present: Personal Spending

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 \$665 million per year to maintain and preserve the highway backbone of our economy.
- The enacted 2019 -21 transportation budget enacted provided WSDOT with only \$384 million per year.
- The last revenue package (2016) dedicated only 9% of funds to state highway preservation.



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# Identifying Future Needs & Planning For It

# 2020 Report to Decision Makers

## *Priority Recommendations*

- Identify sustainable funding sources and follow through on planned investments to improve transportation.
- Put preservation and resiliency of the existing transportation system first and fully fund it.
- Prepare for declining gas tax revenue by starting a gradual transition toward road usage charging.
- Determine the state's role in transit and enact a new dedicated state revenue source to address those needs and the long-term needs of the ferry system.
- Identify a coordinated approach to funding and removing culverts and fish passage barriers.
- Increase efficiencies in state programs, collaborate on state and local solutions to reduce congestion, and actively leverage state assets to attract private sector investments in making our system work for everyone.



# 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:

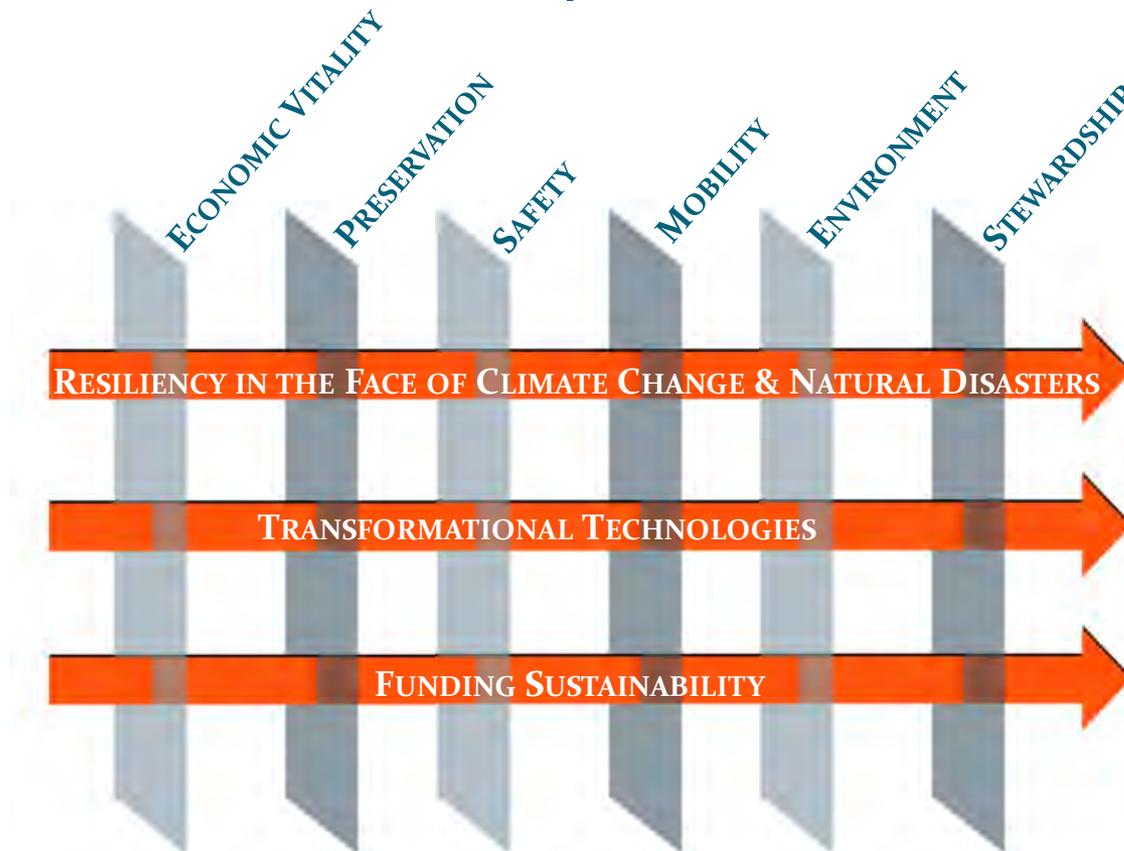
- Preservation
- Safety
- Economic Vitality
- Mobility
- Environment
- Stewardship

<https://www.wtp2040andbeyond.com/>



# Washington Transportation Plan “2040 and Beyond”

## Statewide Transportation Goals and Policies



**CROSS-CUTTING  
TOPICS  
FOR WTP 2040  
AND BEYOND**



# Resiliency - Transportation is Paramount

Increasing frequency of severe weather events and disruptions due to climate change will tax resources, infrastructure, and services.

A \$6.9 billion system preservation need, over \$1.5 billion for bridge retrofit, and \$3.1 billion for state fish passage projects are unfunded.

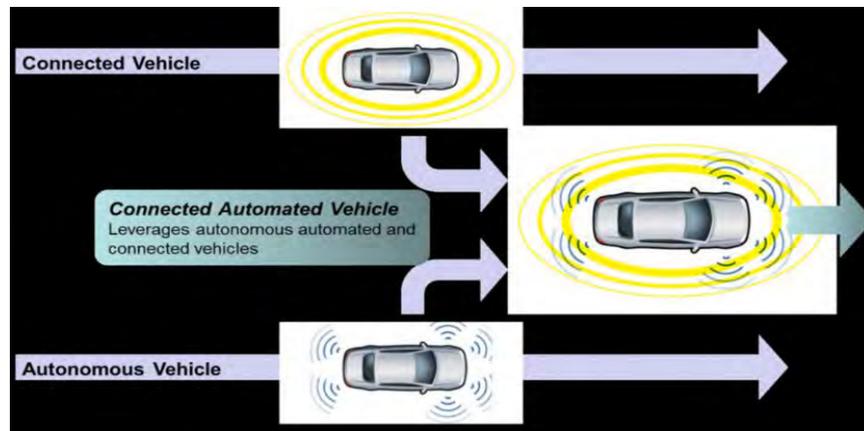
Transportation is critical to:

- 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?





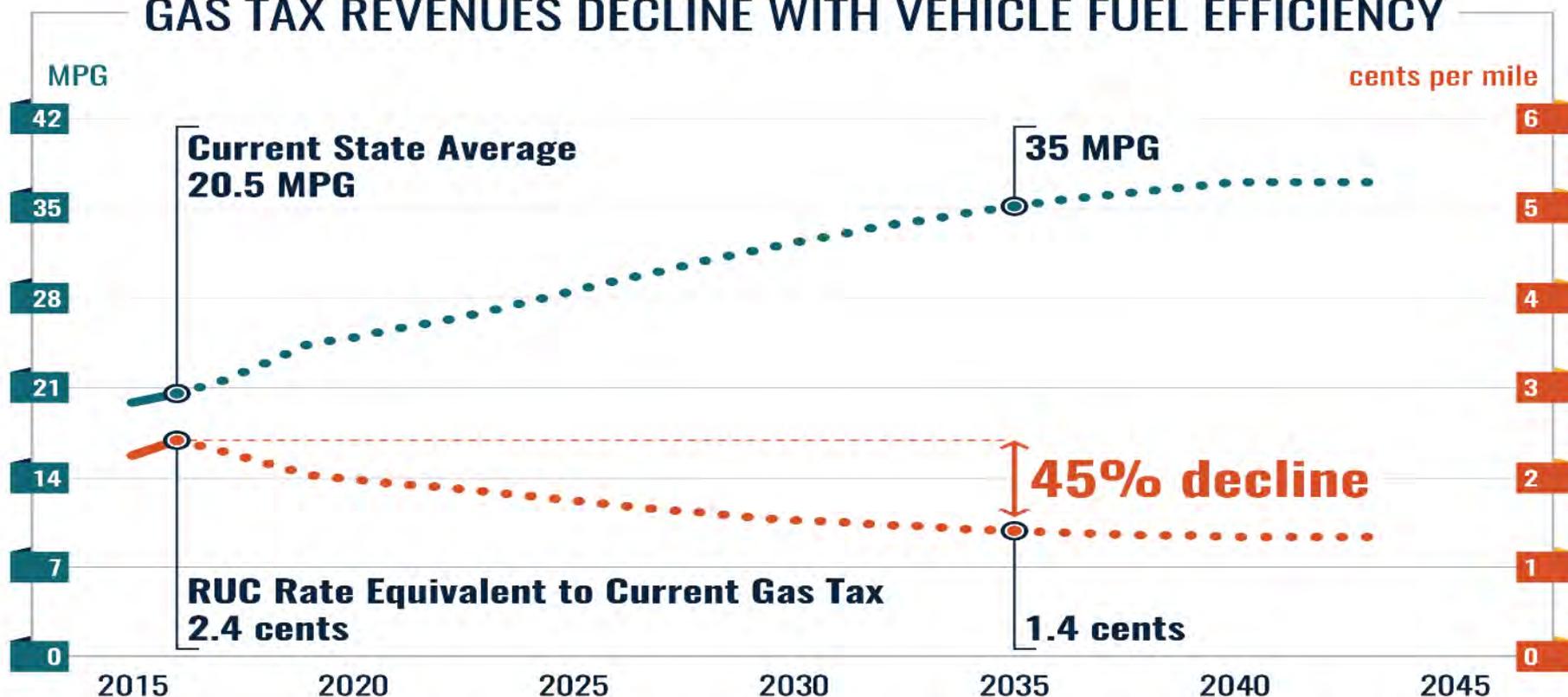
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# Gas Tax Sustainability Uncertain – What's Next?

# Improving MPG Erodes Gas Tax Revenues

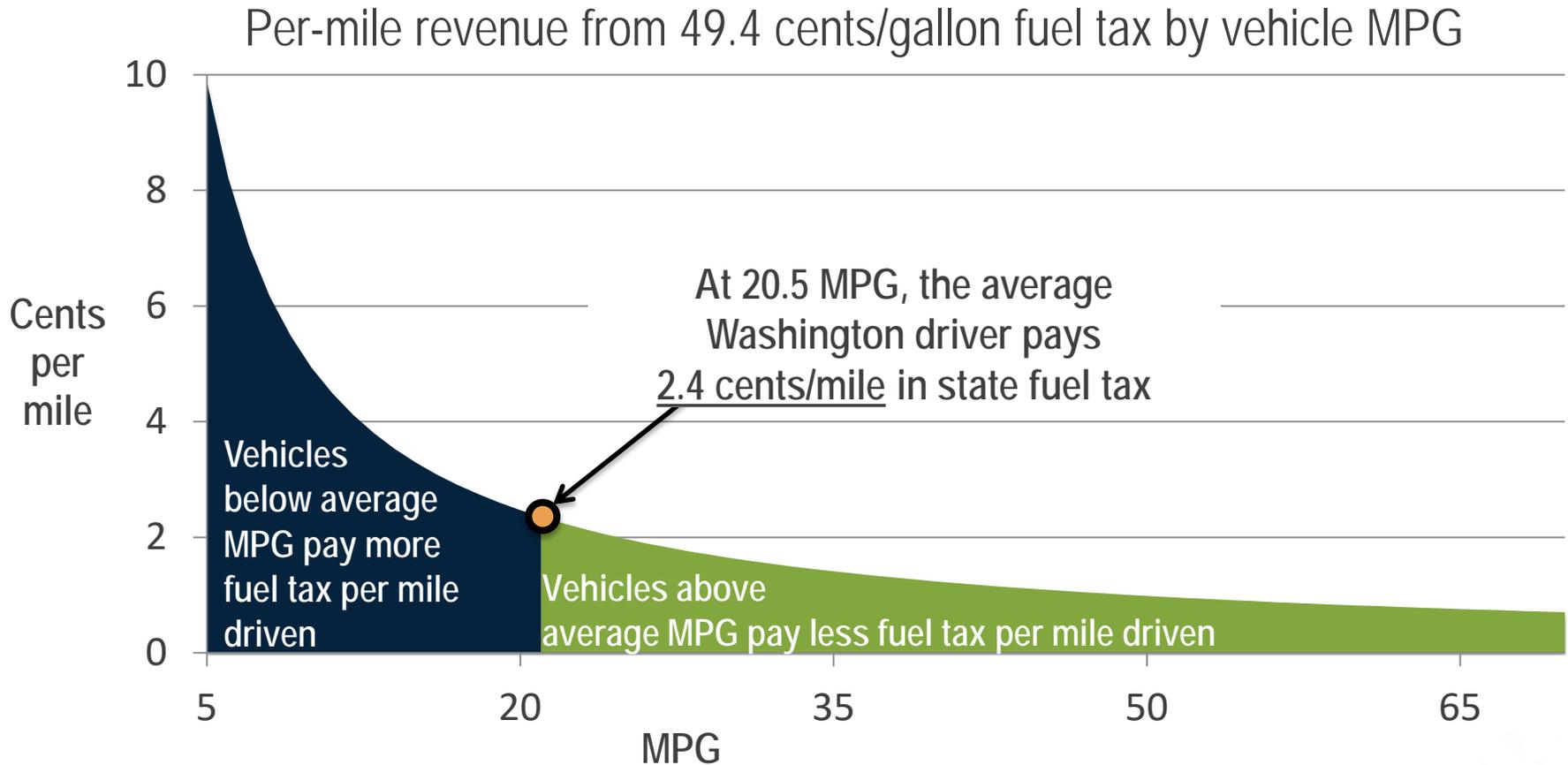
## GAS TAX REVENUES DECLINE WITH VEHICLE FUEL EFFICIENCY



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.*

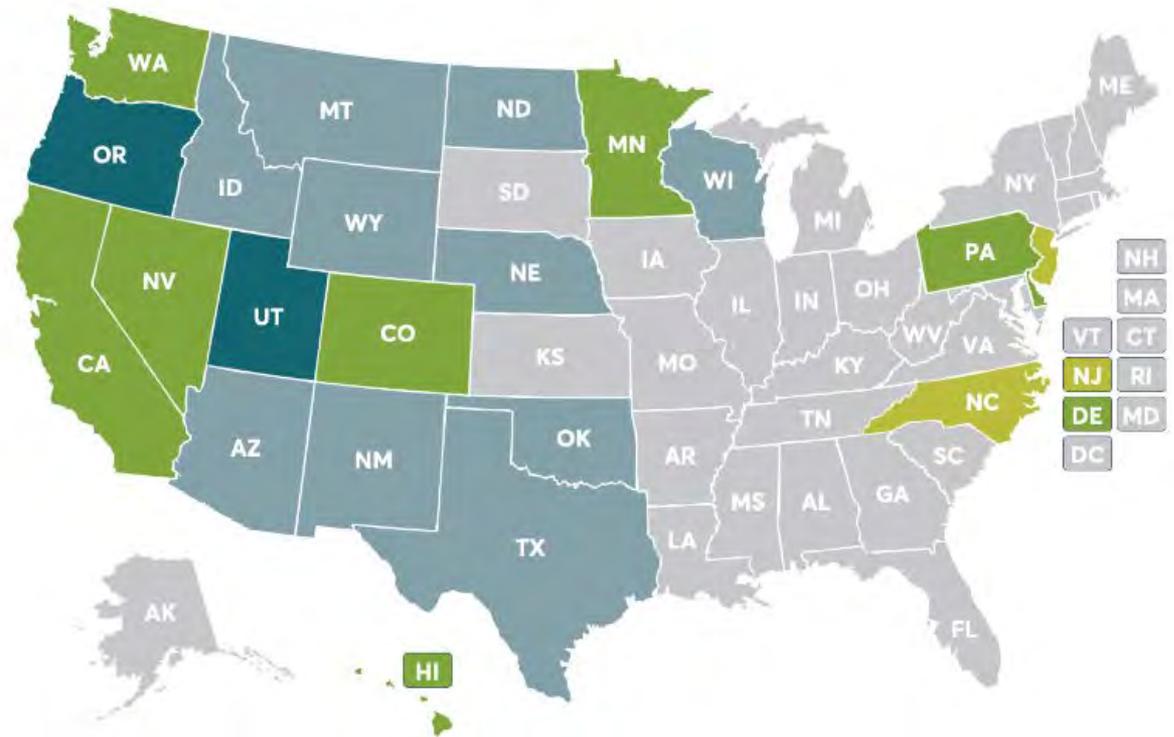
# Not Everyone Pays their Fair Share for the Roads – Taxing Gallons has Fairness & Equity Challenges



# A Potential Solution: Road Usage Charge

- 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 today.

RUC Exploration Across the United States



2 Enacted Programs

8 Pilots/Demonstrations

3 Planned Pilots

10 Research Only

# Road Usage Charge Assessment

*2012 Legislative Mandate: Assess RUC's ability to serve 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.*
- ▶ A per-mile rate of 2.4 cents was analyzed and tested - this rate is equivalent to what drivers pay today under the state's 49.4 cent/gallon gas tax:
  - *State Gas Tax 49.4 ÷ 20 mpg (state average mpg) = 2.4 cents per mile*
- ▶ Drivers need to have choices for how their vehicle mileage is collected, reported and paid.
- ▶ A RUC prototype was developed to simulate a real pay-by-the-mile system that let Washington drivers test and experience it.
- ▶ Revenue and cost estimates focused on net revenue potential for both RUC and the gas tax through 2040.

For more information:

<https://waroadusagecharge.org/>



# Washington's RUC Pilot Project

## Summary of Washington RUC Pilot Project:

- **Year-long (2018-2019)**, 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



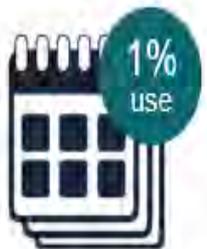
## ODOMETER READING

- Post-pay for miles reported quarterly
- Report miles either electronically or in person



## MILEMAPPER SMARTPHONE APP

- Records miles using a smartphone
- Works with all vehicles
- Navigational GPS can be turned on/off
- Available only on iPhone iOS



## MILEAGE PERMIT

- 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



## PLUG-IN DEVICES (WITH OR WITHOUT GPS)

- Automated mileage meter with GPS and non-GPS options
- Plugs into OBD-II ports in vehicles 1996 or newer
- GPS-enabled devices automatically deduct out-of-state miles

37% with GPS

19% without GPS

LOW-TECH

HIGH-TECH

# RUC Cost Impacts are Determined by the Type of Car You Drive – Not How Far you Drive

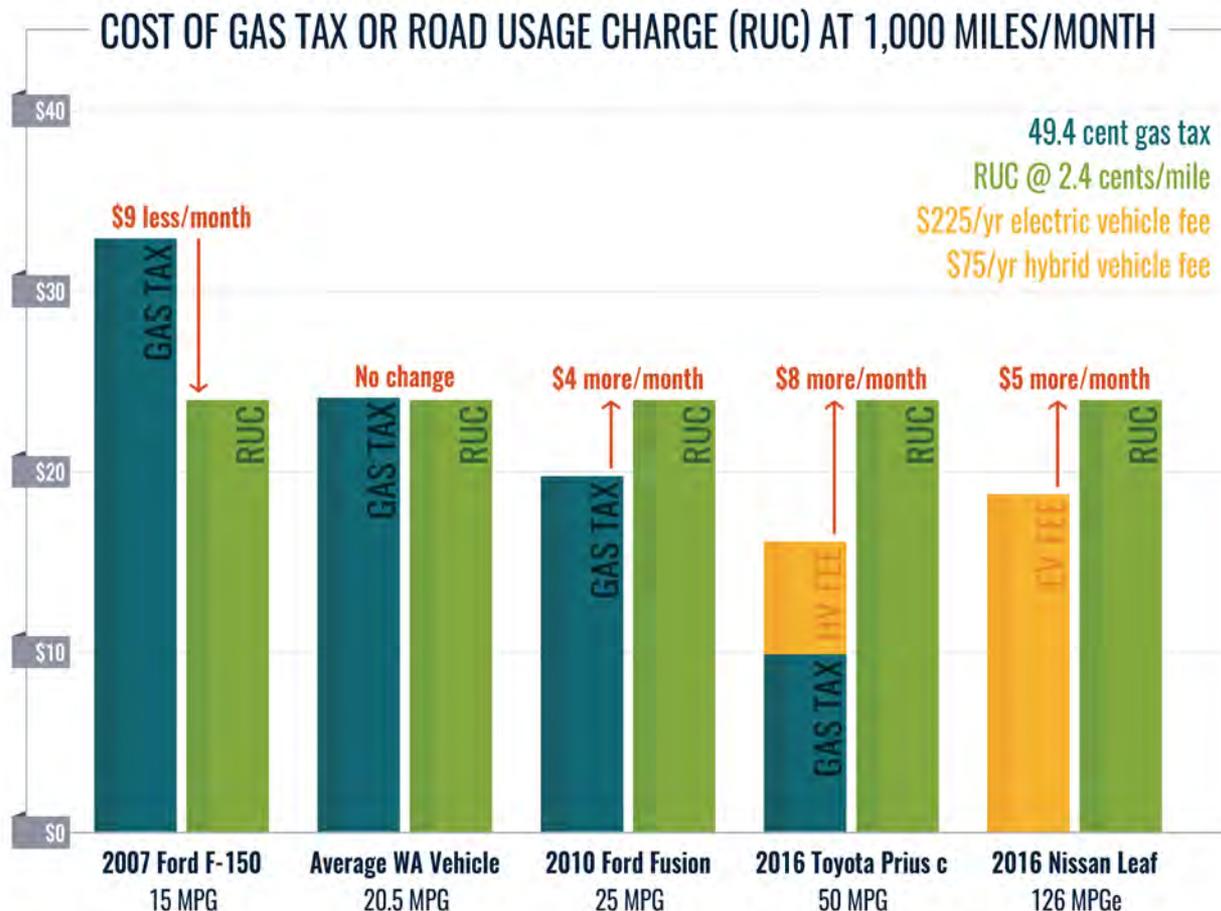
**Rural drivers & lower income drivers** are likely to pay less with RUC than the gas tax.

- This is due to the predominant ownership of lower MPG vehicles.

**Owners of hybrid/electric vehicles** could pay more with RUC, if they drive 12,000 miles or more per year.\*

- If they drive 9,400 miles or less, they will pay less with RUC than the current flat PEV fees.

*\* In the WA RUC Pilot, 100% electric vehicles averaged 8,450 miles. Plug-in electric hybrids averaged 9,980 miles.*



What you drive will determine the cost impact of RUC:

- Less fuel efficient vehicles will see a decrease in the amount of taxes paid
- More fuel efficient vehicles will see an increase in the amount of taxes paid
- The total effect is that all drivers pay the same rate to use the roads—regardless of their vehicle's MPG



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# 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 \$180 million in FY 2020.

**Ferry Fares** are expected to raise \$407 million this biennium, covering about 75% of WSF operating costs.



# Current Toll Facilities in Washington

## SR 16 Tacoma Narrows Bridge

- State's first electronic tolling facility opened July 2007



**Flat toll rates** repay construction bonds.

## SR 167 HOT Lanes Pilot Project

- State's first high-occupancy toll lanes launched May 2008



**Dynamic toll rates** manage traffic performance, no debt issued.

## SR 520 Floating Bridge

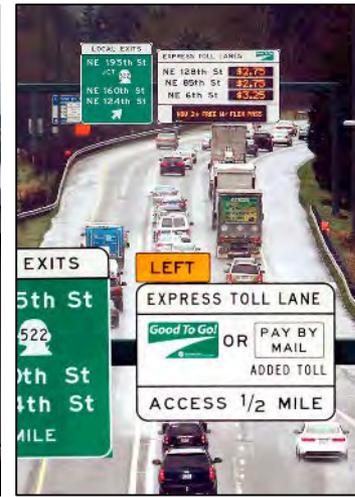
- Urban Partnership
- Pre-construction tolls began Dec. 2011



**Variable toll rates** to repay bonds and manage traffic.

## I-405 Express Toll Lanes

- First phase between Bellevue & Lynnwood began Sept. 2015



**Dynamic toll rates** manage traffic performance, no debt issued.

## SR 99 Tunnel

- Opened Feb. 2019
- Tolling began in Nov. 2019



**Variable toll rates** to repay bonds and manage traffic.

# An Expanding Tolling System

## Future Toll Facilities – mid 2020s

- I-405 Express Toll Lanes (South Half)
- Puget Sound Gateway Program
  - SR 167 Corridor Completion Project
  - SR 509 Corridor Completion Project

## Approved Studies for Possible Toll Facilities

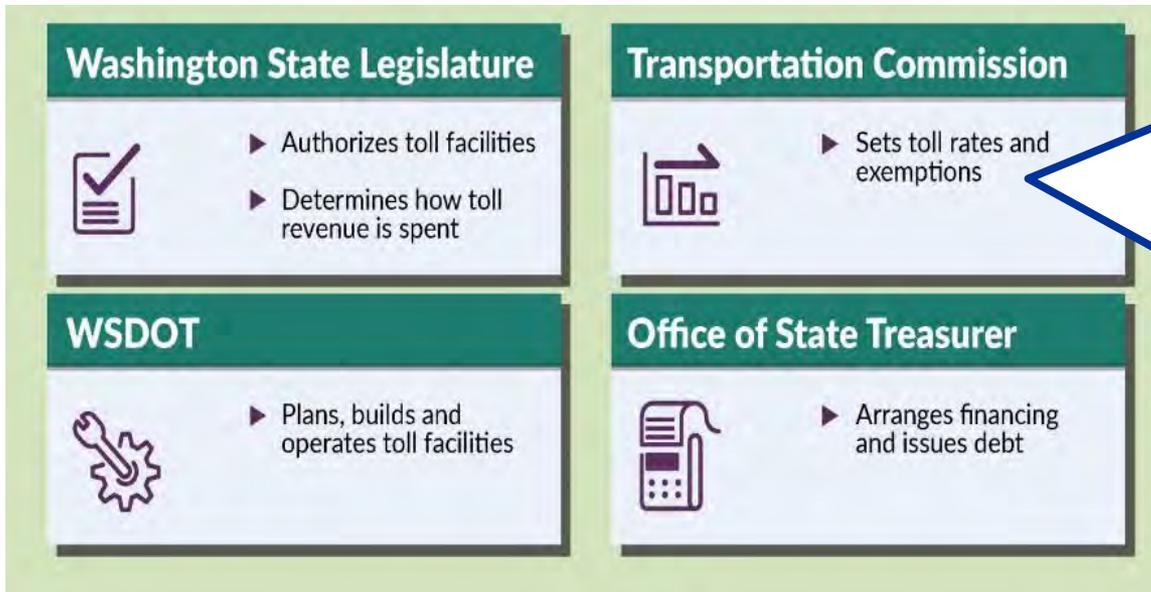
- U.S. 2 Trestle Replacement
- I-5 Columbia River Bridge Replacement



# 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

**Thank you!**  
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