

Transportation Funding: Yesterday, Today and Tomorrow



Paul Parker
Deputy Director
Washington State Transportation Commission

June 5, 2018

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 are 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?

- 18,046 miles of city streets.
- 39,180 miles of county roads and seven county ferries.
- Over 7,000 miles of state highways and 23 ferries.
- 465 miles of Columbia-Snake River barge transport.
- Reservation roads, DNR and Forest Service roads.
- 32 transit agencies.
- 75 port districts in 33 of 39 counties.
- Sidewalks and bike paths.
- Over 7.5 million registered passenger vehicles, trucks and motorcycles.
- Amtrak, Sounder, Link light rail, streetcars.
- Freight trains and trucking companies.
- Airlines and maritime shipping lines.
- Bicycles.



Outline

- Transportation Funding Basics
 - How we raise and spend transportation revenue at the federal, state and local level
- The Future is Uncertain
 - Transportation Planning and Funding to 2040 and Beyond

Transportation Funding Basics

How we raise and spend transportation revenue at the federal, state and local level

Funding: The Past and Present

Federal

- Federal gas tax money built 90% of the Interstate System.
- Congress last increased the gas tax in 1993.
- Since 2008, Congress has transferred over \$143 billion from the general fund to the Highway Trust Fund and Mass Transit Fund.

Washington State

- State gas tax provides about 40% of WSDOT budget.
- Puget Sound ferries were privately owned and operated until the state bought 16 vessels and 20 terminals in 1951.
- The Tacoma Narrows Bridge, both Lake Washington floating bridges, and the I-5 bridges between Vancouver and Portland, were all toll bridges.



The Present: Local Transportation Revenue

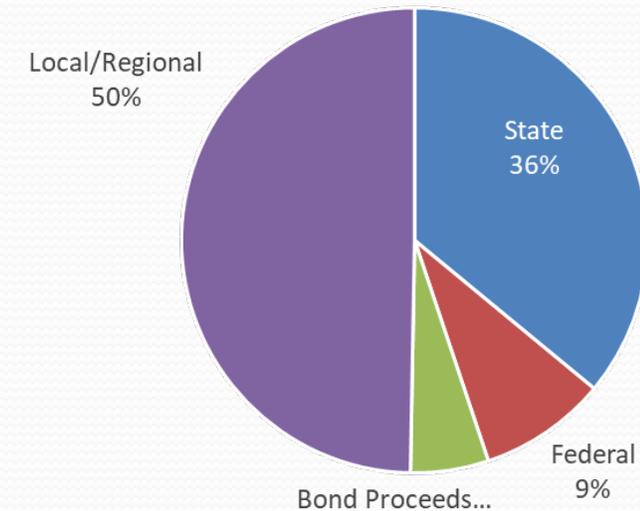
- 79% of cities' transportation funding and about 65% of counties' transportation funding is generated locally. For cities it comes primarily from a sales tax; for counties most is from the county road share of the property tax. Over 80 cities are collecting revenue from a Transportation Benefit District.
- Federal funds contribute 8% to cities' and counties' transportation revenue.
- 24% of counties' transportation revenue and 13% of cities' comes from the state:
 - 4.93¢ of state gas tax is distributed to counties
 - 2.96¢ of state gas tax is distributed to cities
 - 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.



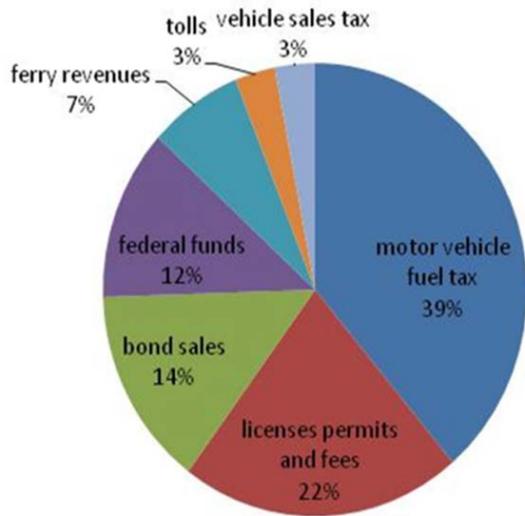
State Transportation Funding and Spending

The \$9.48 billion transportation budget for 2017 – 19 is only 9.2% of the total state budget. State gas tax = 49.4¢/gallon.

Total State and Local Transportation Revenue
2017-2019 Biennium (est.)



Washington State Transportation
16-Year Funding Sources



2017 – 19 WA Transportation Budget (est. in thousands)

Agency/Purpose	Appropriation	% of Total Appropriation
WSDOT	\$ 6,458,699	68%
Bond Payments	\$ 1,621,009	17%
State Patrol and Licensing	\$ 884,569	9%
TIB/CRAB/FMSIB	\$ 463,956	5%
All other transportation agencies	\$ 51,380	0.5%
Total	\$ 9,479,613	100%

Note: WA State's 2015-2017 Biennium is from July 1, 2017 - June 30, 2019

Tolling as a Revenue Source for Major Projects

- In 2002, the Legislature enacted authorized the first tolling in a generation. Chapter 114, Laws of 2002
- Bonds in the amount of \$775 million were issued to finance construction of the new Tacoma Narrows Bridge, which opened in July 2007.
- The 2008 Legislature established a new policy to use tolling to provide a source of transportation funding and to encourage effective use of the transportation system. Chapter 122, Laws of 2008



Washington State Tolling Policy, RCW 47.56.830

- Use tolling to encourage effective use of the transportation system and provide a source of transportation funding.
- Use tolling when it can be demonstrated to contribute a significant portion of the cost of a project that cannot be funded solely with existing sources or optimize the performance of the transportation system.
- All revenue from an eligible toll facility must be used only to improve, preserve, manage, or operate the eligible toll facility on or in which the revenue is collected.
- Toll rates, which may include variable pricing, must be set to meet anticipated funding obligations. To the extent possible, the toll rates should be set to optimize system performance, recognizing necessary trade-offs to generate revenue.
- Because transportation infrastructure projects have costs and benefits that extend well beyond those paid for by initial construction funding, tolls on future toll facilities may remain in place to fund additional capacity, capital rehabilitation, maintenance, management, and operations, and to optimize performance of the system.

Tolling Roles & Responsibilities

	Washington State Legislature	Transportation Commission	Department of Transportation	Office of the State Treasurer (OST)
Responsibility	Establish tolling, designate toll corridors and use of toll revenues	Set toll rates and related fees	Plan, analyze and construct facilities, collect tolls, build and operate toll collection systems	
Roles	<ul style="list-style-type: none"> • Establish legal toll framework • Authorize tolling in designated corridors • Approve financing plans • Enable tolling practices • Appropriate toll operation budget 	<ul style="list-style-type: none"> • Set toll rates within funding requirements • Set toll exemptions • Establish advisory committees 	<ul style="list-style-type: none"> • Develop toll collection systems and procedures • Collect tolls • Finance improvements • Operate tolled corridors • Assess financial feasibility of toll projects 	<ul style="list-style-type: none"> • Conducts all financings for the State of Washington • Responsible for the issuance of toll debt

The Importance of Tolling and Fares

Toll revenue pays for debt, maintenance, and operations for each tolled facility. Tolling generated over \$193 million in FY 2017.

- Build a project: Tacoma Narrows Bridge
- Manage traffic: I-405 Express Toll Lanes and SR 167 HOT Lanes
- Build a project and manage traffic: SR 520 Bridge

Newest Toll Facilities:

- I-405 Express Toll Lanes from Lynnwood to Bellevue opened September 2015.
- AWW Replacement Tunnel opening Fall 2018.

Ferry Fares will raise \$381 million in 2017 – 2019, covering about 75% of WSF operating costs.



The Future is Uncertain

Transportation policy and funding to 2040 and beyond

Commission Planning Role

Develop and update every four years ...

A comprehensive and balanced statewide transportation plan consistent with the state's growth management goals and based on the transportation policy goals

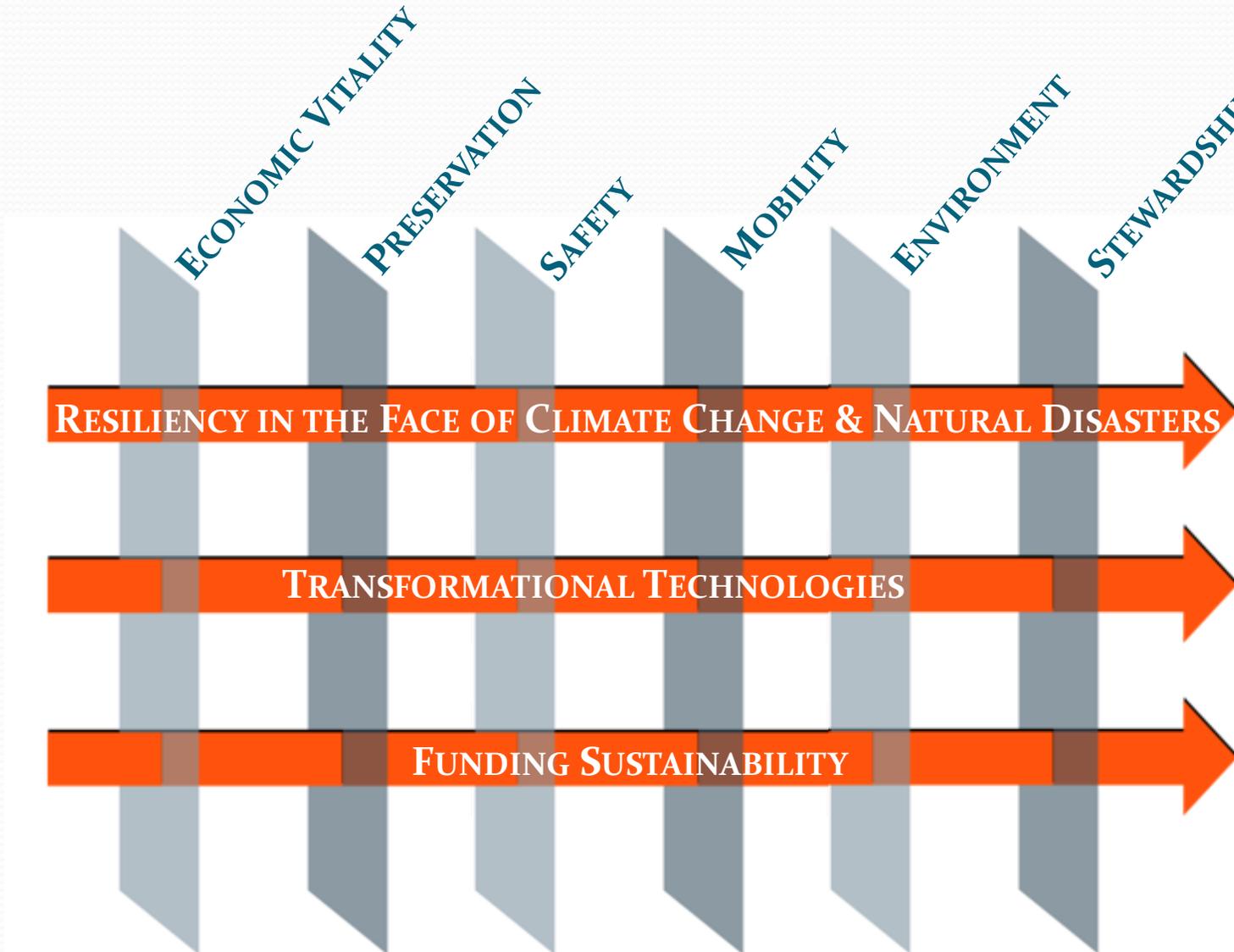
RCW 47.01.071(4)

Six transportation policy goals (RCW 47.04.280):

- ECONOMIC VITALITY
- PRESERVATION
 - SAFETY
 - MOBILITY
- ENVIRONMENT
- STEWARDSHIP



Statewide Transportation Goals and Policies



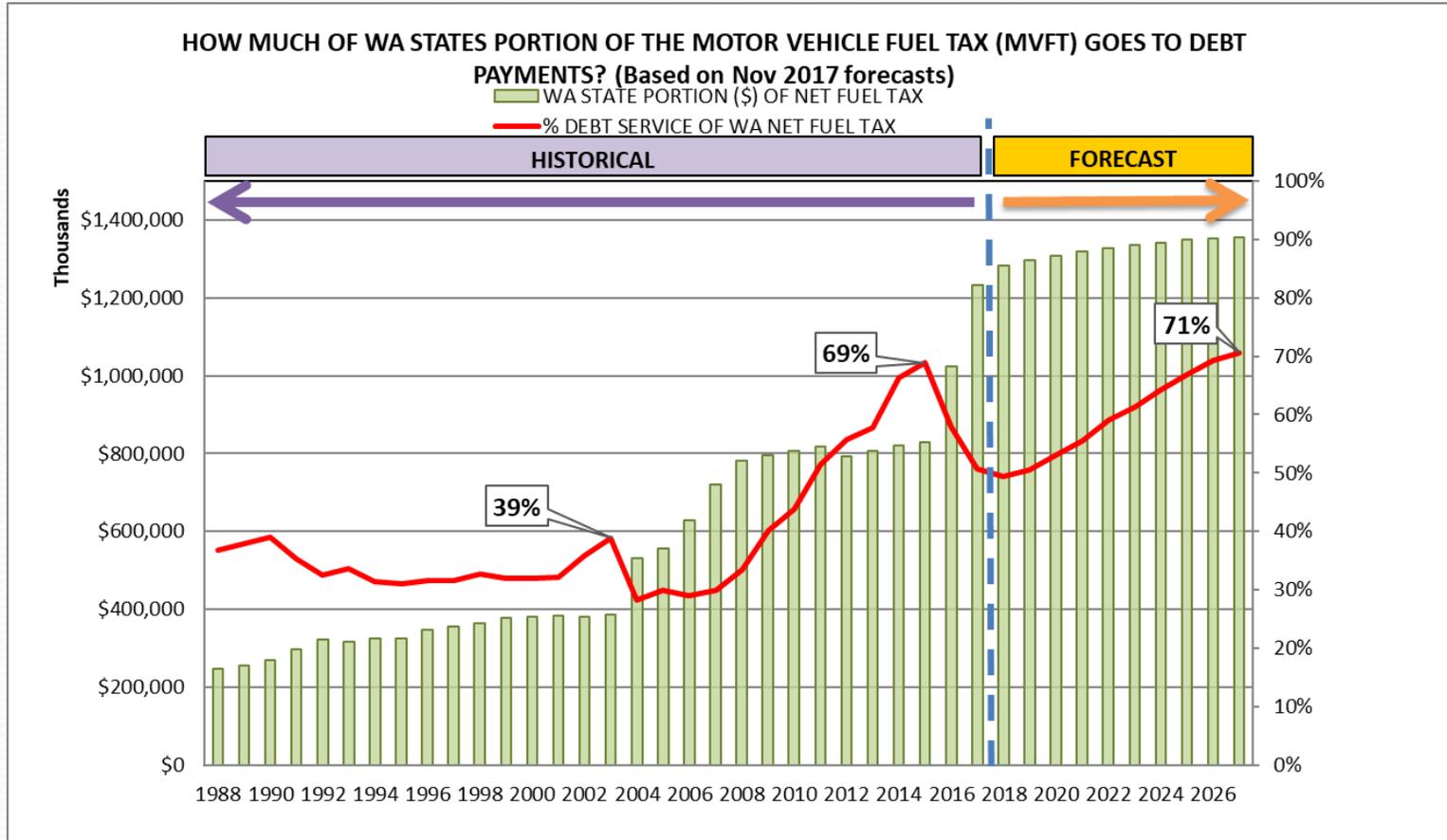
**CROSS-CUTTING TOPICS
FOR WTP 2040
AND BEYOND**

Population Growth and Demographics

- Washington will add an additional 1 million people in the next 10 years, and surpass 9 million by 2040.
- Migration will continue to be the main contributor to state population growth. About 1.3 million net migrants are anticipated between now and 2040. Natural increase will contribute an additional 672,000 persons.
- The state's population is aging rapidly.

	Total Pop	Pop 65+	Pop 85+	Pop 65+ as % of Total	Pop 85+ as % of Total
1990	4,866,700	572,900	55,500	11.8%	1.1%
2000	5,894,100	662,100	84,100	11.2%	1.4%
2010	6,724,500	827,700	117,300	12.3%	1.7%
2020	7,638,400	1,279,200	140,200	16.7%	1.8%
2030	8,503,200	1,751,100	216,600	20.6%	2.5%
2040	9,242,000	1,997,600	394,700	21.6%	4.3%

Future Gas Tax Revenue Pays for Today's Bonds

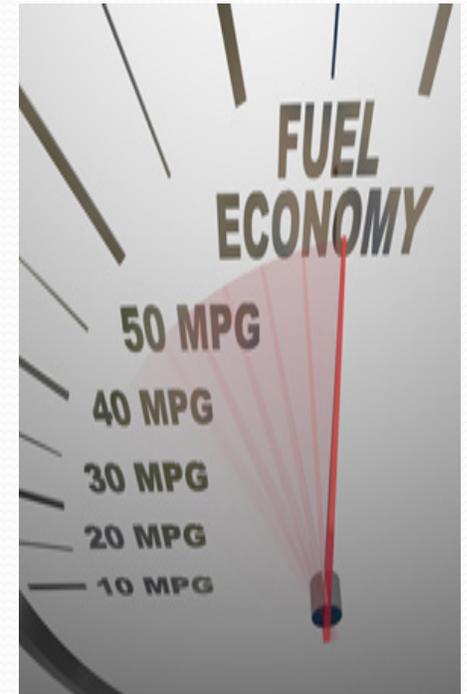


**This chart is based on Net Fuel Tax Revenue and Debt Service projections per the Nov 2017 Forecast.*

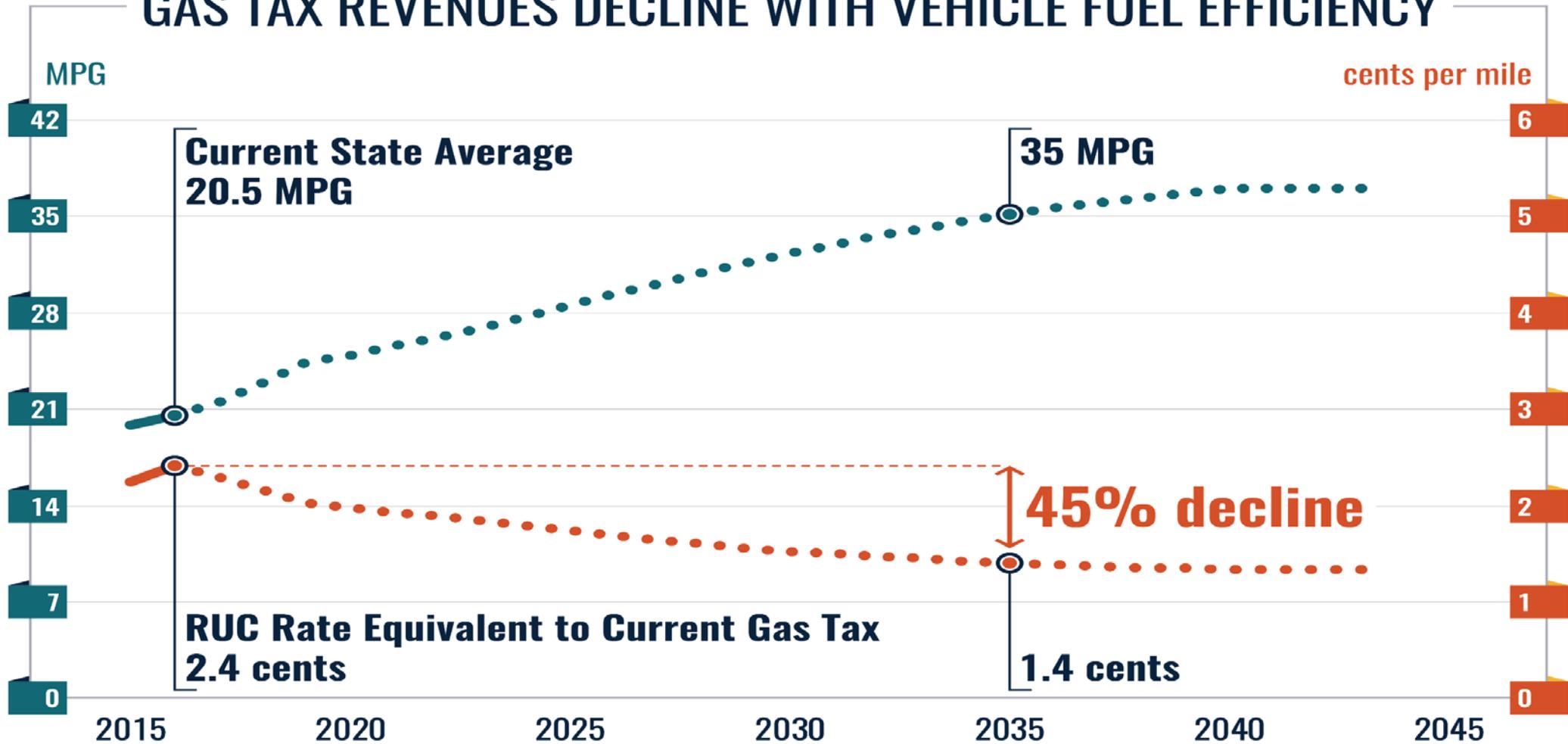
- For this chart, debt service only includes debt first payable by the fuel tax. This excludes SR 520 corridor debt service (first payable by tolls), but includes Tacoma Narrows Bridge debt service (reimbursed by tolls).
- WA state's portion of fuel tax revenue in this chart does not include all fuel tax revenue pledged for debt service. For example, also pledged for debt service is revenue distributed to cities & counties, and beginning in FY 2019, revenue from select vehicle fees (for selected projects).

Fuel Efficiency Continues to Rise

- Current federal CAFE Standards: 54.5 MPG by 2025
- Washington state's current average: 20.5 MPG
- The Federal Energy Information Administration conservatively predicts:
 - All NEW cars by 2040 = 48 MPG
 - All cars (new and old) by 2040 = 37 MPG
- Volvo plans to produce only hybrid and electric cars starting in 2019
- General Motors recently announced that its future fleet will be all-electric, with 20 electric models available by 2023
- Toyota and Ford have invested heavily in hydrogen fuel cell and other alternative fuels



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.

Possible Funding Solutions

Transportation funding options and partnerships

The Road Usage Charge Emerges

- A road usage charge is a **per mile charge** drivers would pay for the use of the roads, rather than paying by the gallon of gas
- Similar to how we pay for utilities, such as electricity or water
- Identified as a viable future funding source in need of further exploration



Road Usage Charge a Potential Solution

Washington is not alone:

- 14 western states are involved in research, testing, or legislatively enacted programs
- In October 2017, FHWA awarded Washington a \$4.6 M grant to implement the RUC pilot statewide – this is in addition to \$3.8 M they awarded our state in 2016 to prepare for the pilot launch
- We now have 2,000 volunteer participants “test driving” a RUC through a live pilot test

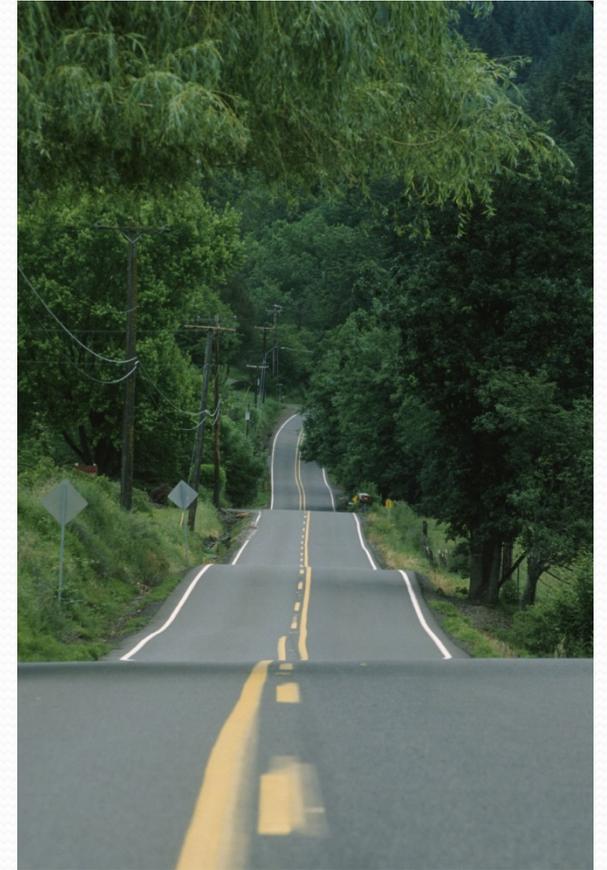


Source: RUC West

The Basis of the Assessment

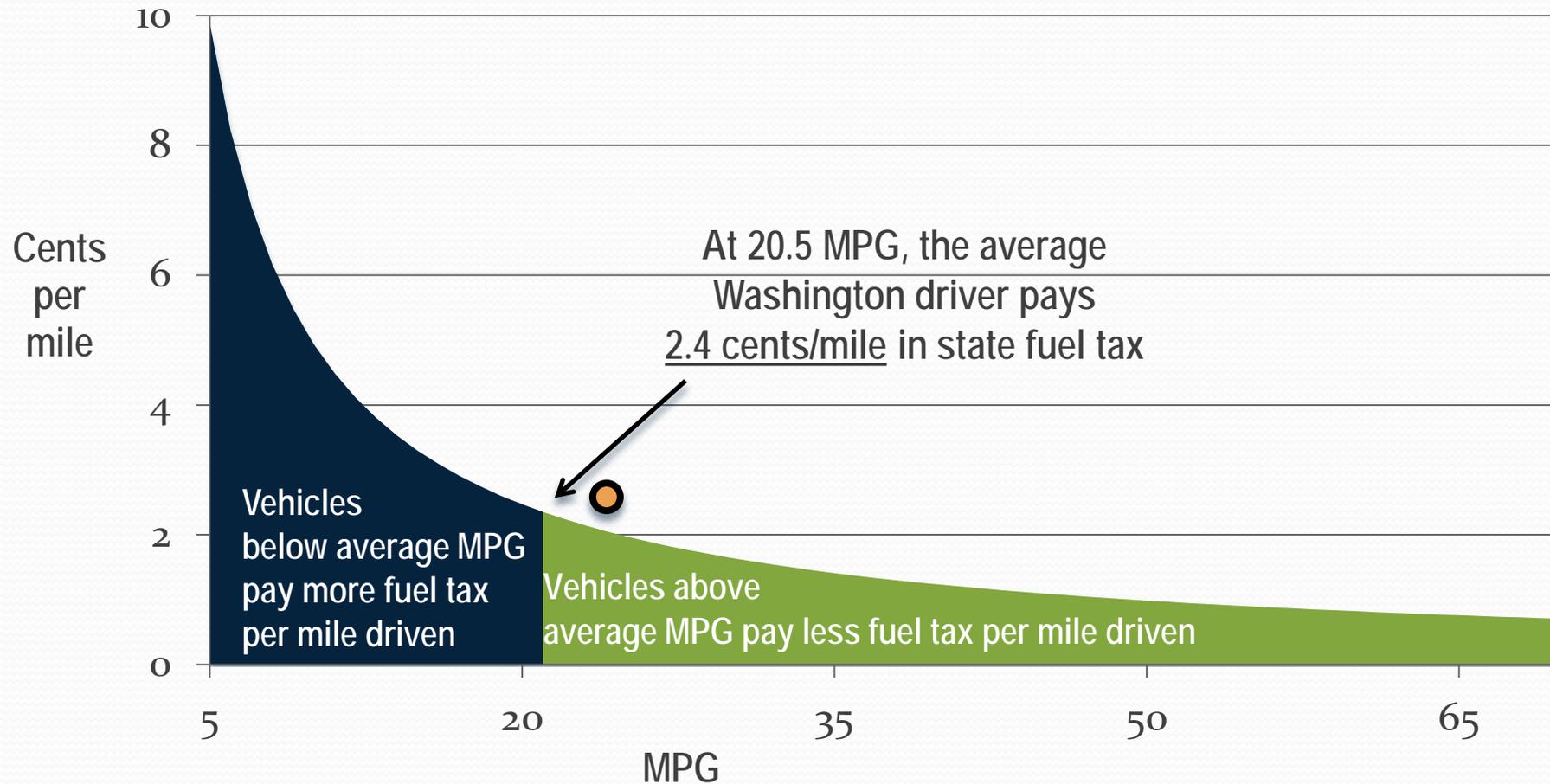
Identify a sustainable, long-term revenue source for Washington State's transportation system, and transition from the current gas tax

- Ensure there is consumer choice on how mileage information can be collected and paid.
- During the transition period of moving from the gas tax to a road usage charge, drivers would pay one or the other, but never both.
- For purposes of assessing the gas tax against a road usage charge, we have assumed revenue neutrality and focused on net revenue potential for both.

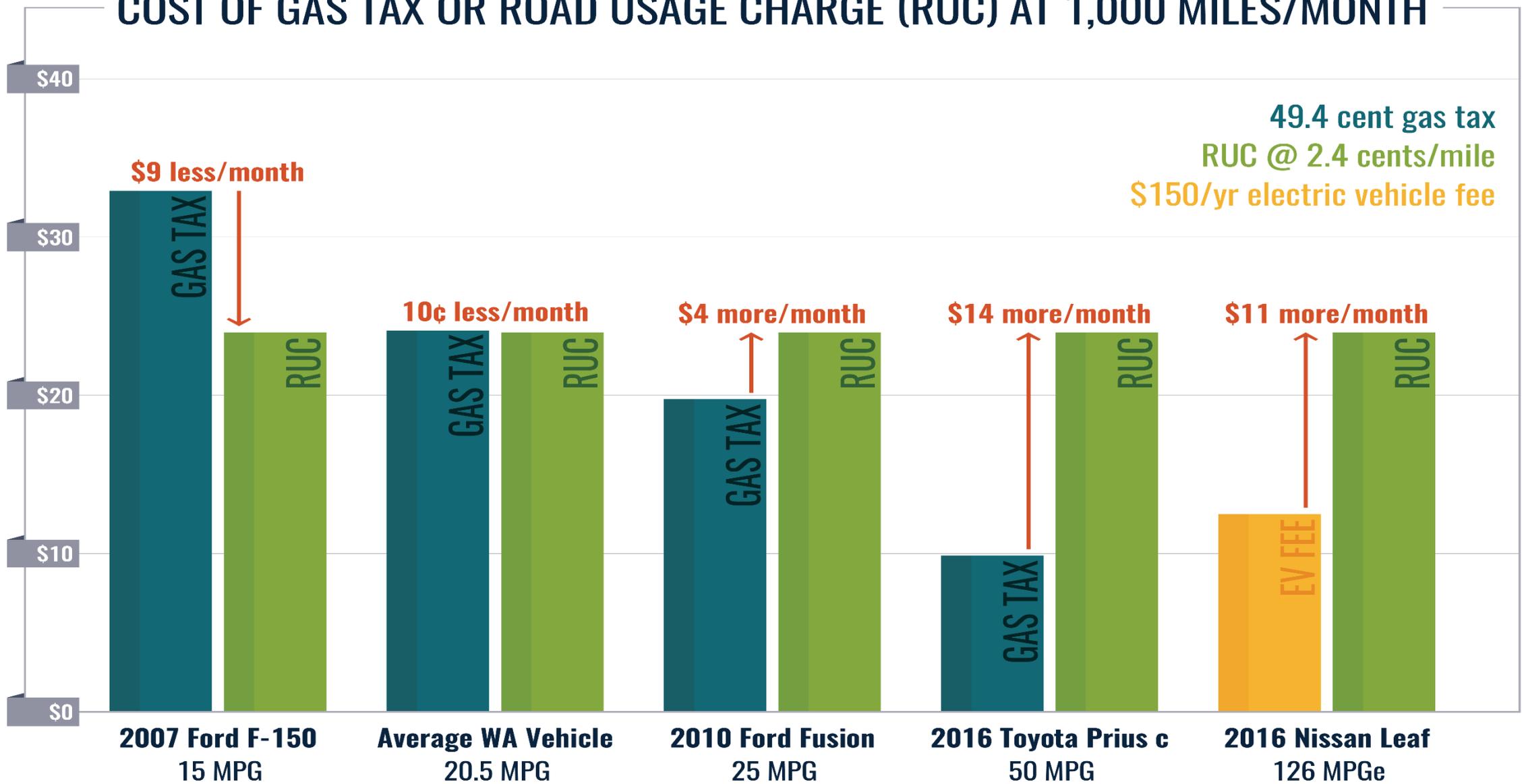


Taxing Gallons Has Fairness and Equity Challenges

Per-mile revenue from 49.4 cents/gallon fuel tax by vehicle MPG



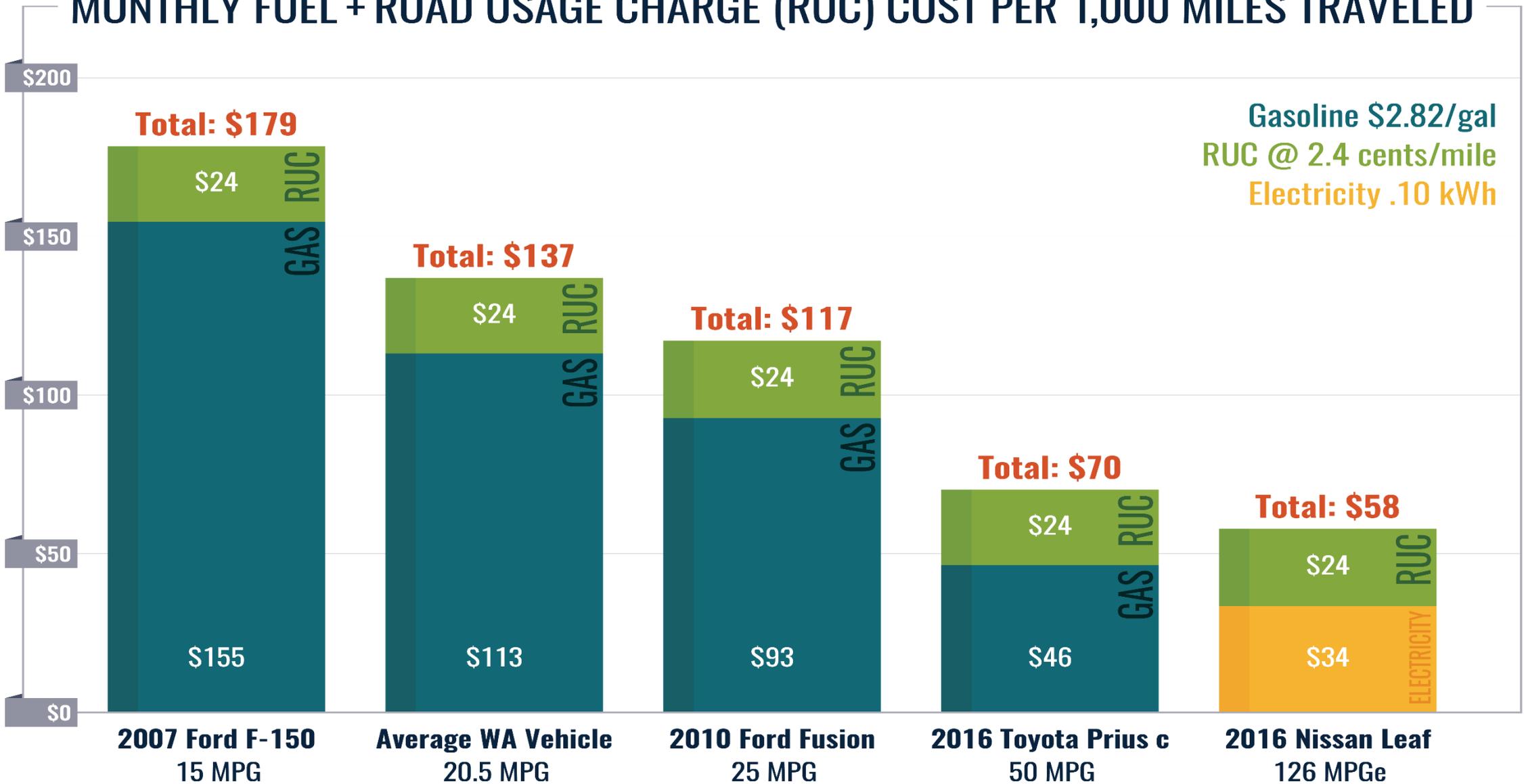
COST OF GAS TAX OR ROAD USAGE CHARGE (RUC) AT 1,000 MILES/MONTH



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

MONTHLY FUEL + ROAD USAGE CHARGE (RUC) COST PER 1,000 MILES TRAVELED



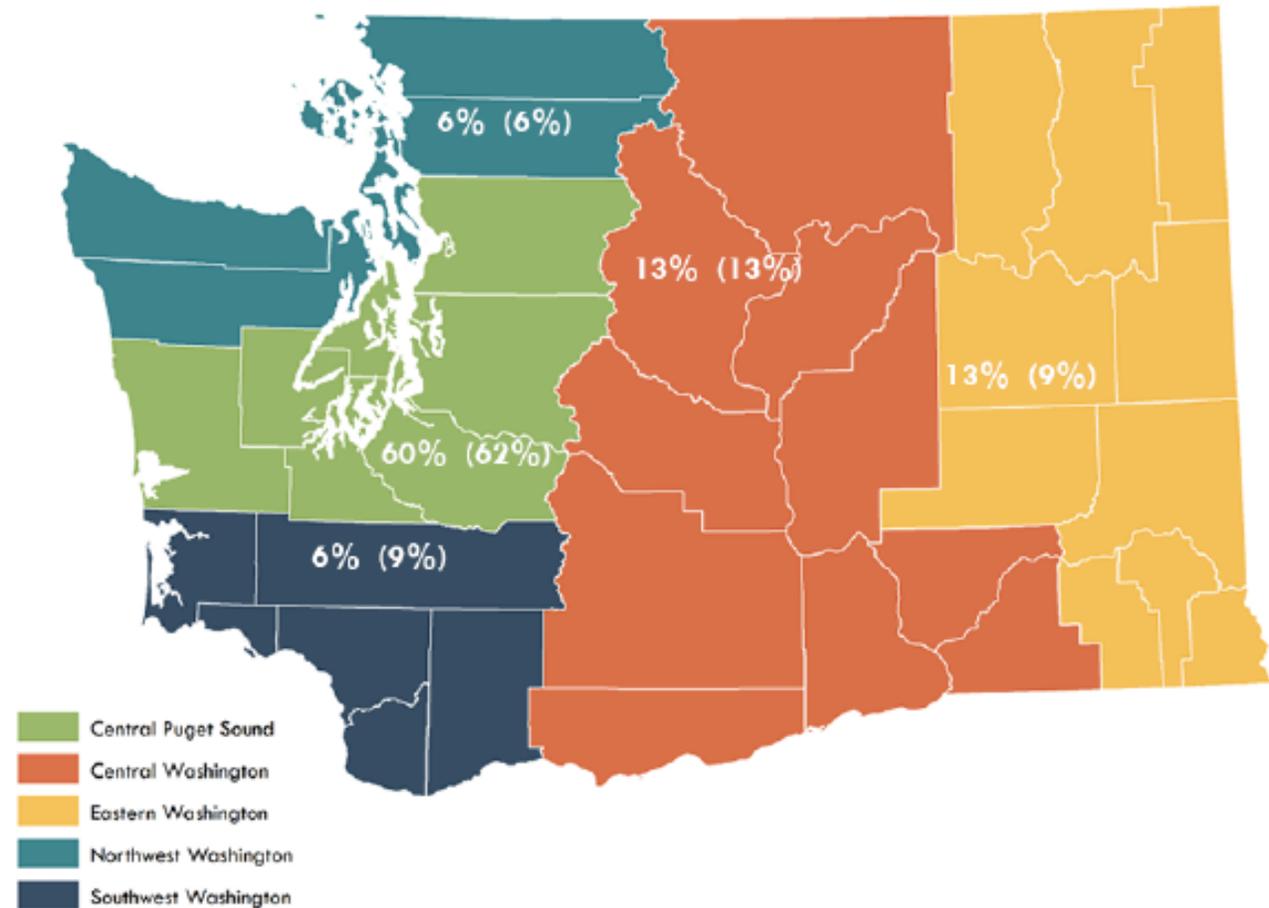
While RUC does result in drivers of fuel efficient vehicles paying a little more in taxes for transportation as compared to the gas tax, the overall cost advantage of owning a fuel efficient, hybrid, or EV remains significant.

For example, under RUC, owners of a Prius will pay \$109 dollars per month less than the Ford pickup truck driver.

2,000 Participants in the Pilot from Around the State

- 2,000 participants were selected from a pool of nearly 5,000 from around the state to achieve geographic and demographic balance.
- The Pilot is testing the technology against out-of-state travel between Oregon, Idaho, and Washington, and travel between Washington and British Columbia.

Percent Enrolled (Share of State Population)



Mileage Reporting Options Being Tested

From No-Tech to High-Tech



- Pre-select miles based on how much you expect to drive in 3 months
- Works with all vehicles
- Submit a mileage report using a mobile phone, or in person at select vehicle licensing offices
- Does not use navigational GPS

SELECT

MILEAGE PERMIT Details+



- Submit a photo of odometer monthly or quarterly using mobile phone, or in person at select vehicle licensing offices
- Works with all vehicles
- Does not use navigational GPS

SELECT

ODOMETER READINGS Details+



- Plug-in device automatically reports mileage
- Works with all vehicles 1996 or newer
- No smartphone required
- Does not use navigational GPS

SELECT

PLUG-IN DEVICE Details+



- Plug-in device automatically reports mileage and deducts out-of-state miles
- Works with all vehicles 1996 or newer
- Smartphone required
- Navigational GPS is required

SELECT

PLUG-IN DEVICE WITH GPS Details+



- Report miles monthly or quarterly using the smartphone app
- Works with all vehicles
- Smartphone required
- Navigational GPS can be turned on/off

SELECT

SMARTPHONE APP Details+

Public Private Partnership Opportunities

- EV Infrastructure
- Anacortes Ferry Terminal assessment
- Colman Dock Entry Building
- US 2 Trestle
- Park and Ride Lots





Thank you!

wstc.wa.gov