

A stylized graphic of a road with a dashed yellow center line and solid blue outer lines, curving upwards and to the right. The background is a solid green color.

# Washington State Road Usage Charge Assessment

*Increasing User-Pay  
Fairness & Equity*

# BUILDING THE ROAD TO SUSTAINABLE FUNDING

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**A decade's worth of research in Washington State  
on road usage charging**

# WASHINGTON'S PATH TO A RUC PROGRAM

**2012 – 2015**

## INITIAL ASSESSMENT & CONCEPT DEVELOPMENT

- 2012 Legislature directs Commission to conduct RUC Assessment
- Convened Steering Committee
- Crafted Guiding Principles
- Determined feasibility
- Developed operational concepts
- Conducted business case analysis
- Designed pilot alternatives

**2016 – 2020**

## PILOT TESTING & POLICY ANALYSIS

- Conducted statewide pilot test with 2,000+ drivers
- Tested multiple mileage reporting methods
- Demonstrated interoperability with OR, ID, BC
- Conducted widespread public outreach
- Addressed 10+ policy issues through analysis and alternatives
- Issued recommendations

**2021 – Present**

## SYSTEM READINESS & CONTINUED RESEARCH

- Legislative proposals emerge
- Updating financial analysis
- Assessing equity impacts and conducting statewide outreach
- Exploring service options and operational innovation
- Developing cost reduction strategies
- Designing mini-pilot tests for emerging concepts

*State funded*

*Federally funded*

# SITUATION ASSESSMENT

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- ✓ **Systems are ready:** After nearly a decade of research and development, Washington has the ability to implement a small-scale RUC program
- ✓ **Privacy can be protected:** Offering non-GPS approaches and privacy protections in law are key. The only data needed to implement RUC is a periodic odometer reading
- ✓ **RUC harmonizes transportation funding and climate policy objectives:** RUC enables us to sustain usage-based funding without continuing to rely heavily on fossil fuel consumption and emissions
- ✓ **RUC offers savings for low-income drivers:** The lowest-income vehicle owners pay the most in gas taxes - tend to own older, less fuel-efficient vehicles. RUC can shift the tax burden to be more equitable
- ✓ **Further research and testing reduces costs and improves user experience:** Research completed in 2021, along with pilots to be conducted in 2022, will culminate in a comprehensive roadmap for transitioning to RUC. This transition begins with enactment of a small-scale RUC program as early as 2023

# RUC PILOTS CONNECT THE PUBLIC TO THE FUTURE

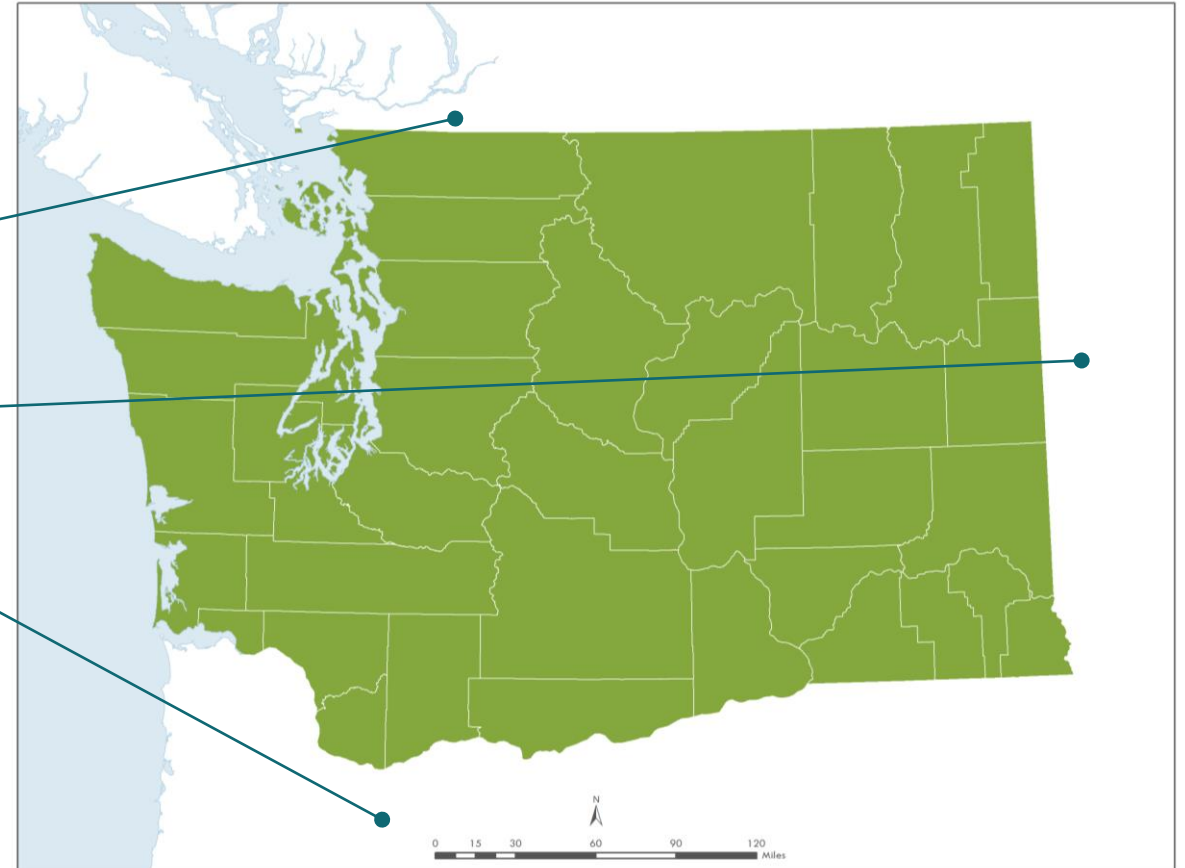
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**Testing informs decision making and public opinion**

# WASHINGTON'S RUC PILOT PROJECT

- 2018/2019 year-long, statewide test of Washington-designed RUC system
- 2,000 test-drivers statewide
- Cross-border testing:
  - City of Surrey, BC
  - Idaho Transportation Department
  - Oregon Department of Transportation
- Conducted the nation's first real cash, transactional test with Oregon utilizing a virtual "clearinghouse/ HUB" approach
- Funded by the STSFA Federal Grant Program

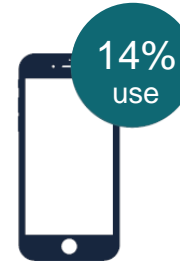


# MILEAGE REPORTING METHODS: DRIVERS GET TO CHOOSE



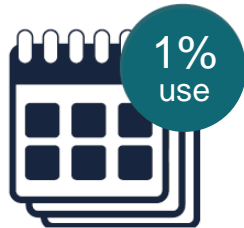
## ODOMETER READING

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



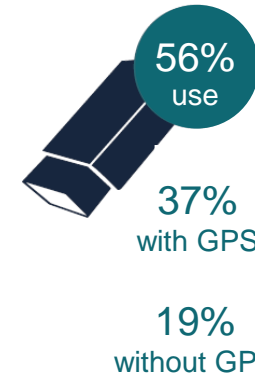
## MILEMAPPER SMARTPHONE APP

- 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



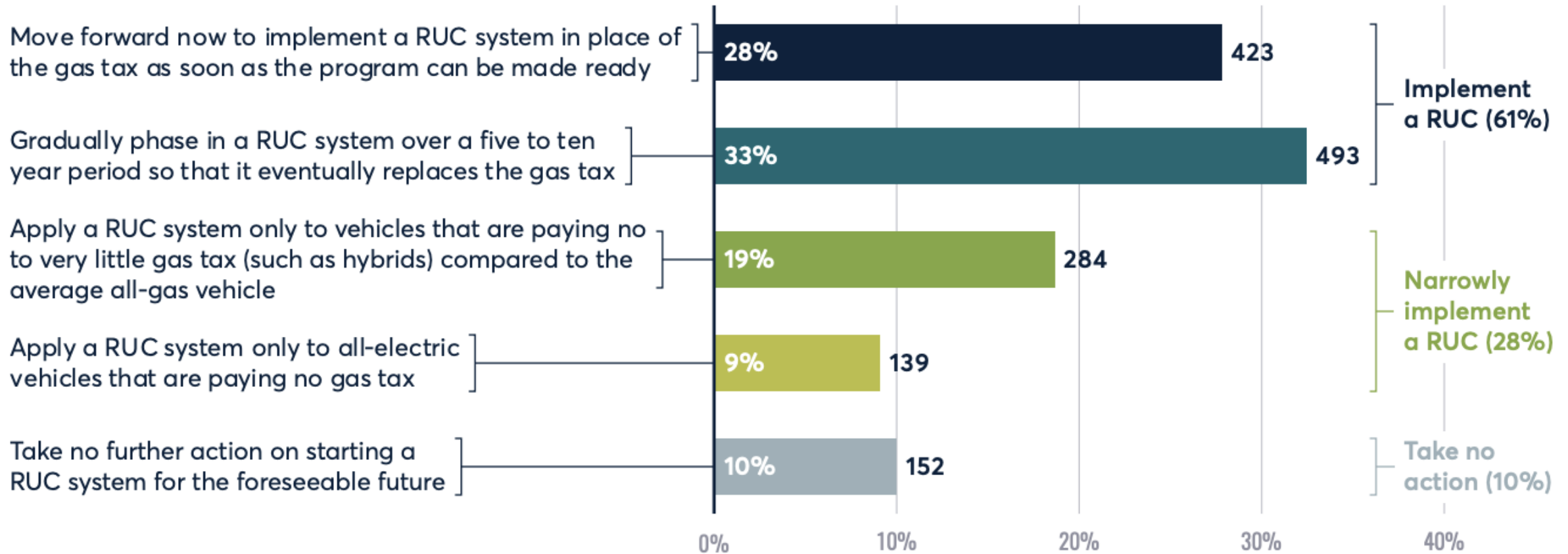
## PLUG-IN DEVICES (WITH OR WITHOUT GPS)

- 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

LOW-TECH

HIGH-TECH

# PARTICIPANT ADVICE TO ELECTED OFFICIALS AS THEY CONSIDER NEXT STEPS FOR RUC STATEWIDE





RUC = FAIRNESS

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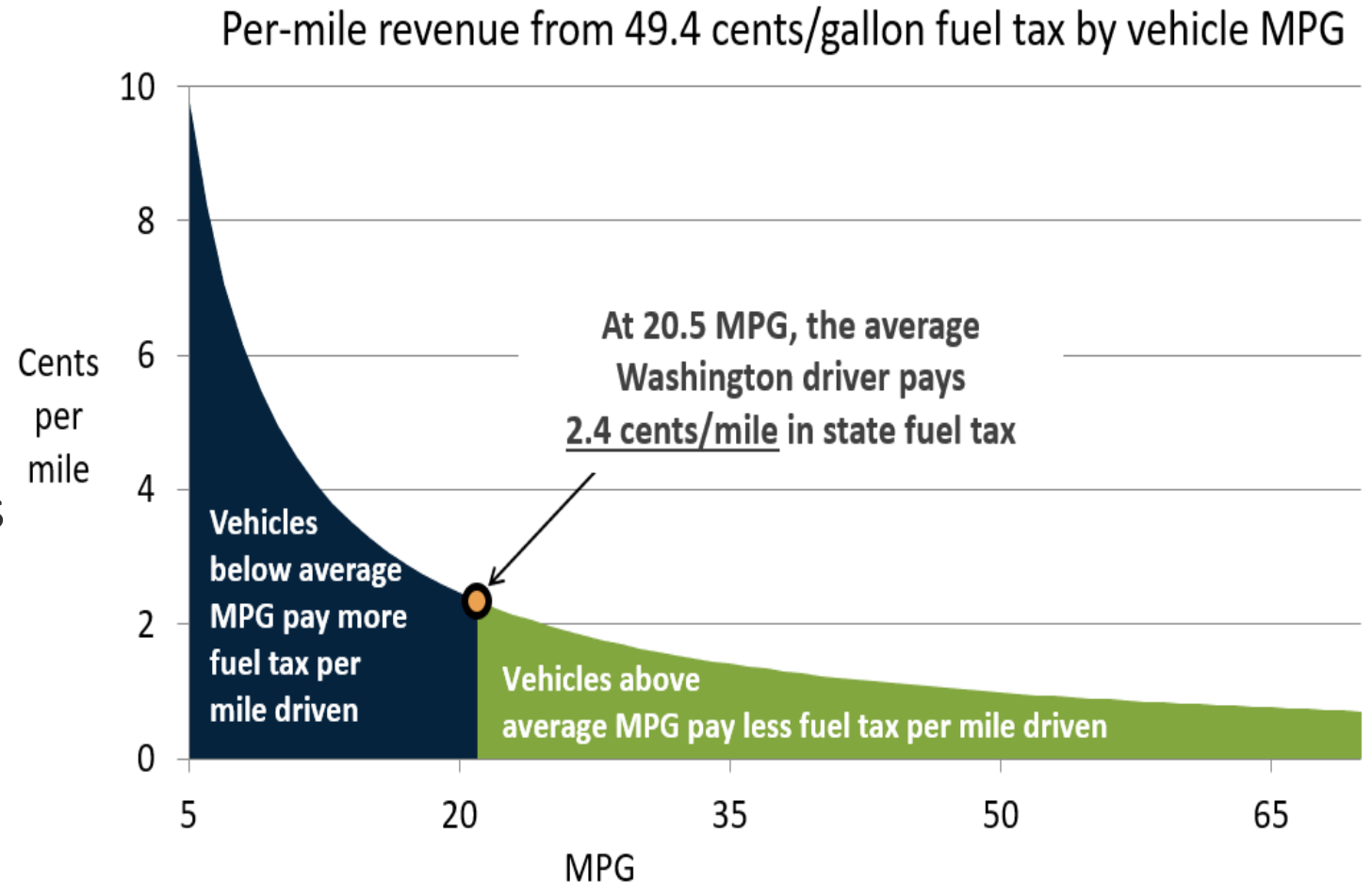


**The gas tax today is a “some users pay – all users benefit” revenue source**

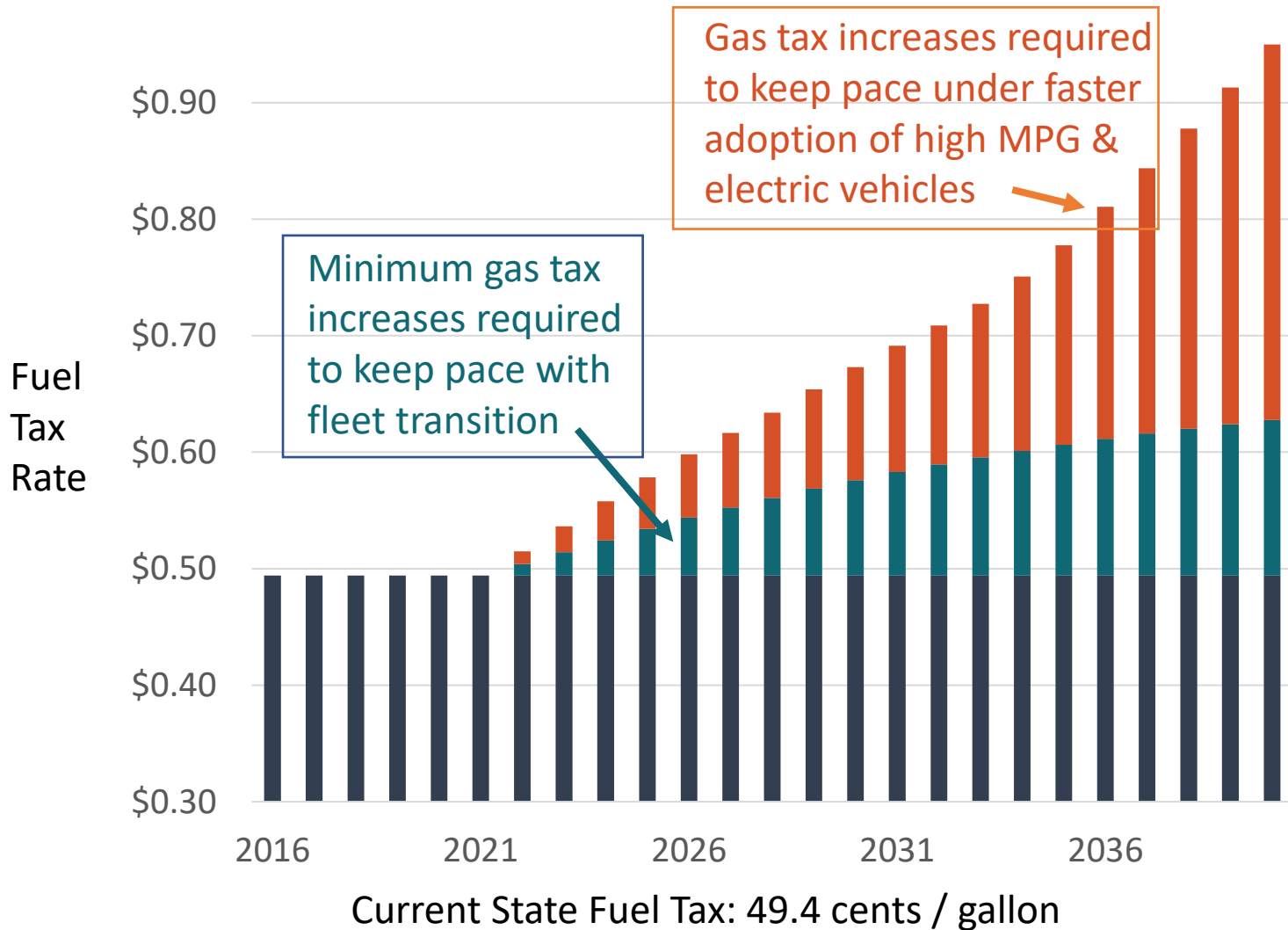
# TAXING GALLONS HAS FAIRNESS CHALLENGES

## *RUC RESTORES THE “USER-PAY” PRINCIPLE*

- 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 they pay in gas taxes for our roads & bridges*
- However, as the adoption of EVs and hybrids expands, the gas tax is moving towards a “some users pay - all users benefit” model



# PRESERVING CURRENT GAS TAX REVENUES WILL REQUIRE FREQUENT INCREASES



- For the gas tax to continue generating the current level of revenue in Washington State, **the gas tax would need to increased 1.7\* cents per gallon, every year through 2040** \*Assumes a moderate pace of adoption of high MPG vehicles and EV's.
- As the gas tax is increased, low-income drivers - who tend to drive older, inefficient vehicles - carry a disproportionate financial burden

# RUC BENEFITS RURAL & LOW-INCOME HOUSEHOLDS

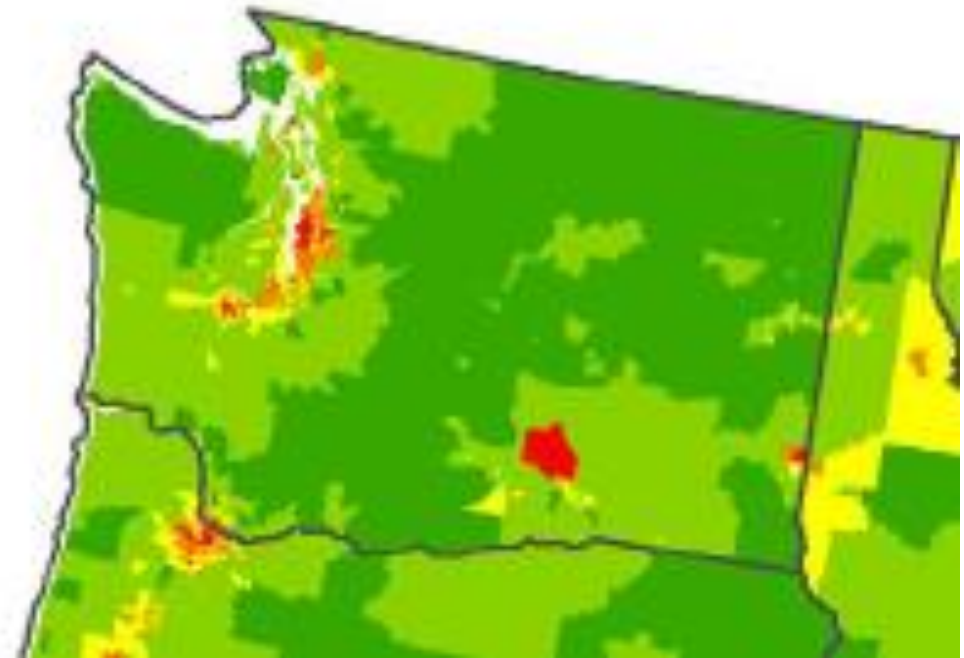
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**What you drive, not how far you drive, determines  
the financial impact of RUC relative to gas taxes**

# RURAL & LOW-INCOME DRIVERS PAY LESS UNDER RUC

- Rural & low-income households tend to drive lower MPG vehicles – and in many cases drive long distances to reach their jobs and access essential services
- Because of this, these drivers pay disproportionately more for roads under the gas tax
- Rural households would save under a RUC compared to the gas tax, on average around \$25 per year savings



Source: RUC West

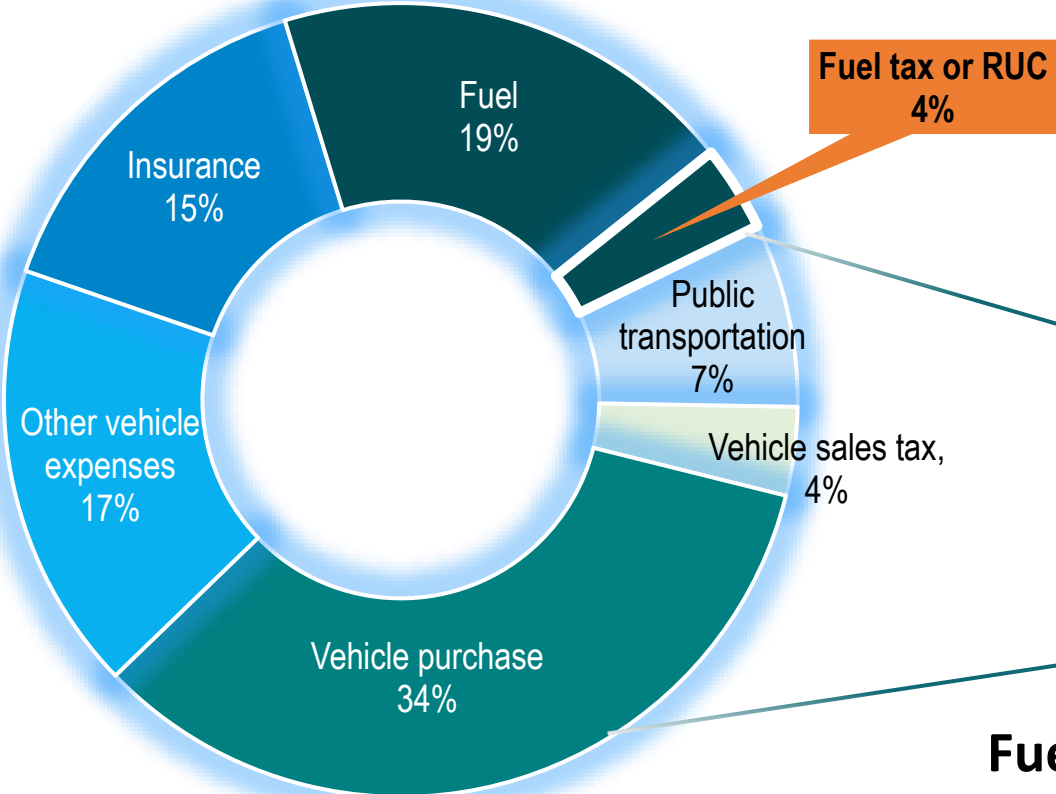
## Payments under RUC



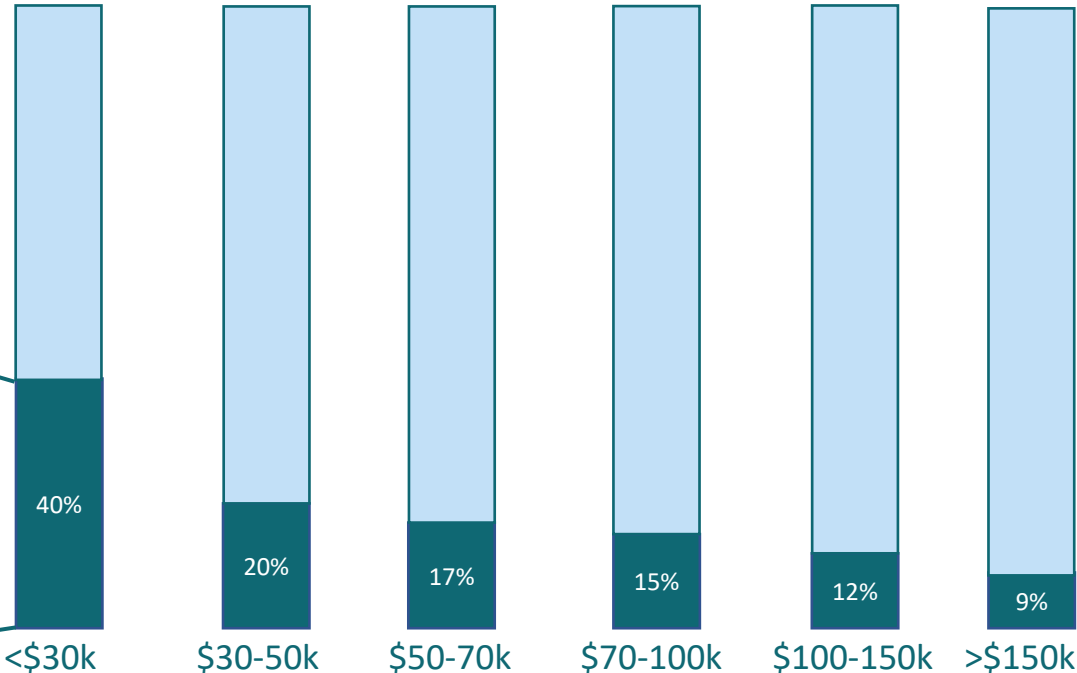
# MOST LOW-INCOME HOUSEHOLDS WILL PAY LESS UNDER RUC COMPARED TO THE GAS TAX

Census tract average household income	Census tract average MPG	Fuel tax per 10,000 miles driven	RUC per 10,000 miles driven	Change under RUC
Less than \$50k	20.0	\$247	\$240	↓ \$7
\$50-75k	20.1	\$246	\$240	↓ \$6
\$75-100k	20.5	\$241	\$240	↓ \$1
\$100-150k	21.4	\$231	\$240	↑ \$9
Over \$150k	22.6	\$219	\$240	↑ \$21

# RUC & GAS TAX ARE RELATIVELY SMALL EXPENDITURES



Transportation as a percent of household expenditures, by income level



**Fuel tax represents 4% of low-income household expenditures, but will increase as fuel taxes increase. With RUC, targeted discounts can be offered.**

# RUC RATE SETTING CAN REDUCE FINANCIAL IMPACTS ON LOW-INCOME DRIVERS

- RUC reduces the disproportionate burden that the gas tax places on low-income drivers – amplified each time the gas tax is increased
- Offer a discounted RUC rate for qualified low-income households
- Offer periodic payments for RUC
- Offer refunds to qualified low-income households who overpay in fuel taxes (cash or credits toward other taxes)





# TRANSITIONING TO AN EV FUTURE

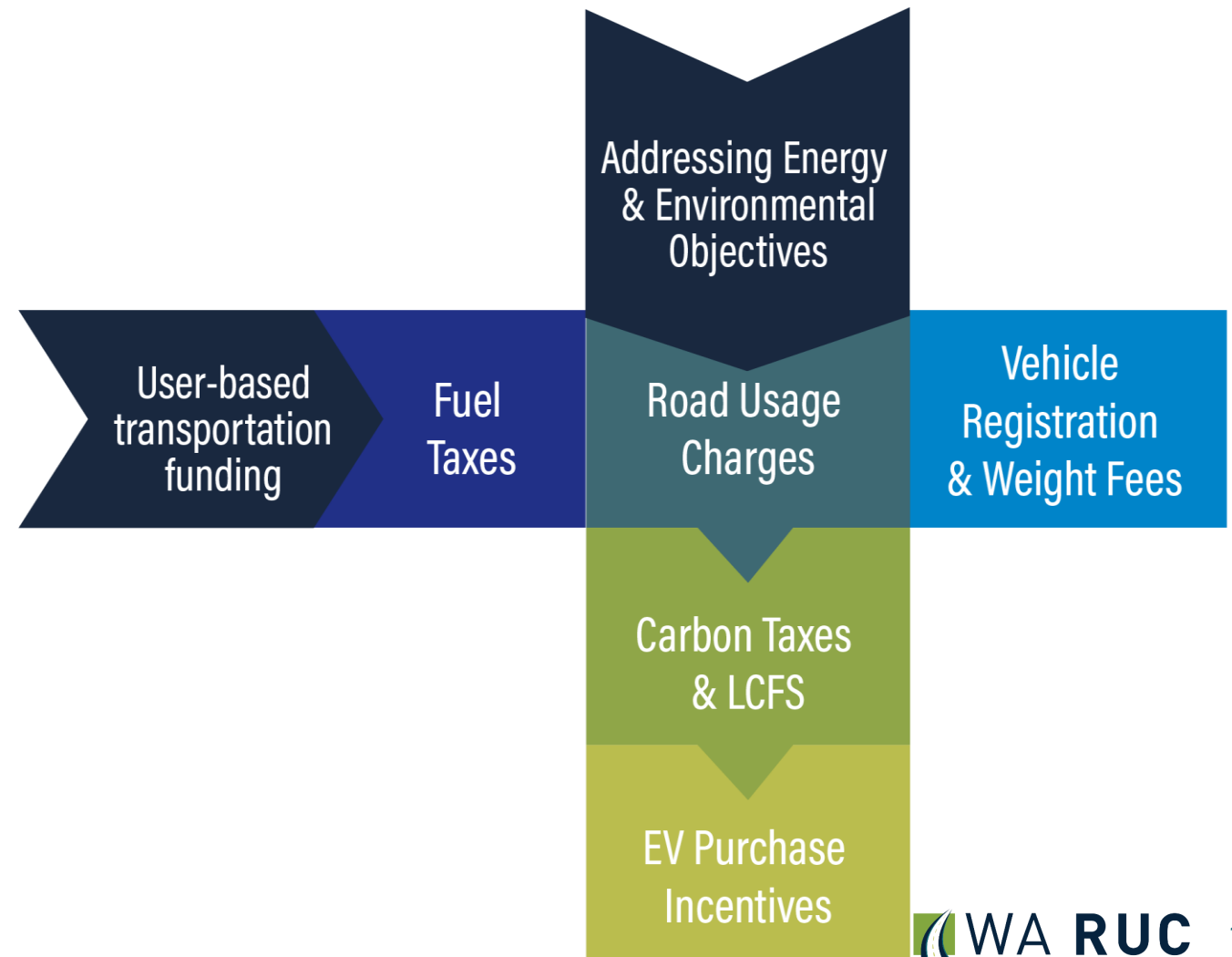
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**RUC enables a transition away from fossil fuel consumption while sustaining transportation funding**

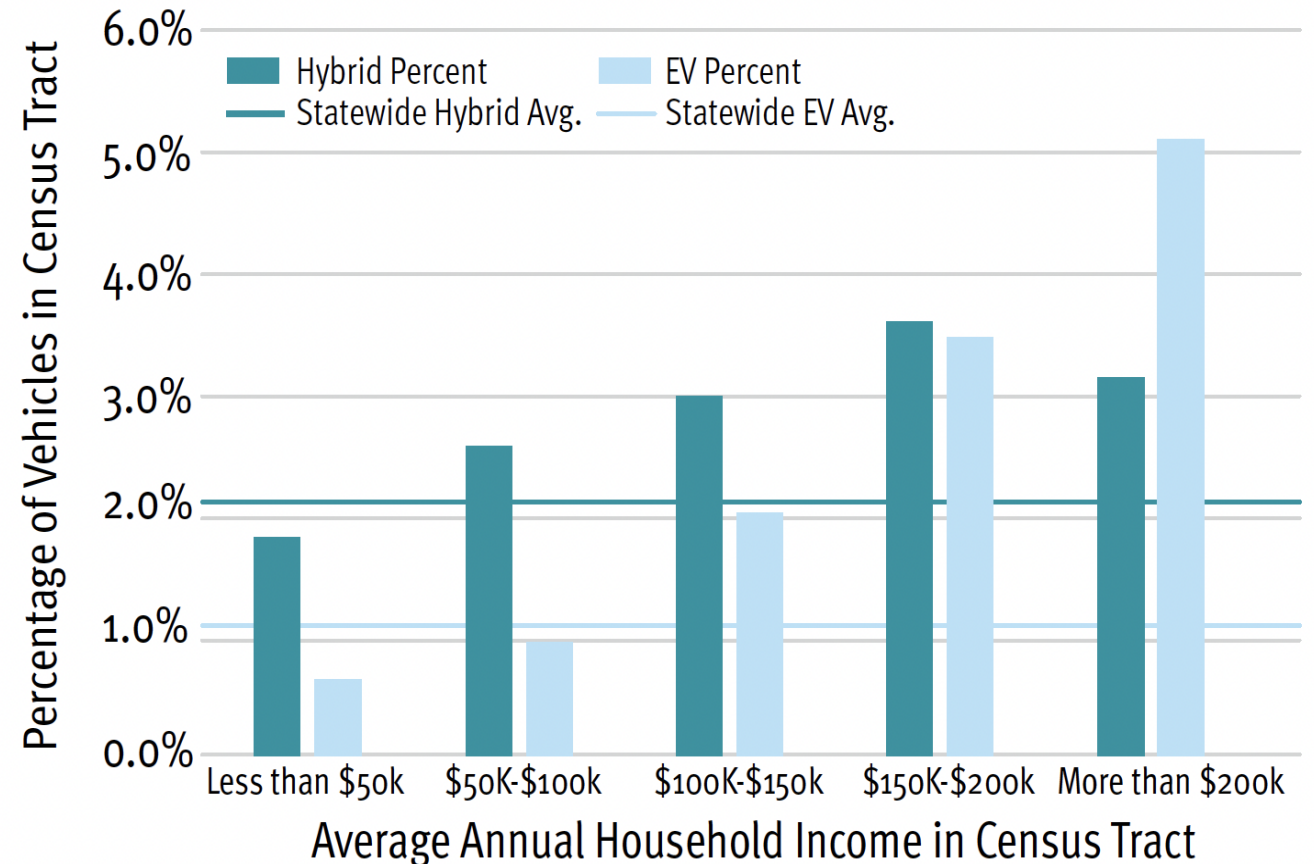
# RUC HARMONIZES CLIMATE & ROAD FUNDING POLICIES

- **High fixed costs of ownership remain the biggest barrier to EV adoption**, a problem compounded by flat EV registration fees
- **RUC allows policymakers to reward EV mileage** by offering RUC as an alternative to a flat fee (*\$225 in WA. State*), and/or with a reduced introductory per-mile rate
- **RUC provides funding for critical transportation infrastructure that will be used increasingly by EVs** in the future as the fleet transitions away from fossil fuels

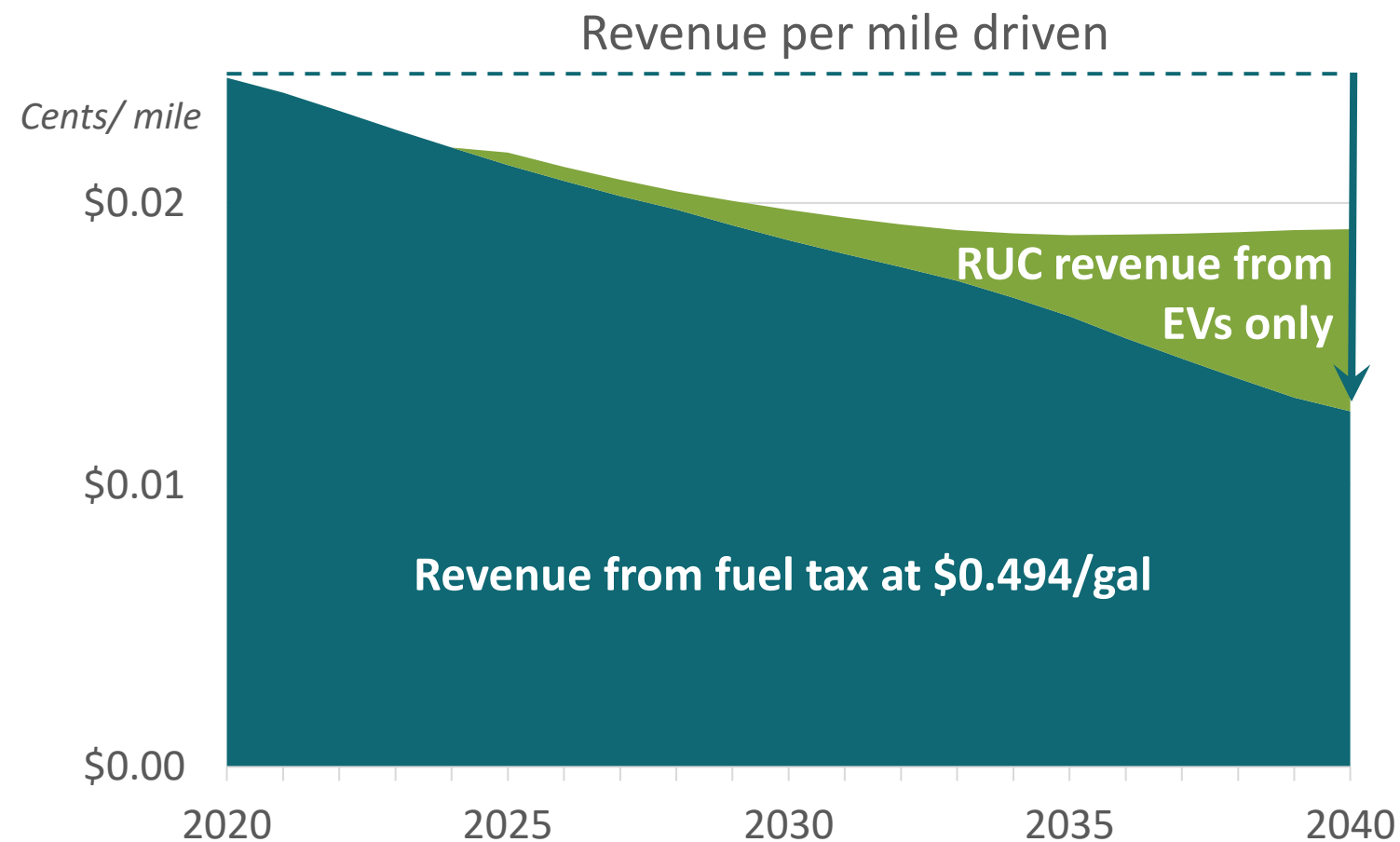


# HYBRID & EV OWNERSHIP INCREASES WITH INCOME

- Washington State is looking at RUC as a replacement to the state gas tax as the vehicle fleet transitions to EVs
  - Assume the gas tax will remain in place during a transition to RUC
- EV incentives are key to supporting an EV transition and are needed as states consider legislation to ban gas-powered vehicles in the coming decade



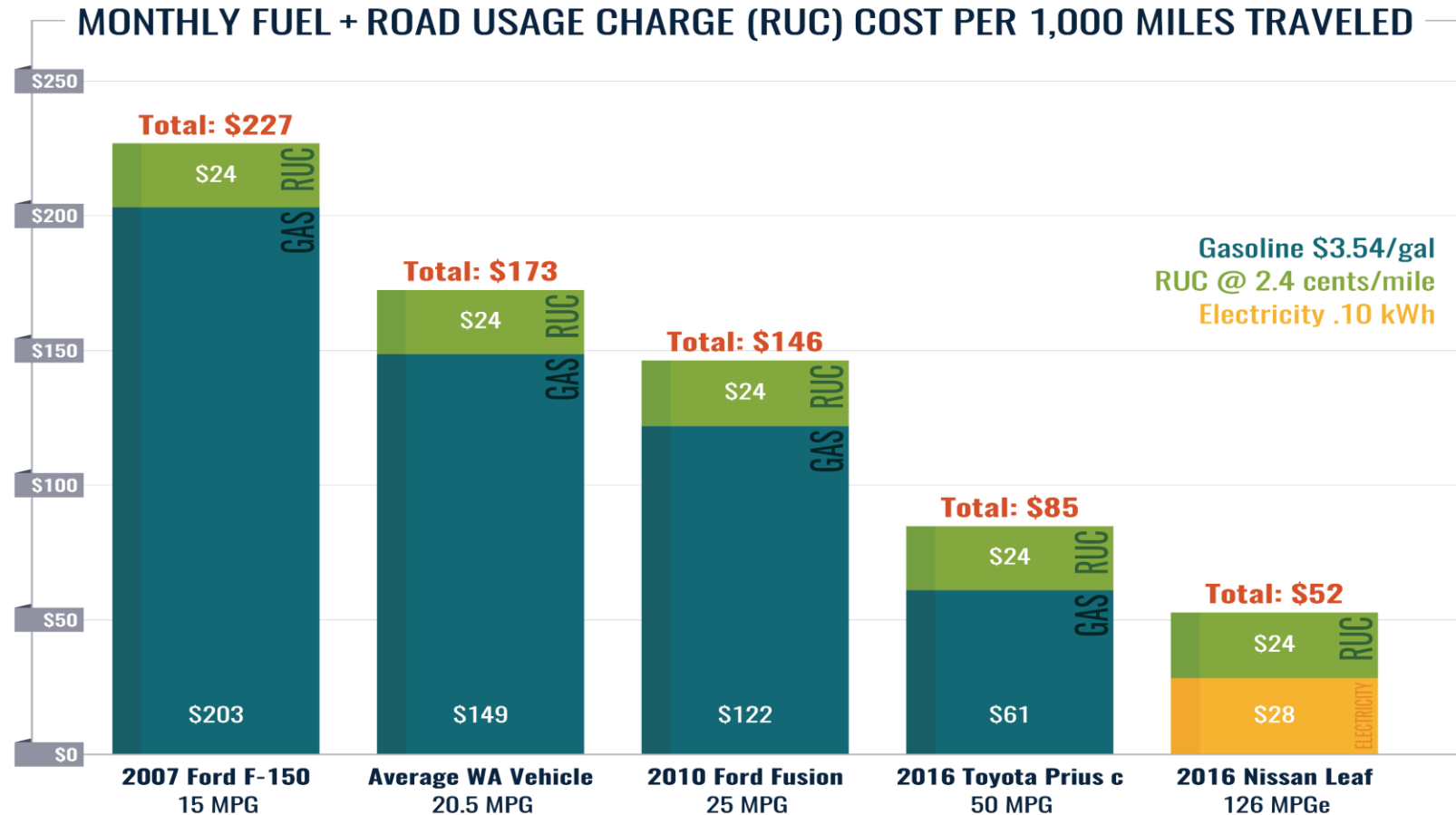
# EVs REPRESENT ONLY ONE PART OF THE EQUATION



- EVs can serve as a starting point for RUC, but they only address a portion of the forecasted revenue gap during a transition
- A moderate EV transition pace is reflected in this chart:
  - 27% of cars are EVs by 2040
  - 73% have a 29 MPG average (gas and hybrid vehicles)
- By 2040 fuel tax revenues are forecasted to decline nearly 50% on a per mile basis

# RUC PRESENTS POLICY OPPORTUNITIES TO SUPPORT AN EV TRANSITION

- RUC maintains significant operating cost advantages of owning an EV
- Waive current \$225 EV flat fee for EVs paying RUC
- Offer an introductory discounted RUC rate or cap for EVs, phased out as EV adoption goals are achieved
- Waive current weight fees for EVs paying RUC



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 \$142 dollars per month less than the Ford pickup truck driver.

# LAW-MAKING IN MOTION

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**As research continues, legislative proposals  
come forward**

# LEGISLATIVE PROPSALS JUMPSTART DEBATE

Policy choice	HB 2026 (2022)	SB 5444 (2021/22)
<b>What vehicles are subject to RUC?</b>	<ul style="list-style-type: none"> <li>• Voluntary: EVs purchased before 2025</li> <li>• Mandatory: New EVs in 2025</li> </ul>	<ul style="list-style-type: none"> <li>• Voluntary: EVs in 2025</li> <li>• Mandatory: All EVs in 2026</li> </ul>
<b>When will other vehicles transition to RUC?</b>	<ul style="list-style-type: none"> <li>• 2026: PHEVs can opt in</li> <li>• 2027: Gas cars can opt in</li> </ul>	N/A
<b>What is the per-mile rate?</b>	2.5c/mi, capped at \$225	2c/mi introductory rate 2.5c/mi in 2029
<b>What fees are waived for RUC-paying vehicles?</b>	\$225 EV surcharge	\$225 EV surcharge
<b>What mileage reporting methods must DOL offer?</b>	Odometer mileage reporting (may offer other methods)	Multiple mileage reporting methods, at least one non-GPS
<b>What legal privacy protections?</b>	Based on WSTC model policy	Based on WSTC model policy
<b>When is a fleet transition plan due?</b>	2029	2023

# TRANSPORTATION COMMISSION PREPARATIONS FOCUS ON ADVANCING SYSTEM READINESS

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- Ongoing preparations with the State Department of Licensing (DMV equivalent) as the planned operator of the RUC program
  - Workshops on customer service, procurement, enforcement
  - Joint development of deployment scenarios, cost estimates
- 2022 research focused on near-term deployment challenges:
  - Self-reporting mileage solutions
  - RUC enrollment design & optimization
  - Designing flexible payment plans
  - WA State Goal: ban gas-powered cars by 2030 – updating revenue and financial analysis accordingly
- Keeping RUC and tolling separate
  - Collaboration to optimize customer support in the near-term between RUC and tolling systems, with integration as a longer-term prospect





**For more information on Washington  
State's RUC Assessment Visit:**

[www.waroadusagecharge.org](http://www.waroadusagecharge.org)

# CONTACT INFORMATION

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