WASHINGTON STATE
ROAD USAGE CHARGE
ASSESSMENT
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.
2012 Legislative Mandate To Transportation Commission:

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

The basis of the assessment:

- Close partnership with Dept. of Transportation & Dept. of Licensing
- RUC rate tested: 2.4 cents per mile
  - State Gas Tax $49.4 \div 20 \text{ mpg (state average)} = 2.4 \text{ cents / mile}
- The pilot was a simulation of a real system
- We assumed revenue neutrality and focused on net revenue potential for both RUC and the gas tax over 24 years (2019 - 2043)
- Assumed drivers would pay either the RUC or the gas tax, but not both
Legislature directed WSTC to establish RUC Steering Committee:

**Three State Transportation Commissioners** – one serves as Chair

**Eight Legislators** – four Senators and four Representatives

**Representatives from:**
- Auto and light-truck manufacturers
- Ports
- Environmental
- Counties
- Trucking industry
- Cities
- Public transportation
- Tribal
- Consumer/public
- WSDOT
- Department of Licensing
- Motoring public
- Business
- User fee technology
- Treasurer’s office
RUC PILOT PROJECT
Inform design of a fair-share approach
WASHINGTON’S RUC PILOT PROJECT

Summary of Washington 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
MILEAGE REPORTING OPTIONS AT A GLANCE

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

**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

**MILEMAPPER SMARTPHONE APP**
- 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)**
- 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

28% use

1% use

56% use

14% use

37% with GPS

19% without GPS
PARTICIPANT POOL: GEOGRAPHIC DISTRIBUTION

- Nearly 5,000 drivers from across the state expressed interest
- 2,000 spots were available - drivers from across the state participated
- The 2,000 participants reflected our state’s geographic distribution
KEY FINDINGS TO DATE
TAXING GALLONS HAS REAL FAIRNESS AND EQUITY CHALLENGES

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

At 20.5 MPG, the average Washington driver pays 2.4 cents/mile in state fuel tax.

Vehicles below average MPG pay more fuel tax per mile driven.

Vehicles above average MPG pay less fuel tax per mile driven.
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

<table>
<thead>
<tr>
<th>Model</th>
<th>Gas Cost</th>
<th>RUC Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Ford F-150</td>
<td>$203</td>
<td>$24</td>
<td>$227</td>
</tr>
<tr>
<td>Average WA Vehicle</td>
<td>$149</td>
<td>$24</td>
<td>$173</td>
</tr>
<tr>
<td>2010 Ford Fusion</td>
<td>$122</td>
<td>$24</td>
<td>$146</td>
</tr>
<tr>
<td>2016 Toyota Prius c</td>
<td>$61</td>
<td>$24</td>
<td>$85</td>
</tr>
<tr>
<td>2016 Nissan Leaf</td>
<td>$28</td>
<td>$24</td>
<td>$52</td>
</tr>
</tbody>
</table>

Gasoline $3.54/gal
RUC @ 2.4 cents/mile
Electricity .10 kWh

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.
RUC ≠ TOLLING

RUC & tolling are separate tools in our tool box

• RUC is being looked at as a foundational funding source for the statewide transportation system, replacing the gas tax
  o Assumes drivers would pay RUC AND tolls – just like they pay gas taxes AND tolls today

• Tolling is used to pay for a specific project and/or manage demand on a specific corridor, with the revenues dedicated to that corridor or project

• While RUC could incorporate pricing for congested corridors, to do so requires the mandatory use of GPS – and this conflicts with a key priority:
  o Consumers must have a choice for how they report their miles, including not using GPS
  o Privacy trumps pricing
EVEN WITH ANNUAL GAS TAX INCREASES REVENUE WILL NOT KEEP UP WITH NEEDS

Sort of like scooping water out of a sinking boat…..

• The gas tax would have to be raised about **1.5 cents per gallon, per year** on all vehicles from 2019-2043 in order to equal net revenues from a road usage charge of 2.4 cents per mile

• By 2043, drivers would be paying **85 cents / gallon** – with reduced purchasing power

• Would not address growing funding needs for improvements nor maintenance – it would keep funding at status quo equivalent levels
RUC PILOT PARTICIPANT INPUT

Three Surveys, 12 months
HOW DO YOU FEEL ABOUT IMPLEMENTING A RUC AS A REPLACEMENT TO THE GAS TAX TO FUND TRANSPORTATION INFRASTRUCTURE?

Survey 1 (n=1,683)

- Strongly support: 21.3%
- Somewhat support: 29.2%
- Somewhat oppose: 9.1%
- Strongly oppose: 8.2%
- Not sure/need more information: 32.4%

Survey 3 (n=1,468)

- Strongly support: 37.9%
- Somewhat support: 33.7%
- Somewhat oppose: 8.4%
- Strongly oppose: 12.9%
- Not sure/need more information: 7.1%
WHICH OF THE FOLLOWING BEST REPRESENTS YOUR ADVICE TO ELECTED OFFICIALS AS THEY CONSIDER THE NEXT STEPS IN IMPLEMENTING A RUC SYSTEM STATEWIDE:

- **Move forward now to implement a RUC system in place of the gas tax as soon as the program can be made ready**: 28% (423)
- **Gradually phase in a RUC system over a five to ten year period so that it eventually replaces the gas tax**: 33% (493)
- **Apply a RUC system only to vehicles that are paying no to very little gas tax (such as hybrids) compared to the average all-gas vehicle**: 19% (284)
- **Apply a RUC system only to all-electric vehicles that are paying no gas tax**: 9% (139)
- **Take no further action on starting a RUC system for the foreseeable future**: 10% (152)
Knowing what you know today, which method to fund transportation would you prefer?

Survey 1
n=1,670
- 43%: A road usage charge where you pay by the mile
- 9%: Equally prefer a RUC or gas tax
- 17%: A gas tax where you pay by the gallon of gas
- 6%: Don’t prefer either a gas tax or RUC
- 26%: Not sure/need more information (please specify)

Survey 3
n=1,482
- 53%: A road usage charge where you pay by the mile
- 15%: Equally prefer a RUC or gas tax
- 19%: A gas tax where you pay by the gallon of gas
- 6%: Don’t prefer either a gas tax or RUC
- 8%: Not sure/need more information (please specify)
PILOT PROJECT TIMELINE

2012-2016
Pre-pilot analysis and design

2017
Recruit pilot participants

2018-2019
Live pilot test driving

2019-2020
Pilot evaluation and final reporting

Conduct feasibility study
Complete financial and policy analysis
Design the pilot project
Outreach to general public
Gather final feedback from participants
Recruit nearly 5,000 volunteers
Conduct surveys and focus groups
Establish help desk
Compile and analyze data and information gathered
Establish final findings and recommendations
Final report to decision-makers

WSTC reports to the Governor, State Legislature, and USDOT on final findings and recommendations

We are here ★

2020

Enroll 2,000 participants

19
To stay looped in on our progress visit:

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