



State Transportation Initiatives: Oregon & California Road Usage Charge Programs

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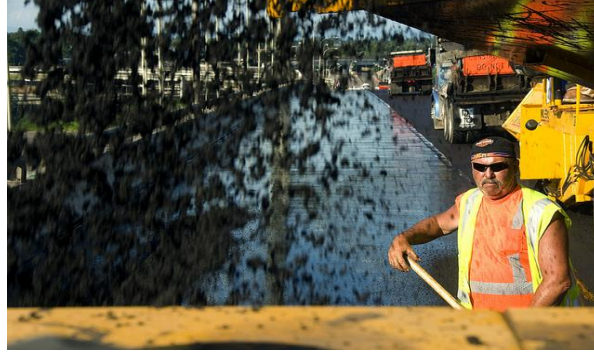
Eryca Dinsdale

Oregon Department of Transportation

Why do we need a road usage charge?



Federal funds
are drying up.

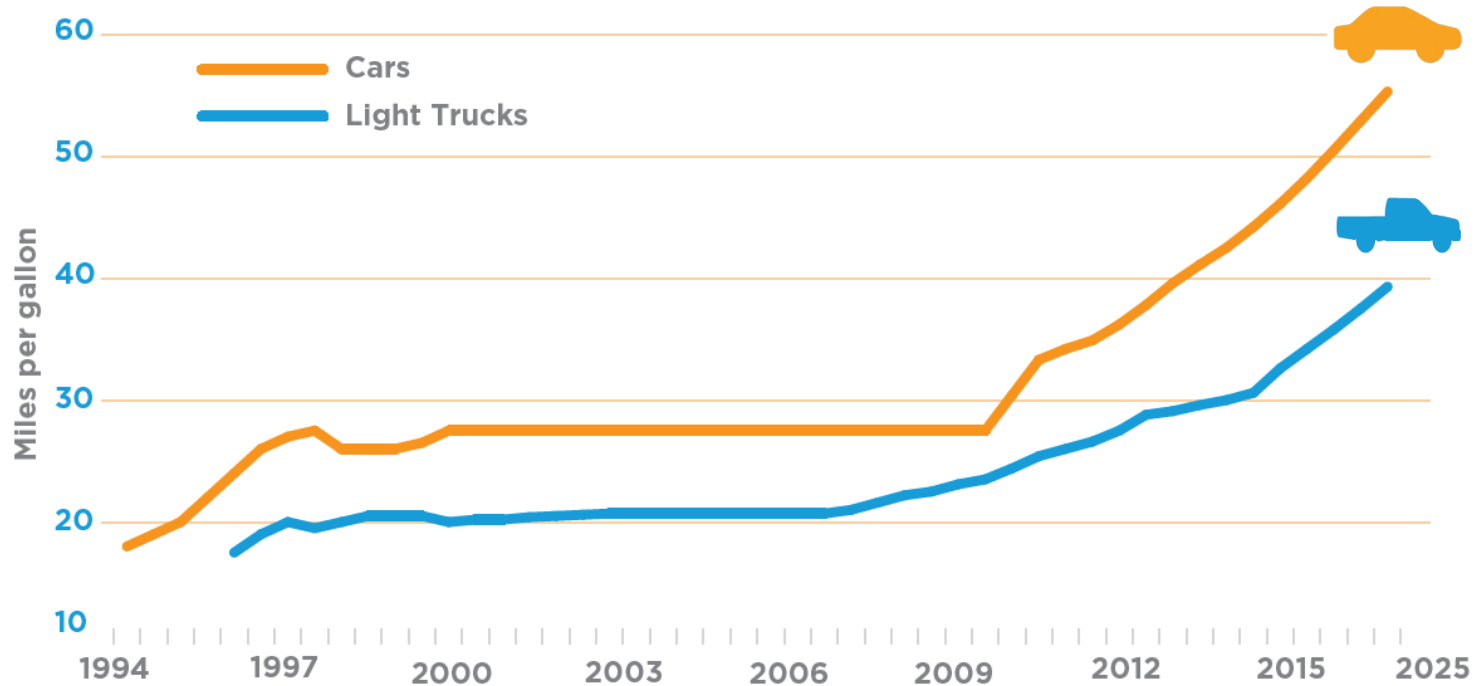


Construction costs
are going up.



The gas tax
can't keep up.

Increasing Vehicle Fuel Efficiency



[CAFE Standards 1978-2010](#): National Highway Traffic Safety Administration

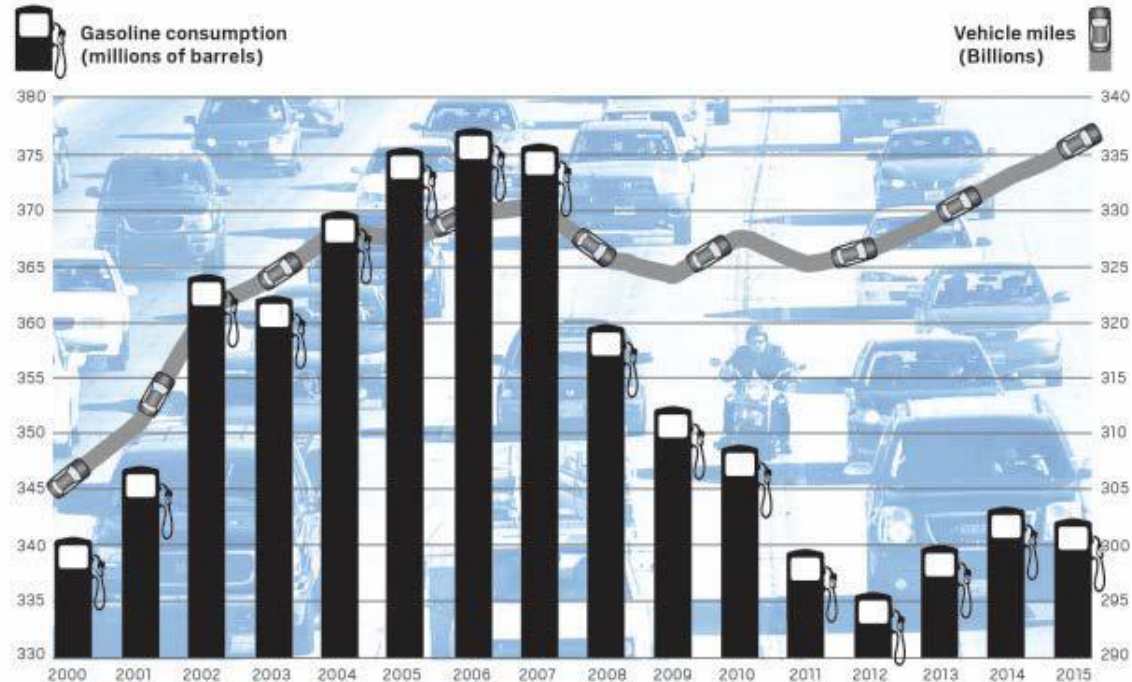
[CAFE Standards 2011-2016](#): U.S. Environmental Protection Agency CAFE 2012-2016 Final Rule

[CAFE Standards 2017-2025](#): U.S. Environmental Protection Agency CAFE 2017-2025 Final Rule

Projected loss by relying on fuels tax

LESS GAS, MORE MILES

As the number of miles driven by Californians rises, gas consumption has plummeted, spelling trouble for a transportation system that relies on gas tax revenue to pay for repairs.



Source: Federal Highway Administration, Next 10

The future is now.

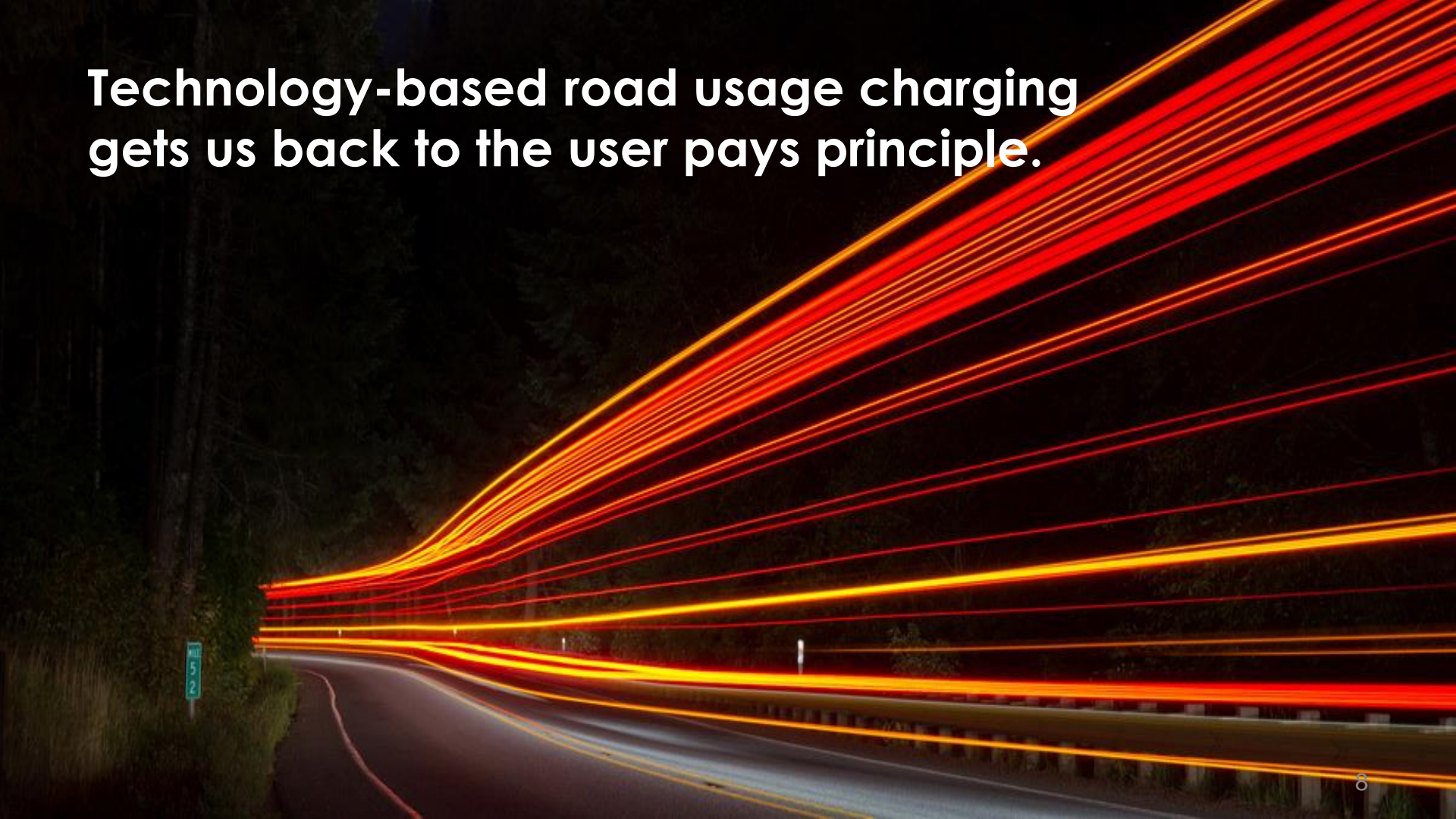


What is a Road Usage Charge?

The “User Pays Principle”



Technology-based road usage charging gets us back to the user pays principle.



The RUC concept



Collect fuels tax
as prepayment
of RUC



Count the miles
and multiply by
the RUC rate



Collect
the net tax or
credit the
difference

How does a RUC system work?

Driver selects account, activates tech



1 In-vehicle mileage counter transmits miles and fuel use to private sector account manager.

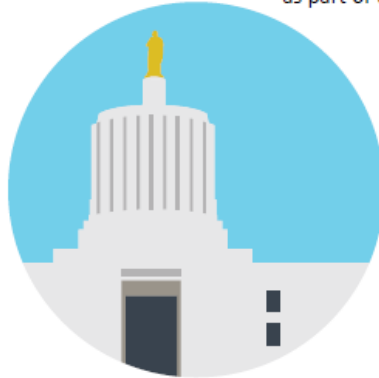
2 Account manager sends a bill (or refund) to vehicle owner for mileage charge, minus fuel tax.

Car reports miles, account manager sends bill



3 Vehicle owner pays road usage charge as part of total bill.

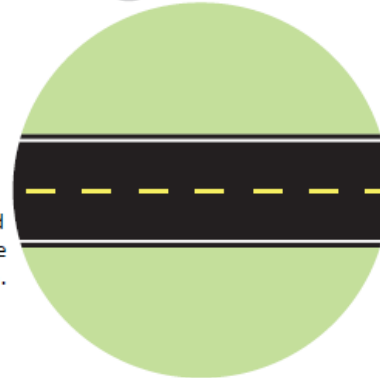
Driver pays bill, account manager pays state



4 Account manager sends road usage charges to state

State improves roads

5 Revenue collected through the road usage charge is used to make improvements to the state's transportation system.

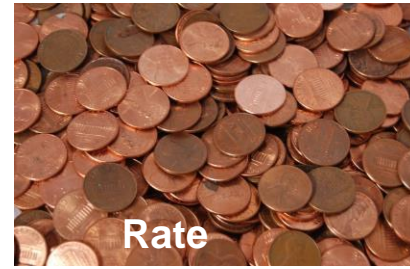
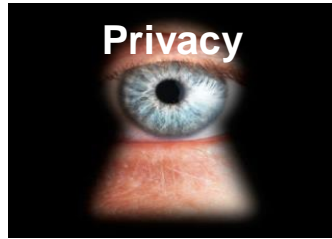


Perceptions/Myths

1st Step: Seeking Public Input



Challenges/Issues



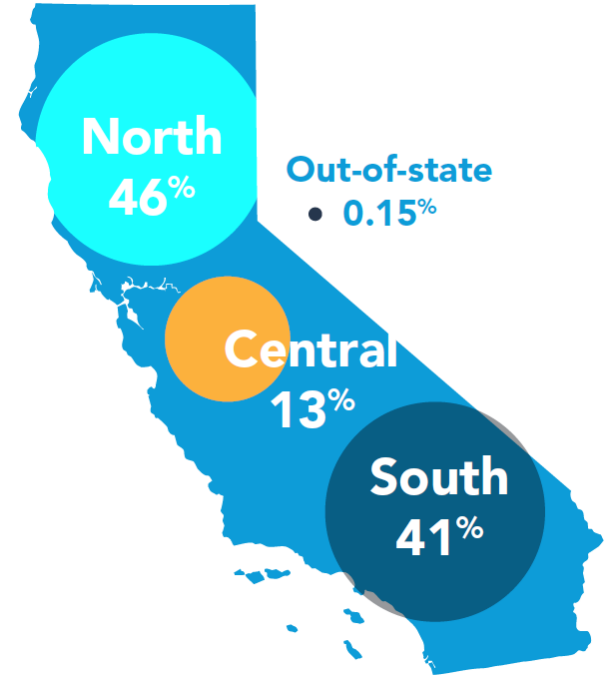
California's RUC program

The Road Charge Pilot Program



Achieved Many First:

- Maintained more than 5,000 participating vehicles over a nine-month period
- Demonstrated six reporting and recording methods
- Offered manual, low tech, and high tech reporting methods
- For the first time included heavy commercial vehicles



Making it the largest road charge pilot in the nation to date!

CA Pilot – Lessons Learned



- ✓ Certain demographic targets set by the TAC were unattainable
- ✓ Education during the pilot led to an increase in acceptance
- ✓ Most think a road charge funding model is more equitable
- ✓ System requirements were successfully developed, tested, and audited
- ✓ Successful in studying the viability of using third-party vendors
- ✓ Demonstrated the ability to offer value-added features as an enhancement to the user experience

85% overall pilot satisfaction, which is further supported by the low rate of 4% attrition

73% felt a road charge was a more equitable transportation funding solution than the gas tax

Technologies – Lessons Learned



Mileage Options

All reporting methods worked, some better than others.

Manual options

- ✓ Highest degree of privacy
- ✓ Most difficult to enforce
- ✓ Costly to administer compared to the gas tax

Automated options

- ✓ Plug-in devices are most reliable; as technology advances could be obsolete by the time road charge is adopted
- ✓ Smartphone app with location & in-vehicle telematics show great promise, but need further refinement



86% satisfied with mileage reporting method

Oregon's RUC program



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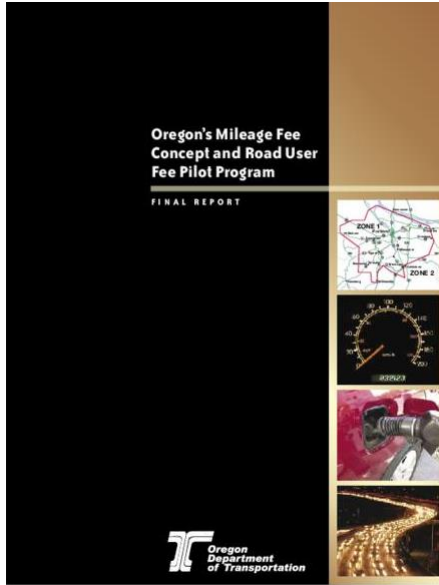
 GO WITH OReGO.

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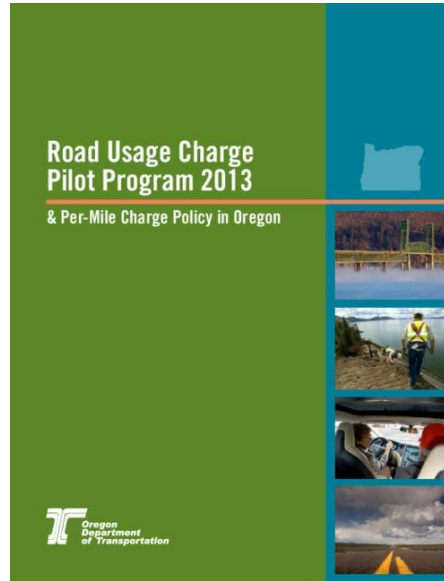
PLUG IN AND DRIVE.

www.MyOReGO.org

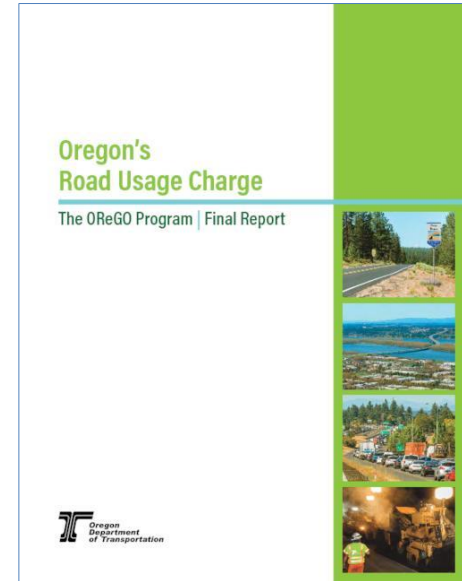
Oregon's RUC evolution



Road User Fee
Pilot
(2006-07)



Road Usage
Charge Pilot
Program (2012-13)



OReGO
(2015-present)

Oregon's lessons learned

Support all
vehicles

Enforcement
drives costs

Be technology
neutral



Effective private
sector relations

Provide choices

Experience
increases comfort

OReGO

California-Oregon regional pilot

The FAST Act – multiple grants awarded

- Demonstrate user-based alternatives
- 5 year - \$95 million grant program
- Eligible to a state or group of states to test road charge design, acceptance and implementation



The FAST Act – grant selections

FFY 2016
8 grants awarded
California, Delaware, Hawaii, Minnesota, Missouri, Oregon, Washington, RUC West
\$14.2 million

FFY 2017
7 grants awarded
California, Colorado, Delaware, Missouri, Oregon, Washington, RUC West
\$15.5 million

\$65.3 million left
in the next 3
years



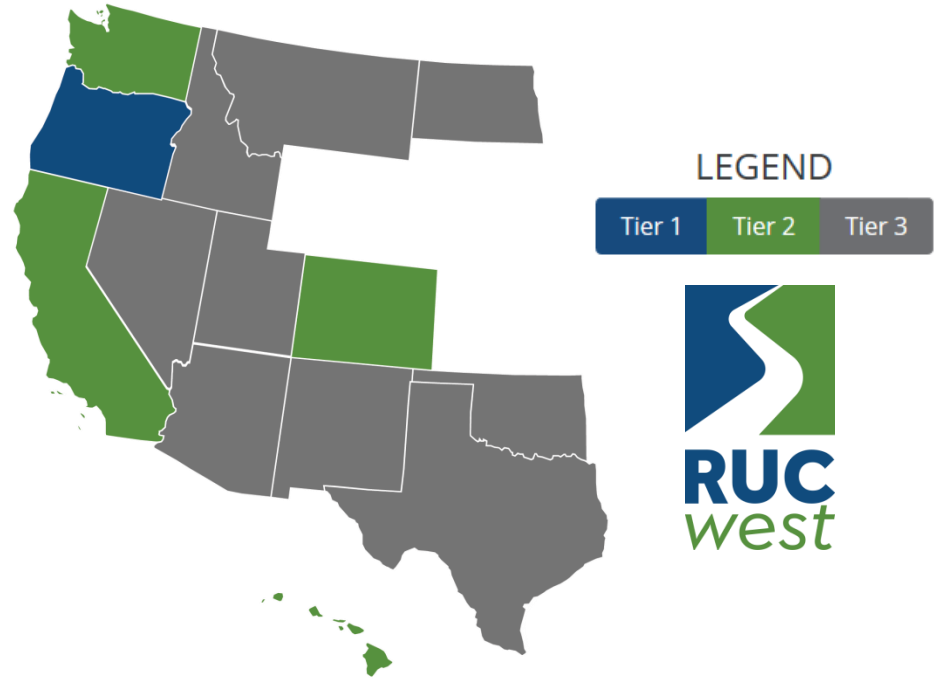
The FAST Act – RUC West

Round 1 - (2016)

- Regional pilot planning
- 11 participating states
- Builds on RUC West funded projects
- Utilizes lessons learned from existing RUC projects
- Defines a regional system
- Investigating interoperability

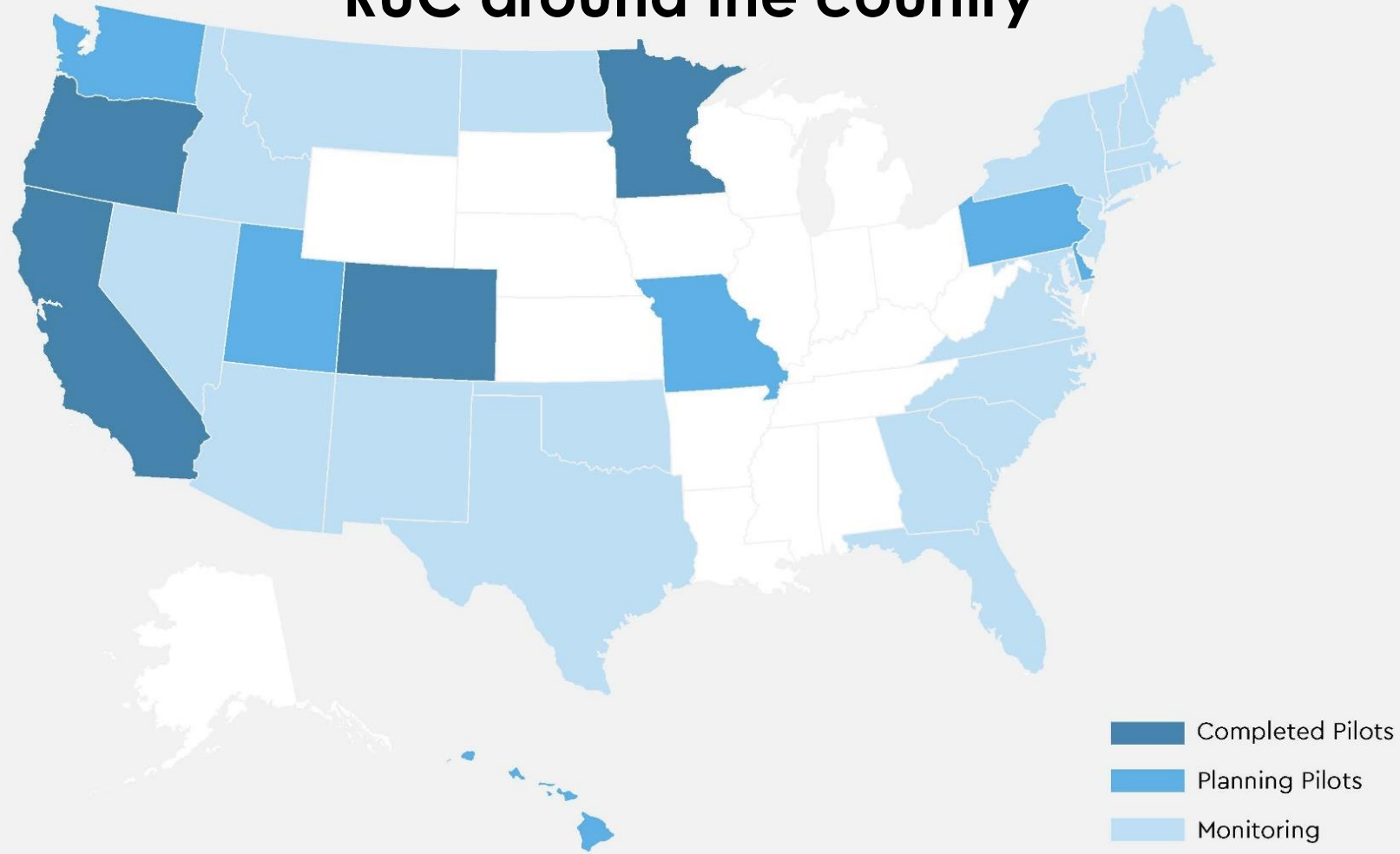
Round 2 - (2017)

- Regional pilot demonstration – CA & OR



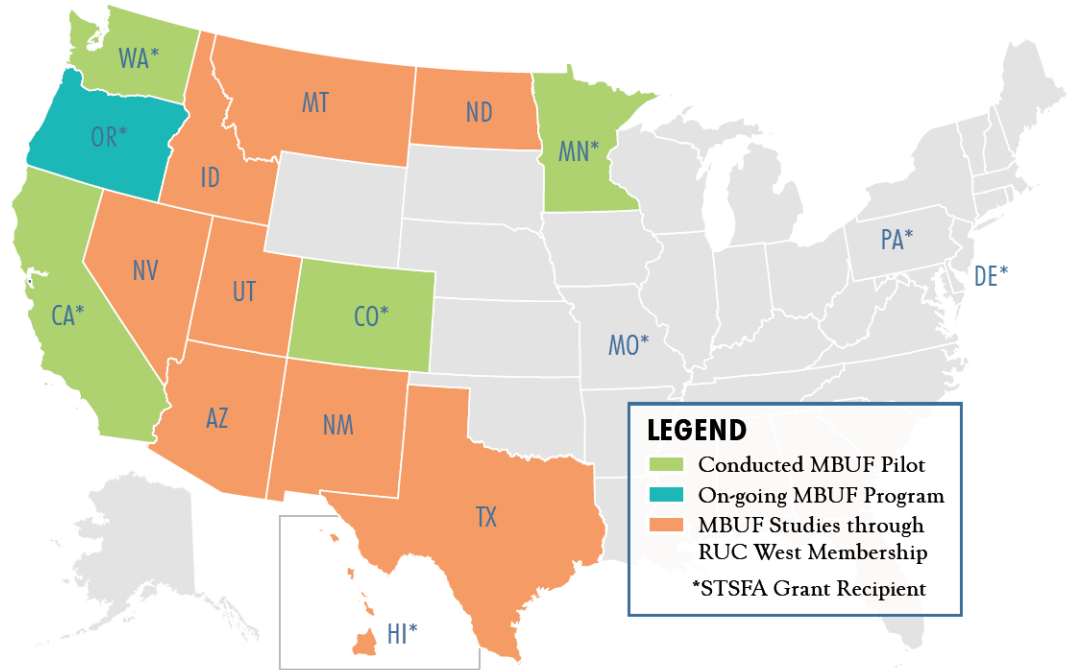
Future momentum

RUC around the country



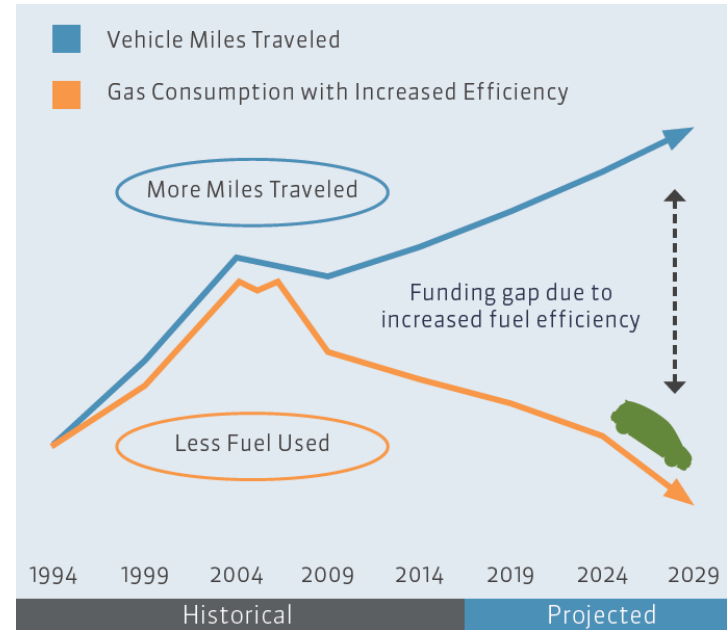
What are other states doing?

- States Conducted Pilots
- Oregon has On-going Program
- Statewide Studies through RUC WEST
- I-95 Corridor Coalition MBUF Exploration

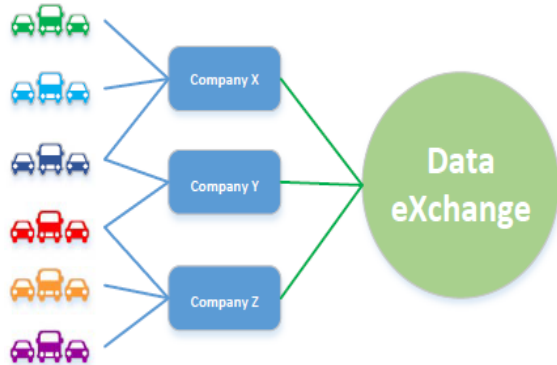


What does the future hold?

- Fuel tax revenue estimated decrease due to decline in gasoline consumption
- CA vehicle fleet transitioning to higher fuel efficient vehicles
- Continued reliance solely on the gas tax will result in revenue deficiencies in the long run
- Advanced Technology
- Connected Cars



New Technologies



Technical considerations of RUC



Connection to automated vehicles



The future of funding

Considerations

Registration
Fees

Does not scale with VMT;
does not fairly price high-
mileage vehicles

Fuel Taxes

Provides some link between
road usage & funding

Road Usage
Charge

Scales with VMT; fairly prices
high-mileage vehicles



Economic Report of the President

Together with
The Annual Report
of the
Council of Economic Advisers

February 2018



Thank You!

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California Final Report:

www.californiaroadchargepilot.com/final-report

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