

# Utah's Road Usage Charge (RUC)

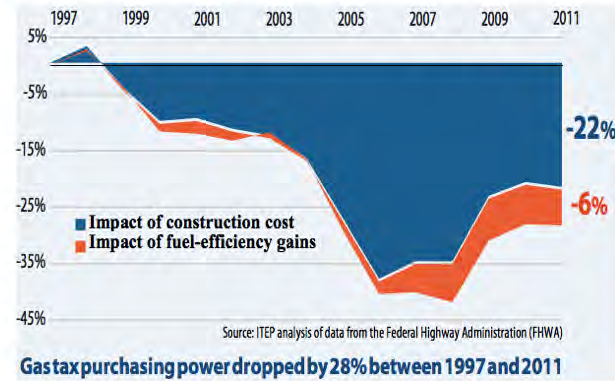
*For Alternative Fuel Vehicles*

August 2018



## FUNDING CHALLENGES & SOLUTIONS

- Nationally gas tax is not keeping up with:
  - Construction costs
  - Inflation
  - Alternative fuels

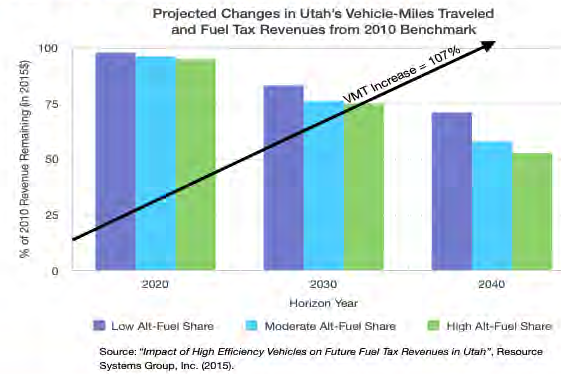


Because gas tax is not keeping up with construction costs, inflation, and alternative fuel vehicle growth:

- Many different methods are being looked at for tax and revenue across the country.
- States are taking on a bigger role in funding solutions.
- Utah has focused great effort in adequately funding transportation needs.

## FUNDING CHALLENGES & SOLUTIONS

- Utah-specific projections
- VMT Growth over 100%
- Gas Tax decline up to 45%



So what does the future look like in terms of transportation funding?

- States will need to look at various options to fund eroding gas tax and highway construction needs.

Projected erosion of gas tax revenues as compared to a 2010 benchmark. Projections in 2015 dollars.

- By 2040 VMT may increase by 107%
- Gas tax revenue decrease of 29-47%.

## FUNDING CHALLENGES & SOLUTIONS

- RUC West Consortium
- 14 western states
  - 3 tier groups:
  - Implementing (OR)  
**(Utah in 2020)**
  - Piloting (CA, CO, HI, UT, WA)
  - Research only (all others)



So what options might be helpful to Utah?

- RUC West is a group that's done a lot of research we can leverage.
- Many of the RUC West states have done pilot projects we can learn from.
- SB136 directs Utah to implement and evaluate a RUC system.
- This implementation will move Utah from a Tier 2 piloting state to a Tier 1 implementing state.



So how should Utah implement a RUC system?

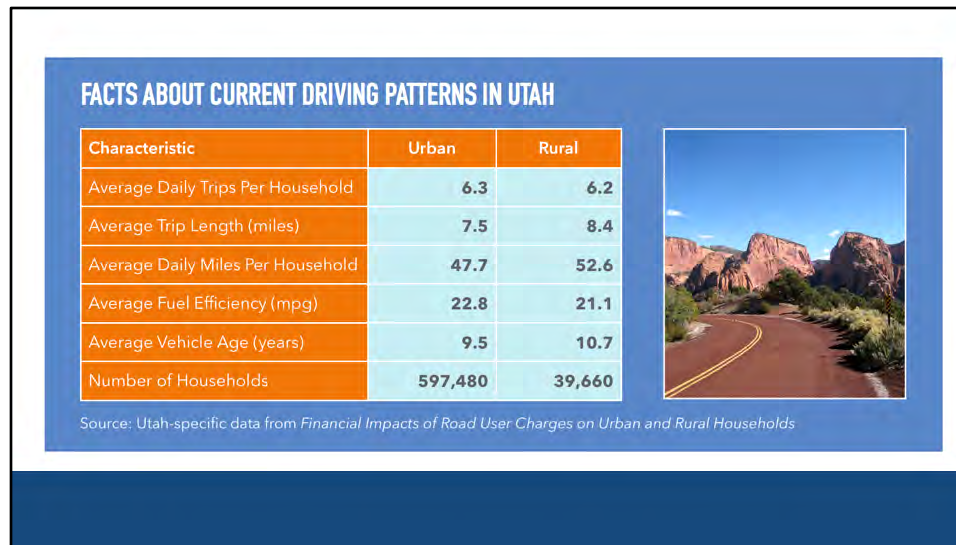
- Learn from others:
  - A group from Utah spent two days visiting with Oregon DOT to learn about their system
  - We are also learning from past pilots and current pilots being done in Washington and along I-95 on the east coast
- What we learn from these other groups can help us implement our system right
- Oregon's system utilizes two different approaches
  - Commercial account manager (CAM), which models a system where private vendors would operate the system with oversight from the State government
  - Owner account manager (OAM), which models a system where the State government itself would operate the system
- Oregon's system allows all types of vehicles (electric, hybrid, and conventional gasoline) to enroll
- Oregon has a separate weight-mile taxation system for heavy commercial vehicles (i.e. semi trucks)
- Oregon's system offers a variety of different mileage reporting options using OBD-II port devices, smartphone apps, and odometer photo capture
- Oregon does not offer a flat fee option like Utah is proposing to do..

## UTAH'S RUC APPROACH (SB136)

- Flat fees for alternative fuel vehicles
- RUC enrollment option in lieu of flat fee
- Implementation date: January 2020
- Advisory Committee
- Annual report to legislative committee



Year	Vehicle Type		
	Electric	PHEV	Gas Hybrid
2019	\$ 60	\$ 26	\$ 10
2020	\$ 90	\$ 39	\$ 15
2021	\$ 120	\$ 52	\$ 20



It's important to review some facts about current driving patterns in order to begin to understand how urban and rural areas would be affected by a RUC system. Average household vehicle trips are essentially the same, but rural trips are about 10% longer on average. Rural people also are more likely to own less efficient and older vehicles. All of these factors lead to the fact that the typical rural household currently pays more gas tax than the typical urban household.

## IMPORTANT FINDINGS

- Rural users are likely to pay less under a RUC than under the gas tax based on vehicle age and mileage statistics

### PROJECTED CHANGE IN STATE TAX PAYMENTS OF MOVING FROM GAS TAX TO RUC SYSTEM\*

Characteristic	Urban	Rural
Average % Change	+0.6%	-5.5%
Annual \$\$ Change per Household	+\$1.35	-\$14.70
Annual Total \$\$ Change**	+\$806,000	-\$583,000



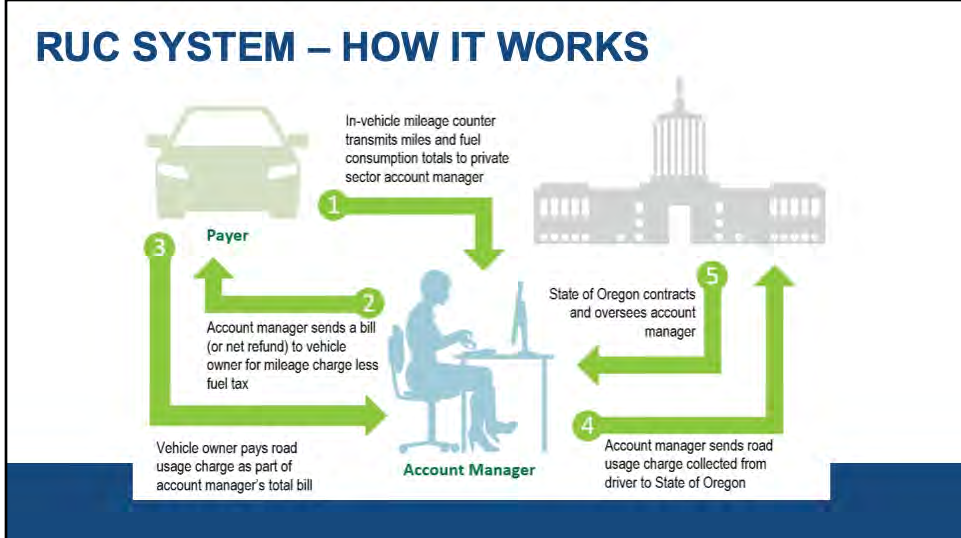
Source: Utah-specific data from *Financial Impacts of Road User Charges on Urban and Rural Households*

Based on Utah-specific demographic data from a 7-state urban/rural impacts study, the average urban household would experience a 0.6% increase in tax payments under a RUC vs. the gas tax, compared to a 5.5% decrease for the average rural household. This graphic also shows the aggregate tax shift from rural to urban areas.





UDOT has been distributing educational material to groups  
Technical groups have been discussing topics related to their subject areas  
Recommendations arising from these discussions will be presented today  
Discussion/recommendation process will repeat over the next 3 months



Advantages of this recommendation

- The government never sees any raw location data tied to personally identifiable information
- Leverages existing vendor systems and relieves the State from spending time and money developing custom systems dependent on quickly-evolving technology



We have been meeting with many different vendors that could provide RUC-related services to Utah. The graphic in this slide illustrates some of the typical services these companies provide. Companies we've met with include:

- ClearRoad, emovis, Transcore, and ETAN (Transcore and ETAN operate the I-15 Express Lanes system currently)

We are still exploring RUC/tolling interoperability possibilities but there appear to be many similarities in how these systems operate.

## PROPOSED OPTIONS FOR VEHICLE OWNERS

*Alternative Fuel vehicle owners have two choices:*

*(1) pay flat fee or*

*(2) enroll with a vendor in GPS RUC*

Year	Vehicle Type		
	Electric	PHEV	Gas Hybrid
2019	\$ 60	\$ 26	\$ 10
2020	\$ 90	\$ 39	\$ 15
2021	\$ 120	\$ 52	\$ 20

or...

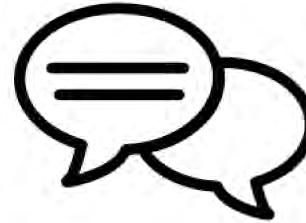


### Advantages of this recommendation

- Simple choice of non-location-based fee or location-based reporting
- Experience from other states shows most people prefer location-based reporting options because of value-added services they receive from vendors
- Flat fee gives an option for people averse to sharing location data with a vendor
- Fewer options should lead to lower vendor contract amounts and lower administrative burden for the State)

## CONVERSATION STARTERS

- Do you know how much gas tax you pay each year?
- Do you know what the gas tax is used for?
- How would you feel about paying for every mile you drive rather than paying for each gallon of gas?



As you talk with people about your role on the RUC Advisory Committee, you may have an opportunity to ask questions about their understanding of current funding and what they think about a shift from a per-gallon user fee to the per-mile user fee. These questions are an easy way to engage in conversation about transportation funding challenges.

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## COMMITTEE TOPICS FOR COMING MONTHS

- RUC rate setting guidelines
- System enforcement guidelines
- Customer enrollment touch points
- Privacy protection principles
- Data security principles
- Items to include in legislation and/or admin rules
- Communication planning



## VEHICLE TYPE BREAK-EVEN POINTS

Year	Vehicle Type							
	Electric		Gas Hybrid		Plug-In Hybrid		Other	
	Fee*	Miles**	Fee	Miles	Fee	Miles	Fee	Miles
2019	\$ 60	4800	\$ 10	1511	\$ 26	2816	\$ 60	4800
2020	\$ 90	7200	\$ 15	2266	\$ 39	4224	\$ 90	7200
2021	\$ 120	9600	\$ 20	3021	\$ 52	5632	\$ 120	9600

Hypothetical mileage equivalents to Legislated flat fees

Assumptions	
RUC Rate:	\$0.0125 /mi
Gas Tax:	\$0.294 /gal
Gas Hybrid:	50 mpg
P-I Hybrid:	90 mpge