

# Colorado Road Usage Charge Pilot Program

December 2017

Colorado's First Pilot Test of the Road Usage Charge Concept

## What is a Road Usage Charge (RUC)?

- Assesses charges based on vehicle miles traveled
- Treats roads like utilities (pay for what you use)
- RUC is also known as Mileage-based User Fee (MBUF) and Vehicle Miles Traveled (VMT) Fee
- Replaces the gas tax which is the main source of funding for our roads

## What is the problem with the current funding model?

### Increased Vehicle Fuel Efficiency

New fuel economy standards mandate that new vehicles in 2016 have an average fuel economy of 35.5 mpg and by 2025 that standard increases to 54.4 mpg. In addition to these new standards, alternative fuel vehicles are becoming more prevalent. Alternative fuel vehicles include full electric, hybrid, compressed natural gas, liquid natural gas, and propane. All of which pay little or no gas tax. Since the current funding model relies on fuel consumed, these new standards and alternative fuel vehicles result in less money to fix the roads.

### Increase in Population

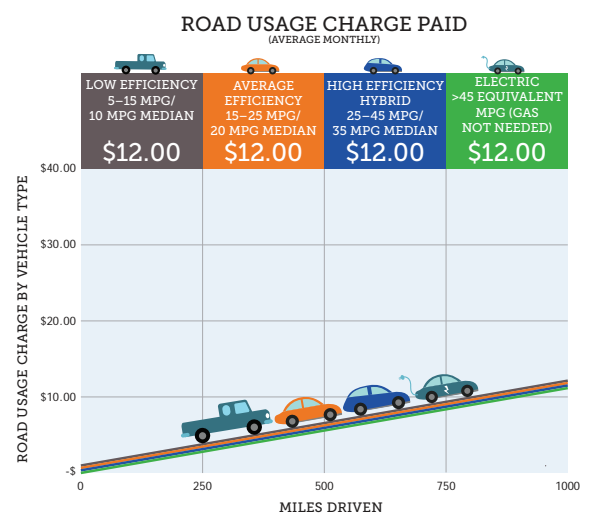
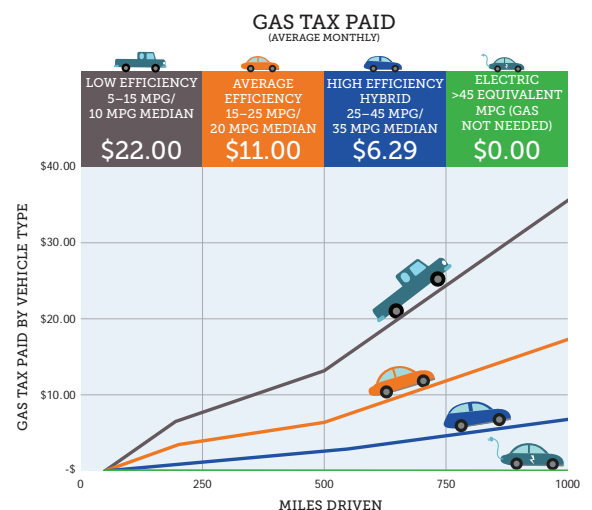
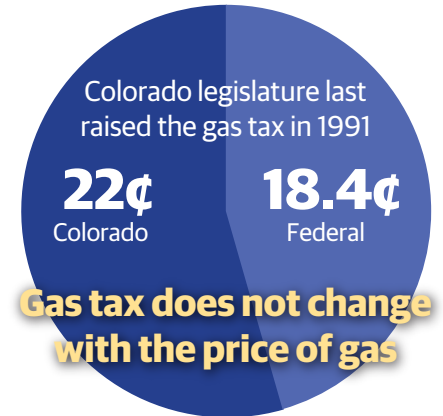
Vehicle miles traveled is the metric used to gauge the number of vehicles on the road and how many miles they are traveling. As the number of people in the state increases, so does the number of vehicle miles traveled as well as wear and tear on our roads. However, with increased vehicle fuel efficiency, less gas is being purchased therefore, the revenue is going down on a per mile basis.

### Declining Purchasing Power

Currently, Colorado transportation revenues come from a 22¢ per gallon tax on gasoline. This is a fixed amount that does not fluctuate with the price of gas (indexing). The gas tax was last raised in 1991. \$1.00 raised in 1991 is worth only \$0.57 today - a 43% reduction in the value of the tax.

## How will RUC address the funding problem?

RUC charges drivers for what they use versus the gas tax which currently charges more for less fuel efficient vehicles and charges nothing for electric vehicles. Under a road usage charge, all types of vehicles pay an equal amount for the same miles traveled, which captures revenue not currently being collected under the gas tax.





# Road Usage Charge Pilot Program

The Colorado Road Usage Charge Pilot Program Research Study evaluated a pay-by-mile system as a potential alternative to the current gas tax. This study accomplished the following:

- Four-month pilot included nearly 150 participants from 27 different counties across Colorado
- Successfully tested RUC technology on vehicles with various fuel efficiency and fuel types – gas, hybrid, electric
- Provided users choice and demonstrated the feasibility of three mileage reporting methods including one manual odometer reading and two technology options
- Collected mileage data and simulated payments of a road usage charge
- Gathered feedback and ideas from the general public and participants through a series of surveys

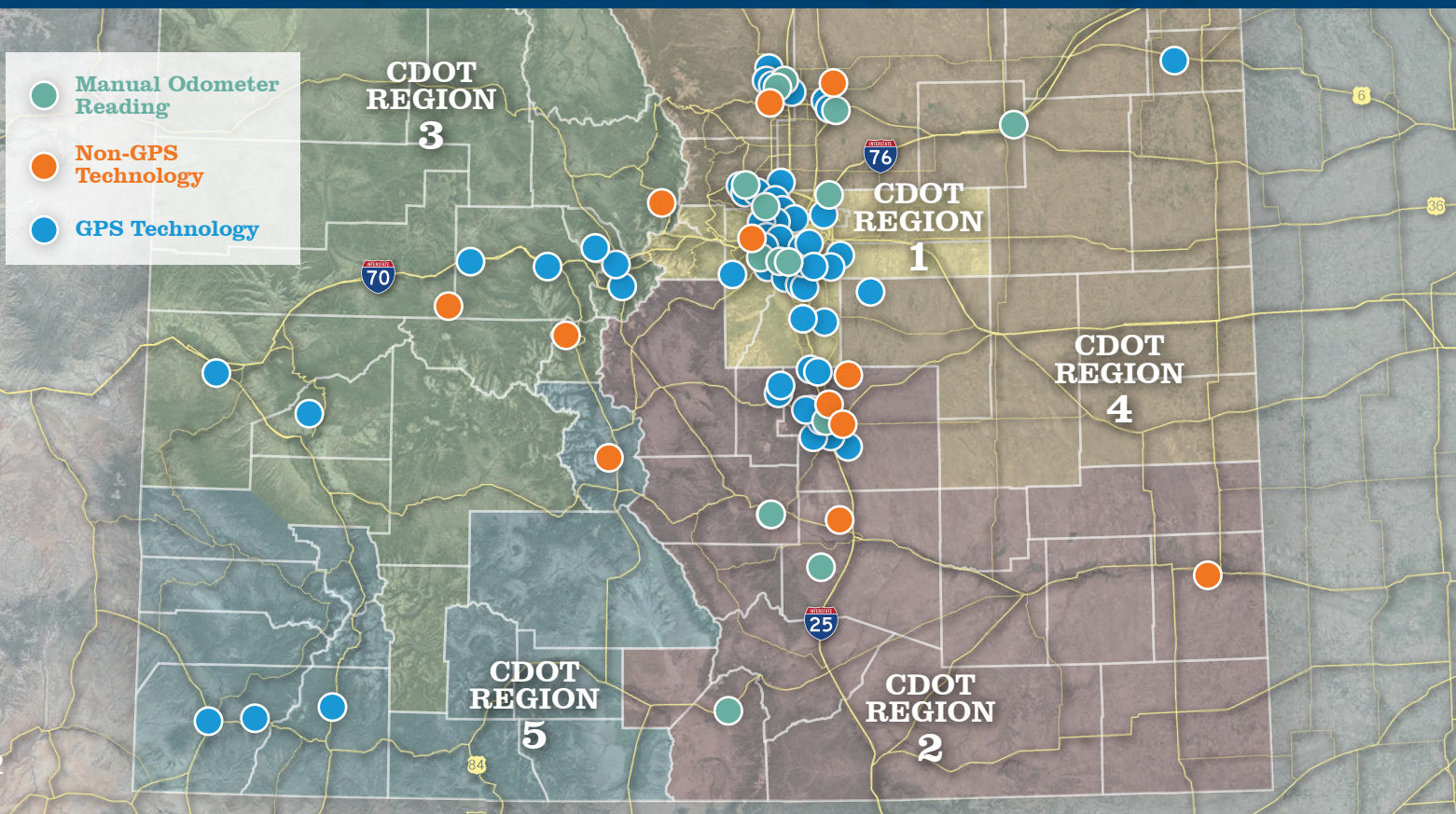
## CDOT RUC Pilot Program Goals

- ✓ Demonstrate an operational RUC
- ✓ Identify and evaluate issues
- ✓ Test the feasibility of various mileage reporting options
- ✓ Solicit feedback and ideas



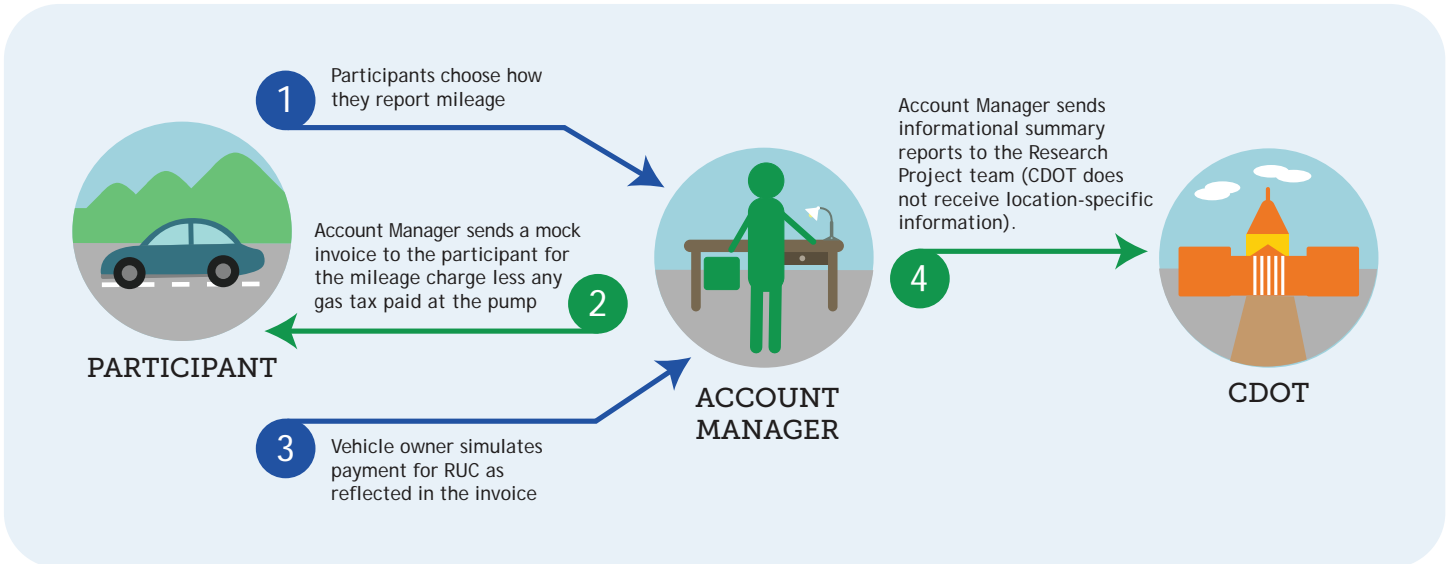
**541,016** total miles driven during four-month pilot

## Pilot Participants and Selected Mileage Reporting Options





## How did the RUC Pilot work?



## Mileage Reporting Options

Participants were provided their choice of mileage reporting options. Some of these options included a mileage reporting device to be installed in the vehicle and one option provided a no technology choice involving self-reporting.

### Odometer Reading

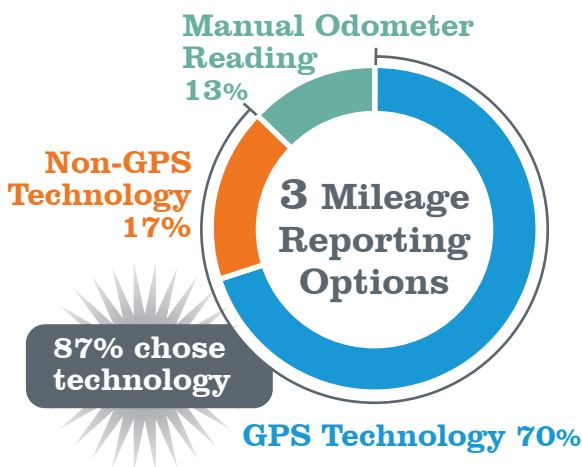
Participants who selected this option reported their vehicle's odometer reading via the account management website or mobile app

### Non-GPS-Enabled Mileage Reporting Device

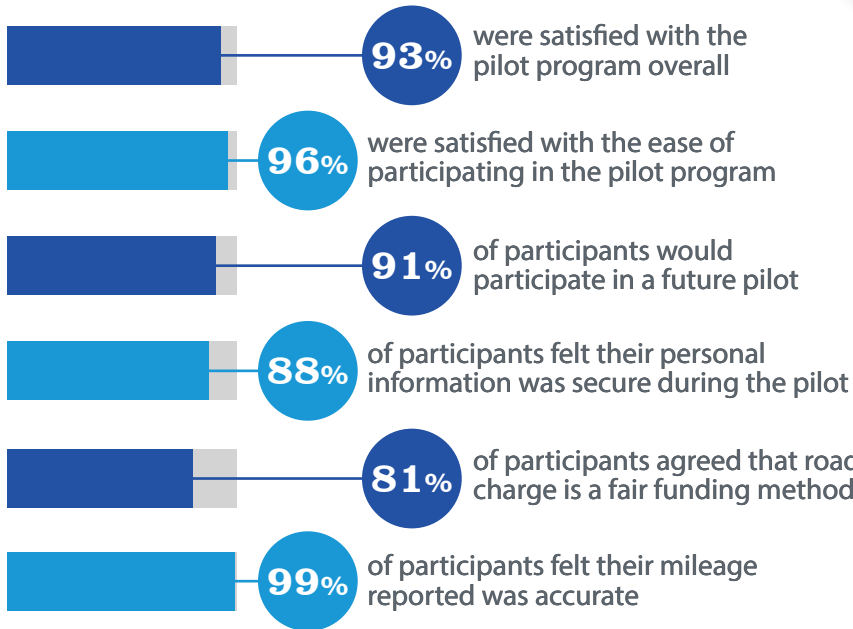
Participants who selected this option received a device to plug into their vehicle; this method used a mileage reporting device (non-GPS) which counts distance traveled and gasoline consumed, but does not assess location

### GPS-Enabled Mileage Reporting Device

Participants who selected this option received a device to plug into their vehicle; this method used a mileage reporting device (GPS) which counts distance traveled and gasoline consumed, and differentiates between in-state and out-of-state mileage using GPS technology



# Participant Experiences



Satisfaction with information security and privacy protections increased over the course of the pilot

Participants grew more confident in the accuracy of mileage reporting and the estimated fuel tax over the course of the pilot.

The top benefits of RUC, as identified by participants, was that it provides a sustainable revenue source and all drivers pay their fair share.



## Key Takeaways

- The pilot demonstrated RUC is technically feasible as an alternative transportation funding mechanism.
- Engagement included a diverse Technical Advisory Committee and Executive Steering Committee consisting of key transportation leaders throughout Colorado resulting in the identification of policy related issues not addressed in the pilot and guidance for future transportation policy discussions.
- Technology-based systems were highly accurate and most convenient for users, the manual option experienced very low compliance over the course of the pilot. Participants who chose technology options had higher levels of satisfaction (93%) than those that chose the manual option (55%).
- The pilot used a number of media outlets including a project website, newsletters, general media (such as press releases) and social media to educate participants as well as the general public on the current transportation funding model and the RUC concept. As a result, participants became more satisfied and confident with the system.

## Next Steps

- Continued education and outreach
- Evaluation of key issues raised by the public: rural/urban equity, non-public roads, and capturing mileage for out-of-state drivers
- Continued research through Federal Grant program evaluating administrative costs and other key issues identified during the pilot
- Continued collaboration through involvement with a consortium of western state Departments of Transportation, known as RUC West.

