



Road Usage Charge Programs

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Transportation infrastructure in the United States is primarily funded through motor fuel (gas) taxes. Facing declining future revenues and increased construction costs, some states have begun to experiment with a new way of funding transportation: the road usage charge. This *issue brief* provides background information on road usage charges, along with information on road usage charge programs in Colorado and other states, and highlights trends and future policy considerations.

Background

A road usage charge (RUC) is a user-based alternative revenue mechanism in which drivers pay a fee based on the number of miles driven in lieu of a fuel tax. These fees may be flat (cent-per-mile) or may vary to include higher fees for wear and tear on certain roads or due to traffic congestion. Aspects of this system already exist; currently, drivers pay tolls for distances driven on toll roads. However, these systems are limited to certain roads. In recent years, several governments have been testing more robust, statewide RUC systems in order to fund transportation.

Federal funding. The federal Surface Transportation System Funding Alternatives Program (STSFA), passed as part of the FAST Act in 2015, provides funding for state RUC programs.¹ The program provides approximately \$20 million in grants each year. Grant recipients must address several issues in their pilot programs, including, but not limited to the:

- implementation of RUC programs;
- interoperability of the program;
- use of independent or third-party contractors;
- protection of privacy;
- reliability and security of the technology;
- the cost of administration; and
- equity of the system.

Recent grant recipients include California, Delaware, Minnesota, Missouri, New Hampshire, Oregon, and Utah.

Colorado RUC Study

Starting in 2016, Colorado conducted a four-month, statewide RUC pilot program. In total, 147 participants from 27 counties participated in the pilot. Participants chose between three options to report their mileage: manual odometer reading, non-GPS technology, and GPS technology. As it was only a pilot, participants continued to pay required Colorado gas taxes, but did receive mock invoices reflecting miles driven and fuel credits. The goals of the pilot project were to:

- evaluate the administrative and technical feasibility of a RUC program;
- identify and evaluate program issues; and
- solicit feedback and ideas on a statewide RUC program.

Overall, the pilot found that a RUC program is technically feasible, the participants were satisfied with the experience, further education and

¹Surface Transportation System Funding Alternatives Program, <https://www.fhwa.dot.gov/fastact/factsheets/surftransfundaltfs.cfm>

outreach is needed, and that personal privacy remains a concern of participants.

RUC Programs in Other States

Several states are conducting statewide RUC pilot programs, while others are considering a RUC vehicle registration fee or assessing a RUC on transportation networking companies only. Two states with RUC programs, Oregon and Utah, are discussed below.

Oregon. In 2007, Oregon launched the first RUC pilot program in the United States. Then, in 2013, the Oregon state legislature created the first volunteer RUC program. OReGO, which fully launched in 2015, is a voluntary program administered by the Oregon Department of Transportation.² Currently, participants pay 1.7 cents-per-mile-driven and can choose between three account managers, or vendors, to administer their RUC payments. Once enrolled in the program, participants are issued a device to install in their vehicles. The device calculates miles driven and credits the fuel tax paid to drive those miles as a prepayment. If vehicle owners drive more miles than credited, the system will invoice the owners in real time. Some devices are GPS-enabled and can calculate out of state miles, while other devices are not GPS-enabled and require participants to submit additional information for miles driven out-of-state. In addition, Oregon allows electric vehicle owners to participate in the RUC program as an alternative to paying Oregon's \$110 electric vehicle registration fee.

Utah. Beginning in 2020, alternative fuel vehicle owners in Utah may choose to participate in a RUC program in lieu of paying Utah's alternative fuel vehicle registration fee. Utah will charge alternative fuel vehicle owners in the program 1.5 cents per mile. Vehicle owners will not be charged if the RUC exceeds the annual flat fee. For example, an electric vehicle owner in Utah will only pay up to \$120 under the RUC program, equal

to the \$120 electric vehicle fee assessed at registration. In addition, Utah's program follows strict privacy rules under which third-party operators are not allowed to share personal or location data with the government or other third parties. In order to implement the program, Utah was awarded \$1.25 million from the STSFA.

Regional cooperation. In addition to individual states, two regional groups, the RUC West and the I-95 Corridor Coalition, are studying RUC program models. Both received STSFA funding to conduct pilot programs. The main RUC West pilot program has finished, with an ongoing California and Oregon single system integration pilot in progress. However, the I-95 Corridor Coalition pilot is still underway and includes a multi-state freight truck component as part of its study.

Trends and Future Considerations

Trends. The major insight gained from different state pilots is that RUC programs can be implemented with current technology. In addition, public perception and education are key to a successful RUC program. Pilot programs have found that participants gain a better understanding and awareness of what they actually pay in gas taxes. Trends also suggest that rural and low-income individuals may end up paying less, while urban drivers pay more under a RUC program compared to the current gas tax model. This may be due to the fact that rural and low-income drivers tend to drive vehicles with lower fuel efficiency.

Policy considerations. Further study is necessary to determine if RUC programs are viable options moving forward. As more and more states conduct pilot programs or begin implementing RUC programs, officials will need to address several barriers to implementation, including, but not limited to: administrative and startup costs; public perception of user charges; privacy; enforcement; interoperability; and equity.

²<http://www.myorego.org/>.