

White Paper #4 – Transportation Funding Series

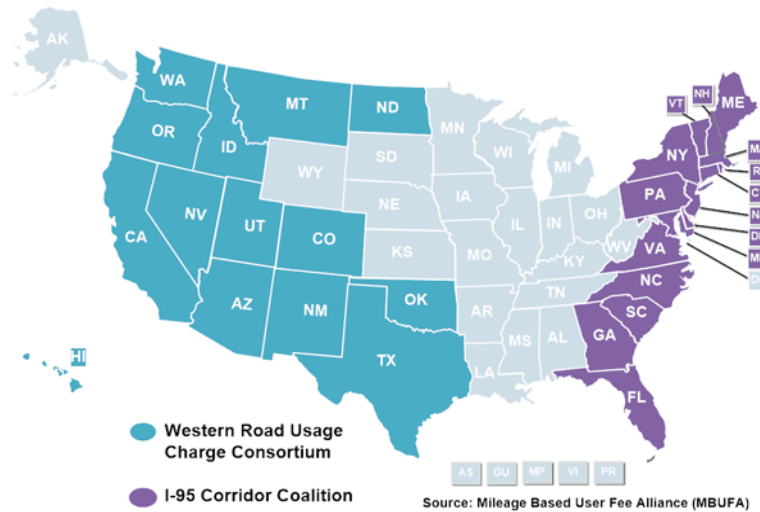
Evaluating User Fee Systems

Compiled by: A-to-Be® | Mobility-Beyond

Executive Summary

The purpose of Road Usage Charging (RUC) or a Vehicle Mile Tax (VMT) is to find a potential way to **replace the gas tax by creating an equitable arrangement for drivers to pay for the time they spend on the road** and recover the costs of damaged infrastructure. In the USA, thirty-seven states have evaluated RUC or are in the process of such implementation, as two state consortiums have emerged that are working to implement such systems to create interoperability across state lines. RUC pilots have been implemented in multiple states, and Oregon has already implemented OReGO as a fully functional program. **No program is perfect, and concerns about RUC include privacy, undue impact on rural drivers, increased taxes, administrative costs, and increased costs on the trucking industry.**

However, **RUC programs have many positives, including low government overhead, net positive revenue, interoperability between systems and states, and minimal infrastructure such as tolling gantries.** Therefore, states are looking to RUC to create a sustainable, long term solution for travelers. **In theory, RUC would be an optimal policy,** as it allows motorists to pay for what they use, which is a concept that would make roads more like utilities including electricity, water, and telephones. **This white paper – the fourth and last of A-to-Be’s Transportation Funding Series – will evaluate the costs and benefits of RUC overall.**



“ (...) participants were able to directly review their own driving data and work with smart phone apps created by state service providers.”

Opponents of RUC will point to several factors why RUC is not the right program to solve America’s transportation funding crisis. Frequent arguments against RUC include: privacy concerns, the punishment of rural drivers, adoption costs, and the impact on the trucking industry.

- ❖ **Any RUC program will address privacy concerns.**
Today’s transponder based tolling system collects detailed information on where your car has been. A RUC system put in place today, would have privacy layers added to ensure the government does not have a detailed history of a driver’s prior location.
- ❖ **The impact on rural drivers is important and a common misconception around RUC.**
Critics argue that rural drivers will be severely punished by a RUC, but rural driver are already negatively impacted by the current gas tax, considering the significantly less efficient vehicles used. Thus, rural drivers would likely pay less in a RUC program compared to a traditional gas tax-based program. This is confirmed by a report out of Washington state, which concluded that rural drivers would likely pay less under a VMT system while urban drivers would pay more than under current fuel rates. In the end, this works out to be a more equitable way for rural drivers.
- ❖ **If a RUC program were to be adopted by the government, yes, there would be adoption costs upfront for any program.**
However, over time the cost of the initial adoption would be paid off by the decrease in cost to other revenue collecting agencies.
- ❖ Lastly, the **trucking industry has raised concerns** over any RUC program for **fear of additional costs** on the industry. A RUC program is not designed to pick winners and losers. A successful RUC program will need input from every industry.

Pros

The positives that RUC can bring to the transportation industry are endless. The most obvious benefits are collecting revenue from more fuel-efficient vehicles and implementing more pricing options based on behavioral economics.

- ❖ As more vehicles become fuel-efficient gas tax revenue will decline. Especially in the case of electric vehicles, which do not pay any gas tax. As revenues continue to decline, a RUC system is needed to **prevent a significant decline in federal Highway Trust Fund revenues**. The Highway Trust Fund was established to provide a more dependable source of funding

from the federal government for the construction of the interstate highway system. However, relying on the gas tax is quickly not becoming dependable.

- **Greater customization is one added benefit to RUC** that has numerous different offshoots. For example, not only could a RUC system be designed to charge a fee per mile but also the amount on congestion levels on the road, time of day, and the type of road used. If a driver knew that to commute from his or her home to the office that day at 8 am would cost them more than leaving at 7 am the individual could make a more informed decision. This could also lead to a decrease in traffic time throughout metropolitan areas.
- A RUC program is **designed to be equitable** as it charges users the same fee. Accordingly, a Colorado Department of Transportation report noted that 81% of responders agreed that RUC is a fair program.
- A RUC program would **lead to additional new technologies** adopted by state and local governments. Many state and local governments are stuck in the past when it comes to transportation technology. A RUC adoption would propel states and towns to accept new technology. These new technologies would bring efficiency for the Government for the user.
- If citizens see actual infrastructure improvements made based on their RUC payments, they should feel **more empowered and involved** in the system at hand. If the systems are easy to use and customer service is responsive, these programs will grow.

Recommendations

Transitioning to a RUC

To make sure RUC has the best chance for success, governments should continue to learn from pilots and engage industry experts.

Guidance from the federal government is needed regarding privacy and other important issues to ensure a transition. For example, the Congressional Transportation & Infrastructure Committee, led by Rep. Sam Graves (R-MO), has been discussing a national RUC program since 2018. Representative Graves has proposed a national pilot program several times to find a way that the USA can address the lack of gas tax revenue decline across the nation. We would support and recommend this type of a program so that the USA can be coordinated, learning from the experiences of state pilot programs, and enact some sort of RUC program that will empower the country to improve infrastructure.

Make sure any RUC program is easy to adopt. If programs are not easy to adapt to this could set the industry back.

Maintain agnostic technology for all RUC programs. Also, incorporating technologies from auto manufacturers which will accelerate adoption. This allows for competition to create the best solutions, avoids states from getting locked into monopolies, and allows for changes to be made with the times. Most importantly, it will allow states to respond to the needs of consumers.

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Summary: The Case for RUC and what A-to-Be Can Do

In 2018, A-to-Be contracted with the Washington State Department of Transportation to implement and operate a state-wide RUC pilot program. A-to-Be MoveBeyond for Road User Charging (RUC) uses satellite-based and smartphone applications to collect data using a mileage-driven approach. Our solution is also able to offer road-side enforcement mechanisms including video imaging and radio frequency to ensure accurate revenue collection and analyzes data to inform and implement new funding streams for infrastructure management and investment.

Our Road Usage Charging solution is technology agnostic and ensures information security while enabling the reduction of carbon emissions and significantly cuts down on administrative costs. Moreover, our solution is capable of facilitating integrated parking payments, fuel payments, congestion pricing, etc., to enable the future of mobility.

A-to-Be will employ detailed pilot data and the latest industry forecasts to make the business case that a Road Usage Charge is sustainable over time. Additional information from the project's results will be used to address low government overhead, net-positive revenue, and offer support for economic development, innovation, and the environment. The most non-partisan approach to generate support for a RUC is to present the business case and show that a fee of the like will benefit local economies and jobs in a sustainable, environmentally friendly manner.

To push our infrastructure to be modern and reliable a change is need. To improve our national infrastructure and bring it up to date we need to create an equitable and functioning program to replace the gas tax. A RUC program does just that. At the current rate, the Highway Trust Fund is not sustainable unless we move forward with a Road Usage Charge. Relying on declining revenues from the gas tax is not the solution moving forward.



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with **A-to-Be's Transportation
Funding Series.**



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