The following document is supplemental to *NCHRP WebResource 2: Road Usage Charge Guide* (NCHRP Project 19-18, "Transitioning Fuel Tax Assessments to a Road Usage Charge"). The full WebResource can be found at https://crp.trb.org/nchrpwebresource2/.

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Three States with RUC

States who have successfully implemented RUC programs at the time of this research include Oregon, Virginia, and Utah. Each state has approached RUC from a unique perspective, taken a different tactic, and implemented RUC with different program designs. This research has used these state's experiences, along with many other states and consortiums who have explored, researched, and piloted RUC programs to guide the development of the research including the building blocks and implementation discussion. By demonstrating the path that these states have taken, others may find inspiration, a roadmap, and a way forward.

Oregon and Utah Moved RUC Forward through Opt-In Programs

Oregon launched their RUC program in 2015 and is a good representation of a state that has completed the majority of the RUC Framework. In Oregon, an administration-led effort to study RUC was initiated, followed by the enactment of legislation establishing a small-scale opt-in RUC program. Since starting the program, the legislature has considered various ways to expand this program. As of 2023, the program has enrolled 2,100 vehicles and continues to welcome new volunteer drivers. The program is optional and replaces a portion of electric vehicle and high miles per gallon vehicle (+40) registration costs with a road charge of 1.9 cents per mile.

Figure 1 shows the roadmap details and individual building blocks that were used in Oregon during the 4 Stages defined in the RUC Framework. As can be seen, Oregon substantially completed all of the Research & Planning building blocks and a majority of the Setup building blocks. Since the program inception, the State has completed parts of all the Ongoing building blocks and has moved onto Transitioning & Growing.

Figure 1: RUC Building Blocks Used in Oregon



Utah launched their RUC program in 2018 and has followed a similar journey. In Utah, the legislature codified a small-scale opt-in program that allowed for electric and hybrid vehicle owners to pay either a flat fee or enroll in the RUC program. The program was intentionally kept small so the state could reevaluate and refine the program. As of 2023, the program is optional and replaces a portion of electric vehicles vehicle registration additional alternative fuel flat fee with a charge of 1.0 cent per mile. The program also allows previously registered gasoline hybrid and plug-in hybrid vehicles to participate in the program with similar incentives.

Figure 2 shows the roadmap details and individual building blocks used in Utah. As with Oregon, Utah has completed a significant share of the building blocks, although it can be seen, that the state did not or minimally explored three building blocks during Research & Planning and one during Setup. Each state can decide for itself how to approach RUC, and which Building Blocks and program elements are needed for success.

Figure 2: RUC Building Blocks Used in Utah



Virginia Moved Forward RUC Directly through Legislation

Virginia has demonstrated a different path to implementation, by moving more directly to legislation. Virginia enacted a RUC program in 2022 without any prior RUC studies or pilots, called the Mileage Choice Program. Virginia's legislation includes a large opt-in program, which allows drivers of electric vehicles and highly fuel-efficient vehicles to opt-in to a RUC in lieu of paying a flat fee. This program includes electric vehicles and vehicles that have a 25 MPG rating or better. Drivers who opt into the program pay a per-mile rate calculated by dividing what the vehicle highway use fee would have been by 11,600 (the average number of miles driven per year by all Virginians).

Figure 3 shows the roadmap details and individual building blocks used in Virginia. Given the different tactical approach by the state, many fewer building blocks have been substantially completed.

Figure 3: RUC Building Blocks Used in Virginia



What's A State To Do?

States have taken varied approaches to RUC, while these three states have successfully implemented different RUC programs, others are doing their own research and/or participating in multi-state consortiums such as RUC America and The Eastern Transportation Coalition. Other states are declining to take part in any of the research and public outreach. Start your implementation by exploring the history in your state, determine if there is past research and effort that you may use, or if another state who is farther along the journey may have lessons worth learning, and dig deeper into this implementation framework and the associated building blocks to start building institutional momentum.