



Kansas Legislative Research Department

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To: House Committee on Energy, Utilities and Telecommunications

From: James Fisher, Managing IT Analyst

Re: Overview of States Exploring Alternatives to Gas Tax for Transportation Project Funding

This memorandum is in response to a request for background information on what States are considering in order to collect revenue from transportation infrastructure users that drive electric or hybrid vehicles who may pay little to no motor fuel tax.

According to the National Conference of State Legislatures (NCSL), alternative options for the motor fuel tax (MFT) have been discussed by numerous states reliant on the MFT as a large source of revenue for transportation funding. As vehicles become more fuel efficient and sales of electric vehicles continue to rise, MFT receipts are projected to decline. A Bloomberg analysis published in February 2020 predicts that 10 percent of all new car sales will be electric by 2025 and 22 percent or higher by 2030, as electric cars become more affordable. According to NCSL, the U.S. Energy Information Administration predicts a 19 percent decline in gasoline consumption through 2050.

Amounts paid by the mile—called road usage charges (RUC), vehicle miles traveled (VMT) fees, or mileage-based user fees (MBUF)—have been adopted in some form in Oregon, Utah, and Virginia. These charges are also being explored in 10 state pilot programs, and studied in 12 other states, including Kansas. Some concerns identified that must be addressed by state programs include fees impacting differing geographic areas and income groups in potentially disparate ways, data security, and program interoperability among multiple states. This memorandum summarizes information on the three enacted RUC programs as well as various RUC pilot programs and electric and hybrid cost-recovery mechanisms.

Summary of Enacted RUC or VMT programs

Oregon (OreGO)

Oregon's RUC began as a pilot program for 5,000 vehicles in 2015, as authorized by 2015 SB 210. In 2019, the Oregon legislature expanded the voluntary program with passage of HB 2881. This legislation allowed vehicles with a combined miles per gallon (mpg) rating of 40 or better to enroll in the OreGo program and repealed the cap on participation. Further, the legislation exempted enrollees from paying enhanced registration surcharges established in 2017 (\$115 for electric vehicles or a variable fee for gas and hybrid vehicles based on mpg; the more fuel efficient the vehicle, the higher the registration fee). Finally, the legislation indexed the RUC to 5.0 percent of the per gallon tax rate. The current charge is 1.8 cents per mile.

The program allows the participant to select from three different account managers when enrolling (Azuga, Emovis, and the Oregon Department of Transportation). The role of the account manager is primarily for calculation of the charge and payment collection. Azuga and Emovis offer pay-as-you-go and post-usage quarterly payments for participants. Further, Azuga offers GPS-enabled odometer read, and non-GPS odometer read options for charge calculation purposes. Each of these vendors also offers credit for miles driven out of state.

Utah (Utah Road Usage Charge Program)

Utah's RUC program began in 2020 with the enactment of SB 150. The program is voluntary and open to all electric vehicle (EV) and hybrid vehicle drivers within the state. Utah drivers may opt to pay a flat registration fee (\$120 to \$123 for electric, \$52 to \$53.25 for plug-in hybrid, and \$20 to \$20.50 for gas hybrid) or enroll in the RUC program. Those choosing to enroll in the program through the account manager, Emovis, are provided with a device to report miles driven in combination with a smart phone application to obtain the initial odometer reading. The RUC is 1.52 cents per mile and participants who opt to participate will never pay more than the set registration fee for the specified class of vehicle.

According to the Utah Department of Transportation (UDOT), the goal is to enroll all qualified drivers in the program by December 31, 2031, with expansion efforts beginning in 2024. UDOT has provided two scenarios for the Utah Legislature to consider.

The first scenario would require an annual odometer readability with a lump-sum payment due at the time of annual vehicle registration. The charge would be assessed on all vehicles with a qualified mpg rating of 20 plus. UDOT expects to be able to enroll 2.0 million vehicles in 2024 if this scenario is adopted and raise \$7.04 billion in transportation funding between 2024 and 2031.

The second scenario is more similar to the current program and would utilize real-time technology-based odometer readings and allow users to pay-as-you-go. The charge would be assessed on all vehicles with a qualified mpg rating of 30 plus and eligibility would expand every two years subsequently. UDOT expects gradual enrollment with this scenario with an estimated 570,000 vehicles enrolled in 2024. This scenario is expected to raise \$6.86 billion in transportation funding between 2024 and 2031.

Virginia (Highway Use Fee and Mileage-based Service Fee Program)

Virginia's highway use law was enacted in 2020 Senate Bill 890. The legislation created a fee for any registered electric, alternative fuel, or fuel-efficient vehicle (mpg of 25 plus) in the commonwealth. The fee for electric vehicles is 85 percent of the estimated amount of taxes paid under provisions of law related to the commonwealth's fuel tax by a combined fuel economy of 23.7 mpg for the average number of miles traveled by a passenger vehicle within the state. The fee for fuel-efficient vehicles is 85 percent of the difference between the estimated amount of taxes paid under provisions of law related to the commonwealth's fuel tax by a hypothetical vehicle with an estimated mpg of 23.7 driven for the average number of miles traveled by a passenger vehicle within the state and the estimated taxes paid with the specific mpg of the registered vehicle.

SB 890 also established a voluntary mileage-based user fee program. Specific program details were not available as of January 23, 2022. However, the law would exempt those opting

to participate in the mileage-based user fee program from paying the highway use fee. In addition, the variable mileage based fee could not exceed the highway use fee.

RUC Pilot programs

Ten states have conducted RUC or VMT pilot programs: California, Colorado, Delaware, Hawaii, Minnesota, Nevada, New Jersey, North Carolina, Pennsylvania, and Washington.

In practice, these programs look similar to the programs adopted in Oregon, Utah, and Virginia, with the exception of Virginia having an “intermediary” step based on fuel efficiency and average miles driven by a passenger vehicle in the state. Third-party account management was prevalent within the various studies along with options for reporting miles driven using GPS or a manual odometer reading. Review of available study reports shows that the majority of participants chose to use GPS-enabled mileage reporting. Please note this information was not available for each state study.

RUC Kansas Research

The Kansas Department of Transportation (KDOT) has established the Midwest Road Usage Charge Study. According to KDOT, the study will have three phases and be completed in March 2024 with a final report anticipated to be released in October 2024. Phase 1 began in September 2021 and will conclude in February 2022. Phase 1 consists for outreach to rural, agricultural, and freight industry. Phase 2 will consist of research relating to mileage collection options and take place from March 2022 to March 2023. Finally, Phase 3 will involve a voluntary pilot program that will take place from March 2023 to March 2024. KDOT indicates the goal of the study is to engage drivers in the design of the program.

Electric Vehicle Specific Charges

Of note, 30 states have enacted legislation to establish a specific registration fee for electric and hybrid vehicles with the purpose of recovering road transportation costs from owners of vehicles paying little to no state fuel taxes. The amounts of these fees range from \$30 to \$200. More detail on these fees can be found in the KLRD memorandum *States’ Fees for Electric and Hybrid Vehicles*, which can be found on the KLRD website: www.kslegresearch.org/KLRD-web/Transportation.html.

[*Note:* Kansas began collecting an electric vehicle registration fee of \$100 and a hybrid or plug-in electric vehicles registration fee of \$50 as of January 1, 2020. The surcharge is a result of enactment of 2019 HB 2214.]

Recently some state legislatures have also begun to explore a tax on kilowatt hours on power transferred to an electric vehicle at a for-profit charging station. Oklahoma enacted 2021 HB 2234 which, among other things, establishes a tax of 3.0 cents per kilowatt hour used to charge or recharge the batteries of an electric vehicle at a for-profit charging station beginning January 1, 2024. Individuals opting to charge their vehicles at a private residence or at a public charging station would not be assessed the tax.

Kansas HB 2488, which would create the EV Energy Equity Road Repair Tax Act, was introduced by Representative Rhiley in the 2022 Legislative Session. The bill is similar to the Oklahoma law in that it would assess a 3.0 cents per kilowatt hour tax for power used at a public charging station. However, the bill's definition of "public charging station" includes both charging stations that provide electricity with no fee and those that provide electricity for a fee. A primary residence is exempted from the bill's definition of "public charging station." The tax would be collected by the charging station and remitted to the Director of Taxation who would then transfer the amount to the State Treasurer to be deposited in the State Highway Fund. As of publication of this memorandum, HB 2488 had been referred to the House Committee on Transportation for its consideration.