



**TESTIMONY OF
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REGARDING
“Long-term Solvency of the Highway Trust Fund: Lessons Learned from the Surface
Transportation System Funding Alternatives Program and Other User-based Revenue Solutions,
and How Funding Uncertainty Affects the Highway Programs.”

**BEFORE THE
ENVIRONMENT AND PUBLIC WORKS COMMITTEE
UNITED STATES SENATE**

APRIL 14, 2021

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Chairman Carper, Ranking Member Capito, and distinguished members of the Senate Environment and Public Works Committee, my name is Douglas Shinkle, transportation program director at the National Conference of State Legislatures (NCSL), the bipartisan organization representing the 50 state legislatures and the legislatures of our nation's commonwealths, territories, possessions, and the District of Columbia. NCSL's mission is to strengthen the institution of the legislatures, provide connections between the states and serve as the voice of state legislatures in the American federal system of government.

Mr. Chairman and Ranking Member, I would like to take this opportunity to thank you and the committee for your leadership on the important issue of transportation funding and financing, not just with today's hearing, but also on the committee's work on surface transportation reauthorization.

As we all know, with improved fuel efficiency, increased use of electric and hybrid vehicles, and a slow growth in vehicles miles traveled, revenue flowing into the Highway Trust Fund (HTF) via the motor fuel tax has proven to be insufficient to support surface transportation programs. As of March 1, 2021, the Congressional Budget Office [has estimated](#), based on current trajectories, that the HTF has sufficient balances to cover expected outlays until summer 2022. Unless additional revenues or transfers are authorized, the HTF could diminish to the point that the U.S. Department of Transportation may have to delay payments to states for completed work. Late payments or reduced federal transportation spending to accommodate for the shortfall, is not an option for states.

Since the last major federal surface transportation reauthorization—the Fixing America's Surface Transportation (FAST) Act—in 2015, states across the nation have worked to research, develop, and deploy new funding mechanisms to increase their transportation revenues. With both the Surface Transportation System Funding Alternatives Program established in the FAST Act, and their own resources, states have been innovative in their efforts. We thank Congress for that program, but also recognize that more federal funding is needed to bolster new efforts to capture all system users and provide sufficient formula-based funding.

As Congress examines alternative funding mechanisms, NCSL urges you to prioritize formula-based funding. This would ensure that funds are distributed in a predictable and stable manner to all states and territories. Formula funding also allows for efficient project and multi-year program delivery wherein transportation needs, and projects are identified by states, metropolitan planning organizations, and local elected officials for funding prioritization. States are best aware of the transportation needs within their boundaries. Congress must not drive away from a user-fee, formula based national transportation funding stream.

We applaud Congress for taking the initial step of examining potential methods to ensure sufficient and stable long-term transportation funding and encourage continued outreach to and consultation with states to develop a shared, long-term vision for funding and financing surface transportation systems that will enhance the nation's prosperity and quality of life for all Americans.

I would now like to take this opportunity to provide the committee an overview of state activity.

State Transportation Funding & Financing Overview

State transportation funding shortfalls have been in a near constant state of crisis for more than a decade. To account for rising costs of road construction and maintenance with diminishing fuel tax

revenues over the last few years, state legislatures have introduced and enacted several approaches to fund and finance transportation, raising billions for the construction, operation, and maintenance of transportation infrastructure.

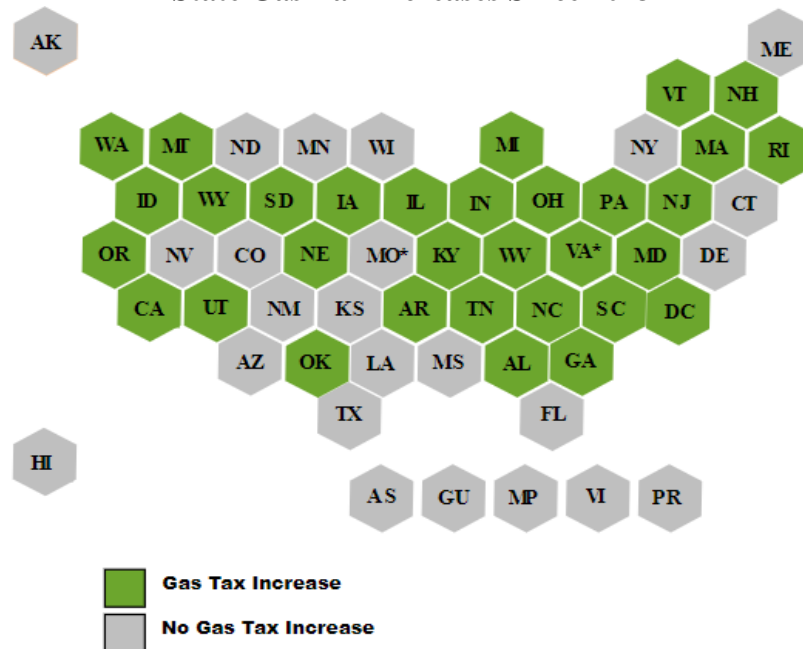
States have enacted and implemented increased gas taxes, indexed those gas taxes to an economic indicator such as CPI, created new tolling programs, enhanced vehicle registration fees and undertaken efforts to “lock-box” transportation revenues solely for transportation purposes. States are also pioneering new approaches to fund and finance needed transportation investment, such as studying and creating road user charging programs, enacting fees on electric and hybrid vehicles, charging fees for transportation network company rides, enhancing vehicle registration fees, and utilizing public-private partnerships for large transportation capital projects.

Motor Fuel Tax – Unit and Variable

In most states the motor fuel tax, commonly known as the gas tax, is a unit tax, paid based on the number of gallons purchased rather than a percentage of the final purchase price and therefore revenue is directly tied to how much gasoline is purchased. With new vehicle fuel economy continuing to rise and the growth in vehicle miles traveled leveling off, fuel consumption and therefore traditional revenue has stagnated and is not keeping up with transportation funding needs of states. The COVID-19 pandemic has not aided the problem either, with the U.S Department of Transportation’s Federal Highway Administration’s December 2020 Traffic Volume Trends report showing an estimating a 13.2% decrease in cumulative vehicle miles traveled for 2020, a decline of over 400 billion vehicle miles from 2019.

Many states have either considered or enacted legislation to raise, or reform, their fuel tax revenues in the past decade. Since 2013, 31 states and the District of Columbia have enacted legislation to increase gas taxes. Missouri voters’ decision to override the legislation on Election Day 2018 resulted in only 30 states implementing these increases.

State Gas Tax Increases Since 2013



Source : <https://www.ncsl.org/research/transportation/2013-and-2014-legislative-actions-likely-to-change-gas-taxes.aspx>

So far in 2021, legislation to increase or index a state fuel tax has been introduced in at least 15 states—Alaska, Arizona, Arkansas, Hawaii, Illinois, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Dakota, Texas, Washington, and Wyoming.

Legislation in Alaska, Illinois, New Mexico, and Wyoming would increase state fuel tax rates, while legislation in Arizona, Arkansas, Hawaii, Indiana, Kentucky, Michigan, Minnesota, Mississippi, Nebraska, Texas and Washington would also index state fuel tax rates to annual changes in the Consumer Price Index (CPI) or the National Highway Construction Cost Index.

In 2020, one state—Virginia—and the District of Columbia, increased gas taxes. The bill in Virginia raised the gas tax 10 cents over a two-year period. Virginia also expanded the “wholesale fuel” tax, which previously only applied to portions along Interstate Highway 81 and changed the formula from a percentage basis to a fixed cents-per-gallon (CPG) rate adjusted to annual changes in the CPI. In July 2020, the D.C. Council approved an increase to its motor fuel tax rate, calling it the “Motor Vehicle Fuel Tax Amendment Act of 2020.” This increase will total 10.3 CPG by October 2021. Additionally, the rate will be annually adjusted based on the greater of the annual change in the CPI or zero thereafter.

In 2019, five states—Alabama, Arkansas, Illinois, Ohio, and Virginia—enacted gas tax increases, although Virginia's only applied to a portion of the state.

In 2018, Missouri and Oklahoma enacted legislation to increase their motor fuel taxes. However, Missouri’s increase was subject to voter approval due to constitutional limitations on revenue increases. Proposition D failed at the ballot box in November 2018, overriding the legislature's desire to increase the state’s motor fuel tax.

In 2017, seven states—California, Indiana, Montana, South Carolina, Oregon, Tennessee, and West Virginia—passed legislation to increase fuel taxes. Additionally, Utah enacted measures to accelerate the motor fuel tax indexing provisions implemented in the state’s 2015 fuel tax legislation, likely leading to a fuel tax increase in subsequent years.

New Jersey was the only state to enact legislation to increase state fuel taxes in 2016, following a much more active 2015 in which eight states—Georgia, Idaho, Iowa, Michigan, Nebraska, South Dakota, Utah, and Washington—passed legislation to increase fuel taxes, and two more states—Kentucky and North Carolina—altered the structure of their taxes in order to limit decreasing revenues.

In 2014, lawmakers in Michigan (later overturned by voters), New Hampshire and Rhode Island enacted fuel tax legislation, and in 2013, six states—Maryland, Massachusetts, Pennsylvania, Vermont, Virginia, and Wyoming—and D.C., did the same. No state legislature approved an increase to fuel taxes in 2010, 2011 or 2012. Additional details are available at [NCSL’s Transportation Funding and Finance Legislation Database](#).

At the time of this testimony, 22 states and the District of Columbia have indexed or variable-rate gas taxes that adjust, to some degree, with inflation or prices without regular legislative action.

Examples of variable-rate gas taxes used by states include:

- A percentage tax on either the [wholesale or “rack” price of gasoline](#)—the price at which refineries sell their gas to clients. Proponents argue that this structure will allow for increased tax revenues as inflation causes gas prices to increase. Conversely, states will also experience decreased revenues as gas prices drop, and the volatile price of oil can create problems for long-term revenue forecasting.
 - In 2015, Kentucky and North Carolina adjusted their percentage-based gas taxes in response to dramatic decreases in revenues due to falling gas prices.
- Statutory provisions to automatically adjust a CPG tax to the consumer price index (CPI) (Florida, Maryland, North Carolina and Rhode Island).
- Tying the gas tax to a state’s inflation (California and Michigan). For example, in California, beginning July 1, 2020, the gas tax is adjusted according to the state CPI. The first increase was based on the CPI increase from Nov. 1, 2017, to Nov. 1, 2019, and subsequent adjustments will occur annually and be added to the associated rate for that year. The amount of the increase is the percentage equal to the increase in the California CPI, which is calculated by the state Department of Finance and rounded to the nearest one-tenth of 1 cent (1 CPG).
- Linking the gas tax to other metrics, such as population (North Carolina) or appropriation decisions (Nebraska).
- In 2020, Virginia, as mentioned above, expanded its wholesale fuel tax to apply statewide and also changed the formula from a percentage basis to a fixed CPG rate adjusted to annual changes in the CPI.
- Hawaii, Illinois and Indiana apply the state’s general sales tax to gasoline and therefore revenues are affected by prices.
- Georgia became the first state, in 2015, to enact legislation linking its gas tax to the efficiency standards of motor vehicles, potentially alleviating any lost revenue because of more fuel-efficient cars.
- Nevada’s gas tax is not indexed statewide, but the gas taxes in Clark and Washoe counties are indexed. The Nevada Legislature allowed voters by county to decide whether to index their gas taxes, with Clark and Washoe counties being the only ones to choose to index.

For a full list of states who have variable tax rates see below:

State	Gas Tax Structure	Year of Last Increase
Alabama	Tax indexed annually to the National Highway Construction Cost.	2019
Arkansas	Tax based on the average wholesale price of gas and diesel, with a floor (prevents the tax from dropping if the 12-month average wholesale price of fuel is less than the previous year), and a ceiling (limits the increase to no more than .1 CPG).	2019
California	Tax varies with inflation.	2020 (per 2017 legislation)
Connecticut	Tax varies with gas prices.	2013
Florida	Tax varies with CPI.	2015
Georgia	Tax varies with vehicle fuel-efficiency and CPI.	2015
Hawaii	Variable rate only because general sales tax applies to	**

	gas.	
Illinois	Tax varies with CPI.	
Indiana	Tax varies with inflation and general sales tax applies to gas.	2017
Kentucky	Tax varies with gas prices.	2015
Maryland	Tax varies with gas prices and CPI.	2013
Michigan	Tax varies with inflation.	2022 (per 2015 legislation)
Nebraska	Tax varies with gas prices and appropriation decisions.	2016
New Jersey	Tax varies with gas prices and revenue collection.	2016
New York	Tax varies with gas prices.	2013
North Carolina	Tax varies with population and CPI.	2015
Pennsylvania	Tax varies with gas prices.	2015
Rhode Island	Tax varies with CPI.	2015
Utah	Tax varies with gas prices and CPI.	2015
Vermont	Tax varies with gas prices.	2015
Virginia	Tax varies with CPI.	2020
West Virginia	Tax varies with gas prices.	2017
D.C.	Tax varies with CPI.	2020

Source: <https://www.ncsl.org/research/transportation/variable-rate-gas-taxes.aspx>

Enhanced Vehicle Registration Fees

Since 2017, at least 12 states—Arizona, California, Connecticut, Illinois, Indiana, Oregon, South Carolina, Tennessee, Utah, West Virginia, Wisconsin and Wyoming—have enacted legislation to enhance registration fees for passenger vehicles. Increases have ranged from \$5 in Connecticut, to \$15 in Indiana, to \$21.50 in West Virginia, to \$32 in Arizona and up to \$250 in South Carolina for an initial registration.

Examples of states which have enhanced registration fees since 2017 include:

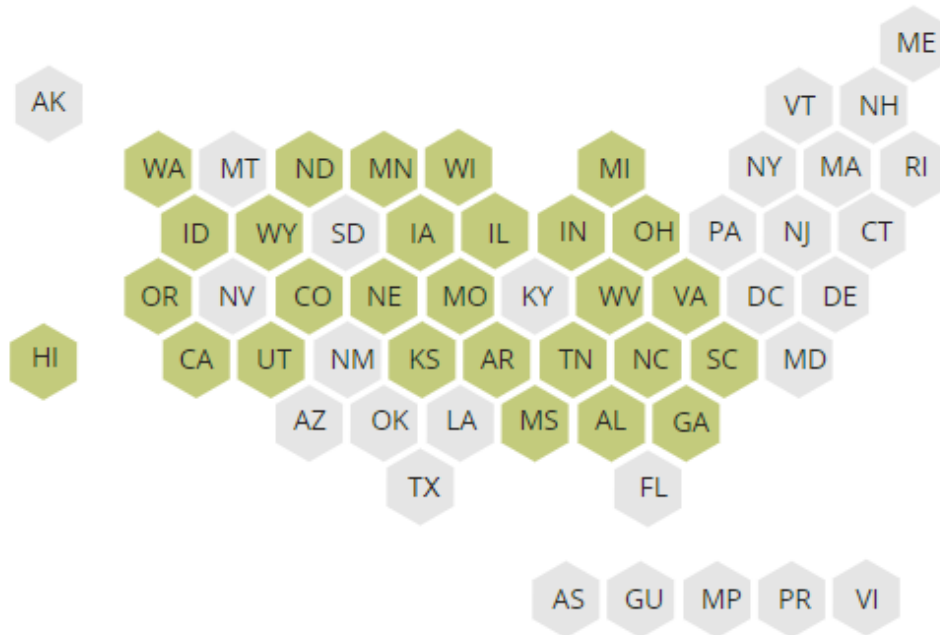
- In California, between \$25 and \$175 based on a vehicle’s value. A portion of this registration fee is adjusted to the CPI.
- Arizona established a [Public Safety Fee](#) of \$32 to support public safety and Highway Patrol operations.
- Wisconsin’s registration fee increased by \$10 in 2019.
- In Oregon, vehicles with a 0-19 mpg rating pay \$18, vehicles with a 20-39 mpg rating pay \$23 and vehicles with a rating of 40 mpg or more pay \$33. These fees increase in January 2022 to \$20 for vehicles with a 0-19 mpg rating, \$25 for vehicles with a 20-39 mpg rating and to \$35 for vehicles with a 40-mpg rating or more.
- Illinois raised its registration fee by \$50 for passenger vehicles.
- Utah’s registration fee increased by \$46.50 in 2019, \$69.75 in 2020 and \$93 in 2021. Registration fees are also indexed to the CPI.

Electric and Hybrid Vehicle Fees

Electric vehicle sales represent less than 2% of all light-duty car sales in the United States, but as sales increase, some states are concerned increased electric vehicle adoption will lower gasoline tax revenues. Because electric vehicles do not require gasoline to operate, they do not contribute to the upkeep of highways through a traditional gas tax. One growing policy trend to address funding

shortfalls is applying a separate registration fee for certain plug-in hybrid or electric vehicles. These fees come in addition to standard motor vehicle registration fees and proponents argue that the fees bring equity among drivers by ensuring all drivers pay for using roadways.

States with Fees on Plug-In Hybrid and/or Electric Vehicles



Source : <https://www.ncsl.org/research/energy/new-fees-on-hybrid-and-electric-vehicles.aspx>

Twenty-eight states have laws requiring a special registration fee for plug-in electric vehicles. Of those, 14 states also assess a slightly lower fee on plug-in hybrid vehicles. The fees range from \$50 per year in Colorado and Hawaii to as much as \$225 for a plug-in electric vehicle in Washington. Ten states—Alabama, Arkansas, Hawaii, Illinois, Iowa, Kansas, North Dakota, Ohio, Washington and Wyoming—enacted laws in 2019 amending or adding new fees for plug-in electric and some plug-in hybrid vehicles, more than any previous year.

Revenue from these additional fees is most often directed toward a state transportation fund. However, a few states also allocate some fee revenue to support electric vehicle infrastructure. For example, Alabama allocates \$50 of its \$200 fee for new electric vehicle infrastructure and Washington added an additional \$75 fee in 2019 to support charging stations. Colorado dedicates \$20 of the \$50 EV fee to the Electric Vehicle Grand Fund to support charging stations.

At least five states—California, Indiana, Michigan, Mississippi and Utah—structure the additional registration fees to grow over time by tying the fees to the consumer price index or another inflation-related metric. These states are striving to avoid the declining purchasing power of gas taxes due to years of fixed-rate structures.

Many state legislatures consider measures each session to add electric vehicle fees or amend existing legislation. This state policy action will likely continue to be a priority as state legislators examine ways to maintain funding for transportation infrastructure.

Transportation Network Company Fees

At least 11 states—Alabama, California, Connecticut, Georgia, Maryland, Massachusetts, Nevada, New York, New Jersey, Pennsylvania and South Carolina—and Washington, D.C., have enacted laws creating additional fees for Transportation Network Companies (TNCs) such as Uber and Lyft. The fees or taxes are charged per-ride or based on the fares. While most of these states use the fees to provide regulatory oversight of TNCs, at least 4 states—Georgia, Maryland, Massachusetts, New York—and D.C. use the fees in part to support transportation projects.

For example:

- Georgia enacted legislation in 2020 to impose a TNC excise tax of 50 cents per trip and 25 cents per trip for shared rides. The tax is adjusted to annual changes in the CPI during the preceding year. Each TNC company is required to submit a quarterly report that includes the number of trips provided by county of origin and destination. The law also states that revenues generated from the excise tax shall be appropriated to a transit provider and used exclusively for transit projects. According to the state Department of Audits and Accounts, the tax is expected to generate between \$4.4 million and \$13 million in its first full year, likely increasing in subsequent years.
- Maryland's TNC law authorizes a county or municipality to impose an assessment on TNC trips that originate within the county or municipality. The assessment fee may not exceed 25 cents per trip. From the assessments and revenues imposed by counties and municipalities, the state comptroller shall distribute each quarter the amount necessary to administer the assessments to an administrative cost account. The amount distributed to the administrative cost account may not exceed 5% of the revenue from the assessments and other revenue. The comptroller shall distribute the remaining revenue to the county or municipality that is the source of the revenue. Maryland's Montgomery County has created an assessment fee to fund a Transportation Services Improvement Fund to improve the delivery of accessible taxicab services and transportation options for senior citizens and persons of limited income.
- Massachusetts created a 20-cent fee on all TNC rides, with 50% of funds distributed to the cities and towns where the TNC ride originated, to address the impact of transportation network services on municipal roads, bridges and other transportation infrastructure or any other public purpose substantially related to the operation of transportation network services in the city or town including the state complete streets program and other programs that support alternative modes of transportation. Another 25% of fee revenue goes to the Commonwealth Transportation Fund, and the remaining 25% of fees goes to the Massachusetts Development Finance Agency to provide financial assistance to small businesses operating in the taxicab.
- The New York legislature imposed fees on ride-hailing and taxi service within New York City in the congestion zone of lower Manhattan below 96th Street. Uber, Lyft and other transportation network services will be charged \$2.75 charge per ride, taxis will be charged \$2.50 a ride and group ride services like Via and uberPOOL will be charged \$0.75 per customer. The revenue raised will be used to help fund subway repair and

improvements, providing an expected \$400 million per year going forward for the Metropolitan Transportation Agency.

Road User Charges/ Mileage-Based User Fees

Since the early 2000s, states have been at the forefront of discussions to explore possible replacements for the motor fuel tax, and given pressures on the tax, states are actively exploring other options, including piloting road user charge (RUC) systems. Also known as Vehicle Miles Traveled (VMT) charges or Mileage-Based User Fees (MBUF), this funding mechanism seeks to more closely link transportation taxes to the actual use of the roadways by a driver by charging drivers based on miles driven, instead of gallons of fuel consumed.

These efforts have been supported by the federal government through the federal Surface Transportation System Funding Alternatives (STSFA) grant program. Fourteen states have received STSFA grant awards to date—California, Colorado, Delaware (on behalf of the Eastern Transportation Coalition), Hawaii, Kansas, Minnesota, Missouri, New Hampshire, Ohio, Oregon (overseeing two grants including one to the Oregon Department of Transportation and the other to [RUC West](#), which consists of Arizona, California, Colorado, Idaho, Hawaii, Montana, Nevada, Oklahoma, Oregon, Utah and Washington), Texas, Utah, Washington and Wyoming. Most of these grants have been to study and pilot RUC programs or similar concepts.

In 2019 and 2020, at least 19 states—Hawaii, Idaho, Illinois, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Mexico, New York, Oregon, Texas, Utah, Vermont, Virginia and Washington—considered 34 pieces of legislation addressing RUC. Of those, at least seven states—Maine, Nevada, New Mexico, Oregon, Utah, Virginia and Washington—enacted eight pieces of legislation.

Notable RUC laws were enacted in Oregon, Utah and Virginia in 2020.

- Utah required the Utah DOT to establish a RUC program, that went live Jan. 1, 2020, and began enrolling drivers in January 2020. The Utah DOT must annually report and submit a plan to enroll all vehicles by Dec. 31, 2031. The [Utah Road Usage Charge Program](#) is currently open only to electric and hybrid vehicle owners.
- Virginia required the Virginia Department of Motor Vehicles to establish a voluntary RUC program. Eligible participants include owners of electric vehicles, alternative fuel vehicles or a fuel-efficient vehicle subject to a Highway Use Fee. Additionally, owners of other fuel-efficient vehicles, defined as vehicles with a combined fuel economy of at least 25 MPG, may enroll. The Virginia program is slated to go live in the summer of 2022.
- Oregon modified its RUC program (OREGO) by increasing the minimum fuel economy to 20 mpg to participate and exempted vehicles achieving at least 40 mpg from additional registration fees. The RUC program participant cap was also removed, and the per-mile rate was set to 5% of the per-gallon license tax.

Oregon and Utah have the nation’s first operational RUC programs, both created at the behest of their state legislatures. A quick comparison of the two programs is below:



- **Created by Utah’s Legislature:** SB 136 (2018) and SB 72 (2019) established a voluntary RUC program.
- **Effective Date:** Utah began collecting electric vehicle fees in 2019 and the RUC program went live in Jan. 2020.
- **Eligible Vehicles:** Full electric vehicles, plug-in hybrid vehicles and gasoline hybrid vehicles.
- **Payment and Vendor Options:** One firm—DriveSync—offers reporting and payment services.
- **Other Provisions:**
 - An electric vehicle owner pays a \$120 fee. Owners who enroll in the RUC program, however, pay 1.5 cents per mile in lieu of this fee.
 - RUC participants can never be charged more than the annual registration fee and receive monthly invoices.
 - Vehicle owners with privacy concerns may opt for short-term data retention or pay a flat fee. Three mileage reporting choices.



- **Created by Oregon’s Legislature:** SB 810 (2013) directed ODOT to establish the nation’s first fully operational RUC program.
- **Effective Date:** Named OReGO, the RUC program went live in July 2015.
- **Eligible Vehicles:** Any vehicle achieving at least 20 mpg.
- **Payment and Vendor Options:** Three firms—Azuga, Emovis and ODOT—offer reporting and payment services.
- **Other Provisions:**
 - Vehicles achieving at least 40 mpg, as well as electric vehicles, are exempt from paying supplemental fees by enrolling (\$33 for vehicles with fuel efficiency at or above 40 mpg and \$110 for electric vehicles).
 - The per-mile rate is set at 5% of the per-gallon license tax (currently 1.8 cents per mile).
 - ODOT is also consulting with new vehicle dealers to determine the most effective methods, at the point of sale, to encourage participation.

Notably, vehicle owners have the option to forgo paying the electric vehicle and alternative fuel vehicle fees by enrolling in the Oregon and Utah RUC programs. Vehicle owners in Virginia will also have the same option when their RUC program becomes operational in 2022.

So far in 2021, 12 states—California, Connecticut, Minnesota, Missouri, New York, Oklahoma, Oregon, Tennessee, Utah, Vermont, Washington, and Wyoming—have introduced legislation concerning RUC. One of Utah’s bills was enacted, creating the RUC Program Special Revenue Fund, and requiring RUC revenues to be used for the costs of administering the RUC program and for state transportation purposes.

To learn more about state RUC programs and policies, see [NCSL’s State Road User Charge Pilot Results and Legislative Action](#).

broad comprehensive enabling statutes creating new P3 authority in a state to minor or substantial tweaks to existing state P3 authority.

In April 2020, [New Jersey's Department of the Treasury \(Treasury\)](#) adopted [regulations](#) designed to support the implementation of a broad enabling [P3 law](#) approved by lawmakers in 2018. Previously, only state and community colleges were permitted to enter into P3 agreements. Highway projects must include an expenditure of at least \$100 million in public funds or any expenditure solely in private funds. Additionally, the law allows up to eight P3 highway projects to be advanced at any given time. Authority to enter into P3 agreements was also extended to the N.J. Transit Authority. The law directs the Treasury with [reviewing and approving](#) P3s.

The Arkansas and Kentucky legislatures created broad enabling legislation for P3 projects in 2017 and 2016, respectively.

Next Steps

Mr. Chairman and Ranking Member, I thank you for this opportunity to testify before the Committee on this important topic, and NCSL looks forward to working with Congress and the U.S. Department of Transportation to examine state transportation funding trends, and exploring new, innovative user-fee, formula-based transportation funding and financing mechanisms to provide much needed investment in the nation's transportation infrastructure.

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