Jacobs

Testimony of Brian Burkhard

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Before the

House Committee on Transportation and Infrastructure,

Subcommittee on Highways and Transit

Hearing on

"*America Builds: The Need for a Long-Term Solution for the Highway Trust Fund*"

April 29, 2025

Why the Highway Trust Fund is Important

Good morning, Chairmen Graves and Rouzer, Ranking Members Larsen and Holmes Norton, and Members of the Subcommittee on Highways and Transit.

My name is Brian Burkhard, and I am Vice President and Global Principal for Advanced Mobility Systems at Jacobs.

I want to thank you for this opportunity to testify today as you examine the need for a long-term solution for the Highway Trust Fund.

I have over 37 years of experience in transportation systems and infrastructure development. Throughout my career, I have led innovative initiatives across connected and automated vehicle technology, wireless electric vehicle (EV) charging systems, and major capital improvement projects. I have been grateful for the opportunity to help states and local governments plan, design, build, operate and maintain complex transportation system solutions that have resulted in improved mobility, increased goods movement, positive economic impacts, and lasting safety. To say that the Highway Trust Fund is responsible for my personal career would be an understatement. Nearly every project that I have worked on has been made possible by funding that comes from the Highway Trust Fund.

We like to say at Jacobs that we're "challenging today to reinvent tomorrow by solving the world's most critical problems," and helping communities solve their infrastructure challenges has never been more complex. As one of America's leading consulting and advisory firms, Jacobs delivers crucial infrastructure projects that enhance mobility and efficiency across all transportation modes, including aviation, rail and transit, highways and bridges, and ports and maritime. Much of this work is supported by the Highway Trust Fund, and we understand that the advent of electric vehicles, improved vehicle fuel efficiency, and the limitations of the current federal fuel tax, all pose great challenges to assuring that there is enough money to repair and build America's transportation infrastructure. Jacobs is proud to have studied and piloted alternatives to the fuel tax, through our work on Mileage-Based User Fees (MBUFs), and to have also engaged in alternative funding and financing methods on projects across the United States.

Jacobs works to create equitable, sustainable, and smart infrastructure that connects people and drives economic development. Like other larger engineering and consulting firms working in transportation, we understand that the Highway Trust Fund is an integral funding source for nearly all the work we do for our state and local transportation clients. Averaging out the local match dollars, the Highway Trust Fund provides about 25 percent of the funding for these projects.

Transportation professionals like me are attracted to designing, building, and maintaining infrastructure because of how broad stretching the impacts are to American's lives. Transportation infrastructure is the backbone of daily life in America and can influence job accessibility, commute times, and even housing choices. A well-maintained system boosts efficiency, reduces costs, and enhances safety, while outdated infrastructure can lead to congestion, higher accident rates, and increased transportation expenses. For businesses, strong infrastructure facilitates commerce, lowers logistics costs, and fosters competitiveness.

Projects that are funded by the Highway Trust Fund keep our transportation systems reliable, safe, and resilient. Moreover, they drive the American economy forward – these infrastructure projects impact how communities can economically thrive because of improvements and efficiencies in goods movement and enhancements in mobility. And on the global stage, the improvements to our transportation infrastructure are essential to America's competitiveness. This is why Congress must prioritize ensuring that we have a robust Highway Trust Fund to power our infrastructure and our economy.

Why the Highway Trust Fund is in Jeopardy

As we all know, the Highway Trust Fund continues to be in trouble. Highway Trust Fund expenditures are growing quicker than its sources, as our nation's transportation infrastructure needs grow. According to the Congressional Budget Office, the deficit between outlays and inflows was approximately $20 billion in 2024 and is expected to increase to over $45 billion by 2034[1]. The federal fuel tax, which accounts for about 80% of the Highway Trust Fund's receipts, has not been adjusted for inflation since 1993 and, when adjusted for inflation, is half the revenue of what it was in 1994. According to the Environmental Protection Agency's *50 Years of EPA's Automotive Trends Report,* fuel efficiency has doubled since 1975 and an increasing share of vehicles using our transportation system today do not pay any fuel tax at all[2]. The net effect of all these issues results in a downward trend in federal revenue per vehicle-mile-traveled and a growing insolvency issue with the Highway Trust Fund.

Our current path is unsustainable. Simply raising the gas tax would be a short-term solution to address the solvency of the Highway Trust Fund, but does not address the long-term structural issues to maintain a user-pays, user-benefits model of federal

[1] *Details About Baseline Projections for Selected Programs – Highway Trust Fund Accounts: January 2025*. (2025, January). Congressional Budget Office. https://www.cbo.gov/system/files/2025-01/51300-2025-01-highwaytrustfund.pdf.
[2] *50 Years of EPA's Automotive Trends Report.* (2025, January 15). Environmental Protection Agency. https://www.epa.gov/greenvehicles/50-years-epas-automotive-trends-report.

transportation investment. Instead, we at Jacobs urge this committee to consider alternatives to the federal fuel tax to fund transportation infrastructure projects.

Alternatives to the Fuel Tax

Fortunately, there are several alternatives to relying on a fuel tax to fund our transportation infrastructure needs. The following are some prevailing funding alternatives in practice across the country today:

Electric Vehicle (EV) Fees

Many states have introduced annual fees on electric vehicles (EVs) to compensate for lost fuel tax revenue. Currently, 39 states have adopted EV fees, with amounts ranging from $50 to $250 per year, depending on the state[3]. Some states, like Maryland and Wisconsin, also impose additional taxes on electricity used at public charging stations to further offset revenue losses.

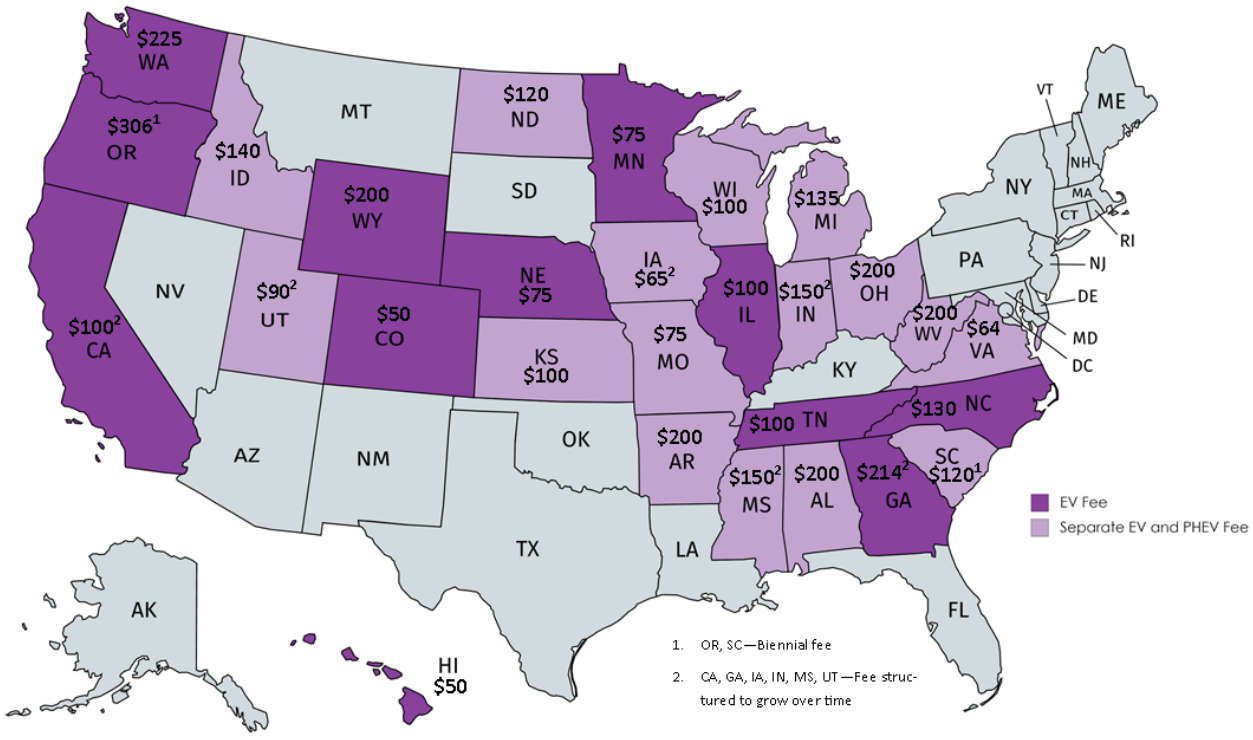


Figure 1- Annual EV Registration Fees by State (Source National Governors Association, 2020)

[3] *Special Registration Fees for Electric and Hybrid Vehicles*. (2025, February 25). National Conference of State Legislatures. https://www.ncsl.org/transportation/special-registration-fees-for-electric-and-hybrid-vehicles.

Common approaches to EV fee assessment include a flat annual fee that EV owners pay during vehicle registration. Tiered fees have been applied in some states for heavier EVs or may even adjust these according to vehicle type. Some states even structure these EV fees to grow over time by tying the fees to an inflation-related metric. A few states tax electricity used at public EV chargers to mimic fuel taxes.

At the federal level, an annual registration fee on EVs could be a short-term stop gap measure to reduce the fuel tax deficit in the Highway Trust Fund caused by EVs. However, this should not be viewed as addressing the entire shortfall and should be considered in parallel with a longer-term fix to the gas tax.

There are some important considerations to keep in mind with an EV fee. First, policymakers must be transparent with the public that these EV fees are transportation user fees intended to replace the gas tax and will be used for transportation investments. Additionally, an annual fee should be priced to mirror the lost gas tax for each class of vehicle so that the fee is as closely tied to transportation usage as possible to maintain the trusted "user pays" principle that has guided federal transportation funding for decades. Second, a one-time or annual fee is still not a precise fee assessment on transportation usage as it does not adjust to all miles driven by each vehicle. Whereas usage fees, like the fuel tax, increase with miles driven, a single fee assessment does not align with the continued impact that a vehicle imposes on the transportation system over the life of the vehicle. With a single fee, a person who only drives 5000 miles in a year would be paying the same as someone driving 20,000 miles in a year.

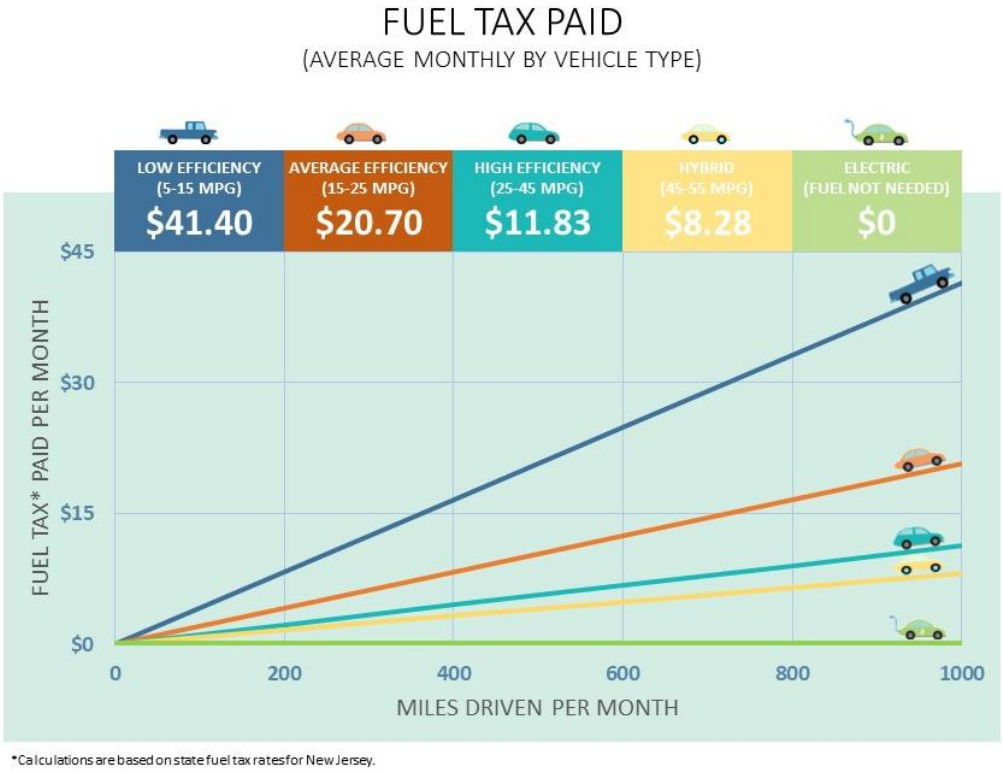
Third, it is appropriate to consider the multitude of taxes and fees EVs may be subject to compared to gasoline-powered vehicles. Many states include a variety of annual battery electric fees, kilowatt hour fees, and sales or electricity taxes on public EV charging. While making sure EVs pay their fair share is necessary for infrastructure sustainability, these fee methodologies could disincentivize EV adoption and may be more punitive than gasoline-powered vehicle ownership. A related problem is that annual, upfront registration fees disproportionately affect lower-income vehicle purchasers in contrast with usage fees or motor fuel taxes, which can be paid incrementally. Overall, it is imperative that Congress maintain a transparent "user pays" principle when guiding any new transportation usage fees.

Mileage-Based User Fees (MBUFs)

Motor fuel taxes link highway use with the associated costs of building and maintaining roads as well as other indirect costs associated with usage of the transportation system, such as pollution and congestion. But motor fuel taxes are an imperfect user fee because

they do not differentiate among vehicles that cause greater or lesser road wear for the same amount of fuel consumed or between travel on crowded and uncrowded roads. As concluded by the National Surface Transportation Infrastructure Financing Commission in 2009 and stated in their Final Report: "The most viable approach to efficiently fund investment in surface transportation in the medium to long run will be a user charge system based more directly on miles driven rather than indirectly on fuel consumed."[4]

To address this imperfection, a concept has emerged called Mileage-Based User Fees (MBUFs), also known as Vehicle Miles Traveled (VMT) taxes or a Road User Charging (RUC) fee. Under an MBUF system, drivers would be charged for the number of miles they drive instead of the amount of fuel they purchase, creating a direct connection between the amount you pay and your use of the transportation network (see Figure 2). Recent legislation has directed studies on MBUF, including a national pilot program to assess its design, acceptance, and sustainability.



[4] *Paving Our Way: A New Framework for Transportation Finance*. (2009, February). National Surface Transportation Infrastructure Financing Commission.

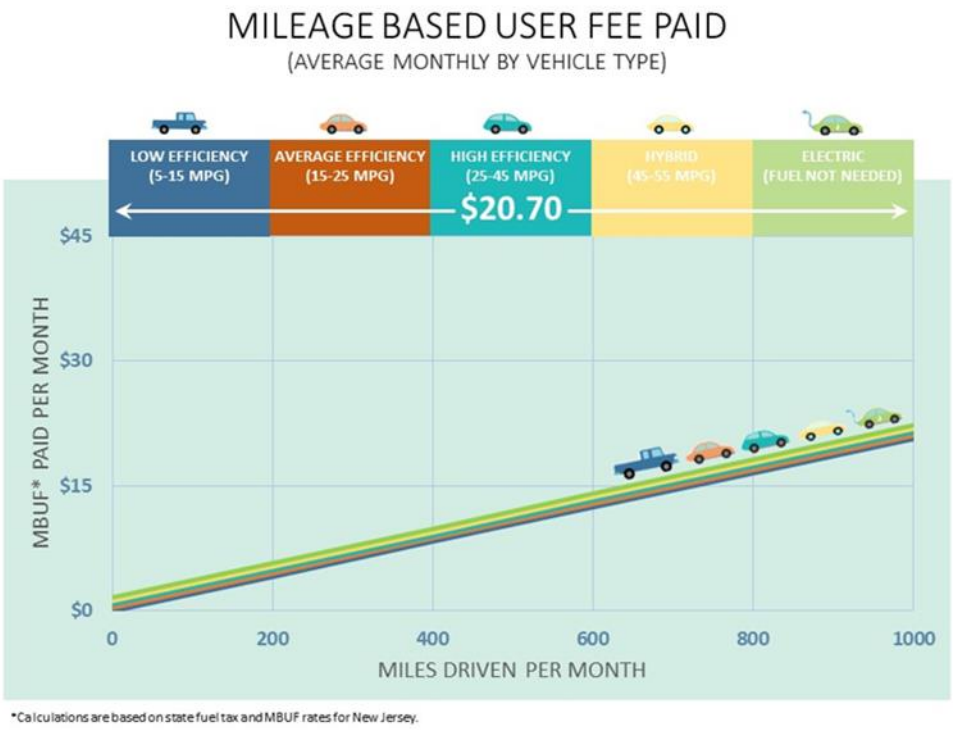


Figure 2- Comparison of Fuel Taxes Paid and MBUF Paid by Vehicle Fuel Efficiency (Assuming a Single per mile MBUF Rate Applied to all Vehicles)

Figure 3 simplifies how an MBUF system could work. Data collection and reporting are necessary to identify the number of miles traveled. Miles driven can be measured through periodic odometer readings, vehicle GPS systems, devices that can plug into a vehicle's on-board diagnostic port, cellular on-board units, or even a driver's smartphone. If location data is included, it can be used to differentiate by state where a vehicle has driven. Alternatively, odometer readings or automated data without location can be used to simply

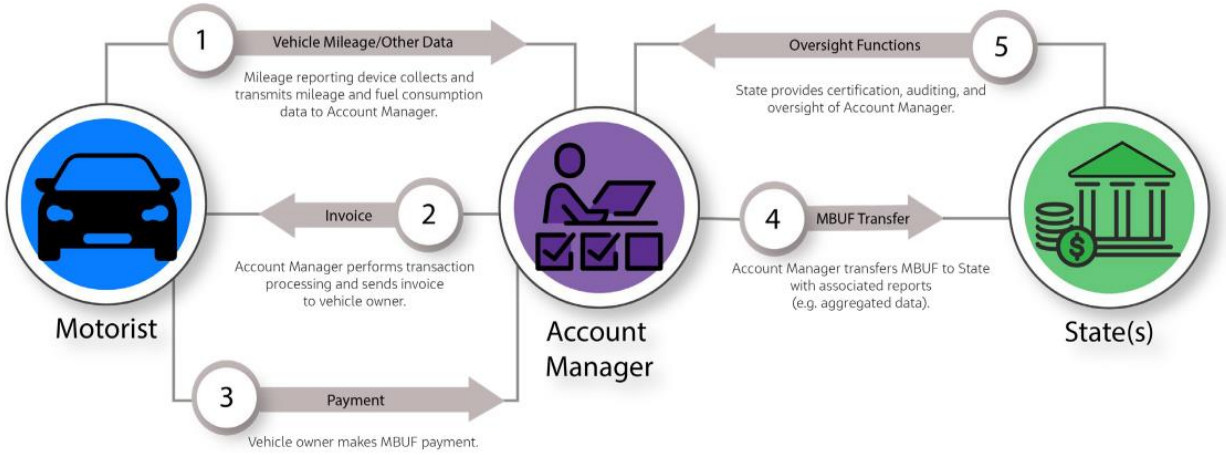


Figure 3 - How MBUF Works

measure the number of miles driven. Regardless of how miles are measured, these would be sent to an account manager. Once an account manager collects mileage data, invoices the driver, and collects the MBUF, it transfers it to the beneficiary, in this case, the State.

Some MBUF concepts have considered the use of a multi-state clearinghouse that could track cross-state travel and re-distribute MBUF funds collected based on out-of-state mileage.

MBUF, or RUC, program pilots have been funded and studied extensively across the United States. The Surface Transportation System Funding Alternatives (STSFA) grant program, established by the FAST Act, contributed funding but required a local match, to explore MBUF revenue mechanisms through study, demonstrations, and piloting. This program aimed to conduct outreach and increase public awareness of the need for new alternatives to the fuel tax and to identify ways to minimize the administrative costs associated with MBUF systems.

Through STSFA or independent initiatives, Jacobs has had the opportunity to assist several states and coalitions in exploring MBUF programs. The current state of those and other programs are as follows:

- Oregon, Utah and Virginia: These states have operational MBUF programs (participation in these programs are currently voluntary).
    - Oregon conducted America's first MBUF pilot in 2013, which led to the establishment of OReGO – Oregon's statewide RUC program. It allows enrolled users to have their miles tracked with a GPS device or a non-GPS odometer tracker and gives enrollees a credit against taxes they pay at the pump. Since 2015, high MPG and EV vehicles can be enrolled in a voluntary program where drivers pay 1.9 cents per mile. Oregon is considering mandatory registration.
    - In 2018, Utah was the second operational MBUF system in the U.S. EVs are allowed to enroll at a rate of 1 cent per mile in lieu of an annual flat EV fee.
    - Virginia became the third operational MBUF system in the U.S. in 2022 by establishing a "Highway Use Fee." Drivers can elect to pay 0.94 cents per mile capped out at $109 per year.
- Hawai'i: Passed the first mandatory RUC legislation in 2023. Starting on July 1, 2025, most EV drivers can choose to pay a 0.8 cent per-mile RUC charge or flat annual RUC that is capped at $50 per year. By the end of this year, Hawai'i will

present a RUC transition plan to the legislature with steps on how to implement a RUC charge to all vehicles in Hawai'i by 2033.

- Washington, California, Wyoming, Colorado, Minnesota, Kansas, Missouri, Texas, Ohio, New Hampshire, Pennsylvania, Delaware, North Carolina, and others: These states have launched or are developing pilot programs to study the feasibility and implementation of RUCs with trucks or light-duty vehicles.
    - Caltrans is testing RUC through the establishment of real monies collection and issuance of fuel tax credits. This pilot is evaluating opportunities and challenges in the establishment of this system and to consider how such a system might scale statewide.
    - Colorado implemented their first road charge pilot program with 100 vehicles over a 4-month period. The participants of this pilot supported the RUC concept and appreciated its fairness to charge on miles-traveled rather than fuel consumption. The pilot demonstrated that mileage-reporting mechanisms could be effective in collection of data without major issues. The pilot also exposed policy challenges like privacy in mileage-reporting and how to integrate with existing transportation funding mechanisms.
- The Eastern Transportation Coalition (TETC) – Since 2017, TETC is a leading consortium of 19 states and Washington DC, of which 9 have explored RUC and its potential impacts. TETC has piloted several aspects of RUC, including community outreach and communication through participant surveys, focus groups, and messaging. This program has conducted 12 passenger vehicle pilots engaging nearly 3000 passenger vehicles.
    - An urban-rural analysis was conducted in Georgia and Maryland. When moving from a gas tax to an MBUF, Georgia's rural residents would pay 9% less per year and Maryland's rural residents would pay 7% less per year.
    - In North Carolina, TETC helped create AdvaNCe Transportation Together, a collaboration between NCDOT, the business community, and other private-public partners exploring transportation funding. The result is an online public education forum that provides information on how transportation is funded today, the problem with the current funding model, and potential solutions. Public engagement and education on the need for more sustainable funding options is key to any future MBUF's success.
- RUC America – RUC America is a consortium of states that pools resources to study the viability of MBUF. RUC America has funded over 24 research projects studying

the feasibility of road usage charging across the interests of 19 state DOTs. Oregon and Utah are member states that are actively operating RUC programs. The second tier consists of states that are conducting, or have conducted, RUC research pilot projects and includes California, Colorado, Hawaii, Pennsylvania and Washington. The remaining states are monitoring transportation trends and evaluating the road usage charge environment.

- One project through RUC America was to evaluate how automated vehicle (AV) systems could be utilized to enable an MBUF. The pilot utilized data from an AV delivery company to identify the opportunities and challenges associated with AV-based systems and assess their potential integration into a RUC framework.

As a member of the advisory panel that convened for the Eno Center's 2023 report entitled *Driving Change: Advice for the National VMT Fee Pilot,* I was encouraged by the report's findings on the need for and importance of a national pilot to explore the framework, policies, and implementation of a federal MBUF.

U.S. DOT should move forward on a national pilot to test the design, acceptance, implementation, and financial sustainability of an MBUF system in keeping with the "user pays, user benefits" principle of federal transportation funding. Since time is of the essence and a Federal Advisory Board has already been established for this initiative, USDOT must not stall on this important and needed evaluation.

Full federal implementation must be accompanied by a robust education campaign to ensure that drivers understand how the program works, to describe the positive impact on rural communities and opportunities for privacy protections. Incorporating "choice" into these programs is essential for their success. Building upon the individual state pilots and findings, a national pilot will be essential in the evaluation of a potentially lasting and fair solution to our Highway Trust Fund problem. In the meantime, EV fees could potentially offer a stop-gap solution but by no means should be considered a panacea to address tax parity with traditional vehicles.

The Role of Private Financing in Transportation Investment

In 2023, federal, state and local governments spent nearly $350 billion on highways and mass transit infrastructure with the federal government responsible for roughly 25% of this spending, largely through the Highway Trust Fund[5]. While the federal government supports transportation investments in a variety of ways, outside direct grants from the Highway Trust Fund (i.e. TIFIA and Private Activity Bonds), the role of private financing and public-private partnerships (P3s) has grown in interest to help close the gap between limited public infrastructure spending and need. The federal government and states have enabled P3 projects in a variety of ways over the past few decades, however the U.S. still lags many other developed countries in utilizing P3s. While progress is being made, the federal government can do more to be a willing partner to embrace the private sector's drive for innovation and efficiency in transportation project delivery.

Public-Private Partnerships (P3s)

Public-Private Partnerships (P3s) have been used for centuries, but their modern application in infrastructure financing gained momentum in the late 20th century. Historically, P3s were employed in colonial charters, toll roads, and early railroads in the U.S. The 1990s and 2000s saw a global surge in P3 adoption, particularly in Canada, the U.K., and Australia, where governments encouraged private investment in public infrastructure. In the U.S., P3s became more prominent as infrastructure needs have outpaced the public sector's ability to maintain and improve assets, and with federal financing programs, such as the Transportation Infrastructure Finance and Innovation Act (TIFIA) and private activity bonds (PABs), supporting their expansion.

P3s involve a long-term agreement between a government agency and a private entity to finance, build, operate, and maintain infrastructure projects. The private sector typically provides upfront capital, while the public sector ensures regulatory oversight. Common P3 models include:

- Design-Build-Finance-Operate (DBFO) – The private partner handles all aspects, with revenue generated through tolls or fees.
- Build-Operate-Transfer (BOT) – The private entity operates the project for a set period before transferring ownership to the government.
- Lease-Develop-Operate (LDO) – The government leases an asset to a private firm for upgrades and operation.

[5] *Public Spending on Transportation and Water Infrastructure, 1956 to 2023.* (2025, February 26). Congressional Budget Office. https://www.cbo.gov/publication/60874.

P3s have been used in various sectors, including transportation, water systems, and public buildings, and offer owners an opportunity to maximize and extend their limited public funding. Many states fund their transportation investments with a pay-as-you-go model where costs are covered by current revenues, rather than by borrowing or accumulating debt. While this can reduce the burden of debt on taxpayers, it also limits the ability for states and localities to fund large or complex projects that may dwarf their current revenues.

In 2023, Tennessee passed the Transportation Modernization Act (TMA) which gave TDOT authority to enter into P3s to address urban congestion, while freeing up funding to invest in rural communities[6]. The state allocated $3 billion in state funding into identified critical corridors to add "choice lanes" in each direction which will be financed and operated by a concessionaire. It is estimated that Tennessee's initial investment into the concession will result in a 3-to-5-fold return in the form of transportation infrastructure improvements.

Since Congress established tax-exempt PABs and low-interest-rate TIFIA loans, the large majority of U.S. P3 projects have used one or both financing methods to leverage private investment on more advantageous terms than in the commercial market. These long-term and flexible financing options are invaluable tools for making P3s and transportation projects a reality. We strongly urge this Committee to make both financing programs more accessible so states and localities can accelerate project delivery of critical transportation projects.

P3s can accelerate project delivery by removing delays typically associated with traditional government funding and can create sustainable funding sources through tolls or other fees. P3s leverage private sector investment reducing taxpayer burden and transfer of risk to the private sector while encouraging cost saving innovation and efficiencies through value engineering.

However, P3 contracts can be complex with lengthy and legally intricate negotiations and may not be suitable for all types of projects. Private financing can result in more expensive projects due to risk coverage and some P3s have lacked transparency on pricing and service quality. All told, P3s are investment partnerships that require good faith negotiation between the private and public sectors to maximize benefit for the traveling public.

[6] *Transportation Modernization Act.* (2025, April 25). Tennessee Department of Transportation. http://tn.gov/tdot/build-with-us/transportation-modernization-act.html

Conclusion

Congress should continue to provide – and reauthorize as needed – the current array of formula funding, federal grants, loans, loan guarantees, and bonding options to help state DOTs and local project sponsors.

Above all else, Congress should seek to adhere to the "user pays" principle and do its best to provide our nation with a robust Highway Trust Fund.

Recent surface transportation laws have not solved the enduring Highway Trust Fund dilemma, but the *Infrastructure Investment and Jobs Act* (IIJA) did find a bipartisan solution through the use of advanced appropriations to help communities fund critical infrastructure. The U.S. infrastructure funding gap is well known, with the American Society of Civil Engineers 2024 Bridging the Gap study finding an over $3.5 trillion investment gap just to reach of state of good repair across all infrastructure modes[7]. However, inflationary pressures and rising materials and project costs are forcing communities to cut back on their programs. We urge this Committee to continue to work together and seek out funding sources outside of the federal fuel tax, including the use of advanced appropriations, to ensure the solvency of the Highway Trust Fund and to drive economic growth and improve the safety of our nation's transportation system.

Thank you again Chairmen Graves and Rouzer, Ranking Members Larsen and Holmes Norton, and Members of the Subcommittee for the opportunity to testify.

I look forward to your questions.

[7] *2025 Report Card for America's Infrastructure*. (2025). American Society of Civil Engineers. https://infrastructurereportcard.org/economics/.