

**TESTIMONY OF PETER J. BASSO
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**BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
HEARING ON THE
LONG-TERM SOLVENCY OF THE HIGHWAY TRUST FUND: LESSONS LEARNED FROM THE
SURFACE TRANSPORTATION SYSTEM FUNDING ALTERNATIVES PROGRAM**

April 14, 2021

Good morning Chairman Carper, Ranking Member Capito and members of the committee. I am pleased to appear before you today to discuss the accomplishments of the Surface Transportation System Funding Alternatives System (STSFA) grant program and what we are learning about mileage-based user systems as an alternative financing mechanism for the Highway Trust Fund.

This hearing comes at a critical time. Since 2008, the Highway Trust Fund has faced a revenue shortfall which has required billions in transfers from the General Fund. The STSFA program was created in direct recognition that an alternative mechanism is needed. This is a problem that is not going to solve itself. It will require leadership, vision, and courage.

WHY MILEAGE-BASED FEES

Ten years ago, I helped launch the Mileage-Based User Fee Alliance, MBUFA, as an organization to bring together government, business, academic, and transportation policy leaders to conduct education and outreach on the potential for mileage-based user fees as an alternative for future funding and improved performance of the U.S. transportation system. As many of you on the committee know, much of my career has been focused on transportation finance, from my time as Chief Financial Officer at the U.S. Department of Transportation, to my time as AASHTO's Chief Operating Officer and Director of the AASHTO Center for Program and Project Finance. It was from that long focus on transportation financing that it became clear to me that the existing finance system for the Highway Trust Fund was falling behind the investment needs of the nation's infrastructure—a trend which was only going to get worse because of the transition to highly fuel efficient and electric vehicles. I believed when we started MBUFA and am even more convinced now, based on what we have learned from 5 years of STSFA pilots in the states, is that adoption of a mileage-based fee system is the best option for a sustainable funding mechanism for the Highway Trust Fund.

As members of this committee know better than most, the need for significant investment in the nation's surface transportation network is tremendous. The American Society of Civil Engineers regularly issues a report card on rating the state of the country's infrastructure. Roads received a "D" with more than \$785 billion in repairs identified. The need is widely recognized in the public and on Capitol Hill. We have all heard the phrase that infrastructure is

a bipartisan issue and I believe it is true that the need for a comprehensive, well maintained national network of roads and bridges for the efficient movement of people and commerce is a broadly supported goal. The devil, as we all know, has been in the details, namely how that network is financed, both to meet new transportation needs and to keep the existing system in a state of good repair. That is where the rubber meets the road and our bipartisan support for the concept of infrastructure gets lost.

Our surface transportation system has been financed by a user pay system, highly reliant on the federal fuel tax. For many years, that proved to be a highly effective and efficient funding mechanism. But since 1993, when it was last increased, it has been set at 18.4 cents/gallon. Back then the average price of gasoline was approximately \$1.17. Today the average price of gas is \$2.87/gallon, and we know that it fluctuates significantly. Yet, because the gas tax is not indexed, it has not been able to keep up as a revenue source for the Highway Trust Fund.

I don't present this as an argument to raise the gas tax. While that could be a short term, transitional solution, I fully understand the challenge and the politics. Frankly, it is that impasse on what to do with the gas tax in the face of the problem of keeping the Highway Trust Fund solvent that led Congress thirteen years ago to create two commissions to make recommendations on alternatives to pay for the Highway Trust Fund. Both concluded that a mileage-based system was the best long term, sustainable approach.

SUCCESS OF THE STSFA PROGRAM

Five years ago, due to the leadership and wisdom of the Environment and Public Works Committee, Congress authorized the STSFA grant program as part of the FAST Act. Specifically, the bill authorized \$95 million for a grant program to states, "to demonstrate user-based alternative revenue mechanisms that utilize a user fee structure to maintain the long term solvency of the Highway Trust Fund."

Since then:

- Fourteen states across the country were awarded grants for 37 projects. Awards went to: Delaware, Oregon, Washington, Minnesota, Missouri, Colorado, New Hampshire, Hawaii, California, Utah, Wyoming, Kansas, Ohio and Texas.
- Two regional pilots, one led by Delaware and the Eastern Transportation Coalition which is testing the implementation paths for mileage-based user fees in the DC metro area and seven states (Delaware, Maryland, Maine, North Carolina, New Jersey, Pennsylvania, and Virginia) and the other, led by Oregon and the Western Road User Coalition (RUC West), has begun to consider international issues and includes British Columbia as a participant.
- Two states, Oregon and Utah, have established actual MBUF programs and a third, Virginia, is planning to launch one in the next year.

- We have seen mileage-based systems being developed and operated internationally
 - Australia is doing a national pilot focused on heavy vehicles
 - New Zealand, which has operated a mileage-based system for all diesel powered vehicles since the 1978 is considering expanding to a wider set of vehicles
 - Germany, like several other European countries, has a road charging program for heavy vehicles
 - The European Union is piloting MBUF systems in many of the member countries

The states have learned through trial and error how to design trials, the importance of public engagement and communication, and the complexities of standing up a new system. The pilots are showing the technical viability of a mileage-based system and are generating valuable and sometimes surprising data on the specific questions outlined in the FAST Act including:

- Implementation, interoperability and public acceptance
- Protection of personal privacy
- Use of third party vendors
- Concerns about equity between urban and rural drivers, income groups and geographic areas
- Technology
- Data Security: and
- Cost

Mr. Chairman, since Dr. Hendren can best share the accomplishments of the Eastern Transportation Coalition pilot, we have reached out to several of our members in the Midwest and Western United States, who have participated in this program, to highlight the breadth of the STSFA grant program's accomplishments, what was piloted and why their work has been so valuable. Let me share some of their lessons learned:

Hawaii – Hawaii DOT is appreciative of the federal government's STSFA program that provided RUC research funding at this critical time. This program enabled us to undertake a personalized statewide public outreach and to demonstrate this potential option of a road usage charge in Hawaii with interested participants. This enabled Hawaii to have an important conversation with the public, participants, policymakers and other varied stakeholders regarding equity and sustainability of transportation funding not only now only now, but into the future as well.

Hawaii conducted the largest scale personalized public outreach effort in the country, reaching over 300,000 households and businesses across the state, with customized direct-mail explaining what drivers currently pay in gas taxes compared to what they could potentially pay under a per-mile charge. Nearly 15% responded to surveys, generating a wealth of data on public preferences for road user charges (RUC) in Hawaii. Hawaii demonstrated the feasibility

of using the state's existing annual car safety check inspection and registration process to assess a per-mile charge. However, a full-scale program would require some enhancements but could be done at a lower cost than some of the other RUC demonstrations to date. And lastly, a large majority of Hawaii drivers prefer to report miles drive at safety check, a process they are already familiar with.

Washington -The STSFA program enabled Washington State to engage thousands of drivers directly in an immersive, year-long road usage charge (RUC) pilot experience which featured testing both GPS and non-GPS options for how to report miles in a RUC system, and gathered extensive feedback from pilot participants. The pilot was the focal point of a public conversation that took place with the general public, key stakeholders, implementing agencies, lawmakers, and the media about how mileage-based-user funding could be carried out, its impacts, and how it can advance fairness and equity for all drivers. This critical work has directly informed ongoing road funding policy discussions in the state legislature as efforts are underway to advance a state RUC program based upon the pilot's findings. Among the lessons learned from the Washington State pilot:

- Nine years of research, pilot testing, and policy development in Washington State have shown that distance-based charging is a viable successor to the motor fuel tax, preserving the user-pay principle in a fair and sustainable way for all drivers.
- Washington addresses privacy concerns by offering drivers non-GPS mileage collection options, along with strong legal provisions on privacy and data protection.
- Washington has determined the financial impact of RUC on drivers, is not determined by how far you drive, but rather by your car's mpg – drivers of low mpg vehicles will generally see a reduction in taxes under RUC, particularly benefitting rural and low income drivers.

Oregon – OreGO was the first operational program for light duty vehicles in the country. It has been operating for almost 6 years with net revenues going into the state highway fund. Oregon has had a weight mile program for heavy vehicles since the 1940s. The privacy provisions in the enabling legislation were negotiated with the ACLU of Oregon at the time the legislation was passed in 2013 and remain in place. It continues to evolve based on lessons learned through operations, input from the public and its account managers, partnerships on pilots and other work it is doing with RUC West.

The STSFA grants received by Oregon DOT allowed us to improve our program, such as by evaluating new technologies, exploring different compliance options, engaging in public education, and evaluating whether it could be a platform for local area pricing. For RUC West, the grants allowed the member states to explore interoperability, examine the interface between autonomous vehicles and road usage charging, and develop clearinghouse requirements to enable data sharing with other jurisdictions. The sessions hosted by FHWA to share lessons learned have been beneficial because they provide networking opportunities for states and coalitions that received STSFA grants.

Minnesota – The aim of Minnesota’s project is to demonstrate that onboard embedded telematics in shared-mobility fleets and automated vehicles can be used to efficiently and effectively collect distance based fees. Fleet managers (such as shared mobility providers) already use telematics for their logistics, making administrative costs and fee remittance easier than traditional mileage-based fee collection approaches. Minnesota sees this approach as both incremental and scalable. Incremental in that we can keep the gas tax in place where appropriate. Scalable in that telematics are already used by fleet managers and will continue to become standard on vehicles

The STSFA provided a useful medium for the public private partnership with shared mobility fleet managers at the core of this demonstration. The grants allowed us to evaluate different pricing strategies and explore potential impacts on other priorities such as mobility, equity, and fairness. It allowed Minnesota to generate an engaged stakeholder education and outreach process for the future of transportation funding leading to direct applications in state legislative proposals for future mileage-based user fees.

California – California used state funds to complete one of the largest pilots yet with over 5,000 participants logging 37 million miles, proving the general feasibility of the system and garnering a very high level of acceptance of the concept by participants. Through the STSFA program, California continues to study issues related to user experience; interoperability between states; impacts to rural, tribal, and disadvantaged communities; and gathering input from the public. In California’s experience, pilots have two equally important goals – testing technical systems and educating the public and decision makers about road charge. Supporting education in states and growth of technical expertise will continue to necessitate the STSFA program as more states engage in studying road charge systems.

PROGRESSION TO A NATIONAL SYSTEM

We recognize the urgency to develop and implement a sustainable funding alternative for the Highway Trust Fund to the present fuel tax and the STSFA pilots are showing that an MBUF can fill that need. Unfortunately, what we have also learned is that there is no off-the-shelf system which Congress can plug-in and use to stand up a 50 state system. Not every state is prepared to embrace this alternative and there are questions that need to be explored and answered at a national level in concert with the ongoing work led by the states. Those include revenue collection, interoperability, and international issues involving cross border transportation. The next critical step is to synthesize what states are learning in order to identify and test mechanisms and processes essential to a viable national system.

What states have learned to date in the development of state pilots and what MBUFA strongly recommends, is the creation of an advisory commission to review the work of the states and identify the steps forward toward a national system. This commission must have milestones and timelines to ensure that the transition to this alternative revenue system keeps driving forward so that Congress and the country are in a position to finally be able to make that transition within the near future.

Two years ago, MBUFA prepared a document, *Guidelines for a National Mileage-Based User Fee Trial*, which pulled together the collective thinking of members who had first-hand experience designing, implementing, and operating MBUF pilots. The purpose was to advise Congress on lessons learned and issues to consider in the development of a national MBUF system. MBUFA's members continue to endorse the considerations and recommendations of our Guidelines which I have included as a supplement to my testimony.

EQUITY FOR ALL VEHICLES

Mr. Chairman, before I conclude, I want to touch on what I believe to be a misperception and not a lesson learned regarding mileage-based fees. The argument is that MBUF fees unfairly add cost to electric vehicles purchase prices and operations while making it cheaper to operate gas fueled vehicles. In other words, switching from what might be considered a carbon tax on gasoline consumption to a system which charges equally regardless of fuel, will be a disincentive to electric vehicle manufacture and adoption. If gas powered, less fuel efficient vehicles only drove very short distances, this might make sense. However, data from the pilots has shown that larger, less fuel efficient vehicles are often driven in rural areas where they also drive long distances. Whatever savings are realized from no longer paying fuel taxes is balanced by the per mile charge for their longer trips.

What has been missed are the fundamental reasons for adopting a mileage based system, namely the user pays principal, which historically has been the bedrock principal of road financing in the United States, and equity, drivers should be fairly assessed for the cost of building and maintaining the roads they use.

The driving concern behind the need to invest in the development of alternative financing options, like the STSFA program, is the recognition that we are at the front end of a transformational event in the design of personal and commercial transportation vehicles -- the transition to highly fuel efficient and electric vehicles. Yet, our user pays based financing system is no longer viable in its current form, requiring Congress to repeatedly draw from the general fund to close the gap. The problem is that our current revenue generating model is predicated on consumption of fuel not on road use. Road use is still high, but fuel consumption habits are poised to shrink dramatically due to highly efficient and electric vehicles. Today, less than one percent of cars are electric vehicles, and it is projected that 25% of new car sales will be electric in 2035. General Motors has announced its goal to introduce 30 new models of electric cars by 2025 and to only sell zero emission cars and trucks by 2035.

The equity question is whether it is fair to require that only gasoline and diesel fueled vehicles pay for the road while electric vehicles travel free? The goal of a mileage-based fee is not to punish vehicle classes but put in place the framework for a user pays financing system which is equitable and sustainable. What we are seeing now in some states, like Utah, is an early step in implementing a mileage-fee system by starting with electric car use to both develop the system and establish fuel fairness. Rather than wait until ten years from now when electric vehicles

will compose a larger percentage of road use and implementation will be harder, the user pays principal is being reinforced now. Success will lead to inclusion of other vehicle types.

The lesson is that mileage-based fees are being piloted to address one specific public policy problem: the need to generate sufficient revenue to build and maintain our nation's network of roads and bridges. Vehicles will continue to need a well maintained transportation network. Reducing fossil fuel consumption does not conflict with adoption of a mileage-based system. It is the reason for it.

Mileage-fees are not the only lever which government can use to reward or incentivize use of more fuel efficient vehicles automobiles. In fact, it is an inefficient lever. Direct investment like President Biden's infrastructure plan which includes \$174 billion to accelerate the adoption of electric vehicles by including investments in 500,000 charging stations, \$100 billion in rebates to electric car buyers as well as investments in electric transit vehicles and school buses is a more efficient approach.

CONCLUSION

Mr. Chairman, I again want to express not just my appreciation for being able to testify this morning on an issue of such enormous importance to our country, but also for the leadership and bipartisan approach the members of this committee have brought to this issue. The federal gas tax of one cent per gallon was first imposed in 1932 when Herbert Hoover was President. Almost ninety years later, the world has changed considerably. The need for people and commerce to move quickly and efficiently has grown exponentially. Technology has revolutionized the way we live and work and made possible a new generation of vehicles powered by electric and hybrid fuels which were imaginable by our grandparents. It has also made possible an alternative financing system to the gas tax.

Switching to a user pays system based on actual road use as opposed to fuel consumed not only makes sense, but because of the STSFA grant program and investment by the states, it is showing itself to be a viable alternative. The growth in number of states piloting programs and the lessons being learned are building the foundation for a national system.

This work is not done. The states have more testing to do which will be essential to the transition from the gas tax to a national system. From what is being learned by the states we can start to look at key questions and issues which will be critical to progressing to adoption of a national system. Just as the committee showed foresight in creating the STSFA grant program, it will need to be creative and thoughtful in laying out the path forward that needs to include guidelines and milestones to ensure continued progress to a national system.

At this point, we believe the next step is to test this approach through a national trial. We also strongly believe that additional funds should be made available for state pilots. Clearly to

preserve the user pays principle, we need to make changes to accommodate the growing mix of the vehicle fleet.