CTAA Analysis: What’s Best for Federal Transit Investment – a new VMT Tax or an Increased Gas Tax?

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The reauthorization of the Fixing America’s Surface Transportation Act (FAST Act) is rapidly approaching and so are discussions on what should be included in the new legislation. A dominating conversation around reauthorization goals has been, “How can Congress increase revenue for the Highway Trust Fund?”

Before we can answer that question, we should examine how the current deficit came to be. Since 1956 (the HTF’s year of creation), federal surface transportation programs have been largely funded by taxes on motor fuels that flow into the HTF. These trust fund-based taxes have historically been user-fee based; governed by the principal “if you use it, you pay for it.” As the highway system continued to expand, maintenance costs piled on and more people started driving, the gas tax was steadily increased to alleviate financial burdens. Gas taxes have increased four times since the HTF’s creation: in 1959, 1982, 1990, and 1993.

1982 marked a significant year for transit. It was the year the HTF was divided into two accounts: the Highway Account and the Mass Transit Account, beginning the flow of funds to support transit directly. The gas tax was increased to nine cents that year, with the Highway Account receiving eight cents and the Mass Transit Account receiving one cent.

As noted above, the gas tax hasn’t increased since 1993, with the current rate taxing at 18.4 cents for each gallon of gasoline and 24.4 cents for each gallon of diesel. Due to the lack of gas tax indexing, the Congressional Budget Office predicts that by 2026, the HTF will have a cumulative shortfall of $75 billion. When the gas tax was initially implemented, present-day challenges such as electric vehicles and Corporate Average Fuel Economy (CAFE) standards were not yet in existence. CAFE standards have dramatically improved auto fuel efficiency since the 1990s and have contributed to the decline in gas tax revenues per mile. In order to adjust for these lacking funds, the U.S. Treasury has transferred more than $140 billion of general funds to the HTF (over the last ten years) in order to keep it solvent.

Not only has the transfer of general funds to the HTF demonstrated the overwhelming budget shortfalls, but it also has the potential to severely impact the work of government agencies such as the Federal Transit Administration, as observed in the most recent 32-day government shutdown. Because the Mass Transit Account, which funds FTA, has been almost entirely funded by general funds over the past decade (rather than already-authorized HTF funds), government shut downs leads to FTA employees being sent home. The latest shutdown critically impacted many small-urban and rural transit agencies because they were not able to receive their approved federal grants, let alone have any of their questions answered by an employee.
Congress is facing more and more pressure to avoid problems like these, tackle the growing transportation deficit and right-size transit investment. Under consideration are two potential methods for enhancing revenue within the Highway Trust Fund: an increase to the federal gas tax or implementing a new vehicle-mileage-travel (VMT) tax.

**Arguments for Increasing the Federal Gas Tax**

Increasing the federal gas tax would allow the federal government to charge motorists and truckers for their use of public roads, at a raised cost. This method is generally considered to be a short-term solution, as electric vehicles and the future of autonomous vehicles continue to accelerate in popularity and unpredictability. There previously have been some legislative pushes to increase the federal gas tax primarily by the U.S Chamber of Commerce, Rep. Earl Blumenauer (D-Ore.) and Rep. Peter DeFazio (D-Ore.). The policies proposed by the U.S. Chamber of Commerce and Rep. Blumenauer were similar. The Chamber’s proposal would raise the federal gas tax five cents per year for five years, while Blumenauer’s bill would lead to the gas tax stabilizing at 43.3 cents per gallon of gasoline and 49.3 cents per gallon of diesel by 2023 (however it would continued to be indexed for fuel efficiency and inflation). Using these numbers, Eno Center for Transportation predicted this kind of gas tax increase would bring in an extra $372.5 billion of revenue for the Highway Trust Fund over a ten-year budget window.

As noted previously, every gas and diesel tax increase from 1982 to the present deposited within the HTF has been split 80/20 between the Highway Account and the Mass Transit Account. Using the Blumenauer bill, Eno’s predicts that the Mass Transit Account would only actually gain an average of $3 billion per year ($3/year x 9 years – $27 billion, which leaves just over $1 billion as a cash cushion). They estimate that in order to keep the transit account solvent at the 80/20 split, there would need to be an immediate gas tax increase of 13.5 cents.

DeFazio, the New Chairman of the House Transportation and Infrastructure Committee, has also advocated for legislation that would increase the federal gas tax. His bill, “A Penny for Progress Act” would provide $500 billion in infrastructure investment by authorizing Invest in America 30-year Treasury bonds annually, through 2030. To repay the bonds, the bill indexes gas and diesel taxes according to two factors: the cost of constructing transportation projects and reduced motor fuel usage from CAFE standards. The indexed tax would raise the gas tax by one cent every year and include a cap of 1.5 cents per year. This bill was introduced in the 115th Congress and it is likely that DeFazio will include some form of this mechanism in a large infrastructure package he is expected to introduce later this year.

**What is a VMT Tax?**

Within the past couple of years, many in the transportation field have begun to argue for a VMT tax. A VMT tax is a mileage-based-user fee, charging drivers and truckers for the amount of miles they drive in the form of a tax. The miles could be tracked in a variety of methods:

- Through an inexpensive device that could be installed in vehicles. The device would wirelessly upload information to state agencies managing the program. Motorists could then be charged a lump monthly sum for the miles they drove;
- A self-reporting odometer reading;
- A toll-like transponder, something similar to that of an EZYPass used on the East Coast;
- A driver’s cell phone; or
- A GPS already installed in most modern cars.
It’s important to note that devices used to track drivers’ mileage would not track locations, simply the amount of miles a driver as gone. For example, if a driver begins their day at work, then drives to the doctor’s office, then drives home, the device wouldn’t be able to read the physical locations. The device would only read the distance traveled.

A VMT tax offers more flexibility than a standard gas tax. The VMT tax could be higher for those who drive in urban areas, and lower for those who drive in rural communities reflecting concerns about regressive impacts on rural areas from higher gas taxes. It can also be used to leverage greater revenue from drivers who strain the roadway network, such as a single driver with no passengers in rush hour. The tax also has the flexibility to account for rising CAFE standards, because drivers will not be able to avoid the tax by driving a more fuel-efficient vehicle. This is a critical difference from a gas tax, because gas taxes do not account for fuel-efficient or electric vehicles. This demonstrates that a VMT tax would allow for increased HTF revenue while also encouraging a reduction in fuel consumption.

There are, however, multiple factors that should be considered before implementing a VMT tax. The technology used for mileage collection would have to be affordable and include accessible technology. The federal government could use state or national pilot programs to determine subsidy amounts for those in need. Additionally, the technology used to track mileage and store the data it collects, would have to be regulated, accounting for the privacy of drivers.

**Possible VMT Tax Revenue Gains & Social Outcomes**

Scholars from the University of Arizona, University of Houston and Brookings Institution published an [analysis](#) on what would happen if a VMT tax was implemented. They found that by implementing a VMT tax at $0.218/urban mile driven and $0.038/rural mile driven, HTF revenue would rise to $55 billion a year.

By using these differentiated urban/rural VMT taxes, they also found that the most populous and urbanized counties would reap the largest social benefits because they would be charged the greatest VMT tax. This is because the tax would encourage less driving, which could reduce congestion within urban cores. Another benefit to a higher VMT tax in urban areas with high congestion levels, is that the tax could help pay for the cost of some, or most, new local projects; including those offering alternatives, such as transit.

**VMT Pilot in Oregon**

Oregon’s DOT began [noticing](#) in the early 2000s that their gas tax revenue wasn’t keeping pace with the rise in fuel-efficient vehicles. To combat this, in 2006 Oregon recruited [300 drivers](#) to be a part of their statewide VMT tax pilot. They requested that each driver pay 1.5 cents per mile and waived them from paying the state gas tax. The drivers paid for their total miles driven mileage fee at the pump, based on a system of local zoning. The one objection that the Oregon DOT heard the most from drivers was that they felt their privacy was being invaded by the government-installed device in their personal car. This was quickly remedied and they decided the drivers should be able to chose their own tracking mechanism.

They found such great success in this pilot, they [ran it again](#) in 2012. This time, the drivers were not paying at the gas pump, but rather at the end of the three-month study period. That pilot was again so successful, they launched a [permanent program](#) in July 2015, capping participation at 5,000 vehicles. The participating drivers are charged 1.5 cents per mile, which is measured by a GPS device (of their choosing) in their car. Participants are excluded from paying state gas taxes and are not required to pay for out-of-state travel. The GPS used in the participant’s vehicle can map specific local zones and outside states, ensuring the areas are differentiated. In order to protect the privacy of drivers, Oregon passed state legislation that requires all GPS data gathered by the state government or third-party vendors must be destroyed within 30 days.
Oregon has found its VMT program to be gaining public popularity. The Oregon DOT polled state residents and found that in 2017, 74 percent of respondents liked the VMT tax, compared with just 35 percent in 2014. The Oregon DOT also released a report that states “The most important learning of the OReGO test program is that the system works: charging drivers by the mile instead of gallon consumed is possible.” They also found that rural communities are not disproportionally charged:

![Map of Oregon with pay more, pay same, and pay less indicators](image)

*There is a common misconception that rural drivers will be penalized by adoption of a road usage charge. The map above reflects a 2016 analysis done by Oregon State University about the impact of a road usage charge on households statewide.*

**How Would These Proposed Revenue Mechanisms Affect CTAA Members?**

Since 1978, the IRS has allowed an exemption from the federal fuel tax for local governments and certain entities performing government-type work, i.e. – public transportation operators. The intention of the IRS exemption, a result of the 1978 Energy Act, was to encourage people to ride transit by making it cheaper to operate transit vehicles, thereby inspiring lower fares and (hopefully) higher ridership. This means that those generally those affected by the gas tax are drivers and truckers.

A 2018 legislative push by Former House Transportation and Infrastructure Chairman Bill Shuster sought to eliminate this exemption. His argument was that transit agencies used 603 million gallons of diesel fuel in 2017 and that this would be a large source of revenue for the HTF. What this legislative push didn’t account for, however, was a flexible tax rate on gas; or a different rate between urban, small urban and rural transit providers. Many agencies reported that they would be forced to hike fares, cut service or advocate for higher local taxes if this kind of federal gas tax was enacted.

This kind of insight demonstrates that the new method(s) of investment should continue with this exception for transit providers. Transit operators would be severely impacted by these increased costs; as many providers already struggle with tight operating budgets.
**A New Federal Solution**

CTAA believes that a solution to increase revenue for the HTF should be sustainable, consistent, and indexed. If the solution is an increased gas tax, CTAA advocates for an annual inflation adjustment and a tax that is re-examined every five years to make sure the amount taxed is still relevant. The gas tax should also take into account the growing future of fuel efficient vehicles, electric cars and AVs. If more and more people are using these types of vehicles, will Congress be forced to restructure the system once again? If the solution is a new VMT tax, CTAA believes the federal government should ensure that rural communities are not disproportionately charged and that the technological implementation does not infringe on the privacy of citizens.

CTAA recognizes that the solution should not be a one-size-fits-all, nor be achieved by a sole method. What’s best for investment could be a combination approach, allowing all drivers to be charged regardless of their vehicle type. It is time for Congress to act. Election results where state and local gas taxes were raised yielded strong rates of re-election for candidates who supported those measures. The majority of Americans recognize the need for sustainable surface transportation investment and are willing to pay more to see these goals achieved.