

# Issue Brief

MAY 10, 2021  
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## Repairs Needed on How We Finance Roads: Options to Fix the Highway Trust Fund

The month of May contains many important calendar marking events: Memorial Day, Mother's Day, and of course, National Infrastructure Week (May 10-14, in case you didn't have it marked down). National Infrastructure week is often considered a punchline around Washington, as it serves to raise awareness of the infrastructure policy challenges that Congress has failed to address by passing a comprehensive infrastructure package. But this year feels different; passing an infrastructure bill is possible and less like the butt-end of a joke.

In years prior, politicians have talked a big game about doing something on infrastructure. In an infamous 2019 meeting between then-President Trump and Congressional leaders, the two parties agreed on a \$2 trillion infrastructure deal, yet as they got into the details of what that would look like, the deal fell apart. But in recent weeks, President Biden, Senate Republicans, and the moderate House "Problem Solvers Caucus" have each unveiled their own blueprint for a comprehensive infrastructure package. Democrats and Republicans on paper are far apart when it comes to what will be included in such a deal, but they are reported to be negotiating in good faith, a necessary first step on how to pass a bipartisan bill.

### Key Facts:



Most federal transportation spending comes from the Highway Trust Fund, but due to flat revenue and high outlays, it is approaching insolvency.



Thankfully, there are many options available to make the Highway Trust Fund finances sustainable for the long term, such as new revenue streams, regulatory reforms, and ending the diversion of gas tax revenue.



One innovative solution is to fund highways by taxing vehicle miles traveled instead of having a federally-imposed tax on gasoline. A tax on vehicle miles traveled would be a true user-fee and could close the Highway Trust Fund deficit.

While much will be discussed on what projects will be built, regulatory reforms, labor reforms, and procurement reform, the most significant challenge to any deal always comes down to money: how will it be paid for? This delicate balance on how to finance a deal often sinks the deal. Democrats usually want to increase taxes and put the rest of the spending on the national credit card, whereas Republicans generally are hesitant to raise taxes and would rather cut spending from the regular budget as a pay for.

NTU believes that federal, state, and local governments, in conjunction with private sector businesses should play an important role in ensuring Americans have adequate roads, bridges, tunnels, airports and seaports. This year, I released a series of papers exploring how the Congress can remove barriers that artificially increase the cost and development time of important infrastructure projects. In a [piece from February](#), I wrote about more than a dozen pieces of legislation that would lower labor costs and procurement costs, which drastically increase the cost on businesses to actually build these construction projects. In a separate [piece from April](#), I took an in-depth look at the National Environmental Policy Act, which is often the biggest impediment to bringing construction projects online in a timely and efficient manner.

One of the biggest questions lawmakers will have to answer is how to shore up the Highway Trust Fund (HTF), which is funded by the federal excise tax on gasoline and used to fund surface transportation projects nationwide. The gas tax used to be one of the most efficient user fees imposed by the federal government: drivers would pay at the pump and that money would be used to restore roads that those same drivers use on a daily basis. In recent years, however, the rise of electric vehicles and more fuel efficient vehicles have undermined this tax as the most efficient user-pay, user-benefit model.

One way to address this issue is for the Congress to assign fees that more evenly distribute the burden of transportation costs across all vehicles, including electric vehicles. Additionally, it should immediately conduct a national pilot program on how to transition away from the gas tax.

So, as Congress yet again sets a goal to enact a large-scale infrastructure bill, policymakers must pair new and existing spending with reforms to the gas tax. Adding to the national debt without regulatory reform, proper oversight, and careful prioritization is financially unsustainable and irresponsible. Furthermore, such spending will only further metastasize a bureaucratic, federally driven process that has plagued Washington for decades.

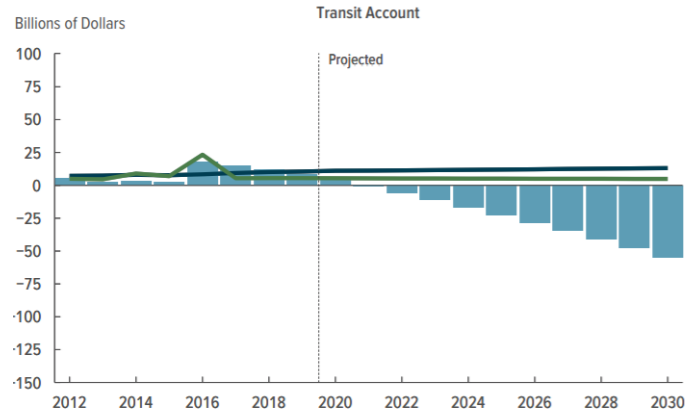
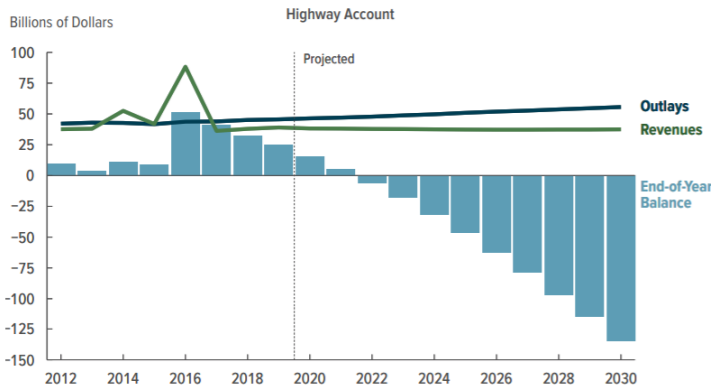
## **Challenges Facing the Highway Trust Fund**

The United States federal government funds the majority of highway and transportation spending through the Highway Trust Fund (HTF). The dedicated fund receives revenue from a series of excise taxes on gasoline, then distributes that revenue to state and local governments in the form of grants to pay for transportation projects. It is not required that the HTF spend every dollar it takes in, as any unused revenue can be saved in the fund for future purposes. The HTF, however, cannot borrow money and must depend on its reserves when expenditures exceed revenue

The overwhelming majority of HTF revenue - between 80 and 90 percent - is generated from excise taxes levied on the sale of gasoline and diesel fuel, currently imposed at a rate 18.3 cents per gallon and 24.4 cents per gallon respectively. These taxes have not been increased by the Congress since 1993, nearly 30 years ago.

Technological innovations in the automotive industry have changed a lot over the last three decades. Today, the solvency and long term sustainability of the HTF is in serious jeopardy. On both sides of the balance sheet, the HTF faces a series of challenges: dwindling revenue and growing outlays. The Congressional Budget Office estimates this imbalance will lead to cumulative deficits of \$189 billion over the next ten

year budget window. Because the Highway Trust Fund by law is not allowed to run a negative balance, it falls on every taxpayer to fund the general fund transfer from the regular budget into the HTF.



Source: CBO

It should also be noted that each state levies its own gas tax, which can widely differ depending on the state. California, for example, applies a tax of 62.47 cents per gallon, the highest in the country, while Alaska only charges their drivers 13.77 cents per gallon, the lowest of the fifty states. Like the federal gas tax, the state-imposed rates generally go towards highway projects in each respective state, though many states divert this revenue towards non-highway projects.

No doubt, taxpayers don't like paying taxes, but the gas tax is one of the more efficient ways to finance infrastructure because it embodies the "user-pay, user-benefit" principle. Since drivers are the ones tearing up roadways, they should be required to pay taxes to fix those roads. In general, drivers benefit from the services that their gas tax dollars pay for, like road construction, maintenance, and repair. Because gas taxes connect drivers to the costs of road upkeep, they encourage efficient road use, which helps limit congestion and the wear and tear that comes from overuse.

In earlier years, the HTF was a model for how to create a well-functioning trust fund. The user-pay, user-benefit system worked, and worked well. Today, not so much. The deficits of the HTF are a result of three major issues.

1. **Fuel Efficiency.** Fuel efficiency measures the distance a motor vehicle can travel on a single gallon of gas. Today, fuel economy standards are almost 50 percent higher than they were 30 years ago. As a result, the improved fuel efficiency of cars has decreased trust fund revenue. Consumers now need less gas in order to drive more miles, which means they drive more (more wear and tear) while lowering tax receipts used to repair those same roads.
2. **Electric Vehicles.** An electric vehicle contains a motor that is powered by electricity rather than gasoline. Driven by lavish government incentives through market-distorting tax credits, the EV market has grown steadily over the course of the last decade. However, more mainstream use of EVs bodes poorly for the HTF. Since EVs do not use gasoline, drivers can avoid the gas tax entirely. As a result, drivers use roads but do not have to pay into the fund that repairs the wear and tear on those same roads.
3. **Diversion of Gas Tax Revenue.** The revenue derived from the gas tax is allocated to one of two buckets: the Highway Account and the Mass Transit Account. Money deposited into the Highway Account is used to fund roads and bridges, whereas the Mass Transit Account is used to fund transit projects unrelated to driving, such as rail projects, buses, and streetcars. The Highway Trust Fund receives a majority of its funding from taxes on gasoline and diesel

fuel, rooted in a user-pay assumption that these revenues will be used for federal highway construction and maintenance. The Mass Transit Account violates this model by diverting billions of dollars to fund everything from street cars to light rail systems. Indeed, the Mass Transit Account represents the second-largest expenditure from the Highway Trust Fund, just after the Highway Account.

## Potential Solutions to Shore Up the HTF

It's clear that the status quo is no longer tenable; the current and future financial standing of the HTF is unsustainable and will require significant general fund transfers in the near-term. This reality puts an unfair strain on all taxpayers to financially support a trust fund that is meant to be self-sustaining. Thankfully, all hope is not lost, so long as Congress acts as soon as possible. The longer Congress waits to act the more extreme the solution will have to be. Nevertheless, there is a menu of options that Congress can take to make the HTF a model user-pay, user-benefit once again. Unfortunately, some of these options may be politically tough for Democrats and Republicans to agree upon, but for the good of drivers nationwide, some reforms must be implemented.

The options below represent a mix of short and long term ways to address the sustainability of the HTF:

**Replace the Gas Tax with a VMT Fee.** While the gas tax has historically been an efficient user-pay, user-benefit model, the existence of EVs and more fuel efficient cars have eroded the success of the gas tax. Given that the growth of the EV market share is expected to continue over the long term, we can expect continued decline in gas tax revenues. In order to become a true user-fee, Congress should consider enacting a fee on each mile driven by every passenger car or truck. Instead of using fuel consumption as an indicator for road usage, charging drivers for actual road usage would fully account for EVs and hybrid vehicles. This potential replacement of the gas tax would also be more fair and better respect the benefit principle.

In practice, there would be no difference between a car that runs on gasoline, electricity, or a mix of both. No matter which type of vehicle a driver prefers they would pay the same rate as any other passenger vehicle. The Committee for a Responsible Federal Budget estimates that a 1-cent per mile fee on all vehicles would raise about [\\$15 billion annually](#). However, heavy duty trucks would likely need to be subjected to a higher fee (similar to the higher fuel tax they already pay) to account for the significant wear and tear they place on roadways. CRFB also estimates that a 5-cent per mile fee on commercial trucks would raise \$16 billion annually - a significant sum.

Lawmakers, economists, and experts agree that a VMT is fundamentally sound policy, but its implementation remains a serious hurdle. The most significant issue is addressing how these miles would be tracked and how such a fee would be paid. Some experts propose options such as a flat cent per-mile charge based on a simple odometer reading, a computer-based mileage tracker, or a GPS-based system that monitors vehicle movements. These proposals no doubt invite some concerns due to privacy issues, potential avoidance, and administrability.

**Impose a Vehicle Miles Traveled (VMT) Fee Solely on Electric Vehicles.** As has been previously mentioned, a major selling point for individuals to purchase EVs is the tax avoidance component: drivers can receive a one-time \$7,500 tax credit and do not have to pay gas taxes since their car does not run on gasoline. It's a good deal for EV owners, but not for the rest of taxpayers and drivers who pay into the HTF. The implementation of a VMT fee on all vehicles could be challenging, but imposing a VMT fee solely on EVs could fix the most glaring issue of tax avoidance that currently exists between EVs and gas-powered vehicles. It doesn't fully transition the gas tax model towards a VMT, but it would buy time as Congress figures out how best to proceed.

In fact, many of the administrative concerns could be mitigated through this approach. Since EVs contain high-tech computer technology, it may be easy for car manufacturers to track the distance and number of miles a car has traveled over the course of a year. This information could be reported back to the individual who owns that vehicle so they could file that information, and corresponding tax liability, to the IRS where it would be deposited into the HTF.

**A VMT Fee Pilot Program.** At the very least, Congress should authorize the Department of Transportation to conduct a large-scale pilot program to better study how a VMT fee would most efficiently operate. While the 2015 FAST Act authorized some funding for states to conduct their own pilot programs on user-based alternative revenue streams, no such pilot program has been done at the federal level. In 2020, however, the House passed H.R. 2, the “Moving Forward Act” which increased funding for state VMT pilot programs and would have established a national VMT pilot program at the DOT. Though there were [many dubious provisions of H.R. 2](#), NTU praised the inclusion of a VMT pilot program and we urge Congress to include this language in the next surface transportation reauthorization bill.

**Move the Mass Transit Account to the Regular Budget.** Revenue deposited into the HTF is meant to fund roads and bridges (the Highway Account), but a sizable portion of that money goes towards non-highway items (the Mass Transit Account). As a result, there is an imbalance between revenue and spending in the Highway Account that could be improved by moving resources to where they will be spent on actual roadways. With this fix, the revenue would remain constant but the outlays would be cut significantly since the HTF would only fund the Highway Account and not the Mass Transit Account. Most importantly, it would focus more funding on actual road and bridge repairs that drivers rely on daily.

Congress should end the diversion of HTF spending on non-highway projects by moving the Mass Transit Account into the federal budget like other programs Congress funds. If lawmakers view the Mass Transit Account as “essential,” it should be funded through the regular appropriations process. If it’s not viewed as “essential,” Congress should reform or scrap the program all together.

**Index the Gas Tax to Inflation.** One of the more undesirable options to addressing the ailing financials of the HTF is to raise the gas tax and index it to inflation. [According to CBO](#), raising the gas tax by 15-cents per gallon would raise \$30 billion annually, more than enough to cover the projected HTF short-fall. This option would constitute a potentially large tax increase on taxpayers, but since the gas tax is considered a user-fee and falls mostly on consumption it is less harmful and less distortive than other tax increases that could be considered.

NTU has historically been opposed to previous attempts to raise the gas tax at the federal and state levels. Nevertheless, if Congress were to consider a gas tax increase, it should be paired with ways to maximize every dollar spent. Specifically, any tax increase should include regulatory reforms, procurement reforms, and labor reforms to make every taxpayer dollar stretch so more infrastructure can be built. Perhaps most importantly, it should also be paired with a pathway to transition away from the gas tax towards a VMT fee since taxing declining fuel consumption would not be a long-term fix for the trust fund and could prompt future tax increases on motorists.

## Conclusion

The Highway Trust Fund is set to run a significant deficit over the next decade and policymakers need to address it. While lawmakers are debating whether to spend trillions of dollars on new infrastructure, they should be focusing on how to reform the existing infrastructure funding mechanisms that are going broke. NTU recognizes there may be no silver bullet solution to this problem and some trade offs will likely be required in order to ensure the sustainability of the HTF. Congress must work on ensuring this

fund is self-supporting in the years to come. That could mean broadening the user fee base to include electric vehicles through a VMT fee.

A path forward is possible that protects taxpayers as well as the “user-pay, user-benefit” model that has made the HTF successful. Technological innovations have threatened the viability of the fund, but forward-looking policy can rectify this problem.

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