

# Statement of Jeff Davis Senior Fellow, Eno Center for Transportation

## Before the NC FIRST Commission July 12, 2019

Mr. Chairman, Commissioners, thank you for having me here today. My name is Jeff Davis and I am a senior fellow at the Eno Center for Transportation, a non-partisan think tank founded in 1921 by traffic safety pioneer William Eno that examines transportation issues across modes and across the levels of the federal-state-local government chain.

103 years ago, in 1916, Congress enacted the first law to provide funding aid for states to improve their roads. In order to raise their 50 percent matching share for these new federal grants, states had to raise new revenues. Oregon was the first state to levy a tax on gasoline, in 1919, and dedicated the proceeds of that tax to pay for roads, just as auto registration fees were already being used. Other states, after debating whether or not to use their normal property tax revenue base for roads, quickly followed suit (North Carolina did so in 1921). The rate of adoption by states was astounding – in just ten years, all 48 states and the District of Columbia had levied gasoline taxes.

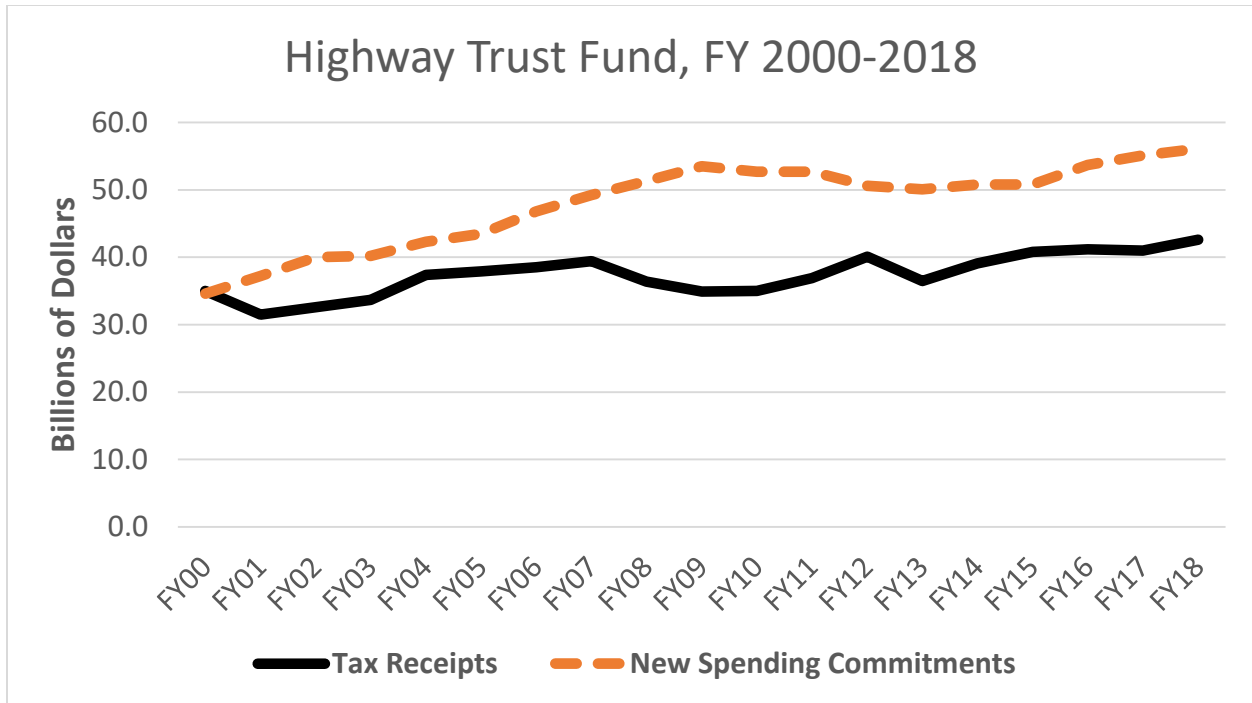
The federal government stayed out of the gasoline tax arena, but the onset of the Great Depression forced their hand. Federal income tax receipts collapsed, falling by more than 50 percent after the stock market crash despite increased tax rates. Customs duties also dropped by almost half. But Congress saw how state gas tax receipts went against this trend and actually increased during the Depression, so Congress taxed gasoline solely as a general deficit reduction measure in 1932.

Recognizing that states were using fuel taxes primarily for roads, Congress (hypocritically) passed a law in 1934 to take away part of a state's highway funding if the state used its gas tax for other purposes. This eventually developed into a *post hoc* user-pay rationalization, which was put on a sounder footing in 1952 when Congress passed a law encouraging federal programs to be made self-sustaining through user fees. The White House budget office took this as gospel

and has been encouraging the user-pay model ever since. Excise taxes or user fees are levied on a sector or group and deposited in a special fund, and the proceeds of that fund can only be used to pay for programs that provide direct benefit to those who paid the excise tax. The federal government put highways on a user-pay basis with the creation of the Highway Trust Fund (HTF) in 1956, followed by aviation in 1970, inland waterways in 1978, mass transit in 1982, and harbors in 1986.

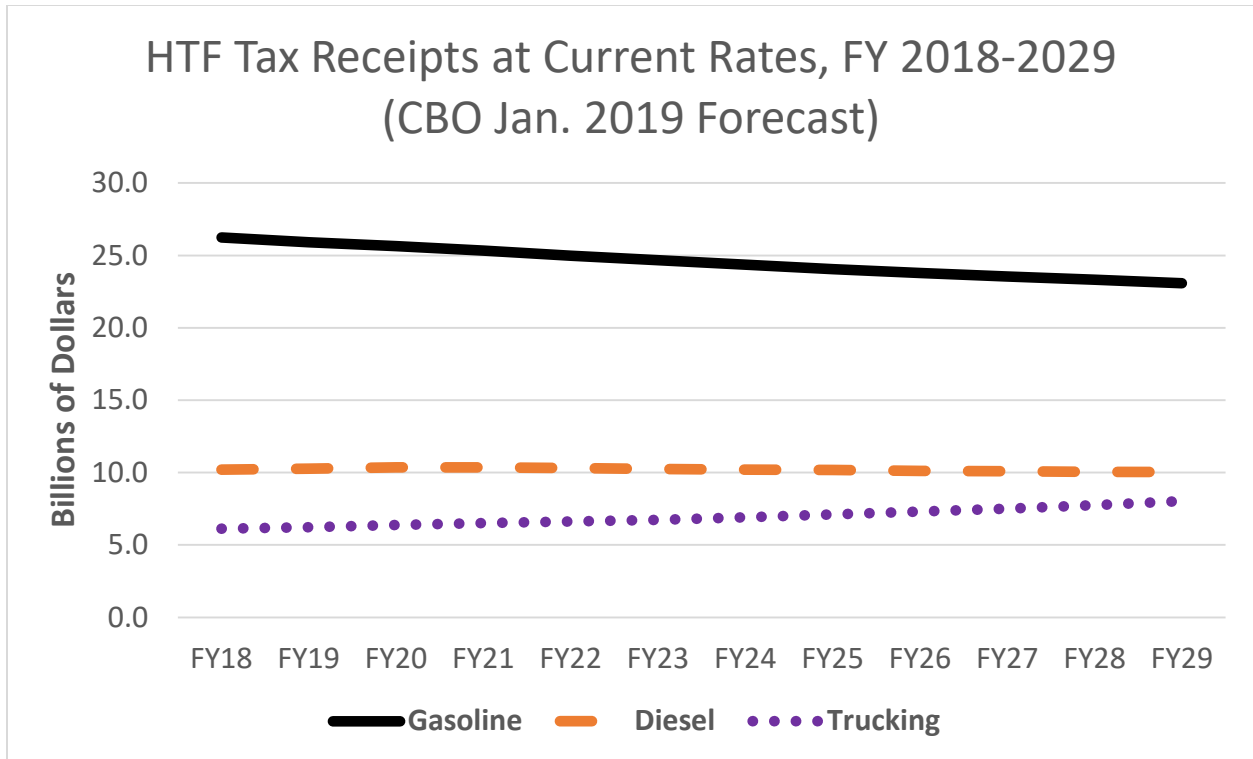
An important theoretical aspect of the user-pay concept is cost allocation. In order to be fair, the government must determine the actual costs incurred by various classes of system users (not just direct costs like pavement and bridge wear-and-tear but also, possibly, externalities like congestion, noise, air quality, and safety risk) and then tailor the revenue scheme so that the taxes and fees paid by each class of user matches up with the costs they incur. It is also very important that revenue sources be stable, not volatile, since those revenues are going to be pledged against long-term spending.

Unfortunately, the federal Highway Trust Fund's user-pay model has been broken for some time. The whole point is to match user tax receipts with spending on programs to benefit users. But Congress has not increased HTF excise taxes since 1993 (the 1993 tax increase was not actually deposited in the Trust Fund until 1999). Since 2000, those tax receipts have only increased at about 1.2 percent per year, but Congress has kept on enacting laws that have allowed new Trust Fund spending commitments to grow by an average of 3.5 percent per year.



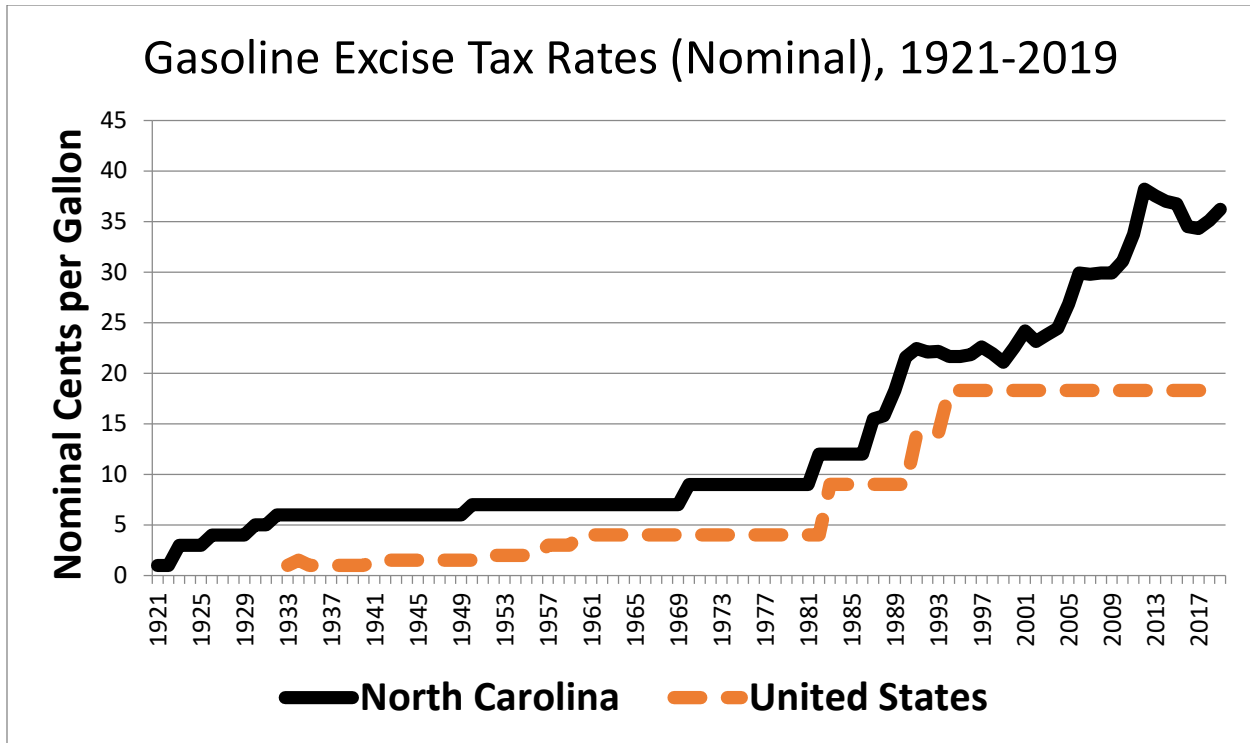
One can look at this chart and ask, how can this continue? Well, we all live in a world governed by Stein’s Law, which says, simply, that “Things that can’t go on forever, don’t.” The Highway Trust Fund ran out of money in September 2008 and, since then, Congress’s inability to either cut spending or increase excise taxes has necessitated \$140 billion in bailout transfers from general revenues. The last such bailout, the \$70 billion provided by the FAST Act of 2015, is projected to run out in summer 2021.

The old model, where the annual growth in the number of gallons sold each year was enough to make up for the fact that the cent-per-gallon rates were not increasing, is no longer valid. The Congressional Budget Office projects that, at the current tax rates, annual gasoline tax receipts will decrease by about 1 percent per year, and diesel tax receipts will decrease slightly less. Put another way, in 2019, every penny of motor fuels taxes brings the Trust Fund about \$1.84 billion, but in a decade, that will drop to \$1.68 billion per penny. The Trust Fund also receives trucking excise taxes that are projected to grow between 2 and 3 percent per year, but in dollar terms, it is the gas tax, not diesel or trucking, that is the mainstay of Trust Fund support.



The Trust Fund is currently in the process of running a \$12 billion cash deficit in 2019, and CBO projects that at current tax rates, and allowing annual inflation increases for spending, that annual deficit will rise to about \$26 billion per year in a decade. \$102 billion in additional funding will be needed to support a six-year reauthorization bill, and \$176 billion would be needed to keep the Trust Fund solvent for a decade at these levels.

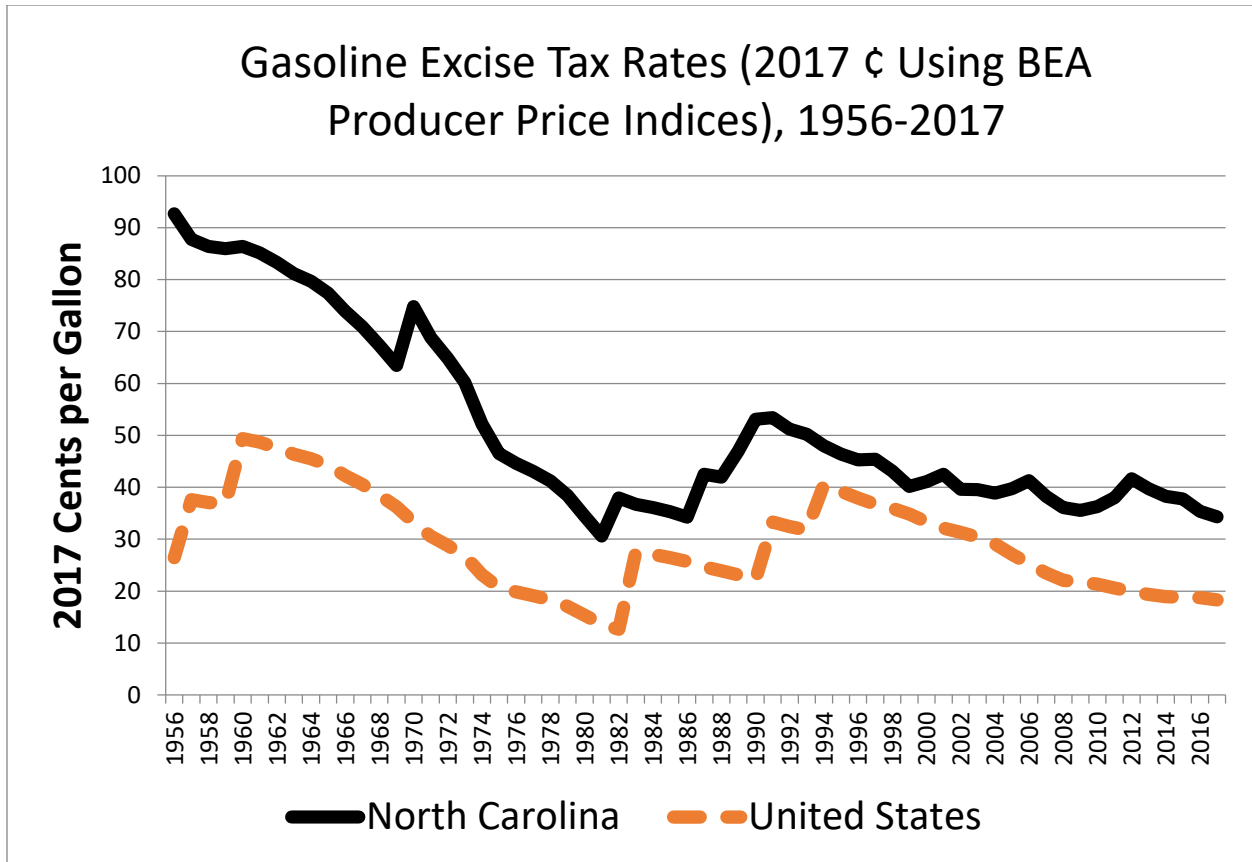
Unlike the federal government, North Carolina has increased its motor fuel tax rates more or less consistently over the last 20 years.



Source: <https://www.ncdor.gov/taxes/motor-fuels-tax-information/motor-fuels-tax-rates> and FHWA Table FE-101A.

However, both North Carolina and the federal government have lost tremendous amounts of buying power over the decades. The most commonly used measure of inflation is the Consumer Price Index, which is an excellent measure for how a tax is felt by the average consumer as a part of their cost of living burden. But it is a poor measure for how much asphalt, concrete, gravel, structural steel, and #2 diesel fuel can be bought, or how much earthmoving services or construction labor cost.

The Congressional Budget Office has used Bureau of Economic Analysis “producer price indices” to analyze [total public spending on infrastructure from 1956-2017](#) in constant 2017 dollars based on the real cost to government of building, and maintaining infrastructure. By those measures, North Carolina’s gas tax rate in 1956 was the equivalent of 93 cents per gallon in 2017 and has lost value ever since. The federal tax rate peaked at the 2017 equivalent of 49 cents per gallon in 1960. In both cases, the real buying power of the gas tax is now about what it was in the early 1980s, before the big 1982 tax increases.



At the federal level, simply filling the Trust Fund revenue gap for a six-year reauthorization bill at baseline spending levels (2018 plus annual inflation) would, if filled entirely with a motor fuels tax increase, require an immediate 9 cent per gallon gasoline and diesel tax increase. Additional increases would be necessary to extend the Trust Fund past 2026 or to provide program growth above inflation.

However, simply increasing fuel taxes won't fix a broken cost allocation system. The last highway cost allocation study was conducted in 1997, and its results were ignored. Congress has not tried to sync user taxes with costs incurred by users since 1982. It was clear in the 1997 study that the heaviest trucks drastically underpay for the costs they impose (to the tune of thousands of dollars per vehicle in some cases), while pickup trucks and SUVs slightly overpaid at that time. Since then, hybrid and electric vehicles have come along and pay somewhere between less and zero for their road use.

At the federal level, motor fuel taxes are still the best option, at least for the next 10 to 20 years. Motor fuel taxes, levied at the wholesale tank farm, are incredibly

easy for the IRS to administer, with fewer than 2,000 points of collection nationwide. Switching to driver-based or car-based user tax systems would force the IRS to go from fewer than 2,000 points of tax collection to 225 million (drivers) or 275 million (cars) points of tax collection – an increase of over 100,000-fold, and all to collect a tax that currently averages around \$120 per driver per year. If better cost allocation is desired, other revenue sources could then supplement – not replace – fuel taxes.

And when I said earlier that the Trust Fund would require an immediate 9 cent per gallon fuel tax increase to support a six-year baseline reauthorization bill, it's a little bit more complicated than that. As part of the political compromise to get urban votes in Congress for the 1982 gas tax increase, it was agreed that 20 percent of that fuel tax increase, and of all future fuel tax increases, would not go to highways but would instead be deposited in a Mass Transit Account of the Trust Fund. But since then, Congress has increased transit spending by a greater percentage than it has increased highway spending, to the point that that 80-20 split is also broken.

The Highway Account of the HTF only needs 80 percent of an 8.5 cent per gallon tax increase to stay barely solvent for 10 years, but the Mass Transit Account needs 20 percent of an immediate 13.5 cent per gallon increase to stay barely solvent over the same period. A 13.5 cent increase split 80-20 would keep transit spending at the bare minimum 2018-plus-inflation levels but would give highways about \$80 billion above baseline over that same period.

Spending policy levels and priorities from the Trust Fund are still based on the assumption that the Trust Fund is entirely supported by user taxes. That hasn't been the case for 11 years, and if the next reauthorization bill continues the bailout approach instead of raising actual user taxes, there is no rational reason to keep harping on user-tax-only concepts like "rate of return" or modal split, and Congress could redesign programs to be more flexible and multimodal.

Another way in which the program is stuck in the past is the formulas by which federal highway funding is distributed to states. I was recently asked by several states how much highway funding they would stand to gain or lose in the event of a systemic 2020 Census undercount, and the answer was: zero. Neither state population, nor road-miles, nor vehicle travel, nor air quality, nor any other real-

world metric, except for Highway Account tax contributions, now has any bearing on highway funding distribution.

Under the FAST Act, as under the prior MAP-21 authorization law, North Carolina is entitled to 2.66 percent of federal highway funding through 2020. Why 2.66 percent? Because that is basically what the state received in fiscal 2009 under the formulas in use at that time, with its then-92-percent gas tax donor state adjustment and its relatively low share of the bonanza of earmarked projects in the 2005 transportation law.

**NORTH CAROLINA’S FY 2009 HIGHWAY APPORTIONMENT CALCULATION**

	NC Total	U.S. Total	NC Share
Factor-Based Formulas (Lane-miles, VMT, population, fatalities, bridge cost, safety, etc.)	\$697.4 million	\$26,205.5 million	2.6612%
Equity Bonus to get NC to 92% gas tax rate of return (% in vs % out)	\$316.4 million	\$9,591.8 million	3.2986%
SAFETEA-LU Earmarks	\$66.5 million	\$4,450.7 million	1.4941%
<b>EQUALS</b>	<b>\$1,080.3 million</b>	<b>\$40,248.0 million</b>	<b>2.6841%</b>
FY14 adjustment to get TX to 95% rate of return (\$\$ in vs \$\$ out)			-.0209%
<b>NC guaranteed share for FY 2015-2020</b>			<b>2.6632%</b>

With the exception of slight adjustments to keep Texas at a 95 percent rate of return, each state just continues to get the same share of the program it received in 2009, whether or not any of the underlying facts have changed. This makes no sense, and if Congress really wants to fix the user-pay system, a more rational basis for funding distribution is needed.

**NORTH CAROLINA’S FAST ACT HIGHWAY FUNDING**

	NC Share	Times U.S. Total	Equals Base	TX 95% Adjust. ?	NC Final
FY 2015	2.6632%	\$37,798.0 million	\$1,006.6 million	none	
FY 2016	2.6632%	\$39,727.5 million	\$1,058.0 million	none	\$1,058.0 million
FY 2017	2.6632%	\$40,547.8 million	\$1,079.9 million	-\$7.0 million	\$1,072.9 million
FY 2018	2.6632%	\$41,424.0 million	\$1,103.2 million	-\$5.3 million	\$1,097.9 million
FY 2019	2.6632%	\$42,358.9 million	\$1,128.1 million	-\$1.7 million	\$1,126.4 million
FY 2020	2.6632%	\$43,369.8 million	\$1,155.0 million	?????	?????



In conclusion, Congress is long past the point where it should decide to mend, or end, the user-pay system for highway and mass transit funding. They can restore the user-pay system, which would require some combination of significant user tax increases and, possibly, spending cuts. Ideally, this restoration would also include fairer cost allocation and a more sensible, rationally-based method for distributing funding to states.

Or, they could dispense with the user-pay method altogether. This would involve abolishing the Highway Trust Fund, redirecting motor fuel and trucking excise taxes to the general fund of the Treasury, and forcing highway and transit interests to join the long line of petitioners for annual discretionary appropriations. These programs have a strong enough political support system to indicate that they could do rather well in that process compared with other non-defense spending needs, but the annual budget process is inherently does not grant long-term funding certainty, which is a crucial factor in federal-state partnership programs such as highways and transit.

This concludes my presentation, and I would be happy to take any questions.

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