

TESTIMONY

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FUNDING THE STATE HIGHWAY SYSTEM WITH INCREASED FUEL TAXES

By Joseph Miller

Testimony Before House Transportation Committee

To the Honorable Members of This Committee:

My name is Joseph Miller, and I am a policy analyst for the Show-Me Institute, a nonprofit, nonpartisan Missouri-based think tank that supports free-market solutions for state and local policy. The ideas presented here are my own. This testimony is intended to summarize research that analysts for the Show-Me Institute have conducted and reviewed regarding proposals to fund the state highway system and the use of fuel taxes for that purpose.

Upon the legislature's approval, Missouri House Bill 738 (HB 738) would remove the state's 17 cent per gallon fuel tax and replace it with a 10.5946 percent tax on the average wholesale price of fuel. The average state wholesale price of a gallon of fuel would be the average of the past six months, recalculated biannually. Assuming fuel prices were to remain as they are today, total state revenue would change very little by the introduction of HB 738. However, fuel prices recently decreased significantly, and if prices rise again, the additional revenue created by this bill could be substantial. For example, should prices increase to their 2012 average in the Midwest (\$2.874 per gallon), total revenue would increase by approximately \$497 million annually, 70 percent of which (\$348 million) would go to the Missouri Department of Transportation (MoDOT) and 30 percent of which (\$149 million) would go to cities and counties.1 Of course, prices could increase much more (or fall), changing revenue amounts. At four dollars a gallon, Missourians would be paying a fuel tax equivalent to 42 cents a gallon. At a wholesale price at \$1.50 a gallon, the fuel tax equivalent would be 15.9 cents a gallon.

In recent decades, Missouri's state highway system has improved both in terms of quality and safety, and it ranks well against other states on many performance measures.² To maintain and improve this system in the future, Missouri will have to make timely infrastructure investments. However, MoDOT, the agency tasked with building and maintaining most of our state's transportation infrastructure, has an unsustainable funding trajectory. Despite cuts to staff and other cost-saving measures, cash available for MoDOT's construction projects have been cut considerably in past years, preventing the department from adding any new projects to the State Transportation Improvement Project (STIP). By 2017, MoDOT's construction budget will fall to \$325 million, \$160 million less than what the agency claims to need to maintain the system in its current state.3

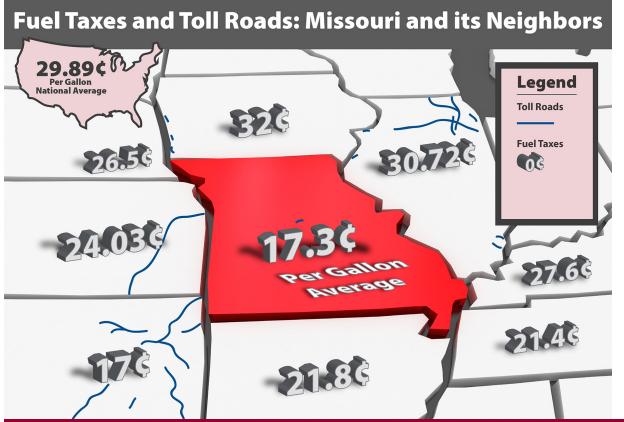
MoDOT's funding model has broken down primarily because at both the federal and state levels the gas tax has not increased. Today approximately 66 percent of the dedicated funding for state roadways comes from state and federal gas tax proceeds.4 The gas tax in Missouri has remained at 17 cents per gallon since 1996, and the federal gas tax has not changed since 1994.5 If we account for inflation, Missouri's gas tax has lost a third of its purchasing power. At the same time, road design specifications have improved and material costs have increased faster than inflation, making project construction more expensive.⁶ In addition, higher fuel efficiency in motor vehicles means that Missourians consume more road while paying less tax. Therefore, MoDOT has seen its costs rise and its revenue fall.

MoDOT avoided having to deal with funding issues for the last

decade because Amendment 3 to the Missouri Constitution authorized billions of dollars in bonds, and the state received federal stimulus dollars.⁷ Thus, MoDOT could increase its transportation spending even as its long-term tax base eroded. Essentially, Missouri drivers received new or repaired roads and bridges without being asked to create a system to pay for their construction or long-term maintenance.

The best policy moving forward is for Missouri to modernize its user-pay model so that it can fund necessary transportation infrastructure into the future. Unlike general taxes, which are not tied to use, fuel taxes represent indirect user fees, as the gas tax charges drivers who actually use the roads. According to the state constitution, virtually all proceeds from the gas tax at the state and local level must be spent on roads. Under these circumstances, the gas tax creates

a connection between funding for roads and the demand for roads. If the gas tax is at an adequate level, as Missourians drive more, MoDOT would receive more money to maintain and construct highways. User-fee solutions include raising the gas tax, as HB 738 would, but also tolls on major roads and bridges throughout the state.



The gasoline tax in Missouri is relatively low compared to other states. As of Jan. 1, 2015, Missouri had the fifth-lowest gasoline tax and the fourth-lowest diesel fuel tax in the nation.⁸ Among its neighbors, Missouri has the second-lowest fuel tax. Oklahoma, the only neighboring state with a lower fuel tax (17 cents per gallon), makes extensive use of tolling.⁹

While having a low tax is not a bad thing, it is irresponsible when the expenditures it is designed to cover are being paid for through debt and federal aid. Furthermore, raising the gas tax is a feasible solution to MoDOT's funding problems.

The decline of the effectiveness of gas taxes can be overstated. Missouri's total fuel consumption has only decreased very slowly over the last decade, and it has actually increased by 0.171 percent in 2014.10 If current trends hold, fuel taxes can provide an adequate user-funding base for MoDOT over the next decade. Furthermore, fuel taxes also have the advantage of being the simplest option for the legislature to take, as it may raise this tax by around 2 to 3 cents immediately without having to go to a vote of the people under Hancock provisions.¹¹ It is possible that HB 738 would not trigger Hancock provisions.

Long-term, using gasoline taxes to fund road infrastructure may not be the best model. ¹² But for now and the near future, gas taxes remain an effective way of funding transportation in Missouri. Depending on changes in fuel prices HB 738 may not be adequate to

ensure Missouri can match federal dollars, and thus other measures might be necessary to stave off the implementation of MoDOT's 325 Plan. Furthermore, the additional \$40 million that local cities and counties receive must also be spent on their local road needs, which are for the most part in a much worse state of repair than the state highway system.¹³ ¹⁴

While the fuel tax increase contained in HB 738 could prevent cuts to MoDOT, it would be unlikely to provide adequate funding for the more expensive projects. That being the case, the state also could explore tolling as a solution. Missouri does not currently toll any highways. Tolling connects the act of using the road, bridge, or port to the method of paying for it. In 2008, the Show-Me Institute released a policy study examining how tolling could increase the use of public-private partnerships (PPPs) in addressing Missouri's transportation needs.¹⁵ Tolling will not be the right solution for many of the transportation needs that the state faces, but for some larger projects, tolling can provide the necessary financing in a fair and economically sound manner. Tolling the highways that are more expensive to build and maintain can free up state funding for other projects, allowing existing taxes to go further.

For example, MoDOT's proposals for replacing and expanding I-70 are expected to cost anywhere from \$2 billion to \$4 billion depending on the final design. ¹⁶ Barring a very large increase in general taxes or fuel taxes, that level of investment might be beyond the financial capabilities of MoDOT. However, paying for

the replacement of I-70 with tolls will allow the state to immediately bond against future toll revenue to pay for the project. The construction cost can then be recouped from those who directly benefit from the highway, and in proportion to their benefit. In other states, anywhere from one-third to one-half of such revenue is derived from trucks, which do disproportionate damage to the roadway. Other large projects aside from I-70 also could be rebuilt using tolls, including the \$200 million plan to improve the aging Broadway Bridge in Kansas City, which itself operated as a toll bridge from 1956 to 1991.¹⁷

Tolling does not just provide the means to build better infrastructure, it also creates a reliable user-based revenue stream for regular maintenance. When toll road revenue is spent, most states prioritize toll road improvements before diverting funds to the rest of the highway system or mass transit. As a result, major toll roads averaged over \$100,000 of maintenance spending per mile in 2011. Missouri's interstates receive less than \$50,000 per mile.¹⁸

Toll roads also can be used to control congestion and promote traffic-free movement on Missouri's highways. New toll roads use open road tolling technology, allowing drivers with multi-state compatible transponders to pay tolls without ever stopping at a booth, eliminating a source of traffic that once characterized toll roads. Furthermore, many states, like California and Virginia, use variable pricing on some of their toll roads to guarantee free-flowing traffic, even in rush hour. When traffic begins to increase on the road, prices

increase to ensure free flow; prices fall when traffic does. A study on high-occupancy toll lanes in California found that tolls tend to push non-work-related traffic to non-rush hour periods, giving quicker rides to higher time-opportunity cost travel.^{21 22} If Missouri used variable price tolls on its highways in major cities, it could use road pricing to encourage rush hour free flow.

Some argue that general taxes should be used to pay for roads because we all benefit from goods moving on state highways. While infrastructure investment creates indirect benefits. there is no reason that benefit cannot be internalized into the cost of goods. For example, trucks are needed to deliver goods to consumers, even to those consumers who rarely drive on the roads. By increasing the cost of transporting these goods, which an increase in gasoline taxes or tolling would do, the sellers of these goods can pass some of this cost increase onto consumers.²³ Thus, these consumers, who could derive indirect benefits from increased infrastructure investment, will indirectly pay for the investment.

The proposed increases in HB 738 should be considered very carefully. Fuel tax revenue is derived from the users of roads, and in proportion to their use. The additional revenue at the state level may be able to prevent the impending budget shortfall, and cities and counties also will be able to spend more on deteriorating roads. However, raising the fuel tax does place a larger tax burden on Missouri residents. In addition, because the tax proposed in HB 738 would be a percentage of the wholesale price of fuel, drivers

would have to pay more taxes along with having to pay more for fuel. In the case of HB 738, residents might be paying significantly more when they can least afford. MoDOT should make efforts to reduce waste and increase efficiency so that Missourians can be sure their hard-earned tax dollars are well spent. Furthermore, this increase in the fuel tax will not be sufficient to fully modernize the state highway system. As those expensive improvement projects become necessary, the state should continue looking for market-based solutions for highway funding. Passing an increase in the fuel tax should not be the end of the conversation on how to provide sustainable funding for one of the state's most important assets.

> Joseph Miller is a policy analyst at the Show-Me Institute.

NOTES

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- 3 MoDOT, "Bleak Financial Forecast for MoDOT," http://www.modot.org/newsandinfo/District0News.shtml?action=displaySSI&newsId=192529.
- 4 For a full breakdown of MoDOT revenue, see "MoDOT 2014 CAFR," 26-29, http://www.modot.org/about/general_info/documents/FY14MoDOTCAFRFINAL.PDF.
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- 6 MoDOT, "A Vision for Missouri's Transportation Future," 34.
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- 8 American Petroleum Institute, "State Motor Fuel Taxes," http://www.api.org/~/media/files/statistics/state-motor-fuel-taxes-report-january-2015.pdf.
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- 21 Edward Sullivan, "Continuation Study to Evaluate the Impacts of the SR 91 Value-Priced Express Lanes Final Report," 99.
- 22 Anthony R. Crane, "Technical Report: Considering Land Use and Pricing in Metropolitan Transportation Planning," http://www.tongji.edu.cn/~yangdy/landuse/ufti/ch4.htm.
- 23 The amount of the increase in prices passed along to the consumer due to higher transportation costs depends on demand elasticity, elasticity of supply, and market competition of the goods in question. For example, see Maritime Administration, U.S. Department of Transportation's "Impact of High Oil Prices on Freight Transportation: Modal Shift Potential in Five Corridors Technical Report," 13-15.



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