



August 3, 2012

Stabilizing Missouri's Highway Funding

Tom Kruckemeyer, Chief Economist

Amy Blouin, Executive Director

The Missouri Department of Transportation (MODOT) faces a \$1.4 billion decline in total funding between fiscal years 2010 and 2016. This decline is due to several factors including depletion of bond revenue which had been available from fiscal years 2001 through 2010, and ending of extraordinary federal funds that had been available through the American Recovery and Reinvestment Act of 2009. Funding through MODOT goes to variety of transportation infrastructure needs including most significantly construction and maintenance of Missouri's roads and bridges.

The steep decline in available revenues comes at a time when costs are increasing dramatically. For example, although Missouri's fuel tax has not been increased since 1992, the cost of materials for road maintenance has nearly tripled. Asphalt jumped from \$21 per ton in 1992 to \$60 per ton today; a cubic yard of concrete sold for \$51 in 1992 and now sells for \$153.¹

More striking, however, in addition to these inflationary increases, costs related to demand have increased dramatically and are expected to amplify over the next two decades. Interstate 70, completed in 1965, was built for traffic patterns carrying up to 18,000 vehicles a day. Today, it carries 31,000 vehicles through rural areas of the state. However, traffic is projected to increase to 20,000 trucks and 80,000 cars per day by 2030 – an increase that if left unresolved would create stop and go traffic on the state's largest thruway.²

Whatever the cause, Missouri's transportation funding will experience a steep decline in available resources without intervention at a time when costs are projected to increase steeply. As a result, MODOT has assessed various funding options, state lawmakers have considered solutions, and most recently the Missouri Legislature established the "**Blue Ribbon Citizens Committee on Missouri's Transportation Needs**" to study the financial situation and potential solutions.

Unfortunately, there is no easy solution for MODOT's funding crisis. An evaluation of the existing and potential funding streams indicates that the best available option for Missouri is to:

1. Increase the State's Motor Vehicle Registration and Driver's License fees; and
2. Institute a Toll Road as proposed by MODOT for Interstate 70.

The following describes why this may be the only sustainable solution for Missouri's transportation funding needs in the near future.

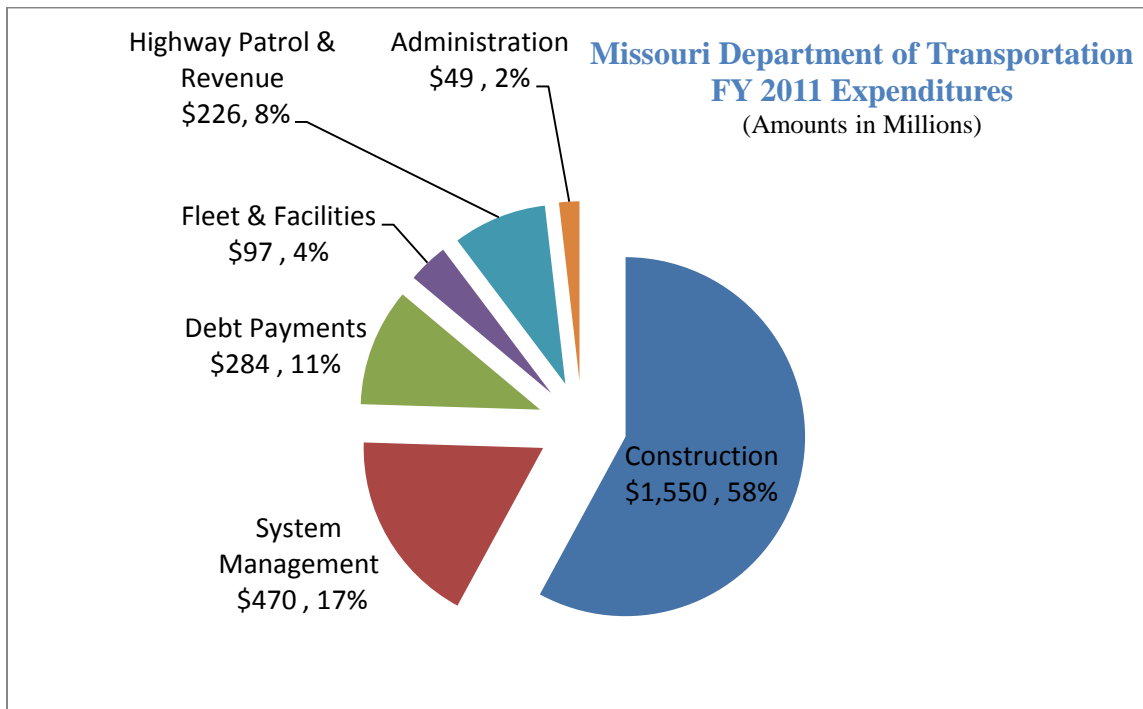
¹ Testimony of Kevin Keith, Director of the Missouri Department of Transportation, before the Blue Ribbon Citizens Committee on Missouri's Transportation Needs, June 29, 2012

² Missouri Department of Transportation, "A Public-Private Partnership to Rebuild, Expand I-70 in Missouri", 2012

Missouri Department of Transportation Expenses

Funding through MODOT is responsible for a wide variety of transportation expenditure needs. In addition to maintaining Missouri's highways and more than 10,000 of Missouri's highway bridges³, MODOT provides for a number of critical functions including snow removal, traffic and highway safety, even appropriations to the Missouri Highway Patrol.

The chart, below, visually depicts the major categories of spending authorized through MODOT. Construction funding comprised about 60 percent of the MODOT budget in fiscal year 2011.



Source: Missouri Department of Transportation. Amounts for FY 2011: the most recent, completed fiscal year for which data is available

In addition to construction funding, MODOT's "System Management" funding is allocated for snow removal, mowing, operation of truck weigh stations, rest areas and providing for routine repair work. MODOT allocates approximately 90 percent of its "Other State Agencies" budget to the Missouri Highway Patrol and uses a portion to reimburse the Department of Revenue for the cost of collecting the taxes/fees that accrue to MODOT.⁴

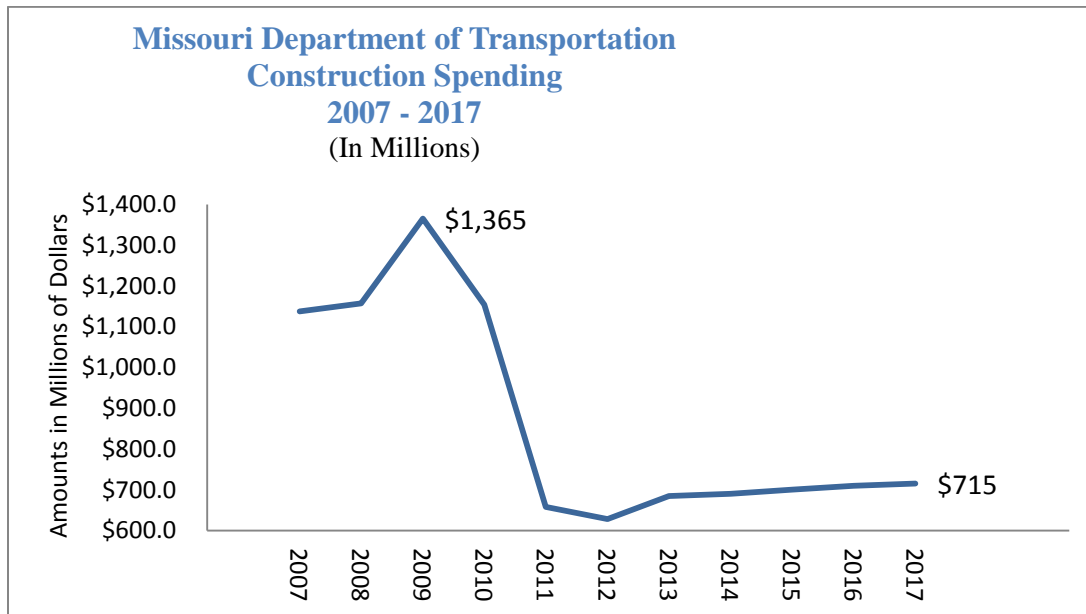
Notably, MODOT spends slightly less than \$300 million per year for "Debt Service", which is repayment for bonds issued in from fiscal years 2001 through 2010. The final payment for these bonds is due in 2033, although funding from the bond proceeds has already ended.

Due to decreases in MODOT's revenue sources, available funding for construction projects has hit a steep decline. As depicted in the chart below, funding in this area has been cut in half and is projected to remain relatively flat for the next several years. The drop in funding is particularly poor timed given the increased need for funding that is simultaneously occurring. As mentioned previously, in addition to ongoing

³ Transportation for America, "The Fix We're In For, The State of Missouri's Bridges"

⁴ www.modot.org/plansandprojects/construction_program/STIP2012-2016/documents/Sec5_EstimatedFinancialSummary.pdf Page 5-5

inflationary increases to maintain Missouri’s current road and bridge structure, striking increases in the use of Interstate 70 demand attention. Interstate 70, completed in 1965, was built for traffic patterns carrying up to 18,000 vehicles a day. Today, it carries 31,000 vehicles through rural areas of the state. However, traffic is projected to increase to 20,000 trucks and 80,000 cars per day by 2030 – an increase that if left unresolved would create stop and go traffic on the state’s largest thruway.⁵ **MODOT projects that addressing the I-70 needs will create increased costs ranging from \$2-\$4 billion.**⁶



Source: Missouri Department of Transportation

Missouri Department of Transportation Revenue Sources

At this time of increased spending needs, the Missouri Department of Transportation (MODOT) faces a \$1.4 billion decline, or 42 percent drop, in total funding between fiscal years 2010 and 2016. This decline is due to several factors including depletion of bond revenue which had been available from fiscal years 2001 through 2010, and ending of extraordinary federal funds that had been available through the American Recovery and Reinvestment Act of 2009.⁷

Significant Bond Revenues have been available for Missouri since 2001. Most recent among them, in 2004 voters approved Amendment 3 which authorized one-half of the motor vehicle sales tax to MODOT to be used to finance \$1.98 billion in bonding. The final proceeds from the bond revenues were allocated in fiscal year 2010. However, as mentioned previously, MODOT will face ongoing payments on these bonds until 2033.

⁵ Missouri Department of Transportation, “A Public-Private Partnership to Rebuild, Expand I-70 in Missouri”, 2012

⁶ IBID

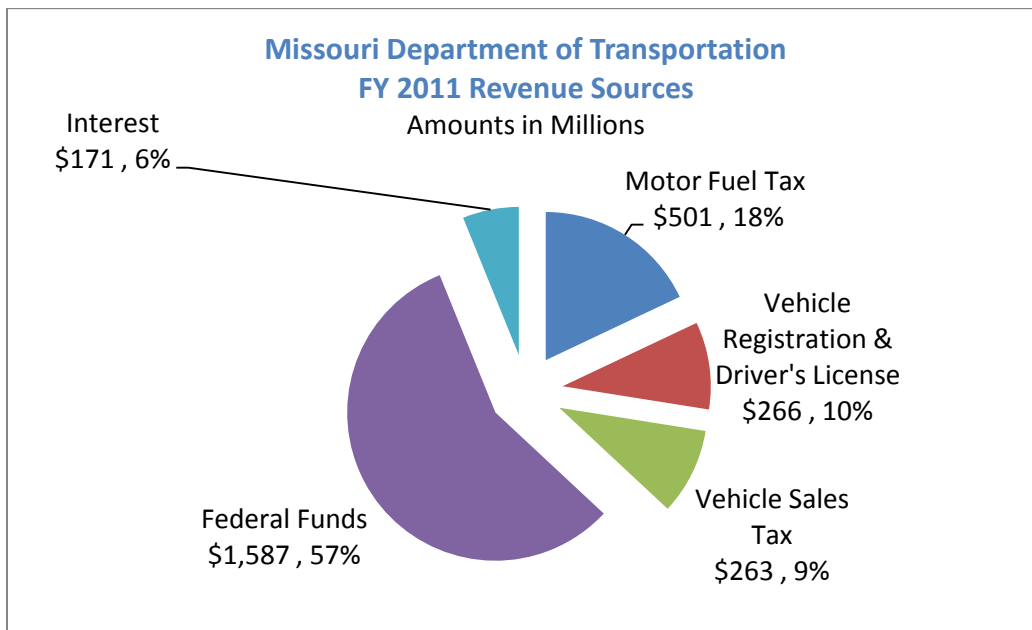
⁷ Data on transportation related revenue and expenditures are from the Missouri Department of Transportation, “Statewide Transportation Improvement Program 2012-2016 Report” and “Statewide Transportation Improvement Program 2013-2017”, available at:

http://www.modot.org/plansandprojects/construction_program/STIP2012-2016/index.htm

and http://www.modot.mo.gov/plansandprojects/construction_program/STIP2013-2017/index.htm

Revenues from the American Recovery and Reinvestment Act (ARRA), signed into law in 2009, are also nearly exhausted. Among other provisions, the ARRA provided states with extraordinary assistance for transportation needs. Between fiscal years 2009 and 2012, the ARRA provided MODOT with \$598.5 million in revenues for highway projects, of which only \$40.2 million remains. As a result, federal funding for MODOT is expected to drop from \$1.58 billion in fiscal year 2011 to \$782 million in fiscal year 2014.

At the same time, MODOT’s traditional, ongoing funding streams have flat-lined. MODOT relies primarily on the state motor fuel tax, vehicle sales tax, vehicle registration and driver’s license fees as its main state-based funding sources. Very little state general revenue flows to MODOT. In fiscal year 2012, state general revenue provided just \$9.1 million to MODOT, of which \$7.9 million was spent on AMTRAK operations⁸.

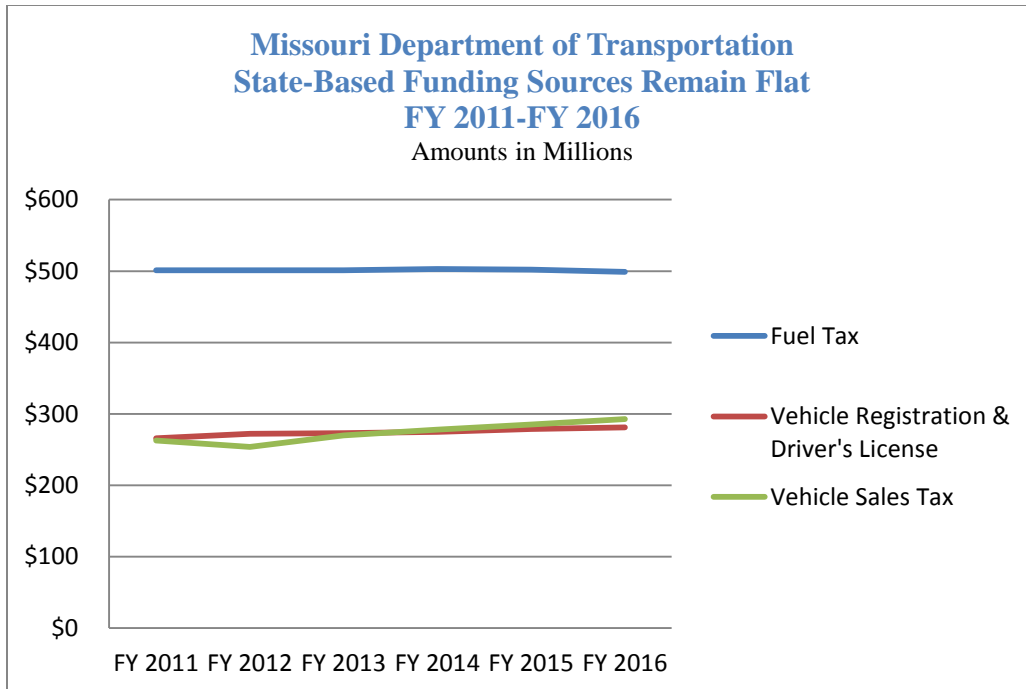


Source: Missouri Department of Transportation. FY 2011 Revenue, the most recent, completed fiscal year for which data is available

In addition to declining federal funds, revenue from the three major sources of state-based funding has generally remained fairly constant or in some cases has declined. For instance, Missouri’s state gas tax generated \$501.5 million in fiscal year 2011, but is expected to generate only \$498.8 million by fiscal year 2016. The slight nominal decline is compounded by inflation, so the actual purchasing power of the tax will be much less. The decrease is expected to continue due at least in part to increases in mileage rates for cars. Under federal law, by 2030, new cars will be required to provide 50 miles per gallon.⁹ The gas tax, which is based on a set rate per gallon, will decline further as a result.

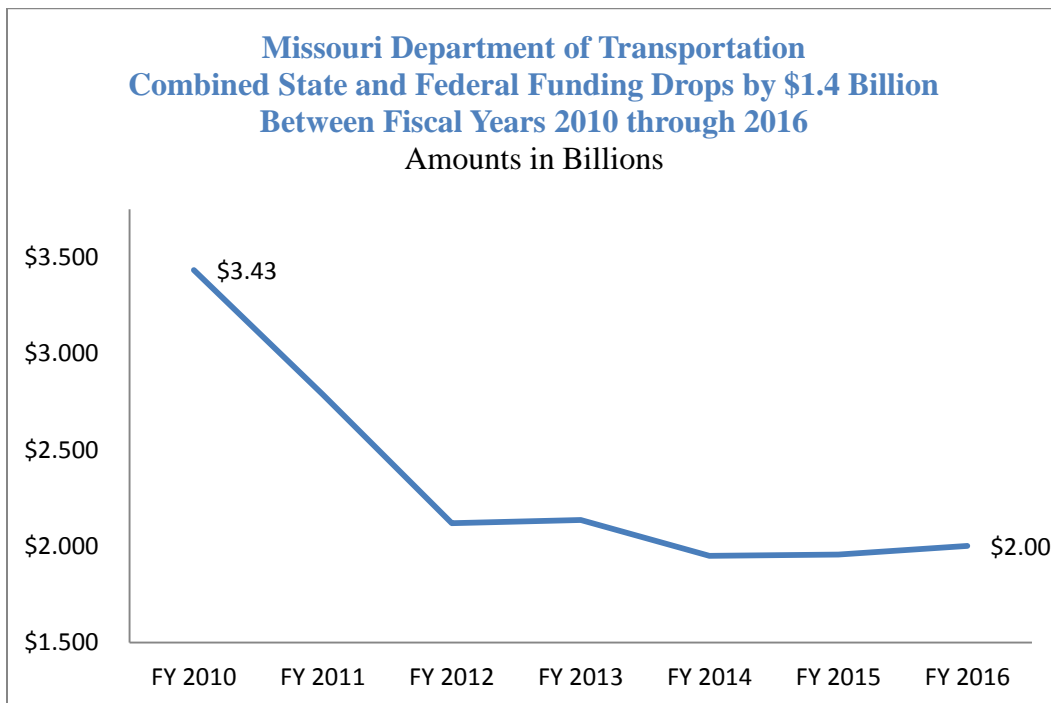
⁸ Office of Administration-Division of Budget & Planning

⁹ Testimony of Kevin Keith, Director of the Missouri Department of Transportation, before the Blue Ribbon Citizens Committee on Missouri’s Transportation Needs, June 29, 2012



Source: Missouri Department of Transportation

Although the gas tax is expected to decrease under its current structure, the state's motor vehicle sales tax and driver's license fee structure is expected to continue modest growth. **However, that growth pales in comparison to the \$1.4 billion decline in total revenue projected between fiscal years 2010 and 2016.**



Source: Missouri Department of Transportation

It is evident that a revenue decline of this magnitude will likely leave MODOT without adequate revenues to undertake existing road and bridge construction and maintenance projects, highway safety and multi-modal functions, let alone address the Interstate 70 problem.

Evaluating Potential Solutions

There is no easy solution to Missouri's transportation funding crisis. Missouri faces a decline of available revenue of \$1.4 billion, coupled with additional projected costs to address Interstate 70 construction needs of \$2-\$4 billion. To meet ongoing funding needs and address Interstate 70 needs, MODOT would need to increase available state revenue by at least \$1 billion annually. The following evaluates some of the available options utilizing Missouri's existing revenue sources and new concepts, compares these options to other states and makes recommendations to help Missouri develop sustainable solutions.

Increasing or Altering the State Motor Fuel Tax

The Missouri Motor Fuel tax of 17 cents per gallon of gasoline and/or diesel fuel was last increased in April of 1996 when it went from 15 to 17 cents per gallon. This was the final phase of a 6 cent increase that was signed into law in 1992 by Governor Ashcroft and phased-in between 1992 and 1996.¹⁰ As of January 1, 2012, the Missouri 17 cent tax ranked tied for 43rd among the 50 states. By comparison, the national average gasoline tax was 23.5 cents per gallon (see appendix).¹¹

The primary advantage of this tax is that it has strong revenue potential. Each 1 cent increase would generate an additional \$28 million in revenue per year.¹² However, even doubling the tax rate to 34 cents per gallon, generating an additional \$476 million in revenue per year, would not provide enough revenue to solve MODOT's funding shortfall. In addition, there are real concerns about the sustainability of this tax due to changing car mileage standards as described earlier. As cars become more fuel efficient, a tax that is based on consumption of gasoline is bound to decrease. Furthermore, weak economies coupled with unpredictable gasoline prices make the gas tax a volatile revenue stream.

Another concept is to shift Missouri's gas tax from an excise tax (rate per gallon) to a sales tax (percentage of sales price paid). To achieve approximately the same amount of revenue, Missouri could eliminate the current gas excise tax and replace it with a 4 percent sales tax on gasoline. Based on current gas consumption, a 4 percent sales tax could generate about \$416 million in the current year. Although the tax would remain somewhat vulnerable to fluctuations in consumption, coupling the tax to gas prices could help to ameliorate the fluctuations in the tax revenues as gas prices generally increase over time, making the revenue generated from the tax more stable and sustainable. For example, the U.S. Energy Information Administration reports that while the Midwest gasoline price for June of 2012 is 4.1 percent lower than June of 2011, it remains 30 percent higher than June 2010 and three times what it was in 1993.¹³ As a result, a gas tax employed as a percentage of gas pricing would generate about three times the revenue today that it did in 1993 if consumption remained steady. The large percentage increase leaves room to account for modest consumption decreases over time. However, to generate enough additional, new state revenue based on this concept, a fairly steep sales tax rate would be required.

Increase Driver's License and Vehicle Registration Fees

MODOT is expected to receive \$273 million in revenue from driver's license and motor vehicle registration fees in the current fiscal year. The Missouri vehicle registration fees are based upon the "taxable horsepower" of the vehicle, ranging from \$21.75 to \$54.75 annually.¹⁴ The annual fee for a

¹⁰ State of Missouri Tax Expenditure Report Section II-3 <http://oa.mo.gov/bp/publications/TaxExpenditure2009.pdf>

¹¹ Federation of Tax Administrators website: <http://www.taxadmin.org/fta/rate/mf.pdf>

¹² Missouri Department of Transportation, "A Public-Private Partnership to Rebuild, Expand I-70 in Missouri", 2012

¹³ <http://www.eia.gov/petroleum/gasdiesel/>

¹⁴ <http://dor.mo.gov/motorv/fees.php>

standard driver's license is \$7.50.¹⁵ The fee rates were last increased in 1984.¹⁶ As a result, inflation has far diminished the purchasing power of the existing rate.

A doubling of these fees would nearly account for inflation since 1984 and could yield an additional \$275 million annually in revenue for MODOT.¹⁷ An advantage of increasing the rates in this funding category is that the fees are broad-based enough to remain stable and generate sustainable revenue as compared to other funding sources.

Increase the State's General Sales Tax

Missouri's current state sales tax of 4.225 percent includes a 3 percent tax for general revenue and 1.225 percent in tax that is earmarked for conservation and other needs. By comparison, the national median state sales tax rate is 6 percent.¹⁸

The state general sales tax has an advantage of being broad-based enough to remain relatively stable and has the potential to generate significant revenue. For example, a one cent increase in Missouri's sales tax rate could generate \$657 million per year¹⁹. The broad-based nature of the tax would also ensure that all Missourians would contribute to solving MODOT's funding crisis. Additionally, relatively small changes to this tax also have the ability to solve MODOT's funding crisis on its own. However, this option would require a vote of the people via a ballot referendum, making changes cumbersome.

A New Bonding Program

As MODOT's bond revenues have been depleted, the state could consider new bonding revenues. To maintain Missouri's construction budget at slightly more than \$1 billion per year over the next five years, a \$2.5 billion bond issue would be needed. This would provide bond revenues of \$500 million per year that could be coupled with existing revenue sources. Assuming 4 percent interest and a 25 year payback period, MODOT estimates the bonding would cost about \$160 million annually.

The most obvious problem with this option is that it doesn't create sustainable revenue but instead would compound MODOT's existing bond-related debt. MODOT's existing bond debt already requires payments from its limited ongoing revenue sources until 2033. To ensure MODOT's financial sustainability, any new bonding would necessitate an increase in tax or fee revenues elsewhere in order to ensure repayment.

Creating Toll Roads

Most recently, MODOT has developed a proposal to transform Interstate 70 to account for the steep projected increases in its use, mentioned earlier. The proposal would institute tolls on 200 miles of Interstate 70 from east of I-470 in Independence to I-64 near Wentzville. The toll rates would range from 10 to 15 cents per mile for cars and double that for trucks²⁰. Not only would the toll project allow the state to rebuild I-70, the project would pay for I-70 maintenance, reducing the overall amount of maintenance costs required from existing revenues by about \$90 million.

¹⁵ <http://dor.mo.gov/drivers/license.php#fees>

¹⁶ Data on transportation related revenue and expenditures are from the Missouri Department of Transportation, "Statewide Transportation Improvement Program 2012-2016 Report" and "Statewide Transportation Improvement Program 2013-2017", available at:

http://www.modot.org/plansandprojects/construction_program/STIP2012-2016/index.htm

and http://www.modot.mo.gov/plansandprojects/construction_program/STIP2013-2017/index.htm

¹⁷ A full adjustment to account for inflation since 1984 would require the rates to be multiplied by 2.28 percent

¹⁸ Federation of State Tax Administrators, State Tax Rates

¹⁹ Missouri Department of Transportation

²⁰ Missouri Department of Transportation, "A Public-Private Partnership to Rebuild, Expand I-70 in Missouri", January 2012, available at <http://www.modot.org/i-70p3/documents/12-01-07WHITEPAPER.pdf>

Currently, 36 states have some toll facilities, including Missouri's neighbors Kansas and Oklahoma. Most recently, Arkansas created the "Bella Vista Bypass" toll, at a rate of 10 cents per mile.

Increase Appropriation from General Revenue is Untenable

Currently less than one percent of MODOT funding is derived from state general revenue funding. Although Missouri could consider increasing MODOT's general revenue allotment, the shift of general revenue dollars would necessitate cuts to other areas of the budget as Missouri's general revenue funding is also under severe strain. In fact, Missouri's general revenue budget without intervention is projected to face 17 more years of budget shortfalls.²¹ As a result, utilizing or increasing general revenue for MODOT needs is untenable.

Conclusions

Clearly the Missouri Department of Transportation faces significant funding pressures due to declines in extraordinary revenues, weak growth in traditional revenue sources and steeply increasing needs. Ultimately, there is no easy solution to this crisis. MODOT requires a sustainable solution to fill an estimated \$1 billion gap. **Based on the available research, it appears that a combination of funding tools may be most effective, specifically:**

3. An increase in Missouri's Motor Vehicle Registration and Driver's License Fee schedules. Because these fees have not been increased since 1984, a strong case for their adjustment can be made. They also hold the additional benefit of being broad-based enough to be sustainable and don't fluctuate in the same way that gas excise taxes do. The fee base could also be increased enough to ensure that Missouri's annual spending needs are funding, while simultaneously having minimal impact on Missourians. For instance, even tripling the fee for motor vehicle registration would result in an increased cost of just \$70 per year for the average Missourian with one car.
4. Simultaneously institute a Toll Road on a portion of Interstate 70 to finance its needed improvements. As discussed previously, many states are instituting toll roads to ensure that large, heavy trucks that travel their roads contribute to the cost of their maintenance and repair. Under MODOT's proposal, converting Interstate 70 to a toll road would fund needed improvements and provide sustainable revenue for maintenance and repairs.

²¹ For more detail on Missouri's General Revenue shortfall, see Missouri Budget Project's Report "Without New Revenue, Missouri Will Face Perennial Budget Shortfalls", March 2012, available at http://www.mobudget.org/files/Perennial_Budget_Shortfall_3-19-2012.pdf

APPENDIX

Major Toll Roads in Other States²²

State and Road	Length When Complete	Cost Per Mile for Cars	Year Completed
Missouri Proposal	200 miles	10 – 14 cents	
	4 miles	15 to 24 cents	Opened Dec. 2011
North Carolina State Road 147			
Virginia Interstate 95	179 miles	Not Established	An Existing Highway to become toll road
Texas State Highway 130	88 miles	12 to 15 cents	To be Completed in 2012
Pennsylvania Mon-Fayette Expressway	52 miles	8.3 to 10 cents	To be Completed in 2012
Pennsylvania Turnpike	360 miles	8.6 to 10 cents	Early 1940s
Delaware Route 1	51 miles	4 to 8 cents	Completed in 1999
Florida Turnpike	256 miles	7 cents	Completed in 1974
Kansas Turnpike	236 miles	7.2 cents	Early 1950s
Ohio Turnpike	241 miles	4 to 6 cents	Middle 1950s
Oklahoma- Will Rogers Turnpike	88 miles	4.5 cents	Completed in 1957

²² Missouri Department of Transportation, “A Public-Private Partnership to Rebuild, Expand I-70 in Missouri”, January 2012, available at <http://www.modot.org/i-70p3/documents/12-01-07WHITEPAPER.pdf>

State Gas Excise Tax Rates²³

Rank	State	Tax Rate
1	California	41.2
2	N. Carolina	39.2
3	Washington	37.5
4	West Virginia	33.4
5	Rhode Island	33.0
6	Wisconsin	32.9
7	Pennsylvania	31.2
8	Maine	30.0
9	Oregon	30.0
10	Minnesota	28.1
11	Ohio	28.0
12	Kentucky	27.8
13	Nebraska	27.6
14	Montana	27.0
15	Vermont	26.1
16	Idaho	26.0
17	New York	25.8
18	Connecticut	25.0
19	Utah	24.5
20	S. Dakota	24.0
21	Kansas	24.0
22	Nevada	23.8
23	Maryland	23.5
24	Delaware	23.0
25	N. Dakota	23.0
26	Iowa	22.0
27	Colorado	22.0
28	Arkansas	21.8
29	Tennessee	21.4
30	Massachusetts	21.0
31	Georgia	20.4
32	Illinois	20.1
33	Texas	20.0
34	Louisiana	20.0
35	New Hampshire	19.6
36	Michigan	19.0
37	Arizona	19.0
38	New Mexico	18.9

²³ Federation of Tax Administrators

39	Mississippi	18.4
40	Indiana	18.0
41	Alabama	18.0
42	Virginia	17.5
43	Missouri	17.0
44	Hawaii	17.0
45	Oklahoma	17.0
46	S. Carolina	16.8
47	Florida	16.6
48	New Jersey	14.5
49	Wyoming	14.0
50	Alaska	8.0

US Average **23.5**

Iowa	22.0
Arkansas	21.8
Illinois	20.1
Kansas	24.0

**MO Main Contiguous
Average** **22.0**