

**MISSOURI STATE AUDITOR'S OFFICE  
FISCAL NOTE (16-152)**

**Subject**

Initiative petition from Edward Greim regarding a proposed constitutional amendment to Article IV. (Received November 23, 2015)

**Date**

December 14, 2015

**Description**

This proposal would amend Article IV of the Missouri Constitution.

The amendment is to be voted on in November 2016.

**Public comments and other input**

The State Auditor's office requested input from the **Attorney General's office**, the **Department of Agriculture**, the **Department of Economic Development**, the **Department of Elementary and Secondary Education**, the **Department of Higher Education**, the **Department of Health and Senior Services**, the **Department of Insurance, Financial Institutions and Professional Registration**, the **Department of Mental Health**, the **Department of Natural Resources**, the **Department of Corrections**, the **Department of Labor and Industrial Relations**, the **Department of Revenue**, the **Department of Public Safety**, the **Department of Social Services**, the **Governor's office**, the **Missouri House of Representatives**, the **Department of Conservation**, the **Department of Transportation**, the **Office of Administration**, the **Office of State Courts Administrator**, the **Missouri Senate**, the **Secretary of State's office**, the **Office of the State Public Defender**, the **State Treasurer's office**, **Adair County**, **Boone County**, **Callaway County**, **Cass County**, **Clay County**, **Cole County**, **Greene County**, **Jackson County Legislators**, **Jasper County**, **St. Charles County**, **St. Louis County**, **Taney County**, the **City of Cape Girardeau**, the **City of Columbia**, the **City of Jefferson**, the **City of Joplin**, the **City of Kansas City**, the **City of Kirksville**, the **City of Mexico**, the **City of Raymore**, the **City of St. Joseph**, the **City of St. Louis**, the **City of Springfield**, the **City of Union**, the **City of Wentzville**, the **City of West Plains**, **Cape Girardeau 63 School District**, **Hannibal 60 School District**, **State Technical College of Missouri**, **Metropolitan Community College**, **University of Missouri**, and **St. Louis Community College**.

**Edward Greim** provided information as a proponent of the proposal to the State Auditor's office.

## Assumptions

Officials from the **Attorney General's office** indicated the proposal creates a new commission, but does not specify whether they shall represent the commission. If they represent the commission, there would be an additional, unknown cost. They assume that any potential costs arising from the adoption of this proposal can be absorbed with existing resources, but they may seek an additional appropriation if necessary.

Officials from the **Department of Economic Development** indicated no impact for their department.

Officials from the **Department of Elementary and Secondary Education** indicated the proposal appears to provide for an increase in the tax levied upon the sale of cigarettes. All moneys collected shall be credited to and placed in the early childhood health and education trust fund. The proposal also appears to reform the coordinating board for early childhood and rename it, the early childhood commission. With restrictions, proceeds from the additional cigarette tax would provide for the operations of the commission. Their department has no means to calculate the potential of these proceeds. Any funds would be additional monies to early childhood education.

Officials from the **Department of Higher Education** indicated this initiative petition would not have a fiscal impact on their department.

Officials from the **Department of Health and Senior Services** indicated no fiscal impact on their department.

Officials from the **Department of Insurance, Financial Institutions and Professional Registration** indicated this petition, if passed, will have no cost or savings to their department.

Officials from the **Department of Mental Health** indicated the amendment would create the Early Childhood Commission of which the director of the Department of Mental Health or his/her designee would be a member.

While the director and other staff of the Department of Mental Health often participate in committees and task forces as a part of their duties, assignments to additional specialized activities can be seen to create costs not necessarily included in the department's regular funding. The Department of Mental Health obviously has a great interest in the improved treatment and education of children so that it is anticipated that any fiscal impact from this legislation will be absorbed by the department's regular operating budget.

This proposal creates no direct obligations or requirements to the Department of Mental Health that would result in a fiscal impact.

Officials from the **Department of Natural Resources** indicated they would not anticipate a direct fiscal impact from this proposal.

Officials from the **Department of Corrections** indicated no impact.

Officials from the **Department of Labor and Industrial Relations** indicated no fiscal impact on their department.

Officials from the **Department of Revenue** (DOR) indicated this petition will have a fiscal impact of \$75,006 for fiscal year (FY) 2017 on their department, creating additional expense for IT consultants, and will increase revenues for the Early Childhood Health and Education Trust Fund by \$374.5 million annually.

#### **Section 54(c)**

The section imposes a 30 mill tax (\$0.60 per pack) on cigarettes phased in over four years beginning January 1, 2017. In addition, the petition allows wholesalers to purchase stamps discounted by three percent from face value. Wholesalers/retailers possessing cigarettes prior to the tax increase are not subject to the new incremental tax before retail sale.

Based on 496.5 million packs of cigarettes stamped in Tax Year 2014, the DOR estimates total revenues of \$289 million as a result of the new tax when this petition is fully implemented.

Beginning January 1, 2017, the petition imposes an “equity assessment fee” on the purchase, storage, use, consumption, handling, distribution, or wholesale sale of each pack of cigarettes by a non-participating manufacturer, whichever event occurs first. The DOR collects this fee when wholesalers purchase cigarette tax stamps. The provision assesses a 67 cent (\$0.67) fee per pack of 20 cigarettes. This fee is in addition to all other fees, licenses, or taxes except the manufacturer is not required to place funds in escrow under Chapter 196 under certain conditions. The legislation prohibits the use of moneys from the Trust Fund to pay costs that are not additional actual costs incurred by the state in the collection and enforcement of the taxes and fees imposed by this section. However, the Directors of Public Safety and Revenue may use up to one and one half percent of funds for additional actual cost of collection and enforcement and shall use one percent of the funds deposited in the fund to employ personnel for the sole purpose of criminal tobacco enforcement of existing state laws regarding tobacco products.

Based on 127.6 million packs of non-participating manufacturer cigarettes stamped in Tax Year 2014, the DOR estimates total revenues of \$85.5 million per year as a result of the equity assessment fee.

The DOR, in consultation with the Director of Health & Senior Services, must determine if the taxes imposed have caused a reduction in the consumption of tobacco products and the resultant funding in certain funds or sales taxes.

**Administrative Impact:**

The Early Childhood Health and Education Trust Fund requires changes to SAGE 50 accounting system and cashiering records. The DOR has approximately 45 days to implement this legislation if passed.

Decal order forms will need to be updated and notification will need to be given to all cigarette wholesalers.

Currently, cigarette wholesalers that purchase cigarette stamps on a credit basis are required to have a bond in place, unless they have met the requirements to be released. It is unclear if increases in the bond amount can be required.

Officials from the **Department of Public Safety** indicated their department sees no fiscal impact due to this initiative petition.

Officials from the **Department of Social Services** indicated no fiscal impact on their department.

Officials from the **Governor's office** indicated there should be no fiscal impact to their office.

Officials from the **Missouri House of Representatives** indicated no fiscal impact to their office.

Officials from the **Department of Conservation** indicated that no adverse fiscal impact to their department would be expected as a result of this initiative petition.

Officials from the **Department of Transportation** indicated no fiscal impact to their department.

Officials from the **Office of Administration** (OA) indicated the proposal amends Article IV of the Missouri Constitution by adding four new sections.

Section 54(a) creates the Early Childhood Health and Education Trust Fund (ECHET) to replace the Coordinating Board for Early Childhood Fund. Monies in the fund will be distributed as follows:

- At least 75% for grants for improving the quality of and increasing access to Missouri early childhood education programs.
- 10% - 15% for grants to Missouri hospitals or other health care facilities to improve access to quality early childhood health and development programs.
- 5% - 10% for grants to provide smoking cessation and prevention programs for Missouri pregnant mothers and youth.

Section 54(b) renames the Coordinating Board for Early Childhood to the Early Childhood Commission and gives them authority to administer and make grants from the

Early Childhood Health and Education Trust Fund. Services provided with the grant funds may only be provided to legal U.S. residents. None of the ECHET funds may be used for anything involving abortion services, human cloning or for tobacco related research. The Governor is responsible for appointing three citizens representing the areas of medicine, business, and higher education to the Commission.

Section 54(c) imposes a 30 mills/cigarette (\$0.60 per pack) tax on cigarettes to be phased it at 7 ½ mills/cigarette (\$0.15 per pack) per year, from January 1, 2017 through January 1, 2020. Wholesalers are allowed a 3% reduction on the purchase of tax stamps. In addition, a \$0.67 per pack equity assessment will be imposed on the purchase, storage, use, consumption, handling, distribution or wholesale of each package of cigarettes manufactured by a non-participating manufacturer as defined in the Master Settlement Agreement. The state is allowed to use up to 1 ½% of the collections for the cost of collection. An additional 1% shall be used by the Director of Public Safety and the Director of Revenue to employ personnel for criminal tobacco enforcement of existing state laws. No ECHET funds may be used for lobbying or promotion of any tax increase or other state/local prohibition of limitation on tobacco products, coupons, or promotions.

Finally, the Departments of Revenue and Health and Senior Services must annually determine if the taxes imposed by this section have resulted in a decrease in the consumption of tobacco products. If that is proven, up to 4% of the monies collected shall be distributed from the ECHET fund to political subdivisions and then to the other funds negatively impacted by the tax (Fair Share and State School Moneys Fund).

#### FISCAL IMPACT:

In calendar year 2014, there was \$81.2 million in cigarette excise taxes collected. OA assumes that the average pack of cigarettes retails for \$4.50, translating to roughly 477.5 million packs sold in Missouri. Based on information provided by DOR of those 477.5 million packs sold, 127.6 million were sold by “non-participating manufactures” as established by the Master Settlement Agreement. OA further assumes that cigarette sales have a (0.8) elasticity. However, there is no way to truly know what impact these tax increases will have on demand due to smoking cessation efforts, other state and federal regulations, and the increase in sales of e-cigarettes and other substitute products.

Table 1 shows OA estimates for changes in revenue caused by additional taxes on cigarettes, less the 3.0 percent wholesaler reduction allowance on the purchase of tax stamps. OA assumed that in addition to the 7.5 mills tax increase in each of the calendar years 2017 through 2020, the equity assessment fee would be \$0.67 in 2018, \$0.69 in 2019, and \$0.71 in 2020.

**Table 1: Revenue changes due to increased cigarette taxes, by fiscal year**

	2017	2018	2019	2020	2021
<b>Revenue gain from increased excise tax*</b>					
Participating Manufacturers	\$24.0	\$70.9	\$115.5	\$158.0	\$178.7
Non-Participating Manufacturers	\$8.8	\$58.6	\$107.0	\$121.4	\$128.4
Early Childhood Health and Education Trust Fund	\$32.8	\$129.5	\$222.5	\$279.4	\$307.1
<b>Revenue loss from lower demand</b>					
Health Initiatives Fund	(\$0.5)	(\$2.4)	(\$4.2)	(\$5.0)	(\$5.4)
State Schools Money Fund	(\$1.1)	(\$5.3)	(\$9.4)	(\$11.2)	(\$12.1)
Fair Share Fund	(\$0.5)	(\$2.4)	(\$4.2)	(\$5.0)	(\$5.4)
<b>Revenue loss from reduced sales tax</b>					
GR	(\$0.8)	(\$3.1)	(\$5.4)	(\$6.7)	(\$7.4)
School District Trust Fund	(\$0.3)	(\$1.0)	(\$1.8)	(\$2.2)	(\$2.5)
Local Sales Tax	(\$1.1)	(\$4.4)	(\$7.6)	(\$9.5)	(\$10.4)

*figures in \$ million*

*\*Accounts for the 3% wholesaler reduction allowance on the purchase of tax stamps.*

This proposal will have a fiscal impact on the Departments of Public Safety, Revenue and Health and Senior services. OA defers to those departments for the specific impacts of implementing the proposal.

This proposal will have no impact on OA.

Officials from the **Office of State Courts Administrator** indicated there is no fiscal impact on the courts.

Officials from the **Missouri Senate** indicated no fiscal impact.

Officials from the **Secretary of State's office** indicated their office is required to pay for publishing in local newspapers the full text of each statewide ballot measure as directed by Article XII, Section 2(b) of the Missouri Constitution and Section 116.230-116.290, RSMo. Their office is provided with core funding to handle a certain amount of normal activity resulting from each year's legislative session. Funding for this item is adjusted each year depending upon the election cycle with \$1.3 million historically appropriated in odd numbered fiscal years and \$100,000 appropriated in even numbered fiscal years to meet these requirements. Through FY (fiscal year) 2013, the appropriation had historically been an estimated appropriation because the final cost is dependent upon the number of ballot measures approved by the General Assembly and the initiative petitions certified for the ballot. In FY 2013, at the August and November elections, there were 5 statewide Constitutional Amendments or ballot propositions that cost \$2.17 million to publish (an average of \$434,000 per issue). In FY 2015, the General Assembly changed the appropriation so that it was no longer an estimated appropriation and their office was

appropriated \$1.19 million to publish the full text of the measures. Due to this reduced funding, their office reduced the scope of the publication of these measures. In FY 2015, at the August and November elections, there were 9 statewide Constitutional Amendments or ballot propositions that cost \$1.1 million to publish (an average of \$122,000 per issue). Despite the FY 2015 reduction, their office will continue to assume, for the purposes of this fiscal note, that it should have the full appropriation authority it needs to meet the publishing requirements. Because these requirements are mandatory, they reserve the right to request funding to meet the cost of their publishing requirements if the Governor and the General Assembly again change the amount or continue to not designate it as an estimated appropriation.

Officials from the **Office of the State Public Defender** indicated the initiative petition will not have any impact on their office.

Officials from the **State Treasurer's office** indicated this proposal would have no fiscal impact on their office.

Officials from **Greene County** indicated that there are no estimated costs or savings to report from their county for this initiative petition.

Officials from the **City of Kansas City** indicated no direct fiscal impact is anticipated if this proposal is adopted, however, the City Health Department may qualify to compete for grant funds under proposed Section 54(a)1.c.

Officials from the **City of Raymore** indicated no fiscal impact.

Officials from the **University of Missouri** indicated there is no fiscal impact on their university for this petition.

Officials from the **St. Louis Community College** indicated they do not believe this will have a negative fiscal impact on their institution.

**Edward Greim** provided the following information as a proponent of this initiative petition.



Graves Garrett LLC

Edward D. Greim  
Graves Garrett, LLC  
1100 Main Street, Suite 2700  
Kansas City, Missouri 64105  
Direct Dial: (816) 256-4144  
[edgreim@gravesgarrett.com](mailto:edgreim@gravesgarrett.com)

November 30, 2015

Missouri State Auditor's Office  
301 West High Street  
Office 880  
P.O. Box 869  
Jefferson City, Missouri 65102

Re: *Fiscal Note in Initiative Petitions 16-152*

To Whom It May Concern:

Based on the information contained in this letter and the attached letter from Tom Kruckemeyer, we propose the following fiscal note summary:

Estimated additional revenue to state government is \$127 million to \$298 million annually with limited estimated implementation costs or savings. The revenue will fund only programs and services allowed by the proposal. The proposal is estimated to result in no net costs or savings to local governmental entities.

### **Introduction**

The initiative allows 460,000 children to receive the early health screenings they need to grow and thrive and the early childhood development experiences that will prepare them for long-term educational success. These programs have important trickle-down effects that result in increased revenue and decreased costs at the state and local level. The initiative is accomplished by funding grants across the state to improve early childhood health and education. Funding for grants is provided by a tobacco tax, conservatively resulting in \$298 million in direct state revenue, while yielding important public health benefits.

### **Early Childhood Delivers Big Benefits**

Missouri enrolls fewer children in its state preschool program than any neighboring state, and funding for programs like Parents as Teachers has been slashed in half. All Missourians benefit





from investments in early childhood education: children start school ready to succeed; parents are able to keep good jobs and earn higher incomes; and taxpayers save money because early childhood education lowers drop-out rates, reduces crime and cuts the cost of social services. Despite clear evidence showing investing in early learning is one of the smartest investments we can make, year after year we battle with the Missouri General Assembly to fund quality early childhood education. Missouri is the 38th worst state for public pre-K funding. In 2012, the General Assembly cut \$13.2 million from early childhood programs, and Parents as Teachers remains \$19 million behind its 2009 funding.

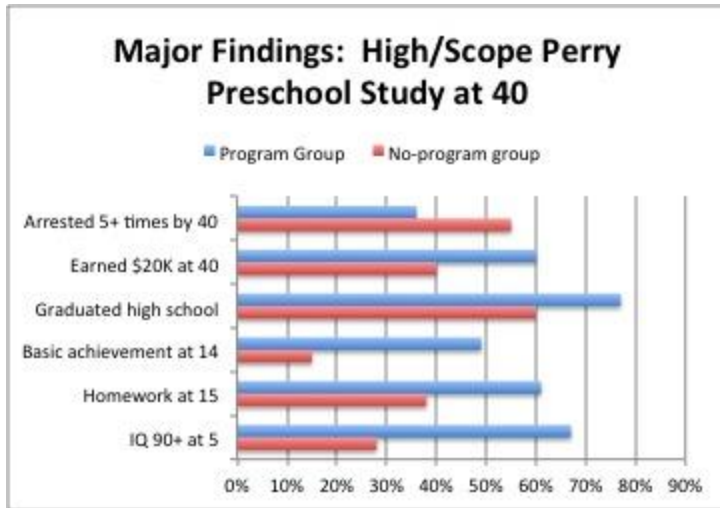
Traditional thought has long emphasized the relationship between early childhood education and academic success, but researchers now are finding that preschool does not have a substantial effect on increasing IQs but rather develops a child's "soft skills" and can have a profound effect on adult earning potential especially for disadvantaged kids.

Evidence shows that non-cognitive skills matter. Through activities like finger painting, playing with blocks, and interacting with other students, children learn how to control impulses, keep anger in check, stay on task, listen and follow curiosity. These soft skills are basic, but important tools needed to learn, find and keep a job and just manage everyday life. Most children gain these skills at home from their parents, but disadvantaged kids often miss the window of opportunity, which are the critical years before Kindergarten.

A literature of empirical evidence shows strong outcome effects for kids who attend pre-school. Using cost-benefit analyses, researchers have found a link between preschool attendance and reduced crime, fewer teen pregnancies, higher rates of college attendance and less need for public assistance. Cost-benefit studies show that pre-school provides the best value and produces more net benefits to society than increased classroom time or job training programs.

#### *Evidence from the Perry Preschool Program*

The most widely cited early childhood intervention occurred in Ypsilanti, Michigan during the 60s. Children with low IQ scores and a low socioeconomic index were invited to participate in the Perry Preschool Program. Using a coin toss, researchers divided students into two groups, a treatment group and a control group. Starting at age three the "treatment" kids got 2.5 hours of preschool a day and weekly home visits for two years. The "control" kids did not participate in either of the services. Researchers interviewed both groups at ages 15, 19, 27 and 40 and asked them questions about life events like school, work, marriage, parenting and incarceration. The following chart shows the major findings of the study.



Source: Lifetime Effects: The HighScope Perry Preschool Study Through Age 40 (2005)

The pre-school girls went farther in school, earned higher GPAs, and received less special education than girls from the control group. Boys benefitted as well, but the boys who did not receive the preschool intervention were 2.3 times more likely to get arrested. The cost-savings alone from just the crime reduction demonstrated success.

With increased scrutiny over government spending, cost-benefit analysis gives policy analysts a tool to separate productive programs from ones that yield no social gains. A recent cost-benefit study that used a wider variety of assumptions and applied more rigorous accounting rules, estimated a return rate of about 7-10%. By monetizing social crime, the researchers were able to estimate that for every dollar invested in preschool, society earned back \$30 to \$300 dollars over the course of a lifetime (Heckman, Moon, Pinto, Savelyev, & Yavitz, 2010).

#### *Abecedarian and Chicago Studies*

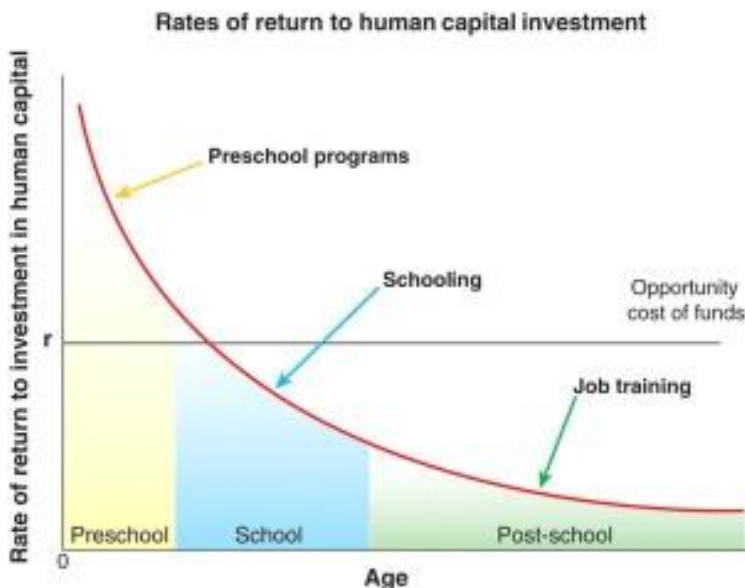
Other studies confirmed the results of the Perry Preschool Project. The Carolina Abecedarian project in the 70s randomly assigned infants into intervention and control groups. The intervention group received full-day childcare from birth through Kindergarten. Intervention kids scored higher in reading and math, completed more education, were older when their first child was born and the mothers of intervention kids progressed farther in school and made more money than the control mothers. Intervention kids even smoked less.

A full-day five-year Pre-K program, while effective, would likely be cost-prohibitive for any state budget; however, the findings proved that early intervention does make a difference. And evidence suggests that a less expensive program could produce similar outcomes (Barnett & Masse, 2007).



Just as Abecedarian kids earned higher wages than the control group, researchers found similar results from participants of the Chicago Child-Parent Program. The Chicago program targeted disadvantaged kids and provided a Headstart type intervention from ages three to nine. A cost-benefit analysis indicated for every dollar invested, the program produced seven in return. The largest impact was earning capacity, but Chicago kids were also less likely to need special education and less likely to commit crimes (Temple & Reynolds, 2007).

Much like with the Perry Program, the Chicago program demonstrated the relationship between early education, higher wages and crime reduction. Again it was the non-cognitive soft-skill development that made the difference. Second chance efforts like GED and job training provide fewer benefits and struggle to lift people out of poverty (Heckman & Masterov, 2007).



Source: Heckman, *The Review of Agricultural Economics* (2007)

What the Perry, Abecedarian and Chicago programs show is that pre-school helps kids develop soft-skills that make it easier to gain cognitive skills later and can lead to better jobs and a better quality of life. This in turn lessens the burden on government resources for remedial education, criminal justice and job-training programs.

Investing in human capital through access to finger-paints and story time may appear far-reaching, but multiple studies now point to early intervention as the cheapest, most effective way to prepare kids for the workforce and reduce crime. As labor force growth wanes and the demand for skilled workers increases, these studies suggest that a pipeline that begins at pre-school has great potential to produce big benefits to society in the long run.



Table 1  
Present value of Abecedarian benefits and costs per child (2002 dollars)

	Discount rate (%)		
	3	5	7
Program cost (net)	\$35,864	\$34,599	\$33,421
Program benefits			
Part. earnings	37,531	16,460	6376
Earnings of future generations	5722	1586	479
Maternal earnings	68,728	48,496	35,560
K-12 education	8836	7375	6205
Smoking/health	17,781	4166	1008
Higher education costs	-8128	-5621	-3920
AFDC	196	129	85
Total benefits	\$130,666	\$72,591	\$45,793
Net present value	\$94,802	\$37,992	\$12,372

### Reducing the Harmful Effects of Tobacco

Tobacco tax increases offer a win-win-win solution for states as they work to balance budgets while preserving essential public services. Tobacco tax increases are one of the most effective ways to reduce smoking and other tobacco use, especially among kids. Every state that has significantly increased its cigarette tax has enjoyed substantial increases in revenue, even while reducing smoking. Higher tobacco taxes also save money by reducing tobacco-related health care costs, including Medicaid expenses. States can realize even greater health benefits and cost savings by allocating some of the revenue to programs that prevent children from smoking and help smokers quit.

National and state polls consistently have found overwhelming public support for tobacco tax increases. Polls also show that, when it comes to balancing budgets, voters prefer raising tobacco taxes to other tax increases or cutting crucial programs such as education and public safety.

Tobacco use causes approximately \$3.03 billion in annual health care expenditures in Missouri. Smoking specifically causes over \$500 million in annual costs for the Missouri Medicaid program. The initiative petition would increase the tax on cigarettes by \$0.60 per pack over the course of 4 years and would also immediately increase the tax on non-participating manufacturer cigarettes by 67 cents. By conservative estimates, those tax increases would raise approximately



\$127 to \$298 million in new state revenue to improve early childhood health and education programs and certain smoking cessation programs. New state revenue is the amount of additional new revenue over the first full year after the effective date and increases as the tax is phased-in. The state will collect less new revenue to the extent that the rate increase does not apply to all cigarettes and other tobacco products held in wholesaler and retailer inventories on the effective date. This fiscal projection was derived using a price elasticity of demand for cigarettes of -0.8, even though the weight of credible academic literature suggests a conservative estimate for the price elasticity of demand for cigarettes is -0.4.

Tax increases of less than roughly 25 cents per pack or 10% of the average state pack price do not produce the same public health benefits or cost savings because the cigarette companies can easily offset the beneficial impact of such small increases with temporary price cuts, coupons, and other promotional discounting.

In addition to raising new revenue, the tax increase would have an immediate public health benefit. Each 10% cigarette price increase reduces youth smoking by 6.5%. Each 10% cigarette price increase reduces adult smoking by 2%. The total expected reduction in smoking consumption as a result of a 10% price increase is 4%. It is conservatively estimated that the initiative petition would decrease youth smoking by 6% in Missouri.

There would also be a fiscal benefit to the citizens of the state from the improved public health. As of 2014, the CDC estimated 11,000 annual average smoking-attributable deaths in Missouri. 127,500 Missouri Youth aged 0-17 are projected to die from smoking. Approximately 22.1% of Missouri adults smoke. Approximately 14.9% of Missouri high school students smoke. The average Missouri resident's state and federal tax burden from smoking-caused government expenditures is \$588 per household. Approximately one of every six pregnant women smokes, a rate significantly higher than the national average. Smoking during pregnancy increases the risk for preterm delivery, stillbirth, low birth weight and Sudden Infant Death Syndrome.

In recent years, almost every state and the federal government have increased tobacco taxes. Missouri is a notable exception. The average state cigarette tax is currently \$1.60 per pack, but rates vary widely from 17 cents in Missouri to \$4.35 in New York. On April 1, 2009, the federal cigarette tax increased by 62 cents, to \$1.01 per pack.

As of July 1, 2015, Missouri's cigarette tax was less than one-third of any of its border states: IL - \$ 1.98; IA - \$1.36; KS - \$1.29; AR - \$1.15; OK - \$1.03; NE - \$0.64; TN - \$0.62; KY - \$0.60. Moreover, Missouri's 17-cent per pack tax on cigarettes is the lowest in the country. The real value of the cigarette tax is decreasing. As a percentage of the overall Missouri State Budget, Missouri's tobacco taxes have decreased from 1.036% in 2000 to 0.464% in 2015. See MO Executive Budget Books & MO Office of Administration.

Every day 3,000 kids try their first cigarette and another 700 kids become regular smokers. There are more than 250 thousand new underage smokers each year. One third will eventually die from their addiction. Smoking has declined in every state where the tobacco tax has been increased.



Ongoing reductions in state smoking levels will, over time, gradually erode state cigarette tax revenues (in the absence of any new rate increases). But those declines are more predictable and less volatile than many other state revenue sources, such as state income tax or corporate tax revenues (which can drop sharply during recessions). In addition, the smoking declines that reduce tobacco tax revenues will simultaneously produce much larger reductions in government and private sector smoking-caused costs. See the Campaign for Tobacco-Free Kids factsheet, *Tobacco Tax Increases are a Reliable Source of Substantial New State Revenue*, <http://tobaccofreekids.org/research/factsheets/pdf/0303.pdf>.

For other ways states can increase revenues (and promote public health) other than just raising its cigarette tax, see the Campaign factsheet, *The Many Ways States Can Raise Revenue While Also Reducing Tobacco Use and Its Many Harms & Costs*, <http://tobaccofreekids.org/research/factsheets/pdf/0357.pdf>.

For more on sources and calculations, see <http://www.tobaccofreekids.org/research/factsheets/pdf/0281.pdf>

### **Additional Information on Tobacco Product Tax Increases**

*Raising State Cigarette Taxes Always Increases State Revenues and Always Reduces Smoking*, <http://tobaccofreekids.org/research/factsheets/pdf/0098.pdf>.

*Responses to Misleading and Inaccurate Cigarette Company Arguments Against State Tobacco Tax Increases*, <http://tobaccofreekids.org/research/factsheets/pdf/0227.pdf>.

*State Cigarette Excise Tax Rates & Rankings*, <http://tobaccofreekids.org/research/factsheets/pdf/0097.pdf>.

*Top Combined State-Local Cigarette Tax Rates (State plus County plus City)*, <http://tobaccofreekids.org/research/factsheets/pdf/0267.pdf>.

*State Cigarette Tax Increases Benefit Lower-Income Smokers and Families*, <http://tobaccofreekids.org/research/factsheets/pdf/0147.pdf>.

*The Best Way to Tax Smokeless Tobacco*, <http://tobaccofreekids.org/research/factsheets/pdf/0282.pdf>.

*How to Make State Cigar Tax Rates Fair and Effective*, <http://tobaccofreekids.org/research/factsheets/pdf/0335.pdf>.

*State Benefits from Increasing Smokeless Tobacco Tax Rates*, <http://tobaccofreekids.org/research/factsheets/pdf/0180.pdf>.



Graves Garrett LLC

*The Case for High-Tech Cigarette Tax Stamps*,  
<http://tobaccofreekids.org/research/factsheets/pdf/0310.pdf>.

*State Options to Prevent and Reduce Cigarette Smuggling and to Block Other Illegal State Tobacco Tax Evasion*, <http://tobaccofreekids.org/research/factsheets/pdf/0274.pdf>.

*The Many Ways States Can Raise Revenue While Also Reducing Tobacco Use and Its Many Harms & Costs*, <http://tobaccofreekids.org/research/factsheets/pdf/0357.pdf>.

### **Works Cited**

Barnett, W., & Masse, L. (2007). Comparative benefit-cost analysis of the Abecedarian program and its policy implications. *Economics of Education Review*, 113-125.

Bartik, T. J., Gormley, W., & Adelstein, S. (2012). Earnings benefits of Tulsa's pre-K program for different income groups. *Economics of Education Review*, 1143-1161.

Heckman, J. J., & Masterov, D. V. (2007). The productivity argument for investing in young children. *Review of Agricultural Economics*, 446-493.

Heckman, J. J., Moon, S., Pinto, R., Savelyev, P. A., & Yavitz, A. (2010). The rate of return to the HighScope Perry Preschool Program. *Journal of Public Economics*, 114-128.

Temple, J. A., & Reynolds, A. J. (2007). Benefits and costs of investments in preschool education: Evidence from Child-Parent Centers and related program. *Economics of Education Review*, 126-144.

Sincerely,

Edward D. Greim  
Partner, Graves Garrett, LLC

Tom Kruckemeyer  
Missouri Budget Project  
3534 Washington Ave  
St. Louis, Missouri 63103

November 30, 2015

Missouri State Auditor's Office  
301 West High Street  
Office 880  
P.O. Box 869  
Jefferson City, Missouri 65102

To Whom It May Concern:

I currently work as the Director of Fiscal Policy and Chief Economist at the Missouri Budget Project, a nonprofit, objective, public policy analysis organization that provides independent research on complex state policy issues and how they impact the state budget. I hold a B.A. in Economics and History and an M.A. in Economics from the University of Missouri-St. Louis. I also hold an M.A. Political Science from the University of Missouri-Columbia. I worked in the Missouri Division of Budget from 1978 to 2004, where I served as the chief economist. In the course of both my positions at the Missouri Division of Budget as well as my current position, I have routinely projected the fiscal impact of tax changes.

In my experience, it is a conservative, generally accepted practice to project the revenue generated from a proposed cigarette tax by estimating an average price per cigarette (or price per pack), estimating a uniform price elasticity of demand, and to assume that the tax will result in a penny-for-penny increase in the cost of cigarettes.

Upon information and belief, the Office of Administration usually estimates the price elasticity of demand for cigarettes as -0.8. This estimate means that a 10% increase in the cost of cigarettes results in an 8% reduction in the quantity of cigarettes sold. A price elasticity of demand of -0.8 is a conservative but reasonable estimate for the price elasticity of demand of a product such as cigarettes. Notably, even with a 60 cent to \$1.27 increase in Missouri's cigarette tax, Missouri's cigarette tax will remain lower than many of its contiguous states, in particular the states that border major metropolitan areas, Illinois and Kansas.

Additionally, the Office of Administration's method for estimating cigarette tax revenue is conservative because it assumes a penny-for-penny price increase in the cost of cigarettes as a result of the tax. In practice, whether the entire tax increase will result in a 60 cent to \$1.27 increase in the prices of cigarettes is unknown because the market for cigarettes is competitive. Moreover, regardless of whether the Office of Administration estimates that the demand for cigarettes will remain flat or decrease due to societal trends, the overall fiscal impact is largely the same. An estimate of the decrease in future tax collections due to decreased smoking from societal trends is not essential to the findings in the fiscal note that this particular tax will result in a net increase to state revenue with no net cost to local governments.



If the Office of Administration decides to use the same assumptions in projecting the revenue for other non-participating manufacturer cigarettes as it does for cigarettes, generally, it is my opinion that the resulting collection estimate would be conservative but appropriate. Further, media reports indicate that the percentage of non-participating manufacturer cigarettes sold in Missouri is approximately 20%. If the Office of Administration decides to assume that 19% of the total cigarettes sold in Missouri are non-participating manufacturer cigarettes, I believe that figure would be conservative but appropriate.

Based on generally accepted methods for estimating the fiscal impact of a proposed tax, I estimate that an immediate 67 cent cigarette tax increase on nonparticipating manufacturers will result in approximately 58 million dollars of revenue in calendar year 2017; 56 million dollars of revenue in calendar year 2018; 54 million dollars of revenue in calendar year 2019; and 52 million dollars of revenue in calendar year 2020.

Based on generally accepted methods for estimating the fiscal impact of a proposed tax, I estimate that a phased-in 60 cent cigarette tax increase will result in approximately 68.7 million dollars of revenue in calendar year 2017. I estimate that the cigarette tax will result in approximately 132 million dollars of revenue in calendar year 2018. I estimate that the cigarette tax will result in approximately 191 million dollars of revenue in calendar year 2019. I estimate that the cigarette tax will result in approximately 246 million dollars of revenue in calendar year 2020. The approximate total tax revenue collected in each year is calculable by adding the figures in the previous two paragraphs.

These estimates assume a 1% yearly reduction in the state's smoking level. There may be a small decrease in revenue collection for each phase of the additional tax due to lags associated with the implementation and collection of taxes. Further, I assume that the tax on non-participating manufacturer cigarettes does not have an independent effect on cigarette sales.

These taxes are expected to result in limited implementation costs to the state. The costs associated with administering the Early Childhood Health and Education Trust Fund will primarily be borne by the Trust Fund. Nonetheless it is proper and reasonable to consider additional costs of administering the cigarette tax increase, which may include fixed costs like salaries as well as additional marginal costs, such as costs associated with stamping cigarettes. All state government costs are estimated to be offset by additional revenue increases.

Local governments will receive revenue from the tax to offset any potential decrease in local tax revenue. Based on a price elasticity of demand of -0.8, local revenue may decrease, but any such decrease in cigarette taxes will be offset by funds allocated by the proposal to local governments. By any reasonable estimate, 4% of the Early Childhood Education and Health Trust Fund will exceed the decrease in revenue associated with local tobacco taxes and local sales taxes. Accordingly, any such decrease will be offset as a result local revenue from the transfer of funds to localities with local tobacco taxes and local sales taxes. Additionally, while direct local revenue is zero, there are positive indirect effects that may result in additional revenue to local governments.

Sincerely,

/s/

Tom Kruckemeyer  
Director of Fiscal Policy & Chief  
Economist, Missouri Budget Project

The State Auditor's office did not receive a response from the **Department of Agriculture, Adair County, Boone County, Callaway County, Cass County, Clay County, Cole County, Jackson County Legislators, Jasper County, St. Charles County, St. Louis County, Taney County, the City of Cape Girardeau, the City of Columbia, the City of Jefferson, the City of Joplin, the City of Kirksville, the City of Mexico, the City of St. Joseph, the City of St. Louis, the City of Springfield, the City of Union, the City of Wentzville, the City of West Plains, Cape Girardeau 63 School District, Hannibal 60 School District, State Technical College of Missouri, and Metropolitan Community College.**

### **Fiscal Note Summary**

When cigarette tax increases are fully implemented, estimated additional revenue to state government is \$263 million to \$374 million annually, with limited estimated implementation costs. The revenue will fund only programs and services allowed by the proposal. The fiscal impact to local governmental entities is unknown.