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## **Who Will Pay Taxes for Tennessee Governor's "Schools First" Initiative, and Who Will Receive the Spending?**

by Andrew Chamberlain and Gerald Prante

### **Fiscal Fact No. 84**

#### **Introduction**

In his most recent State of the State Address, Tennessee Gov. Phil Bredesen proposed a 40-cent increase in the state's cigarette tax to fund an education initiative known as "Schools First."

The plan consists of \$219.6 million of new spending on a broad array of education, agriculture and smoking cessation programs.<sup>1</sup> To fund the spending, the Governor has proposed increasing the state's cigarette tax from 20 to 60 cents per pack, which is estimated to raise roughly 96 percent of the required \$219.6 million for the plan.<sup>2</sup>

While the Governor's plan to boost education spending may be well intended, by funding the Schools First initiative through tobacco taxes rather than general sales taxes, it will make low-income households in Tennessee much worse off than they could otherwise be. Because the Governor's proposal relies almost entirely on cigarette tax revenue, at least three components of the plan have the perverse effect of redistributing millions of dollars from low-income to upper-income households in the state of Tennessee.

As explained below, this result could largely be avoided by funding the proposal through general sales taxes rather than regressive cigarette excise taxes.<sup>3</sup>

#### **The Schools First Initiative**

The revenue and spending items that make up Gov. Bredesen's Schools First initiative are listed in Table 1, along with their 2007-2008 budget amounts. Of the \$219.6 million of revenue from the proposed cigarette tax increase, roughly 90 percent is targeted at various education programs, while the remaining 10 percent is divided between smoking prevention programs and farm programs.

**Table 1.** Tennessee Gov. Phil Bredesen's Schools First Initiative

<b>Revenue</b>	
40 Cent Cigarette Tax Increase	\$211,900,000
General Sales Tax Revenue Growth	\$7,700,000
Revenue Total	\$219,600,000
<b>Spending</b>	
K-12 Education - "At Risk" Student Needs	\$119,300,000
K-12 Education - Student Census Growth	\$27,200,000
Higher Education - Operating Increase	\$48,300,000
Higher Education - Need-Based Financial Aid	\$3,800,000
Health - Tobacco Use Prevention	\$15,000,000
Agriculture - Farm Program	\$6,000,000
Spending Total	\$219,600,000

Source: Tennessee Department of Finance and Administration

### **Who Pays Taxes, and Who Receives Spending?**

One way to assess the combined effect of tax and spending increases on households is through what economists call "fiscal incidence" analysis.<sup>4</sup> Taxes take away resources from households, but government spending gives back resources to households. By examining the combined effect of both spending and taxes, economists can estimate which households receive the best overall deal from a particular tax and spending proposal. If a household's fiscal incidence is positive, it receives more spending from a proposal than it pays in taxes to fund it. If a household's fiscal incidence is negative, it pays a heavier tax burden than it receives back in government spending.

For the Governor's Schools First plan, we're able to estimate the fiscal incidence in two steps. First, we estimate the distribution of the proposed \$219.6 million cigarette tax increase across income groups. Second, we estimate the distribution of each component of the Governor's proposed spending plan across those same groups of households and show which income groups pay for the plan and which receive the most spending.

For this analysis, we've divided Tennessee's 2005 population of 5,810,590 into ten groups known as "deciles" based on their households' cash money income.<sup>5</sup> Each group contains equal numbers of people, or about 581,000 individuals. Table 2 shows the number of people and households in each of these groups, as well as the income boundaries for each.

**Table 2.** Income Levels for the Ten Groups of Tennesseans Used in this Analysis  
(Calendar Year 2005)

<b>Income Deciles</b>	<b>Cash Money Income Per Household</b>	<b>Number of People</b>	<b>Number of Households</b>
Top 10 Percent	\$131,413 and over	582,556	190,205
Ninth 10 Percent	\$97,742 to \$131,412	579,448	184,799
Eighth 10 Percent	\$78,877 to \$97,741	572,165	192,514
Seventh 10 Percent	\$65,687 to \$78,876	589,633	193,012
Sixth 10 Percent	\$54,363 to \$65,686	580,137	217,138
Fifth 10 Percent	\$44,010 to \$54,632	599,482	224,962
Fourth 10 Percent	\$34,157 to \$44,009	563,987	246,233
Third 10 Percent	\$23,871 to \$34,156	581,377	259,589
Second 10 Percent	\$12,875 to \$23,870	580,750	295,628
Bottom 10 Percent	Less than \$12,875	581,055	375,310

Source: U.S. Census Bureau; Tax Foundation

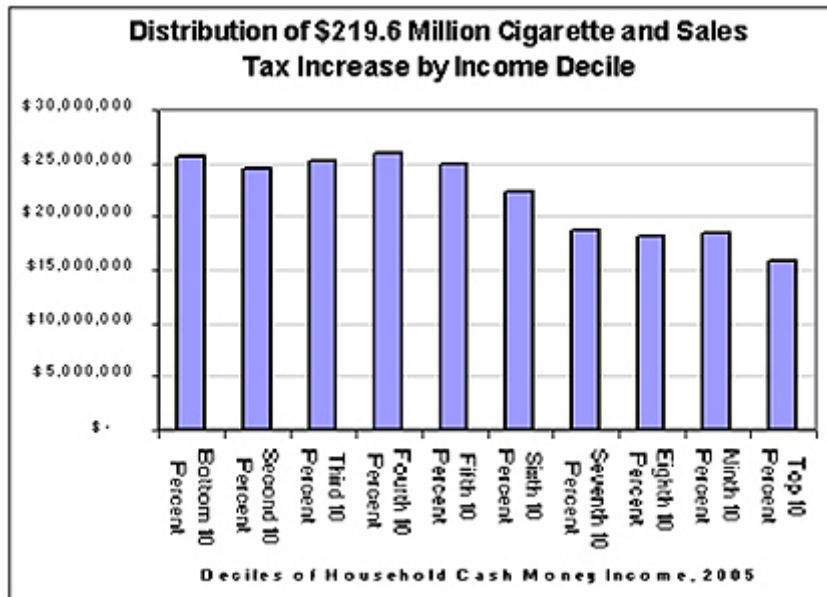
### **Distribution of the Cigarette Tax Increase**

Cigarette taxes have long been known to be a regressive revenue source. Lower-income households generally smoke at higher rates than upper-income households, and they spend a much larger fraction of their income on tobacco products. As a result, the burden of cigarette taxes falls most heavily on households toward the bottom of the income scale.

Using the income groups in Table 2, we illustrate the distribution of the Governor's proposed 40-cent per pack cigarette tax increase across income groups in Tennessee in Figure 1. The distribution also includes the Governor's estimated \$7.7 million growth in state sales taxes.

As is clear from the figure, cigarette taxes fall disproportionately on lower- and middle-income groups in Tennessee. Fifty-seven percent of the total tax increase will be paid by the bottom half of Tennessee earners, with the bottom and fourth deciles paying the largest dollar amounts as a group.

**Figure 1.** Distribution of Gov. Bredeesen's Proposed \$219.6 Million Cigarette and Sales Tax Increase Across Income Groups



Source: U.S. Census Bureau; Bureau of Labor Statistics; Tax Foundation

However, what isn't apparent from Figure 1 is which Tennessee households receive the most spending from the Schools First plan in return.

In the following three sections we explore the combined impact of the taxes and spending for three components of the Governor's plan: farm program spending, general higher education spending, and general K-12 education spending. These three examples illustrate the sharp inequities across income groups that result from financing the Schools First initiative with cigarette rather than broad-based taxes.

All figures are derived using the Tax Foundation's fiscal incidence methodology,<sup>6</sup> and are based on income and expenditures data from the U.S. Census Bureau's 2000 Decennial Census file for Tennessee, as well as regional tobacco consumption figures from the Bureau of Labor Statistics' "Consumer Expenditure Survey."

### **Fiscal Impact of Farm Program Spending**

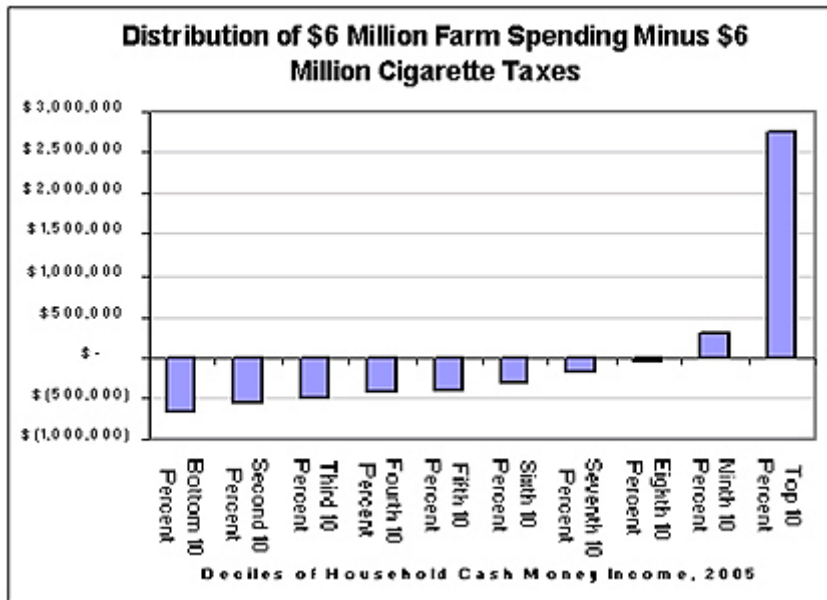
Gov. Bredeesen's Schools First initiative proposes an increase of \$6 million on farm program spending. The proposed spending ranges from programs to improve cattle breeding to the promotion of Tennessee agricultural products. Because the spending initiatives are primarily aimed at agricultural producers, increased farm program spending primarily is targeted at Tennesseans who earn farm-related income.

Because farm income is generally clustered among high-income households, the majority of increased farm spending is funneled to upper-income Tennesseans. Figure 2 illustrates the net distribution of \$6 million of farm program spending, minus the \$6 million cigarette and sales tax burden required to fund the spending.

As is clear from the figure, the net fiscal incidence of this component of the Governor's initiative is negative for the bottom 80 percent of earners. Only the top two income groups—those earning more than \$97,742 per household—receive more spending from the plan than they pay in taxes.

Overall, the proposed \$6 million in farm spending funded by cigarette and sales taxes results in a net fiscal redistribution of \$3.04 million from the bottom 80 percent of Tennessee earners to the highest-income 20 percent of households in the state.

**Figure 2.** Farm Spending Results in a Fiscal Redistribution of \$3.04 Million to Upper-Income Tennesseans When Funded by Cigarette Taxes



Source: U.S. Census Bureau; Bureau of Labor Statistics; Tax Foundation

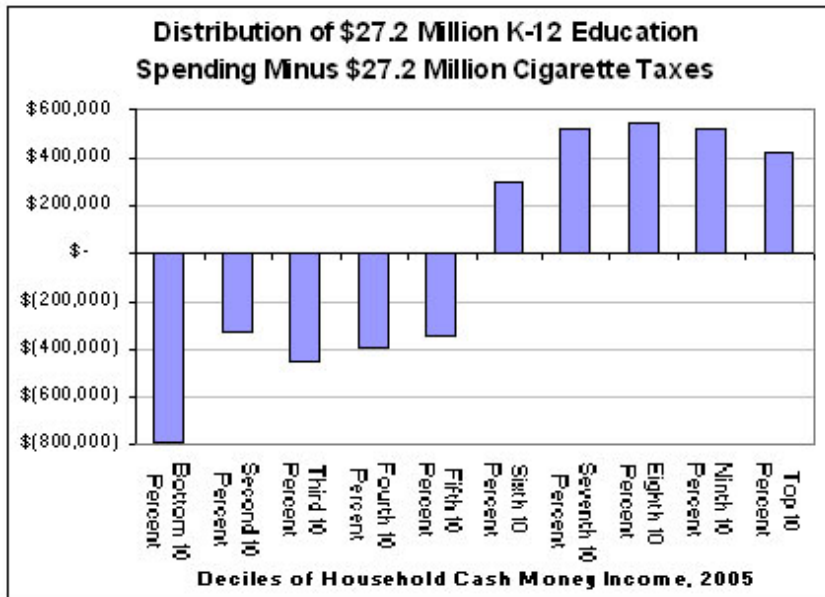
### Fiscal Impact of K-12 Education Spending

In addition to funding increased K-12 spending on "high risk" students, Gov. Bredesen's initiative also proposes an increase of \$27.2 million for general K-12 education in the state's fastest growing school districts, to be funded by a cigarette and sales tax increase.

This component of the Schools First initiative is primarily designed to provide primary and secondary education services to households with children currently enrolled in public schools. As a result, this increased spending primarily falls on Tennessee households with children currently enrolled in K-12 public schools in the state.

Figure 3 illustrates the net distribution of \$27.2 million of general K-12 education spending, minus the proposed \$27.2 million increase in cigarette taxes. As shown in the figure, the bottom 50 percent of earners pay more taxes than they receive in spending under the proposal. As a result, this component of the Governor's plan results in a fiscal redistribution of roughly \$2.3 million from low- and middle-income Tennessee households to the top 50 percent of earners in the state—an inevitable result of funding the proposal through regressive tobacco taxes.

**Figure 3.** General K-12 Education Spending Results in a Fiscal Redistribution of \$2.3 Million to Upper-Income Tennesseans When Funded by Cigarette Taxes



Source: U.S. Census Bureau; Bureau of Labor Statistics; Tax Foundation

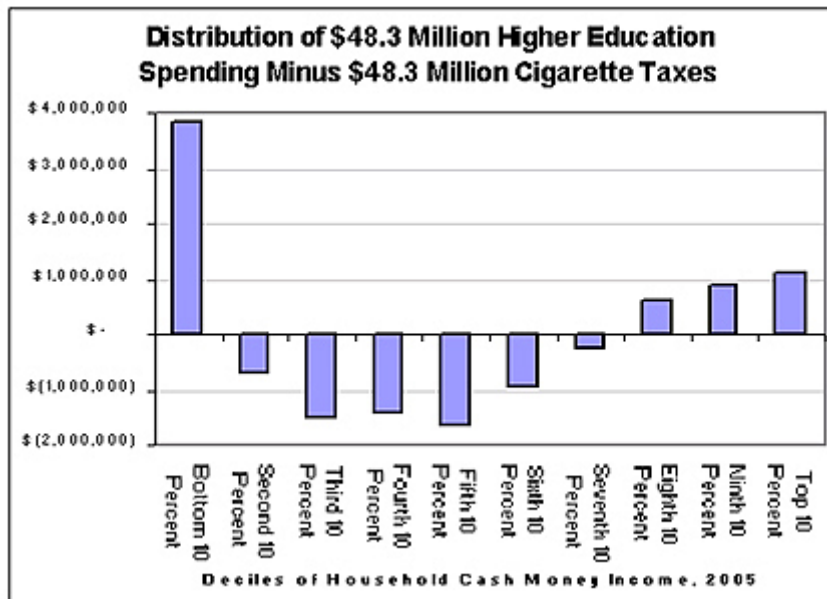
### Fiscal Impact of Higher Education Spending

The second-largest component of Gov. Bredesen's Schools First initiative is a proposal to increase operational support for higher education in Tennessee by \$48.3 million. This spending program is designed to broadly fund higher education in an effort to alleviate pressure on tuition increases in the state, keeping them within a range of 5 to 6 percent per year.

Because this spending is targeted specifically at the provision of higher education services to Tennessee students, the primary recipients are households with current enrollees at Tennessee public colleges and universities who may enjoy somewhat lower tuition due to the proposal.

Figure 4 illustrates the net distribution of \$48.3 million of proposed general higher education spending, minus the \$48.3 million of cigarette and sales taxes proposed to fund it.

**Figure 4.** General Higher Education Spending Results in a Fiscal Redistribution of \$6.47 Million from Middle Incomes to the Bottom and Top Income Groups When Funded by Cigarette Taxes



Source: U.S. Census Bureau; Bureau of Labor Statistics; Tax Foundation

As is clear from the figure, the net fiscal incidence of this component of the Governor's initiative is negative for households in the six income groups earning between \$12,875 and \$78,877 per year. In contrast, the plan is positive for the lowest-income group—which contains many unemployed college students living alone, most of whom are children of parents who reside in upper-income deciles—and for the top three income groups earning \$78,877 and over, which contain fewer smokers.

Overall, when funded by regressive cigarette tax increases this component of the Schools First initiative results in a net fiscal redistribution of \$6.47 million from the 60 percent of households in the low- to middle-income groups to households in the top three income groups and to non-working college students residing in the bottom income group.

**General Sales Taxes: A Better Way to Fund "Schools First"**

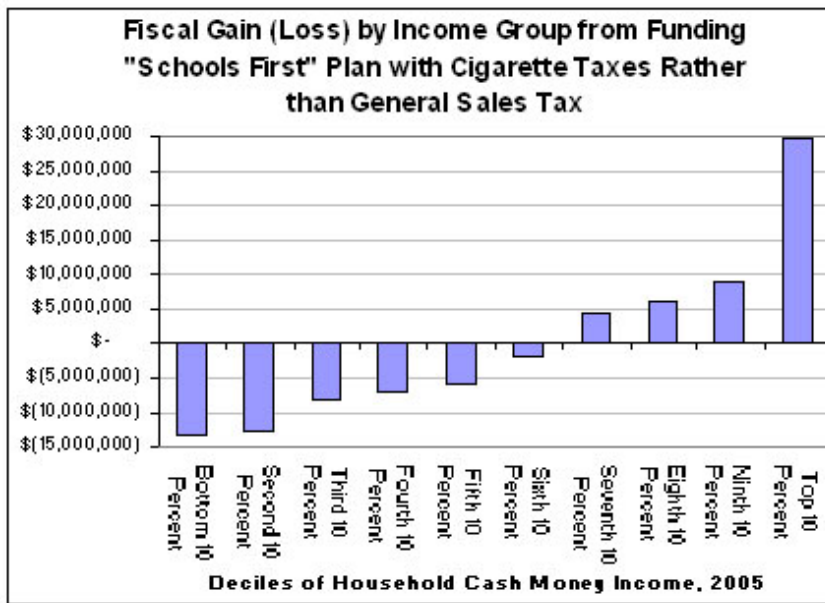
As illustrated above, at least three components of Gov. Bredesen's Schools First initiative result in sharp fiscal redistribution from low-income households to the highest-earning residents in Tennessee, largely because of the proposal's reliance on regressive cigarette tax increases. Together these components make up \$61.5 million of the \$219.6 million plan, or about 28 percent.

By funding the Governor's plan with broad-based general sales taxes instead, the overall proposal could be designed to provide much more powerful benefits to lower-income Tennessee households, while limiting the degree of fiscal redistribution from low- to high-earning households.

Figure 5 shows how cigarette taxes are an inferior funding source for the proposal as a whole compared to general sales taxes. It shows the difference in the fiscal impact of the Governor's full \$219.6 million proposal if it is funded by cigarette taxes rather than an across-the-board increase in the general sales tax.

When funded by a cigarette tax increase, households in the bottom 60 percent of Tennessee earners are made worse off than they would be if the plan were funded by a general sales tax. In contrast, because of the comparatively few smokers in the top 40 percent of Tennessee earners, these upper-income groups benefit greatly if the Governor's plan is funded by a cigarette tax rather than a general sales tax.

**Figure 5.** Funding the Schools First Plan through Cigarette Taxes Rather than General Sales Taxes Leaves the Bottom 60 Percent of Earners Worse Off than They Could Otherwise Be



Source: U.S. Census Bureau; Bureau of Labor Statistics; Tax Foundation

**Conclusion**

From a policy standpoint, the proper role for cigarette taxes is only to compensate for what economists call "negative externalities" from smoking, such as increased health costs to taxpayer-funded healthcare systems.<sup>7</sup> There is little justification for relying on cigarette taxes as a general revenue source.

If funded by cigarette tax increases, Gov. Bredesen's Schools First initiative will result in sharp fiscal inequities across income groups. Compared to broad-based general sales taxes, cigarette taxes are among the least defensible ways of funding the Governor's education initiative.



**Footnotes:**

1. Tennessee Schools First!, "New Statewide Coalition Puts 'Schools First'." Press Release (March 20, 2007). Available online at <http://www.tnschoolsfirst.com/Newsroom.htm>.
2. The full proposal assumes \$211.9 million in additional cigarette tax revenue, and an additional \$7.7 million in revenue from growth in the state's general sales tax. Both revenue sources are included in this analysis. See Tennessee Department of Finance and Administration, "The Budget, Fiscal Year 2007-2008." Available online at <http://tennessee.gov/finance/bud/bud0708/08publications.html>.
3. In general, cigarette excise taxes are inappropriate general revenue sources, and they can only be justified on policy grounds to the extent that they are used to remedy "spillover" costs from smoking on society. As a result, the regressivity of cigarette taxes is not a flaw in the taxes *per se*, but only results from using the tax as a general revenue source beyond correcting for spillover costs from tobacco use. If the tax were only used to compensate for spillover costs, cigarette taxes could be justified despite their regressivity. See Patrick Fleenor, "Who Bears the Ancillary Costs of Tobacco Use?" *Tax Foundation Background Paper*, No. 36 (January 2001).
4. See Andrew Chamberlain and Gerald Prante, "Who Pays Taxes and Who Receives Government Spending? An Analysis of Federal, State and Local Tax and Spending Distributions, 1991-2004." *Tax Foundation Working Paper*, No. 1 (March 2007). Available at [www.taxfoundation.org/publications/show/2282.html](http://www.taxfoundation.org/publications/show/2282.html).
5. "Cash money income" is defined by the U.S. Census Bureau. It is broader than adjusted gross income (AGI) as defined by the IRS for income tax purposes. It consists of earned income such as wages and salaries, interest and rental income, as well as unearned income such as alimony, unemployment compensation, and Social Security payments. This definition of cash money income generally corresponds to most taxpayers' "common sense" definition of their household's income. For the complete definition of household cash money income, see "Income Measurement" at [www.census.gov/population/www/cps/cpsdef.html](http://www.census.gov/population/www/cps/cpsdef.html).
6. See Chamberlain and Prante, *op. cit.*
7. Patrick Fleenor, "Who Bears the Ancillary Costs of Tobacco Use?", *Tax Foundation Background Paper* No. 36 (January 2001).

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