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TRANSPORTATION FUNDING ALTERNATIVES: A PRELIMINARY ANALYSIS

There is growing concern regarding the revenue available to adequately fund transportation programs in Georgia. To address these transportation funding needs, several alternative proposals have been suggested. These financing options include the following:

- Option 1a - Increase the state fuel taxes.
- Option 1b - Allow additional fuel taxes to be levied on a county or regional basis.
- Option 2a - Impose a 1 percent general sales tax on a statewide basis with the funds going to the state and earmarked for transportation program funding.
- Option 2b - Impose a 1 percent general statewide sales tax with the revenue earmarked for transportation program funding and allocated to specified regions of the state based on where the revenue was generated.
- Option 2c - Replace the state levied 7.5 cents and 3 percent prepaid fuel taxes with a 1 percent sales tax on a statewide basis with the funds earmarked for state transportation program funding. (The version of this proposal from Georgians for Better Transportation that we are aware of leaves open whether both of the fuel taxes would be eliminated. For purposes of this report we assume both fuel taxes would be eliminated.)
- Option 3 - Allow the adoption of a one percent Transportation SPLOST (TSPLOST) by any two or more counties. (The proposal from the Metropolitan Atlanta Chamber of Commerce specifies that the tax would be in place for a period of up to 8 years. There is no discussion of the possibility of renewal, but we assume that the counties could agree to hold subsequent referenda.)
- Option 4 - Impose a tax based on the number of vehicle miles driven.

This Policy Brief provides a preliminary analysis of these revenue options. For a fuller discussion see FRC Report No. 138, which is the basis of this Policy Brief.

Revenue Forecast

Table 1 provides preliminary forecasts of the revenues associated with the 4 financing options that rely on the sales tax, along with a forecast of fuel tax revenue based on the current fuel tax rates.[1] (We assume that the TSPLOST tax base includes the consumption of food consumed at home.) For the TSPLOST option we also provide a revenue forecast for the 10-county

TABLE 1. TRANSPORTATION FUNDING OPTIONS (IN 2006 DOLLARS)

	Revenue Effects of Transportation Funding Options ($ in millions)				
Year	Fuel Taxes	State Sales Tax Option 2(a,b)	State Sales Tax less Fuel Taxes Option 2c	TSPLOST State Total Option 3	TSPLOST ARC region Option 3
2006	$867	$1,428	$561	$1,628	$710
2015	$848	$1,795	$947	$2,046	$985
2030	$848	$2,197	$1,350	$2,505	NA
Total 2006-2030	$21,418	$46,895	$25,477	$53,460	NA
Total 2008-2015	$6,851	$13,612	$6,761	$15,325	$7,342

NA: Not Applicable.

Atlanta Regional Commission (ARC) area. Due to a lack of data and proposal details, no estimate is provided for the other funding options.

Fuel Taxes

The current state fuel excise tax rate on gasoline is 7.5 cents per gallon. In addition to the per gallon excise tax, Georgia also levies a second motor fuel tax of 3 percent on the sale price per gallon.[2] The Department of Revenue converts this prepaid 3 percent tax into a per gallon tax based on a survey of retail prices. Currently, the prepaid tax on gasoline is 5.7 cents per gallon, for a total state fuel tax on gasoline of 13.2 cents per gallon.

All revenues from motor fuel taxes are earmarked for transportation purposes, but the funds are constitutionally restricted to the construction and maintenance of roads and bridges. In fiscal year 2006, the combined motor fuel tax in Georgia generated $801 million in revenue. This amount does not include the approximately $66 million in fuel tax revenue that was not collected due to the suspension of the fuel taxes in September of 2005.

Motor Fuels Tax Trends

In nominal terms, revenues from the state motor fuels tax have increased over time. However, Georgia's per capita motor fuel revenues, inflation adjusted, have declined substantially. Between 1980 and 2003, the inflation-adjusted per capita motor fuel tax revenue declined by 52.2 percent. Furthermore, real revenue per vehicle mile traveled (VMT) has also declined.

Highway transportation demands are expected to continue to rise. Based on the linear trends, by 2010, the average Georgia resident will be driving a distance in excess of 14,600 miles a year, which is 11.3 percent more than in 2003 and 30.6 percent more than in 1991. Furthermore, the downward trend in inflation-adjusted fuel tax per mile traveled is expected to continue. An increase in congestion, and a decrease in road maintenance, road quality, and highway safety are likely the eventual result of the reduction in revenue per VMT.

Economic Issues

In this section we address economic issues associated with the various financing options.

Option 1.Increase the State Motor Fuel Tax.

- The per gallon fuel tax is a relatively stable revenue source over the business cycle.
- Fuel tax revenues have declined over time in real value and in terms of per miles driven.
- Increasing the fuel tax has the advantage of discouraging consumption of gasoline and driving. Studies have found that on average a 1 percent increase in the price of gasoline decreases consumption by about 0.43 percent.
- Increasing the fuel tax will result in a long-run decline in motor fuel consumption. Furthermore, the growth of the tax base of the motor fuels tax will diminish over time due to increases in fuel efficiency and use of alternative fuels, making this base a less than optimal match for a public service with increasing needs over time.
- Proponents of increasing the state fuel tax often cite secondary benefits such as reduced congestion and air pollution. Many economists have long touted increased fuel taxes as the appropriate solution for correcting the negative side effects associated with driving.
- Excise taxes more closely resemble user fees or prices. If the fuel tax accurately reflects the cost of driving by including such costs as road maintenance and

construction and congestion, then the fuel tax operates in much the same manner as a market price and as such is not a source of economic distortion in our economy.

Option 2(a and b). Increase the State Sales Tax.

- An increase in the general sales tax increases the price of all taxed goods in the state. Therefore, increasing this tax will increase the distortion between purchases of goods and services captured under the sales tax and purchases of those which are not.
- Sales taxes are paid by all consumers while gas taxes are paid by those individuals receiving the most benefit from transportation expenditures. Replacing the tax on gasoline with a sales tax disrupts the link between public expenditures and benefits and may increase the overall welfare loss to society from the imposition of taxes.
- Another view of this argument states that all residents, not simply drivers, benefit from increased transportation infrastructure.
- Sales tax revenues are projected to increase over time as the population and prices increase.
- The revenue from the state sales tax can be subject to cyclical swings in the economy and is slightly more volatile than the fuel tax.
- Increasing the sales tax rate reduces the revenue from the existing sales taxes since the increased sales tax rate will reduce total taxable purchases, for example through increased cross border shopping.
- Increasing the sales tax rate will increase efforts to avoid the sales tax and will reduce purchases of taxable items. For example, there will likely be an increase in cross border shopping by Georgians and a reduction by non-Georgians. There will be a likely increase in electronic purchases on which Georgia is currently unable to collect sales tax.

Option 2c. Increase the State Sales Tax and Eliminate the State Fuel Taxes.

- Eliminating both state fuel taxes removes a disincentive to drive so that there may be some increase in congestion, air pollution, and additional wear and tear on the existing transportation infrastructure.

Option 3. Transportation SPLOST.

- Local option sales tax revenues are more stable over the business cycle than state sales tax revenues due to the inclusion of food consumed at home in the local option sales tax base.
- The implementation of a regional SPLOST will cause increased cross-regional shopping as a means to avoid the tax.

Option 4. Tax on Vehicle Miles Traveled.

- The monitoring infrastructure needed for this taxing system is costly, as is the equipment placed in the vehicles.
- There is no opportunity to export the tax to nonresidents living outside the monitored area since the tax would not be imposed on nonresidents.

Tax Equity Issues

We calculated the effective tax rates by each income category, i.e., taxes paid divided by income, for the local option sales tax, the state sales tax, and motor fuel taxes. We find that all three taxes are regressive. The state sales tax and the local sales tax base are less regressive than the state motor fuel tax. In addition, the local option sales tax base is slightly more regressive than the state sales tax base; this is due to the inclusion of food consumed at home in the local sales tax base.

Other Issues

There are several other issues that we consider, many of them of an administrative nature.

- The magnitude of the needed transportation revenue is not known with any precision.

  The need for additional transportation revenue is driven by two factors. First, State spending on transportation has not kept pace with the growth in demand, as measured by vehicle miles driven (VMT). Thus, the State has a large backlog of transportation infrastructure improvements that are needed to catch up with current demand (i.e., VMT). Second, the State continues to grow rapidly and VMT is projected to grow even faster. The State needs additional transportation funding to just keep pace with this growth.

  However, as far as we know, there is no statewide, long-term plan that has determined what

transportation improvements are in fact needed and what they might cost.

- Fuel tax rates would have to increase to generate the same revenue as a 1 percent sales tax rate.

  In FY 2006, the state sales tax raised an estimated $5,712.1,[3] or $1,428.0 million per penny. Increasing both fuel taxes to generate an additional $1,428.0 would require that the fuel excise tax be increased by 12.3 cents to 19.8 cents per gallon and the prepaid tax be increased by 4.9 percentage points to 7.9 percent. If just the per gallon fuel excise tax was increased, the tax rate would have to increase from 7.5 cents per gallon to 34.9 cents per gallon.

- The nature of the required legislation.

  To increase the state fuel tax would require the General Assembly to pass legislation increasing the fuel tax; no Constitutional amendment would be required. The Constitution specifies that fuel taxes are earmarked for transportation.

  An increase in the state sales tax can be legislated by the General Assembly. However, under current law the funds cannot be earmarked for transportation. Thus, to ensure that the revenue is appropriated to the Department of Transportation, it would be necessary to pass a Constitutional amendment that would earmark this sales tax revenue for transportation.

  The TSPLOST could be adopted by general legislation of the General Assembly; no Constitutional amendment would be required.

- Nature of earmarking.

  The State Constitution restricts the use of the funds from fuel taxes to roads and bridges, none of the funds can be used for transit, trails, etc. There is a desire in many of the State's metropolitan areas to increase the financing of transit; this is especially true in the Atlanta area. A Constitutional amendment would be needed to allow the fuel tax revenue to be used to fund transit and other non-road and non-bridge transportation needs.

  The enabling legislation for a TSPLOST could restrict the use of the funds in the same way that current SPLOST funds are restricted, although in the case of TSPLOST the restriction would be that the funds be used only for transportation. Furthermore, allowable transportation projects could include more than roads and bridges, in particular transit projects.

- Effect on existing funds for transportation.

  One potential concern is that a substantial increase in revenue devoted to transportation could displace revenue already being used to fund transportation.

  With a sizable increase in earmarked transportation funds going to Georgia DOT (either through an increase in fuel taxes or a shift to a sales tax), it is possible that the General Assembly would eliminate the current allocation to the Department of Transportation from the General Fund. For FY 2006, the General Assembly allocated $14.6 million to the Department of Transportation.

  If a TSPLOST is adopted, there is some possibility that voters will reject new SPLOSTs, particularly if they were used to fund transportation, or that counties will remove transportation projects from future SPLOSTs.

- Political support.

  Opinion polls suggest that voters are resistant to an increase in fuel taxes.

  There is a question as to whether voters will support a permanent 1 percent sales tax earmarked entirely for transportation.

  Support for an increase in the sales tax may be influenced by the current sales tax rate faced by voters. As of October 2006, in 145 countries the sales tax rate was 7 percent (the 4 percent state sales tax and 3 percent local option sales tax), while in the other 14 counties the rate was 6 percent.

- Duration of the tax increase.

  All of the options, with the exception of the TSPLOST, are seen as permanent increases in the tax rate. For the TSPLOST, the proposal calls for a duration of up to 8 years; it is assumed that renewal is possible.

  An 8-year TSPLOST is longer than the allowable SPLOST duration. However, in considering the types of long-range, large projects that need to be funded, it is not clear that 8 years is sufficient to accomplish the projects.

A second issue regarding duration is the need for funding maintenance and operations, particularly transit.

There are two principal proposals that are currently being discussed. For this reason we focus on several issues that are specific to these two proposals.

Option 2c. Increase the Sales Tax and Eliminate the Fuel Tax.

This option has been advanced by Georgians for Better Transportation. There is uncertainty regarding many of the details of this proposal. For example, will both fuel taxes be eliminated, and if so, will the general sales tax apply to fuel purchases?

Eliminating the fuel taxes and imposing a permanent 1 percent sales tax removes a degree of freedom from the General Assembly regarding future funding options for other expenditures. Fuel taxes can be used to finance transportation projects, but are unlikely to be used to fund other needs such as increased health care or education expenditures. If the state sales tax rate is increased to 5 percent, the state would have a more difficult time financing a major increase in health care or education spending.

Option 3. A Regional Transportation SPLOST (TSPLOST).

This proposal has been advanced by the Metropolitan Atlanta Chamber of Commerce. The proposal would allow any two or more counties to agree to vote to impose a sales tax, with the revenue dedicated to transportation projects. Many details of the proposal are still evolving.

- In order for two or more counties to agree to form a region, each must believe it will receive a fair share of the revenue. Fair in this case probably means that it gets projects equal in value to the revenue collected in its county.
- There is a presumption that one of the regions will be the 10-county ARC region (or perhaps a somewhat larger area), while only a few other urban counties will form transportation regions. However, there is no reason to believe that all 10 counties will be able to reach agreement on a list of projects. This means that the need for some regional transportation projects may not be addressed.
- The proposal currently specifies that there would be an appointed supervisory body that would oversee implementation of the proposed transportation projects. This body would have authority to change the proposed projects if that was necessary. But there are several issues regarding how this supervisory body is formed. Should it be elected or appointed? If appointed, who does the appointing? Should representation be based on population or equal numbers per county.
- If a region is formed and a TSPLOST is approved, what happens when the TSPLOST comes up for renewal? Will a county be able to back out of the agreement at that time? Could a new county join the region?

Recommendations and Policy Considerations

Based on our analysis and consideration of these proposals, we outline our thinking about how to increase funding for transportation. We do not have answers or recommend-dations for several of the issues listed above.

- We believe it is important to retain, and actually increase the fuel taxes if an increase in transportation spending is desired. While there appears to be little public support for this option, the argument that economists make for using user charges is very strong. Funding transportation projects with fuel tax revenue ties the cost of providing roads and bridges to the benefits accruing to the person using them. In addition, increasing the fuel tax reduces the use of roads, and thus reduces the need for additional capacity and the maintenance costs for existing infrastructure.
- Fuel taxes are a way of linking the benefits from using roads to the funding of them. However, the link between the use of roads and fuel taxes paid is not a perfect relationship since gas mileage differs across drivers. Furthermore, improvements in fuel efficiency and the use of alternative fuels have reduced the fuel tax revenue per mile driven. For these reasons a VMT tax is seen by economists as a more desirable mechanism than fuel taxes. In addition, a VMT tax can be used to discourage driving at times of peak congestion. Portland, Oregon is experimenting with a VMT tax and several other states are considering it. This is an option that Georgia should at least study.
- Any new funding source must be allowed to fund transit and other non-road and non-bridge projects.
- Once a Constitutional amendment is passed establishing a state sales tax dedicated to transportation it will be very hard to change or

eliminate the tax. Thus, before substantially increasing transportation revenue on a dedicated, permanent basis through a Constitutional amendment, the State should determine if it needs to devote that much revenue to transportation essentially in perpetuity. This suggests that the General Assembly should not specify the sales tax rate in the Constitution, but allow the rate to be set by general law.

- For the regional TSPLOST, we suggest the following provisions be considered:
  - The authorizing legislation should specify what counties will form at least some of the regions, in particular, the counties in urban areas. For example, the legislation might specify that the 10 ARC counties form one region. Provisions should be made for counties to join a region before the referendum. It is also important that some provision be made for a county to opt out of the region before the referendum, but it should not be easy for a county to exit. We are concerned that it will be difficult to get counties to agree on being partners without substantial negotiations over the geographic allocation of the revenues, and that a county could try to hold the other counties hostage.
  - The allowable duration for imposing a TSPLOST should be longer than 8 years, and probably much longer. Regions should be able to decide the duration, subject to some maximum.
  - Allowance should be made for sales tax rates of less than 1 percent. At some point, a region may decide that it needs a sales tax rate of ½ percent or even ¼ percent. Furthermore, during the life of the SPLOST the region should have the option of reducing the tax rate.
  - Serious consideration needs to be given to the administration of the region. We don't believe that every county should have to approve every decision. But we don't know how independent the governing body of the region should be, how it should be selected, or what authority it should have. However, these are clearly important decisions.

Notes

[1] See FRC Report No. 138 for an estimate of the current distribution of fuel tax revenue by county and a forecast to 2015 of TSPLOST revenue by county.
[2] Motor fuels are also subject to a 1 percent state sales tax, with the revenue going to the General Fund, and to all of the local option sales taxes.
[3] The final audited amount is not yet available.

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