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## GASOLINE TAXES IN GEORGIA

The motor fuel tax is the oldest of Georgia's major taxes and the third largest revenue source for the state, behind the personal income tax and the sales and use tax. Unlike the other major taxes in Georgia, the revenue from the motor fuel tax is entirely dedicated to a single activity, the building and maintenance of roads and bridges in the state. Because motor fuel tax revenues are dedicated, the tax acts as a user fee for all users of the highway system in the state. More use of the roads results in more fuel use, and as a consequence, more fuel taxes being paid. The structure and rates of the motor fuel tax have been very stable, remaining almost unchanged since the 1950s. However, there are questions about the current and future adequacy of the motor fuel tax in its current form as a dedicated revenue source for highway transportation.

### Comparing Georgia with Other States

Motor fuel taxes apply to the sale of gasoline, diesel, aviation grade gasoline, liquefied petroleum gas, compressed natural gas and other special fuels. The excise portion of the motor fuel tax is currently 7.5 cents per gallon for motor fuels. In 2004, the excise portion of the motor fuel tax in Georgia accounted for \$527 million in revenue. The Prepaid Motor Fuel Tax (formerly the Second Fuel Tax), which is 3 percent of the average retail price of each fuel, is currently 7.8

cents per gallon for gasoline and 9 cents per gallon for diesel (based on fuel prices as of January 2006). Figure A shows the effective per gallon total state fuel tax rate for all 50 states and the District of Columbia as of 2004. At that time only Alaska and Wyoming had lower effective fuel tax rates. Increases in fuel prices have increased the effective tax rate in Georgia, as well as in several other states. At the current (2006) effective tax rate of 15.3 cents per gallon (gasoline) and 16.5 cents per gallon (diesel), Georgia's effective motor fuel tax ranks among the lowest in the nation.

### Adequacy of Georgia's Fuel Tax

A low tax rate does not necessarily mean inadequate revenue. In general, an adequate tax is one whose revenues change to reflect changes in the costs of providing the desired amount of a public service.

Two major sources of increasing costs are inflation and increased public demand (i.e., increased usage). The following figures indicate that the tax on fuel (specifically gasoline) has not kept pace with either inflation or with the increasing demands of Georgia's drivers. In Figure B, we measure demand by population and inflation by both the Consumer Price Index (CPI) and by an index of road building costs (RPI) produced by the Federal Highway Administration.

The figure shows that on a per capita inflation adjusted basis, in 2002, Georgians paid half the fuel tax on gasoline that they paid in 1980.

Road repair costs generally rise with use, and vehicle miles traveled (VMT) has been steadily rising in Georgia. In Figure C, we use VMT to measure demand. The revenues per VMT, after adjusting for inflation, have been steadily declining. With the recent increases in fuel prices, the Prepaid Tax revenues have risen sharply. However, these increases are not enough to counterbalance the declining real (inflation adjusted) revenue of the excise portion of the fuel tax. Declining revenue per VMT, without injecting revenues from another source, will eventually lead to a reduction in the building and maintenance of roads and bridges in the State.

### Revenue Alternatives

This growing divide between transportation demands and transportation revenue is not confined to Georgia. Because all states use an excise tax on gasoline to fund a large portion of transportation, to some extent they all face the same fundamental problem. A per unit excise tax (i.e., one that is based on the volume of gasoline used) has two primary shortcomings as a revenue source intended to maintain highways: 1) the revenues are tied to the volume gasoline sold and not to price, thus, revenues rise only with consumption, not inflation, and 2) increasing fuel economy of cars, over time, will lead to a declining tax paid per mile traveled. Linking a portion of the fuel tax to the price through the Second Fuel Tax has provided a relatively small offset to declining real (inflation adjusted) revenues. As a result, states have turned to more creative sources for funding current transportation needs.

One alternative involves using general fund revenues to make up the difference, but this alternative reduces the connection between the costs drivers generate and the taxes paid. Using the general fund means that non-resident drivers pay less and resident drivers and non-drivers would pay more. Furthermore, it would increase the competition for revenue between road funding and other government programs, like education.

Georgia's fuel excise taxes could be periodically adjusted either by legislation or through a formula based indexation process. But, legislation that increases taxes is not popular among legislators, and indexation faces the criticism that it removes the accountability for the tax increase from the legislators' hands. Based on our analyses presented in this paper, it is likely that Georgia is a net exporter of fuel and a

net importer of fuel tax revenue. The relatively low fuel taxes in Georgia along with the likelihood that a substantial portion of the revenue is, on net, imported leaves some room for increasing highway funding by increasing or indexing rates, while allowing the state to maintain a competitive advantage over most of its neighbors.

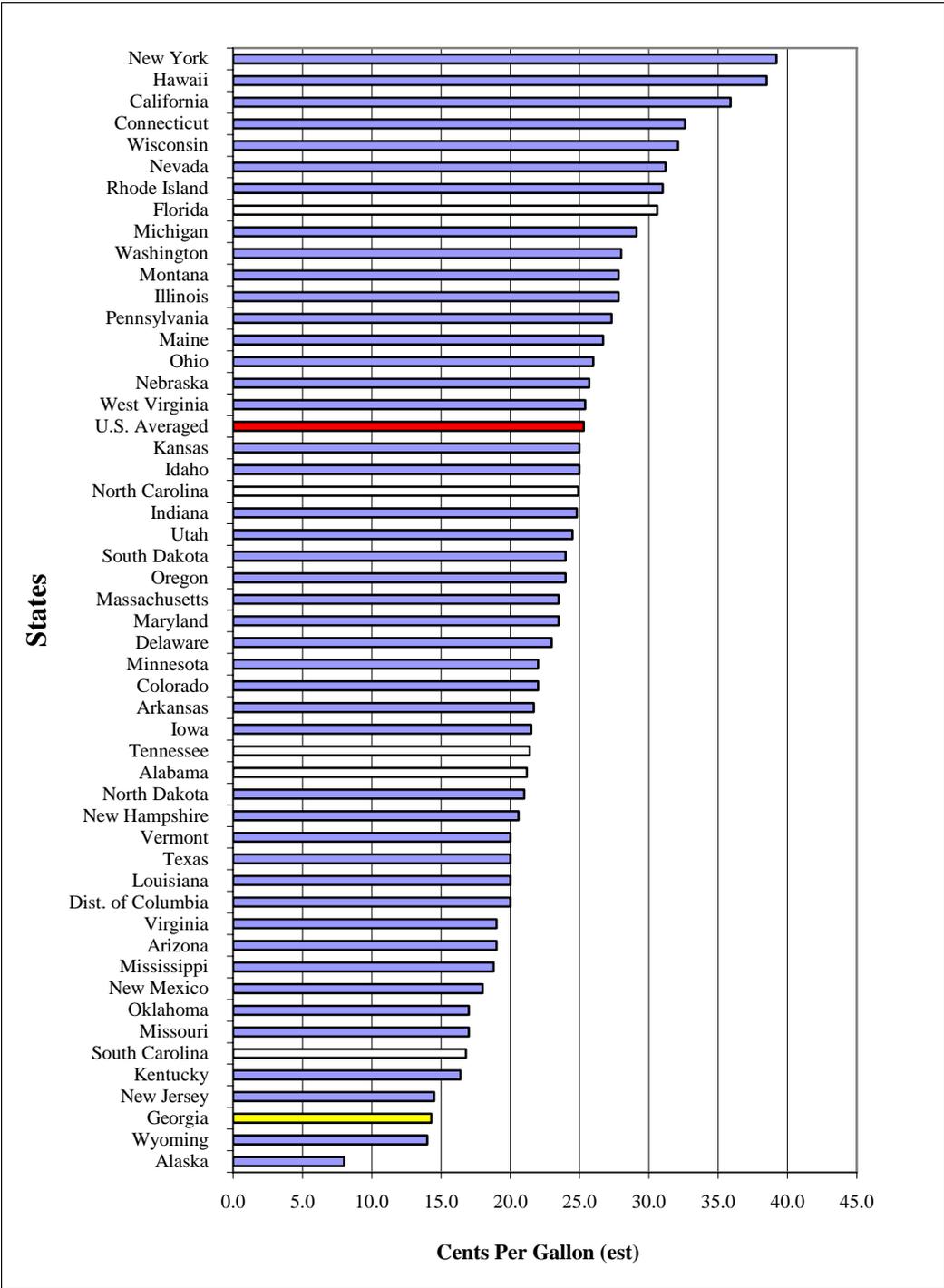
A more geographically targeted alternative is a regional fuel tax. This option would divide the state into separate taxing jurisdictions for the purpose of levying and collecting fuel taxes and adopting highway projects. The effect of a regional fuel tax would be to transfer many of the decisions about revenue generation and highway development to the local level. However, differences in fiscal capacity, regional priorities and actual transportation need may make this alternative difficult to coordinate into a coherent state transportation plan.

Perhaps the most talked about alternative for alleviating the transportation funding shortfalls is through a debt financing instrument called Grant Anticipation Revenue Vehicles (GARVEE) bonds. These GARVEE bonds are secured with future federal highway funds. GARVEE bonds are attractive because they allow for accelerated project delivery. They may allow for cost savings from speeding up projects and avoiding inflation. They also may enable states to avoid state limitations on debt, and no bond referendum is required.

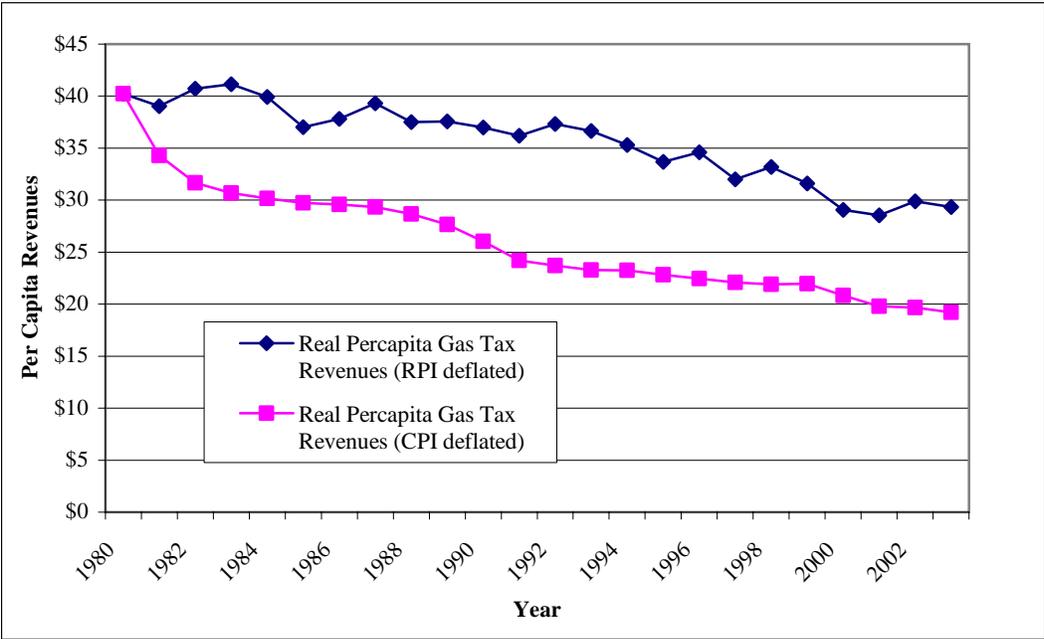
There are, however, potential risks and costs of using this alternative. By promising future federal highway disbursements (and possibly tax revenues), a state reduces its ability to remain fiscally flexible, especially if changes were to occur in the appropriation and authorization of federal funds. In past years, the benefits of avoiding inflation may have been overstated; historically, road building costs (as estimated by the Federal Highway Administration) have risen slower than the costs of other goods and services in the economy, but note that road building costs estimated by the FHWA do not include recent price increases of petroleum-based products (a key raw material used in building roads), nor does it include price increases in labor and other materials used in road building caused by demand from hurricane rebuilding efforts. As a result, some states have been forced to postpone major highway projects because of the price spike in critical inputs.

The search for funding alternatives that do not involve tax rate increases or the reliance on an index has led many states to consider GARVEE bonds. Although GARVEE bonds are being touted as a transportation cure-all alternative to increasing fuel taxes, their usefulness as an alternative for highway funding may be quite limited. What GARVEEs do offer is fast money,

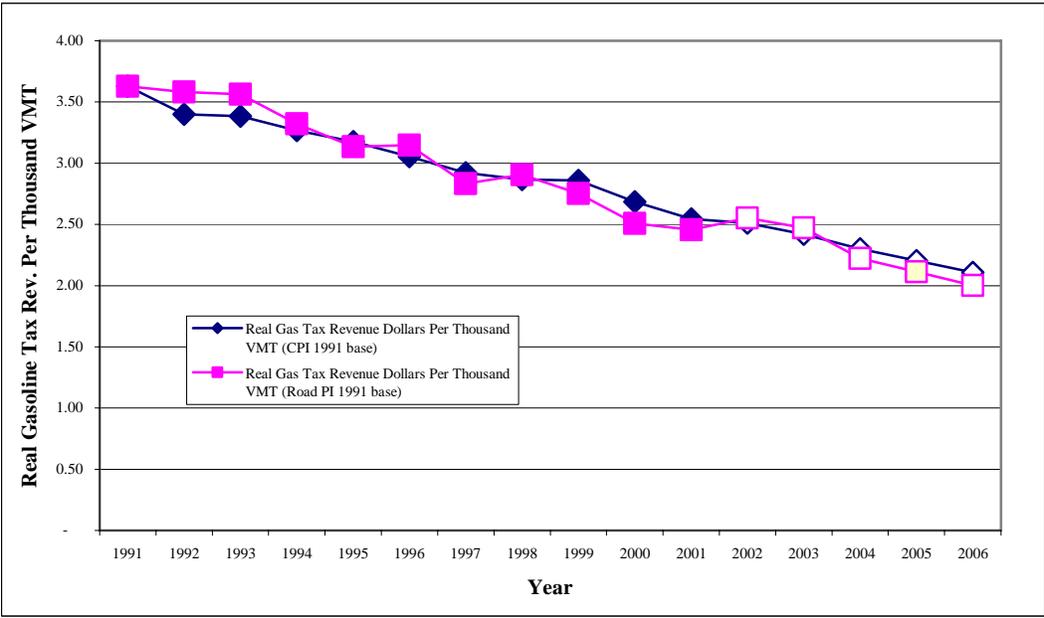
**FIGURE A. TOTAL STATE TAXES ON GASOLINE, 2004**



**FIGURE B: PER CAPITA GASOLINE EXCISE TAX REVENUES: GEORGIA**



**FIGURE C: GASOLINE EXCISE TAX REVENUE PER THOUSAND VMT (ESTIMATED 2002-2006)**



but the risks associated with GARVEEs are not trivial. The use of GARVEEs may substantially limit policy makers from reacting to new and emerging transportation needs should future transportation revenues become constricted.

### Summary

Population growth, longer commutes, and more commercial traffic have increased the demands on Georgia's roads and bridges; but revenues from Georgia's fuel tax have not kept pace with either the costs of road construction or the rising demands being placed on the road network. Inflation has eroded the revenue generating capacity of the fuel excise tax. The addition of the Prepaid Tax Motor Fuel Tax provides some adjustment for cost increases, but the adjustment is small and far from adequate. Although the 2005 hurricane season brought with it a sudden and substantial increase in fuel prices (and consequently, revenues from the Prepaid Fuel Tax), this represented only a temporary increase in fuel tax revenues. Recent record-high prices are not likely to substantially change Georgia's overall fuel tax revenue trends unless fuel prices rise to (or above) what was experienced in the 2005 hurricane season and remain there.

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