THE CALIFORNIA GAS TAX SWAP:

A Study of Revenue Volatility in Transportation Planning

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RESEARCH TOPIC

California has historically utilized fuel excise and sales taxes for transportation funding. The former are flat-rate taxes charged on a per-gallon basis, while the latter are charges assessed as a percentage of the pre-tax sales price. Fuel excise taxes have historically been earmarked for transportation purposes, while fuel *sales* taxes have been divided between transit and general state outlays.

In the mid-2000s, soaring gas prices created a perception of excess revenue from the fuel sales tax, with many arguing that using all of this money on mass transit would be unwise in a recession, when so many other needs beckoned. The state began diverting fuel sales tax money previously earmarked for mass transit to pay debt from highway and rail bonds, as well as general services supported by the state. A state court, however, soon ruled that diverting transportation sales taxes to the General Fund was invalid. Therefore, the Governor proposed a "Fuel Tax Swap"; the state would reduce fuel sales tax by 6% and increase the fuel excise tax in hopes of generating the same amount of revenue, with the excise tax then being used to make these payments. Specifically, a portion of the excise tax would be adjusted annually to approximate the amount of money that the previous sales tax *would have generated* (which was itself determined by fuel prices).

RECOMMENDATIONS

- The long-term nature of transportation projects requires funding sources that are stable and hold their purchasing power. Policymakers should attempt to limit or remove the use of sales taxes in transportation funding.

- As long as the excise tax is adjusted based on fuel prices, policymakers should support efforts to account for revenue volatility in transportation planning (i.e. using a multi-year fuel price average in revenue projections).

- For a long-term solution, the state should eliminate the fuel sales tax and increase the excise tax back up to a historical average, while also indexing that amount to inflation. This would allow for greater revenue stability.
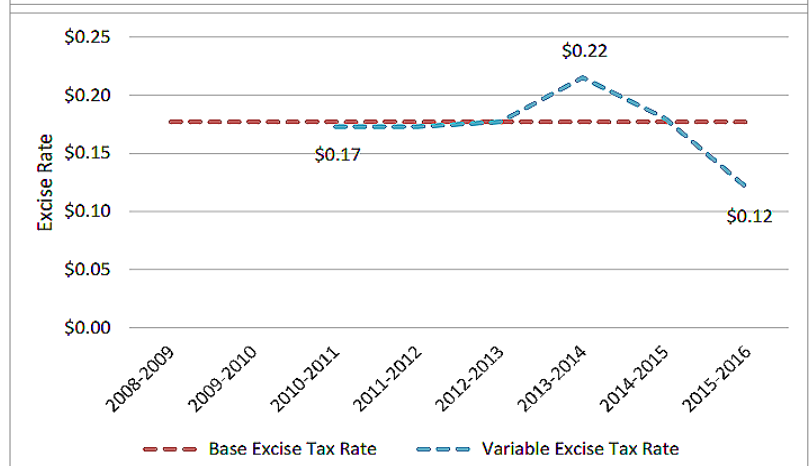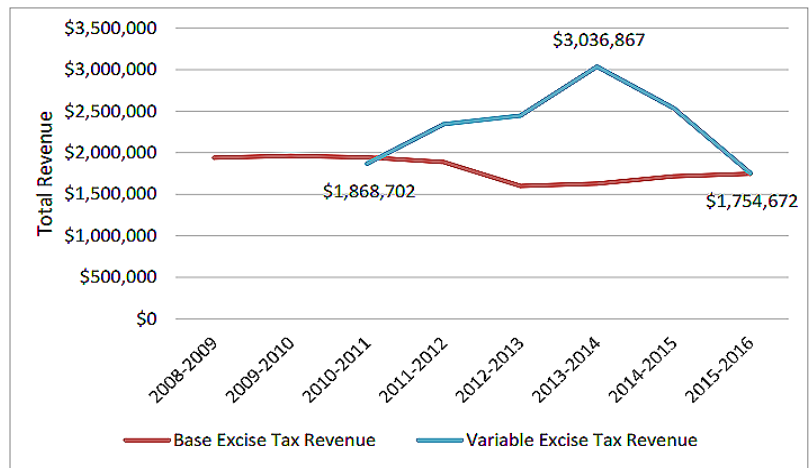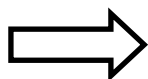

Image from NY Times, 2013

Researchers studied the history of California transportation finance, utilizing primary and secondary sources to present a comprehensive image of the state's transportation funding history, present, and future. The study highlights the need for more stable and secure future state transportation funding. Professor Martin Wachs, Research Faculty Mark Garrett, and PhD student Anne Brown, all from UCLA, authored the report.

MAIN FINDINGS

- The fuel excise tax is less volatile because it is based not on fuel price, but on the number of gallons consumed. Its purchasing power does degrade over time with inflation and as cars become more efficient.

- The state tied part of the excise tax charge to what would have been collected through the lost sales tax in an effort to ensure revenue neutrality. However, this process was based on annual projections of future gas prices and so was imperfect (leading at first to higher revenues as fuel prices surged, and then lower revenues as fuel prices fell).

- Because transportation projects so often take place over years or decades, relying upon taxes that vary with fuel price can create a disconnect between the amount of money projected to be collected, and the amount actually collected.

- California still faces major transportation funding problems caused by large outstanding bonds for capital projects, and the declining real value of the fuel excise tax because of increasingly fuel-efficient cars, inflation, and rising construction costs.

The top image shows that while the revenue from the base excise tax stayed static (shown in red) the portion that was tied to sales tax revenue fluctuated dramatically (shown in blue). The bottom images shows a similar relationship for the *tax rate*.

The image on the right shows how two different transportation accounts saw large revenue fluctuations during the swap.