

Q&A: North Carolina Motor Fuels Taxes

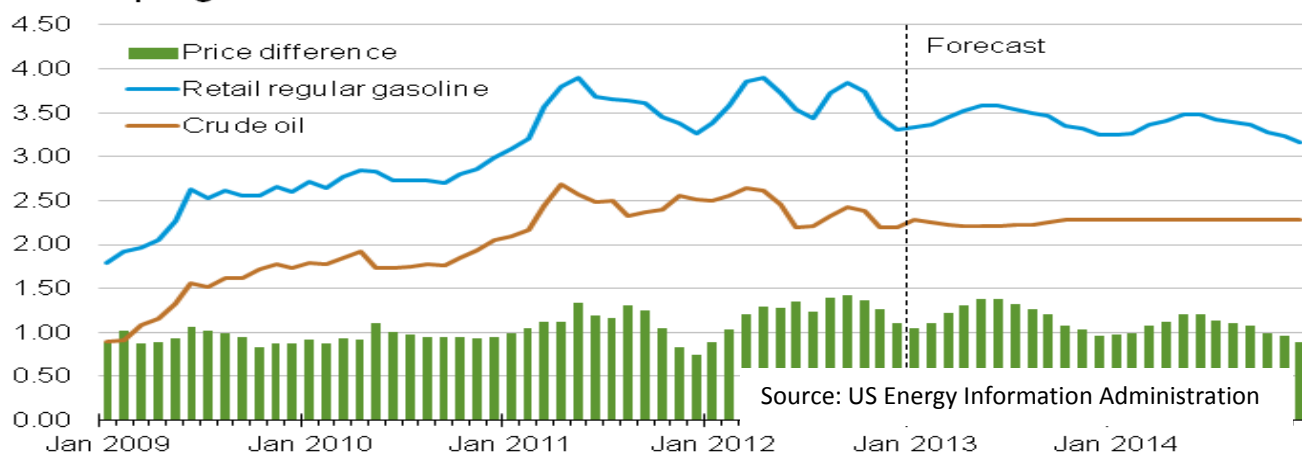
January 2013

Motor Fuel Taxes Nationally

What factors are responsible for the fluctuating motor fuel taxes?

According to the US Energy Information Administration (EIA), the price of crude oil is “the main contributor to the large changes in gasoline prices the U.S. has experienced in recent years.” Crude oil currently accounts for 67% of the price of gas at the pump. The price of crude oil is greatly affected by supply and demand. EIA forecasts that prices will slightly decline in 2013 and 2014 as the global supply of crude oil increases faster than the projected increase in global consumption. Key to this projected increase in supply is the growth of crude oil produced in North America. By next year, U.S. crude oil production is projected to reach the highest annual production level since 1988. However, if the increases in North America’s new pipeline capacity and rapid production growth are less than projected, the EIA forecasted decline in the price of crude oil will be impacted. As shown in the chart below, EIA forecasts crude oil prices to remain steady through 2014 while the price of gasoline mildly fluctuates.

U.S. Gasoline and Crude Oil Prices dollars per gallon



Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, January 2013



NC Motor Fuel Tax Basics

What is North Carolina’s current motor fuel tax rate?

From July 1, 2012 through June 30, 2013, the rate is capped at 37.5 cents per gallon, a decrease of 1.4 cents per gallon over the previous six-month period.

How much revenue does the motor fuel tax generate?

The 2012 budget estimated that the capped motor fuel tax will generate \$1.9 billion in FY 2012-13. Each penny of the tax generates approximately \$50 million per year.

How is the motor fuel tax rate calculated?

The motor fuel tax rate has two components:

- A flat rate of 17.5 cents per gallon (cpg), plus
- A variable rate that is currently capped at 20.0 cpg. The formula for this variable rate is the higher of 3.5 cpg or 7% of the wholesale price of gasoline based on a weighted average price of gasoline and diesel for a six-month base period.

How much does an average consumer pay in North Carolina motor fuel tax each year?

On average, a person pays \$7.50 per year for every penny of the State motor fuel tax. This figure is based on a person driving 15,000 miles annually using a vehicle with an average fuel economy of 20 miles per gallon. An individual will pay approximately \$281 in motor fuels taxes this fiscal year.

In general, how are the revenues generated from the motor fuel tax used?

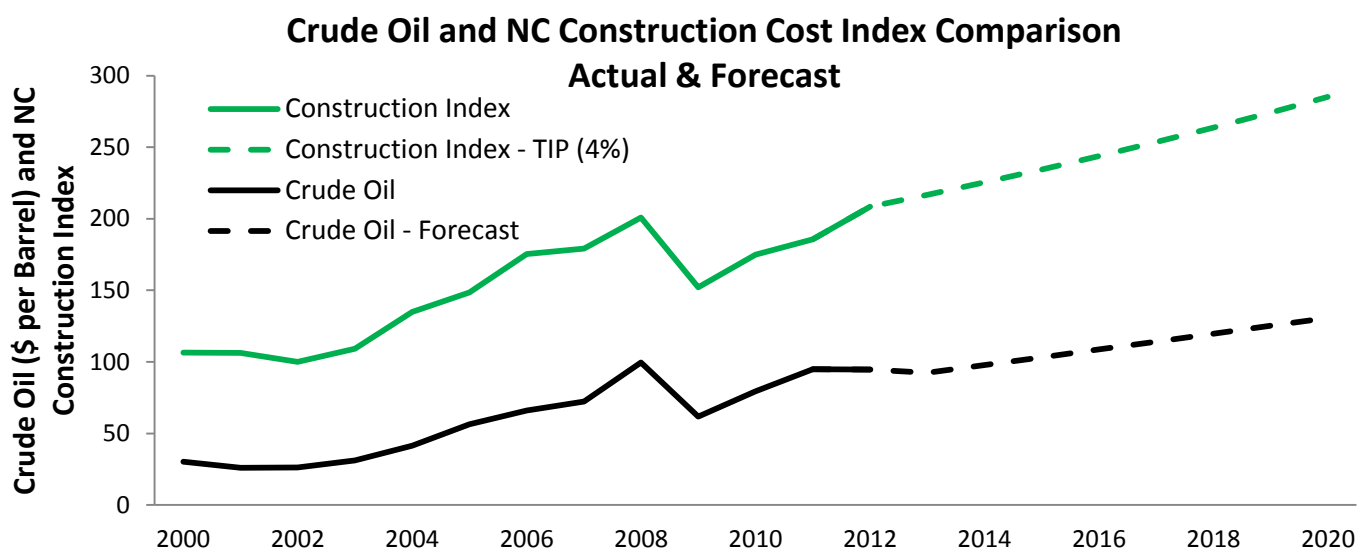
With minimal exceptions, G.S. 105-449.62 requires revenue from motor fuel tax be used “for the State's transportation needs.” Statutorily, 75% of revenues are deposited into the Highway Fund, which supports the state’s maintenance needs, DMV, and five intermodal divisions. The remaining 25% supports the Highway Trust Fund, which is the State’s construction fund.

How were revenues affected by the 37.5 cent per gallon (cpg) cap in effect this fiscal year?

Without a cap, the motor fuel tax rate would have been 37.7 cpg from July 1 – December 31, 2012 and 38.6 cpg from January 1 – June 30, 2013. The cap will reduce Highway Fund and Highway Trust Fund revenues by approximately \$32 million this fiscal year.

Is the motor fuel tax rate correlated with the cost of construction materials?

Asphalt is a by-product of crude oil. Increases in the motor fuel tax rate are linked to increases in the price of crude oil; the greater the price of crude oil, the greater the price of construction. The chart below tracks the relationship between NC DOT construction costs and crude oil prices.



Source: DOT Program Development Unit, January 2013.

Forecasting Motor Fuel Prices and Taxes

What is the national forecast for motor fuel prices for the rest of this year and for 2014?

The 2012 national average retail price for a gallon of regular grade gasoline was \$3.63, up \$0.84 since 2010. As of January 2013, EIA forecasts the national average retail price for a gallon of regular grade gasoline will be \$3.44 in 2013 and \$3.34 in 2014.

How much will the NC motor fuel tax rate change during the next fiscal year?

A preliminary and final consensus revenue forecast between the Executive Branch and the General Assembly's Fiscal Research Division will be completed in February and May, respectively. Preliminary data suggests the rate will range between 37.0 and 38.0 cpg for the next two six-month cycles beginning on July 1, 2013 and January 1, 2014.

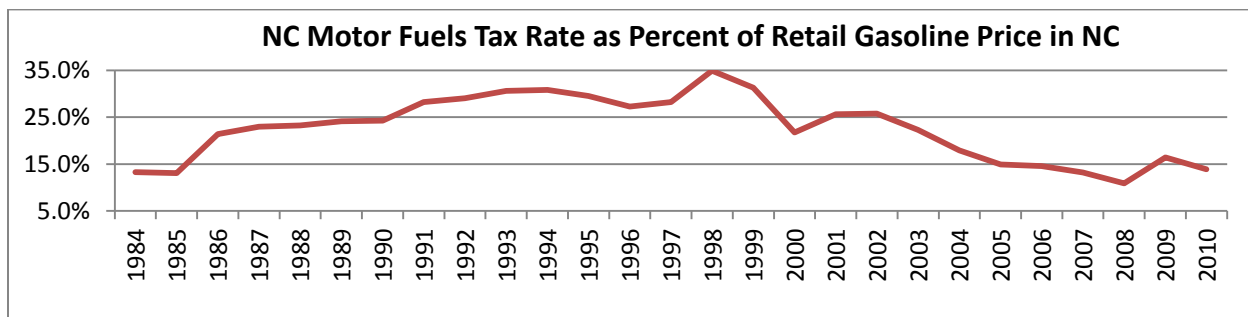
How does DOT account for less revenues?

DOT compares forecasted to actual revenues monthly and adjusts transportation spending accordingly. To manage its cash flow as required by statute, DOT will let fewer projects than planned if actual revenues fall short of forecasted revenues.

Comparing Motor Fuel Taxes

How has NC motor fuel tax rate changed over time?

With few minor exceptions, the NC motor fuel tax rate has risen steadily over time. The Department of Revenue tracks changes in the tax rate at: <http://www.dor.state.nc.us/taxes/motor/rates.html>. However, as shown below, the tax rate as a percentage of the retail price of gasoline (excluding all taxes) in NC is declining. The chart indicates that as the tax rate has steadily increased, the rate has not kept pace with the rising cost of gasoline. The relationship between the price of gasoline and the price of highway construction indicates that North Carolina's tax rate generates the same buying power as it produced in 1984.



How does North Carolina's motor fuel tax rate compare to other states?

Compared to other states, North Carolina has a high motor fuel tax rate. According to the American Petroleum Institute, North Carolina's base rate of 37.5 cents per gallon (cpg) on gasoline is tied with Washington as the highest in the nation. North Carolina is one of 26 states that tax gasoline and diesel at the same rate. Thirteen states tax gasoline at a lower rate than diesel fuel. The remaining 11 states tax diesel fuel less than gasoline. In comparison to North Carolina, only one state, Connecticut, has a higher base tax rate on diesel fuel. Washington's rate diesel fuel tax rate is tied with North Carolina.

As of January 1, 2013	Gasoline	Diesel
Federal	18.4	24.4
Base Rate- North Carolina/ Average All States	37.5 / 21.0	37.5 / 19.0

In addition to the base rate, North Carolina levies an additional motor fuel tax inspection fee of 0.25 cpg. Including North Carolina, 39 states levy an additional tax to the base motor fuel tax rate. The additional taxes include sales taxes on gasoline and/or diesel fuel, gross receipt taxes, and environmental or other fees. When comparing total state and local taxes on gasoline, seven states have a higher combined motor fuel tax rate than North Carolina. The average *total* state and local tax rate on gasoline in the United States is 30.4 cpg. Eight states have a higher combined diesel fuel tax rate than North Carolina. The average *total* state and local tax rate on diesel fuel is 30.0 cpg.

How do neighboring states tax motor fuel?

All neighboring states apply an additional tax to gasoline and diesel fuel. Georgia levies a 4.0% sales tax on the average price of motor fuel and a local sales tax that varies based on population. South Carolina levies a 0.25 cpg inspection fee (the same as North Carolina) and a 0.5 cpg Underground Storage Tank cleanup fee. Tennessee applies a one cent special petroleum tax for gasoline and a 0.4 cpg environmental assurance fee. Virginia levies a 0.6 cpg petroleum storage tank fee and enables some localities to charge a 2.1% sales tax.

State	Gas Excise Tax	Other Gas Tax	Total Federal, State & Local Gas Tax	Diesel Excise Tax	Other Diesel Tax	Total Federal, State & Local Diesel Tax
Georgia	7.5	21.0	46.9	7.5	24.5	56.4
North Carolina	37.5	0.25	56.2	37.5	0.25	62.2
South Carolina	16.0	0.8	35.2	16.0	0.8	41.2
Tennessee	20.0	1.4	39.8	18.0	0.4	42.8
Virginia	17.5	2.4	38.3	17.5	2.7	44.6

Source: American Petroleum Institute, Rates Effective January 1, 2013

Why is the North Carolina motor fuel tax rate higher than the rate in surrounding states?

North Carolina has a higher motor fuel tax rate than other states in the Southeast, including all neighboring states. Two factors distinguish NC transportation revenue needs: (1) road miles owned by the State and (2) the percent of road miles owned by the State. As shown in the chart below, North Carolina owns more road miles than neighboring states. Local governments may use revenues from other sources to support local roads.

State	Road Miles Owned by State Agency	Total Road Miles	Percent Owned by State Agency
Georgia	17,984	122,917	15%
North Carolina	79,466	105,653	75%
South Carolina	41,422	66,024	63%
Tennessee	13,871	94,207	15%
Virginia	58,103	74,378	78%

Source: FHWA, Highway Statistics 2009 and 2010