SJR 385: Joint Subcommittee to Study Fuel-Efficient Vehicles and Transportation Funding.

September 12, 2007 - Meeting Summary

Senate Joint Resolution 385 (Wagner) establishes a joint subcommittee to study fuel-efficient vehicles and transportation funding. The joint subcommittee held its first meeting on Wednesday, September 12, 2007, in Richmond. The joint subcommittee elected Senator Frank W. Wagner, the patron of SJR 385, as chairman of the joint subcommittee and Delegate G. Glenn Oder as vice-chairman of the joint subcommittee. Other legislative members of the joint subcommittee are Senator Patricia S. Ticer, Senator John C. Watkins, Delegate Jeffrey M. Frederick, Delegate L. Scott Lingamfelter, Delegate Stephen C. Shannon, and Delegate Shannon R. Valentine. The two nonlegislative citizen members of the joint subcommittee are Mr. Hugh Montgomery and Mr. Thaddeus J. Nowak. The Secretary of Transportation, Pierce R. Homer, and the Secretary of Finance, Jody M. Wagner, serve as the ex officio members of the joint subcommittee.

Overview

Staff presented an initial report of the mandates of and issues pertinent to SJR 385. To begin, the joint subcommittee must conclude its study of fuel-efficient vehicles and transportation funding by November 30, 2007; however, the joint subcommittee is authorized to hold four meetings in conducting its study. Moreover, the joint subcommittee must submit a final report of its findings and recommendations by the first day of the 2008 General Assembly session.

In addition, staff recited the charges of SJR 385. Primarily, the joint subcommittee is charged with studying long-term solutions for transportation funding that are not dependent upon revenue generated from a motor vehicle fuels tax. Likewise, the joint subcommittee must consider ways to promote the use of hybrid and fuel-efficient vehicles, which might include the development of tax incentives for the use of such vehicles. The resolution also specifies that all agencies of the Commonwealth are to provide technical assistance to the joint subcommittee.

Staff later explained key provisions of the Virginia Fuels Tax Act. Namely, motor fuels and alternative fuels were defined and distinguished. In addition, staff espoused the tax rate for the four relevant motor fuels (gasoline/gasohol, diesel fuel, motor fuel blended with gasoline, and motor fuel blended with diesel fuel), liquid alternative fuel, and all other alternative fuel.

Staff's presentation continued into an explanation of fuel economy, alternative fuels use, and road use at the national level. The Fuel Tax and Alternatives for Transportation Funding (The Fuel Tax), a report published by the Transportation Research Board of the National Academies, served as the source for such information. Staff displayed several graphs found in The Fuel Tax. One such graph illustrated the increase in vehicle miles traveled per year in the United States. Another graph bifurcated the number of cars and light trucks on the road and the Corporate Average Fuel Economy(CAFÉ) standards for such cars and light trucks. Two other graphs, when taken together, demonstrated that while the average user fee per mile traveled has declined nationally, highway expenditures per user fee has increased nationally. Several conclusions were offered in The Fuel Tax. Namely, The Fuel Tax concluded that although the

present highway finance system can remain viable for some time, travelers and the public would benefit greatly from a transition to a direct mileage-based user fee. To achieve such direct mileage-based user fee, The Fuel Tax presented a roadmap of a couple of short-term and long-term solutions. Such short term solutions include increasing the number of toll roads and toll lanes and increasing fuel taxes and registration fees. By contrast, long-term solutions include mileage based user fees, as well as time and location based user fees.

Presentations

John R. Layman, Director/Chief Economist - Virginia Department of Taxation, Office of Revenue Forecasting

Mr. Layman began his presentation to the joint subcommittee by describing the three components of Virginia's motor fuels consumption: gasoline, diesel, and alternative fuel. Gasoline represents 66% of the total motor fuels consumption in Virginia. Diesel fuel, by contrast, represents 34% of such total, and most diesel fuel consumption is by nonpassenger-carrying vehicles. Alternative fuel represents only slightly above 0% of the share of motor fuels consumption in Virginia.

In the next part of his presentation, Mr. Layman described the many different parameters that impact Virginia's motor fuel demand. These parameters include population growth, economic growth, fuel prices, and vehicle mix and driving habits. With respect to population growth, Virginia has been on a trend toward slower growth since 2000. Moreover, with respect to economic growth, the Commonwealth has begun the phase of decelerating growth in the economy, and the demand for motor fuels, particularly diesel, is driven by economic activity. In describing the impact of fuel prices, Mr. Layman noted that gasoline prices have increased 80% since January 2004. Retail motor fuel prices follow prices of crude oil, and the Energy Information Administration estimates gasoline prices will steadily decline over the next decade. Furthermore, Mr. Layman commented, with respect to vehicle mix and driving habits, that there has been a broad, long-term, but gradual movement to smaller vehicles, and sales of large SUVs went down 19% in 2005 and 26% in 2006.

The demand for gasoline is relatively inelastic over the short term. Research suggests it takes years for higher gas prices to meaningfully damp consumption. Prices would have to be considerably higher and stay high for a long time to significantly curb gasoline consumption. Mr. Layman also pointed out that motor gasoline demand is generally correlated to highway demand. Highway demand is the ratio of vehicle miles traveled to average fuel efficiency. Over the last 10 years, vehicle miles traveled and gasoline consumption have increased by 1.5% in Virginia.

The third part of Mr. Layman's presentation centered on motor fuels tax collections. First, Mr. Layman named the components of Commonwealth Transportation Fund (CTF) revenues. These components are motor fuels tax collections, motor vehicle sales tax collections, state sales tax collections, motor vehicle registration fees collections, and other sources. Motor fuels tax collections represented 38% of total CTF revenues in fiscal year 2007. Over the last 20 years, motor fuels tax collections have represented 44% of total CTF revenues on average, and the share has steadily declined since fiscal year 1998. Note also that motor vehicles sales tax collections represented 27% of total CTF revenues in fiscal year 2007; state sales tax collections represented 22% of total CTF revenues in fiscal year 2007; motor vehicle registration fee

collections represented 7% of total CTF revenues in fiscal year 2007; and other sources of revenue represented 6% of total CTF revenues for fiscal year 2007.

While motor fuels tax collections' share of total CTF revenues has steadily declined since 1998, motor fuels tax collections have increased at a steady pace. Since fiscal year 1990, the average annual percent change in motor fuels tax collections is 1.9%. Over the last three years, the average annual growth has been 0.5%. Adjusted for inflation, motor fuels tax collections are at levels seen in the early 1990s. More specifically, motor fuels tax collections have declined for three consecutive years when adjusted for inflation. Also, fiscal year 2007 collections of the motor fuels tax were 6.7% below the level recorded in fiscal year 1990 when adjusted for inflation. Note, however, that the official forecast for motor fuels tax collections anticipates trend growth over the forecast horizon. Mr. Layman noted that the transportation funding and reform included in House Bill 3202 (2007) drives the above-trend growth in CTF revenues in fiscal year 2008 and fiscal year 2009.

Mr. Layman concluded his presentation by noting that long-term trends in motor fuel demand are difficult to predict. Reasons for such difficulty include geopolitical events, changes in weather patterns, worldwide economic growth, exploration efforts (particularly overseas exploration efforts), energy prices, and technological advances. With respect to energy prices, crude oil prices are estimated to be $95 a barrel by 2030; with respect to technological advances, sales of alternative vehicle technologies (including diesel) are expected to account for 28% of new light duty vehicle sales in 2030, up from 8% in 2005.

* The above information is taken directly from Mr. John R. Layman's PowerPoint presentation to the joint subcommittee entitled "Motor Fuels Tax Revenues."

George E. Hoffer, Ph.D., Professor of Economics - Virginia Commonwealth University

Professor Hoffer delivered a presentation entitled "The Impact of New Technology Motor Vehicles on Virginia Highway User Fee Revenues." The professor's presentation began with a discussion of what fuel-efficient vehicles the professor expects to come in the next five years. First, Professor Hoffer stated that more diesel-powered light vehicles are expected in Europe, but the fate of such vehicles in the U.S. depends on the success of the Ford light truck diesel. Second, Professor Hoffer argued that more full hybrids will come into the market as the relative price of such vehicles falls, making them more attractive. However, Professor Hoffer noted that the hybrid tax credits apply to too few units to make a difference in the full hybrid vehicle market. By contrast, Professor Hoffer explained that mild-hybrids are "more hype than anything." A third version of the hybrid, the plug-in electric hybrid, has a real future, according to Professor Hoffer, if the lithium-ion battery proves to be viable. Further, the U.S. market can expect to find more new technology gasoline engines and class "A" and "B" vehicles while fuel-inefficient truck-based SUVs are retiring with time.

The second segment of Professor Hoffer's presentation centered on his proposed "model" highway user tax system. Such system has three components: (1) Fixed fee per month for the right to drive in Virginia; (2) variable fee based on miles driven per month; and (3) variable congestion user tax. The first component, the fixed fee per month for the right to drive in Virginia is equivalent to the current registration fee/license plates. The second component, i.e.,

the variable fee based on miles driven per month, is equivalent to the current motor fuels tax. Such fee, however, could vary by region of the state, by type of road taken, and/or by weight of the vehicle. This fee is also designed to cover highway growth and the variable maintenance cost per mile. Finally, the third component of the model highway user tax system is the variable congestion user tax. This tax/fee, designed to better utilize existing roads and cover the capital cost for new roads where excess demand exists, would vary by time of day and day of use.

The specifics of this model highway user tax system were also explicated. First, the system would be GPS satellite based. Also, the monthly bill would be itemized by fixed charge, miles driven, place and time of day vehicle drove, and suggested driving alternative routes and times.

Finally, Professor Hoffer explained the implications of frequently proposed ideas for increased transportation funding. First, the professor noted that higher gasoline taxes, an idea recommended by the Transportation Research Board, ignores the basic problem of an increased number of fuel-efficient vehicles. Second, with respect to an odometer mileage fee collected as part of the state safety inspection, Professor Hoffer stated that problems with odometer fraud and collection, including nonresident collection, may occur. A third proposed solution, i.e., registration fees on new technology vehicles, would lessen incentives to adopt new technology and would encourage firms in the Washington, D.C., metropolitan area to register elsewhere. In addition, such registration fee would need to be high enough to make a difference per mile, but such a high fee would penalize the low road user and allow the high road user to underpay. Further, Professor Hoffer suggested that charging hybrid and plug-in vehicle owners with higher registration fees is perverse and inefficient because such a solution does not collect a fee per mile driven, when driven, or where driven. Lastly, Professor Hoffer remarked that the reasons for increasing diesel fuel user taxes above gasoline are threefold: (1) diesel-powered vehicles are heavier vehicles on the road; (2) diesel-powered vehicles get much better mileage; and (3) nonresidents pay disproportionate share because the great majority of diesel-powered vehicles are heavy trucks.

* The above information is taken directly from Professor George E. Hoffer's handout to the joint subcommittee entitled "Notes on The Impact of New Technology Motor Vehicles on Virginia Highway User Fee Revenues."

Mr. Al Christopher, Executive Director - Virginia Clean Cities

Mr. Christopher testified before the joint subcommittee as to how he believes Virginia can help promote vehicle fuel efficiency and advanced technology vehicles like hybrid electrics and hydrogen, and alternative fuels like biodiesel and ethanol. According to Mr. Christopher, step one toward the goal of fostering greater fuel efficiency, wider acceptance of new fuel-saving technology and encouraging the use and production of renewable alternative fuels is for large fleet owners to lead by example -- to buy efficient vehicles and use alternative fuels. For 15 years, the Clean Cities program has stated that government has a special obligation to lead and the capacity to help build early markets for fuel efficient vehicles and alternative fuels, primarily by using them. Moreover, Executive Order 48 is an excellent mechanism here in Virginia to achieve such promotion. Specifically, Executive Order 48 encourages state agencies to buy and

use hybrids, other fuel efficient vehicles and alternative fuels like biodiesel and a high blend of ethanol called E85 that can be used in alcohol-capable Flex Fuel Vehicles.

Step two toward fostering greater fuel efficiency, wider acceptance of new fuel-saving technology, and encouraging the use and production of renewable alternative fuels is to dedicate a source of funds so that it is possible to buy fuel efficient vehicles and use alternative fuels, even when economic conditions are negative. Mr. Christopher suggested that, in the short term, Virginia might be able to get badly needed refueling infrastructure to make biodiesel and E85 available to state agencies and the public by incurring an opportunity cost, such as leasing out real estate to third party alternative fuel providers. Moreover, public access to the limited infrastructure is vital.

Virginia has in place the framework to foster a long-term solution to part of the petroleum addiction problem. The Biofuels Production Incentive Grant Fund and Program was established two years ago by House Bill 680 and amended last year by House Bill 3089. According to Mr. Christopher, however, the producer incentive program lacks adequate and consistent appropriations. Moreover, Mr. Christopher remarked that Virginia's fund is too small today to support one-year capacity production by the three biodiesel refiners located in the Commonwealth, none of which has attempted to qualify thus far because production threshold criteria are set higher than current sales will support. Thus, the Virginia fund would need additional revenues in order to provide a full 10-cent per gallon incentive to an ethanol producer.

In addition to explaining the state of Illinois' innovative rebate incentive to encourage consumers to purchase hybrid electric and a limited number of other fuel efficient vehicles, Mr. Christopher concluded his presentation by noting that a dedicated source of money derived from "new" revenues produced by an alternative fuel industry itself is one option of providing a sustainable funding source that is large enough to compete with similar incentives offered by other states.

* The above information is taken directly from Mr. Al Christopher's PowerPoint presentation and letter to the joint subcommittee.

The next meeting of the joint subcommittee has not yet been set. Meeting materials, for this meeting, are available on the joint subcommittee's website at: http://dls.state.va.us/FEV.htm.