The Vehicle Mileage Tax

Increasing use of public transportation and fuel-efficient vehicles has led to a decline in gas-tax revenue for many states. For most states, this gas-tax revenue is the principal source of funding for transportation projects; thus the continuing decline in receipts from the tax has many states looking for alternative methods to fill the financial gap and keep transportation funding level or growing. This report will focus on the vehicle mileage tax as a possible mechanism for either increasing revenue or decreasing spending.

The Vehicle Mileage Tax (VMT) is a tax based on miles driven, not gallons of fuel used. A Global Positioning System (GPS) mechanism installed in the vehicles tracks the distance traveled. For its proponents, the logic behind such a tax is clear: they contend that in addition to the declining revenue from the gasoline tax, the gasoline tax does not provide adequate incentive to dissuade driving.1 Furthermore, they say the tax is misdirected because most of the costs associated with driving, including road deterioration, noise, pollution, accidents, and congestion are directly tied to when, where, what, and how far one drives, not how much gasoline one uses. Opponents of the tax cite concerns over privacy, implementation and administration, and penalization of commuters, especially lower-income and rural commuters.2

State Actions Regarding the VMT

While many states have implemented pilot programs, to this date, this method of revenue generation has only been adopted statewide in Oregon. Oregon’s Road Usage Charge Program becomes active July 1, 2015. From 2006 to 2007, the Road User Fee Task Force administered a pilot program in Portland to test the viability of implementing a VMT in Oregon. After the pilot

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2 Congressional Budget Office, “Alternative Approaches To Funding Highways.”

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program, however, both the public and the national commission were concerned with the protection of privacy. In order to address the public’s concerns, the Oregon Department of Transportation (ODOT) revised its charging system to include an open architecture, no government mandate for GPS technology installation into vehicles, the ability for motorists to choose how to report mileage, and the opportunity for private sector companies to market their services.

Unprepared to pass a road usage charge bill, in 2011 the Oregon legislature passed House Bill 2138, which allowed for a second pilot program to be developed. Eighty-eight drivers from three states participated in the second pilot program, along with two private vendors. This pilot satisfied the four major goals of achieving public acceptance that had been established: ease of use, motorist choice, open systems, and private sector administration. Drivers were charged 1.56 cents per mile and revenue exceeded fuel tax receipts by nearly 28%.3

Drawing on the success of the pilot, ODOT proposed and the Oregon Legislature approved SB 810 in 2013. On July 1, 2015 the ODOT will rollout a voluntary 5,000 vehicle miles traveled user fee program.4

A study conducted from 2005 to 2007 by the Puget Sound Regional Council in the state of Washington found that the VMT did affect driver choices and had the potential to reduce congestion.5 An emissions-reduction law enacted in 2008 by Washington set goals for reducing annual per capita vehicle miles traveled within the state by 18% by 2020, 35% by 2035, and 50% by 2050.6 This goal, in conjunction with the already large number of fuel-efficient vehicles, has necessitated a look at other revenue sources.7 To this end, a study issued in January 2010 by the Joint Legislative Committee of the state legislature recommended that an array of funding


options be considered to offset the loss of gas tax revenue. These included instituting the VMT, expanding tollbooths, higher licensing fees, and tying the gas tax to the consumer price index.8

The University of Iowa Public Policy Center conducted an extensive study on the VMT in 12 areas around the country.9 The released findings show that originally participants had concerns over privacy, but these concerns dissipated over the course of the study, as participants began to understand that the only data collected was miles driven, or in one particular phase of the study miles driven within a given tax jurisdiction. The VMT could not be used as a tracking device.10 Additionally, as the study progressed many participants were eager to have more specificity in their tax statements, such as their daily miles traveled in order to confirm that charges were correct. The study found that at the beginning only 20% of participants supported the concept of the VMT but by the end of the study more than 80% of the participants approved. The researchers determined that nationwide implementation would probably take 5-10 years because of the costs associated with installing the equipment post-manufacture, and they determined that a requirement for new cars to include the technology would cut down significantly on both cost and potential for tampering with the monitor.11

In 2009, the Transportation Commissioners of California, Washington, and Oregon wrote to the federal government to convey their support for the VMT and asked that it be considered for implementation on a national scale.12 Additionally, the Congressional Budget Office identified the VMT as a “practical option” for raising additional transportation funds.13 Congressman Earl Blumenauer, Oregon, has introduced H.R. 3638, the Road Usage Fee Pilot Program Act of 2013, creating a $30 million competitive grant program to fund pilot projects like the ones undertaken in Oregon14.

As of June 2012, there were six mileage-based user fee pilot projects in the United States, including the Oregon Road User Fee Pilot Program and Puget Sound Regional Council ones.

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11 David DeWitte, “UI Study: Drivers would accept new kind of highway tax.”
14 Honeyman, Craig, “Oregon’s VMT Pilot to Begin its Third Phase- Road Usage Charge Program Update.”
Additionally, there was a national evaluation of a mileage-based road user charge done in Iowa with field tests in California, Florida, Idaho, Illinois, Iowa, Kansas, Maine, Maryland, Montana, New Mexico, North Carolina, and Texas, which found that mileage-based road-user charging is feasible with current technologies, but the installation of equipment into existing vehicles may pose a challenge.  

International Experience with the VMT

Germany and Holland have implemented programs similar to the VMT. As Europe’s most congested country, Holland has struggled with reducing automobile commuting. In November 2009, the Dutch cabinet approved a measure that would place a tax on drivers based on how far they travel. In addition to distance, the Dutch model would consider the fuel efficiency of the vehicle and the time of travel (e.g., peak congestion hours versus non-congestion hours). The tax, proposed to begin at a level of 3 euro cents (as of April, 2011 approximately 4.3 US cents) per kilometer (approximately .6 miles) in 2012, is scheduled to rise through 2018 to a level of 6.7 cents (as of April, 2011 approximately 9.5 US cents) per kilometer. To offset the increased revenue from this, the Dutch proposal would repeal the 25% tax on auto sales, as well as the road tax, which every Dutch citizen must pay to operate a vehicle. Such a policy has given rise to an intensified debate within Germany on its transportation tax system. In Germany, tolls are assessed on heavy trucks using the federal highway system. They are measured using GPS technology, and are calculated by truck weight, distance traveled, and emissions produced. According to the Federal Highway Administration’s Office of Innovative Program Delivery, in the U.S., Illinois also taxes trucks according to VMT.

Conclusion

The increased use of fuel-efficient cars and public transportation has led to the decline of revenues from gas taxes. Revenues generated from gas taxes were used to support

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transportation infrastructure projects among different states. Thus, this decline has caused budget shortfalls for transportation departments. Transportation experts have proposed different solutions to mitigate these problems; such plans include the use of vehicle mileage taxes, public-private partnerships, and consolidation. The vehicle mileage tax plan bases road taxes based on miles driven, but opponents note that this could lead to privacy, implementation, and administrative problems. On July 1, 2015 the Oregon VMT tax will be implemented, and while it has addressed many of these problems, the results of the VMT tax remain to be seen.

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Disclaimer: This report has been compiled by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the report does not reflect the official policy of the University of Vermont.