The World Has Changed

Oregon Pioneers Road Usage Charging in North America

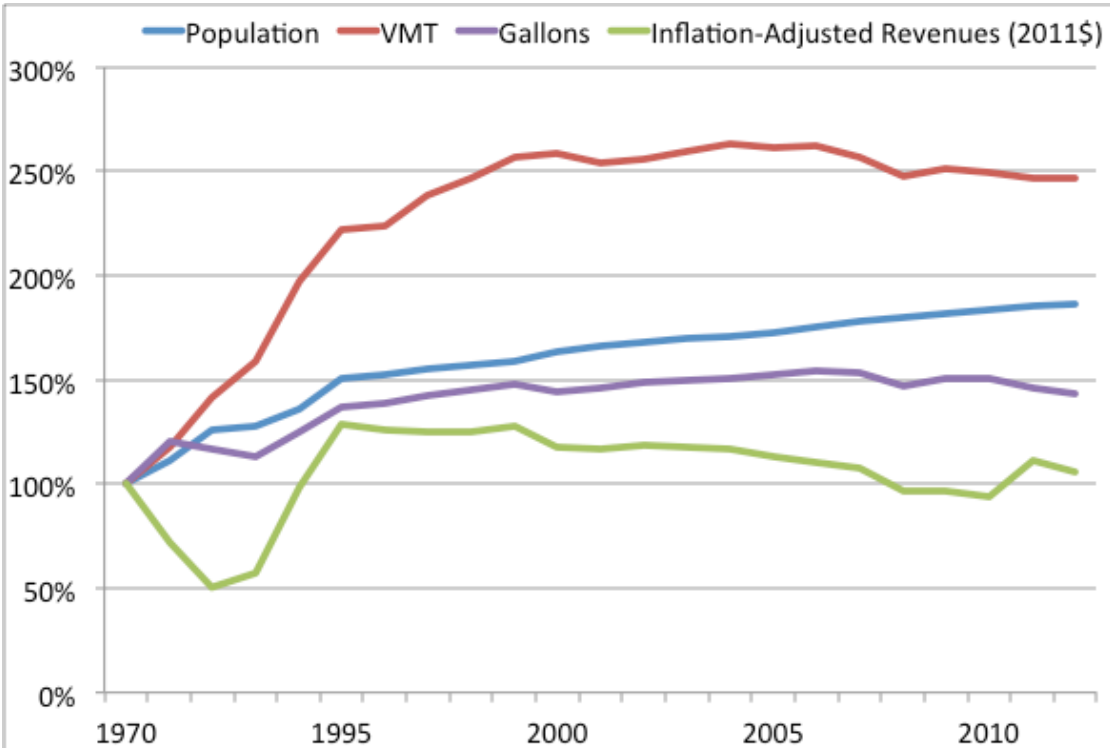
By D'Artagnan Consulting LLP

In 1919, Oregon made the most significant contribution to transportation funding policy of the 20th century, becoming the first state in the U.S. to implement a gas tax to pay for roads. This summer, the Oregon Legislature passed and Governor John Kitzhaber signed into law Senate Bill 810, creating a distance-based road usage charge by July 1, 2015 for 5,000 volunteer vehicles. The law, which passed the Oregon Senate (24-6) and the House (47-13), enjoyed broad bipartisan support plus the support of the Alliance of Automobile Manufacturers. The new legislative mandate may sound modest because it applies to a small fraction of the vehicle fleet, but make no mistake: this bold move by Oregon's political leadership marks America's most significant transportation funding policy innovation of the 21st century. It may be a small pebble, but it is making big waves!

Oregon deserves the reputation it enjoys as an environmentally friendly state. From the coast to the Cascades, Crater Lake to the Columbia River, Oregonians prize the natural beauty and bountiful natural resources within their state's borders. This consciousness extends to transportation, where the combined ownership rate of hybrid, electric, and plug-in hybrid vehicles is twice the national average. Economists expect this trend in fuel-efficient vehicle ownership to grow as automakers strive to meet EPA-mandated 54.5 MPG CAFE standards by 2025. The adoption of ever more fuel-efficient vehicles helps Oregon to meet its greenhouse gas emissions reduction goals, but reduces fuel tax revenues and thus harms traditional funding of transportation.

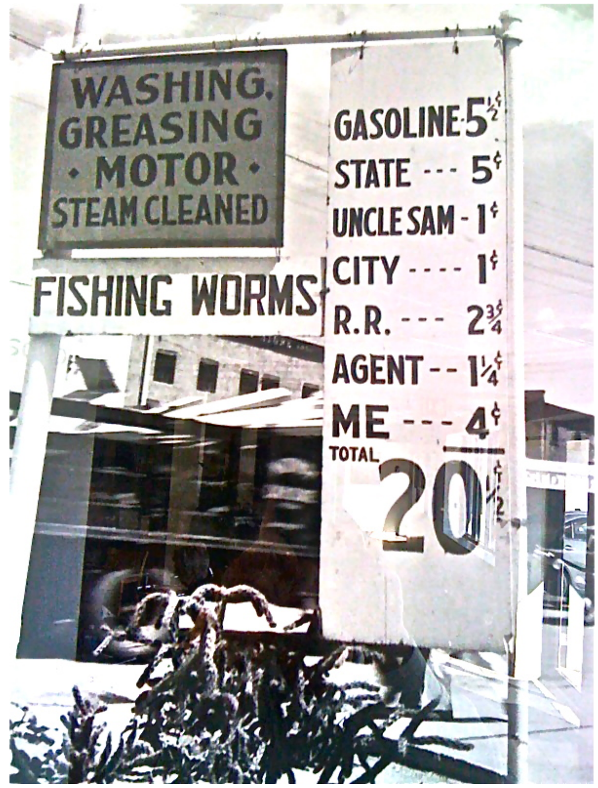
Oregon policymakers have recognized that the improving fuel efficiency of the vehicle fleet threatens the viability of the nearly 100-year-old fuel tax, the state's primary source of transportation revenue. The Oregon constitution requires that light and heavy vehicles pay their fair share for roads, but the share that motorists currently pay depends on the fuel economy of their vehicles. The fuel tax was last increased to 30 cents per gallon in 2011. Despite the increase, the revenue threat is looming on the horizon: 2012 fuel consumption in Oregon was at its lowest level since 1997, at just over 1.6 billion gallons. Inflation-adjusted revenues are down 19% since 1997, while VMT are up 8% over the same time frame. And from its most recent peak in 2006, fuel consumption has declined by a startling 10%.

Figure 1: Population, Vehicle Miles of Travel, Gallons of Fuel Consumed, and Inflation-Adjusted Fuel Tax Revenues in Oregon, Indexed to 1970



To address this dilemma, Oregon's legislature created the Road User Fee Task Force (RUFTF) in 2001. RUFTF explored many of potential revenue mechanisms. RUFTF ultimately settled on a distance-based road usage charge as the preferred mechanism to address dwindling revenues. After a decade of policy developments and refinements, public outreach, industry consultations, and two successful pilot tests, policymakers agreed that the time had come to begin the transition from fuel taxes to distance-based road usage charges, and passed Senate Bill 810.

Senate Bill 810 directs the Oregon Department of Transportation (ODOT) to implement a road usage charge of 1.5 cents per mile by July 1, 2015. Drivers who make the switch will pay 1.5 cents for every mile they drive instead of 30 cents per gallon at the pump. The extent of the current law is limited — participation will be voluntary and capped at 5,000 drivers — but its potential as a model for the region and country is tremendous.



Throughout the Legislative sessions and sub-committee meetings, the notion of road usage charging was not above doubt and criticism from policymakers and the public. Some expressed a natural hesitancy to depart from a time tested tax mechanism that the fuel excise tax has become, to political fears of raising taxes. Other concerns raised about road usage charging included the possibility of exchanging the easy and efficient management of a fuel surcharge for a complex, less efficient charge, and privacy concerns about government tracking personal driving mileage were also common condemnations. Oregon's transition toward a road usage charge model is instructive for other states because of how officials dealt with each of these criticisms in an open and gradual way.

Oregon did not achieve this milestone by accident or coincidence. The state and the appointed RUFTF committee have been preparing the public for a per-mile road usage charge since 2001. It approved and directed two pilot programs, one in 2007 and the most recent one earlier this year. The latest pilot program leveraged the lessons learned from the previous pilot by doing the following:

1. employing an open system design (a system based on an open-standards including a "mileage message" that defines how mileage information is communicated electronically, to prevent vendor lock-in and encourage competition),
2. bringing in commercial firms to handle the account processing (allowing private firms to handle user accounts, in addition to the public sector, in order to take advantage of private sector efficiencies),
3. providing user choice of technology and payment systems (offering several different technologies for reporting miles traveled and offered check and credit card payment).

To ensure policymakers experienced the system after these updates, ODOT enlisted legislators and key decision makers to participate and experience the technology, billing, and actual collection of revenues to demonstrate the viability of a road usage charge.

An independent evaluation of the pilot test results, coupled with extensive focus group testing around the state, suggests that the multiple mileage reporting technologies tested in the pilot—ranging from location-based devices and smartphone applications to simple mileage counting—are viable and commercially available. The evaluation concluded that providing users multiple options for account management and choice of mileage reporting technology options allayed the privacy and "big brother" concerns from the earlier test where only GPS technology was employed.

Oregon's innovative method of embracing basic commercial market principles and private industry, hands-on testing of technologies, independent evaluation of pilot tests, and collecting focus group feedback allowed Oregon to allay the public's perception concerns toward road usage charging. That combination is the winning formula for Road Usage Charging.

What's next?

The passage of SB 810 is a watershed moment in transportation policy. It will spark a new wave of policy studies in other states that will inevitably lead to paradigmatic changes in transportation policy, just as Oregon's fuel tax did a century ago.

After Oregon's 1919 implementation of a gas tax, three decades passed before all 50 states implemented gas taxes of their own, and the federal gas tax was not imposed until 1943. In the case of road usage charging, some jurisdictions will continue to "wait and see" how the systems and solutions that emerge from Oregon progress and succeed. But others will opt for change sooner, in an effort to stave off further declines in fuel tax revenues that are now universally recognized.

Neighboring Washington State has already made significant progress, employing a very pragmatic process of determining if and how Road Usage Charging fits its transportation policy needs. In parallel to Oregon's recent work, Washington State, under a joint project lead by the Washington State Transportation Commission and the Washington State Department of Transportation, determined through a special steering committee that road usage charging is feasible. The unanimous findings of the 21-member Steering Committee were reported to the Legislature, combined with a work plan for further examining the desirability of road usage charging in Washington State.

The Washington State legislature authorized new funding for the proposed work plan in the last legislative session. The next milestone will be the development of a detailed business case for road usage charging, which will be provided to the legislature, as well as the newly elected Governor Jay Inslee and his new Secretary of Transportation Lynn Peterson. The impact of the passage of Oregon's road usage charging legislation will further support the process in Washington State.

To the south, California is wrestling with its own transportation funding demons. Governor Brown has instituted a special transportation commission to review transportation needs and make broad recommendations. At this time, the scope of the California commission's recommendations can only be speculated about, but there is a gigantic need to address the pending fiscal cliff of transportation funding in California that occurs in 2015. It would be difficult for California to ignore the developments in Oregon in its study of alternatives to provide the revenue necessary to address its growing transportation needs.

Other states in the western region of the USA are also addressing road usage charging. Nevada and Colorado have both shared information with Oregon, and Nevada—like Washington State—has participated in the most recent Oregon pilot tests. Unlike Oregon, however, which had a highly focused Road User Fee Task Force of legislative backing and stakeholders, or Washington State's Steering Committee of stakeholders, Nevada's work has focused more on system development and research than on legislation. In Colorado, the efforts are joint projects of several industry groups and the Colorado DOT. The impact of Oregon's pioneering efforts cannot be understated in providing an impetus and direction to these states in advancing road usage charging.

Several other states are addressing mileage-based policy discussions during the first part of 2013. These included, among others, Florida, West Virginia, New Jersey, Massachusetts, Texas and Minnesota. Given the passage of SB810 in Oregon, these discussions might find new inspiration, and encourage these states to continue to research and develop their transportation policy and funding options for the future. These states may model some of their approaches around the factors that have made Oregon successful, though each state faces unique challenges that will result in unique policy aspects being developed in each state.

The ripples created by the Oregon pebble in the policy pond are reaching other shores. In the northwest, British Columbia, and especially metropolitan Vancouver, are wrestling with transportation funding for their mobility needs. Shortfalls from declining motor fuels taxes, more fuel-efficient vehicles, and the lure of inexpensive fuel across the Canadian border in Washington State have created a growing deficit in funding the transportation needs of Metro Vancouver. While tolling has recently been added to the transportation funding mix of the region, net tolling revenues are insufficient to meet the growing transportation needs of this growing region. Along with Toronto and Montreal, Metro Vancouver is reviewing whether its existing funding models will work in the future. With Oregon and Washington State providing local examples just south of the border, this Canadian Province may also choose to investigate the new wave of transportation funding through road usage charging.

Lastly, Australia is investigating its transportation funding needs. The reformation of its transport funding was a hot topic a few years ago with the Henry Tax Review[1], a major review of all Australian tax measures that attempted to simplify and modernize them. While the Henry report was sidetracked after its initial release, leading to no substantial legislative changes, current debates on transportation funding and reform of the system appear to have gained momentum.

As national elections in Australia draw closer, the subject of transportation funding and changes to the existing system are being debated. Roads Australia and its Transport

[1] The Henry Tax Review, or more formally "Australia future tax system" was commissioned by the Rudd Government in May 2008 and published in May 2010. This Review considers how Australia can best structure its tax and transfer system to meet the challenges of the 21st century and to enhance its economic and social outcomes. It can be found at: http://taxreview.treasury.gov.au/content/Content.aspx?doc=html/the_review.htm

Reform Network (TRN) are feeding this debate. Discussions of how States should raise revenues for their transportation needs is a hot topic in the states of Victoria, New South Wales, and Queensland. Oregon's example road usage charges for light vehicles, in addition to its long-standing weight-distance charges for commercial vehicles, provide stellar examples of sustainable transportation funding that may further advance the transformation of infrastructure funding in Australia.

Conclusion

When Oregon introduced its one-cent fuel's tax in 1919, it was to get "Oregon out of the mud." At the time, major cities and the state were faced with a huge financial burden to hard surface the major arteries to connect cities and towns. The ripples—the nationwide impacts—started by Oregon's simple and innovative approach of having users pay their fair share for the road network they use were not foreseen at the time.

Today, fuels excise taxes are the financing method for most countries of the world to fund their transportation needs. Fuels taxes built the Interstate Highway System and the State transportation networks in the USA, as well as the national road networks and motorways in most countries around the world. Fuel consumption was the proxy for road usage, and taxing fuel consumption was the "invisible" way to tax the public for meeting transportation needs.

Gas taxes were an easy and reliable revenue source, and were indeed a good proxy for road usage, until recently. The advent of highly efficient internal combustion engines, hybrids, plug-in hybrids, and electric cars, has broken the linkage between fuel consumption and roadway usage, eroding the quality of the fuel excise taxes as a proxy. The fuel tax is also increasingly inequitable, as lower-income families cannot afford new, more fuel-efficient vehicles, and thus are compelled to pay more for their roadway usage than their wealthier neighbors who can afford hybrids and electric vehicles. Raising the fuel tax might be a short-term solution for transportation funding, but doing so widens the equity gap further.

Forward thinking states like Oregon are in the vanguard of changing their transportation funding policies to meet tomorrow's needs. They are providing logical and practical approaches for other states to follow and emulate. Either wittingly or unwittingly, Oregon's pioneering Road Usage Charging Legislation may be déjà vu—another bellwether policy measure. The small pebble it has tossed may make a big splash in meeting the current and future transportation needs in the USA and around the world.

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Authors:

D'Artagnan Consulting LLP (DCL) partners have seven decades of combined experience in the transportation sector. Together, their diverse backgrounds and perspectives have created a one-of-a-kind consulting venture that offers unparalleled knowledge, experience, and cutting edge ideas to promote transformation toward financial sustainability and equity in surface transport. Web Site: www.dartagnan.co

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