



MILEAGE-BASED
USER FEE ALLIANCE

This is the Autumn 2014 issue of MBUFA's e-Newsletter. Please use the links below to jump directly to articles and departments of interest. We welcome any comments and suggestions as well as contributions (news, features or links to recent research) for upcoming issues.

- The Editor

CHAIRMAN'S LETTER

EXECUTIVE DIRECTOR'S REPORT

**CALIFORNIA GOVERNOR SIGNS BILL
TO STUDY MBUFs**

MEMBER PROFILE: CALTRANS

**CALIFORNIA SUSTAINABLE
TRANSPORTATION WORKSHOP**

**THE INTERNET OF THINGS AND
MILEAGE-BASED USER FEES**

**OREGON'S ROAD USAGE CHARGE
PROGRAM MYTHS**

**LAWMAKERS SEEK SOLUTIONS FOR
TRANSPORTATION FUNDING
SHORTFALL**

STOCKHOLM FUEL TAX SYMPOSIUM

**IBTTA TRANSPORTATION FINANCE
AND ROAD USAGE CHARGE
CONFERENCE**

**MID-ATLANTIC SUSTAINABLE
TRANSPORTATION WORKSHOP**

EVENTS

NEWS

RESEARCH

MEMBERS

MBUFA.ORG

Follow us on [twitter](#)

CHAIRMAN'S LETTER

A little more than a year ago, I wrote about Oregon's historic action as the first state to adopt a mileage-based user charge system. Just as was the case when the gas tax was first enacted by Oregon, we are seeing other states follow that lead.



**By Jack Basso,
Chairman of
MBUFA**

Today, on the eve of our third MBUFA workshop in Glendale, California, we are celebrating the state of California's historic action. Governor Brown has signed legislation creating a Technical Advisory Committee charged with the responsibility of making recommendations to the Secretary of Transportation for a road user charge pilot program. As California, the largest state in the country, now moves forward, other states are sure to follow. And as that happens, these pilot programs will help work out the practicalities of implementation, interoperability, and fairness.

The timing is perfect as well for encouraging Congressional support for funding pilot programs as we face another Highway Trust Fund crisis in late May of 2015 and begin to craft a new long term successor bill to MAP-21. Mileage-based user fees are no longer theoretical. They are becoming a mainstream approach to infrastructure funding.

These are exciting times for our members who have been exploring financing options and responding to the many questions about mileage-based fees for many years.

California here we come!



**By Barbara
Rohde, Executive
Director of
MBUFA**

EXECUTIVE DIRECTOR'S REPORT

The publication of the MBUFA newsletter is slightly delayed this month because of our desire to highlight the signing by Governor Brown of SB-1077 for the State of California. This major piece of legislation, we believe, will have major impacts for this issue both nationally and internationally.

On October 7, we are hosting a Sustainable Transportation Funding Workshop in Glendale, California to focus on the issue as it relates to California. Apart from a panel discussion on the mechanics of putting the legislation together, we will also be focusing on the impact transportation has on the economy of southern California. The workshop was scheduled well before we knew of the bill signing by Governor Brown.

These workshops have become an important feature of moving the subject of mileage-based issues forward and providing solid background information to a variety of policy leaders and other interested parties. We are tentatively scheduling our next conference for December 5 in Wilmington, Delaware to focus on the Mid-Atlantic region.

We want to again thank our Premier Education Sponsors: Computer Aid, Inc., CH2MHill, and 3M; and Silver Sponsor Reason Foundation for solidly providing the support to allow us to host these important conferences. We truly are very appreciative and thankful for their generosity.

Please also mark your calendars for February 24, 2015 when the next MBUFA Conference will be held in Washington, D.C. just prior to the AASHTO winter

meeting. We look forward to seeing many of you at that event as well. We are also co-hosting with our member IBTTA, their Transportation Finance and Road Usage Charge Conference in Portland, Oregon on April 26-28, 2015.

Although the federal efforts on this issue will now probably be delayed until at least next spring, we are continuing to work closely with staff both from personal offices and committees to provide background and support. We plan to highlight those efforts at the February 24 conference and through various communication tools as well.

Thanks for the many notes of support we have heard from members for the work on MBUFA on these issues. We are very thankful that our membership is the leading tier of knowledge on this issue both in the United States and around the world.



CALIFORNIA LEGISLATION SIGNED TO STUDY ROAD USAGE CHARGE ALTERNATIVES

The Mileage-User Fee Alliance (MBUFA) announced that Governor Jerry Brown (D-CA) has signed SB-1077 requiring the State of California to establish a technical advisory committee to study road usage charge as an alternative to the gas tax. In addition, the legislation would implement a pilot program to identify and evaluate issues related to the potential implementation of a road usage charge program to begin in California no later than January 1, 2017.

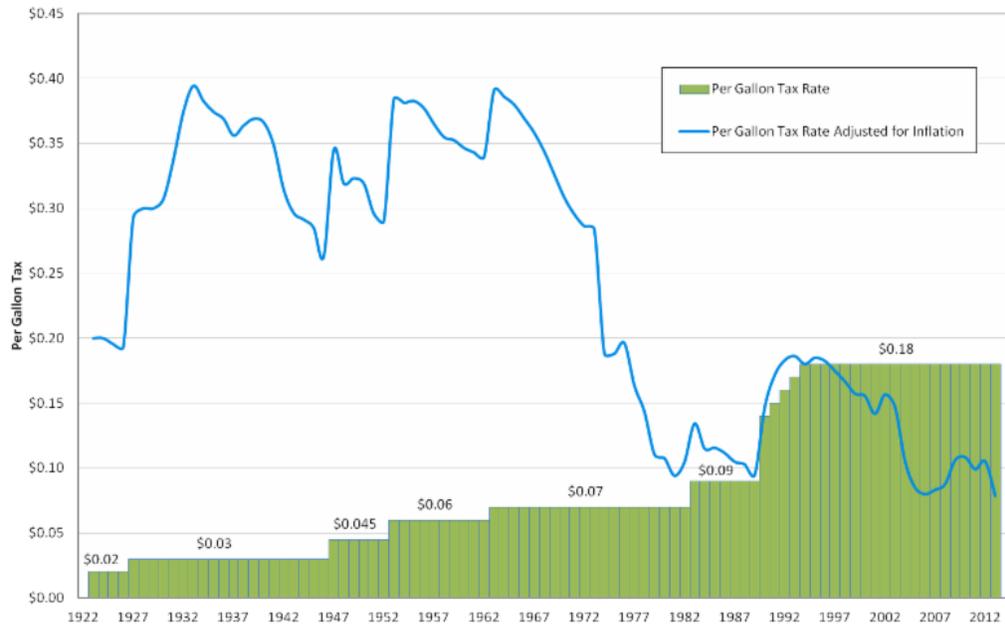
In making the announcement, MBUFA Chair, Peter (Jack) Basso said, "This is an important first step to looking at viable ways to use mileage-based user fees to replace the traditional gas tax funding of transportation infrastructure." The review of funding alternatives has become very important as states find their transportation funding base dwindle as cars become more fuel efficient.



MEMBER PROFILE: CALTRANS (CALIFORNIA DEPARTMENT OF TRANSPORTATION)

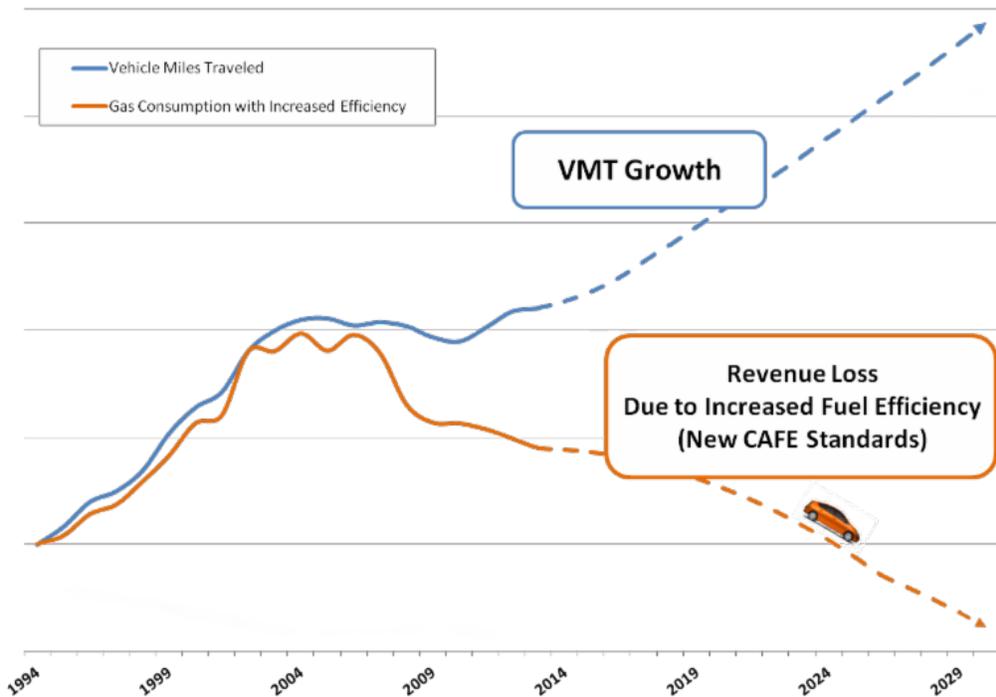
As part of our ongoing series of profiling MBUFA members, we spoke to Norma Ortega, Acting Chief Deputy Director of CalTrans and Vice-Chair of MBUFA.

Like most states, California faces significant transportation funding shortfalls. The gas tax hasn't been increased in 20 years and because it is not indexed to inflation, the purchasing power has decreased by almost 40% since 1994.



Source: Board of Equalization. Escalation based on California State Highway Construction Cost Index and Consumer Price Index

The state could face a shortfall as much as \$300 billion over the next ten years, in part due to further improvements in fuel efficiency.



According to TRIPS data (2009), poor road conditions cost motorists about \$703 a year, a number that coincidentally is nearly double the amount (\$368) the average California driver pays annually in all gasoline taxes combined.

So it comes as no surprise that California is actively taking steps to meet the funding challenge, both in the administration and in the legislature.

Legislative Activities: In August of this year, both the Assembly and the Senate passed bill SB-1077 which was signed last week by Governor Jerry Brown. This bill will "establish a mileage-based fee pilot program, including the establishment of a technical advisory committee consisting of 15 members representative of the telecommunications industry, highway user groups, the data security and privacy industry, privacy rights advocacy organizations, regional transportation agencies, national research and policy making bodies, including, but not limited to, the Transportation Research Board and the American Association of State Highway and Transportation Officials, and Members of the Legislature." The advisory committee will be charged with considering the following (excerpted from the bill):

"(1) The availability, adaptability, reliability, and security of methods that might be used in recording and reporting highway use.

(2) The necessity of protecting all personally identifiable information used in reporting highway use.

(3) The ease and cost of recording and reporting highway use.

(4) The ease and cost of administering the collection of taxes and fees as an alternative to the current system of taxing highway use through motor vehicle fuel taxes.

(5) Effective methods of maintaining compliance.

(6) The ease of re-identifying location data, even when personally identifiable information has been removed from the data.

(7) Increased privacy concerns when location data is used in conjunction with other technologies.

(8) Public and private agency access, including law enforcement, to data collected and stored for purposes of the RUC to ensure individual privacy rights."

The technical advisory committee would also be tasked with making specific recommendations for any proposed pilot or study including the size and scope of the project.

Administration initiatives: The big news, of course, is that Governor Brown signed the bill authorizing a mileage-based fee pilot program. There's more that has been going on, too. According to Norma Ortega, Acting Chief Deputy Director of CalTrans (and Vice Chair of MBUFA), in April 2013 the California State Transportation Agency (CalSTA) created a work group called the California Transportation Infrastructure Priorities (CTIP) to look at the challenges of the state's transportation system. In February, CTIP issued an [interim report](#) with both near and long term funding recommendations. As one of the long term funding goals, they recommended California join with other Western states in exploring "a voluntary pilot program to study, review, and consider the viability of a Mileage-Based User Fee" (California is, indeed, a member of the [Western Road Usage Charge Consortium](#)). CTIP formed a sub-group that has been tasked with determining what it would take to further road use charging in California. The group is in the process of finalizing recommendations for CalSTA Secretary Brian Kelly.



CALIFORNIA SUSTAINABLE TRANSPORTATION FUNDING WORKSHOP

On October 7, MBUFA will hold the next in its series of Sustainable Transportation Funding workshops in Glendale, California. The event will be hosted by the Southern California Association of Governments (SCAG) and the California Department of Transportation (CalTrans), and co-sponsored by 3M, CH2MHILL, Computer Aid, Inc., and the Reason Foundation.

The workshop will focus on California and will address issues of interest to many stakeholders in business, transportation, local government and special interest communities. Topics of discussion will include the state of the fiscal cliff that is faced by California and the federal government, the importance of transportation infrastructure to enhancing California's economy, what other states are doing to address their own fiscal challenges, what Oregon has accomplished with road usage charges, and what efforts other states and localities are making towards mileage-based user fees. Speakers will include Malcom Dougherty, Director of CalTrans; Hasan Ikhata, Director of SCAG; Lucy Dunn, Commissioner, California Transportation Commission; Jim Whittey, Oregon Department of Transportation; and others.

[To register and to find more information, click here.](#)



By John Condon,
Research
Manager,
Verdeva, Inc.

THE INTERNET OF THINGS AND MILEAGE-BASED USER FEES

The time is quickly arriving when advances in technology and innovative market-based applications will offer new solutions to some of the challenges that are facing mileage-based user fees. It's not just that high speed internet is more widely available or that the hardware driving the advances in communication and information technology continues to shrink in size and cost. Just as important are the commercial applications being introduced.

Usage-Based Insurance: Mileage-Based User Fees' Close Relative

Applications of technological innovations include "connected vehicles," including on-board telematics devices. This technology is already the basis for making possible in the near future one of the biggest paradigm shifts in the automotive insurance business: "usage-based insurance" (UBI), which is projected to grow in the U.S. from an estimated \$3 billion in policies now to \$30 billion by 2020 (Source: Progressive Insurance). While the types of policies range from "pay-as-you-drive" policies (where verified mileage is the main variable used in calculating the premium) to "pay-how-you-drive" policies (where mileage is still the largest variable but where other driving behavior (acceleration rates,

cornering, etc.) is taken into account. UBI, like some road-charging solutions, faces two significant challenges - privacy concerns, and the cost of outfitting vehicles and the ongoing wireless data costs.

- **Privacy:** While about nine out of ten drivers express an interest in UBI as a way to save money (Source: Towers Watson), nearly half express privacy concerns stemming from having an on-board device installed (Source: Lexis Nexis, 2013). Many feel that's giving the insurance company too much information. (Interestingly, some states - including California - allow data on mileage and driver behavior to be collected by law, but allow only mileage to be considered in determining rates, prohibiting the use of other behavioral data.)
- **Cost:** For all but the largest insurers (Progressive, All State, etc.), the cost of outfitting vehicles with proprietary telematics devices (called "dongles") is daunting. Even as technical costs drop, it can still come to \$50 or more per device. And then there are the on-going wireless data costs that come with such an approach.

However, advances in other technology for machine-to-machine networking (M2M) offer privacy and cost solutions for both UBI and, potentially, user-based alternatives to the gas tax. Advances in M2M are leading to a spread of "smart" devices, and their connection and interaction with each other - what many call the "Internet of Things" (IoT) - is considered by many in the high-tech start-up world as the next big opportunity creating new opportunities in consumer markets.

The IoT is already finding applications across many different sectors and adding value to everyday objects already in existence. While many of the conveniences from connecting every-day devices to the internet can seem small (such as a refrigerator that alerts your smartphone that you are low on milk), its impact on public policy could be substantial.

The IoT, the Gas Pump, and Usage-Based Charging

The ubiquitous gas pump is the place where 40 million drivers visit everyday. In the past fuel dispensers haven't had much application for either UBI or MBUF solutions, primarily because the cost of networking them for a single purpose (mileage-based user fees, for example) has been an issue. New IoT solutions, including near-field communications (NFC) and affordable RFID systems, now make the fuel dispenser potentially a very powerful commercial platform with the potential to overcome both cost and privacy concerns for usage-based insurance and, in the future, for mileage-based user fees.

- **Cost:** The cost reaching vehicles by equipping the pumps at the gas stations could be, on a per-vehicle basis, 40-60 times less than the cost of installing dongles on the vehicle itself. The cost of installing telematics hardware in individual vehicles and transferring data over cellular or Wi-Fi networks can be prohibitive. With over 250 million registered vehicles in the United States, there are almost 1,700 times as many vehicles as there are fueling stations. The technology being used in the IoT community - RFID tags, near field communication (NFC) readers, etc. - is cheap and will require far less costly labor hours to reach the same amount of drivers. For insurers of all sizes (and eventually states contemplating usage-based charging), this could be a cost game-changer. IoT-enabled pumps will be capable of many new types of commissionable commercial transactions that could cover the cost of the networking and subsequent operating

costs. In other words, it is conceivable that such a commercial IoT solution might cost a state nothing.

- **Privacy:** With IoT technology, it will be possible for a fuel pump (or charging station, for that matter) to recognize a vehicle's make and model and estimate with reasonable accuracy the amount of miles a consumer's fuel purchase will provide them, based on vehicle-specific fuel consumption algorithms. It provides consumers with a choice for usage-based insurance without having a more intrusive device installed in the car.

The same promise holds true for transportation funding solutions. The concept of charging motorists for every mile they drive instead of how much gas they purchase is usually met with raised eyebrows and has raised concerns among drivers about invasion of privacy, particularly if the perceived intruder is the government. Despite a universal consumer trend towards trading personal data for convenience, the public is often concerned (justifiably or not) over the amount of personally identifiable information (PII) that would need to be obtained - again, especially if by the state - during the process of verifying a driver's mileage. But leveraging a commercial at-the-pump system that doesn't require on-board tracking should be more acceptable to consumers already used to doing business there.

The potential for other policy benefits of a widely adopted at-the-pump system are considerable. For example, by recognizing individual vehicles at the pump, it could make variable pricing possible based on factors (rural versus urban, socioeconomic or occupational factors, etc.), giving policy makers better tools to craft smarter approaches to transportation funding.

Giving the Consumer Options

The state of Oregon's Department of Transportation (ODOT) learned during its Road Usage Charge Pilot Program that one solution to assuaging privacy fears is to give drivers different options on how their mileage data is reported: GPS, smartphone app, odometer reading, or an option where there is no mileage data reported and the motorists pay a flat rate based on 35,000 miles of driving per year. In the near future, the IoT will make it possible to include a compelling at-the-pump option to the choices consumers have.



By Michelle Godfrey, Public Information Officer, ODOT's Office of Innovative Partners and Alternative Funding

TOP 5 MYTHS ABOUT OREGON'S ROAD USAGE CHARGE PROGRAM - BUSTED!

What is the Road Usage Charge Program?

ODOT is first in the nation to create a per-mile charging system (thanks to Oregon's 2013 Senate Bill 810) that will help fill the widening gap in transportation funding caused by a failing gas tax. The Road Usage Charge Program will assess a charge of 1.5 cents per mile for up to 5,000 cars and light commercial vehicles and issue a gas tax credit to those who volunteer to participate.

Opinions on this funding model vary, from generally positive to vehemently opposed. And there are many misperceptions about what the program will do. Reactions like these were considered carefully by ODOT and the Oregon

Legislature before deciding to implement the program. Next time you come up against a myth about Oregon's Road Usage Charge Program, consider the facts.

Myth: It's a new tax, on top of everything else the government charges.

Fact: The road charge works as a replacement for the gas tax, not an additional tax.

Participants in the Road Usage Charge Program will receive a credit or refund of gas tax paid while they are in the program. The system will calculate gas consumed, and gas tax paid, as it also calculates the per-mile charge. If the two are equal, the motorist pays nothing. If the gas tax paid exceeds road charges billed, the driver will be eligible for a refund. And if the road charge exceeds what was paid in gas tax, the excess amount will be due from the motorist.

As it stands, the gas tax is becoming obsolete as vehicles consume less fuel. Over time, older vehicles will phase out and the entire fleet of vehicles will become highly fuel efficient, vaporizing the gas tax. Oregon's Road Usage Charge Program is a fair and sustainable funding model that will ensure our roads are maintained safely for every motorist well into the future.

Myth: State government will now track your whereabouts with GPS.

Fact: GPS is not required to participate in the program.

Senate Bill 810, which created the Road Usage Charge Program, does not require GPS. In fact, it demands that at least one mileage reporting option not use GPS, and that motorists be given choices for the devices and reporting services they will use.

While the technology and account options for the program launching July 2015 are currently in development, ODOT's pilot program tested four different account options with success. Options in the pilot included a smartphone app, a "basic" plan that reported miles from an odometer reading, an "advanced" plan that deployed a device with GPS, and a flat fee plan. Similar, or even better options, could be designed for the Road Usage Charge Program.

With the advent of the smartphone in 2007, consumers have become more comfortable with GPS technology because it gives them immediate information and services at their fingertips. They may like the convenience that a GPS-enabled device offers for road usage charging—no need to switch "on" or "off" when traveling out of state or on private roads; miles are automatically recognized as billable or not. Other folks are not as comfortable, and they will exercise their choice to not use location-determination technology. Whatever their choice, having options empowers participants to select the plan that best fits their lifestyle and driving habits.

Myth: It's unfair to rural Oregonians who drive longer distances.

Fact: Every driver is different, with no significant net difference between rural and urban.

Some say it would be unfair for rural drivers to pay a road usage charge because they must drive longer distances to do basic things such as go to work, school, medical appointments and the grocery store. While this may be true for some rural drivers, nearly all Oregon motorists already pay a distance-based tax—the fuel tax.

But the fuel tax is not a perfect proxy for road use because it imposes a higher cost per mile on people who drive less fuel-efficient vehicles. Some drivers -

those with working vehicles such as pickup trucks, for example - pay much more per mile than others. Someone driving a Ford F250 15,000 miles a year pays \$410 in Oregon fuel taxes whereas a Toyota Prius driver pays \$90 for traveling the same total distance.

Recent ODOT surveys found no consistent theme for rural driving. Rural drivers are actually quite diverse and have many travel behaviors. Some live in towns or close to them while others live far away on working properties. Some drive short distances and less than urban drivers while others drive longer distances and more than urban drivers.

Bottom line, extremely rural Oregonians reported driving much longer distances for medical appointments and shopping, but that was offset by less frequent trips than their urban counterparts. The net difference? Not much.

Myth: It is a disincentive to owners of fuel-efficient vehicles.

Fact: These drivers favor the fairness of road use charging.

In ODOT's focus group research (2012-13), electric vehicle owners tended to be in favor of road use charging. They appreciated the fairness of the model as they voiced their concern for maintaining our roads (on which to drive their new vehicles). They agreed that motorists should fairly pay for the roads they use.

While a road charge would be a new bill for them to pay (instead of paying gas tax at the pump, as they did with their old car), savings in fuel consumption far outweighed the prospect of a road charge. They were just thrilled to not have to visit the pump anymore! Also, multiple incentives were known to be available for purchasing fuel-efficient vehicles, state and federal, which added up to thousands of dollars against the purchase price.

When faced with the realization that the gas tax places greater financial burden for maintaining our roads upon less affluent drivers who purchase vehicles in the secondary market (less fuel-efficient), the logic of a per-mile charge became clear. Some said, "I want to do my part."

Turns out, every driver wants good and safe roads to drive on, no matter what car they drive.

Myth: A government-run system is certain to run poorly and cost a lot of money.

Fact: The program uses private sector vendors to provide high performance at low cost in a competitive, open-market system.

It's true that the cost to collect Oregon fuel taxes averages about 0.5% of revenue - a real bargain! That figure reflects a fully operational, mature program with three million vehicles. And it excludes capital costs associated with establishing the system back in 1919 (Oregon was the first in the country to implement the gas tax, too.)

Operating costs for the Road Usage Charge Program will start out high but using private vendors to manage collection will reduce system costs over time. ODOT expects vendors will use the per-mile charging system as a platform for marketing other products and services, such as pay-as-you-drive insurance, tolling, and travel concierge-or perhaps those services would serve as a platform for the road charge. Many of the costs of system implementation and operation would be borne by the industry, and their customers could benefit from value-added services, discounts, and open-market innovation and upgrades.

It's worth the investment. As the number of program participants grows and the market for value-added services expands, costs will decline substantially. ODOT estimates when the number of road usage charge payers reaches one million, operating costs will drop to below five percent of gross revenues per month. If all 3.2 million registered vehicles in Oregon were enrolled in the program, costs would approach the bargain of the gas tax.

What's more, by enlisting private sector companies to provide technology and billing service options, program participants will benefit from innovation that is naturally driven by the open market (versus a "closed" system entirely run by the government). The "connected car" is becoming reality. Many vehicles already have factory-installed telematics (infotainment) systems that could be used to wirelessly report miles driven. In time, motorists may be able to simply drive and receive a bill by email that is bundled with other services, such as insurance, cable, parking or mobile phone charges. They pay online via smartphone and roll on!

Looking Ahead

Years from now, the road usage charge model could transform the way Oregon drivers pay for the roads they use every day. It offers a way to equitably assess fees based on the value a motorist gets from the public infrastructure. And because technology is advancing so quickly, the system can maintain privacy even while delivering higher levels of service and more seamless ease of use.

No solution, not even Oregon's, can address every set of circumstances. Still, Oregonians are proud to be blazing a new trail-high-tech, responsive and practical-keeping alive our tradition of innovation that stretches back to the days of sputtering Model-Ts, roads of mud, and the nation's first gasoline tax.



By Kevin Pula,
Research Analyst,
National
Conference for
State Legislatures

LAWMAKERS SEEK SOLUTIONS FOR TRANSPORTATION FUNDING SHORTFALL

Editor's note: The following is a blog post originally published on the National Conference for State Legislatures' website. It is republished here with permission from NCSL.

State lawmakers gathered on August 20 for the National Conference for State Legislatures' Legislative Summit in Minneapolis, a roundtable discussion seeking [solutions to the potential transportation funding shortfalls](#).

There is real unease among state lawmakers about the future of federal funding for transportation projects across America, an unease that was granted little reprieve when Congress reauthorized [MAP-21](#), the federal transportation funding law, until next spring without addressing long-term funding issues.

It is widely acknowledged that because of more fuel efficient vehicles and changing travel habits the current structure of a fixed gasoline tax is unsustainable as a transportation funding source. Some have proposed an indexed gasoline tax. Indiana Representative Ed Soliday (R), however, pointed out that a simple index of the gasoline tax to the consumer price index (CPI) is

not a long-term solution because highway maintenance and construction costs are rising at a faster rate than the CPI.

Barb Rohde, executive director of the Mileage Based User Fee Alliance, expressed the need for a new approach to transportation funding, and [highlighted the benefits](#) of a mileage-based user fee (MBUF). Implementation of a MBUF would involve eliminating or phasing out the gasoline tax and creating a [vehicle miles traveled \(VMT\) tax](#) that would require those who use the infrastructure most to pay more. The Alliance has compiled a list of locations where MBUFs are currently being discussed or implemented, which can be found on their [website](#).

NCSL's immediate past president, Senator Bruce Starr (R-Ore.), believes states would have to [champion new and innovative methods of transportation funding and financing](#) to create movement at the federal level.

Arizona Senator Steve Farley (D) believes political capital is better spent on long-term solutions rather than the temporary fixes we are seeing currently. Representative Linda Harper Brown (R-Texas) hopes states will be allowed to be an incubator for these policies. Soliday urged others to consider the importance of making the case to the public of the value of a sound transportation system, and to prevent our infrastructure debt from being passed onto the next generation.

One concern raised was the equity of MBUFs on rural drivers. Delegate Mark Sickles (D-Va.) explained how Virginia sought to solve this potential problem by regionalizing sales tax increases and basing the rates off of the need, cost and size of transportation projects for each region, an approach that could be [utilized nationally](#). It was unclear among the participants whether rural users would actually be disproportionately affected by a MBUF, citing the trend of rural drivers to have longer but fewer trips than urban drivers and their tendency to own larger more gas-reliant vehicles.

Other alternatives were discussed such as a hybrid gasoline tax-mileage based user fee system. Issues with a strict MBUF included capturing out-of-state travelers, interstate freight traffic and non-automobile gasoline use. Additionally a weight-based VMT tax-in which a vehicle's weight is used in combination with miles traveled to calculate the tax-could alleviate concerns about heavy freight traffic.

Rohde encouraged legislators to not underestimate the power of their voices and that of the NCSL Natural Resources and Infrastructure Committee. Harper Brown agreed and emphasized that legislative resolutions and a collective push by passionate legislators will help the states and country solve this problem.



MILEAGE-FEES A TOPIC AT STOCKHOLM FUEL TAX SYMPOSIUM

An international symposium in Stockholm, Sweden on September 18th and 19th featured academic and policy perspectives on reconsidering motor fuel taxes and options for reforming the taxation of vehicle use and ownership. The symposium was organized and hosted by the Centre for Transportation Studies

of the KTH Royal Institute of Technology. Many of the presenters discussed econometric studies, modeling of fuel tax and regulatory policies, and research on environmental impacts of fuel tax policies. There were also presentations related to distance-based charging and congestion charging as more effective ways of addressing externalities related to transportation.

Ian Parry, of the Fiscal Affairs Department of the IMF, said the theory suggests that mileage taxes should be used for congestion (on busy roads, rising and falling over rush hour), accidents (perhaps varying with driver/vehicle risks), road damage (axle weight of trucks), and local pollution (scaled by emission rates-if emissions per mile are fixed), and that fuel taxes should be used for carbon reductions. However, Parry warns that the welfare gains may not always be large and administrative costs will be higher with the mileage tax requiring data on all motorists. Parry suggested proceeding cautiously with transition to mileage taxes.

Jani-Pekka Jokinen, of Aalto University, discussed a paper comparing two types of distance-based taxation systems: a kilometer-based taxation system vs. a fuel-integrated taxation system where the collection occurs at the fuel pump. A working group in Finland concluded that Finland should proceed towards distance-based taxation by experimenting and testing required technologies. The fuel-integrated taxation system enables taxation based on traveled distance, location and time, but based on a fuel tax refund instead of an extra charge. Jokinen explained that the fuel integrated taxation system has many technical advantages, which seem to improve cost efficiency and data protection compared to the basic kilometer-based system.

Andreas Kossak discussed the German Toll Collect System, a distance-based system for trucks, that has operated since 2005, and the current work of a German commission on transportation funding. Kossak concluded that the potential of distance-related road user charges regarding traffic management, environmental preservation, and saving resources is much richer than that of fuel taxes or vehicle taxes. Nevertheless, we should take full advantages of both options.

Lee Munnich of the University of Minnesota's Humphrey School presented the experience with Minnesota's mileage-based user fee task force and discussed the interest by many U.S. states in exploring mileage fees as an alternative to the fuel tax. He discussed the leadership role that Oregon is playing with its legislation to begin implementing a road usage charge system with 5,000 volunteers and the role of MBUFA in conducting outreach and education with state policy leaders and elected officials.

Svante Mandell of KTH discussed the effects from strategic interactions of distance charges and fuel taxes on trucks. He examined various scenarios for introducing a distance charge for trucks and reducing the fuel taxes in large and small countries. According to Mandell, for low enough implementation costs, a country can gain by a unilateral introduction of distance-based taxes and lowering the diesel tax. Other countries have an interest to follow and also implement distance charges which will lead to downward pressure on diesel taxes and overall taxes on freight will be too high. Introducing diesel cars that also need to be taxed limits the option to reduce fuel taxes for freight and yields too high taxes on freight and too low taxes on diesel. Distance-based taxes for freight are not necessarily a better instrument. They can be beneficial for large countries to avoid the undercutting of diesel excises and risk generating too high tax levels for freight. The EU has recognized this problem but setting a limit on distance based taxes for freight.



IBTTA'S TRANSPORTATION FINANCE AND ROAD USAGE CHARGING CONFERENCE IN PORTLAND, OREGON, APRIL 26-28, 2015

America's transportation funding system is broke and broken. This conference will explore innovative ways to fix it. As Congress struggles to restore the solvency of the federal Highway Trust Fund, states and localities are blazing new paths to generate sustainable funding for their vital transportation infrastructure. Thirty-five states now use toll-financing to build, maintain and reconstruct limited access road infrastructure. In addition, Oregon and several other states are trying out road usage charging (RUC), a policy of assessing fees for the use of roadway infrastructure across an entire roadway network (also called VMT or MBUF).

Who should attend this conference? Public officials and private sector organizations responsible for financing, funding, maintaining and operating surface transportation infrastructure, including: Cities, Counties, Departments of Transportation, Governors' Representatives, investors, legislators, Metropolitan Planning Organizations, Regional Mobility Organizations, and Road Builders. Conference sponsors include the Mileage-Based User Fee Alliance, Oregon Department of Transportation and Reason Foundation. For more information, visit www.ibtta.org/portland.



TENTATIVE DATE SET FOR MID-ATLANTIC SUSTAINABLE TRANSPORTATION WORKSHOP

MBUFA will hold the fourth of it's educational workshop series, the Mid-Atlantic Sustainable Transportation Workshop, in Wilmington, DE. The date of the event has been tentatively set for December 5, 2014.

Please remember to check the [MBUFA website](#) for more information and registration details.



EVENTS

2014

OCTOBER

[MBUFA's California Sustainable Transportation Funding Workshop](#),
October 7, Glendale, CA

[Global Summit: Innovations & Technologies for Sustainable Mobility, Environment and Road Safety](#)

October 19-21, Prague, Czech Republic

NOVEMBER

[2014 AASHTO Annual Meeting](#)
November 21-24, Charlotte, NC

2015

JANUARY

[Transportation Research Board \(TRB\) 94th Annual Meeting](#),
January 11-15, Washington D.C.

FEBRUARY

[MBUFA Conference](#),
February 24, Washington D.C.

[2015 AASHTO Washington Briefing](#),
February 25-27, Washington D.C.

APRIL

[Transportation Finance and Road Usage Charging Conference](#),
April 26-28, Portland, OR

M B U F A NEWS

[Every Road in Australia Should Have Tolls, Says Report](#)

[What's Driving Worth to You? Have Your Say on Road Tax Changes](#)

[California Dabbling with Replacing Fuel Tax with Mileage Tax](#)

[Policies of the Future Should Not Be Tied to Science of the Past](#)

[California Nears Plan to Charge Drivers by the Mile](#)

[Miles Driven Tax Could Replace Gas Tax](#)

[Big Brother Is Already Watching Your Driving...And It's Your Fault](#)

[Road User Fees May Replace Gas Taxes in Washington and Oregon](#)

[Could Michigan Drivers Pay Fees Based on Miles Driven? Report Says Yes](#)

[America's Transportation Needs Are Huge. Too Bad The Way We Fund Them Is Broken](#)

[California Could Start Taxing Motorists for Every Mile They Drive](#)

[Straight Talk on Gas Tax: Vehicle Miles Fee a Better Approach?](#)

[MBUFA's Adrian Moore on CNN's Newsroom](#)

[Someday Soon You'll Pay For Every Mile You Drive](#)

[Dem Proposes Taxing Drivers By The Mile](#)

[Metro-North Derailment Demonstrates Need For Infrastructure Investment, Says LaHood](#)

[Mass. Miles: The Bay State May Become The "Miles-Traveled State"](#)

[Panelists Talk Vehicle Miles Traveled Fee Option For Transportation Financing](#)

[PBS NewsHour: Should Drivers Be Charged For Every Mile Driven?](#)

[Study Proposes Implementing Per-Mile Tolls On U.S. Interstate System](#)

[Indiana Lawmaker: Mileage Charge Could Replace State Gas Tax](#)

[One Way To Pilot A Fee Mile vs. Gasoline Taxes: Institute It Now, For Alternative Fuel Vehicles](#)

[Nevada To Consider 'Vehicle Miles Traveled' Tax For Road Funding](#)



RESEARCH LIBRARY

[California Transportation Infrastructure Priorities: Vision and Interim Recommendations](#)

[Text of California's SB-1077 Vehicles: Road Usage Charge Pilot Program](#)

[Road Usage Charge Pilot Program 2013 & Per-Mile Charge Policy in Oregon](#)

[Context and Considerations of a Mileage Fee for Michigan: By SMART- Sustainable Mobility & Accessibility Research & Transformation at the University of Michigan for the Michigan Environmental Council](#)

[Documents and Presentations from 2013 Oregon Road Usage Charge Summit](#)

[Text of H.R. 3636: Update, Promote, And Develop America's Transportation Act Of 2013](#)

[Text of H.R. 3638: Road Usage Fee Pilot Program Act of 2013](#)

["What do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Four of a National Survey". The Mineta Transportation Institute](#)

Council of State Governments Knowledge Center Transportation Policy Academy presentations on Oregon's Mileage-Based Road Usage Charge

Program

- [Oregon's Road Usage Charge Program: Paying for Distance Travelled \(Jim Whitty PowerPoint presentation\)](#)
- [Cost and Revenue Modeling for Road Usage Charging \(Travis Dunn \(D'Artagnan Consulting\) PowerPoint presentation\)](#)
- [Evaluation of Oregon DOT Road Usage Charging Pilot Program \(Steve Morello, D'Artagnan Consulting\)](#)
- [Road Usage Charge Pilot Program Administration and Lessons Learned \(Louis Neudorff, CH2M HILL\)](#)
- [Road Usage Charging Urban-Rural Analysis \(DHM Research\)](#)
- [Pilot Program Communications \(Kristin Hull, CH2M HILL\)](#)

[RAND: Mileage-Based User Fees for Transportation Funding: A Primer for State and Local Decisionmakers.](#)

["Road to Nowhere: Federal Transportation Infrastructure Policy" -- Council on Foreign Relations](#)

[The Mediating Role of Motorists' Evaluation of Current Roadway Conditions in Determining Their Willingness to Pay for Future Improvements. Morgan State University National Transportation Center](#)

[Equity of Evolving Transportation Finance Mechanisms: Transportation Research Board August, 2011](#)



JOIN MBUFA

MEMBERS

3M
AECOM
CalTrans (California Department of Transportation)
Cambridge Systematics
CDM Smith
CH2MHill
Colorado Contractors Association
Computer Aid, Inc.
Delaware Department of Transportation
Humphrey School of Public Affairs, University of Minnesota
I-95 Corridor Coalition
IBTTA (International Bridge, Tunnel and Turnpike Association)
LECET (Laborers- Employers Cooperation and Education Trust)
Minnesota Department of Transportation
Nevada Department of Transportation
New York City Department of Transportation
North Carolina Department of Transportation
Oregon Department of Transportation
Parsons Brinckerhoff
Reason Foundation
SANEF ITS Technologies
TransCore
True Mileage, Inc.

Verdeva, Inc.
Washington Department of Transportation
Xerox

MBUFA ARCHIVES: [RESEARCH LIBRARY](#) [NEWSLETTERS](#)

