

Summary of Workshop on Integrating PAYD Insurance and Mileage-Based Road User Fees

June 15, 2011

Breckenridge, Colorado

On June 13-14, 2011, the Texas Transportation Institute, University of Minnesota Humphrey Institute of Public Affairs, and Move Colorado convened the Symposium on Mileage-based User Fees, in Breckenridge, Colorado, the third such annual symposium. The Federal Highway Administration, with support from SAIC, convened a post-symposium workshop on June 15 (as was also done with last year's symposium) bringing together select insurance company representatives (with companies that have shown some leadership in figuring out how to implement pay-as-you-drive insurance (PAYDI)) with state department of transportation (DOT) representatives (from states that have shown leadership in pursuing both mileage-based user fees (MBUF) and PAYDI) to explore state-led partnership opportunities that could lead to implementation of both MBUF and PAYDI, perhaps taking advantage of the same technologies and systems. Leading researchers provided technical presentations and insights throughout the workshop.

Almost all of the presentations and discussion from this workshop could be categorized as to falling into one of three themes:

- Insurance companies provided government officials excellent strategic advice on implementing mileage-based user fees (MBUF) and demonstrated that they could be very valuable partners
- Leading researchers and state and city department of transportation officials offered opinions that PAYDI would be helpful or even necessary to make voluntary adoption of MBUF successful
- Insurance company representatives said they need insurance-regulator approval and most also desire additional government help to implement PAYDI, both in obtaining data and analytical support to develop actuarially-based pricing models and to deploy PAYDI after prices are set

Below is a summary of takeaway points under each of these three themes. No comments are being attributed to any individual insurance company participant so that readers do not construe any of the views expressed as representing those of a specific insurance company.

Insurance companies provided government officials excellent strategic advice on implementing mileage-based user fees and demonstrated that they could be very valuable partners

Insurance companies that were present have had varying experiences gathering data for and/or offering PAYDI. They've learned firsthand of opportunities, challenges and pitfalls related to technical, user acceptance and interface issues, and public relations matters, and understand the value proposition that must be put forward to bring customers to purchase PAYDI and to avoid a negative response from the media and from public officials.

Data transparency is critical. Customers want to understand what data is being collected, who sees that data, how long the data will be kept, what the range of uses for that data will be, and how their sharing the data is likely to benefit them (in terms of reduced premiums for insurance customers, but also other potential benefits that governments might need to provide as a "value proposition" to opt-in MBUF participants).

Using successful opt-in PAYDI products as a guide, an opt-in MBUF system would have a number of advantages. Opt-in PAYDI customers appreciate the ability to prove they deserve a better rate; opt-in MBUF customers might appreciate the same opportunity, such as by showing they deserve to pay lower user fees by minimizing peak-period driving. In both cases, people who are most concerned about their driving being monitored can choose not to opt in.

Similar to what insurance companies considering offering PAYDI need to understand, governments will have difficulty implementing MBUF unless there is a clear and compelling value proposition for the public to embrace the change from gasoline taxes. Bundling programs like PAYDI are helpful but the value proposition for the change to MBUF has to be compelling to the public in its own right. Right now the public does not perceive a problem with the gas tax (at least not one large enough to care about). Until the government can clearly articulate the problem that MBUF solves for the public (not just for Federal, state and local governments), the battle for the taxpayers hearts and minds will be very difficult to win.

(Additional feedback at the workshop provided by insurance company representatives to state DOTs about MBUF systems, where the feedback had no relationship to any potential PAYDI product that might be offered, has been provided to the symposium organizers in summary form, and is not presented here.)

Leading researchers and state and city department of transportation officials see PAYDI as helpful or even necessary to make voluntary adoption of MBUF successful

Here is just a sampling of comments that illustrate the importance of PAYDI to MBUF:

Paul Sorenson, RAND Corporation (and lead author on various MBUF policy reports):

"Proponents of value-added services view PAYD insurance as a potentially strong motivator for voluntary adoption."

Trey Baker, Texas Transportation Institute (co-author of various MBUF technology and policy reports and co-organizer of the two-day Symposium on Mileage-Based User Fees): “By internalizing the true cost of driving, PAYD insurance provides an incentive for drivers to modify their behavior to enhance their own utility. These changes, in aggregate, could lead to better system efficiency...PAYD insurance provides an incentive to adopt in-vehicle technology; voluntary implementation [of MBUF] becomes more feasible.”

Kenneth Buckeye, Minnesota Department of Transportation: “There are many synergies between PAYD insurance and MBUF, including: both being distance based, overlapping enabling technologies, one supports the other, operational cost savings with joint implementation, greater market expansion potential, and new technologies and applications to serve each would result from collaboration.”

Bruce Schaller, Deputy Commissioner, New York City Department of Transportation: “DriveSmart applications such as PAYD insurance deliver tangible benefits to drivers individually and transportation users collectively.”

John Sabala, Texas Department of Transportation: “Including pay-as-you-drive insurance does add some complexity, but it can also build acceptability.”

Jim Whitty, Oregon Department of Transportation (presenting a contrasting view): “I’m agnostic as to whether or not insurance companies take advantage of the mileage-based user fee platform we’re developing in Oregon, but if you choose to join us, I want to work with you.”

Insurance company representatives said they need insurance-regulator approval and most also desire additional government help to implement PAYDI, both in obtaining data and analytical support to develop actuarially-based pricing models and to deploy PAYDI after prices are set

The real potential value to insurance companies in offering PAYDI is market segmentation and gaining a related pricing advantage. Government partners can help insurance companies secure (hopefully expedited) approval for their products, especially if State insurance commissioners are part of the government team, which insurance company representatives strongly recommended occur.

Insurance companies are also very interested in using telematics and in working with governments to reduce insurance fraud.

Insurance companies earn on average only \$0.04 profit per \$1 of premium or, as an example, \$40 for a \$1,000 six-month policy. While PAYDI can increase this through improved pricing, reduced crashes, and better customer retention, PAYDI requires companies to encumber additional costs, which they only sometimes have the know-how to recover. For example, according to one insurance company representative, it costs about \$5 per month to get just

mileage data, which some of the participant companies are already getting, as they can raise earnings by more than this amount given the actuarial knowledge they already have related to mileage and claims. By contrast, most companies do not have the pricing models and other capabilities to make profitable use of the full range of driving data (including on driving behavior) which they can obtain for about \$12 per month, according to this same representative. (Another representative, in a follow up written response to these notes provided in draft form, disputed that the cost was this high, and instead asserted that a full range of driving data pulled from an on-board diagnostic data logger or GPS unit from the vehicle could be sent over a wireless network for a cost of only \$4 or \$5 per month.) If government can absorb some of these costs (whatever they may precisely be), or be a direct or indirect provider of this data to the insurance companies and/or the actuarial and data service companies that serve them, it would be very helpful to companies seeking to offer PAYDI. (Governments, it was noted, face similar cost challenges in that only \$400 to \$500 per vehicle is collected annually in fuel taxes today, making keeping collection costs for alternative revenue systems down particularly important.)

The companies expressed that the Federal government should set technology and data standards (so-called interoperability standards) to facilitate combined MBUF/PAYDI offerings. While it was noted that this could be tricky as insurance companies are trying now, and will continue for some years to come, to figure out what data they'll want to use and collect for their PAYDI offerings, it was nonetheless noted that failure to do this may cause much hardship later, such as (1) when insurance companies, as a result of the national healthcare reform legislation, began to be required to report medical data to the Federal government before reporting standards were developed and (2) prior to Federal and state coordination efforts, states deploying different tolling technologies caused added system expenses and driver inconvenience.

Insurance company representatives suggested that the Federal government somehow encourage automotive manufacturers to preinstall telematics in new vehicles (which is already occurring in many instances), consistent with whatever technology and data standards the Federal government develops. This would facilitate MBUF and PAYDI in the longer term by eliminating in-vehicle device costs to governments and insurance companies for new vehicles, but would not address the need to instrument vehicles that are already on the road.

Insurance companies would like to be able to offer PAYDI without also having to be in the business of providing and pulling data from telematics devices, an opportunity that partnering with state and city governments implementing MBUF could facilitate.

Even the smallest insurance companies believe that PAYDI is going to be the wave of the future and that they need to figure out a means to offer some version of it. All insurance companies, to varying degrees, rely on external data providers and analytical support to develop and implement their pricing models and participants urged that governments bring these firms into the discussion on how best to deploy MBUF and PAYDI together.

Mileage data on its own was viewed by participants as insufficient in the long term to serve the needs of companies offering PAYDI. Data collection efforts to serve both MBUF and PAYDI will need to amass data on more than just mileage. Companies want governments to allow them flexibility and leeway in selecting PAYDI product features to make available.

Insurance companies are looking for more public sources of data relating driving conditions and behaviors to risk. A presentation by the Colorado Department of Transportation on I-70 crash data related to lane volumes, speed, and time of day was particularly well received. MBUF deployments could be a good source of coveted, additional data.