

# **WORKSHOP ON INTEGRATING PAYD INSURANCE AND MILEAGE-BASED ROAD USER FEES**

**Humphrey Institute of Public Affairs  
University of Minnesota**

(April 19, 2010)

## **Overall Summary**

On April 19, 2010, a workshop on integrating pay-as-you-drive (PAYD) insurance and mileage-based road user fees was held at the University of Minnesota's Humphrey Institute of Public Affairs. The workshop brought together representatives from the insurance industry and researchers and professionals involved with mileage-based user fees. The purpose of the workshop was to have a discussion and gauge the interest of the insurance industry in partnering on pilot projects related to PAYD insurance and mileage-based user fees.

Various perspectives were expressed from the insurance representatives and the interest level in partnering on future pilots was very high if the insurance companies would be offered the freedom to design the projects to meet their own needs, while competing for government funding based on how well the companies' proposed pilots would also meet government needs. Company interest became more mixed if government were to have a greater direct role in designing the pilot, choosing technology, etc. Companies did not want to participate in pilots that had a forced end point, either because the government would insist upon such an end point or would remove monitoring equipment from vehicles thereby making continuation infeasible. In general, companies that were less far along in developing their own PAYD insurance programs expressed greater flexibility in their willingness to partner with government on pilots than companies that already have well developed PAYD insurance products using in-vehicle telematics. The industry representatives stated that the information that they would be interested in obtaining from pilots would be data on driving, including not just mileage, but also the time of day and location (e.g., road type, central city or rural, etc.) of the driving. Industry representatives stressed that they would like this data in a raw form, as that would facilitate their ability to learn as much as possible about driving behavior and claims' risk and to price policies reflective of such risk.

## **Participants (\* Denotes Insurance Company Representative)**

- Lee Munnich (University of Minnesota, Humphrey Institute of Public Affairs, State and Local Policy Program)
- Frank Douma (University of Minnesota, Humphrey Institute of Public Affairs, State and Local Policy Program)
- Harris Clark (Unigard Insurance)\*
- Bern Grush (Skymeter Corporation)
- Sarah Aue (University of Minnesota, Law Student)
- Cheryl Kehoe (Maryland Auto Insurance Fund)\*
- Bryan Smith (Travelers Insurance)\*
- Chris Gay (Mile Meter Insurance)\*
- Ginger Goodin (Texas Transportation Institute)
- Ken Buckeye (Minnesota Department of Transportation, Office of Policy Analysis Research and Innovation)
- Adeel Lari (University of Minnesota, Humphrey Institute of Public Affairs, State and Local Policy Program)

- Scott Wilson (D'Artagnan Consulting)
- David Huber (AAA Auto Insurance of Northern California, Nevada, and Utah)\*
- Bill Everett (Progressive Insurance)\*
- Richard Hutchinson (Progressive Insurance)\*
- Lynne Bly (Fresh Energy)
- Ferrol Robinson (University of Minnesota, Humphrey Institute of Public Affairs, State and Local Policy Program)
- Allen Greenberg (Federal Highway Administration)
- Max Donath (University of Minnesota, ITS Institute)
- Jim Whitty (Oregon Department of Transportation, Office of Innovative Partnerships and Alternative Funding)
- Paul Sorensen (RAND Corporation)
- David Coyle (University of Minnesota, Humphrey Institute of Public Affairs, Applied Economics Graduate Student)

## **Introduction (Munnich and Greenberg)**

Lee Munnich gave brief opening comments welcoming everyone to the University of Minnesota and outlining the workshop's goals. Munnich announced the 2010 Symposium on Mileage-Based User Fee taking place over the two days immediately following the workshop at the Humphrey Institute and addressed the possibility of bringing together mileage-based user fees and pay-as-you-drive (PAYD) insurance. Munnich made clear that merely being present at the workshop did not necessarily mean one supports mileage-based user fees, but those working on mileage-based user fees were interested in what lessons could be learned from PAYD insurance.

Allen Greenberg then provided a welcome on behalf of the Federal Highway Administration and gave brief remarks on mileage-based user fees and PAYD insurance. Greenberg explained that his office at the Federal Highway Administration is involved in road, vehicle-use, and parking pricing and believes that pricing enhances efficiency. Greenberg's own work focuses on promoting non-toll pricing strategies including PAYD insurance. Greenberg noted that PAYD insurance offers the potential to align premiums with the real risks when driving. Greenberg also highlighted a Brookings study that predicted that converting to PAYD insurance would lead to an 8% reduction in vehicle-miles traveled which would provide \$60 billion in public benefits. Major environmental groups have put together a report that endorses tax credits for PAYD insurance. People in the environmental community and at various think tanks are interested in PAYD insurance. Greenberg thought that the workshop would be a good opportunity to bring PAYD insurance proponents together with people working to advance mileage-based user fees.

## **NCHRP 20-24 Summary, Implementable Strategies for Shifting to Direct Usage-based Charges for Transportation Funding (Munnich)**

Munnich gave a brief overview of a study conducted by RAND. One of the motivations for the study was the declining tax revenues raised by the fuel tax caused in part by the fact that vehicles have become more fuel efficient. The central research question was whether there were simpler, less expensive, and less controversial vehicle-miles traveled (VMT) fee metering options than Global Positioning Systems (GPS). The report found that the three options that offer the greatest potential for near term implementations are fuel consumption estimates, OBD II Cellular, and Coarse-Resolution GPS. Munnich noted that the public does not yet understand the motivation for VMT fees and is concerned with privacy and government overreach. Voluntary "opt-in" strategies and the ability to gain additional features such as navigation capabilities and real-time traffic info may facilitate implementation.

Greenberg wanted to make sure the group understood the attraction to VMT fees among transportation policy leaders. Greenberg and Munnich noted that VMT has grown faster than fuel consumption and this is one factor explaining the revenue shortfalls in the Highway Trust Fund. New vehicle fuel economy standards, increasing fuel economy of model year 2016 vehicles by 40% over the existing fleet, will significantly exacerbate the revenue problem. There are also vertical equity issues as poorer drivers purchase older, less fuel efficient vehicles. Wilson noted that in Europe simply raising the gas tax to higher and higher levels has caused distortions in the transportation system.

### **Texas Transportation Institute (TTI) Technology and Institutional Studies (Goodin)**

Goodin noted some of the research activities on mileage-based user fees at TTI including development of a framework for evaluating system requirements, focus groups and stakeholder interviews, equity analysis related to income and the fuel efficiency of household vehicles, and emissions measures associated with imposing such fees. Goodin emphasized that the selection of a technology configuration for VMT fees depends on the policy objectives that policy makers are seeking to achieve. There are many technology options and system configurations available for mileage fee implementation but certain configurations are better at achieving certain policy goals. In focus groups, concerns about costs were frequently raised more than privacy issues when addressing VMT fees. The focus groups have also revealed a large deficiency in transportation finance knowledge by the public. Buckeye echoed Goodin's point noting that in their research, Minnesotans have little awareness of their even paying the gas tax, let alone understanding the role of the gas tax in financing transportation infrastructure. Goodin found that once focus group members were educated about gas-tax related issues, they then generally supported starting the implementation of VMT fees with simple approaches beginning with electric vehicles.

### **Additional Thoughts on Technologies (Donath and Grush)**

Donath and Grush gave remarks about technologies involved with VMT fees. Donath explained the technology that his group has been working on at the University of Minnesota. Donath wanted to make clear that he has no personal argument with GPS approaches to VMT pricing, but has found that GPS approaches raise privacy concerns that, no matter what precautionary measures may be offered, the public cannot be dissuaded from. Donath's group was asked to come up with a non-GPS technology that would be easy to install, is very inexpensive, does not involve deployment of new infrastructure, and would operate in parallel with the gas tax. The technology developed was an inexpensive cellular modem. This technology is non-GPS; however, it has the ability to distinguish when a driver is in a rural or urban zone and when a driver crosses between states and countries.

Grush extended the discussion on technologies related to PAYD insurance and VMT fees. Grush noted that GPS technologies that would enable both VMT pricing and PAYD insurance have operating costs of approximately \$21 per month, but should move towards \$10 per month in the future. Grush noted the spectrum of privacy levels available with various enabling technologies.

### **Oregon Pilot and Next Steps in Oregon (Whitty)**

Whitty provided information on the mileage-based user fees pilot project in Oregon which began in 2005. The project used a GPS receiver to collect mileage information and a pay-at-the-pump payment method. Despite attempts to ensure privacy, the public was critical of the project. Whitty thought that moving forward motorists should be provided a number of different technology options to record mileage. Whitty also echoed earlier points regarding the gap in transportation finance knowledge by the public.

## **Insurance Companies' Reactions and Open Discussion (all attending insurance companies)**

The response from the insurance companies was mixed. In general companies that were less far along in their development of PAYD insurance products were more interested in partnerships than those companies that already have well developed PAYD insurance systems. Hutchinson noted that Progressive Insurance doesn't need a mileage-based fee system or government involvement to move forward. Huber noted that margins are very thin in the insurance business and any discussion of partnerships must be mindful of this.

Greenberg asked for clarification from the insurance companies on whether they wanted to be involved in pilot projects that support both mileage-based user fees and PAYD insurance. Hutchinson clarified his point saying that it was not that they do not necessarily want to partner on the issue, but rather government action is not required for insurance companies to move forward with PAYD insurance. Hutchinson went on to note that adding more parties invites more complexity.

Greenberg asked what types of data the insurance companies would want and whether they would want government involved in gathering data. Clark appeared relatively ambivalent on the issue, but stated that the insurance industry could potentially be interested. Kehoe stated that she didn't care who provided the information and would want to know vehicle location but not specific location (urban vs. rural) and mileage. Smith noted that the insurance industry was not going to turn down data, but was concerned about how much information his company might be required to share with the government in exchange for obtaining the data. Smith noted the importance of not losing their competitive advantage. Gay stated that his company would use data as long as no strings were attached and added that data on vehicle travel broken down by road type could be very useful for his company. Huber didn't want government aggregating the data and instead wants the data in as raw a form as possible. Donath and Grush noted that there are companies that want to obtain mileage data and then sell it.

## **Next Steps for Moving Forward (Sorensen, Munnich, and Greenberg)**

Sorensen provided comments related to his work with RAND on mileage-based user fees. Sorensen opened a discussion on trials and asked what would be needed to entice insurance companies to be a partner on the trials. Everett noted that opportunities to partner would most likely be with companies not already involved with PAYD insurance. Everett went on to explain that Progressive Insurance already has product models and integrating different data sources would be costly. Gay noted that his company could be interested, but that it would be hard to get people to switch insurance with a pilot, where it was understood that the pilot would end. Huber noted that insurance companies could provide an incentive to drivers who drive in safe ways. Kehoe stated that she would be interested in a partnership, but noted several risks related to customer service, pricing, and project administration. Kehoe noted that some of her customers are transient and weary of "big brother".

Hutchinson wondered why the government doesn't just mandate VMT fees rather than go through the ordeal of attempting to gain acceptance through pilots involving complex partnership arrangements. Munnich and Sorensen responded that it was important to have successful demonstrations and that ideally a VMT fee system should be made attractive enough to get people to jump in before a mandate.

Finally, Greenberg asked the insurance companies if they would be interested in partnering if the details were left to the companies. Greenberg received nods of support from representatives of five different insurance companies.