

002010

## SYMPOSIUM ON MILEAGE-BASED USER FEES: MOVING FORWARD

APRIL 20-21 - MINNEAPOLIS, MINNESOTA

### **Mileage-Based User Fees: Moving Forward**

Symposium on Mileage-Based User Fees, April 20-21, 2010

Report on Closing Discussion Session

#### Background

The conventional wisdom that fuel taxes can provide adequate long-term funding for transportation programs is being questioned. Various market pressures and governmental regulations are working to drive up average vehicle fuel efficiencies, meaning that the average driver will be paying less fuel tax in the future to use the nation's surface transportation system. Furthermore, the federal fuel tax has remained static since 1993, and many state legislatures have shown a reluctance to increase their respective state's fuel tax rates. As a result, the fuel tax has lost significant purchasing power due to inflation, a trend which has been exacerbated by steep increases in the cost of building and maintaining roadways.

These concerns have not gone unnoticed. In 2006 the Transportation Research Board (TRB) formed the *Committee for the Study of the Long Term Viability of Fuel Taxes for Transportation Finance*. Among the committee's numerous recommendations was a proposal to conduct rigorous evaluations of technical options for use-based fee systems as promising replacements for the fuel tax. The 2008 final report of the *National Surface Transportation Policy and Revenue Study Commission* echoed this sentiment by recommending that the next surface transportation authorization act require major national studies to develop mechanisms and strategies for transitioning to usage-based alternatives to the fuel tax for funding surface transportation programs. Furthermore, the final report of the *National Surface Transportation Infrastructure Financing Commission* concludes that use-based fee systems, and specifically systems based on miles driven, are the most viable mechanisms for funding long term surface transportation needs.

#### Purpose

The University of Minnesota's Hubert H. Humphrey Institute and Center for Transportation Studies and the Texas Transportation Institute (TTI) hosted the second national Symposium on Mileage-Based User Fees in Minneapolis, Minnesota, April 20-21, 2009. The event was designed to bring together transportation professionals interested in advancing mileage-based user fees as an option for future transportation funding.

The symposium focused on methods and approaches to further the development of mileage-based user fees with an emphasis on these areas:

- Deployment approaches
- Demonstration projects
- Political leadership and project champions
- Public outreach, awareness and acceptance
- Transition issues and research needs

Seventy transportation professionals from fifteen states and two Canadian Provinces representing over forty organizations gathered for a day-and-a-half to hear presentations from experts on the state-of-the-practice in mileage-based fees, also called vehicle-miles traveled (VMT) fees. Participants represented all levels of government, academic institutions, trade associations, advocacy groups, and the private sector. The symposium featured speakers highlighting demonstration projects in the U.S., activities in the Netherlands, political realities, public outreach, and transition issues. The symposium also featured a discussion of linking pay-as-you-drive (PAYD) insurance and mileage-based user fees. A separate workshop on the topic was held with insurance company stakeholders the day before the symposium to gauge their interest. The symposium program can be found at the web site <http://utcm.tamu.edu/mbuf>.

At the opening of the conference, participants were asked to consider three questions during the course of the symposium:

1. What are the greatest challenges or barriers to transitioning from the fuel tax to a per-mile fee?
2. What would the transition look like and who would lead?
3. What additional research, testing and demonstration are needed?

The closing activity of the conference featured an interactive discussion session facilitated by Laurie McGinnis of the Center for Transportation Studies and Katherine Turnbull of TTI. Using an innovative “conversation circle” format, each question above was posed by a moderator and participants were invited to join the circle and offer their responses to the individual questions.

The purpose of this document is to provide: (1) a summary of the general themes based on responses to each of the three questions; and (2) a detailed synopsis of the individual responses (found in the Appendix of this report).

## Summary of Responses: General Themes

In general, there was not clear consensus among the group on responses to the three questions, but there were a number of general themes that emerged from the discussion. A summary of the themes is presented below.

### ***Question 1: What Are the Greatest Challenges or Barriers to Transitioning from the Fuel Tax to a Per-Mile Fee?***

#### **Acceptance by the General Public and Other System Users**

The topic of “lack of awareness of need” generated the most feedback from participants. From the public’s perspective, there is no compelling argument for transitioning to a new revenue collection system. Public outreach and education was identified as a critical step, beginning with clear and concise messaging that presents a compelling argument and a value proposition for users in order to articulate benefits to the public. At the present, the message encompasses a mix of purposes and is too complex: road user fees for revenue replacement? For revenue enhancement? For congestion pricing? Comments from participants included the following:

“We are trying to sell the public something they don’t like and don’t want;”  
“From the user’s perspective there is no funding crisis;”  
“From the public’s standpoint they have been getting roads for free, and now we are going to charge them for it.”

An issue related to acceptance is public trust in the message. Public trust in government is at a very low level, and the process for transportation planning and investment does not always meet the public’s expectations for transparency, fairness and efficiency. Government distrust was acknowledged as an important factor in the timing, transition and scope of deployment of a mileage-based fee system. Among the comments from participants:

“The public does not believe us;”  
“We are asking people to change the way they do business but we are not willing to change the way we do business;”  
“If the public does not have confidence in the way money is spent now, they are not going to have confidence in a new system.”

Finally, there are a variety of transportation system stakeholders, some with differing opinions on mileage-based fees. The commercial trucking industry, a major user of the system, is generally skeptical of transitioning from the fuel tax to a mileage-based fee system. A representative from the trucking industry had this perspective: “Trucking will push back; you will give us passion and focus.”

## **Leadership – Political and Professional**

Leadership challenges were articulated by the participants as “lack of political will,” “lack of coherent vision,” “no common purpose,” and “lack of consensus among the professional community”. The absence of a clear national vision, the scarcity of political leadership at all levels of government, and the lack of clear system objectives were cited as impediments. The absence of clear consensus among the professional community was also highlighted as a barrier. Finally, leadership is needed to address the lack of funding resources for research, testing, and implementation, particularly for states that are prepared to move forward for testing and implementation.

### **Question 2: What Would the Transition Look Like and Who Would Lead?**

The consensus of the participants in the interactive discussion was a vision of a transition to a road user fee system characterized as voluntary and evolutionary. The notion of user opt-in to metering technology, fee alternatives, and payment approaches under a variety of choices was discussed, with more simplistic approaches offered initially and increasing complexity over time.

Most of the participants speaking on the topic of “who would lead?” pointed to state leadership in the areas of future testing and implementation. Greater involvement and participation by state DOTs and agencies responsible for collecting revenue at the state and federal level was encouraged. However, one participant had changed his opinion on state and federal roles since MBUF-1. He said, “Now I think there should be more of a federal role. The federal government needs to focus on listening sessions with a wide array of entities, including the private sector and user groups, and use those sessions to devise a set of principles for defining the path forward. Then the states will follow.”

### **Question 3: What Additional Research, Testing and Demonstrations Are Needed?**

The responses to this question represent a mix of technological and policy research needs:

- Develop privacy standards that form the basis of public policy on use of data collected
- Identify enforcement approaches, covering the full range of issues: field enforcement, payment compliance, adjudication of violations
- Conduct large-scale trials, demonstrations and tests that encompass the full range of implementation elements, including administration and enforcement. Draw from the experience of the Value Pricing Pilot Program, which supports full field implementation of HOT lanes and other pricing projects.
- Conduct national polling and market research to support state-level public attitudinal data collection
- Gather input from a broader group of stakeholders, including financial and legal professionals as well as privacy advocates
- Explore risks associated with mileage-based fee rate increases
- Develop potential concepts of operation with system costs
- Define the “value proposition” for the public and other system users

- Develop national interoperability standards
- Compile research needs through TRB, so that academic institutions with their own research funding can begin exploring some of the many research topics in the policy, technology and behavioral science areas
- Evaluate the efficiency, equity and sustainability of the fuel tax in comparison to mileage-based fees

## **Conversation Circle Participants:**

**Moderators:** Laurie McGinnis, Center for Transportation Studies, University of Minnesota  
Katherine Turnbull, Texas Transportation Institute

**Discussants:** Susan Binder, Cambridge Systematics  
Ken Buckeye, Minnesota Department of Transportation  
John Collura, University of Massachusetts  
John Doan, SRF Consulting  
Ginger Goodin, Texas Transportation Institute  
Allen Greenberg, Federal Highway Administration  
Bern Grush, Skymeter Corporation  
Paul Hanley, University of Iowa  
John Hausladen, Minnesota Trucking Association  
Matthew Kitchen, Puget Sound Regional Council  
Said Majdi, HDR, Inc.  
Jim March, Federal Highway Administration  
Adrian Moore, Reason Foundation  
Richard Mudge, Delcan Corporation  
Lee Munnich, Humphrey Institute, University of Minnesota  
Mark Muriello, Port Authority of New York and New Jersey  
Flo Raitano, RDSpecialists, LLC  
Ferrol Robinson, Humphrey Institute, University of Minnesota  
Paul Sorenson, RAND Corporation  
Myron Swisher, SAIC  
Jim Whitty, Oregon Department of Transportation  
Sott Wilson, D'Artagnan Consulting Inc.  
Jeffery Zupan, Regional Plan Association

**Recorder:** Trey Baker, Texas Transportation Institute, Texas A&M University System

## **APPENDIX: Detailed Responses by Participants**

*The following are individual responses by symposium attendees to the questions being discussed and should not be construed a consensus view of all those in attendance.*

### **Question 1: What are the greatest challenges or barriers to transitioning from the fuel tax to a per-mile fee?**

- I think we need to gain some degree of consensus and the mechanism for doing so and list of issues. What we need to do is take off the items that have already been addressed and focus on items for which there is no consensus, where the research is contradictory, and then begin to “drill down” to where there are fewer moving parts next time around. I think that is the biggest barrier is getting to where we, as professionals, are singing the same tune.
- There is substantial complexity in these types of systems and simplifying it does not move us towards a consensus.
- There is no public understanding of the need for a transition. More outreach and listening is needed, starting at local/state level where future trials will occur and where eventual implementation will begin. Stakeholders, local elected officials, transportation agencies, and state DOT planning partners, should all be included.
- Public acceptance is a crucial issue and there are some holes in the system development such as enforcement.
- Some states are ready to do trials but funding is always going to be an issue.
- Clarifying the message is going to be an issue. We need to separate the distinct aspects of this: 1) The VMT aspect which is to preserve the yield, 2) variable and congestion pricing is supported but they are not equivalent, 3) setting the rate is also important. We need to keep these elements in our decision making and consensus building but clarify them. We have a cautionary tale raised by others that we have damaged the concept through donor/donee fights among states, and that has made discussion difficult. We need to be careful in these discussions.

- The framing of this concept going in to reauthorization will be important. Framing for reauthorization: (1) no coherent vision; (2) state deal; (3) applications we want to target as a condition of federal funding.
- The biggest challenge is that we are selling something the public doesn't like or want.
- It is interesting that we are not focused on technology issues. Outreach will be key. Today there are fees for all kinds of services that used to be financed out of property taxes. People need to know that transportation is important and that revenue is going to a good purpose. Outreach is important and the audience has to be convinced that transportation is important.
- Trucking will push back. You will give us passion and focus. We all have to accept from a user's perspective there is no federal transportation funding crisis. Transportation is viewed as too big to fail. Congress is the challenge.
- Human psychology is an issue, and the reality is that a lot of the decisions that people make are not rational from an economic perspective. The 70/30 rule has been alluded to in these discussions about support for congestion pricing. Loss aversion also plays into this in that people rank the loss higher than the gain. The problem is thus introducing this as a gain and seeing what the benefits are. I don't think revenue neutrality is the answer and I think more work like what is being done in Nevada is needed. We need to have a way of talking to people and addressing fairness. This will be a bigger challenge than congestion pricing, and communication will be a big challenge.
- The fundamental problem is that the public does not believe us. All the studies are ignored and without selling this the effort doesn't matter. There is no leadership in the at the federal executive and legislative levels so it has to come from the states. Another question is where the money will come from. We may be a little early to bring in the private sector to develop the system but there is the potential for them to come in and get some private money.
- I am very confident that if we keep at it we will get somewhere. I am more interested in the optimal path to the end which means getting there in the most efficient way. We have a self-inflicted problem. We mix hard and soft issues all the time. We need to identify these issues, determine where we are on them, and address them on parallel



paths with linkages. If we don't tackle this task first the effort will be tough.

- I think what we need to do is come back to the central public questions: What are you using the money for and how did you arrive at the price. You are asking people to pay for something in a way they have not paid before. There are clearly serious issues with how the money is spent today, and if they don't have confidence in that they are not going to have confidence in the new system. We need to have a "new deal" with road users. What we have now works well. Infrastructure works but raiding the system for political objectives damages the credibility of the system. Maintain the system and anything over and above that is based on cost-benefit analysis, which provides a more objective basis for making the case on making changes.
- On "messaging": the U.S. population does not respond well to doomsday messages from the government. We should not respond in the abstract. We did respond to I-35 collapse and Katrina. Simply saying the system is deteriorating will not work. Rather focus on other aspects. Remember "get farmers out of the mud?" That was a positive message that had a tangible benefit that people could latch on to.
- From the public's perspective they have been getting roads for free and now we are going to charge them for it. We have to look at what the tangible benefits are to the driver.
- I think creating the political will to do this is an enormous challenge and I don't see leadership stepping forward. The other part of this is the definition of the problem. I would say that three quarters of our state's population does not have congestion, so to implement something for the purposes of managing congestion in a few urban areas will not work. So for us it boils down to a revenue generating mechanism.
- We are asking people to change the way they do business but we are not willing to change the way we do business. Until we are ready to confront the political and economic realities at the metropolitan level we won't advance.
- I think there is void in getting out the message on this topic. Something that struck me is how do we talk to people about paying at the pump. I think getting the bill in the mail is trouble.

## Question 2: What would the transition look like and who would lead?

- I think the transition has to be voluntary and evolutionary and there has to be a perceived value from this. People have to be attracted with benefits. This can be accomplished through building markets for service provision and collection. Policy needs to drive this and policy is mostly state oriented. Therefore this needs to be state driven. States are different but they need to lead.
- Focus on the problem. The commercial trucking “fee for use” model should not be the model for how to do the system. The problem is fuel efficient vehicles. Oregon’s weight distance fee is not a good model.
- I believe change will occur at the state level and we need to prepare for the fact that there will be failure, and we can’t afford for failure to lead to paralysis when it occurs. We need to sell the problem. Too many times we have solutions looking for problems. Start with defining what the goal of VMT fees are. We don’t have a common purpose.
- The idea of an opt-in period is becoming more attractive, and with it comes the idea of having optional devices. What occurs to me is that some users will want the services but will skip the road charge. If we move to that model, then the state and federal government need to be considering what the charges should be and how to collect them. Perhaps give people the option of paying MBUF over other types of fees, and opt in to more and more complicated systems in terms of technology.
- In terms of implementation it is easier to talk about it if we have people responsible for implementation present. I think therefore we need to have state DOTs more involved in conferences like this as well as the agencies responsible for collecting revenue at the state and federal level. Some of the issues we are discussing here might be non-starters if those individuals were here.
- Last year I felt that this should be state driven because that is where we would see activity. But now I think there should be more of a federal role. The lessons we should draw are from the federal congestion pricing program, which enabled states to go out and do these types of projects, whereas now with VMT fees we don’t have a lot of direction. Federal government needs to focus on listening sessions with a wide array of entities including private sector and user groups. Use this to devise a set of principles for defining the path forward and the states will follow this.

- People will accept this without accepting there is a problem or having a crisis. Look at healthcare. We also had welfare reform that was not considered a crisis. We have deregulated industries. The fact is big changes can happen if the ideas are advanced. It may take time. The financing commission was talking about a 15 to 20 year time frame. This is how these kinds of changes happen. People keep at it until they retire. Let's keep plugging away and not wait for a bridge collapse.

**Question 3: What additional research, testing and demonstration are needed?**

- We need privacy standards in terms of policy. This is not about demonstration of technology; it's about showing the policy works. With HOT lanes people saw that the system worked. People need to see the benefits in order to accept it.
- You have to face the enforcement reality. There is a belief that it can all be made to work through technology, but for a reasoned discussion you will have to bring in road enforcement people and financial enforcement people.
- You have to address the privacy issue. Even if we all agree on the goals, the data is out there. The platform has been created and it will be co-opted from you.
- We also need to be wary of the technocrat wizards because right now we are all just talking to ourselves. There have been a number of state surveys and focus groups but there has not been any sort of national poll or market research. We need robust market research for decision makers to use to evaluate this.
- I think we are past pilots. We need to do actual implementations where money is changing hands. It does not have to be nationwide; it can be done on the small scale.
- It is a lot more effective if you can show someone something as opposed to talking to them about it. We are dealing in the abstract. While we can't definitively lay out what these will look like we need to do a better job of illustrating to the right people (namely opponents). Showing them more definitive systems would be helpful.
- Don't do small trials and demonstrations. There needs to be a large population with changing revenue, because in terms of cost of administration we need to see how this will function on a large scale. What are the issues in terms of enforcement and and

administration on a large scale?

- There is the risk from this system about having to raise fees when necessary. We need to think about this hard. We have not had good luck raising fuel taxes, and VMT fees would not be able to remain static or else we go through this anguish at some point in the future.
- Interoperability needs to be addressed as well as concepts of operations which would include system costs. There also needs to be a focus on the value proposition and what users are going to get from the system. State entities do not have that relationship with users to accomplish this like the private sector.
- Research has a role in advancing the discussion at the state legislator level and public outreach level. We need to develop a comprehensive list of research needs that can be prioritized and placed on the TRB research needs database so that researchers can begin working on these particular issues and advancing the body of knowledge on the topic.
- The people who favor the gas tax always bring up the fact that it is not costly to collect. We here are doing research on tax financing principles which includes efficiency, equity, sustainability, etc. I think that if we get into this research we will find that the fuel tax is not as great as everyone thinks, and I believe there are other opportunities in this area. So I would suggest that one of the things we need to do is to focus on what it is we are really trying to do and what is the most important. We need a framework for moving forward.
- Our DOT is not in the business of collecting money so we need to have a department of revenue at the table to talk about this.
- I want to reinforce the importance of bringing in treasury/revenue departments. We have gotten feedback on piggybacking off of existing systems and that would increase. We need to have these people come to next year's symposium.