



# Mileage-Based User Fee Public Opinion Study

## Summary Report Phase One (Qualitative)

Final Report 2007-50

**Prepared for:**

**Mn/DOT Market Research**  
on behalf of  
**The Value Pricing Program**

**August, 2007**

*Prepared by:*

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16. Abstract (Limit: 200 words) <p>A panel of select “key experts” expressed their opinion that the fuel tax is viewed as an accepted, efficient option for funding transportation, and that it will continue to be for the next 15 to 20 years. Mileage-based fees are a solution that will likely not be necessary nor feasible for at least 10 years according to the experts. It is imperative that transportation authorities clearly identify the objectives of the mileage-based user fee as a first step for determining structure/design of the concept and how to communicate it. These experts proposed that a mileage-based user fee should be used to supplement, rather than replace, the current motor fuel tax.</p> <p>Focus group participants (n = 10 groups) did not fully grasp the amount of tax dollars they spend per year on the transportation system, nor do they easily recognize the sources through which these monies come. After discussing the current and projected funding shortfalls from the motor fuel tax and hearing a brief description of a usage tax based on mileage, participants were generally comfortable with the idea of paying their “fair share” based on how much they use the roads. Varying a mileage-based fee based on size and/or weight of the vehicle was seen as logical, and not do so would unfairly penalize those who have chosen to drive fuel-efficient or hybrid vehicles. The congestion pricing model was seen as less fair because it would negatively impacts those drivers who need to travel for work during standard “rush hours.”</p> <p>These participants were skeptical of the claim that the information would not be tracked, and being watched by “Big Brother” was mentioned frequently. Many believed that mileage-based user fee technology would be expensive to implement and maintain, and suggested that, if additional funds were needed, simply increase the existing fuel tax or registration fees. As qualitative research, these findings are not projectable to either of the segments researched.</p>			
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**Mileage-Based User Fee  
Public Opinion Study**

**Expert Online Bulletin Board Discussion**

**Final Summary of Findings, August 2007**

**Created for: Mn/DOT Market Research  
On behalf of The Value Pricing Program**

**Created by: The Dieringer Research Group**

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## Executive Summary

### *Addendum from Mn/DOT Market Research*

*Reporting September 2007*

In 2007, Minnesotans were recruited to participate in a series of focus groups regarding mileage-based user fees (“MBUF”). Initially, a panel of Key Experts on the topic was surveyed via an online bulletin board, in order to ‘hear’ current national developments and beliefs on alternative financing for transportation. (Full description of methodology and sampling is at the end of this document as well as an appendix in the full report.) This summary provides Key Takeaways and Conclusions.

### Expert Panel Key Findings

- A mileage-based user fee is a solution that will likely be neither necessary nor feasible for at least 10 years, according to the experts who participated.
- If or when tested or implemented, it is imperative to clearly identify the objectives of the mileage-based user fee as a first step for determining structure/design of the concept and how to communicate to consumers.
- The fuel tax is viewed as an accepted, efficient option for funding transportation, and some experts believe it should and will continue for the next 15 to 20 years. The adequacy of funding, as stated by some, is a political issue and dependent on politicians’ willingness to increase the fuel tax.
- Experts proposed that a mileage-based user fee should be used to supplement, rather than replace, the current motor fuel tax. It may be easier to gradually transition from a simpler method, such as tolling via electronically collected tolls (ETC), which uses existing technology that motorists are familiar with, to a mileage-based option.

### Consumer Focus Groups Key Findings:

- In general these participants did not fully grasp the amount of tax dollars they spend per year on the transportation system, nor do they easily recognize the sources through which these monies come.
- Drivers may be more accepting of a change in the funding method, whether simply an increase in the existing tax or a switch to a mileage-based user fee, if the reason for the change is clearly explained. To illustrate, many were aware that the gas tax had not increased in many years and that Governor Pawlenty had recently vetoed a \$.05 tax increase. Participants often mentioned they would be willing to pay more in gas tax if they could be assured that the monies would actually be spent for transportation.
- After discussing the current and projected funding shortfalls from the fuel tax and hearing a brief description of a usage tax based on mileage, participants were generally comfortable with the idea of paying their “fair share” based on how much they use the roads. They saw the general idea of a mileage-based user fee as a fair and reasonable way to tax, similar to how they pay for electricity and water.
- Mixed feelings existed, however, as to the need for more money for transportation in general, with a small portion convinced funds were adequate but mismanaged. Other problems seen as barriers to the mileage-based user fee concept are capsulated below:
  - While varying the fee based on size and weight of the vehicle was seen as logical, some thought it would unfairly penalize those who have chosen to drive fuel-efficient or hybrid vehicles.
  - The congestion pricing model was seen as less fair as it negatively impacts those drivers (particularly those in the Twin Cities metro area), who need to travel for work during standard “rush hours.”
  - It was also perceived as an attempt at social engineering, which some thought appropriate for Mn/DOT’s role and others not.
  - Participants were skeptical of the claim that the information would not be tracked, and being watched by “Big Brother” was mentioned frequently.
  - While the technology exists, many believed it would be expensive to implement and maintain, and often wondered why, if additional funds were needed, they didn’t simply increase the existing fuel tax or registration fee or bill in some other way.
- ***The public in general, according to this first round of groups, has not yet linked increased vehicle efficiency, alternative fuels and inflation to the availability of financial resources for transportation in the future. There is an attitude that raising the motor fuel tax is the only/best/long term solution for transportation.***

**Encapsulated\* Conclusions and Recommendations regarding the implementation of a mileage-based user fee to replace the existing fuel tax are offered by The Dieringer Research Group, Inc. based on these qualitative data:**

1) When consumers were told approximately what they pay in taxes per year to own and operate a vehicle, some were surprised, and many thought this would generate inadequate levels of funding into the future. As it explores modifying the funding system, Mn/DOT needs to consider how it can elevate the topic of transportation funding in the minds of consumers and frame the debate in terms of its overall objectives. The ability of Mn/DOT to get ahead of the curve and begin positioning the need for a funding change, as well as the purpose, goals and objectives of change will sow the necessary seeds for future communication once change begins.

2) While understanding the concept of a mileage-based user fee system, to consumers the connection between filling up the gas tank and paying for the roads was more indirect than direct. One way to help consumers make the connection would be to put a notice on every gas pump as to tax paid per gallon of gas and connecting the tax with road construction and maintenance.

3) The majority of consumers did not recognize that the current system for funding roads -the motor fuel tax- has shortcomings or is flawed. Therefore, telling them how Mn/DOT plans to “fix” the system may likely be received as premature. In essence, Mn/DOT must be able to answer the question, “Why not just raise the gas tax?” with a clear and convincing response. (Full report gives specific, targeted issues that will arise.)

4) Again, the purpose of a mileage-based user fee must drive the model proposed, as well as communications regarding the model.

- o If the goal is to move away from the current fuel-based calculation to a mileage-based calculation while increasing the amount of funds collected, the model needs to clearly show how that will happen and why it should happen.
- o If a goal of the model is also to relieve congestion, the model needs to clearly show how that will happen and why it should happen. Mn/DOT could borrow from the demand-side management practices of electric utilities in the 80’s and 90’s. It would need to show the cost of building additional lane-miles compared to shifting traffic from peak times to off peak times.

5) Consumers were quick to point out low-tech solutions, including raising the gas tax or requiring annual odometer inspections, which could accomplish some or all of the goals of a mileage-based user fee. There was a great deal of skepticism regarding claims that the device would not track movement, and recent news stories about divorce lawyers subpoenaing toll-booth records from states to prove philandering charges will only add to the public’s desire for caution in having technology in their vehicles. Skeptics also thought people would succeed at finding ways around the technology, capture information that should be secure and use it for alternate purposes. Some even felt legitimate companies, such as insurance companies, would try to gain access to the information to use when setting rates for a vehicle. Mn/DOT needs to have explanations and reassurance to these issues, at the ready, before implementation.

6) Regardless of the final goals of a mileage-based user fee, as long as vehicles are powered by a non-renewable energy source, consumers felt the current system of rewarding those who drive energy efficient vehicles should remain a component of the model. They believed that having an allowance for size and weight or the economy class of the vehicle would also be important. Mn/DOT should educate/prepare consumers as final model may not include such characteristics.

7) Finally, it was important to consumers to be able to verify the information being collected and the resulting fees being charged. They did not want to be blindly charged for road use if they couldn’t verify the charges prior to completing a fuel purchase transaction. Explaining this cross check mechanism will go far to enhance acceptance.

### **Methodology and Sampling**

Eight of 12 Key Experts who agreed to participate in the online bulletin board were recruited from a list of 21 that Mn/DOT provided. The bulletin board began on 5/16/07 and remained open for the duration of the focus groups.

The groups were recruited randomly from zip codes surrounding/in the cities of Mankato, Duluth, Minneapolis and St. Paul. The exception to this rule was the hybrid vehicle owners, who were recruited randomly from a purchased list. The groups were conducted between the 19<sup>th</sup> and 28<sup>th</sup> of June, 2007 and moderated by Dieringer Research Group (Bob Fichtner.) Group configurations and respondent types are displayed in the full report.

**\*See full report for supporting information**

**RESEARCH OVERVIEW**

Overview

This qualitative research study was conducted in two phases:

- Phase I – Expert Online Bulletin Board
  - Online bulletin board discussion held with experts in the field of mileage-based user fees from May 16, 2007 to June 11, 2007.
  
- Phase II – Consumer Focus Groups
  - Ten focus groups conducted with Minnesota drivers from June 19, 2007 through June 28, 2007

Results of each of these phases are detailed in this report.

## **METHODOLOGY**

This study was the initial phase of a two-phase qualitative research study to understand public opinion regarding a mileage-based user fee alternative to the current motor fuel tax. This phase of the research involved contacting transportation experts knowledgeable about mileage-based user fees. The purpose of this research was to understand the current perceptions of a mileage-based user fee among national experts and how they believe the idea would be perceived by the end-user, or general public. The second phase of the research, specifically focus groups conducted with Minnesota drivers, was to be based on the information gathered through this preliminary phase. While the original proposal suggested having The DRG conduct in-depth interviews with the experts on an individual basis, it was decided jointly that an online bulletin board was a preferred option to gather information as it provided the option for experts to “interact” as they might during a focus group.

To form the online bulletin board panel, Mn/DOT provided a list of 21 individuals from around the country who had some knowledge or experience in the field of mileage-based user fees. From that list, 12 respondents agreed to participate in the online bulletin board discussion that was conducted from May 16, 2007 to June 11, 2007. Participants were provided a unique login ID and password that allowed them access to the secure online bulletin board that was hosted by The DRG. A trained moderator led participants through a discussion by regularly posting questions to which participants could respond. Participants also had the ability to respond to the comments of other experts.

Mn/DOT was identified as the sponsor of the research in order to validate the research study, and experts were offered \$150 in the form of cash or as a contribution to the charity of their choice for their participation in the online discussion. They were encouraged to log in at least once or twice a day to view recent posts and respond to new questions from the moderator.

Participation in the discussion was lighter than anticipated. Of the 12 respondents who initially agreed to participate in the online discussion, eight were at least slightly involved in the discussion over the few weeks that it was online. Three did not participate at all and one only made one posting. The DRG made multiple attempts to encourage participation among the experts, by sending several reminder e-mails which included the login information and instructions on how to log in and post responses on the bulletin board. Reminder phone calls were also made to the experts to encourage participation and to be able to respond to any questions they may have had regarding the technical aspects of the bulletin board. Despite these attempts, responses mainly revolved around the early questions related to proposed supplements or replacements to fuel tax and few experts provided responses to the questions of key groups who might be impacted by mileage-based user fees and how it should be communicated to the public.

**INTERPRETATION AND USE OF QUALITATIVE RESEARCH**

Qualitative research is exploratory in nature. It is used to define the important issues and attitude parameters in relation to a particular subject. Because of the small number of people involved, the moderator can probe beyond the initial response into participant attitudes and perceptions. They are a very useful tool in finding out not only how people feel, but also why they feel that way.

However, due to the small number of participants and the recruiting methods used, the results of the online discussion are not statistically projectable back into the population as a whole. Therefore, the reader is cautioned not to project these findings, they are, however, intended to be directional in nature.

**Online Bulletin Board Participants**

<b>Name</b>	<b>Title</b>	<b>Company</b>
Todd Litman	Executive Director	Victoria Transport Policy Institute
Jack Wells	Chief Economist	US DOT
Gary Maring	Senior Associate	Cambridge Systematics
Ed Regan	Senior Vice President	Wilbur Smith Associates
Marty Wachs	Director, Transportation, Space, and Technology Program	Rand Corp
Mathew Kitchen	Principal Planner	Puget Sound Regional Council
David Forkenbrock, Ph.D.	Professor	University of Iowa
Ken Orski	Editor and Publisher	Innovation Briefs

Participants in the panel were told that their names would be listed as contributors, pursuant to the MN Data Practices Act. However, they were also told that comments made were not to be linked to their identity, in order to motivate more forthright and objective discussion.

**SUMMARY OF FINDINGS**

The current fuel tax is viewed as an accepted, efficient option for funding transportation, and many experts believe it should and will continue for the next 15 to 20 years.

- Few perceive an imminent decline in funding levels due to an increase in efficiency of the fleet.
- Many believe the adequacy of funding is a political issue and is dependent on politicians’ willingness to increase the fuel tax.

Experts proposed options such as a Vehicle Miles Traveled tax (VMT) or a Mileage-Based User Fee for collecting additional revenue; however, they believe the options should be used to supplement, rather than replace, the current motor fuel tax. The table below summarizes the advantages and disadvantages suggested by experts.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Reduces effect on gas tax from increased fuel efficiency</li> <li>• Links taxes to road usage</li> <li>• Equips vehicles to allow for future pricing initiatives, such as congestion charging, variable tolling, HOT lanes, etc.</li> <li>• Increases efficiency of toll collection process</li> </ul>	<ul style="list-style-type: none"> <li>• Increased transaction/administration costs</li> <li>• Privacy concerns</li> <li>• Reduced incentives for driving fuel efficient vehicles</li> <li>• Vulnerability to fraud</li> <li>• Cross-border conflicts – if fees are only state-based</li> <li>• Politically – difficult sell</li> </ul>

Rather than implementing a new, large-scale funding option in one step, experts suggested it may be easier to gradually transition from a simpler method, such as tolling via electronically collected tolls (ETC), which uses existing technology that motorists are familiar with, to a mileage-based option.

However, experts caution that any changes or supplements to the motor fuel tax must begin with clearly defined objectives. Once the goals are identified, a funding option can be designed to meet those specific objectives. Experts provided some examples of how the options varied base on the goals, as summarized in the table below.

Objective/Goal	Option(s)
Decreasing congestion	Congestion-based Mileage-Based User Fee <b>or</b> Congestion pricing via ETC or VMT
Decreasing emissions	Increased fuel tax <b>or</b> Mileage-Based User Fee with varying charges based on vehicle class
Increasing transportation funding	Increased fuel tax supplemented by Mileage-Based User Fee or ETC

## DETAILED FINDINGS

### Replacements/Supplements to Motor Fuel Tax

The main discussion on the bulletin board revolved around potential replacements or supplements to the current motor fuel tax. Ultimately, many of the experts believe that the fuel tax is and will continue to be the best primary roadway funding option.

*There are merits to fuel taxes, so I think it makes more sense to think in terms of supplementing, rather than replacing fuel taxes as the transportation funding revenue source.*

*I think it is a mistake for us to dismiss fuel taxes. They are a simple, broadly accepted, cost-effective funding mechanism that helps encourage fuel efficiency, and as Mark Twain would say, 'The rumors of its death have been greatly exaggerated.'*

*I think that this discussion highlights the point that alternative funding options, such as road tolls to finance specific highways and congestion pricing on specific roads or areas, will only cover a small portion of total vehicle travel (I estimate 10% to 20%), and for the foreseeable future, fuel taxes will continue to be the best primary roadway funding option.*

*I disagree that we are "on a path of no return with fuel taxes." I think it is more realistic to say that we are looking for efficient financing options to supplement fuel taxes. Fuel taxes ARE an effective revenue generating system, and are even more justified if greenhouse gas emission reductions are a serious objective.*

### Decrease in Fuel Tax Not Imminent

Many experts do not foresee a fuel tax 'crisis' caused by a decrease in tax collected as a result of increasingly more fuel-efficient cars on the roads. While they agree that this is the trend, they believe that the change will happen gradually and judge it to be 10 to 20 years off.

*Although rising fuel prices may marginally increase average vehicle fuel efficiency, I can't see the fleet becoming significantly more efficient in 15 years. Even if fuel prices double, say, to \$6.00 per gallon, new fleet fuel efficiency would probably only increase by ~50%, and it would take ~15 years for half the fleet to be replaced, resulting in a ~25% reduction in fuel tax payments per vehicle-mile.*

*The obvious direction we will ultimately take is a shift to some form of mileage-based taxation. I believe it will take many years to get there, probably 15 or more, to completely transition of the gas tax.*

*I believe that mileage-based road user charges are about a decade away at best. They offer considerable promise in the long run, but as others have said, fuel taxes are likely to be the mainstay for some time to come.*

### Funding Issue is Political

Several believe that the ‘crisis’ is, instead, a political problem and is simply due to politicians being unwilling to raise fuel taxes.

*The real problem with fuel taxes as a revenue source is not the risk of huge increases in average vehicle fuel efficiency, it is the reluctance of politicians to raise fuel taxes in response to inflation and marginal fuel efficiency increases.*

*The biggest stumbling block is not technology... nor is it public opinion. It is incorrect political perceptions of public opinion about pricing and tolling, which leads elected officials to resist major changes in the status quo. That resistance may well become the ultimate doom of transportation as we continue to “make believe” there is no problem.*

*This is not a technical problem; it is a political problem, and therefore an education problem. Being anti-government and anti-tax have been politically popular and fuel taxes seem to be particularly difficult to raise.*

*I also concur that the major issue here is political resistance to raising the motor fuel tax. It will be especially difficult to get legislators to raise the motor fuel tax as motorists buy more fuel efficient vehicles because it seems to be punishment for socially desirable behavior.*

### Mileage-Based User Fee Seen as Supplement

A Vehicle Miles Traveled tax (VMT) or Mileage-Based User Fee was one of the most frequently mentioned options for collecting additional revenue, with experts believing that it should be used to supplement, not replace, the current motor fuel tax. There were some interesting similarities between the statements from the industry experts and those of the focus group participants regarding the Mileage-Based User Fee.

#### Advantages

One expert listed several advantages of a mileage-based fee, including:

- *Reduces further erosion of purchasing power of gas tax as fuel efficiency dramatically increases in the future*
- *Links usage of road capacity directly to the taxes collected (or price paid), which permits more direct demand management*
- *Potentially results in all vehicles being equipped for some form of road pricing which opens up huge opportunities for increased pricing initiatives, such as congestion charging, other forms of variable tolling, HOT lanes, etc.*
- *Increased efficiency of toll collection process on all toll operations*

Disadvantages/Concerns

When discussing this option, Minnesota drivers raised similar concerns to those of the experts, including increased transaction costs, administrative challenges and privacy issues.

*It will require not-insignificant increases in transaction costs (probably \$30 - \$100 per vehicle-year, taking into account all costs)*

*It significantly increases transaction costs. Although the cost of the GPS transponders has declined..., there is still a large cost to installing the equipment in existing vehicles in such a way that they are secure (so motorists can't remove them and take unpriced trips) and powered (either with large enough batteries to last several years or wired into the vehicle electric power). Plus, there are costs to collect and process the vehicle travel data and generate a bill.*

*I agree that time-and-location-based pricing can be more efficient than fuel taxes, which could justify the increased transaction costs associated with vehicle tracking, and that these transaction costs are declining from high (more than \$100 per vehicle-year) to moderate (say, \$50-100 per vehicle-year).*

*One of the disadvantages of mileage-based fees is the administrative challenge of monitoring and imposing fees of over 200 million drivers nationally (or on all the drivers in a particular state) vs. the fuel tax which is collected from about a thousand entities and mostly from 10 or so big oil companies.*

*An even greater problem, I think, is the concern about privacy. People don't need to be conspiracy buffs who believe the government operates covert black helicopters to object to vehicle tracking systems on principle.*

*The privacy issue of government monitoring movements of nation's drivers has been widely mentioned; and, although there are solutions, it is likely to remain a perception problem...*

Additional concerns raised by one expert included:

- Reduced incentive for driving fuel efficient vehicles
- Vulnerability to fraud
- Cross-border conflicts, if fees are only state-based

Implementing a Mileage-Based User Fee would require motorists to pay to have a device installed in their vehicle so that they can be taxed. Several experts suggest that this would be a "difficult sell" among motorists, as they don't see tangible benefits from this taxing method.

*Politically, it will be difficult to say to citizens, "You need to pay extra to install a tracking device in your vehicle so that we can tax it." It will be very vulnerable to criticism, and I don't see what tangible benefits most citizens would perceive.*

Gradually Transition to Mileage-Based Option

A couple experts suggested that an easier option would be to begin with a simpler method, such as tolling via electronically collected tolls (ETC), which uses a technology that currently exists and with which motorists are already acquainted and comfortable and then slowly transitioning from fuel taxes to a mileage-based option. Another expert indicated that a gradual transition would be necessary due to the inability to retrofit vehicles with the equipment needed for a vehicle-mile tax.

*I see an increasing use of tolling and other forms of pricing used to supplement the fuel tax, with more and more roads and bridges becoming tolled. This will result in more vehicles being equipped for electronic toll collection, leading ultimately to the day where all vehicles in America are equipped for mileage-based pricing. If the technology is planned right, these same devices will open up huge opportunities for widespread demand management pricing.*

*There should be greater political acceptance for VMT-based pricing using simple odometer audits (an annual odometer reading). Even that would be difficult to sell, but may be acceptable, since it has modest incremental transaction costs (many vehicles already have annual safety or emissions inspections that include recording odometer readings).*

Understanding Goal is Key

One expert suggests that knowing the objective(s) for the replacement/supplement is key. Based on the objective, there are several different suggestions.

Objective/Goal	Option(s)
Decreasing congestion	Congestion-based Mileage-Based User Fee or Congestion pricing via ETC or VMT
Decreasing emissions	Increased fuel tax  or Mileage-Based User Fee with varying charges based on vehicle class
Increasing transportation funding	Increased fuel tax supplemented by Mileage-Based User Fee or ETC

Experts were asked how mileage-based user fees should be introduced to the general public. Only one suggestion was given for introducing any sort of increase in vehicle user fee – whether an increase in existing motor fuel taxes or a new fee based on mileage. The expert stated that government “has done a poor job of explaining why total road user fee revenues should be raised.” He outlined steps for communicating an increase, including:

*Show citizens how little they are currently paying toward roadway costs, how the costs of maintaining and building transportation facilities has declined over time, and how unfair and inefficient it would be to rely on other funding sources to finance roads.*

**Appendix – Screener/Discussion Guide**



## INTRODUCTION

Hello, this is \_\_\_\_\_ of The Dieringer Research Group. We are working in conjunction with the Minnesota Department of Transportation on a multi-phase research project. In this project, we are exploring the reactions of consumer and other stakeholders to various alternatives to current fuel-based funding mechanisms for road construction and repair.

Before we obtain feedback directly from consumers or other stakeholders, we would like to gain input from a select group of transportation experts such as yourself and we would very much like to include your insight on the topic. Your name was provided to us by Mn/DOT as a person of considerable knowledge in the field.

Do you have a few minutes now to chat about participating in this project?

Yes – Continue

No – Schedule callback

If person declines to participate – we realize your time is valuable. Could I e-mail or fax you a synopsis of the project for your review

Yes – Obtain e-mail or fax number \_\_\_\_\_

No – Thank you for your time

## Project Description

Rather than interview experts individually, we thought it would be interesting to hold a roundtable discussion that would allow the participants to add to each others comments and thoughts, provide counterpoints and learn from one another. To achieve this, we have set up a secure online discussion forum. If you agree to participate, we would e-mail you a link to the discussion site and then call you with your username and password. This will be a closed discussion (that is, not open to the public), but the results from the discussion will become public as part of our report to Mn/DOT and your name will be listed as a contributor at the end of the report; however, no individual comment will be quoted.

Over the course of approximately two weeks, we will pose specific questions to the group for their consideration and discussion. You would be responsible for logging into the discussion group **at least** once a day and providing responses to the question or posts from the other discussion members.

Representatives from Mn/DOT will read the posted comments but not actively participate in the discussion.

In recognition of your time, we are offering a monetary gift of \$150 to you or a charity of your choice as a thank you for your participation.

The discussion will start around May 16<sup>th</sup> and run for approximately two weeks.

Are you able to participate?

**Discussion Scheduling**

Now we just need to collect some information to help us with the interview...

I have your name as . . .

Name (Mr./Mrs./Ms.) \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_ /

Organization \_\_\_\_\_

So that we may mail you the \$150 check as a thank you for your participation, May I please have your address?

If would prefer Charity, Which one? \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Direct Line \_\_\_\_\_

Alternate/Main Co. Number \_\_\_\_\_ Ext: \_\_\_\_\_

We appreciate your willingness to participate in this study. We will send you an e-mail confirmation with additional details about the discussion, along with the Web address for the discussion forum. We will also contact you a day or two before the discussion starts to remind you of this appointment and answer any questions you may have.

In order to do this, we would like to collect your e-mail address. We will not use this for any other purpose nor provide this address to anyone else. May I please have your e-mail address?

E-mail address: \_\_\_\_\_

In the meantime, if you have any questions, please feel free to call **Bob Fichtner** at **1-800-489-4540 x1116**. We look forward to speaking with you.

Do you have any questions for us at this time?

Yes – Record

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No – thank and close

**GROUP DISCUSSION GUIDELINE**

**I. WELCOME/EXPLANATION OF GROUP PROCESS:**

- Explain purpose of group
- Explain discussion forum protocols
- Stress no right or wrong answers; all opinions welcome
- Reminder: no one will be quoted by name in the final report but a list of contributors will be added per law (MN Data Practices Act).

**II. INTRODUCTIONS:**

- Name
- Current position and role

**III. BACKGROUND DISCUSSION OF MILEAGE-BASED USER FEES:**

- a. There have been recent suggestions to replace or supplement the motor fuel tax. What different ideas come to mind when you think of possible ways to do this?
- b. How would you classify or define mileage-based user fees?

NOTE: Then provide definition to all participants so that subsequent discussion is relative to this definition – reference as needed to keep discussion on topic.

**MILEAGE-BASED USER FEES**

**Context**

The motor fuel tax has long been a reliable source of transportation revenue. However, there are indications that this source of revenue may decline in the future because of reduced growth in vehicle miles of travel, improving fuel efficiency, increasing availability of alternative fuels, and tax avoidance. Mileage-based user fees are being considered by many as a possible replacement for the motor fuel tax.

**Definition**

For this project, the definition of mileage-based user fees are those fees associated with use of roadways by motor vehicles. Mileage-based user fees will directly connect street and highway use with the cost travelers impose and the price travelers pay for using the system. These fees could be designed to replace or supplement motor fuel taxes, and they could be assessed based on a number factors including:

- Actual miles traveled;
- Time of day of travel;

- Facility;
  - Jurisdiction; and,
  - Vehicle type.
- c. What is your general sense of the current discussion with respect to replacing or supplementing existing fuel-based funding mechanisms, with other methods of generating revenue?
- d. How, if at all, has the discussion changed over the past year?
- e. How would you describe level of activity regarding the current debate with respect to mileage-based user fees?
- i. Is it increasing? Why/why not?
  - ii. (if not already mentioned) Are you aware of other countries that have implemented this mechanism, or are about to?
- f. How aware do you think most consumers are of the notion of mileage-based user fees? Why do you say that?

#### **IV. GROUPS AFFECTED:**

- a. What segment or group do you think **MIGHT** be affected most by a change in the revenue collection model for roads from a fuel-based funding mechanism to a mileage-based mechanism?
- b. If you were seeking input from various consumer segments and groups, which one or ones would you be sure to contact and include in your research?
- c. What groups would have special interests in the mileage-based user fees?
- d. What advantages, if any, do you see in mileage-based user fees over other potential funding mechanisms?
- i. What about from the perspective of the general public?
  - ii. Other groups such as farmers, truckers, environmentalists?
- e. What disadvantages, if any, do you see in mileage-based user fees over other potential funding mechanisms?
- i. What about from the perspective of the general public?
  - ii. What about for other specific groups, such as truckers, farmers, environmentalists, etc.?

**V. EXPERIENCE WITH Mileage -Based User Fees:**

- a. Have you had any direct experiences in developing/demonstrating or implementing mileage-based user fees? Describe those experiences.
  - i. What, if any, specific hurdles did you have to overcome?
  - ii. Can you describe specific successes you had and how you achieved them?
  - iii. What about disappointments? Why do you think they occurred?
    - 1. Probe for specifics related to communication
    - 2. Lack of communication
    - 3. Communication of erroneous/wrong information
    - 4. Poor timing of communication
    - 5. Impact of communication/information from non-official sources (word-of-mouth, rumor, news media, talk radio, etc.
  - iv. Which group, if any, did you have the hardest time convincing?
    - 1. Were you successful? If so, what contributed to the success?
    - 2. Probe for message, medium, allies, third-party groups, etc. enlisted to help

**VI. IMPLEMENTING MILEAGE-BASED USER FEES:**

- a. In your opinion, what are the main barriers to the implementation of mileage-based user fees?
  - i.(For each barrier) What suggestions would you have to address or overcome that issue?
- b. What opportunities, if any, would switching to mileage-based user fees provide?
  - i.For the various entities that expend road funds?
  - ii.For the general public?
  - iii.For other stakeholders/constituencies (identify)?
- c. What do you think about an approach that would involve a blend of varying kinds of mileage-based user fees?
  - i. Would incremental implementation solutions that didn't involve full conversion to mileage-based users fees make more sense? Why/Why not?
  - ii. If so, how would you structure it?
    - 1. What types of fees would you implement?
    - 2. Would you institute them all at once or phase them in?
      - a. What would the sequence be?

**VII. COMMUNICATION WITH THE PUBLIC REGARDING MILEAGE-BASED USER FEES:**

- a. Earlier in the discussion, we raised the issue of communicating with the public regarding the funding of roadways. Let's go back to that topic. In your opinion, what has driven and what will drive an increase in awareness?
- b. What are your suggestions for the following:
  - i. Introduction of the topic to the general public to encourage discussion
  - ii. Timing of the discussion
    1. Is there a need to "get out in front" of the discussion?
  - iii. Methods for keeping the public informed
- c. We've also discussed various barriers with respect to the adoption of mileage-based user fees. Let's revisit those which have been raised and how states can address them in terms of communication. What do you think are the key points states should be raising with respect to:
  - i. Privacy
  - ii. Fairness
    1. E.g. "penalizing" people who drive energy efficient vehicles
    2. The economically "disadvantaged"
    3. People whose jobs require them to drive high miles
  - iii. Mileage-based user fees as supplementing versus replacement of existing revenue mechanisms
  - iv. Other issues?
    1. Transition from one revenue/fee structure to another
    2. Affordability – cost to consumers & businesses
    3. Ability to evade
    4. Allocation of collected funds – state, county, local

**VIII. OTHER ISSUES RELATED TO MILEAGE-BASED USER FEES**

- a. In your opinion, are there any regional or local differences in perspectives or attitudes that planners should take into account with respect to mileage-based user fees? What are they?
- b. Are there any other key points or issues with respect to mileage-based user fees that we have not covered in this discussion? If so, what?

**Mileage-Based User Fee  
Public Opinion Study**

**Focus Group Discussion**

**Final Summary of Findings, August 2007**

**Created for: Mn/DOT Market Research  
On behalf of The Value Pricing Program**

**Created by: The Dieringer Research Group**

## **BACKGROUND, METHODOLOGY AND OBJECTIVES**

### Background

Around the country, transportation authorities are considering the next generation of funding for roads. Sentiment is growing that the “gas tax,” which is the main source of transportation funding in the US, is generating inadequate levels of funding due to an increasing array of vehicle and fuel types, and will become even more unreliable in the future.

An alternative funding source is a mileage-based user fee, which may use technology to record miles and road use while strictly protecting the privacy of motorists. This approach would tax drivers based on the miles they drive, and possibly when and where they drive, not the amount of energy they use.

Most of the current initiatives and discussions are focused on technical and policy issues and disregard the critical dimension of public opinion regarding purpose and need. For example, the goals of a demonstration study at the University of Iowa are to assess the reliability, security, flexibility, user friendliness and cost-effectiveness of the technology, and to evaluate operator acceptance of such a system. No mention of user opinion is included.

Without public understanding and acceptance, it is unlikely that these initiatives will win support. This project proposes to supplement and enhance the ongoing and proposed work of other efforts by understanding public attitudes, awareness and potential conditions for public acceptance.

### Objectives

The primary objectives of this research overall are to determine the following:

- Identify what we know and do not know by speaking with policy experts around the country on Mileage-Based User Fees.
- With this body of information, describe and explain Mileage-Based User Fees to the public,
  - for reaction and overall attitude
  - finding particular “hot spots” existing in public perceptions and
  - investigating how to address these issues.
- Find the right ‘positioning statements’ for both internal and external stakeholders as well as the public end-user (customer) for potential demonstration projects across the country.

### Intended Use

This information will provide direct input into ongoing work looking at the motor fuel user fee and how the need for a new or replacement fee might be best described and communicated to stakeholders and public alike.

### Methodology

A qualitative methodology was employed. This report is for the first qualitative piece only. Future phases of this study will be conducted, using the findings from this initial effort.

This qualitative research study was conducted in two phases:

- Phase I: Online Bulletin Board Discussion with industry experts
- Phase II: Consumer Focus Groups

- Phase I – Online Bulletin Board
  - Mn/DOT provided a list of 21 individuals from around the country who are viewed as experts in the field of mileage-based user fees.
  - From that list, 12 respondents agreed to participate in an online bulletin board discussion that was conducted from May 16, 2007 to June 11, 2007.
  - Participants were provided a unique log in ID and password to give them access to a secure online bulletin board.
  - A trained moderator led participants through a discussion by regularly posting questions to which participants could respond. Participants also had the ability to respond to the comments of other experts.
  
- Phase II – Consumer Focus Groups
  - Ten focus groups were conducted in three different locations within Minnesota
    - Six groups were conducted in the Twin Cities Metro area
    - Four groups were conducted in rural areas – two in Duluth and two in Mankato
  - Different types of drivers were recruited to participate in the groups to ensure that a desirable variety of perceptions from both the general public and highly affected groups were included. Specific groups and the qualifiers for each are shown below:
    - General Public – 4 groups (2 in Metro, 2 in rural Duluth and Mankato)
      - Mix of gender, age and income
    - High Miles – 2 groups (1 in Metro, 1 in rural Mankato)
      - Drive more than 25,000 miles per year
    - Low Fuel Efficient Vehicles – 1 group (Metro)
      - Drive a vehicle that averages fewer than 20 miles per gallon
    - High Fuel Efficient Vehicles – 1 group (Metro)
      - Drive a vehicle that averages 30 miles per gallon or more
      - Mix of hybrid/non-hybrid vehicle drivers
    - Peak Commuters – 1 group (Metro)
      - Travel to work/school at least four times/week in the Metro area using highways or freeways between 6 am and 9 am or 3 pm and 6 pm
      - Mix of those who drive alone or commute
    - Environmentalists – 1 group (Rural Duluth)
      - Achieve a total score of 12 or higher on five attitudinal/behavior statements that were rated on a 3-point scale<sup>1</sup>
  - The focus groups were conducted from June 19, 2007 to June 28, 2007 and were moderated by The Dieringer Research Group.
  - Participants were offered \$50 for their participation in the focus groups; however, in an effort to increase the number of recruits in some groups, such as high efficiency,

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<sup>1</sup> Respondents were read a list of activity statements and asked to rate their level of participation using a scale of 1 to 3, with “1” being “Almost Never,” “2” being “Sometimes” and “3” being “Almost Always.”

some participants were offered \$75 to \$100 (the latter if traveling a great distance to the groups).

A total of 84 participants attended the focus groups, 29 in the General Public groups and 55 in the specialty groups. Although the specialty groups were segmented to assess the impact of specific driving behaviors and/or vehicle types (e.g. “high mileage” drivers or drivers of “low fuel-efficient” vehicles), participants in a specific group likely had multiple characteristics. That is, a driver in the “high mile” group may own and drive both a high fuel-efficiency and low-fuel efficiency vehicle, such as a truck and a hybrid. Therefore, participants often were able to address topics from multiple perspectives and see various sides of an issue.

A discussion guide was developed by The Dieringer Research Group, with input from Mn/DOT. [See the discussion guide in the Appendix for the exact questions asked.]

#### Statistical Reliability and Limitations

Qualitative research, both the online bulletin board discussion and focus groups, is exploratory in nature. It is used to define the important issues and attitude parameters in relation to a particular subject. Because of the small number of people involved, the moderator can probe beyond the initial response into participant attitudes and perceptions. They are a very useful tool in finding out not only how people feel, but also why they feel that way.

However, due to the small number of participants in certain subsets of the population, the results of focus groups are not statistically projectable back into the population as a whole. Therefore, the reader is cautioned not to project the findings of these groups to all Minnesota residents; instead, these findings are intended as directional in nature.

In addition, all market research is a ‘snapshot’ of the point in time during which data collection occurred. These groups were conducted in June of 2007. Had they been conducted in August, participants may have had different opinions, leading to different conclusions. The reader is therefore advised to balance the opinions and observations reflected in this report against the fact that they were gathered prior to the collapse of the I-35W bridge. Likewise, the results of the investigation into the reasons for the collapse will further influence public opinion regarding transportation funding, including how those funds are collected.

## SUMMARY OF FINDINGS

In general, these focus group participants were unable to clearly identify the amount they pay for transportation in terms of taxes, or the different sources of transportation funding such as state and federal gas tax, vehicle registration, etc. This lack of awareness may be due to limited communication about the topic, but is more likely a reflection of the public's lack of interest or attention paid to the subject until something happens. When asked what the current gas tax is, estimates varied anywhere from \$.05 to \$1.00 per gallon. While they were unable to precisely pinpoint the amount of the tax, many were aware that the gas tax had not increased in many years and that Governor Pawlenty had recently vetoed a \$.05 tax increase. Participants often mentioned they would be willing to pay more in gas tax if they could be assured that the monies would actually be spent for transportation, highlighting the fact that some don't realize fuel tax funds are dedicated to transportation.

After discussing the current and projected funding shortfalls from the fuel tax and hearing a brief description of a usage tax based on mileage, participants saw the general idea of a mileage-based user fee as a fair and reasonable way to tax drivers. They related it to other usage fees, such as electricity or water, believing that the more you use it, the more you should pay.

Participants generally understood that Mn/DOT needs to collect transportation funds in order to maintain the roadways, and were, for the most part, comfortable with paying their "fair share" based on how much they use the roads. Mixed feelings existed, however, as to the need for more money for transportation in general, with a small portion convinced funds were adequate but mismanaged.

Varying the fee based on size and weight of the vehicle was seen as a logical aspect of the concept as larger vehicles do more damage to roadways; however, many would also prefer that the fuel efficiency of the vehicle be included in the equation. Participants believed that a fee based solely on mileage and not efficiency unfairly penalizes those who have chosen to drive fuel efficient or hybrid vehicles. The congestion pricing model was seen as less fair as it negatively impacts those drivers (particularly those in the Twin Cities metro area), who need to travel for work during standard "rush hours." It was also perceived as an attempt at social engineering, which some thought appropriate for Mn/DOT's role and others not.

Participants were generally familiar with the types of technology that would be involved in the two concepts they reviewed and understood how it would work. There was a tacit level of acceptance on the part of the younger participants that the technology would work as described, while older respondents had more questions and were slightly more hesitant. However, regardless of age, participants were skeptical of the claim that the information would not be tracked, and being watched by "Big Brother" was mentioned frequently. Recording mileage, and especially the time and location information of the congestion pricing model, was seen as a "slippery slope" that could then be used for other things.

While the technology exists, many believed it would be expensive to implement and maintain, and often wondered why, if additional funds were needed, they didn't simply increase the existing fuel tax or registration fee or bill in some other way. Example comments pertaining to all 3 of these ideas follow.

*Why reinvent the wheel? Let's just crank it up at the pump and be done with it. Because if we start doing this, we start employing a bunch of new people, private companies, government, etc. You still have to pay their retirement, their health insurance, so how much is that really going to cost you? Just jack it up at the pump is the way I see it. – Metro Low Fuel Efficiency participant*

*I like the theory of it, but the implementation might be difficult. The reason I say that is the gas tax, you pay it at the pump. You pay your tax and the government has the ability to use that relatively quickly because it's already been collected. – Mankato General Public participant*

*My guess would be that at the end of the year, you get your mileage certified by somebody. You'd pay a per mileage tax – three cents a mile, five cents a mile, whatever it is. – Metro General Public participant*

Clearly identifying the objectives of the mileage-based user fee is important and should be the first step when determining how to structure or design the concept and how to communicate the new concept to the consumer. One Metro participant summed this up well when asked which of the two scenarios was better. He stated,

*It depends what your goal is, basically. If your goal is to get people off the roads so that they are not as congested so you don't have to build more, the congestion charge would work. – Metro General Public participant*

Focus group participants were very perceptive and many appreciated a more direct approach at communication. Drivers may be more accepting of a change in the funding method, whether simply an increase in the existing tax or a switch to a mileage-based user fee, if the reason for the change is clearly explained. Additionally, explaining how the monies raised by various fees are dedicated to transportation funding, as well as how those monies are allocated to different types of projects (local versus county versus state roads, mass transit, etc.), will help drive the acceptance of change.

## Conclusions and Recommendations

Based on the results of these ten focus groups and the online discussion with industry experts, The Dieringer Research Group, Inc. would like to offer the following conclusions and recommendations regarding the implementation of a mileage-based user fee to replace the existing motor fuel tax:

- 1) Consumers do not regularly concern themselves with the specifics as to how government entities fund roads and transportation systems or how the money is spent. While they know that, in general, roads are funded with a motor fuel tax and other vehicle related items (a new car tax, tabs and registration fees, tolls, etc.), few people could accurately identify how much they pay, either on a per-gallon or per-mile basis, or in total on an annual basis.

However, this lack of knowledge or concern does not necessarily indicate inadequacy in terms of education/communication efforts. Consumers treat roads as ‘a given’ – as they might a utility, like electricity. They only really think about electricity when it isn’t there. Similarly, consumers only think about roads if there is something that significantly inconveniences them.

When consumers are told approximately what they pay in taxes per year to own and operate a vehicle, some were surprised, and many thought this would be inadequate in the future.

Most construction projects, bad roads, congestion and other transportation topics have become routine, thanks in part to the current communication efforts of the department. Transportation stays in the background relative to consumers’ daily actions.

As it explores modifying the funding system, Mn/DOT needs to consider how it can elevate the topic of transportation funding in the minds of consumers and frame the debate in terms of its overall objectives. Its ability to get ahead of the curve and begin positioning the need for a change, as well as the purpose, goals and objectives of change will sow the necessary seeds for future communication once change begins.

- 2) Consumers understand the concept of a mileage-based user fee system, thinking of it as a “pay for what you use” way of funding the roads. For consumers, it is analogous to other commodity utility purchases, be it electricity, gas, water or phone services. However, the connection between filling up the gas tank and paying for the roads is more indirect than direct. Consumers may be aware of the connection when asked, but they don’t consciously associate the two.

One way to help consumers make the connection would be to put a notice on every gas pump as to tax paid per gallon of gas and connecting the tax with road construction and maintenance. Mn/DOT would reinforce the connection every time consumers purchase gas, sending a message of “Funding Better Roads.”

- 3) The majority of consumers did not recognize that the current system for funding roads – the motor fuel tax – has shortcomings or is flawed. Therefore, telling them how Mn/DOT plans to “fix” the system may likely be received as premature. In essence, Mn/DOT must be able to answer the question, “Why not just raise the gas tax?” with a clear and convincing response.

In order to drive acceptance of a change, communications regarding the need to change the system will need to address three key elements:

- a. How (and why) the system actually is (or may be) threatened, including:
    - i. Increased fuel efficiency in vehicles
    - ii. Changes in vehicle engine and fuel technology – hybrids, E85, fuel cells, etc.
    - iii. The escalating cost of maintaining and building roads
  - b. Why a mileage-based system is “better” than the current system of a motor fuel tax
  - c. Why it is important to maintain and build good roads without sounding like just another government agency or entity saying it needs more money
- 4) The purpose of a mileage-based user fee must drive the model proposed, as well as communications regarding the model. If the goal is to move away from the current fuel-based calculation to a mileage-based calculation while increasing the amount of funds collected, the model needs to clearly show how that will happen and why it should happen. If a goal of the model is also to relieve congestion, the model needs to clearly show how that will happen and why it should happen.

Mn/DOT could borrow from the demand-side management practices of electric utilities in the 80’s and 90’s. It would need to show the cost of building additional lane-miles compared to shifting traffic from peak times to off peak times.

- 5) It was clear from discussions in the groups that most consumers were accepting of the technology at face value. However, they were concerned about the cost of the technology and how the information gathered by the technology might be used. They felt the “device” – as described in the concepts - and the infrastructure required, were an expensive solution to what is, in their minds, a straightforward problem; namely, charging people based on the miles they drive. Consumers were quick to point out low-tech solutions, including raising the gas tax or requiring annual odometer inspections, which could accomplish some or all of the goals of a mileage-based user fee.

Additionally, the specter of “Big Brother” tracking and recording their movements and travel habits was an issue of many consumers. There was a great deal of skepticism regarding claims that the device would not track movement, merely record miles traveled. The level of fear and skepticism was heightened by a device that would track mileage by time and type of road. Recent news stories about divorce lawyers subpoenaing toll-booth records from states to prove philandering charges will only add to the public’s desire for caution in having technology in their vehicles.

Consumers were also skeptical about the security of the technology and the resulting information. They felt people would succeed at finding ways around the technology or to capture information that should be secure and use it for alternate purposes. Some even felt legitimate companies, such as insurance companies, would try to gain access to the information to use when setting rates for a vehicle.

Finally, it was important to consumers to be able to verify the information being collected and the resulting fees being charged. They did not want to be blindly charged for road use if they couldn't verify the charges prior to completing a fuel purchase transaction.

- 6) Regardless of the final goals of a mileage-based user fee, as long as vehicles are powered by a non-renewable energy source, consumers felt the current system of rewarding those who drive energy efficient vehicles should remain a component of the model. They felt that having an allowance for size and weight or the economy class of the vehicle would be important.

## DETAILED FINDINGS

### Perception of Current Situation

#### Condition of Roads

In order to stimulate the discussion about roads, the moderator began by asking participants about their perceptions of the current road conditions in Minnesota. In general, responses were mixed. Some suggested that the road quality had declined in recent years, and, despite the perceived constant construction, were not well maintained. Others were more understanding as they said the Minnesota climate is tough on roads. They described the roads as being better than those of other states, and were accepting of construction as a necessary part of ensuring roads are maintained.

Example negative comments included:

- *I work in Little Canada. There's a stretch of roads that are just bumpy and wavy; they're not being maintained properly. I know that they're planning on redoing them, but in the meantime, they just haven't kept up with the maintenance of the roadways, as far as pot holes, cement blowing out. We live in the climate and we have a lot of freezing, thawing and that sort of thing, but in the springtime, it's never taken care of. – Metro Low Fuel Efficiency participant*
- *Living in Illinois for many years, living in Connecticut, I don't think that the roads in Minnesota are that great. – Duluth Environmental participant*

Others had positive impressions, including:

- *As a former truck driver, Minnesota roads are in very good condition compared to other states. Compared to others, we are in the top five. – Mankato High Miles participant*
- *I think in Minnesota as a whole, the roads are really good compared to other states. I've spent a lot of time in lots of other state and we've got to be in the top 25%. From my experience at least, other states would love to have our pot holes. Get in to out state Minnesota and it's harder to find really dilapidated roads – other states, not so much. – Metro General Public participant*

Participants attributed the road condition to not only the climate, but also increasing population and design problems.

- *I think our roads are pretty average. They could be better kept up [compared to other] states, but I think we've got pretty heavy usage, too. – Metro Low Fuel Efficiency participant*
- *Overall, I think it's pretty good. One thing that I think Minnesota suffers from is some of the highways' design. Like some of the ways the freeways go together and split off and do these weird kind of connection things. I've never seen that in other states. ... It's*

*crazy. Who would have thought to design it that way? – Metro High Efficiency participant*

While many believe there is room for improvement, they acknowledged that these improvements come with a cost.

- *Certainly they're not in the greatest of shape, but considering what they have to go through, I'm happy with the overall conditions. Yeah, I'd like them to be better, but I know that costs tax payer money. I don't like to pay any more taxes just like anybody else, so I guess I would say I'm satisfied with the roads. – Mankato General Public participant*

#### Adequacy of Funding – Current

There was also discrepancy within the groups as to the amount of funding available for the roadways. While some perceived it to be sufficient, others stated they believe the funding is inadequate, citing the deferred maintenance, absence of tax increases and impact of increasing population. Almost no one said there was too much funding for Minnesota roads.

- *I'd say there's not enough. Because lots of times the roads get too bad before they have to do something instead of maintaining them better. – Duluth Environmental participant*
- *Not enough. It seems like we've had a lot of budget cuts and now we're trying to play catch up. So for example, the cross town project that just started. I think that was initially to start two years ago, but because of budget cuts...it just didn't happen and finally started this year. So we are playing catch up with these projects that were planned for a couple of years ago. – Metro High Efficiency participant*
- *That gas tax hasn't gone up in like a long time, has it? Isn't it something like five years or something? I can't really understand how the funding can be expected to be adequate when it's not getting increased at all. And you are always talking about pot holes and too much congestion and things like this. You're not going to alleviate these problems without funding. – Metro General Public participant*
- *Not enough. I think our priorities are [off]. Legislation wanted to put a tax on gas – a five or ten cent tax on gas. Everyone is complaining that the roads are poor and that they need to do something – we need to get across town. But I don't think people are willing to, and certainly the governor is not willing to fund it. – Metro General Public participant*

Other participants believe that the amount of funding is appropriate but that the monies are mismanaged.

- *There's enough funding, they just don't use it for what they're supposed to use it for. ... I live on a state-aid country road and the county took part of the money that was allocated every year to the state-aid roads and put it in their new garage, their highway building. – Duluth General Public participant*

- *I may be wrong, but I was under the impression that for many years part of the tax that we paid for gasoline was supposed to go for maintaining roads, and it did not. It went into the general fund. – Metro High Efficiency participant*
  
- *I don't think it's a matter of not enough or too much, I think it's poor budgeting. – Mankato High Miles participant*

Sources of Funding

The moderator then asked participants how roads are funded and recorded their answers on a white board. This common “brainstorming” technique is used to identify the variety of opinions in a group, as group participants work together to compile a list. The purpose was less to understand how many participants within each group believe each source contributes to road funding. Because of this, analysis is limited to the number of groups in which each source was mentioned.

When asked how roads are funded, participants in every group mentioned the gas tax. Participants in a majority of groups also mentioned other funding sources, such as federal tax, plate fees, property and income tax. However, some uncertainty exists as a few groups also mentioned that monies are generated through other methods, such as the lottery or the Adopt-a-Highway program.

<b>Unaided Sources of Funding</b>	
<b>Source</b>	<b>Number of Groups Mentioning</b>
Gas tax	10
Federal	8
License/Plate fees	7
Property tax	7
Income tax	7
Vehicle sales tax	5
Trucker excise tax	4
Special road assessment	2
Tickets	2
General Fund	2
Adopt-a-Highway	2
Construction fund	1
Lottery	1

Current Rate

In general, participants are unaware of the amount they pay for both gas tax and for transportation, in total. When asked what the current gas tax rate was, answers varied from \$.05 to \$1.00 per gallon, with one participant even mentioning the \$.009 that shows on the gas price was the tax. While most participants gave an estimate of the gas tax in total, individuals in several groups were aware of the split for state and federal. While the state amount varied (\$.20 to \$.35), those who were aware of the split accurately estimated the federal tax at \$.18 per gallon.

<b>Gas Tax Ranges</b> (Per gallon)		
<b>Group – Description</b>	<b>Low</b>	<b>High</b>
Group 1 – Metro General Public	\$.20	\$.55
Group 2 – Metro High Miles	\$.08	\$.25
Group 3 – Duluth General Public	\$.009	\$.80
Group 4 – Duluth Environmental	\$.08	\$1.00
Group 5 – Metro Low Fuel-Efficiency	\$.32	\$.40
Group 6 – Metro High Fuel-Efficiency	\$.30	\$.67
Group 7 – Metro Peak Commuters	\$.05	\$.35
Group 8 – Metro General Public	\$.18	\$.30
Group 9 – Mankato General Public	\$.07	\$.40
Group 10 – Mankato High Miles	\$.20	\$.46

During this discussion, many participants mentioned that the tax had not been raised in many years and cited the recent attempt to increase the tax. Often, comments were made that they would be willing to pay a slightly higher gas tax, particularly if the additional amount would go towards roads.

- *Actually, the majority of the people were willing to pay ten cents and then they tried to knock it down to five, and even a greater majority was like, ‘Yeah, I’ll pay five cents for better roads.’ But it still didn’t happen. – Metro General Public participant*
- *I’m amenable to it [the increased tax]. If I see I’m getting something from that tax dollar, I don’t mind spending it. – Duluth Environmental participant*
- *I don’t have a complaint about the gas tax because they aren’t the ones making the big bucks on the gas. You have to pay something in order to get decent roads. – Duluth General Public participant*

One participant mentioned that, politically, it would not have been a good move to ask for a gas tax increase with the price of gas escalating as it has recently. Similar comments were heard in other groups.

- *Well, politically, it’s not a real smart thing when you ask us at \$3.00 a gallon to add another \$.05, you know, that was probably not a good political move. – Duluth Environmental participant*

Another participant in the Duluth group believed that by clearly informing the public of the current gas tax and the fact that it serves as the major source of funding for transportation the DOT could increase support for an increase in the tax, saying:

- *Based on the way that we didn't know much about what was going on, which is maybe what you're trying to make a point to us. If I saw that tax thing written there on the pump every time I go and I never looked at it, maybe that should be more prominently displayed, then people might go, 'Gee, we're paying \$.20' or 'I pay a quarter to get this.' If that's the major source of funding then maybe that would be their best public relations tool to get us on board with [increasing the tax]. Because I'm sure the transportation department would be happy to get more money and find a good way to spend it. – Duluth Environmental participant*

Participants are equally unaware of the total tax they pay towards their personal transportation on an annual basis. After reviewing the sources that they thought contributed to transportation, participants were asked to provide an estimate of what they pay. In nearly every group, there was at least one participant who was unable to provide even a rough estimate, the responses among those who could varied greatly, from \$50 to \$10,000 per vehicle per year.

<b>Total Transportation Tax Ranges</b> (Per vehicle per year)		
<b>Group</b>	<b>Low</b>	<b>High</b>
Group 1 – Metro General Public	\$1,000	\$9,000
Group 2 – Metro High Miles	\$200	\$2,500
Group 3 – Duluth General Public	\$1,800	\$4,000
Group 4 – Duluth Environmental	\$350	\$10,000
Group 5 – Metro Low Fuel-Efficiency	\$1,000	\$2,000
Group 6 – Metro High Fuel-Efficiency	\$200	\$1,800
Group 7 – Metro Peak Commuters	\$50	\$3,000
Group 8 – Metro General Public	\$280	\$1,400
Group 9 – Mankato General Public	\$200	\$600
Group 10 – Mankato High Miles	\$500	\$1,200

**Factors Affecting and Responsibility for Adequacy of Future Funding**

Tax Factors

After participants estimated the amount of their taxes, the moderator clarified the actual current funding amounts of \$0.384 per gallon gas tax and approximately \$600 to \$700<sup>2</sup> per vehicle per year for total transportation costs. Several participants were surprised by the total amount, as they had estimated it to be much higher. Based on this new information about how much they are actually paying, the majority of participants acknowledged that the current funding would not be adequate moving forward. They mentioned that the roads were already bad and that more money would be needed to repair them in the future, especially with the increases in construction costs.

<sup>2</sup> Calculated using the following assumptions: \$120 sales tax amortized over 10 years on \$20,000 car, tab registration fee of \$200, \$300 in gas tax for driving 15,000 per year assuming 20 miles per gallon.

### Vehicle Type Factors

A few participants understood the impact of hybrid use on transportation funding without being prompted, stating:

- *With the increase and use of hybrid technology and hybrid vehicles, people are getting better fuel economy; therefore, they're paying less in fuel taxes, which will reduce the tax that they have to work with in the first place. – Mankato High Miles participant*
- *As the price of gas goes up, we drive less, obviously funding goes down. It's related to the amount of gallons sold, if that's the primary source of funding. So if we all freak out at \$4.00 per gallon, which we would, we're not going to drive as much, which is great for conservation, but bad for funding the roads. – Duluth Environmental participant*

The moderator then explained the current debate regarding transportation funding and the impact of potential changes in vehicle fuels, whether they be hybrids, electric vehicles, ethanol, methanol or fuel cells. The moderator explained that any move away from gasoline as the primary fuel for motor vehicles will reduce the amount of money raised for roads and transportation.

### Responsibility

In the later groups, participants were asked whose problem they believed the funding shortfall was and whose job it was to find a solution. Ultimately, participants reported that it is “our” (meaning society’s) problem, as they believed all drivers suffer due to a lack of funding, and while they believed “government” is responsible for providing a solution, there was no consensus of the specific entity within government. Answers varied from the local, state and federal government, the legislature to the governor.

- *I don't think you can ultimately say it's one person's problem. We're all users of the system, so it's obviously part our own problem. And leave government tasked with infrastructure. – Metro Peak Commuters participant*
- *[Who should take the lead on addressing the problem?] The governor. He's the head of the state. He's the person who should be in charge. – Metro General Public participant*

One participant believed the federal government should be responsible for resolving the problem so that the plan can be unified across the states, rather than having different solutions in every state.

- *I think it's got to be a federal government thing to unify whatever the plan is. Because otherwise, if it's left up to the states, this may not interconnect very well. – Mankato General Public participant*

## Perceptions of Mileage-Based User Fees

Upon introduction, the idea of a usage tax based on the miles driven resonated with these Minnesotans. Participants in several groups mentioned the idea of taxing miles driven on an unaided basis, while other participants were, for the most part, accepting of the concept when it was raised by fellow participants or the moderator. However, some participants took a bit longer, through the course of the discussion, to appreciate the rationale.

### Unaided Awareness

During the discussion of how government should adjust to ensure that they have adequate funds to provide transportation needs, participants in four of the ten groups suggested, unaidedly, they could begin taxing based on the miles driven. Many believed this would be a fair alternative as it would tax individuals based on their usage, and was seen as comparable to the current gas tax.

- *What we're looking at is in the future, as gas tax diminishes, how you make that up. What I'm saying is then do you have to start looking at 'Okay, you drive 20,000 miles a year, you have to pay so many cents per mile for roads that you drove because of the amount that you drove rather than somebody else who drove 9,000 miles.'* – Metro Peak Commuter participant

One participant even suggested that cars are currently equipped with “black boxes” that could be used to track mileage.

- *We can collect this money easily from people. The technology is almost already in automobiles. The newer automobiles all have black boxes in them already; we just need to use them now. We can utilize them because the car knows where it's at, on the roads. If we make the roads a little bit smarter, we can collect the money from the people just automatically as they use the roads* – Mankato General Public participant

### Aided Awareness

In those groups that did not raise the concept on their own, the moderator asked whether they were aware of a mileage-based user fee, what they thought it was and what their impression of the concept would be. Overall, few participants had heard of the idea, but when the moderator provided a brief description, participants understood the concept and believed it would be a fair way to assess the tax.

- *I think it's fair. It just means that the people who are driving more miles, they're the ones who are going to be paying more.* – Metro High Miles participant

Many believed it would penalize those who drove more fuel efficient vehicles. They thought that the mileage-based fee should also factor in the type and size of vehicle driven so that larger vehicles, that are doing more damage to the road, would be charged a higher rate than smaller vehicles. Vehicle efficiency should also factor into the equation in order to continue to reward motorists who choose to drive fuel efficient or hybrid vehicles.

- *It would have to be indexed by what you drove and, therefore, the gas mileage. ... To buy a hybrid car costs you more money. So you would only buy it really because you think over the next few years, I'm going to get this tax break. And, also you're concerned about the environment and with the taxes here – the gas tax. But at the end of the year, if you're told 'Well, you did that many miles in your super-efficient car, but we're going to sting you now with it.' Then I don't think people would buy an efficient car if they're going to get charged more than an inefficient car. – Metro General Public participant*
- *I think it would be fair, if it would depend on what kind of vehicle you had. That mileage tax is based on whether you have a fuel efficient vehicle. – Duluth Environmental participant*
- *As a usage tax, I like it conceptually. But how do you determine usage relative to impact on the roads, impact on the environment? Other things, too. Should an electric car be taxed the same way as an internal combustion car? They both use the road, they both wear the road out and they have very different impact on the environment. – Metro Low Fuel Efficiency participant*
- *It's not going to do anything to encourage fuel efficiency and reduce our dependence on foreign oil. ... My Prius is lighter, less damage to the road. So there is no encouragement for me to get a nice, light car and for him to give up his behemoth. I mean we're encouraging people to drive Hummers all over. – Metro High Efficiency participant*

It's not just those who drive efficient cars who believed the concept would penalize that segment of the population. A pickup driver described the inequity by saying:

- *Her Prius is probably a lot friendly on the roads than my Ford pickup is. If we drive the same amount of miles, I'm probably tearing up the roads three times as much as she is, but I'm still paying per mile, and the truckers that really bang up the roads, they're paying the same per mile as me. That probably doesn't sit well. At least with the gas tax, it seems to me that the other vehicles that beat up the roads the most usually are the ones that probably use more gas. ... She is intentionally trying to damage the road less and be more friendly. I think she should pay less than I do with my Ford pickup. – Mankato General Public participant*

How the tax would be implemented and monitored was also a source of concern among the groups. With the exception of the one participant who suggested that the car's black box could be modified to monitor mileage, others were leery of having their mileage monitored automatically, believing it was 'Big Brother-ish.' Several preferred to have it checked manually, as was done with the emissions testing or when renewing tabs.

- *As long as they don't put a device on my car to track it. – Metro Peak Commuter participant*
- *That's a great idea except of the [problem] with people's privacy. ... How would they enforce it? You know, if I drive 20,000 miles and I report 12,000. ... You'd have to have Big Brother. – Metro General Public participant*

- *How would it be collected? How could it be recorded? How would you determine the number of miles that you're doing? ... Do we have to build separate stations for us to report in every so often? Then we create jobs that way, but we're also paying those people. – Metro Low Fuel Efficiency participant*
- *Maybe when you pay your tabs. When you pay your tabs, you pay [an annual fee] during that point. – Metro General Public participant*

### Proposed Scenarios

Participants were then shown two concepts of how the mileage-based user fee might be implemented<sup>3</sup>, one at a time. In order to reduce the “group think” aspect of focus groups, that might cause participants to change their responses based on what others say, participants were asked to review the scenario and record their initial reactions to the concept on a handout. Discussion was then based on what their initial reactions were.

The order in which the scenarios were shown were rotated within the General Public groups. While there were some differences in the initial impression based on which scenario was shown first, participants ultimately identified the same issues with each.

### Scenario Q

The simpler of the two concepts, this version of the mileage-based user fee was described as:

Vehicles will have a small device installed, like an odometer, that tallies the number of miles driven. This device will be high-tech and accurate, with no ability for tampering. When the driver buys gasoline, the mileage information is transferred to the gas pump through a wireless transmission **that replaces** the per-gallon fuel tax. The rate is charged **per miles driven** and may vary with the size or weight of the vehicle. Funds would go towards both local and state roads.

### Positive Perceptions

Many participants had positive comments, reporting they thought it was a “good idea.” They thought it would be fair and liked that it is based on the type and weight of car.

- *I love the idea – wish I would have thought of it. It is very user-based, with those utilizing the highways to a greater extent paying a greater amount. Also, with the size or weight of the vehicle being factored in, these vehicles that cause more destruction to highways are paying for it. – Mankato High Miles participant*
- *Sounds like a very good idea, with the size and weight of vehicle. The more you drive, the more you pay. – Metro General Public participant*
- *I feel that this would be fair. The more you drive, the bigger your car, the more you pay. – Metro High Miles participant*

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<sup>3</sup> Examples of scenarios that were provided to the participants are included after the discussion guide in the appendix of this report.

### Negative Perceptions

Others expressed concerns with the concept, including the expense and complexity of implementing the concept, the intrusiveness of the technology, and that the rate would not account for vehicle efficiency.

One of the more frequently mentioned comments was that participants believed the concept would be expensive to both implement and maintain. Others believed that the variability of the fee would be difficult for those on a budget.

- *Cost and up keep of these systems seem to be a major factor in whether or not to implement them. – Metro General Public participant*
- *Paying for equipment and infrastructure for this sounds expensive! Who would pay for this equipment? – Metro High Efficiency participant*
- *The amount of money charged this way would have to be well advertised/transparent so that there is no surprise at the pump – Metro Peak Commuter participant*

They were concerned about the technology aspect of the concept, equating it to Big Brother. They thought that installing a device in vehicles was too intrusive and wanted confirmation that it would not track their movements. Concerns for the reliability of the technology were also mentioned, believing that the technology could fail or could be tampered with.

- *Sounds a little bit sketchy with a “Big Brother” impression. – Metro High Efficiency participant*
- *Big Brother is really watching. – Duluth General Public participant*
- *I disbelieve that it would be tamper proof. There are websites devoted to cracking/hacking anything – Metro Peak Commuter participant*
- *I do not support any implementation of equipment by the government on my privately owned vehicles. I can not support this type of system based on this type of subversive invasion. – Mankato High Miles participant*

While participants liked that the fee would be based on the size and weight of the vehicle, they believed it should also take into account the fuel efficiency of the vehicle to encourage and reward those who drive fuel efficient vehicles.

- *Sounds good, but does not take into consideration a car that is less polluting and more efficient in usage of gas. – Metro High Efficiency participant*
- *The problem with this is that unlike the current gas tax, it must be weighted by size and weight and encourage people to reduce their fuel consumption. It should pose a monetary penalty to large gas consumers. – Metro Peak Commuters participant*

Population Segment Most Affected

This scenario of the mileage-based user fee was perceived to have the greatest impact on two main groups – those who have long commutes or who drive a lot for their work, such as truckers, and those who drive fuel efficient or hybrid vehicles. No differences were seen by group or participant type.

- *People with economic cars [are most impacted]. They're using a lot less fuel now, even though they're still putting the same amount of miles on the road. So they're getting fuel savings but they're not benefiting from the less taxes going to the DOT. – Mankato High Miles participant*
- *What about the people who drive trucks that bring our goods and things like that to stores? I mean, economically, I think this also has an impact from that standpoint. – Metro High Efficiency participant*
- *In terms of people like us, I think that it's the commuters. People who have a big commute. I don't know people who drive to Chicago for work who drive to Milwaukee for work. I mean that's who it's really going to hurt. – Metro General Public participant*

Scenario F

The other concept shown factored in when the vehicle was driven, charging a higher fee for driving during peak periods or on freeways as opposed to side streets. The first four focus groups were shown the following concept:

The same technology on-board the vehicle again tracks the mileage driven, but also: where the travel occurred and when it occurred. User fee rates would vary for different types of travel. For example, travel in the peak congested period (“rush hour”) might be more expensive than travel in the off-peak periods. Travel on freeways might be more expensive than travel on local roads.

When the driver buys gasoline, the mileage information is transferred to the gas pump through a wireless transmission that replaces the per-gallon fuel tax. The rate is charged per miles driven and may vary with the size or weight of the vehicle. Fees would be applied on both local and state roads.

After the first four groups, the concept was modified slightly. The changes included:

- The technology was clearly identified to allow for concept rotation.
- Additional verbiage was added to clarify what information would be collected by the device in an attempt to emphasize that the device would not be able to “track” the vehicle.
- The method of communicating the mileage traveled changed from the gas pump via wireless transmission to a billing center via cellular technology in an effort to make the scenario more distinct from the other concept.

The revised concept, which was shown to Groups 5 through 10, read:

Vehicles will have a small device installed, like an odometer, that tallies the number of miles driven. It will also record where the travel occurred and when it occurred. The device would not “track” vehicles, nor would they have the capability to do so.

User fee rates would vary for different types of travel. For example, travel in the peak congested period (“rush hour”) might be more expensive than travel in the off-peak periods. Travel on freeways might be more expensive than travel on local roads, and the rate charged may vary with the size or weight of the vehicle.

On a predetermined basis, the mileage information stored on-board the vehicle is downloaded via cellular technology to a billing center. The billing center subtracts any the motor fuel tax paid and adds the per-mile fee. Billing would occur on a scheduled basis. Funds would go towards both local and state roads.

#### Positive Perceptions

Few participants had positive comments for this scenario. Some of those who did liked that it could help promote smarter working conditions by forcing drivers to think about when and where they were driving. However, others were leery of this aspect of the scenario, considering it to be social engineering.

- *This sounds like a better idea. It may make you think more about driving in rush hour traffic. – Metro General Public participant*
- *It’s basically social engineering instead of dealing with the demands of the populace. – Metro General Public participant*

Another participant liked that the additional information would help government know how to allocate the transportation funds.

#### Negative Perceptions

The main concerns with this scenario included the fear of being tracked (by Big Brother) and that it would hurt those who have to drive during peak hours to work. It was also seen as a much more complicated method.

While mentioned with regard to the previous scenario, the concern of being tracked or watched by Big Brother was stronger for this concept as more information is being recorded. As one participant said,

- *They will try to make it anonymous, but it won’t be. You start to set the precedent on tracking your car. The next thing you know your insurance company says if you want insurance we are going to add that device, and now we’re going to start tracking other aspects of you. I think it feels too Big Brother-ly. – Metro Peak Commuter participant*

Others had similar concerns that, despite the concept stating that the device “would not have the capability” to track vehicles, that it would be used to do so, and they believed that information should be private.

- *To me, it's Big Brother. I mean, my God, you're talking about a GPS in your car. This is recording where you are traveling and when. – Metro General Public participant*
- *I don't like the Big Brother factor. It doesn't matter where I go, when I go; no one has to know that. That's my information, that's private. That's the way I look at it. – Metro Low Fuel Efficiency participant*

The aspect of charging a higher rate for traveling during peak periods didn't seem fair to some participants, as they thought it would penalize individuals who did not have flexible schedules that would allow them to travel during other periods. It also caused some safety concerns in that it would cause commuters to shift from freeways to side roads that may not be designed for the increased travel.

- *Well, you're taking advantage of the working people who have to get out and travel during congested times. They have no choice; they have to go to work and they're causing the congestion. By the same token, that's the only choice they have. They have to go to work and they end up having to pay for it. I don't think that's fair. – Metro High Miles participant*
- *I would say that the majority of us don't carpool. So, therefore, we still have to be accountable for our time; we have employers that are paying us to be there at X time. ...If we're going to penalize people for driving in rush hour, employers need to be more flexible with their hours. – Metro Low Fuel Efficiency participant*
- *It's a penalty, I think. I mean some of us are lucky enough to have flex hours, but there's only a certain amount of flex. – Metro Peak Commuter participant*
- *I think the rush hour premium is just downright stupid. I mean a mile during rush hour doesn't hurt the roads any more than a mile at two in the morning. And it's also very hard on people who have no control with their work hours, which tends to be lower paid employees. So I say, hooley, with a capital H! – Metro High Efficiency participant*
- *I frequently drive down Lyndale because of the construction. People in the neighborhood are complaining about the new traffic that is going down their street rather than on the freeway. – Metro Peak Commuter participant*

The peak commuting charges appeared to be more of an issue for participants in the Metro groups, regardless of type of driver, compared to the groups that were held out of state. One Mankato participant explained the difference by stating,

- *Rush hour in southern Minnesota is a whole lot different than rush hour in Mankato or in the cities. So, if they're going to bill you by, “I'm driving in rush hour” well, whoop de do. There are 10 cars on Main Street, you know. There's a whole lot of difference there. – Mankato General Public participant*

Another difference by region was pointed out by a Duluth participant who indicated that the monitoring device, if it were some type of GPS, may not work in remote locations.

- *The problem with the GPS, though, is where we live, up in the sticks, there are dead spots. – Duluth General Public participant*

This concept was also seen as being more complex than necessary compared to the other scenario. Another main concern was that rather than paying the fee at the gas pump, they would receive a bill in the mail. Participants believed this bill would be expensive to administer and collect.

- *I really didn't like the idea of a monthly bill. It feels complicated to me in terms of the infrastructure and the management of it. – Metro Peak Commuter participant*
- *This involves a separate bill of some sort, too, which then has to be administered – more government. – Metro Low Fuel Efficiency participant*
- *How in heaven's name are you going to have people pay for this? What's going to happen is you're going to have a whole bunch of people who are not going to pay, and then who's going to run around and get the money from those people and all the costs involved with that stuff. – Mankato High Miles participant*

Participants believed that the mileage-based user fee, regardless of scenario, would be expensive to implement and maintain, and should include an incentive for motorists to drive fuel efficient cars.

- *Having that type of technology would cost more, so where's the profit going to come from? Because you're going to have to do research; you're going to have to pay other people; you're going to have to do some sort of micro chip or whatever. I mean, it's going to have to be computerized and where's your profit going to go? It's going to go into all that development and research. – Mankato High Miles participant*
- *The rate charged should vary with the weight of the vehicle, and also vary by the efficiency. Hybrid drivers should be rewarded for making responsible choices. – Metro General Public participant*

#### Population Segment Most Affected

As mentioned earlier, participants believed that this scenario would negatively impact individuals who needed to travel to work during peak times. They mentioned that while some companies offered flex time, the worker's ability to shift schedules to avoid a higher "peak period" charge may not be possible, especially for those in lower paying positions who were less able to absorb the increased fee.

- *Depending on the recipe or the formula that comes out of here, it kind of implies that you have a choice to drive in rush hour. Now I probably do, but there are plenty of people who there who probably have no choice. I go to work at this time, I need to be home by*

*this time for day care or kids or soccer, or whatever. – Mankato General Public participant*

Truckers, or those who drove high miles for work, were also seen as being hit hardest by this concept, particularly as truckers typically travel via freeway, which would be charged at a higher rate. Participants indicated that this would actually impact all consumers as the increased fee charged to truckers would be passed along to consumers in terms of higher costs for products. As one participant stated,

- *Long term impact, this affects everybody anyway, because they're just going to pass that cost on to the consumer. It's going to increase [costs of] products one more time. Because they're going to try to still stay in business, they're going to charge more. – Mankato General Public participant*

### **Concept Communication**

When eliciting reactions to a new concept, it can oftentimes be invaluable to ask participants how they would talk about or describe the concept to a friend or neighbor. The benefits are in hearing what words participants use to describe the concept and digging beyond the surface of the discussion into how they really feel about the concept.

Some participants simply touched on the basics of the concept, that it would be an alternative to the gas tax, that it would be a fee based on mileage and vehicle type. Other participants described it as a usage tax, similar to electricity or water, where the more you drive, the more you pay.

- *The more you drive, the more you pay, same as your electricity bill. – Metro Peak Commuter participant*
- *It's a tax levied on the way you drive, the miles you drive and where you drive – Mankato General Public participant*
- *Your water bill and your electricity bill are based on usage. Your food bill is based on usage. Over and over and over, we have usage charges. That allows you to decide how much electricity you're going to use, how much food you're going to buy. All those things. It gives you the choice, so that in that sense, it's not just being taxed, but saying, "Okay, you've got some choices." You use it, you pay for it. You don't, you don't pay for it. – Metro General Public participant*

Others, however, believed that they would have to vary their message based on the neighbor. Some indicated that they knew that their neighbors might react negatively to certain words or phrases, so they would be careful to avoid them. Other neighbors may not be as technology-savvy, so they would be more careful in explaining how the fee was calculated. Ultimately, these participants believed that messages would need to be tailored to resonate best with the different types of audiences.

- *It would differ how you told your neighbor about it. If you know somebody's the type of person to not like change, you might want to ease into it, "This might happen." There might be a little fear behind somebody, or somebody else is all gung ho for the change and ready for the information. – Metro High Miles participant*
- *A lot would depend on their age. I mean, there are just so many people that don't really understand the whole technology. – Duluth Environmental participant*
- *It would depend on what the person's views are on the subject. If I talked about this with my neighbor on the right, I would leave out the "tax" or "fee," because once he hears the word "tax," you know "I already pay too much tax." So, yeah, he's on the right of me, thought. So it depends on where you're coming from and what your priorities are. – Metro General Public participant*

**Appendix – Discussion Guide**

06-26-07

**MILEAGE-BASED USER FEE STUDY  
DISCUSSION GUIDE**

- I. WELCOME/EXPLANATION OF GROUP PROCESS: **3 minutes****
- Thank you for attending
  - Explain purpose of group
  - Explain tape recording, video camera
  - Advise on confidentiality / Tennessee warning
    - This information is going to be used by Mn/DOT to enhance their decision making in the future
    - None of your answers will be linked to your name because they will have no record of who attended
    - If any question makes you feel uncomfortable, you are under no obligation to answer it
  - Stress all opinions welcome
- II. INTRODUCTIONS: **7 minutes****
- First Name
  - What you do for a living
  - What type of car do you drive
  - Do you have a regular/daily commute? How far is it?
- III. HIGHWAY/ROAD FUNDING DISCUSSION: **30 minutes****
1. Overall, what’s your opinion of the roads in MN? Why do you say that?
    - a. List positives and negatives
    - b. Differentiate local versus state and I-system
  2. Would you say that there is enough, too much, or too little funding for roads? Why?
  3. How are the state’s roads and highways funded? Where does the money come from?
    - a. **Make list** of sources of funding
  4. How much do you think you pay each year in transportation taxes? Probe for estimate or “best guess”
  5. One of the main sources of funding for roads is a tax you pay when you buy gas.
    - a. Can anyone tell me how much you pay at the pump in terms of taxes?
    - b. Clarify actual rates before moving on
      - i. MN state tax – 20 cents per gallon
      - ii. Federal gas tax – 18.4 cents per gallon
      - iii. Total = 38.4 cents
    - c. Do you think the current funding system will be adequate in the future?
      - i. Why/why not?

IV. MILEAGE-BASED USER FEES:

50 minutes

Like most other states, MN has determined that money raised from the gas tax is no longer sufficient to maintain existing roads and build new roads. Some people are driving cars that get higher mileage. Others are driving cars that use other fuels, such as ethanol, E85, biodiesel, electricity, etc. and future vehicles could run on hydrogen or other fuels. All of these things mean people will end up buying less gas, which means less taxes paid and less funding for roads.

1. Whose problem do you think this is?
  - a. Who do you think should fix it?
2. Can you think of ways they could change the current funding system to counter those changes? **Make list**
  - a. If “raise the gas tax” is mentioned:
    - i. How often does the tax on gas change?
    - ii. When was the last time it was increased?
3. Have you heard of Mileage-Based User Fees?
  - a. What do you **think** a Mileage-Based User Fee is?
  - b. What is your reaction to that idea?
    - i. Probe for positive and negative perceptions

**Hand out first concept** – give participants time to review. Have them write down initial thoughts on hand out

4. What is your initial impression of the concept?
  - a. Dislikes (Start with negatives first)
  - b. Likes
  - c. Any red flags?
5. What kinds of questions do you have about the concept?
  - a. Is there anything that is unclear?
    - i. How it would work?
    - ii. What it would cost you?
6. How would this kind of system impact people like yourself?
  - a. Is there anyone who would be impacted by a system like this more than others? Who?
7. Do you think people would change how they drive if something like this were implemented? Why/why not?
8. Can you see any flaws in a funding system like this? What are they?
  - a. How would you address those issues?
9. How do you think this compares to the current funding method – aka the “gas tax?”

**Hand out second concept** – give participants time to review

10. What is your impression of this concept?
  - a. Probe for whether they feel it is better/worse than the first concept and WHY
  - b. Flaws & fixes
  - c. How it would impact people
  - d. Any red flags
  
11. There can be other models of the Mileage-Based User Fees but of these two options, assuming the gas tax is replaced, which option seems like the best solution? Why?

**V. MESSAGING:**

**25 minutes**

1. How would you describe mileage-based user fees to your neighbor?
  - a. What would you focus on or highlight as the benefits?
  - b. How would you address potential concerns they might have?

**VI. DISCUSSION WRAP-UP:**

**5 minutes**

Check in with observers

1. Final wrap up questions from observers
  
2. Thank and close

City \_\_\_\_\_

Group # \_\_\_\_\_

First Name \_\_\_\_\_

**MILEAGE-BASED USER FEE SCENARIO**

Scenario Q:

Vehicles will have a small device installed, like an odometer, that tallies the number of miles driven. This device will be high-tech and accurate, with no ability for tampering. When the driver buys gasoline, the mileage information is transferred to the gas pump through a wireless transmission **that replaces** the per-gallon fuel tax. The rate is charged **per miles driven** and may vary with the size or weight of the vehicle. Funds would go towards both local and state roads.

Initial Impressions:

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City \_\_\_\_\_

Group # \_\_\_\_\_

First Name \_\_\_\_\_

### **MILEAGE-BASED USER FEE SCENARIO**

#### Scenario F:

Vehicles will have a small device installed, like an odometer, that tallies the number of miles driven. It will also record **where** the travel occurred and **when** it occurred. The device would not “track” vehicles, nor would they have the capability to do so.

User fee rates would vary for different types of travel. For example, travel in the peak congested period (“rush hour”) might be more expensive than travel in the off-peak periods. Travel on freeways might be more expensive than travel on local roads, and the rate charged **may vary** with the size or weight of the vehicle.

On a predetermined basis, the mileage information stored on-board the vehicle is downloaded via cellular technology to a billing center. The billing center subtracts any the motor fuel tax paid and adds the per-mile fee. Billing would occur on a scheduled basis. Funds would go towards both local and state roads.

#### Initial Impressions:

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