

Mileage-Based Road User Fees: Do Americans Support or Oppose Them?



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Summary

Despite several pilot studies and commissioned reports, very little is known about public opinion regarding the replacement of fuel taxes with mileage user fees. Using data from the recently completed *2013 IU-SPEA Mileage User Fee Survey*, we show that there is widespread public opposition to the enactment of a mileage-based road user fee. Interestingly, we find that people are comparably opposed to financing roads with other revenue sources such as higher fuel taxes, sales and income taxes, and tolls. We speculate that this high level of opposition is due to people's belief that roads are in good condition, a dislike for new (or higher) taxes, and, in the case of the mileage user fee, concerns about privacy and costs. This issue of *SPEA Insights*, provides an overview of the *2013 IU-SPEA Mileage User Fee Survey* and summarizes some of the main findings.

Why A Mileage User-Fee?

The federal government and the 50 states rely heavily on the gasoline tax to finance road construction, repairs, and maintenance. Due to rapid growth in the number of fuel-efficient cars and trucks, the gasoline tax is losing its revenue-raising effectiveness. As a result, several national commissions and expert groups have called for replacement of the gasoline tax with a road user fee based on the number of vehicle miles traveled (VMT-F) (Duncan and Graham 2013).

Despite the broad expert interest in mileage-based road user fees, elected officials at the federal and state levels of government have made only limited progress in passing the legislation necessary to implement mileage-based road user fees. Several states have undertaken (or are seriously considering) pilot tests of mileage-based road user fees, but no state has enacted one on a large-scale basis.¹ Duncan and Graham (2013) argue that elected officials may be reluctant to reform the system due to fear of public opposition. However, there is very little information on how the public actually feels about replacing fuel taxes with mileage user fees.

2013 IU-SPEA Mileage User Fee Survey

We fill this gap in the debate with data from the *2013 IU-SPEA Mileage User Fee Survey*, which elicited public opinion about state-level mileage user fees from 2087 individuals who are representative of the non-institutionalized U.S.

¹For example, Oregon and Minnesota have conducted pilot studies. The University of Iowa conducted a large-scale pilot study in 12 cities across six states. Washington State, Indiana, and Colorado are among a list of states that have or are considering mileage user fee pilot studies

population. Participants are asked to state whether they agree or disagree with various statements about a general mileage user fee and then three specific types of mileage user fees that would differ in whether the information to assess the fee is obtained using an odometer or two types of GPS devices before stating whether they overall support or oppose replacing their state's gasoline taxes with each of the mileage user fees.² We also collect data on perceived conditions of roadways, need for new or updated roads, and four alternative means of financing roads.

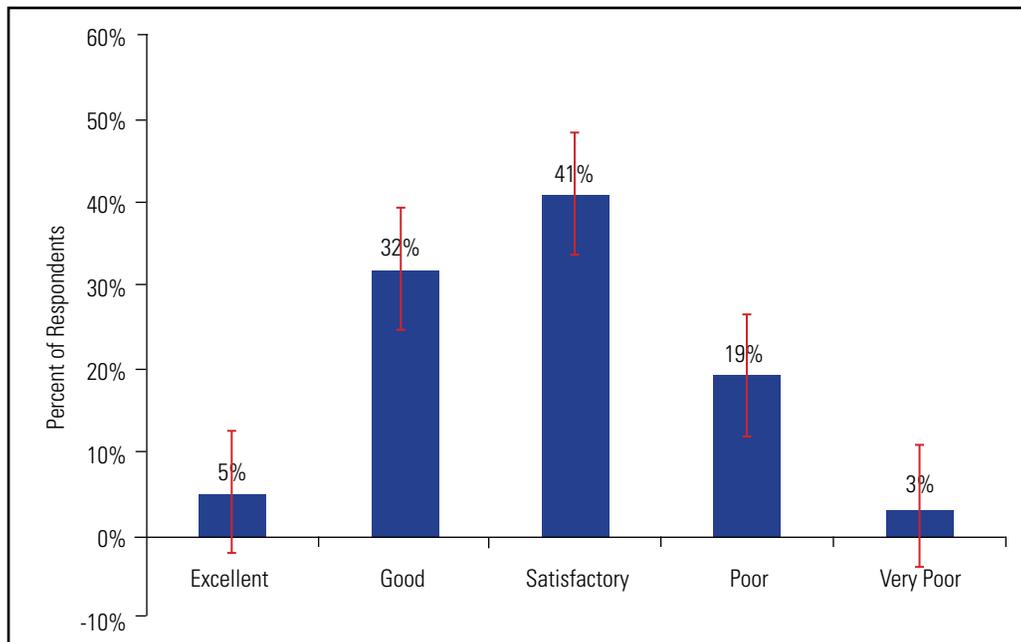
The survey was conducted online by GfK Custom Research, LLC, using respondents from the KnowledgePanel from August to September 2013. The panel of respondents assembled by GfK, who are recruited through probability-based sampling methods, have some methodological, cost, and speed advantages compared to mail surveys or surveys based on random-digit dialing, and such Internet surveys are gaining increasing acceptance in the peer-reviewed literature on opinion formation.

A copy of the survey instrument is available from the authors upon request.

Here are the key findings of the survey.

1. The vast majority of respondents (78%) perceive the quality of roads they travel regularly for work and recreation to be “excellent,” “good,” or “satisfactory” (see Figure 1).
2. When asked whether the gasoline tax should be replaced with a mileage-based road user fee, only about 20% of Americans overall are in favor and this level of support is consistent across many demographic subgroups (see Table 1).
3. Respondents give some credence to the following policy arguments against mileage-based road user fees: They are unfair to rural drivers, to people who drive a lot as part of their job, to people who drive fuel-efficient vehicles, and to people who are concerned about privacy issues (see Table 2).
4. Respondents were asked about several alternative revenue sources for road construction, maintenance and repairs: a higher fuel tax rate, use of a general retail sales tax, use of the personal income tax, and greater use of tolls on roads. Opposition to each of these measures is also widespread, ranging from 66% to 87% of respondents (see Table 3).

Figure 1. Rating of quality of roads travelled regularly for work and recreation.



Note: Number of observations is 2076.

Source: Authors' calculation based on data from the 2013 IU-SPEA Mileage User Fee Survey.

²Participants are asked about a general mileage user fee that provides no information about how mileage would be measured. They are also asked about mileage user-fees that rely on two types of GPS device (basic and advanced) and the odometer in cars.

Table 1: Support for VMT-F by Demographic Characteristics, Road Use Characteristics and Road Quality Attitudes

	Support (%)	Oppose (%)	N. Obs.		Support (%)	Oppose (%)	N. Obs.
<i>Gender</i>				<i>Employment Status</i>			
Female	20.5	79.5	1,100	Not currently employed	21.9	78.1	935
Male	21.7	78.2	978	Currently employed	20.4	79.6	1,143
<i>Race/Ethnicity</i>				<i>Vehicle Ownership</i>			
White	20.1	79.9	1,536	Does not own a vehicle	21.7	78.3	135
African-American	23.8	76.2	190	Owns a vehicle	20.9	79.1	1,926
Hispanic	20.5	79.5	222	<i>Miles Driven per Week</i>			
Other Race	26.5	73.5	130	0 miles	20.0	80.0	148
<i>Age Group</i>				1-49 miles	20.1	79.9	577
18-24	22.3	77.7	162	50-99 miles	22.1	77.9	486
25-34	17.3	82.7	285	100-199 miles	20.3	79.7	429
35-44	21.2	78.8	310	200-299 miles	27.1	72.9	237
45-54	18.3	81.7	379	300 or more miles	17.4	82.6	189
55-64	24.1	75.9	485	<i>Frequency of Use of Interstate Highways</i>			
65-74	21.3	78.7	335	Once a year or less	24.1	75.9	252
75+	28.9	71.1	122	A few times a year	24.6	75.4	347
<i>Educational Attainment</i>				About once every one or two months	19.8	80.2	206
Less than high school	19.3	80.7	172	A couple of times a month	19.8	80.2	412
High school	21.2	78.8	580	1 to 3 days per week	18.3	81.7	379
Some college/Associate's degree	20.9	79.1	604	4 to 5 days per week	20.4	79.6	264
Bachelor's degree or higher	21.8	78.2	722	6 to 7 days per week	19.7	80.3	189
<i>Party Identification</i>				<i>Condition of Roads</i>			
Republican	17.6	82.4	526	Excellent/good	21.1	78.9	762
Moderate	20.9	79.1	833	Satisfactory	21.3	78.7	820
Democrat	23.9	76.1	701	Poor/very poor	20.8	79.2	487
<i>Political Ideology</i>				<i>Need for Expanded Roads</i>			
Conservative	21.8	78.2	563	Urgent/significant need	23.1	76.9	706
Moderate	21.8	78.2	714	Some need	20.9	79.1	852
Liberal	20.6	79.4	742	Little/no need	18.5	81.5	513
<i>Household Income</i>				<i>Region of Place of Residence</i>			
Less than \$25,000	21.2	78.7	322	New England	20.3	79.7	114
\$25,000 - \$49,999	19.5	80.5	467	Mid-Atlantic	19.0	81.0	273
\$50,000 - \$74,999	21.8	78.2	399	East-North Central	20.0	80.0	306
\$75,000 - \$99,999	21.0	79.0	294	West-North Central	19.8	80.2	161
\$100,000 - \$124,999	25.8	74.2	268	South Atlantic	23.5	76.5	407
\$125,000 - \$149,999	19.3	80.6	135	East-South Central	18.4	81.5	113
\$150,000 - \$174,999	25.0	75.0	70	West-South Central	23.9	76.1	241
\$175,000 or more	14.4	85.5	123	Mountain	21.0	22.4	149
<i>Marital Status</i>				Pacific	20.3	24.3	314
Not married	21.6	78.4	855	<i>Metropolitan Status of Place of Residence</i>			
Married	20.6	79.4	1,223	Lives in non-metropolitan area	20.5	79.5	344
				Lives in metropolitan area	21.2	78.8	1,734

Notes: Reported is the percent of respondents who support or oppose replacing the gasoline tax in their state with a vehicle mileage user fee (VMT-F), conditional on their individual characteristics. Party Identification is constructed from a 7-point Likert scale where the Moderate group includes individuals who "Lean Republican," "Lean Democrat," or are "Undecided/Independent/Other."

Source: Authors' calculation based on data from the 2013 IU-SPEA Mileage User Fee Survey.

Table 2: Support for Arguments For and Against VMT-F

	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Easy to calculate amount paid for using roads.	6.5	44.8	36.9	11.7
Accurate way to charge for road wear and tear.	5.3	34.7	41.3	18.6
Unfair to rural drivers who must drive more miles.	32.9	47.0	18.2	1.9
Unfair to people who drive a lot for their jobs.	33.3	41.6	22.1	2.9
Collecting mileage data is an invasion of privacy.	33.4	41.6	21.2	3.8
Unfair to people who drive fuel efficient vehicles.	19.3	38.6	34.8	7.3

Notes: Reported is the percent of respondents who agree or disagree with various statements about the VMT-F. Number of observations is 2074. The wording of each statement is:

- [1] A mileage user fee makes it easy for road users to calculate how much they pay the government for using the roads.
- [2] A mileage user fee is an accurate way to charge road users for the wear and tear they cause on the roads.
- [3] A mileage user fee is unfair to people living in rural areas because they have to drive more miles to get to places they need to go.
- [4] A mileage user fee is unfair to people who drive a lot on the job (for example, truckers, sales people, and taxi drivers).
- [5] Collecting information about a person's mileage is an invasion of privacy, unless the collection is voluntary.
- [6] A mileage user fee is unfair to people who drive fuel efficient vehicles.

Source: Authors' calculation based on data from the 2013 IU-SPEA Mileage User Fee Survey.

The data summarized here are in the process of in-depth evaluation for purposes of publication in peer-reviewed scientific journals. Nonetheless, the basic results of the survey indicate that the vast majority of the American people are not currently inclined to replace the gasoline tax with a mileage-based user fee, or create additional financial burdens through other tax instruments, even if the revenues are earmarked for road construction, maintenance and repair.

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Table 3: Support for alternative sources of financing roads as replacement for gasoline tax

	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Higher fuel tax rate	3.9	25.0	48.3	22.7
Higher retail sales tax rate	1.6	16.6	56.1	25.6
Higher PIT rate	2.5	10.9	54.5	32.1
Additional tolls on roads	3.5	30.3	45.3	20.9

Notes: Reported is the percent of respondents who agree or disagree with each alternative source of financing roads. PIT is personal income tax. Number of observations is 2072.

Source: Authors' calculation based on data from the 2013 IU-SPEA Mileage User Fee Survey.

Further Reading

Agrawal, Asha Weinstein and Nixon, Hilary (2013). *What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Four of a National Survey*. Mineta Transportation Institute. San Jose State University. San Jose, CA. June.

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Sorensen, Pau, Ecola, Liisa and Wachs, Martin (2012). *Mileage-Based User Fees for Transportation Funding: A Primer for State and Local Decisionmakers*. RAND.

Wachs, Martin (2007). *Beyond the Gas Tax: Alternatives for a Greener World*. Santa Monica, CA. RAND CT-274.

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