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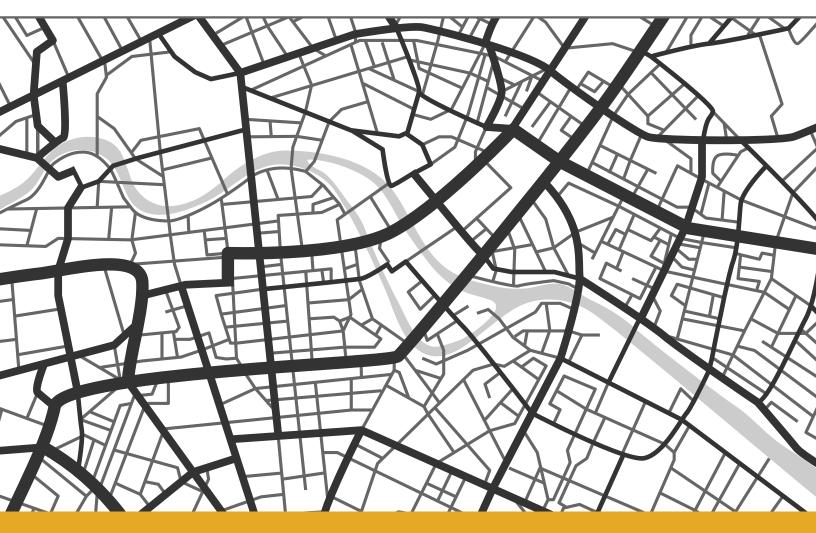
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What Do Americans Think About Federal Tax Options to Support Transportation? Results from Year Nine of a National Survey

Asha Weinstein Agrawal, Ph.D. Hilary Nixon, Ph.D.



MINETA TRANSPORTATION INSTITUTE LEAD UNIVERSITY OF

Mineta Consortium for Transportation Mobility

Founded in 1991, the Mineta Transportation Institute (MTI), an organized research and training unit in partnership with the Lucas College and Graduate School of Business at San José State University (SJSU), increases mobility for all by improving the safety, efficiency, accessibility, and convenience of our nation's transportation system. Through research, education, workforce development, and technology transfer, we help create a connected world. MTI leads the four-university Mineta Consortium for Transportation Mobility, a Tier I University Transportation Center funded by the U.S. Department of Transportation's Office of the Assistant Secretary for Research and Technology (OST-R), the California Department of Transportation (Caltrans), and by private grants and donations.

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REPORT 18-03

WHAT DO AMERICANS THINK ABOUT FEDERAL TAX OPTIONS TO SUPPORT TRANSPORTATION? RESULTS FROM YEAR NINE OF A NATIONAL SURVEY

Asha Weinstein Agrawal, Ph.D. Hilary Nixon, Ph.D.

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if they would support various tax options variations on raising the federal gas tax the survey collected data on standard s respondents' views on the quality of thei in their state. All of this information is use The survey results show that a majority For example, 72% of respondents supp dropped to just 34% if the revenues were options where the revenues were to be kind of tax would be imposed, with a sa	e ninth year of a national random-digit-dial pub for raising federal transportation revenues. The rate, two variations on a new mileage tax, and ociodemographic factors, travel behavior (anner r local transportation system, and their prioritie ed to assess support levels for the tax options y of Americans would support higher taxes for orted a gas tax increase of 10¢ per gallon to in re to be used more generally to maintain and spent for undefined transportation purposes, les tax much more popular than either a gas	te ten specific tax option creating a new federal s ual miles driven and vers s for government spend among different populat r transportation – under nprove road maintenan improve the transporta support levels varied of	ns tested were seven sales tax. In addition, shicle fuel efficiency), ling on transportation tion subgroups. er certain conditions. ice, whereas support ation system. For tax considerably by what
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I. INTRODUCTION

Over the past several decades, the transportation revenues available from state and federal gas taxes have fallen significantly in terms of inflation-adjusted dollars per mile traveled. At the same time, the transportation system requires critical – and expensive – system upgrades. Among other needs, a large portion of the national highway system requires major rehabilitation, and there is growing desire at all levels of government to substantially upgrade and expand infrastructure to support public transit, walking, and bicycling.

This dilemma of growing needs and shrinking revenues can be resolved in only two ways: either the nation must dramatically lower its goals for system preservation and enhancement, or new revenues must be raised. If the latter is to happen, legislators must be convinced that increasing taxes or fees is politically feasible. One portion of the political calculus that legislators make when deciding whether or not to raise new revenues is, of course, likely public support for – or opposition to – raising different kinds of taxes.

This report contributes to the understanding of current sentiment about increasing transportation taxes by presenting results from the ninth year of an annual telephone survey investigating public opinion about a variety of federal-level transportation tax options. The specific taxes tested were seven variations on raising the federal gas tax rate, two variations on creating a new mileage tax, and one option for creating a new federal sales tax. In addition, the survey collected data on respondents' sociodemographic characteristics, travel behavior, views on the quality of their local transportation system, and priorities for government spending on transportation in their state. All of this information is used to assess support levels for the tax options among different population subgroups.

The survey questionnaire described the various tax proposals in only general terms, so the study results cannot be assumed to reflect support for any actual proposal put forward. Nevertheless, the results show likely patterns of support and, more important, the public's *relative* preferences among different transportation tax options.

The report compares the results of the nine surveys in the series to establish how public views may have changed over the eight years. The surveys used identical question language each year to enable reliable trend analysis.¹

The remaining chapters of the report are organized as follows. Chapter II describes findings from other polling on similar transportation taxes, to provide context for understanding this survey's results. Chapter III describes the survey methodology and presents an overview of the questionnaire and details of the implementation procedure. Detailed discussion of the survey findings on support for the different tax options follows in Chapter IV, and Chapter V summarizes key findings and suggests policy implications.

II. A REVIEW OF SURVEYS ON GAS, MILEAGE, AND SALES TAXES FOR TRANSPORTATION PURPOSES

To provide context for interpreting the 2018 survey results presented in this report, Chapter II reviews the results from 202 other public opinion surveys that asked about support for gas, mileage, and sales taxes whose revenues would be used for transportation purposes. Almost all surveys are from the past ten years.

The surveys were identified through a search of the Internet-based archives of popular pollsters and aggregators of public opinion surveys, including the Pew Center for the People and the Press, the Roper Center for Public Opinion Research, SurveyUSA, PollingReport.com, Quinnipiac University Polling Institute, and Polling the Nations. This work was supplemented by searching for relevant surveys in the Transport Research International Documentation (TRID) database, Google News, Lexis-Nexis, Proquest News, and Twitter.² Once a survey had been identified through one of these resources, complete survey results were obtained directly from the survey sponsors' websites or through personal contact with the sponsors.

Most of the surveys reviewed here were conducted by public agencies, advocacy groups, popular pollsters, or news media, with a few others conducted by academics or researchoriented nonprofits.

GAS TAXES

Gas taxes are a primary source of transportation revenue at both the state and the federal levels. However, the federal government and many states have not raised the tax rates regularly over the past decades, so the real value of the revenues collected has fallen with inflation. As a result, there is frequent talk about raising gas-tax rates, and 26 states have done so in the past five years.³ As part of these state initiatives, public opinion has been extensively polled. Table 11 in Appendix B presents the key findings from 145 surveys asking about support for gas tax increases.

Making direct comparisons among the surveys is difficult because the specific tax increases proposed and the contexts in which they are presented vary widely. For example, some proposals call for unspecified increases in the gas tax, while others propose specific increases that range from one cent to two dollars per gallon. Some surveys link the gas-tax increase to a particular purpose, such as maintaining bridges, while others link the increase to very general uses, such as "to help meet new transportation needs."

Although support levels are not universally high, they are often higher than one might expect given the frequent pronouncements in the news media that the public simply will not tolerate an increase in the gas tax rate. Twenty-five percent of the surveys reviewed found at least majority support for raising the gas tax, and 46%—approaching half—found a still-respectable support level of 40% or higher.

MILEAGE TAXES

Far less surveying has been done about mileage taxes as compared to gas taxes because mileage taxes are not currently in widespread use in the United States. No state currently requires drivers to pay mileage fees, although mileage taxes are under active discussion among policymakers and researchers across the country and the State of Oregon began a voluntary mileage fee program in 2015.

Table 12 in Appendix B presents a review of 38 surveys that included at least one question about mileage taxes. As with gas taxes, there is wide variation in how the surveys presented the mileage tax option. Some simply asked how respondents felt about an unspecified fee charged per mile driven, while others gave a detailed explanation of the tax and the technology that would be used to collect it.

Regardless of question wording, support is not especially strong. Only 3 of the 38 surveys found a majority in favor of a mileage tax, and only 29% of the surveys found support above 40%.

SALES TAXES

Public opinion about local sales taxes to fund transportation programs has been extensively tested. However, very little surveying has been done to test public support for a national sales tax to support transportation, most likely because the federal government does not collect sales taxes, leaving them for state and local governments to use as a revenue tool. (If the federal government were to consider imposing its own sales tax, there would likely be a powerful backlash from state and local officials.)

For more than a decade, sales taxes have been one of the most popular methods used by local governments to raise revenue for transportation purposes. In almost all cases, the taxes were placed on the ballot for voter approval, so the election results provide one clear picture of the level of public support. (Many of these local sales taxes have passed, especially in California, where the great majority of the population lives in counties where two-thirds of voters have approved local sales taxes for transportation.) In addition to the evidence from election results themselves, considerable public polling has been done prior to elections to assess the appeal of sales tax increases.

Table 13 in Appendix B summarizes a sampling of 71 surveys that tested public opinion on sales taxes. Overall, support levels were quite high: 53% found majority support, with a very strong majority in some cases.

III. SURVEY DESIGN AND ADMINISTRATION

QUESTIONNAIRE DESIGN

The survey questionnaire was designed to test public support for three types of taxes: an increase in the federal gas tax rate, a new national mileage tax, and a new national sales tax. In all cases respondents were told that the revenue raised would be spent only for transportation purposes.

To make these hypothetical taxes easier for respondents to understand, the survey gave specific amounts for each. The amounts were selected to be simple numbers within the range of mainstream current policy discussion.

Because gas and mileage taxes are revenue options likely to receive considerable policy scrutiny in coming years, the survey tested support for different versions of each tax. Overall, ten different tax options were tested: seven variants of a gas tax increase, two variants of a new mileage tax, and one new sales tax option.

Gas-tax increases. All variants of a federal gas tax increase involved raising the existing 18¢-per-gallon tax⁴ to 28¢ per gallon, but each included a different set of information for respondents to consider. The seven variations were:

- A "base-case" 10¢ increase in the gas tax, with respondents given no information other than the rate and that proceeds would be spent "for transportation."
- A 10¢ increase in the gas tax that would be phased in over 5 years, increasing by 2¢ per year.
- A 10¢ increase in the gas tax, with the revenues to be spent only for projects to reduce local air pollution caused by the transportation system.
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to reduce the transportation system's contribution to global warming.
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to maintain streets, roads, and highways.
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to reduce accidents and improve safety.
- A 10¢ increase in the gas tax, with respondents informed of the annual tax burden for a typical driver under both the current and increased tax rates. Respondents were told that the tax burden would increase from an average of \$100 a year to \$150 a year for someone driving 10,000 miles a year in a car with a fuel economy of 20 miles per gallon.

New mileage taxes. Two variants of the mileage tax were presented, both of which involved levying a new tax per mile driven, with electronic meters being used to track miles driven and drivers being billed when they buy gas. The two variants, which differed only in the rate structure, were:

- A "base-case" one-cent-per-mile tax, with every car taxed at the same rate.
- A variable-rate mileage tax for which the average rate would be one cent per mile, but vehicles that pollute less would be charged less and vehicles that pollute more would be charged more.

A new national sales tax. In this option, the federal government would levy a new halfpercent sales tax.

In addition to testing population-wide support levels for the tax options and opinions about public transit, the survey was designed to assess how responses might vary by respondents' sociodemographic characteristics, travel behavior characteristics, and opinions on several topics related to transportation policy. The sociodemographic questions addressed common characteristics such as age, race/ethnicity, and income. To assess travel behavior, the survey included one question asking how many miles the respondent drove in the previous year and another question about the average fuel efficiency of the vehicle the respondent drove most often for personal use. As for opinions, respondents were asked to rate the quality of roads and highways in their community, as well as its transit service. They were then presented with various options for improving the transportation system in their state and asked what priority they thought the government should assign to each (high, medium, or low).

The exact wording used for all questions can be found in Appendix A, which reproduces the survey questionnaire.

SURVEY IMPLEMENTATION

We chose to implement the survey as a random-digit-dial survey conducted by live interviewers because the validity of this approach has been assessed and confirmed by highly reputable pollsters such as the Pew Research Center. In a 2017 Pew study assessing whether telephone surveys still provide accurate findings, given dropping response rates, the authors concluded:

Telephone poll estimates for party affiliation, political ideology and religious affiliation continue to track well with estimates from high response rate surveys conducted in-person, like the General Social Survey. ...[E]ven at low response rates, telephone surveys that include interviews via landlines and cellphones, and that are adjusted to match the demographic profile of the U.S., can produce accurate estimates for political attitudes.⁵

The Social Science Research Center at California State University Fullerton conducted the survey on behalf of the Mineta Transportation Institute's National Transportation Finance Center. The interviewing was conducted from February 8 to March 23, 2018. A total of

1,201 adults nationwide were interviewed by telephone in either English or Spanish, with 14 (1.2%) of the interviews conducted in Spanish. The median time to complete each survey was 14 minutes.

Telephone numbers included in this sample were randomly generated, and survey respondents were reached by both cell phone (40%) and landline phone (60%).

The margin of error for the total sample is \pm 2.83 percentage points at the 95% confidence level. Smaller subgroups have larger margins of error.

We calculated response, cooperation, and refusal rates following standards recommended by the American Association for Public Opinion Research (AAPOR).⁶ The survey had a response rate of 10% of eligible phone numbers (AAPOR Response Rate Calculation Method 3), a cooperation rate of 25% (AAPOR Cooperation Rate Method 3), and a refusal rate of 29% (AAPOR Refusal Rate 2).

Unless otherwise indicated, all results presented are weighted to match the Census Bureau's 2016 American Community Survey one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.⁷

IV. FINDINGS ON SUPPORT FOR THE TAXES

This chapter presents the survey results, describing the survey respondents, support for the tax options among all respondents, support among different population subgroups, and trends in support from 2010 to 2018. This chapter concludes with findings that compare how support for the base-case gas tax and mileage fee changes with different variations on each tax option. (Appendix A presents the complete results of the survey.)

SURVEY RESPONDENTS

The 1,201 adult survey respondents were generally representative of the U.S. population in terms of Census region and sociodemographic characteristics (Table 1). Survey results were weighted to match the sample to the U.S. adult population in terms of gender, Hispanic ethnicity, race, education level, imputed annual household income, and age.

	Landline sample (%)	Cell sample (%)	Total sample, unweighted (%)	U.S. adults ^a (%)
Census region ^b				
Northeast	22	14	19	17
Midwest	22	21	22	21
South	32	33	32	38
West	24	31	27	24
Gender				
Male	41	58	48	49
Female	59	42	52	51
Of Hispanic/Latino origin/descent	8	16	11	16
Race				
White	77	72	75	74
Black/African-American	9	4	7	12
Asian/Asian-American	3	6	4	6
Other, including multiracial	11	17	13	8
Education				
Less than high school graduate	3	4	4	13
High school graduate	18	13	16	28
Some college	26	26	26	31
College graduate	33	38	35	18
Graduate degree	20	19	19	11
Income (annual household)				
\$0 - \$25,000	14	15	14	21
\$25,001 – \$50,000	22	20	21	23
\$50,001 – \$75,000	21	16	19	18
\$75,001 – \$100,000	17	15	16	12
\$100,001 – \$150,000	17	17	17	14
\$150,001+	10	17	13	12
Age (years)				
18 – 29	5	22	12	22
30 – 39	5	14	8	18
40 – 49	10	17	13	17
50 – 59	19	22	21	18
60 – 69	26	16	22	15
70 – 79	21	7	15	8
80+	14	2	9	1

Table 1.Comparison of Survey Respondents to the Adult U.S. Population by
Census Region and Sociodemographic Characteristics (2018)

^a All data are for adults 18 years and older, with the exception of household income, which is for all U.S. households. Region population statistics from U.S. Census Bureau: https://www.census.gov/popclock/data_tables.php?component=growth. All other population data from ACS 2016

1-Year Estimates.

^b Census regions are defined at U.S. Census Bureau, "Census Regions and Divisions of the United States with State FIPS Codes" (no date), http://www2.census.gov/geo/docs/maps-data/maps/reg_div.txt (accessed May 31, 2018). *Note:* Some percentages do not sum to 100% due to rounding.

OVERALL SUPPORT LEVELS FOR THE TRANSPORTATION TAX OPTIONS

The survey results show that a majority of Americans would support higher taxes for transportation – under certain conditions (Figure 1). For example, only 34% of respondents supported the base-case 10° -per-gallon gas tax increase, where respondents were told only that the tax revenues would be spent for transportation purposes. However, five variants on that idea of a 10° -per-gallon gas tax increase received at least 50% support. The proposed new national sales tax also had majority support. The very highest level of support among all the tax options tested was for a gas tax increase of 10° per gallon to fund road maintenance, an option supported by 72% of respondents. The second most popular option was a gas tax increase with funds devoted to reducing accidents and improving safety (66% support).

For tax options in which the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed. A new national sales tax was much more popular than either the base-case 10° -per-gallon gas tax increase or new mileage tax with a flat rate of 1° per mile.

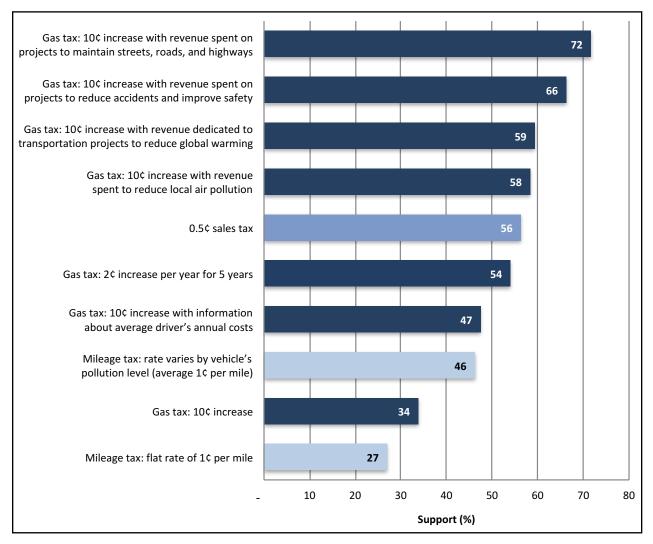


Figure 1. Support^a Levels for the Tax Options (2018)

^a "Support" is the sum of those who said that they "strongly" or "somewhat" support the tax option.

SUPPORT BY POPULATION SUBGROUPS

The researchers also examined support levels for the different tax options by subgroups within the population. The statistical test of two proportions was used to check whether differences among subgroups (e.g., men versus women) are statistically significant at the 95% and 99% confidence levels. Tables 2 through 5 present the results from statistical testing in which the first subgroup listed in a table for that set of population categories is the base-case against which the other subgroups are compared. (The tables do not show the results of the authors' tests run against pairs of subgroups that do not include the first subgroup in the category.)

The following discussion highlights those differences among subgroups in which the patterns are "clear," which we define as cases where (1) the variation in support is statistically significant across at least five of the ten tax options, and (2) the average magnitude of the difference between the groups across all tax options is at least ten percentage points. Readers should note that the differences among subgroups highlighted as "clear" are not necessarily the only important differences that exist. Rather, the variations discussed are those that fell within the cutoff points selected and were statistically significant according to the particular statistical tests used. Choosing different cutoff points would highlight a somewhat different set of variations. It is also important to keep in mind that "statistical significance" is not an automatic indicator of scientific or policy importance, as discussed in a 2016 statement from the American Statistical Association.⁸

Table 2 shows support for the taxes among subgroups of respondents defined by sociodemographic categories and U.S. Census region. The clear patterns that emerge are linked to race, income, and age. With respect to race, whites were the least supportive of the taxes. Compared with whites, Asians/Asian-Americans were, on average, 17 percentage points more likely to support each tax, and both Black/African-American respondents and those of "other" races were on average 12 percentage points more likely than whites to support each tax. Turning to income, respondents in the lowest income group were 10 percentage points more likely to support the taxes than the wealthiest group. As for age, respondents in the youngest group (18 - 24 years) were more likely to support all of the taxes than respondents in the oldest group (55 years and older). The average difference in support for the taxes was 13 percentage points for the youngest group when compared with the oldest group.

Table 2 reveals no other clear patterns as defined above. For example, there are no clear patterns showing consistent variation in support for the taxes by region of the country, gender, or educational attainment.⁹

••		Milos	ige tax				Gas tax			
	-	IVIIIEa					Gasiax	Device to		
Sociodemographic category	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	27	46	34	54	58	59	72	66	47
Census region										
Northeast	57	27	35	24	48	67	69	71	58	38
Midwest	58	18	41	36*	60*	51**	49**	72	66	54**
South	62	35	55**	38**	58*	57*	54**	74	68*	55**
West	57	25	47*	32	50	52**	61	71	67	40
Gender										
Male	53	23	42	40	52	50	55	70	61	49
Female	59	30*	51**	28**	56	67**	63*	73	71**	46
Race										
White	54	23	40	32	51	54	54	71	63	44
Black/African- American	65*	53**	65**	34	66**	72**	72**	75	75*	59**
Asian/Asian-American	63	28	72**	59**	65*	75**	75**	70	75	65**
Other	61	26	59**	29	51	66*	76**	78	78**	52
Of Hispanic/Latino origin/d	escent									
Yes	64	24	48	26	48	73	74	75	77	42
No	55*	28	46	35*	55	55**	57**	71	64**	49
Education										
High school graduate or less	60	34	49	28	50	64	62	76	75	42
More than high school	54	22**	44	38**	57*	55**	58	68**	60**	51**
Income (annual household)									
0 – \$50,000	60	28	49	32	57	69	63	78	75	48
\$50,001 – \$100,000	50**	26	40**	29	47**	47**	54*	67**	59**	41
\$100,001+	57	26	48	43**	57	53**	59	67**	60**	53

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Table 2. Support^a for the Tax Options, by Census Region and Sociodemographic Characteristics (2018)

Table 2, continued

		Milea	age tax	Gas tax							
Sociodemographic category	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
Age (years)											
18 – 24	62	19	64	34	55	84	77	87	81	53	
25 – 54	57	27	45**	35	54	57**	60**	69**	66**	47	
55+	53	31*	41**	32	54	49**	51**	69**	61**	46	

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

Note: The test of two proportions was used to check if there is a statistically significant difference between "support" levels among subgroups. The first subgroup in each category is the "base"-case for the test; the proportion of respondents who supported the individual policies in each of the other subgroups within that category is compared to the base-case.

Table 3 shows support levels by political characteristics. Political party affiliation played a strong role. People who self-identified as Democrats were more supportive than everyone else. The mean difference was especially large for Democrats compared to Republicans; Democrats were, on average, 22 percentage points more supportive than Republicans across the 10 tax options. Voters who identified with a party other than Democratic or Republican were also more supportive than Republicans. However, no clear difference emerged for likely voters compared to unlikely voters, or for registered voters as compared to non-registered respondents.

The survey asked questions about travel behavior and personal vehicle fuel efficiency in order to examine whether support for the tax options varied by these factors (Table 4). With respect to annual mileage, the only notable difference was that respondents who did not drive at all were more supportive than respondents who drove more than 12,500 miles annually. There were no notable differences in tax support according to the fuel efficiency of respondents' primary personal vehicles.

The next set of analyses examines how support for the different tax options correlates with respondents' opinions about the transportation system (Table 5). Respondents who rated the quality of their local public transit service as very good were more likely to support the taxes than those who said they had no service in their area. By contrast, respondents' rating of the condition of roads and highways in their community was not clearly correlated with support for the taxes.

Another set of questions asked respondents to assign a high, medium, or low priority to four functions on which governments might spend transportation revenues: reducing traffic congestion; maintaining streets, roads, and highways; expanding and improving local public transit service; and reducing accidents and improving safety. A greater percentage of respondents who thought government should place a medium or high priority on each issue supported the taxes, as compared to those who placed a low priority on those functions. The one exception to this pattern is that there is no clear difference between those placing medium and low priority on improving maintenance.

		Milea	ige tax				Gas tax			
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	27	46	34	54	58	59	72	66	47
Registered voter										
Yes	56	27	44	35	54	57	59	72	64	47
No	56	25	56**	30	51	62	54	71	73*	44
Likely voter ^b										
Yes	56	26	44	35	53	56	58	71	63	47
No	55	31	43	35	63*	66*	65	78	72*	48
Political affiliation										
Democrat	64	34	59	46	65	74	73	76	69	61
Republican	45**	23**	35**	25**	40**	37**	36**	65**	62	32**
No preference	54	30	34**	29**	47**	57**	46**	70	64	44**
Other ^c	61	22**	45**	33**	54**	58**	68	71	66	47**

Table 3. Support^a for the Tax Options, by Political Characteristics (2018)

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who said that they "strongly" or "somewhat" support the option.

^b Likely voters are those respondents who said that they are registered voters and that they vote "all of the time" or "most of the time."

^c Registered member of any other party, including independents.

Note: The test of two proportions was used to check if there is a statistically significant difference between "support" levels among subgroups. The first subgroup listed in each category is the "base"-case for the test; the proportion of respondents who supported the individual policies in each of the other subgroups within that category is compared to the base-case.

		Milea	ige tax				Gas tax			
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	27	46	34	54	58	59	72	66	47
Annual miles driven										
1 – 7,500	61	29	43	30	49	60	59	71	63	44
7,501 – 12,500	56	19**	46	40*	59*	57	60	73	65	49
12,501+	55	23	36	33	46	44**	49*	67	58	47
Don't know	48**	32	53*	40*	66**	68	66	80*	79**	54*
Don't drive	51	35	72**	29	59	69	70	72	78**	48
Miles per gallon ^b										
≤ 19 mpg	59	23	40	41	52	50	45	79	65	52
20 – 30 mpg	52	22	39	30**	46	52	56*	64**	58	41**
31+ mpg	57	21	48	40	70**	61	59*	73	67	55

Table 4. Support^a for the Tax Options, by Travel Behavior (2018)

* Statistically significant at p<0.05.

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** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

^b Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), https:// nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT (accessed May 6, 2018).

Note: The test of two proportions was used to check if there is a statistically significant difference between "support" levels among subgroups. The first subgroup listed in each category is the "base"-case for the test; the proportion of respondents who support the individual policies in each of the other subgroups within that category is compared to the base-case.

		Milea	age tax				Gas tax			
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	27	46	34	54	58	59	72	66	47
Opinion on condition of	roads and high	nways in l	ocal commu	inity						
Very good	50	29	45	33	56	60	56	69	67	48
Somewhat good	60*	27	46	34	53	60	61	73	68	48
Bad	54	25	49	35	55	53	61	71	61	47
Opinion on public transit	t service in loca	al commu	nity							
Very good	55	26	58	39	63	70	68	76	72	55
Somewhat good	63	26	46**	37	56	63	65	76	65	51
Poor	57	31	44**	35	52*	53**	58*	63**	62*	49
No service	54	21	45*	26**	52*	53**	46**	72	66	37**
Role of government in re	educing traffic	congestio	n							
High priority	58	28	49	33	54	61	61	68	67	47
Medium priority	62	25	50	38	58	61	64	80**	68	55*
Low priority	40**	27	30**	28	46	45**	42**	67	59	37*
Role of government in m	naintaining stre	eets, road	s, and highv	vays						
High priority	59	25	49	34	55	60	62	72	67	49
Medium priority	50*	30	38**	34	52	51*	51**	69	63	45
Low priority	24**	46**	24**	22	32**	56	42*	75	59	31*
Role of government in e	expanding and	improving	local public	transit service						
High priority	65	34	53	40	62	67	71	73	71	55
Medium priority	56*	23**	52	29**	51**	60*	57**	73	67	48
Low priority	37**	17**	22**	28**	42**	36**	37**	67	54**	35**

Table 5. Support^a for the Tax Options, by Opinions of the Transportation System (2018)

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Findings on Support for the Taxes

Table 5, continued

		Milea	age tax				Gas tax			
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
Role of government in r	educing accide	ents and i	mproving sa	fety						
High priority	61	27	49	35	56	62	62	74	73	49
Medium priority	52*	28	45	33	53	53*	56	64*	48**	52
Low priority	18**	26	20**	24	36**	24**	39**	68	28**	26**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

Note: The test of two proportions was used to check if there is a statistically significant difference between "support" levels among subgroups. The first subgroup listed in each category is the "base"-case for the test; the proportion of respondents who supported the individual policies in each of the other subgroups within that category is compared to the base-case.

SUPPORT FOR DIFFERENT VERSIONS OF THE MILEAGE AND GAS TAXES

A central goal of the survey was to test how public support varied for different mileage and gas tax proposals. In this study, the base-case proposals for each type of tax were the flat-rate mileage tax of 1¢ per mile and the 10¢-per-gallon gas tax increase without any additional detail given. For comparative purposes, respondents were also asked about a single variant of the flat-rate mileage tax (a variable tax based on how much pollution a vehicle produces) and a series of variants on the base-case gas tax increase (several proposals that dedicate additional revenues to specific purposes, a phased-in tax increase, and a proposal that informs respondents of the typical annual cost). Figure 2 shows how variants on the tax proposals increased support in comparison to the basecase tax options. For both tax types, the base-case version had the lowest support level, and applying the test of two proportions confirmed that in all cases the increase in support is statistically significant at the 99% confidence level.

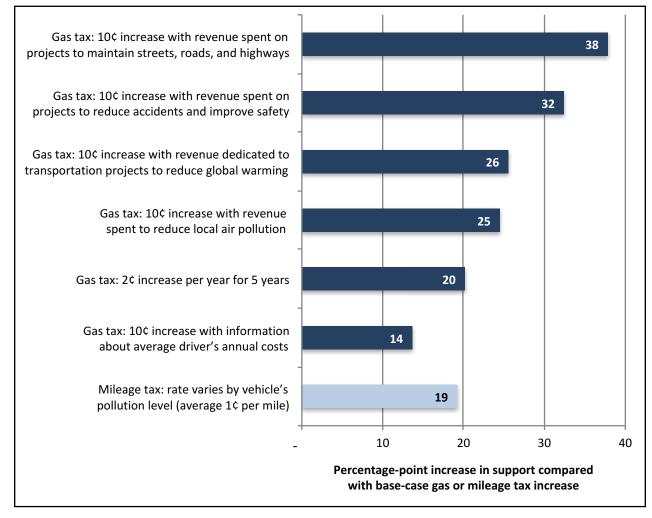


Figure 2. Relative Increases in Support^a for Variations of the Base-Case^b Gas Tax and Mileage Tax Concepts (2018)

- ^a "Support" is the sum of those who "strongly" or "somewhat" supported the tax option.
- ^b The base-case proposals were a new flat-rate mileage tax of 1¢ per mile and a 10¢-per-gallon gas tax increase, both presented to respondents without additional detail.

Tables 6 through 9 present the change in support levels for each tax variant, looking at respondent subgroups defined by census region, sociodemographic and political characteristics, travel behavior characteristics, and opinions about the transportation system. Collectively, the tables include 55 population subgroups, for each of which there are 7 tax comparisons, resulting in a total of 385 population groups examined.

The overall pattern of increased support for the variants as compared to the base-case proposals holds for the subgroups, just as for the respondent pool as a whole. In all but 3 of the 385 subgroups, the tax variants had significantly higher support. Further, these differences were often substantial:

- At least 10 percentage points for 94% of cases
- At least 20 percentage points for 63% of cases
- At least 30 percentage points for 31% of cases
- At least 40 percentage points for 11% of cases

In other words, all the variations on the gas and mileage taxes produced significant increases in support virtually across the board, even among those subgroups less likely to support the taxes in the first place.

				Ga	s tax		
Sociodemographic category	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	19**	20**	25**	26**	38**	32**	14**
Census regions							
Northeast	9	24**	43**	45**	48**	34**	14**
Midwest	23**	24**	15**	13*	36**	31**	18**
South	20**	20**	18**	16**	35**	29**	17**
West	21**	19**	20**	30**	40**	35**	8
Gender							
Male	18**	12**	10**	16**	30**	21**	10**
Female	20**	28**	39**	35**	45**	43**	18**
Race							
White	17**	19**	22**	22**	38**	31**	11**
Black/African-American	12	31**	38**	38**	40**	40**	25**
Asian/Asian-American	45**	6	16	16	11	16	5
Other	33**	22**	37**	47**	48**	49**	23**
Of Hispanic/Latino origin/descent							
No	24**	22**	47**	48**	49**	50**	15**
Yes	18**	20**	20**	21**	36**	29**	13**
Education							
High school graduate or less	15**	22**	35**	34**	48**	47**	14**
More than high school	22**	19**	17**	20**	31**	23**	13**
Income (annual household)							
0 – \$50,000	21**	26**	37**	31**	46**	43**	16**
\$50,001 – \$100,000	14**	18**	18**	25**	39**	30**	12**
\$100,001+	22**	14**	10*	17**	24**	17**	10*

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Table 6.Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the
Base-Case^b Versions of Those Taxes, by Census Region and Sociodemographic Categories (2018)

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Table 6, continued

		Gas tax						
Sociodemographic category	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
Age (years)								
18 – 24	45**	21**	50**	43**	54**	47**	19**	
25 – 54	18**	19**	22**	25**	34**	30**	12**	
55+	11**	21**	17**	19**	37**	29**	14**	

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

^b The base-case proposals were a new flat-rate mileage tax of 1¢ per mile and a 10¢-per-gallon gas tax increase, without any additional detail.

Note: The test of two proportions was used to determine whether the change in support from the base-case option is statistically significant.

		Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
All respondents	19**	20**	25**	26**	38**	32**	14**	
Registered voter								
Yes	17**	19**	22**	25**	37**	29**	12**	
No	32**	21**	31**	23**	41**	43**	14**	
Likely voter ^c								
Yes	17**	18**	21**	24**	36**	28**	12**	
No	13*	28**	31**	29**	43**	37**	13*	
Political affiliation								
Democrat	24**	19**	27**	26**	30**	23**	15**	
Republican	13**	15**	12**	11**	41**	37**	8	
No preference	4	17**	28**	17*	41**	35**	14*	
Other ^d	23**	21**	25**	35**	38**	33**	14**	

Table 7. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Political Affiliation (2018)

* Statistically significant at p<0.05.

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** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

^b The base-case proposals were a new flat-rate mileage tax of one cent per mile and a ten cent per gallon gas tax increase, without additional details.

^c Likely voters are those respondents who said that they are registered voters and that they vote "all of the time" or "most of the time."

^d Registered member of any other party, including independents.

Note: The test of two proportions was used to determine whether the change in support from the base-case option is statistically significant.

		Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
All respondents	19**	20**	25**	26**	38**	32**	14**	
Opinion on condition of road	ls and highways in local c	ommunity						
Very good	16**	22**	26**	22**	36**	33**	14**	
Somewhat good	19**	20**	26**	27**	39**	34**	14**	
Bad	23**	20**	18**	26**	37**	26**	12*	
Opinion on public transit ser	vice in local community							
Very good	32**	23**	31**	29**	37**	33**	16**	
Somewhat good	20**	19**	25**	28**	38**	28**	14**	
Poor	13**	17**	18**	23**	28**	27**	14**	
No service	24**	26**	27**	20**	46**	40**	11*	
Role of government in reduc	cing traffic congestion							
High priority	21**	21**	28**	28**	35**	34**	14**	
Medium priority	25**	20**	23**	26**	42**	30**	17**	
Low priority	3	17**	17**	14*	39**	30**	9	
Role of government in maint	taining streets, roads, and	l highways						
High priority	24**	21**	26**	27**	38**	33**	14**	
Medium priority	7	18**	17**	17**	35**	29**	11*	
Low priority	-22	10	34**	20	53**	37**	8	
Role of government in expan	nding and improving local	public transit service	9					
High priority	19**	22**	27**	31**	33**	31**	15**	
Medium priority	29**	21**	30**	27**	44**	38**	18**	
Low priority	5	13**	8	8	39**	25**	6	

Table 8. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Opinions of the Transportation System (2018)

Findings on Support for the Taxes

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Table 8, continued

		Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
Role of government in reduc	cing accidents and improv	ing safety						
High priority	22**	21**	27**	27**	39**	38**	14**	
Medium priority	16**	20**	20**	22**	31**	15**	18**	
Low priority	-5	12	-1	15	44**	4	2	

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who said that they "strongly" or "somewhat" support the option.

^b The base-case proposals were a new flat-rate mileage tax of 1¢ per mile and a 10¢ per gallon gas tax increase, without any additional detail.

Note: The test of two proportions was used to determine whether the change in support from the base-case option is statistically significant.

		Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
All respondents	19**	20**	25**	26**	38**	32**	14**	
Annual miles driven								
1 – 7,500	13**	19**	30**	29**	41**	33**	14**	
7,501 – 12,500	27**	19**	17**	20**	33**	25**	9	
12,501+	13**	14**	11*	16**	34**	25**	15**	
Don't know	21**	26**	28**	25**	39**	39**	13*	
Don't drive	36**	30**	40**	41**	43**	49**	19**	
Miles per gallon ^c								
≤ 19 mpg	17**	11*	9	3	38**	24**	11*	
20 – 30 mpg	17**	16**	22**	26**	34**	28**	11**	
31+ mpg	28**	31**	22**	20**	34**	27**	15*	

Table 9. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Travel Behavior (2018)

Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

^b The base-case proposals were a new flat-rate mileage tax of 1¢ per mile and a 10¢ per gallon gas tax increase, without any additional detail.

 Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT (accessed May 6, 2018).

Note: The test of two proportions was used to determine whether the change in support from the base-case option (either the flat-rate mileage tax or the 10¢ gas-tax increase in a single year) is statistically significant.

Findings on Support for the Taxes

TRENDS IN SUPPORT OVER TIME, 2010 – 2018

Most of the 2018 survey questions replicate those in the eight surveys previously administered in this series, so it is possible to look at trends in support over time.¹⁰ The trend analysis shows that the year-to-year changes are generally quite small. However, support in 2018 is higher for every tax than it was when the survey series began; in other words, support has grown modestly but steadily (Figure 3 and Table 10).

From year to year, support for most taxes varied by five or fewer percentage points, a difference too small to suggest a meaningful change in support. As for the change in just the last year, from 2017 to 2018, support increased for six tax options and dropped for the other four. The changes vary from one to seven percentage points, and in four cases the change is statistically significant.

While there is little marked change in support from year to year, there is a steady growth comparing 2018 with 2010 (or 2011, for those questions added in 2011). Over that seven or eight-year period, support has grown for all the taxes by 10 to 15 percentage points, excepting only the flat-rate mileage tax, which saw a smaller 6 percentage point increase in support. This growth is a statistically significant change in every case.

The growing support for the taxes found in this project mirrors findings from a 2017 study by the Pew Research Center that found public support for government spending more generally has increased since 2013.¹¹

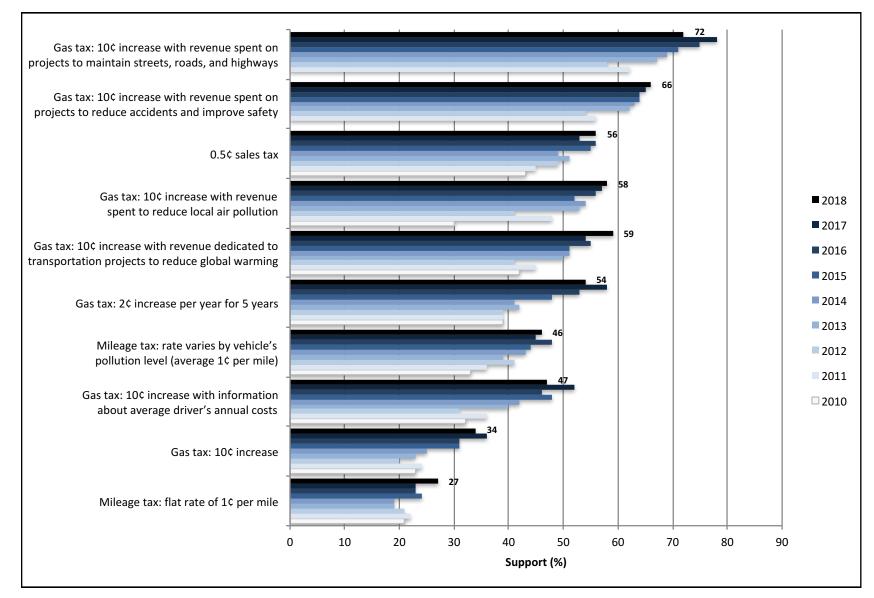


Figure 3. Trends in Support^a for the Tax Options, 2010 – 2018

^a "Support" is the sum of those who "strongly" or "somewhat" supported the tax option.

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											Differences	
Tax option	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2010-2018 (%)	2011-2018 (%)	2017-2018 (%)
Gas tax												
10¢ increase	23	24	20	23	25	31	31	36	34	11**	10**	-2
10¢ increase, phased in over 5 years at 2¢ per year	39	39	39	42	41	48	53	58	54	15**	15**	-4
10¢ increase, revenues spent to reduce local air pollution	30	48	41	53	54	52	56	57	58	28**	10**	1
10¢ increase, revenues spent to reduce global warming	42	45	41	50	51	51	55	54	59	17**	14**	5*
10¢ increase, revenues spent to maintain streets, roads, and highways	b	62	58	67	69	71	75	78	72		10**	-7**
10¢ increase, revenues spent to reduce accidents and improve safety	b	56	54	62	63	64	64	65	66		10**	2
10¢ increase, respondents informed of the annual tax burden for the typical driver	32	36	31	40	42	48	46	52	47	15**	11**	-4*
Mileage tax												
1¢ per mile	21	22	21	19	19	24	23	23	27	6**	5**	4*
1¢ per mile average, but vehicles that pollute more pay more and vehicles that pollute less pay less	33	36	41	39	43	44	48	45	46	13**	10**	1
National 0.5% sales tax	43	45	49	51	49	55	56	53	56	13**	11**	4

Table 10. Trends in Support^a for the Tax Options, 2010 – 2018

* Statistically significant at p<0.05.

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** Statistically significant at p<0.01.

^a Sum of those who "strongly" or "somewhat" supported the option.

^b This option was not included in the 2010 survey.

Note: The test of two proportions was used to check if there is a statistically significant difference in support for the different tax options from 2010 to 2018, 2011 to 2018, and 2017 to 2018.

V. CONCLUSIONS

SUMMARY OF KEY FINDINGS

Overall Support Levels for the Tax Options in 2018

The survey results show that a majority of Americans would support higher taxes for transportation – under certain conditions. For example, 72% of respondents supported a federal gas tax increase of 10¢ per gallon to improve road maintenance and 58% supported the same increase to reduce local air pollution, but support levels dropped to only 34% if the use of the revenues was for undefined "transportation" purposes. Support also varied considerably by tax type. For tax options in which the revenues were to be spent for undefined transportation purposes, support levels varied noticeably by the kind of tax that would be imposed, with a sales tax much more popular (56%) than either the gas tax increase (34%) or a new mileage tax (27%).

A central goal of the survey was to compare public support for two alternative versions of the mileage tax and seven versions of a gas tax increase. Variations on the base-cases almost always increased support substantially over that for the base-cases, which were a flat-rate mileage tax of 1¢ per mile and a 10¢ gas tax increase proposed without any additional detail. Those boosts in support for the variants on the base-cases ranged up to 54 percentage points.

When interpreting the survey results, it is important to keep in mind that the questionnaire described the various tax proposals in only general terms, so one cannot assume the survey results will predict support for any actual proposal put forward. Nevertheless, the results show likely patterns of support and, more importantly, the public's likely *relative* preferences among different transportation tax options.

Support Levels among Population Subgroups for the Tax Options in 2018

In addition to examining support for the different tax options among the overall population, the analysis examined support by subgroups within the population. Breaking the population into subgroups by sociodemographic categories reveals only a few links with support for the taxes. Subgroups showing clearly higher levels of support compared with other subgroups in the same category are respondents who are not white (compared to whites) and in the youngest age group (compared to the oldest group). In terms of politics, party affiliation played a clear role. Democrats were more supportive than everyone else.

Breaking the respondents into subgroups according to their travel behaviors and certain opinions reveals other clear correlations with support for the tax options. Support for the taxes was higher among people who do not drive at all than among people who drive 12,500 miles or more a year. Also, support was clearly higher among respondents who thought government should place a medium or high priority on improving local transit service, improving safety, improving maintenance, or reducing congestion (compared to those who placed a low priority on these government functions).

Looking across all respondent characteristics and opinions, the factors that stand out as correlated with the very largest differences between subgroups – 15 percentage points or more – are being Asian/Asian-American (as opposed to white), identifying with the Democratic party (as opposed to the Republican party), placing a high priority on reducing accidents and improving safety, and placing a high priority on expanding and improving transit service.

When looking at support levels among different population subgroups for the different gas and mileage tax options, a clear and simple picture emerges: the base-case taxes were less popular than the alternative tax options for all but 3 of 355 subgroups. Further, that boost in support for the variants is generally quite large. The analysis examined 385 cases (7 tax variants for each of 55 subgroups) and found that the boost in support for the variant was 20 percentage points or more for 63% of the subgroups.

Changes in Support for the Tax Options, 2010 – 2018

The research results indicate that American public opinion about the federal transportation tax options tested has become more positive since 2010. Comparing 2018 with 2010 (or 2011, for those questions added in 2011), support has grown for all the taxes. The growth has been modest but steady (10 to 15 percentage points) for all but the flat-rate mileage fee.

POLICY IMPLICATIONS FOR TRANSPORTATION PROFESSIONALS AND POLICYMAKERS

Results from the nine years of survey data suggest several key implications for policymakers who wish to craft transportation revenue increases that maximize public support:

The basic concept of a gas tax increase is not popular, but there are ways to structure such an increase that would significantly boost its acceptability.

The survey results from every one of the nine years show that while support for a one-time gas tax increase can be very low, support could be substantially increased by modifying the way the tax is implemented or described. Dedicating the revenue to purposes that are popular with the public, spreading out the increase over several years, and providing information about how much the increase will cost drivers annually are all options for increasing support.

The basic concept of a mileage tax is not popular, but there are ways to structure such a tax that would increase its acceptability.

The survey results from all nine years show that while a new mileage fee has been unwaveringly unpopular, support could be increased by modifying the tax structure so the rate varies according to the vehicle's environmental performance (defined in this survey as the vehicle's pollution level). The survey did not test any other variations on the mileage tax, but it is likely that there are others that would also have support levels above the low 27% support for a flat 1¢-per-mile tax.

Linking a transportation tax to environmental benefits can increase public support.

Linking a transportation tax increase to environmental benefits can increase support, a trend found among other public opinion polls as well. In all years of this survey, support improved notably for both the gas tax increase and the mileage tax when they were linked to environmental benefits. For the mileage tax, the pollution-linked variant as compared to the flat-rate version saw a boost in support of 20 or more percentage points for eight of the nine years. The boost crossed political party lines, too, though the magnitude of increased support was greater among Democrats than respondents with other political affiliations.

Demographic change in the U.S. population may increase support for transportation taxes.

The surveys found that the youngest respondents were much more supportive of the tax options than the oldest respondents. If this variation reflects a true generational shift, rather than different views at different life-stages, then these opinions will persist as those currently young respondents age and might also hold with the age cohorts behind them.

APPENDIX A: SURVEY QUESTIONNAIRE AND RESULTS

This appendix presents the results of the 2018 survey, comparing these with the results from earlier surveys in the series conducted by MTI in 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017.¹²

The 2018 data labeled as "weighted" are weighted to match the Census Bureau's 2016 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.¹³ Similar weights were used for the other survey years.

The authors removed missing and refused responses from the dataset before calculating the response rates.

Note that some categories in the tables do not sum to 100% due to rounding.

* *

Hello, I'm calling from the Social Science Research Center at Cal State University, Fullerton.

We're conducting a study of 1,200 adults to gather their thoughts about transportation in the US. The information you provide will be used to help shape public policy priorities related to improving transportation services in the future. The survey takes about 12 minutes and is completely confidential. You may skip any item you don't want to answer, or stop the survey at any time.

May we please have a few minutes of your time for this study?

Before we continue, are you 18 years of age or older?

And may I verify that I am speaking to you on a landline [or: cellular] telephone? [If cellular] And are you currently in a safe place to talk for a few minutes, or would you like us to call you back at another time?

To make our survey as representative as possible, may I please speak to the adult in your household who had the most recent birthday and is 18 years of age or older?

The research is supported by the Mineta Transportation Institute. This study involves no more than minimal risk, and there are no known harms or discomforts associated with this study beyond those encountered in daily life. The information you provide may benefit you indirectly if the data collected are used to shape public priorities related to improving public transit service in the future.

Your identity and your responses will remain completely confidential to the extent permitted by the law, and of course, you are free to decline to answer any survey question or to decline to participate entirely. Only research staff at the SSRC will have access to the data collected during this survey, and the data provided to the Mineta Transportation Institute will contain no identifying information. Neither Laura Gil-Trejo nor the staff at the Mineta Transportation Institute have any financial interest in the results of this study, and the research is being done solely for academic purposes.

We are interested in your opinions about the transportation system. When I talk about the transportation system, I mean local streets and roads, highways, and public transit services like buses, light rail, and trains.

Q1. OK, here's my first question. In the community where you live, would you say that roads and highways are in very good condition, somewhat good condition, or bad condition?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Very good condition	25	19	20	23	19	21	22	19	23	22
Somewhat good condition	54	62	64	60	57	55	60	57	56	56
Bad condition	20	19	16	16	23	24	18	23	21	21
Don't know (volunteered)	<1	<1	1	1	1	<1	<1	<1	<1	<1

Q2. Does your community offer very good public transit service, somewhat good public transit service, poor public transit service, or no public transit service at all?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Very good	17	16	19	19	20	20	20	20	17	17
Somewhat good	38	38	41	41	38	35	34	38	38	39
Poor	15	19	16	13	15	15	14	15	19	19
No service	23	21	17	21	20	24	23	22	18	18
Don't know (volunteered)	7	7	7	5	8	5	9	5	7	7

Now, please think about what the government could do to improve the transportation system for EVERYONE in the state where you live. I'm going to read you several options. For each one, tell me whether you think government should make that a high priority, medium priority, or low priority.

[Q3-Q6 RANDOMIZED]

Q3. How about reducing traffic congestion? Should government make that a high, medium, or low priority?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
High priority	47	49	47	49	51	53	49	57	54	53
Medium priority	35	36	33	35	30	31	31	30	31	31
Low priority	15	14	17	15	17	15	18	12	15	14
Don't know (volunteered)	4	2	2	1	3	1	2	1	1	1

Q4. How about maintaining streets, roads, and highways in good condition, including filling potholes? Should government make that a high, medium, or low priority?

	2010	2011	2012	2013	2014	2015	2016	2017	20	018
	Weighted (%)	Unweighted (%)								
High priority	68	73	68	75	78	80	78	80	79	79
Medium priority	26	23	27	22	17	17	18	18	17	17
Low priority	5	4	5	2	4	3	4	2	4	4
Don't know (volunteered)	1	<1	1	<1	1	<1	<1	<1	<1	<1

Q5. How about expanding and improving local public transit service, like buses or light rail? Should government make that a high, medium, or low priority?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
High priority	47	47	45	43	44	45	43	45	46	46
Medium priority	36	33	37	38	35	36	36	38	32	33
Low priority	14	17	16	18	18	17	17	16	19	19
Don't know (volunteered)	4	3	2	2	3	2	4	2	2	3

	2010	2011	2012	2013	2014	2015	2016	2017	20	018
	Weighted (%)	Unweighted (%)								
High priority	n.a.	65	68	71	69	72	69	71	76	71
Medium priority	n.a.	26	22	20	19	19	22	20	16	21
Low priority	n.a.	7	9	8	10	8	8	8	7	7
Don't know (volunteered)	n.a.	1	2	1	1	1	1	1	1	1

Q6. How about reducing accidents and improving safety? Should government make that a high, medium, or low priority?

There are many ways the U.S. Congress could raise money to pay for maintaining and improving the transportation system. I'm going to ask your opinion about some of these different options. In each case, assume that the money collected would be spent ONLY for transportation purposes.

[RANDOMIZE BLOCKS Q7, Q8, Q9]

C	1. One idea (a DIFFERENT idea)	ea) is to ad	opt a nev	v national	half-cent	SALES	TAX to pa	ay for trans	sportation. Woul	d you strongly
	support, somewhat support,	somewhat	oppose,	or strong	ly oppose	this new	sales tax	(?		
				-		0044				

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	12	14	12	13	15	20	19	19	19	17
Somewhat support	30	31	37	37	32	32	34	33	35	35
Somewhat oppose	16	20	19	20	19	17	16	22	16	16
Strongly oppose	38	30	27	28	30	27	26	24	26	29
Don't know (volunteered)	4	5	4	3	4	4	5	2	4	4

Q8A. Right now the federal government collects a tax of 18 cents per gallon when people buy gasoline. One idea (a DIFFERENT idea) to raise money for transportation is to increase federal gas tax by 10 cents a gallon, from 18 cents to 28 cents. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose this gas tax increase?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	9	7	6	5	8	12	12	11	12	14
Somewhat support	14	17	14	18	17	19	18	24	21	22
Somewhat oppose	20	22	19	18	19	22	20	21	17	15
Strongly oppose	54	52	61	57	54	46	48	42	48	47
Don't know (volunteered)	2	2	1	2	1	1	2	1	2	1

Q8B. A VARIATION on the idea of raising the gas tax by 10 cents at one time would be to spread the increase over 5 years. The tax would go up by 2 cents a year for each of five years. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose this gas tax increase?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	14	13	10	14	14	19	18	21	22	22
Somewhat support	25	25	29	28	26	28	34	37	32	31
Somewhat oppose	21	20	18	20	19	20	16	18	14	14
Strongly oppose	36	39	43	38	38	32	30	23	32	32
Don't know (volunteered)	3	2	1	1	3	1	2	<1	1	2

Q9A. One idea (a DIFFERENT idea) is to adopt a new tax based on the number of miles a person drives. Each driver would pay a tax of one cent for every mile driven. For example, someone driving one hundred miles would pay a tax of one dollar. Vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose this new mileage tax?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	9	6	6	5	6	7	8	7	10	8
Somewhat support	12	16	15	13	12	16	14	16	16	18
Somewhat oppose	15	17	17	16	20	17	16	19	18	15
Strongly oppose	61	58	60	64	59	57	59	56	54	57
Don't know (volunteered)	3	2	3	2	3	2	2	1	1	2

Q9B. A VARIATION on the mileage tax just described is to have the tax rate vary depending upon how much the vehicle pollutes. On average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose THIS new mileage tax?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	14	14	17	16	17	17	21	20	18	18
Somewhat support	19	22	24	23	26	26	27	24	27	25
Somewhat oppose	18	18	17	18	19	18	16	19	15	16
Strongly oppose	46	42	40	42	37	37	34	36	38	39
Don't know (volunteered)	3	4	2	2	2	2	2	1	2	2

Now, imagine that the U.S. Congress decided that the best option to raise money for transportation is to increase the federal gas tax by ten cents per gallon. I'm going to read you several different options for how the money is spent. For each, please tell me if you would strongly support, somewhat support, somewhat oppose, or strongly oppose the gas tax increase.

[RANDOMIZE BLOCKS Q10 TO Q14]

Q10. Would you support the gas tax increase if the new money were spent ONLY on projects to reduce local air POLLUTION caused by the transportation system?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	9	14	14	18	19	20	21	21	27	19
Somewhat support	21	33	27	35	33	31	34	36	30	31
Somewhat oppose	23	16	16	19	19	18	16	17	16	19
Strongly oppose	42	33	41	28	26	28	26	25	25	29
Don't know (volunteered)	6	3	2	2	2	2	2	1	2	2

Q11. Would you support the gas tax increase if the money were spent ONLY on projects to reduce the transportation system's contribution to GLOBAL WARMING?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	12	14	14	19	20	21	23	25	28	23
Somewhat support	30	32	26	30	29	28	31	29	29	29
Somewhat oppose	19	15	14	17	17	18	16	16	14	16
Strongly oppose	36	34	41	32	30	30	28	29	24	29
Don't know (volunteered)	3	6	4	2	3	2	2	1	5	4

Q12. Would you support the gas tax increase if the money were spent ONLY on projects to MAINTAIN streets, roads, and highways?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	n.a.	26	23	33	33	34	38	39	38	35
Somewhat support	n.a.	36	35	34	36	37	36	39	33	35
Somewhat oppose	n.a.	12	10	12	13	12	10	9	13	12
Strongly oppose	n.a.	22	31	20	17	17	16	13	15	17
Don't know (volunteered)	n.a.	4	2	1	1	1	1	<1	1	2

Q.13. Would you support the gas tax increase if the money were spent ONLY on projects to reduce accidents and improve safety?

	2010	2011	2012	2013	2014	2015	2016	2017	2	018
	Weighted (%)	Unweighted (%)								
Strongly support	n.a.	23	25	27	27	29	30	31	33	25
Somewhat support	n.a.	34	29	35	35	34	33	34	33	35
Somewhat oppose	n.a.	15	12	17	16	15	16	18	15	17
Strongly oppose	n.a.	24	31	21	21	21	19	17	18	22
Don't know (volunteered)	n.a.	5	3	1	1	1	2	<1	2	1

Q14. Let me give you some information about how much the CURRENT federal gas tax costs an AVERAGE driver. Someone who drives 10,000 miles a year, in a vehicle that gets 20 miles to the gallon, will pay about 100 dollars a year. If Congress raised the gas tax by 10 cents a gallon, that same driver would now pay about 150 dollars a year. Now that you have this information, would you strongly support, somewhat support, somewhat oppose, or strongly oppose a 10 cent gas tax increase?

	2010	2011	2012	2013	2014	2015	2016	2017	20	018
	Weighted (%)	Unweighted (%)								
Strongly support	13	11	10	12	12	18	17	23	18	20
Somewhat support	19	25	21	28	29	29	27	29	29	30
Somewhat oppose	19	18	16	17	19	17	18	17	18	16
Strongly oppose	46	42	50	42	38	34	35	31	34	33
Don't know (volunteered)	3	4	3	1	2	2	2	1	2	2

presents responses to gas tax proposals, Table 12 presents responses to mileage tax proposals, and Table 13 presents responses to sales tax proposals. Complete source asking respondents about their support for taxes to raise transportation revenues. Table 11 citations for all items in the tables are given in the report bibliography. The tables in this appendix summarize key findings from a sampling of public opinion polls

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Boston Globe (Smith)	2008	MA residents	77% "would be willing to increase" the gas tax 5¢ or more, "knowing that maintaining roads and bridges is expensive." 40% would "favor" increasing the gas tax to reduce tolls or state debt.
Mineta Transportation Institute (Agrawal & Nixon)	2017	U.S. residents	78% of respondents said they would "strongly support" or "somewhat support" a 10¢ per gallon federal gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Support for other variants on a 10¢ per gallon federal gas tax increase ranged from 29%, if respondents were told only that the money would be spent "for transportation purposes," to 66%, if the revenues were spent "only on projects to reduce accidents and improve safety."
Mineta Transportation Institute (Agrawal & Nixon)	2016	U.S. residents	75% of respondents said they would "strongly support" or "somewhat support" a 10¢ per gallon federal gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Support for other variants on a 10¢ per gallon federal gas tax increase ranged from 31%, if respondents were told only that the money would be spent "for transportation purposes," to 64%, if the revenues were spent "only on projects to reduce accidents and improve safety."
National Highway Users Association (Fabrizio McLaughlin & Associates)	2008	U.S. likely voters	71% of respondents "supported" some form of unspecified increase in the gas tax "to pay for needed transportation projects" when the question followed a series of informative questions on the values of investing in roads and bridges. Initially, 57% of respondents had supported the increase. In both cases, respondents were informed about the current level of the tax and how long it has been set at its current level.
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	71% of respondents said they would "strongly support" or "somewhat support" a 10¢ per gallon gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support for a 10¢ increase not directed toward a specific purpose was 31%. When the increase was spread out over five years so that "the tax would go up by 2 cents a year," or when told how much the increase "costs the average driver," support increased to 48%. Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 51% when the money would be "spent only on projects to reduce the transportation system's contribution to global warming" to 64% support if the revenue were dedicated for improving safety.
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	69% of respondents said they would "strongly support" or "somewhat support" a 10¢ per gallon gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support for a general 10¢ increase not directed toward a specific purpose was 25%. When the increase was spread out over five years so that "the tax would go up by 2 cents a year," support increased to 40%. Respondents were then given five options for how tax revenue could be spent. Support for these options ranged from a low of 49% when the money would be "spent only on projects to reduce the transportation system's contribution to global warming" to 69% for road maintenance. After being given information on how much "the current federal gas tax costs the average driver," support was 41% for a 10¢ increase.

Table 11. Public Opinion Polling on Gas Tax Increases

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Appendix B: Public Opinion Surveys Reviewed

Sponsor (and author of source in this report bibliography, if different) Survey date Sampling frame Findings Center for the Study of 2016 TN registered 67% of the respondents were "willing to pay 2 cents more per gallon on gas if it meant that more could be Democratic Institutions spent to improve roads and bridges to help ensure economic growth and public safety." In addition, 55% of voters the respondents were willing to pay 8 cents more per gallon for the same purpose, and 47% were willing to pay 15 cents more per gallon. Mineta Transportation 2013 U.S. residents 67% of respondents said they would "strongly support" or "somewhat support" a 10¢-per-gallon gas tax Institute (Agrawal & increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support for a 10¢ increase directed only for transportation purposes generally was 23%. Support was 40% when Nixon) respondents were informed of the annual cost of the increase, and 42% when respondents were told the increase was spread out over five years so that "the tax would go up by 2 cents a year." Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 50% when the money would be "spent only on projects to reduce the transportation system's contribution to global warming" to 62% support if the revenue were dedicated for improving safety." Metropolitan 2016 San Francisco 66% of respondents who heard various arguments for and against a regional gas tax increase would "favor" Transportation Bav Area a ballot measure "to establish a gas tax which would increase the cost of gasoline by [5] cents per gallon in all Bay Area counties. The revenue would directly fund local road repairs, as well as improvements for bicycle Commission registered voters and pedestrian routes." If the proposed tax were 10¢ per gallon, then 58% supported it. Center for the Study of 2015 (Nov.) TN registered 66% of respondents would be "willing" to pay 2¢ more per gallon of gas "if it meant that more could be spent **Democratic Institutions** voters on projects to improve roads and bridges to help ensure economic growth." 54% would be willing to pay 8¢ more: 46% would be willing to pay 15¢ more. Carsey School of 65% of respondents would "support increasing the gas tax by an additional 5 cents per gallon, if the funds are 2016 (Feb. & NH residents Public Policy Jul) & 2017 needed to maintain New Hampshire highways and bridges." (May) 2007 CBS News/The New U.S. residents 64% of respondents "would be willing to pay" an unspecified increase in the gas tax if proceeds were used York Times to research renewable energy sources, while 38% would "favor" an increase to promote conservation and reduce global warming. Mineta Transportation 2010 U.S. residents 62% of respondents said they would "strongly support" or "somewhat support" a 10¢-per-gallon gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support Institute (Agrawal & for a 10¢ increase directed only for transportation purposes generally was 24%. Support was 32% when Nixon) respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that "the tax would go up by 2 cents a year." Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 31% when the money would be "spent only on projects to reduce local air pollution caused by the transportation system," to 56% support if the revenue were dedicated for improving safety.

Table 11, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
MassINC Polling Group	2013	MA registered voters	61% of respondents "support" increasing the state gas tax "if the money were spent ONLY on projects to MAINTAIN streets, roads, and highways." Lower percentages supported a gas tax increase for other transportation purposes.
Winthrop University, Social & Behavioral Research Lab	2015	SC Republican primary likely voters	61% of respondents would "support" an increase in South Carolina's gas tax "if the money was to be used for repairing roads and transportation infrastructure."
CBS News/The New York Times	2006	U.S. residents	59% of respondents "favored" an unspecified increase in the gas tax if it "would cut down on energy consumption and reduce global warming." 55% also favored the increase if it "would reduce the United States' dependence on foreign oil." This dropped to 28% if the tax increase reduced other taxes, 24% if it helped pay for the war on terror, and 12% if no reason was given. 17% of respondents continued to "favor" the tax increase when it was specified as a \$2 per gallon increase.
YouGov	2014	Registered YouGov members	58% of respondents said they strongly or somewhat support "raising the gas tax by 1 cent per gallon in order to provide more money to pay forroad repairs and construction." There was less support for using the additional revenue for other purposes, ranging from 29% for "museum construction and maintenance" to 47% for "handicap accessible buses and subways."
Georgia Transportation Alliance (Wilson Perkins Allen Opinion Research)	2015	GA likely voters	58% of respondents said they would support a transportation funding option that would reform "Georgia's gas tax formula [to] simplify and streamline the revenue system so that it keeps up with the current rate of inflation." 57% said they would "be willing to pay a little more in gas tax if [they] knew that it would go to improving [Georgia's] roads and transportation infrastructure needs." 49% said they would support "a gas tax increase that is dedicated to addressing the state's road maintenance backlog." 44% said they would support "a gas tax increase that allows larger transportation projects to be completed quicker."
Eagleton Institute of Politics	2014 (April)	NJ adult residents	58% of New Jerseyans would support increasing the gas tax when told that the (recently proposed) increase "would be five cents per year over three years, raising an additional \$250 million per year for road and bridge repairs" and that "given current prices, this would increase gas costs by about one and one half percent per year." This represents an increase from a 48% approval rate when the question did not explain the percentage increase in the price of gas and a 31% approval rate when the question merely stated that "any increase would be dedicated to pay for road maintenance and improvements."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	58% of respondents said they would "strongly support" or "somewhat support" a 10¢-per-gallon gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support for a 10¢ increase directed only for transportation purposes generally was 24%. Support was 36% when respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that "the tax would go up by 2¢ a year." Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 45% when the money would be "spent only on projects to reduce the transportation system's contribution to global warming" to 54% support if the revenue were dedicated for improving safety.
Mineta Transportation Institute (Agrawal, Nixon, & Murthy)	2012	U.S. residents	58% of respondents said they would "strongly support" or "somewhat support" a 10° -per-gallon gas tax increase "if the money were spent only on projects to maintain streets, roads, and highways." Initial support for a 10° increase directed only for transportation purposes generally was 20%. Support was 31% when respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that "the tax would go up by 2° a year." Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 41% when the money would be "spent only on projects to reduce the transportation system's contribution to global warming" to 54% support if the revenue were dedicated for improving safety.
HNTB Corporation (Kelton Research)	2011	U.S. residents	57% of respondents agree that "the gas tax should be increased and decreased with inflation."
Metropolitan Transportation Commission (BW Research Partnership)	2007	San Francisco Bay Area residents	56% of respondents would "support" an unspecified increase in the cost of gasoline to either reduce public transit fares or increase transit service. 57% supported the increase for providing incentives for carpooling, but only 47% supported the increase to pay for bike lanes and sidewalks. 46%, 28%, and 17% were "willing to pay" 25ϕ , 50ϕ , or \$1 more per gallon of gas, respectively, when these amounts were called out. All questions framed increased gas costs as a way to reduce greenhouse-gas emissions or global warming.
Winthrop University, Social and Behavioral Research Lab	2015	SC adults	55% of respondents said they would support a current proposal in the South Carolina Legislature to increase the state gas tax by up to 10¢ a gallon [with the money] restricted to use for infrastructure, such as repairing roads and bridges."
Steve Novick's 2016 Portland City Council election campaign (City of Portland, Office of Public Safety)	2015	Portland OR likely primary voters	55% of respondents would "vote yes" for the city of Portland to "fund street repair and traffic safety investments [including safer pedestrian crosswalks and sidewalks] with a 10 cents per gallon gasoline tax" limited to four years, with "a citizen oversight board and public audits" required.

Appendix B: Public Opinion Surveys Reviewed

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
Oregon Public Broadcasting (DHM Research)	2016	Portland, OR voters	55% of respondents would vote "yes" to support a 4-year 10¢-per-gallon gas tax on fuel sold in Portland. The question was preceded by statement of the ballot measure language: "Temporary Motor Vehicle Fuel Tax for Street Repair, Traffic Safety Shall Portland adopt four year, 10 cents per gallon fuel tax dedicated to street repair, safety including safer crossings, sidewalks?"
Bloomberg News	2017	U.S. adults	55% of respondents said it is "okay" to "increase the federal gas tax to pay for roads and bridges" in their state.
Mountain-Plains Consortium (Ozbek, Albeiruti & Atadero)	2013	CO, ND, SD, UT, and WY residents	54% of North Dakota respondents agreed or strongly agreed with the statement, "I support increasing the state gas tax that is collected at the time of purchase to fund the highway system." Researchers also surveyed residents of Colorado, South Dakota, Utah and Wyoming. Among all five states, support for raising state gas taxes ranged from 45%-54%, and support for raising the federal gas tax ranged from 43%-50%. For every state, an increase in the federal gas tax was the top choice when respondents were asked to choose one funding mechanism from eight options, with 18%-39% choosing that option. Additionally, 28%-39% agreed or strongly agreed that gas taxes "should be indexed to the price of gas and change (increase or decrease) as gas prices change."
Loras [College] Public Opinion Survey Center	2015	IA adults who voted in November 2014	54% of respondents said they would tell their state legislator to vote for "a 10 cents per gallon gas tax increase which would be used to repair roads and bridges in Iowa."
ΑΑΑ	2014	Continental U.S. adults	52% of respondents said they would be "willing to pay" more in federal fuel taxes to support roads, bridges, and mass transit. Among them, 20% were willing to pay up to \$4.99 more per month, 11% were willing to pay \$5 to \$9.99 per month, and 21% were willing to pay more than \$10 per month.
WMUR Granite State Poll (University of New Hampshire Survey Center)	2014	NH adults	52% of respondents said the strongly or somewhat favor legislation passed by the New Hampshire legislature that increased "the gasoline tax by 4 cents per gallon to pay for improvements and maintenance on the state's roads and bridges."
Washington Post/ University of Maryland (Abt-SRBI Inc.)	2015	MD adults	52% of respondents said they would "oppose eliminating automatic increases in the state's gasoline tax used to fund roads and transportation?"
Montana Chamber of Commerce (Moore Information)	2016	MT registered voters	52% of respondents expressed "support" for "increasing the state tax on gasoline and diesel to pay for roads, highways, and bridges throughout the state."
Minnesota Public Radio (Pugmire)	2007	MN registered voters	51% of respondents supported a 5¢ per gallon increase in the state gas tax "to pay for improvements to roads and bridges." This was a follow-up question regarding a 10¢ per gallon increase for which support was only 37%. The poll was conducted two months after a bridge collapsed in Minnesota.

Sponsor (and author of source in this report bibliography, if different) Survey date Sampling frame Findings AAA Mid-Atlantic 2016 DE drivers 51% of respondents would strongly or somewhat "support ... a reasonable increase, of 5 to 10 cents a gallon, in the gasoline tax to be dedicated to the Transportation Trust Fund, which funds transportation projects, so long as there are safequards in place to ensure there is no waste, abuse or diversion of that money." The question was preceded by the statement: "Delaware's gas tax is currently 23-cents a gallon, and ranked 35th highest nationally." Quinnipiac University 2015 (April) NJ registered 50% of respondents said they would support an increase in the gasoline tax "to help finance road improvements and mass transportation." voters Salt Lake Tribune & UT registered 50% of respondents answered "strongly support" or "somewhat support" a gas tax increase "to improve Utah 2018 Hinckley Institute of highways and roads." voters Politics Field Institute Faculty 2015 CA registered 49% of respondents would "support ... increasing the state gasoline tax by 10 cents per gallon, if the money Fellowship (Fisher & is used to improve the conditions of state roads and highways." voters Wassmer) Washington Post 2005 Washington DC-48% of respondents "supported" a gas-tax increase if the money was used for "transportation projects such as building roads, traffic management, or public transportation." This question was asked after a series of (Morin & Ginsberg) area residents questions on congestion-reduction strategies. Washington Post 2012 MD residents 48% of respondents "favored" a 5¢ per gallon increase in the state gas tax "if the money is used for (Abt-SRBI, Inc.) transportation projects." Follow-up questions for 10¢ and 15¢ increases were "favored" by 26% and 25% of respondents respectively. The Des Moines 2015 48% of respondents said they favored an "initiative that may be debated in the lowa legislature" to "raise the IA adults Register (Selzer & Co.) gas tax by around 10 cents a gallon to pay for road and bridge repairs." Wisconsin 2017 WI likely voters 48% of respondents favor a gas tax increase of "five cents per gallon to pay for highway projects and the Manufacturers & upkeep of roads." Commerce NCPPR (Wilson 2008 U.S. likely voters 47% of respondents "would be willing to pay" some level of increased gas tax as a way to promote Research Strategies) conservation and reduce greenhouse-gas emissions. 62% reported that they would be less likely to accept such an increase if Americans' transportation emissions were shown to be "a small fraction of a percentage point" of all greenhouse-gas emissions. Monmouth University 2015 NJ residents 47% of respondents said they would strongly or somewhat support "raising the state tax on gasoline if all of the Poll revenue was used to pay for road and bridge improvements." 27% of respondents, including 22% of those who said they were opposed to raising the gas tax, said they would be more likely "to support an increase in the gas tax if it was coupled with a decrease in the taxes people pay when they inherit a family home or other property."

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Transportation Institute

Sponsor (and author of source in this report bibliography, if different) Survey date Sampling frame Findings Washington State 2012 WA residents 46% of respondents thought that the state gas tax was "definitely" or "probably" a "good way to fund increased transportation investment." Additionally, 41% of respondents "supported" allowing the gas tax to "rise with the Transportation Commission rate of inflation so it provides a more stable funding source." (EMC Research) Judy Ford Wason 2015 VA registered 46% of respondents said they would support increasing the gas tax "to ensure adequate transportation Center for Public voters funding for maintenance and new construction." Policy News9/NewsOn6 46% of respondents would support "a proposed gas tax [that] would increase the sales tax on unleaded 2017 OK likely voters gasoline and diesel fuel from the current 16 cents per gallon to 22 cents per gallon." Quinnipiac University 2018 U.S. residents 46% of respondents think that "raising the federal gas tax to specifically pay for repairs to the U.S. infrastructure" is a "good idea." 45% of respondents "favored" a 40¢ per gallon gas tax "to support development of clean renewable energy Public Agenda 2009 U.S. residents (Bittle, et al.) sources" when presented in a series of energy-related proposals. Levels of favor for other gas-tax proposals included 40% for a 40¢ tax "to help achieve energy independence," 38% for a 40¢ tax "to improve roads, bridges, tunnels, and other public works," and 25% for a federal \$4 per gallon fixed price on gasoline to "encourage the development of alternative fuels." Star Tribune (Mason-2015 (March) MN adults 45% of respondents would "support ... Governor Dayton's proposal to raise the wholesale tax on gasoline to Dixon Polling & increase spending on road and bridge projects." Research) Pasco County, FL 44% of respondents said they "strongly agree" or "somewhat agree" with increasing the gas tax as an option 2014 Pasco County, FL (National Research residents "to pay for unfunded transportation needs in Pasco County." Center, Inc.) Idaho Politics Weekly 2015 ID registered 44% of respondents said they "strongly support" or "somewhat support" an increase in the gas tax "to provide (Dan Jones & more funding for Idaho's roads and highways." voters Associates) Eagleton Institute of 2015 (Feb.) NJ adults 44% of a split sample, which was informed that New Jersey's gasoline tax "is currently the third lowest in the nation and has not been raised in twenty years," said they support a proposed state gas tax increase that Politics "would be dedicated to paying for road maintenance and improvements." Among the other respondents, who were not given any information about how New Jersey's tax compares nationally or when it was last raised, 39% said they support the proposed increase. Mineta Transportation 2006 CA likely voters 43% of respondents "would vote for" a 1¢-per-gallon increase in the state gas tax during each of the next 10 years. 28% of respondents "would vote for" indexing the state gas tax to inflation when the question prompted Institute (Weinstein, that such an increase would have been 0.5¢ per gallon in the previous year. et al.)

Table 11, continued

Appendix B: Public Opinion Surveys Reviewec

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
CBS News/ The New York Times	2009	U.S. residents	43% of respondents "favored" an unspecified increase to the federal gas tax "if it would reduce U.S. dependence on foreign oil."
University of Texas, Austin (Musti, et al.)	2010	Austin TX-area residents	43% of respondents "supported" a \$1-per-gallon increase in the gas tax "to combat climate change." 62% of respondents "supported" energy taxes with this same purpose – a \$50 tax per ton of greenhouse gas emissions "produced by electricity generation and motor fuel use" was given as an example of such a tax.
Metropolitan Transportation Commission (EMC Research)	2012	San Francisco Bay Area likely voters	43% of respondents "approved" a 10¢ per gallon gas tax increase across the region "for no longer than 20 years with expenditures subject to strict citizen oversight and requiring that at least 95 percent of revenue generated by each county be spent on benefits for that county" after mentioning some potential improvements. 36% of respondents "agreed" to support the increase without additional information, although follow-up questions on 5¢ and 2¢ increases garnered 51% and 66% agreement. 44% of respondents "agreed" to support the 10¢ increase "only for road improvements," while 41% "agreed" to support the increase "only for transit improvements."
Barr Foundation (MassINC Polling Group)	2013	MA registered voters	43% of respondents would "strongly" or "somewhat" support increasing the state gas tax "to pay for maintaining and improving transportation." The question was preceded by the statement: "The actual amount of all federal and state taxes in Massachusetts is 41.9 cents per gallon. The state gas tax of 21 cents per gallon was last increased in 1991, and no sales tax is charged on gasoline. Because the gas tax is not adjusted for inflation, the gas tax has lost nearly half its purchasing power since 1991."
Y'allPolitics	2016	MS likely primary voters	43% of likely primary voters would "support" an increase in the state gas tax "if this tax increase was dedicated to only fixing roads and bridges." The question was preceded by the statement: "In 2016, several Mississippi organizations have called for an increase in the state tax on gasoline that consumers pay to provide more funds for fixing roads and bridges."
ABC News/ <i>Time/</i> <i>The Washington Post</i> (Langer)	2005	U.S. residents	42% of respondents were "willing to pay" some higher level of gas tax "to fund transportation projects." 32% of respondents "supported" higher gas taxes for building roads, public transportation, or managing traffic.
Eagleton Institute of Politics	2016	NJ adults	42% of respondents would "support" an increase in New Jersey's gasoline tax "to pay for road maintenance and improvements."
Paul Werth Associates	2016	OH registered voters	42% of respondents would "support increasing the gas tax to maintain and repair the roads and highways in Ohio."
Paul Simon Public Policy Institute	2017	IL voters	42% of respondents are in favor of "a proposal to raise the state gasoline tax to fund improvements to Illinois highways, roads, and bridges."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Eagleton Institute of Politics	2014 (Dec.)	NJ adults	41% of a split sample said they would support a gas tax increase that "would be dedicated to pay for road maintenance and improvements." The rest of the respondents were also informed that, at 15 cents a gallon, New Jersey's gasoline tax is "nearly the lowest in the country"; 36% of this group supported an increase. When respondents were given a hypothetical situation in which the only ways to "raise the money to maintain and improve the state's roads" were an increase in the gas tax or borrowing money, and then asked to state their preference, 58% selected the gas tax. Respondents were then assigned to one of three groups and given different details about a proposed gas tax increase of 25 cents a gallon. 40% of Group A, which was told that such a tax plan would "would increase gas cost by about 10%," supported the proposal; 37% of Group B, which was told that such an increase "would add about 80 cents a day to driving costs" for the average driver, supported the proposal; and 33% of Group C, which was told that such an increase would "triple the state's share of the gas tax," supported the proposal. 37% of respondents said they would be "more likely" to support an increase in the gas tax, if it were combined "with a decrease in estate and inheritance taxes."
National Association of Realtors (Hart Research Associates)	2009	U.S. registered voters	40% of respondents favored a 5¢ per gallon gas-tax increase "to pay for transportation projects and create jobs." Support fell to 23% for a 10¢ increase.
Marquette University Law School (LHK Partners Inc.)	2014	WI registered voters	40% of respondents said they were "willing" to "raise gas taxes and vehicle registration fees to pay for highway projects."
Alameda County Transportation Commission (EMC Research)	2011	Alameda County CA registered voters	39% of respondents were "likely to vote yes" for a 10¢ per gallon increase in gas taxes for the surrounding region to "pay for maintenance of local streets and roads as well as improvements to public transportation." Approval dropped to 38% when more information was provided. In contrast, 71% of respondents "were likely to vote yes" for an extension of a 0.5¢ county sales tax "to address an updated plan for the county's current and future transportation needs" after being informed that "money from this measure could only be spent on the voter-approved expenditure plan and could not be taken by the state."
Quinnipiac University	2014 (Dec.)	NJ registered voters	39% of respondents said they would support an increase in the gasoline tax "to help finance road improvements and mass transportation."
Institute of Governmental Studies (Maclay)	2015	CA residents	39% of respondents would "favor" a "bill before the state legislature [that] would increase the gas tax by 10 cents a gallon for five years to generate more money for road repairs." The question was preceded by the statement: "California faces a backlog of road repair projects estimated at \$59 billion." Another group of respondents received the same question, but without the statement about the repair backlog; this group favored the bill by 36%.
Washington Post	2007	MD residents	38% of respondents "favored" a 10¢ per gallon increase in the state gas tax "if the money is used for transportation projects such as building roads, traffic management, or public transportation."

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Appendix B: Public Opinion Surveys Reviewed

Sponsor (and author of source in this report bibliography, if different)	Suprovidato	Sampling from	Findings
Eagleton Institute of Politics	Survey date 2014 (March)	Sampling frame NJ residents	Findings 38% of New Jerseyans supported raising the gas tax when they were informed that it 'is currently the third lowest in the nation and has not been raised in twenty years." This rate of support is higher than the 27% of New Jerseyans who supported the raising the gas tax when not given the additional information.
Eagleton Institute of Politics	2014 (Sept. & Oct.)	NJ adults	38% of respondents said they would support "an increase in the gas tax if it were dedicated solely to paying for roads, bridges, and other transportation costs." Given three options to pay "for needed road and bridge repairs," 17% of respondents said they would "most prefer" an option to "raise the gas tax by a fixed amount, like 15 cents per gallon," while 18% said they would "most prefer" an option to "apply the standard 7% sales tax to gasoline purchases."
MTSU Poll	2017	Tennessee registered voters	38% of respondents would "favor" a proposal to "pay for road projects by raising taxes on gas and diesel fuel while cutting other taxes, including taxes on groceries."
Millsaps College	2017 (Dec.)	Mississippians	38% of respondents would support "the authorization of a higher state gasoline tax to fund improvements in roads, bridges, and general infrastructure in Mississippi."
Quinnipiac University Polling Institute	2005	CT registered voters	37% of respondents "supported" a 6¢ per gallon gas tax increase to pay for "transportation improvement projects to reduce traffic congestion."
Quinnipiac University Polling Institute	2009	NJ voters	37% of respondents "supported" an unspecified gas tax increase "to help finance road improvements and mass transportation."
American Trucking Association (Public Opinion Strategies)	2015	U.S. registered voters	37% of respondents "favor" a proposal "raising federal taxes on gas and diesel five cents a year, every other year for the next eight years."
Quinnipiac University	2015 (Jan.)	NJ registered voters	37% of respondents said they would support an increase to the gasoline tax "to help finance road improvements and mass transportation."
Morning Consult	2015 (June)	U.S. registered voters	37% of respondents thought an increase in the federal gas tax "a good idea" to deal with the expiration of "the federal fund to build and maintain interstates and highways." The question was preceded by the statement: "the federal fund to build and maintain interstates and highways will expire at the end of July."
Eagleton Institute of Politics	2015 (Oct.)	NJ adults, 18 or older	37% of respondents chose "support" in response to the question: "Legislative leaders have proposed increasing New Jersey's gasoline tax. Do you support or oppose a gas tax increase?" Support was similar (36%) among a different subset of respondents who were asked a different version of the question, one telling them that revenue "would be dedicated entirely to paying for road maintenance and improvement, as well as other transportation costs." Support was 29% among yet another subset of respondents who were told, "Legislative leaders have proposed increasing New Jersey's gasoline tax. The increase would be about 50 cents more per day for the average driver in New Jersey, or \$180 a year. "

Sponsor (and author of source in this report bibliography, if different) Survey date Sampling frame Findings 36% of respondents agreed that they "would support" a 10¢ per gallon gas tax increase "now that the **HNTB** Corporation 2011 U.S. residents economy has improved" after being informed that the tax had not risen since 1993 and that it no longer (Kelton Research) "collects enough funds to fully support current or future federal highway and transit programs." In a follow-up question, 58% of respondents agreed that the gas tax "should rise and fall along with the rate of inflation." American Trucking 2014 U.S. registered 36% of respondents said they somewhat or definitely favor "raising federal taxes on gas and diesel five cents Association (Public voters a year, every other year for the next eight years" to raise money "to repair, update and modernize the nation's roads, highways and bridges." 23% chose raising the gas tax as their top choice among "four proposals to pay Opinion Strategies) to modernize the nation's roads bridges and highways." Respondents were then told that, as a result of the proposed tax increase, "the average driver would pay \$2 a week more in fuel taxes"; 34% said this information made them definitely or somewhat more supportive of the proposal. Atlanta Journal-2015 GA adults 36% of respondents said they would support "paying a higher gasoline tax if the money is used for transportation projects." Constitution (Abt SRBI) Quinnipiac University 2014 (July & NJ registered 36% of respondents said they would support an increase to the gasoline tax "to help finance road August) voters improvements and mass transportation." **HNTB** Corporation 2009 U.S. residents 35% of respondents "would support" a 10¢ per gallon gas-tax increase "once the economy improves." The question informed respondents about the level of the federal gas tax, when it was set, and the reasons why (Kelton Research) it is no longer sufficient. Earlier in the poll, 57% of respondents agreed that current gas taxes "are no longer sufficient to properly maintain our roads and bridges." Selzer & Company 2013 IA adults 35% of respondents "favored" raising the gas tax "by around 10 cents a gallon to pay for road and bridge repairs." The University of Idaho 2014 ID likely voters 35% of respondents said they would "strongly support" or "somewhat support" increasing "fuel taxes" to "raise James A. and Louise more funds for Idaho's roads and bridges." 32% said they would "strongly support" or "somewhat support" McClure Center for charging a "sales tax on fuel." Public Policy Research Utah State 2014 UT registered 35% of a split sample said they favor or strongly favor a legislative initiative "that would increase the gas tax in University Institute order to pay for the needed building and maintaining of roads." Among the other half of respondents, who also voters of Government & were also told the initiative "would cost around 435 million dollars per year." 34% said they favor or strongly Politics and The Exoro favor the proposal. Group (Dan Jones & Associates) Quinnipiac University 2015 (Nov.) NJ voters 35% of respondents would "support" an increase in the gas tax "to help finance road improvements and mass transportation."

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Transportation Institute

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
Americans for Prosperity (Brawner)	2015	AR voters	35% of respondents would "strongly" or "somewhat support" raising the state's gas tax by 10¢ per gallon to pay for repairs to roads and bridges. The question was preceded by a statement that "repairs to Arkansas's roads and bridges are mostly supported by the state tax paid on gasoline."
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa OK-region residents	34% of Tulsa residents were somewhat or very willing "to use a slight increase in the gas and diesel tax" to "help fund public transportation improvements."
CNN (Bursk)	2007	U.S. residents	33% of respondents "favored" an unspecified increase in the federal gas tax to pay for additional "inspection and repair of bridges across the country." The poll was conducted one week after a bridge collapsed in Minnesota.
HNTB Corporation (Kelton Research)	2013	U.S. residents	33% of respondents supported an unspecified increase in the gas tax to fund highway improvements. Support for using increases in the gas tax to fund other transportation improvements was lower.
Quinnipiac University	2014 (April)	NJ voters	33% of respondents supported an increase in the gasoline tax to balance the New Jersey state budget.
Rasmussen Reports	2017	U.S. adults	33% of respondents "think the government should raise the gas tax to help meet new transportation needs" when told that "Americans pay a federal tax of 18.4 cents on each gallon of gas, and a proposal has been made to raise this tax to help pay for the Trump administration's \$1 trillion infrastructure plan."
ABC News/ <i>The</i> <i>Washington Post/</i> Stanford University (Krosnick)	2007	U.S. residents	32% of respondents "favored" an unspecified increase in gas taxes to promote fuel-efficient vehicles and conservation. This question was asked as part of a series of questions on strategies to reduce global warming.
Quinnipiac University	2012	VA voters	32% of respondents would rather have higher gas taxes than tolls to raise money for road improvements.
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist & Stoycheva)	2012	GA adult drivers	31% of respondents would "support" a gas tax increase of 10 cents per gallon to fund transportation. 23% of respondents would "support" a gas tax increase of 15 cents per gallon. 21% of respondents would "support" a gas tax increase of 15 cents per gallon. 21% of respondents would "support" a gas tax increase of 15 cents per gallon.
The Des Moines Register (Selzer & co.)	2012	IA residents	31% of respondents "favored" raising the state gas tax "8 to 10 cents a gallon to pay for road and bridge repairs."
Judy Ford Wason Center for Public Policy	2013	VA registered voters	31% of respondents would "support" an increase in the state gas tax in order to fund the state's "transportation needs, including building new roads and bridges and maintaining current roads and bridges."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Gallup (Brown)	2013	National phone survey	29% of respondents would "vote for" a "law in your state that would increase the gas tax up to 20 cents a gallon, with the new gas tax money going to improve roads and bridges and build more mass transportation in your state."
Yale Project on Climate Change Communication (Leiserowitz, et al.)	2013	U.S. adults	29% of respondents strongly or somewhat support a policy to "increase taxes on gasoline by 25 cents per gallon and return the revenues to taxpayers by reducing the Federal income tax."
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	29% of respondents said they "agree" or "strongly agree" with the statement, "The gasoline tax rate should be increased."
Metropolitan Washington Council of Governments	2013	Washington, DC- area participants in forums on congestion pricing	29% of respondents "strongly agree" that the gas tax should be raised to pay for transportation (this was after an informational presentation). Before the presentation, only 13% of respondents "strongly agreed" with this proposal.
Roanoke College	2013	VA residents	29% of respondents "favored" linking the gas tax to inflation in order to raise revenues for transportation. 24% of respondents said that raising taxes and designating them for roads is "closest to their view."
Quinnipiac University	2015 (May)	NYC registered voters	29% of respondents chose raising the New York state gas tax over two other options – raising the New York City sales tax and adding tolls on bridges into Manhattan – as their preferred way for the city to "get additional money to maintain roads, bridges and mass transit."
Vanderbilt University (Princeton Survey Research Associates International)	2015	TN registered voters	28% of respondents "support" an "increase in the gas tax." The question was preceded by the text: "Elected officials in Tennessee are considering raising the gas tax for the first time in more than 25 years. Revenues from the tax will help fund improvements to roads throughout the state." By contrast, 22% of respondents supported a gas tax increase if the question was preceded with this text: "Elected officials in Tennessee are considering raising the gas tax for the first time in more than 25 years. Revenues from the state as well as develop mass transit alternatives that would relieve traffic."
Quinnipiac University Polling Institute (Brown)	2011	VA registered voters	28% of respondents "would rather have a higher gas tax to raise money for road improvement" when asked to choose between gas taxes and tolls. By contrast, 60% "would rather have highway tolls."
Wall Street Journal	2012	Readers of the paper's blog who responded to an invitation to vote	28% said the gas tax should be "increased." 16% said that the gas tax should be indexed to inflation.

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Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
Elway Research	2013	WA registered voters	28% of respondents would "favor" or "accept" a gas tax increase as a transportation funding option.
Marquette Law School	2013	WI voters	28% of respondents were "willing" to "raise gas taxes and vehicle registration fees for highway projects."
Public Mind, Fairleigh Dickinson University (Opinion America)	2015	NJ adults	28% of respondents agreed that "New Jersey needs to raise the gasoline tax because all of the current money is committed and without new revenue there cannot be any new road or bridge projects." 44% correctly stated that the current gas tax in New Jersey is lower than the national average. Among those who said they were opposed to any increase in the gas tax, "taxes are already too high" was the most popular explanation for their opposition, cited by 45%.
The Rockefeller Foundation (Hart Research Associates)	2011	U.S. registered voters	27% of respondents found it "acceptable" to increase the federal gas tax an unspecified amount in order to "provide additional funding for transportation projects" after being informed that the tax had not increased since 1993.
Gonzales Research Marketing Strategies	2013 (Jan.)	MD registered voters who vote regularly	27% of respondents would "favor" a "10 cent per gallon increase in Maryland's gas tax rate to be used for transportation projects."
Hassenfeld Institute for Public Leadership (Gregg)	2015	RI registered voters	27% of respondents were "strongly" or "somewhat supportive" of having the State of Rhode Island "raise gas taxes so everyone helps pay for the repairs to the bridges in the state." Respondents were told that this gas tax increase would be in lieu of assessing a toll on large trucks.
High Point University Survey Research Center	2016	NC likely voters in Republican and Democratic primaries	27% of likely primary voters in North Carolina "support" a proposal of "additional motor fuel taxes." The question was preceded by the statement: "Now we would like to ask you about some transportation issues here in North Carolina. Please tell me if you support or oppose each of these proposals to pay for new highways and additional lanes of traffic."
Washington Post	2013	MD residents	26% of respondents would "favor" a "new 3 percent sales tax on gasoline, if the money were used for transportation projects such as building roads, traffic management or public transportation."
Quinnipiac University	2014 (June)	NYC registered voters	26% of respondents chose increasing the state fuel tax as their preferred method of raising "additional money to maintain roads, bridges and mass transit" over increasing the city sales tax and additional bridge tolls. The gas tax had the highest level of support among the three options.
Oregon Department of Transportation	2009	OR adults	25% of respondents chose increasing the gasoline tax as the "most fair" method for raising additional funds for transportation projects from a list of three options that also included charging tolls and increasing vehicle registration fees. Additionally, 49% said they believe they "get good value" from the money they pay in gas taxes and registration fees, versus 30% who said they do not.
Old Dominion University	2012	Hampton Roads VA residents	25% of respondents would "support" increasing the state fuel tax "if additional funds are needed to maintain or expand the road, highway, and bridge systems in Hampton Roads."

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
YouGov	2015	Registered YouGov members	25% of respondents said they would favor "raising the [federal] gas tax by 12 cents over the next two years, and indexing the tax to the inflation for the future to fund highway and road improvement projects." 18% said gas taxes "should be the main way that governments pay for road repairs and construction."
Oregon Department of Transportation	2011	OR adults	23% of respondents chose increasing the gasoline tax as the "most fair" method for raising additional funds for transportation projects from a list of three options that also included charging tolls and increasing vehicle registration fees. When asked to choose from among "a temporary increase in [the] gas tax for a specific time," "taking funds from other construction and maintenance projects," and "making do with existing resources, even if it means closing bridges" as the method they would be most likely to support if additional funding were needed "to fix the most urgent bridge problems," 34% chose the gas tax. Additionally, 46% said they believe they "get good value" from the money they pay in gas taxes and registration fees, versus 31% who said they do not.
Gonzales Research Marketing Strategies	2012	MD voters who vote regularly	23% of respondents would "favor" a "10 cents per gallon increase in Maryland's gas tax rate to be used for transportation projects." 3% of respondents "favored" a "law in Maryland that would automatically increase the gas tax rate each year without Legislative review or approval."
Public Mind, Fairleigh Dickinson University	2014	NJ residents	23% of New Jerseyans support raising the state gas tax "because all of the current money is committed and without new revenue there cannot be any new road or bridge projects." 72% of respondents opposed a new gas tax, "regardless of the need."
WSB-TV (Landmark Communications)	2015	GA adults who voted within the last 4 years	23% of respondents said they would support "an increase in the gas tax to fund maintenance of existing roads and bridges." Support increased to 35% if the gas tax increase were to be "offset by a reduction in the income tax rate."
Pew Research Center	2008	U.S. residents	22% of respondents "favored" an unspecified increase in the gas tax "to encourage carpooling and conservation." This was in response to a series of questions on policies that "address America's energy supply."
Rasmussen Reports	2009	U.S. residents	22% preferred raising the gas tax an unspecified amount to "cutting back nationally on transportation projects." 15% of respondents agreed that the federal government should increase gas taxes "to help meet new transportation needs."
Pew Research Center	2010	U.S. residents	22% of respondents "approved" of an unspecified increase to the national gasoline tax when "thinking about ways to reduce the federal budget deficit."
Gonzales Research and Marketing Strategies	2013 (Oct.)	MD likely voters	22% of voters in Maryland approve of their state government's 2013 decision to raise the gas tax by 21¢ over three years.

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Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Virginia Transportation Construction Alliance (Public Opinion Strategies)	2013	VA likely voters	21% of respondents said that the following proposal to increase transportation funding was "closest" to their opinion: "in order to increase transportation funding, the current gas tax of seventeen point five cents per gallon should be increased by ten cents to twenty-seven point five cents per gallon. The gas tax would also be indexed to inflation so that it would increase at the same rate as inflation." (The alternative presented was to eliminate the gas tax and increase the state sales tax.)
Missouri Alliance for Freedom (Johnson)	2015	MO State Senate District 25, likely voters	21% of respondents would "support raising the tax on gas to support transportation projects in Missouri."
Reason Foundation	2011	U.S. residents	19% of respondents "favored" an unspecified increase in the gas tax. Respondents were informed that the tax pays for highways and transit, and were given the following opposing viewpoints: "Roads and transit systems are crumbling and need more funding" and "The government wastes a lot of the gas money it already receives."
Oregon Department of Transportation	2013	OR adults	19% of respondents chose increasing the gasoline tax as the "most fair" method for raising additional funds for "transportation maintenance, repair, and development within the state" from a list of three options that also included charging tolls and increasing vehicle registration fees.
<i>Rasmussen Reports</i> (Pulse Opinion Research)	2012	U.S. residents	18% of respondents agreed that the government should "raise the gas tax to help meet new transportation needs." 48% of respondents agreed that the government should "eliminate the federal gasoline tax until gas prices come down."
Quinnipiac University	2009 (Jan.)	NY registered voters	18% of respondents supported increasing the gasoline tax by an unspecified amount.
HNTB Corporation (Kelton Research)	2012	U.S. residents	17% of respondents stated they would be "willing to spend more money on" the gas tax "if it was allocated to long-term interstate improvements in [their] area."
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	17% of respondents expressed support for "increasing the state fuel tax by five cents per gallon" by rating the proposal 7 or higher on a 0-to-10 scale. Support dropped to 10% for a proposed increase of 10 cents per gallon. 17% supported "linking the state fuel tax to the average yearly inflation rate."
Quinnipiac University	2011 (March)	CT registered voters	17% of respondents supported increasing the gasoline tax by 3ϕ per gallon.
Mineta National Transit Research Consortium (Noland, Weiner & Greenberg)	2016	NJ adults	17% of respondents "strongly" or "somewhat" agreed with a proposal to "add a 5-cents-per-gallon tax on gasoline sales in New Jersey for 5 years." The question was preceded by this prompt: "Some people say even though New Jersey will receive funds from the federal government, insurance companies, and charitable organizations to help rebuild areas devastated by Hurricane Sandy, eventually New Jersey will need to generate even more funds to better protect our vulnerable areas against future disasters." The gas tax increase was one of 5 funding proposals that respondents were asked to rate.

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Associated Press-GfK Poll	2014	U.S. adults	14% of respondents said they would support raising "federal gasoline taxes from their current levels of 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel" as a way to "pay for transportation projects, such as highway construction, improvements to roads and bridges, and maintenance of public roads."
Build Our Bridge Now Coalition (Public Opinion Strategies)	2015	Boone, Campbell, and Kenton Counties, KY registered voters	14% of respondents said they would support a gas tax increase "rather than having tolls" as a way to pay for a new bridge span for Interstate 75 traffic over the Ohio River.
Reason Foundation (Princeton Survey Research Associates International)	2014	Continental U.S. adults	13% of respondents said they favor raising the federal gas tax above the current rate of 18.4 cents per gallon. When asked to choose between two options, 32% of respondents said they would rather raise the gas tax than pay tolls "to pay for repairing and expanding existing Interstate highways.
Rasmussen Reports	2009	U.S. residents	10% of respondents "favored" a federal government policy to increase gas taxes "a large amount" to encourage the purchase of fuel-efficient cars.
HNTB Corporation (Kelton Global)	2015	Adults in the greater New York City area	5% of respondents chose increased gas taxes as their preferred method to fund "maintenance or expansion of service to accommodate increased ridership for the local transportation network" from a list of eight options that included fares, tolls, other taxes, and increased federal and private funding.

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
HNTB Corporation (Kelton Global)	2016	U.S. residents, over 18 years old	65% of respondents were "extremely" or "somewhat likely" to "support" a "Vehicle Miles Traveled system" or "Mileage Based User Fee" to help fund "maintenance or construction of local roads, bridges, or interstate highways." The question was preceded by the statement "A Vehicle Miles Traveled system or Mileage Based User Fees are alternatives to gas taxes in which vehicles owners are assessed a fee based on how much a vehicle is driven."
CalChamber	2017	CA voters	61% of respondents "strongly support" or "somewhat support" changing how they pay for road repair and operation in California by "replacing the gasoline tax with a fee based on number of miles driven no matter how the car or truck is powered."
Mineta Transportation Institute (Agrawal, et al.)	2009	CA residents	50% of respondents "supported" replacing the state gas tax with a fee averaging 1¢ per mile for every mile driven within the state, with the fee rate varying by how much the vehicle pollutes so that "vehicles that pollute the least would pay less, and vehicles that pollute the most would pay more per mile." Respondents were informed that "vehicles would be equipped with an electronic means to keep track of miles driven, and the fee would be paid when drivers buy gas." Support for the proposal was only 28% for a variation in which all vehicles paid the same 1¢ per mile rate.
Mineta Transportation Institute (Agrawal & Nixon)	2016	U.S. residents	48% of respondents said they would "strongly support" or "somewhat support" a new mileage tax in which "on average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more," and "vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support for a mileage tax not tied to vehicle pollution, in which "each driver would pay a tax of 1 cent for every mile driven," was 23%.
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County FL residents	46% of respondents said they "strongly agree" or "somewhat agree" with a "tax on the number of miles driven" as an option "to pay for unfunded transportation needs in Pasco County."
Washington State Transportation Commission (EMC Research)	2012	WA residents	44% of respondents thought that "a fee based on the number of miles driven – people who used the system more would pay a higher fee" was "definitely" or "probably" a "good way to fund increased transportation investment."
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	44% of respondents would "strongly support" or "somewhat support" a new mileage tax in which, "on average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more," and "vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support for a mileage tax not tied to vehicle pollution, where "each driver would pay a tax of 1 cent for every mile driven," was 24%.

Table 12. Public Opinion Polling on Mileage Taxes

Sponsor (and author of source in this report bibliography, if different) Sampling frame Findings Survey date Mineta Transportation 2017 U.S. residents 44% of respondents would "strongly support" or "somewhat support" adopting "a new tax based on the number of miles a person drives" if the tax rate varies "depending upon how much the vehicle pollutes." Institute (Agrawal & Nixon) Support for a mileage tax not tied to pollution, where "each driver would pay a tax of 1 cent for every mile driven," was 23%. Mineta Transportation 2014 U.S. residents 43% of respondents said they would "strongly support" or "somewhat support" a new mileage tax in which, "on Institute (Agrawal & average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, Nixon) and vehicles that pollute more would be charged more." and "vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support for a mileage tax not tied to vehicle pollution, in which "each driver would pay a tax of 1 cent for every mile driven," was 19%. Mineta Transportation U.S. residents 41% of respondents "supported" a tax where "vehicles would be charged one cent per mile, but vehicles that 2012 Institute (Agrawal, pollute less would be charged less, and vehicles that pollute more would be charged more. ... Vehicles would Nixon & Murthy) have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support for a mileage tax not tied to vehicle pollution, in which "each driver would pay a tax of 1 cent for every mile driven." was 21%. **Bay Area Council** 2015 San Francisco 41% of respondents "strongly" or "somewhat favor" a "vehicle fee to fund transportation improvements that (EMC Research) Bav Area is determined by the number of miles the vehicle is driven, with strict privacy protections and no costs to the residents owner for new technology installation." Fiscal Research 2012 GA adult drivers 39% of respondents would "support" a VMT tax of 1.60 cents per mile. The survey described the tax "as a Center, Andrew Young replacement for the current gas tax without describing the mechanism by which miles would be determined. School of Policy Respondents were asked to imagine that, instead of paying a state gas tax, they could pay at the gas pump a Studies, Georgia State tax based solely on the number of miles the vehicle was driven in Georgia since it was last refueled." University (Ellen, 36% of respondents would "support" a VMT tax of 2.10 cents per mile "as a replacement for the current Sjoquist & Stoycheva) gas tax without describing the mechanism by which miles would be determined. 33% of respondents would "support" a VMT tax of 1.35 cents per mile "as a replacement for the current gas tax without describing the mechanism by which miles would be determined." **HNTB** Corporation 2010 U.S. residents 39% of respondents agreed with the statement "the U.S. should try to reduce transportation greenhouse-gas (Kelton Research) emissions by reducing the number of miles that vehicles travel through a mileage use tax." Mineta Transportation 2013 39% of respondents "supported" a tax where "vehicles would be charged one cent per mile, but vehicles U.S. residents Institute (Agrawal & that pollute less would be charged less, and vehicles that pollute more would be charged more." Support Nixon) decreased to 19% of respondents when all vehicles paid the same flat fee of one cent per mile. Mineta Transportation 2011 U.S. residents 36% of respondents "supported" a tax where "vehicles would be charged one cent per mile, but vehicles that Institute (Agrawal & pollute less would be charged less, and vehicles that pollute more would be charged more. ... Vehicles would Nixon) have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support decreased to 22% of respondents when all vehicles paid the same flat fee of one cent per mile.

Table 12, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
The Rockefeller Foundation (Hart Research Associates)	2011	U.S. registered voters	34% of respondents found it "acceptable" to replace the federal gas tax with "a fee based on the number of miles driven per year." 40% of respondents "favored" developing a pilot program in "select states and localities" to test such a replacement.
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa OK-region residents	33% of Tulsa residents were somewhat or very willing to pay "a small user tax that would be based on the number of miles a vehicle is driven each year" to "help fund public transportation improvements."
Mineta Transportation Institute (Agrawal & Nixon)	2010	U.S. residents	33% of respondents "supported" a tax where "vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more Vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas." Support decreased to 22% of respondents when all vehicles paid the same flat fee of one cent per mile.
Mason-Dixon Polling and Research (Coker)	2015	OR registered voters	32% of respondents "support" a "1.5 cent per mile driving mileage tax as an alternative to the existing state and local fuel taxes to pay for road maintenance."
Field Institute Faculty Fellowship (Fisher & Wassmer)	2015	CA registered voters who own a motor vehicle	30% of respondents would "support the installation of an electronic device on your motor vehicle to measure the exact amount of miles that you drive to enable the state to assess an accurate fee for road funding based upon the number of miles driven to replace or eliminate the current gasoline taxes."
Wall Street Journal	2012	Readers of the paper's blog who responded to an invitation to vote	28% of respondents said that in place of the gas tax there should be a "tax instead by miles driven."
Hoover Institution	2015	CA residents, 18 and older	27% of respondents "support" replacing the state gas tax with "a new tax on the number of miles a vehicle drives." The question was preceded by the statement: "Some people argue that in order to raise enough revenue to pay for California's transportation infrastructure needs, California should end the current state tax on each gallon of gas purchased and replace it with a new tax on the number of miles a vehicle drives. Supporters of this change point out that, in 2014, Californians drove 2% more miles than they did in 2006. But the cars and trucks they drove consumed 7% less gasoline because of better fuel efficiency in gas-powered vehicles and the use of more electric vehicles, so the total amount of money collected from the gas tax each year is less than it used to be." Two alternative versions of the question asked of other subsets of respondents had slightly lower support, at 19% and 23%.
Michigan Infrastructure and Transportation Association (Fisher & Wassmer)	2014	MI likely voters	24% of respondents "support" the "use of an electronic device to measure miles for a mileage-based fee."

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
Mountain-Plains Consortium (Ozbek, Albeiruti & Atadero)	2013	CO, ND, SD, UT and WY residents	23% of South Dakota respondents agreed or strongly agreed with the statement, "I support the use of Mileage-Based User Fees to fund the highway system." Researchers also surveyed residents of Colorado, North Dakota, Utah and Wyoming. Among all five states, support ranged from 18%-23%.
HNTB Corporation (Kelton Research)	2012	U.S. residents	23% of respondents would "most prefer" a "vehicle miles driven user fee" when asked to choose whether they would "most prefer" as a way to "get funding for the nation's interstate projects." (The alternatives were tolls or an increased federal gas tax.)
Reason-Rupe Public Opinion Survey (Princeton Survey Research Associates International)	2014	Adult residents of the continental U.S.	23% of respondents said they would favor "a plan to eliminate the gas tax and instead charge drivers a fee based on the number of miles they drive."
The University of Idaho James A. and Louise McClure Center for Public Policy Research	2014	ID likely voters	23% of respondents said they would "strongly support" or "somewhat support" adding "a mileage-based fee that charges drivers according to how many miles they drive each year" to "raise more funds for Idaho's roads and bridges."
Mineta Transportation Institute (Weinstein, et al.)	2006	CA likely voters	23% of respondents "would vote for" replacing the state gas tax with a mileage fee where "each driver would pay a fee of 1¢ per mile for every mile driven within the state." Respondents were informed that "vehicles would be equipped with an electronic means to keep track of miles driven, and the fee would be paid when drivers buy gas."
Indiana University– School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	22% of respondents said they would "support" or "strongly support" replacing the gasoline tax with a "mileage user-fee" plan that was described in detail and would require drivers to report "the mileage on your odometer to the department of motor vehicles in your state." Half of respondents were also presented with an alternate plan, in which an advanced GPS device would "count the number of miles you drive each year, and wirelessly report this number to the department of motor vehicles in your state" while also collecting "data on your location including when and where (the specific roads) you drive," and drivers would be "required to pay \$250 for the device and its installation"; 11% of the subset said they would "support" or "strongly support' replacing the gasoline tax with such a plan. Support for several other variations, both general and detailed, ranged from 12% to 21%.
Associated Press-GfK Poll	2014	U.S. adults	20% of respondents said they would support replacing "federal gas and diesel taxes with taxes based on how many miles a vehicle is driven" as a way to "pay for transportation projects, such as highway construction, improvements to roads and bridges, and maintenance of public roads."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Detroit Free Press/ WXYZ-TV 7/ WLNS- TV 6/ WOOD-TV 8/ WJRT-TV 12 (EPIC- MRA)	2014	MI likely voters	18% of respondents said it was a "very good" or "somewhat good" idea "to change to a system where motorists pay a new fee that would be based on several factors, including the number of miles they drive, the time of day they travel, the route taken and the weight of the vehicle they drive" in order to "provide the increased funding needed to improve and repair the roads" in Michigan.
Rasmussen Reports	2009	U.S. residents	18% of respondents "favored" some form of mileage tax "to help fund the building and repair of roads and bridges."
Barr Foundation (MassINC Polling Group)	2013	MA registered voters	17% of respondents would "strongly" or "somewhat" support a mileage fee based on miles driven. The question was preceded by the statement: "Assuming the Massachusetts state government decided to raise funds for maintaining and improving our transportation system, one option is to adopt a new tax based on the number of miles a person drives. Each driver would pay a tax for every mile driven. The car's mileage would be read during annual vehicle inspections, and the tax would be paid at that time."
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	12% of respondents expressed support for replacing the state fuel tax with "a user fee of one cent per mile driven" by rating the statement 7 or higher on a 0-to-10 scale.
Civitas Institute	2009	NC registered voters	12% of respondents "would view favorably" a switch to "a plan that would charge all drivers based on the number of miles they drive in North Carolina." (The question did not specify what the "current system" was.)
<i>Rasmussen Reports</i> (Pulse Opinion Research)	2012	U.S. residents	12% of respondents "favored" a mileage tax when it was presented as "a good way to raise funds for highway maintenance."
High Point University Survey Research Center	2016	NC likely voters in Rep. and Dem. primaries	12% of likely primary voters in North Carolina "support" a "tax on the number of miles people drive." The question was preceded by the statement: "Now we would like to ask you about some transportation issues here in North Carolina. Please tell me if you support or oppose each of these proposals to pay for new highways and additional lanes of traffic."
American Trucking Association (Public Opinion Strategies)	2014	U.S. registered voters	10% of respondents said they "somewhat support" or "definitely support" the concept of "raising money for transportation by using technology to charge drivers a fee for each mile a vehicle is driven."

Sponsor (and author of source in this report bibliography, if different) Survey date Sampling frame Findings City of Palo Alto 2016 Palo Alto, CA, 75% of respondents "think" they "would vote ves" on a Santa Clara County 30-year, half-cent sales tax "to (Fairbank, Maslin, likely voters fund transit improvements like Caltrain to increase capacity and improve safety at crossings, provide funds for street maintenance and pothole repair, bike and pedestrian improvements, especially near schools, and Maulin. Metz & ease congestion on County Expresways and key highway interchanges." Support dropped to 69% after Associates – FM3) respondents heard about a possible city tax for transportation. San Miquel 73% would support "a one-guarter of one percent increase in the San Miguel County sales tax rate" to fund San Miguel County 2016 (Keating Research) County. NM. "the formation of the San Miguel County Regional Transportation Authority, also known as SMART transit." Precincts 1, 2, & 3 likely voters San Bernardino and 2002 Residents of 72% of Riverside County residents and 75.8% of San Bernardino County residents said that they would Riverside Counties, CA Riverside and support local sales tax measures in upcoming referendums (in 2002). Analysis of the survey data showed that San Bernardino. the measures were supported consistently across a variety of subgroups (income level, racial identity, voter CA, counties registration status, and likelihood of voting). All groups except black/African-Americans in Riverside County showed more than 69% support for the measures. Contra Costa 2016 Contra Costa 72% of respondents would vote "yes to approve" a half-cent county sales tax increase that would be used for "implementing the Contra Costa County 25-year Transportation Expenditure Plan to: Expand Bart in Contra Transportation County, CA, likely Costa County: Improve transit connections to jobs and schools: Fix roads, improve highways and increase Authority (EMC voters Research) bicycle and pedestrian safety: Reduce traffic congestion and improve air guality: Enhance transit services for seniors and people with disabilities." Lower percentages of respondents said they would approve alternative versions of the sales tax increase. Alameda County 2011 (March) Alameda County, 71% of respondents were "likely to vote yes to approve" an extension of a 0.5¢ county sales tax "to address Transportation CA, registered an updated plan for the county's current and future transportation needs." Respondents were informed about Commission the fact that the tax passed twelve years previously and that "money from this measure could only be spent voters on the voter-approved expenditure plan, and all money from this measure would stay in Alameda County and (EMC Research) could not be taken by the state." In separate questions, respondents showed a preference for making the tax permanent with votes on the spending plan every 20 years to just extending the tax 20 years (54% to 29%) and maintaining the tax at its current rate rather than increasing it by $0.25 \notin (45\% \text{ to } 39\%)$. Sacramento 2016 (March) Sacramento 70% of respondents who heard support messages would "vote yes to approve" a measure to repair streets and bridges, relieve traffic, build an expressway, extend light rail, support bus operations, and improve bicycle Transportation County, CA, likely and pedestrian safety by "enacting a countywide 30-year sales tax, at a rate of one half of one percent, raising Authority (Evans) voters approximately 100 million dollars annually, with independent oversight and audits." Prior to hearing support message, 69% would vote "yes to approve" the measure.

Table 13. Public Opinion Polling on Sales Taxes

Sponsor (and author of source in this report bibliography, if different) Sampling frame Findings Survey date Virginia Transportation 2013 VA likely voters 69% of respondents said that the following proposal to increase transportation funding was "closest" to their Construction Alliance opinion: "in order to increase transportation funding, the current gas tax of seventeen point five cents per (Public Opinion gallon should be eliminated and replaced with an eight tenths of a penny increase in the state sales tax. The additional revenue from the state sales tax increase would be dedicated entirely to transportation and Strategies) Virginia's state sales tax would still be the lowest in the region." (The alternative presented was to raise the state per-gallon gas tax and also index the rate to inflation.) Alameda County Alameda County, 69% of one group of respondents were "likely to vote yes to approve" a measure "extending the existing 2011 (Oct.) transportation sales tax and increasing it by one half cent." 59% of a second group of respondents were "likely Transportation CA. registered Commission voters to vote yes to approve" a measure that "authorizes a one half cent transportation sales tax." In both cases, respondents were informed that the measure would "address the County's current and future transportation (EMC Research) needs," would require "voter approval every 20 years on a new expenditure plan, with citizen oversight and a local jobs creation program" and that "no money can be taken by the state." Center for the Study of Nashville/ 68% of respondents said they would be "willing to pay 50 cents more in sales tax for every \$100 you spend 2017 **Democratic Institutions** Davidson if the money went towards public transportation improvement in Nashville," Among a different group of respondents (the sample was split), 63% said they would be willing to pay 25 cents more in sales tax for the County, TN, adult residents same purpose. Transportation 2014 Marin County, 68% of respondents said they would "definitely" or "probably" vote yes on a measure to "authorize a Authority of Marin CA, likely voters guarter cent sales tax to "provide new or improved school bus service, help reduce traffic congestion on (Godbe Research) our local roads, provide seniors low cost or no cost mobility options, improve pedestrian travel while also accommodating bikes, and fix potholes and maintain local roads." Contra Costa 2014 Contra Costa 68% of respondents said they would vote yes to approve a ballot measure that would increase the county Transportation County, CA. sales tax by a half cent to fund a "25 year Transportation Expenditure Plan." Respondents were given Commission registered voters details of the plan, which would "expand [Bay Area Rapid Transit] in Contra Costa County; improve transit connections to jobs and schools; fix roads, improve highways and increase bicycle and pedestrian safety; (EMC Research) reduce traffic congestion and improve air quality; [and] enhance transit services for seniors and people with disabilities." Transportation 2017 WI likely voters 67% of respondents would strongly or somewhat "support allowing counties or local governments, if approved by the voters in a referendum, to raise the sales tax by a half percent for a fixed period of time, solely for the Development Association use on road and bridge repair and maintenance."

Table 13, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
City of San Jose, CA (Fairbank, Maslin, Maullin, Metz & Associates)	2014	San Jose, CA, likely voters	66% of respondents said they would "definitely" or "probably" vote yes on a possible ballot measure to "enact a one-quarter cent sales tax for 9 years used exclusively for street improvements, with citizens' oversight and independent audits of all expenditures" after being given information on how revenue could be spent, as well as arguments for and against the measure. Before being given this additional information, 65% of respondents said were in favor of the measure. Throughout the survey, 52% of respondents consistently said they would vote yes each time they were asked.
Transportation Agency for Monterey County (EMC Research)	2016	Monterey County, CA, likely voters	66% of respondents would vote "yes" to approve a measure for the Transportation Agency for Monterey County to enact a three-eighths percent sales tax to "fund a Transportation Safety and Investment Plan to: improve safety on local roads and highways, repair potholes, maintain streets and roads, reduce traffic congestion, improve transportation for seniors, young people, and people with disabilities, and make walking and biking safer."
Santa Cruz County Department of Public Works (Gene Bregman & Associates)	2014	Likely voters in unincorporated areas of Santa Cruz County, CA	64% of respondents said they would "definitely" or "probably" vote yes on a possible ballot measure to establish a one-quarter cent sales tax "in the unincorporated areas of the county for a period of seven years, with local citizen oversight, and all funds being used only in the unincorporated areas of Santa Cruz Countyin order to repair, maintain and improve local streets, roads, sidewalks and bike lanes, and make neighborhood roads safer" after hearing arguments for and against the measure. 59% said they would "definitely" or "probably" vote yes on such a measure if the tax increase were a half cent. Before hearing pro and con arguments, 62% supported the quarter-cent increase and 55% supported the half-cent increase. 34% said they would "definitely" or "probably" vote yes if the tax were permanent rather than expiring after seven years.
Marquette Law School	2016	WI registered voters	64% of respondents "favor legislation that would allow counties to add a one-half percent sales tax for four years to be used for local, street and highway maintenance so long as voters approve the increase in a referendum vote."
Judy Ford Wason Center for Public Policy	2013	VA registered voters	63% of respondents said they would "support replacing the gas tax with an increased sales tax." 45% of respondents said they would support an "increase the state sales tax" in order to fund "transportation needs, including building new roads and bridges and maintaining current roads and bridges."
Regional Transportation Alliance (Fallon Research)	2012	Orange County NC registered voters	60% of respondents "would vote for" a 0.5¢ local sales tax "to pay for new or expanded public transportation." Exempting "food, medicine, utilities, and gasoline" from the tax increased support for the measure (41% said they were "more likely" to vote for the measure vs. 7% "less likely"), as did a scenario where gas prices rose to \$5/gallon (27% "more likely" to 14% "less likely"). A scenario where "funding was used just for more bus routes and services, and did not include any rail systems" reduced support for the measure (8% "more likely" to 35% "less likely").

Mineta Transportation Institute

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
San Francisco County Transportation Authority	2017	San Francisco, CA registered voters	59% of respondents responded definitely, probably, or undecided/lean yes when asked "shall the San Francisco sales tax rate be increased by 1/2-cent bringing the total tax to 9%" in order to fund a list of transportation improvements.
Triangle Transportation Authority (Fallon Research)	2010	Registered voters in Durham, Orange, and Wake Counties, NC	58% of respondents "would vote for" a 0.5¢ sales-tax increase "to pay for new or expanded public transportation." 53% of a segment of respondents "would vote for" a 0.75¢ county sales tax to fund "new or expanded public transportation, new school construction, and the purchase of open space for preservation."
Los Angeles Metro (Fairbank Maslin Maullin)	2007	Los Angeles County CA registered voters	56% of respondents "would vote yes in favor" of a 0.5¢ county sales tax for transportation projects "with local control, required annual independent financial audits, and no funds to be used for administrators' salaries." Respondents were presented with the types of projects that would be funded with the tax. 57% of respondents "would vote yes in favor" of the same measure if the tax was set at 0.25¢.
Mineta Transportation Institute (Agrawal & Nixon)	2016	U.S. residents	56% of respondents would somewhat or strongly support "a new national half-cent sales tax to pay for transportation."
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	55% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
UtahPolicy (Dan Jones & Associates)	2015 (April)	UT registered voters	54% of respondents said they would "strongly favor" or "somewhat favor" a local "sales tax increase" as allowed by Utah HB362, which lets cities and counties seek voter approval of a quarter-cent sales tax to fund local roads and transit districts, if their local officials were to "put this sales tax increase on the ballot."
Center for the Study of Los Angeles, Loyola Marymount University	2012	Los Angeles, CA registered voters	54% of respondents "would vote yes" to extend a 0.5¢ county sales tax "for transportation-related projects, like the metro rail." Respondents were informed about the fact that the tax was passed four years previously and was going to last a total of thirty years, and that their vote would be to extend the tax another thirty years.
Greater Tampa Chamber of Commerce (SEA Polling & Strategic Design)	2016	Hillsborough County, FL adults	54% of respondents who heard positive messaging would "vote for" a measure to raise the sales tax 0.5% "to fund transportation projects across Hillsborough County." 47% of respondents said they would vote for the 0.5¢ sales tax increase after they had heard statements opposing the measure. 49% of respondents would vote for the measure when it was first described to them, without either positive or negative messaging.
University of Arkansas (Parry)	2012	AR adult residents	53% of respondents "favor" a measure that would "increase the statewide sales tax from 6 percent to 6.5 percent for the next 10 years in order to generate money for Arkansas highways and other road construction projects. The increase would not apply to groceries."

Mineta Transportation Institute

Sponsor (and author of source in this report bibliography, if			
different)	Survey date	Sampling frame	Findings
Washington Post & Schar School of Policy and Government	2017	Commonwealth of Virginia adults	53% of respondents would support "creating a new sales tax in the D.C. region that would directly fund Metro."
UtahPolicy.com (Bernick)	2015 (August)	UT adults	52% of respondents "favor" a quarter-cent sales tax hike for local transportation needs.
Mineta Transportation Institute (Agrawal & Nixon)	2017	U.S. residents	52% of respondents would strongly or somewhat support "a new national half-cent sales tax to pay for transportation."
Cincinnati USA Regional Chamber	2017	Cincinnati region voters	52% of respondents answered definitely yes, probably yes, or undecided/lean yes when asked if they favor "a ballot measure for Hamilton County to fund improvements to the bus system through a sales tax" if "the sales tax rate were one half of 1%."
Magellan Strategies & Public Policy Polling	2018	CO 2018 general election voters	52% of respondents would vote definitely or probably yes on a measure that increases "funding for transportation projects across the state by increasing state sales taxes by 0.62% for twenty-five years."
Atlanta Journal- Constitution/Channel 2 Action News (Mason- Dixon Polling & Research, Inc.)	2011	Atlanta, GA-area registered voters	51% of respondents "would vote yes, in favor" of a 1¢ local sales tax to "fund transportation projects in the [local] special transportation district." Respondents were informed that "projects to be funded would be requested by each county and then selected by a regional group of elected officials."
Denver RTD (The Kenney Group)	2010	Metro Denver and Boulder County, CO likely voters	51% of respondents "would vote for" a 0.4¢ increase in county sales taxes devoted to a set of regional transportation projects. Earlier in the survey, 48% of respondents agreed that "we should double the sales tax from four pennies on ten dollars to a total of eight pennies on ten dollars" in order to complete the set of projects "on time in 2017."
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	51% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
Regional Transportation Alliance (Fallon Research)	2012	Wake County, NC registered voters	50% of respondents "would vote for" a 0.5¢ local sales tax "to pay for new or expanded public transportation." Exempting "food, medicine, utilities, and gasoline" from the tax increased support for the measure (44% said they were "more likely" to vote for the measure vs. 9% "less likely"), as did a scenario where gas prices rose to \$5/gallon (23% "more likely" to 20% "less likely"). A scenario where "funding was used just for more bus routes and services, and did not include any rail systems" reduced support for the measure (12% "more likely" to 40% "less likely").
Public Policy Institute of California	2017	CA adult residents	50% of respondents would vote "yes" if "your local ballot had a measure to increase the local sales tax to pay for roads and surface transportation projects in your part of California."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal, Nixon & Murthy)	2012	U.S. residents	49% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
SaintPetersBlog (St. Pete Polls)	2014	Pinellas County, FL likely voters	48% of respondents said they "support the Greenlight Pinellas Plan to improve public transit including expanded bus service, local passenger rail and regional connections to be funded by levying a one percent sales surtax."
Tampa Bay Partnership (FrederickPolls)	2014	Pinellas County, FL residents who voted in the November 2014 election	48% of respondents said that – regardless of how they voted on the defeated Greenlight Pinellas ballot issue, which would have raised sales taxes by 1 cent to expand bus service and build a light rail system – there was "a time over the last year or so when they supported it or thought it might be a good idea." 37% said they had voted yes. 39% said they would vote yes if they "had the chance to vote on a new and different transportation plan for Pinellas County that included expanded bus transit service but no light rail at a cost of a one-half cent sales tax increase." Respondents were also asked to rate specific aspects of the plan. 33% rated the sales tax increase as "very positive" or "somewhat positive." 40% rated the fact that the plan "would have done away with the current property tax for transportation and replaced it with a penny sales tax increase" as "very positive" or "somewhat positive."
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	47% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
Public Policy Institute of California (Baldassare)	2005	Los Angeles County, CA residents	47% of respondents "would vote yes" for a 0.5¢ local sales tax "for local transportation projects."
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	45% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
Talkbusiness.net (Brock)	2012	AR likely voters	42% of respondents "would vote for" a 0.5¢ statewide sales tax increase that "would be used to pay for a four- lane highway system statewide."
Mineta Transportation Institute (Agrawal & Nixon)	2010	U.S. residents	42% of respondents "supported" a "new national half-cent sales tax to pay for transportation."
Mineta Transportation Institute (Weinstein, et al.)	2006	CA likely voters	41% of respondents would "support" a 0.5¢ increase in the state sales tax "for transportation purposes, such as maintaining and improving local streets, highways, and mass transit."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Marquette University Law School	2017	Milwaukee area adults	41% of respondents would support "a special sales tax across the five counties in the Milwaukee area to provide additional funding for highway construction."
Pasco County, Florida (National Research Center, Inc.)	2014	Pasco County, FL residents	40% of respondents said they "strongly agree" or "somewhat agree" with an increase in sales tax as an option "to pay for unfunded transportation needs in Pasco County."
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	39% of respondents expressed support for "dedicating state sales tax on vehicles to transportation" by rating the proposal 7 or higher on a 0-to-10 scale. 13% supported replacing "the state fuel tax with a 6.25% state sales tax on fuel."
Center for the Study of Democratic Institutions	2017	Nashville/ Davidson County, TN, adults	39% of respondents support a "15-year transit plan to fund a new and expanded public transportation system" by increasing "the sales tax by half a cent next year and another half a cent in 2023."
SurveyUSA	2007	Seattle-Tacoma MSA residents	38% of respondents "would support" raising the sales tax by 0.6¢ "in order to pay for transportation projects." Also, 25% of respondents "would support" the sales-tax increase in concert with an increased "car license tab tax" to pay for "a combination of road, highway, and mass transit improvements" in the survey area.
Vanguard Public Affairs (Denno Research)	2015	MI likely voters	37% of respondents said they were "supportive" or "very supportive" of a ballot measure "to raise the state sales tax by 1%, with a majority of the funds going to fix Michigan's roads."
SurveyUSA	2012	Atlanta, GA-area likely voters	36% of respondents were "certain to vote yes" on a 1¢ sales tax increase "to fund regional transportation projects."
Ax the Tax (St. Pete Polls)	2014	Pinellas County, FL likely voters	35% of respondents said they would vote no on an upcoming referendum "to increase your sales tax to pay for the proposed light rail program" between Clearwater and St. Petersburg, Florida. After being given more information about the proposal – including information about route and stops, that the sales tax would increase to 8%, that it would be the highest sales tax rate of any Florida county, and "that the light rail plan would cost your household over \$4,000" – 33% said they would be more likely to vote for the plan and 62% said they would be less likely.
20/20 Insight Polling	2011	Atlanta, GA-area registered voters	33% of respondents "favored" a measure "to increase their local sales tax by one cent for every dollar spent" if "the money raisedwill be used solely for transportation projects on a list approved by regional leaders."
Roanoke College	2013	VA residents	33% "favor" a proposal that "[t]he gas tax would be eliminated, but the sales tax would be increased. Vehicle registration fees would also increase. The additional funds from the sales tax would go to transportation and a higher percentage of the existing sales tax revenue would go to transportation as well."
WSB-TV (Landmark Communications)	2015	GA adults who voted within the last 4 years	32% of respondents said they would support "an increase of 1¢ in the statewide sales tax to fund maintenance of existing roads and bridges."

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Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
USC Sol Price School of Public Policy (M4 Strategies and Benson Strategy Group)	2013	City of Los Angeles, CA likely voters	30% of respondents would vote "definitely yes" on Proposition A which "would enact a one-half cent sales tax in order to offset severe and repeated state cuts and provide local funding for: 911 emergency response services; maintaining firefighter, paramedic, and police officer staffing levels; continuing community policing, senior services, after-school gang and drug prevention programs; repairing potholes and sidewalks; and other general municipal services."
Washington State Transportation Commission (EMC Research)	2012	WA residents	30% of respondents thought that "adding the sales tax to gas purchases" was "definitely" or "probably" a "good way to fund increased transportation investment.
Washington Post	2013	MD adult residents	27% of respondents would "favor raising Maryland's overall sales tax from 6 percent to 7 percent, if the money were used for transportation projects such as building roads, traffic management or public transportation."
Mountain-Plains Consortium (Ozbek, Albeiruti, and Atadero)	2013	CO, ND, SD, UT, and WY residents	24% of South Dakota respondents agreed or strongly agreed with the statement, "I support the collection of additional sales tax on all goods to fund the highway system." Researchers also surveyed residents of Colorado, North Dakota, Utah and Wyoming. Among all five states, support ranged from 13% to 24%.
HNTB Corporation (Kelton Research)	2013	U.S. residents	24% of respondents stated that they would be "willing to spend more money on" a sales tax "if it was dedicated to long term surface transportation improvements in their area."
Build Our Bridge Now Coalition (Public Opinion Strategies)	2015	Boone, Campbell, and Kenton Counties, KY, registered voters	23% of respondents said they would support a local sales tax increase "rather than having tolls" as a way to pay for a new bridge span for Interstate 75 traffic over the Ohio River.
HNTB Corporation (Kelton Global)	2014	Adults in the greater New York City area	22% of respondents chose sales taxes as their preferred method to raise funds "to go toward improving the transportation network in the tri-state area" from a list of four options that also included public transportation fares, property taxes, and tolls and user fees.
HNTB Corporation (Kelton Research)	2012	U.S. residents	21% of respondents stated that they would be "willing to spend more money on" a sales tax "if it was allocated to long-term interstate improvements in [their] area."
HNTB Corporation (Kelton Research)	2011	U.S. residents	18% of respondents would be "willing to spend more money on" sales taxes if the money was allocated to "long-term transportation investments such as expanding highway capacity to reduce congestion or introducing high-speed rail in [their] area."
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	18% of respondents said they "agree" or "strongly agree" with the statement, "The gasoline tax should be replaced with a higher general retail sales tax rate."

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Quinnipiac University	2015	NYC registered voters	13% of respondents chose raising the New York City sales tax over two other options – raising the New York state gas tax and adding tolls on bridges into Manhattan – as their preferred way for the city to "get additional money to maintain roads, bridges and mass transit."
YouGov	2015	Registered YouGov members	6% said sales taxes "should be the main way that governments pay for road repairs and construction."
HNTB Corporation (Kelton Global)	2015	Adults in the greater NYC area	4% of respondents chose increased sales taxes as their preferred method to fund "maintenance or expansion of service to accommodate increased ridership for the local transportation network" from a list of eight options that included fares, tolls, other taxes, and increased federal and private funding.

ENDNOTES

- 1. For the results of the first eight years of polling in this series, see Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think about Federal Transportation Tax Options? Results from a National Survey (San José, CA: Mineta Transportation June Institute. 2010), http://transweb.sjsu.edu/MTIportal/research/publications/ documents/2928_09-18.pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think About Federal Transportation Tax Options? Results from Year 2 of a National Survey (San José, CA: Mineta Transportation Institute, June 2011), http://transweb.sjsu.edu/PDFs/research/Transportation taxes public opinion 1031.pdf (accessed April 20, 2016); Asha Weinstein Agrawal, Hilary Nixon, and Vinay Murthy, What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 3 of a National Survey (San José, CA: Mineta Transportation Institute, June 2012), http://transweb.sjsu.edu/PDFs/research/1128-american-survey-federaltaxes-public-transit-highways-streets-roads.pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 4 of a National Survey (San José, CA: Mineta Transportation Institute, June 2013), http://transweb.sjsu.edu/PDFs/research/1228-American-tax-poll-2013public-transit-highways-streets-roads.pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 5 of a National Survey (San José, CA: Mineta Transportation Institute, June 2014), http://transweb.sjsu.edu/PDFs/research/1328-road-tax-public-opinion-poll-2014. pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 6 of a National Survey (San José, CA: Mineta Transportation Institute, June 2015), http://transweb.sjsu.edu/PDFs/ research/1428-road-tax-public-opinion-poll-2015.pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 7 of a National Survey (San José, CA: Mineta Transportation Institute, June 2016), https://transweb.sjsu.edu/sites/default/files/1528-road-and-transit-taxespublic-opinion-survey-2016.pdf; and Asha Weinstein Agrawal and Hilary Nixon. What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 8 of a National Survey (San José, CA: Mineta Transportation Institute, June 2017), http://transweb.sjsu.edu/PDFs/ research/1728-what-do-americans-think-about-federal-tax-options-to-support-publictransit-highways-and-local-streets-and-roads.pdf.
- 2. Search terms used included transportation tax, transit tax, gas tax, gasoline tax, motor fuel tax, mileage tax, mileage fee, sales tax, transportation finance, motor fuel fee, road use, road charge, vehicle miles, and vehicle miles traveled.

- 3. National Conference of State Legislatures, "Recent Legislative Actions Likely to Change Gas Taxes" (February 20, 2018), http://www.ncsl.org/research/transportation/2013-and-2014-legislative-actions-likely-to-change-gas-taxes.aspx (accessed May 21, 2018).
- 4. The current federal tax on gasoline is 18.4¢ per gallon, but respondents were told that it was 18¢ per gallon, to make the survey simpler to understand.
- 5. Pew Research Center, "What Low Response Rates Mean for Telephone Surveys" (May 2017), http://assets.pewresearch.org/wp-content/uploads/sites/12/2017/05/12154630/ RDD-Non-response-Full-Report.pdf (accessed May 22, 2017).
- The formulas used to calculate these rates are available at American Association for Public Opinion Research, "Response Rates: An Overview," (no date) http://www. aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Response-Rates-An-Overview.aspx (accessed May 31, 2018).
- The U.S. Census Bureau's 2016 American Community Survey 1-Year estimates were downloaded from the American FactFinder website using the tables for Demographic and Housing Estimates (DP05), Annual Estimates of Resident Population by Single Year of Age (PEPSYASEXN), 1-Year Household Income in the Past 12 Months Estimates (in 2015 inflation-adjusted dollars (B19001), and 1-Year Educational Attainment Estimates (S1501), https://factfinder.census.gov/faces/nav/jsf/pages/ searchresults.xhtml?refresh=t (accessed May 17, 2017).
- For more information about the use of p-values in scientific research, see: American Statistical Association, "Statement on Statistical Significant and P-values," ASA News, March 7, 2016, https://www.amstat.org/newsroom/pressreleases/P-ValueStatement. pdf (accessed June 1, 2018).
- 9. To test whether support levels might be lowest among people with the very lowest incomes, we compared support among households with an annual income of \$25,000 per year or less to support among households with higher income levels, but no clear pattern emerged.
- For the results of the first years of polling in this series, see Agrawal and Nixon (2010), Agrawal and Nixon (2011), Agrawal, Nixon, and Murthy (2012), Agrawal and Nixon (2013), Agrawal and Nixon (2014), Agrawal and Nixon (2015), Agrawal and Nixon (2016), and Agrawal and Nixon (2017).
- 11. Pew Research Center, "With Budget Debate Looming, Growing Share of Public Prefers Bigger Government," (April 24, 2017), http://www.people-press.org/2017/04/24/ with-budget-debate-looming-growing-share-of-public-prefers-bigger-government/ (accessed May 22, 2017).

- 12. For the complete 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017 results, see Agrawal and Nixon (2010), Agrawal and Nixon (2011), Agrawal, Nixon, and Murthy (2012), Agrawal and Nixon (2013), Agrawal and Nixon (2014), Agrawal and Nixon (2015), Agrawal and Nixon (2016), and Agrawal and Nixon (2017).
- 13. The U.S. Census Bureau's 2015 American Community Survey 1-Year estimates were downloaded from the American FactFinder website using the tables for Demographic and Housing Estimates (DP05), Annual Estimates of Resident Population by Single Year of Age (PEPSYASEXN), 1-Year Household Income in the Past 12 Months Estimates (in 2015 inflation-adjusted dollars (B19001), and 1-Year Educational Attainment Estimates (S1501), https://factfinder.census.gov/faces/nav/jsf/pages/ searchresults.xhtml?refresh=t (accessed May 17, 2017).

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