What Do Americans Think about Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Eight of a National Survey

MTI Report 12-77

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REPORT 12-77

WHAT DO AMERICANS THINK ABOUT FEDERAL TAX OPTIONS TO SUPPORT PUBLIC TRANSIT, HIGHWAYS, AND LOCAL STREETS AND ROADS? RESULTS FROM YEAR EIGHT OF A NATIONAL SURVEY

Asha Weinstein Agrawal, PhD
Hilary Nixon, PhD

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16. Abstract

This report summarizes the results of the eighth year of a national random-digit-dial public opinion poll asking 1,201 respondents if they would support various tax options for raising federal transportation revenues, with a special focus on understanding support for increasing revenues for public transit. Ten specific tax options tested were variations on raising the federal gas tax rate, creating a new mileage tax, and creating a new federal sales tax. Other questions probed perceptions related to public transit, including knowledge and opinions about federal taxes to support transit. In addition, the survey collected data on standard sociodemographic factors, travel behavior (public transit usage, annual miles driven, and vehicle fuel efficiency), respondents' views on the quality of their local transportation system, and their 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 results show that a majority of Americans would support higher taxes for transportation – under certain conditions. For example, 78% of respondents supported a gas tax increase of 10¢ per gallon to improve road maintenance, whereas support dropped to just 36% if the revenues were to be used more generally to maintain and improve the transportation system. For tax options where the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed, with a sales tax much more popular than either a gas tax increase or a new mileage tax.

With respect to public transit, the survey results show that most people want good public transit service in their state. In addition, 68% of respondents supported spending gas tax revenues on transit and 48% supported raising the gas tax specifically to pay for transit. Also, not all respondents were well informed about how transit is funded, with only 58% knowing that fares do not cover the full cost of transit.

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Mineta Transportation Institute
College of Business
San José State University
San José, CA 95192-0219

Tel: (408) 924-7560
Fax: (408) 924-7565
Email: mineta-institute@sjsu.edu

transweb.sjsu.edu

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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, considering likely public support for – or opposition to – raising different kinds of taxes.

This report contributes to the understanding of current public sentiment about increasing transportation taxes by presenting the results from the eighth year of an annual telephone survey investigating public opinion about a variety of transportation tax options at the federal level. 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.

In the 2012 survey (the third year), questions were added to probe public perceptions related to public transit. Questions explore respondents' knowledge of whether different levels of government help to pay for transit, their opinion about whether gas tax revenues should be spent on transit, and their support for different Congressional options to raise additional revenues to support improved and expanded transit.

The report compares the results of the eight surveys in the series to establish how public views may have changed over the seven years. Most of the questions asked use identical language in each year of the survey, to enable reliable trend analysis.[1]

The remaining chapters of the report contain the following material. Chapter 2 describes findings from other polling on similar transportation taxes to provide context for understanding this survey's results. Chapter 3 describes the survey methodology and presents an overview of the questionnaire and details of the implementation procedure. Detailed discussion of the survey findings on the different tax options and the transit-related questions follow in Chapters 4 and 5. Chapter 6 summarizes key findings and suggests some implications of those findings for policymakers.

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

To provide context for interpreting the 2017 survey results presented in this report, Chapter 2 reviews the results from 181 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 mention of relevant surveys in Google News, the databases Lexis-Nexis and Proquest News, and Twitter.[2] 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 research-oriented 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 in a decade or more, 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 public opinion on such increases has been extensively polled. Table 17 in Appendix B presents the key findings from 136 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 1¢ to $2 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 found at least majority support, and 43% 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 wide-spread use anywhere in the United States, although they are under active discussion among policymakers and researchers, and the State of Oregon began a voluntary mileage fee program in 2015.

Table 18 in Appendix B presents a review of 36 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 2 of the 36 surveys found a majority in favor of a mileage tax, and only 25% of the surveys had 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. And in fact, many of these local sales taxes have passed, especially in California. In that state, the great majority of the population lives in counties in which voters have approved local sales taxes for transportation by two-thirds majorities. In addition to the evidence from election results, considerable public polling has been done prior to elections to assess the appeal of sales tax increases.

Table 19 in Appendix B summarizes a sampling of 63 surveys testing public opinion on sales taxes. Overall, support levels were quite high: 50% found majority support – 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 a gas tax and a mileage tax are revenue options likely to receive considerable policy scrutiny in coming years, the survey tested support for these concepts when the taxes were structured or described in different ways. 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 tax[3] 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 without further stipulations;
- A 10¢ increase in the gas tax that would be phased in over five 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 1¢-per-mile tax, with every car taxed at the same rate; and
- A variable-rate mileage tax for which the average rate would be 1¢ 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 0.5% sales tax.

In the 2012 survey, we added several questions related to public transportation. Respondents were asked if they knew whether different entities help to pay for transit (transit riders, plus government at the local, state, and federal levels); their opinion about whether or not gas tax revenues should be spent on public transit; and their support for, and preference among, different Congressional options to find additional revenues to support improved and expanded transit.

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 asking if the respondent had used any form of public transit within the past 30 days. Respondents were also asked the average fuel efficiency of the vehicle they 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 (high, medium or low) they thought the government should assign to each.

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.[4]

The Survey Research Lab at Portland State University conducted the survey on behalf of the Mineta Transportation Institute's National Transportation Finance Center. The interviewing was conducted from February 21 to April 28, 2017 (with a break from April 12 to April 24, so as not to survey within a few days of the April 18 deadline for filing federal and state income taxes). A total of 1,201 adults nationwide were interviewed by telephone in either English or Spanish, with 41 (3.4%) of the interviews conducted in Spanish. The mean time to complete each survey was 15.46 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 ± 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).[5] The survey had a response rate of 6% of eligible phone numbers (AAPOR Response Rate Calculation Method 3), a cooperation rate of 22% (AAPOR Cooperation Rate Method 3), and a refusal rate of 22% (AAPOR Refusal Rate 2).

Unless otherwise indicated, all results presented are weighted to match the Census Bureau's 2015 American Community Survey one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.[6]

IV. FINDINGS ON SUPPORT FOR THE TAXES

This chapter presents highlights of the survey results. It first describes the survey respondents and then presents the support for the tax options among all respondents and also among population subgroups. The chapter concludes with findings on how support for the base-case 10¢ gas tax increase and new flat-rate mileage tax compares with support for variants on these options. (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). The 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.

Table 1. Comparison of Survey Respondents to the Adult U.S. Population by Census Region and Sociodemographic Characteristics (2017)

	Landline sample (%)	Cell sample (%)	Total sample, unweighted (%)	U.S. adults[a] (%)
Census region[b]				
Northeast	19	13	17	18
Midwest	27	24	26	21
South	26	35	30	38
West	28	28	28	23
Gender				
Male	36	55	43	49
Female	64	45	57	51
Of Hispanic/Latino origin/descent	6	12	8	18
Race				
White	79	72	76	73
Black/African-American	9	11	10	13
Asian/Asian-American	2	3	3	5
Other, including multiracial	9	14	11	9
Education				
Less than high school graduate	3	6	4	13
High school graduate	19	22	20	28
Some college	31	30	31	31
College graduate	22	24	23	18
Graduate degree	25	18	22	10
Income (annual household)				
$0 – $25,000	17	22	19	22
$25,001 – $50,000	26	21	24	23
$50,001 – $75,000	21	19	20	18
$75,001 – $100,000	13	14	13	12
$100,001 – $150,000	15	12	14	14
$150,001+	9	12	10	11
Age				
18 – 29	3	23	11	22
30 – 39	3	16	8	17
40 – 49	8	14	11	17
50 – 59	19	21	20	18
60 – 69	32	17	26	14
70 – 79	22	8	16	8
80+	13	2	9	5

[a] All data are for adults 18 years and older, with the exception of household income, which is for all U.S. households. The U.S. population 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).

[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 17, 2017).

[c] American Community Survey data not available.

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 36% of respondents supported the base-case 10¢ per gallon gas tax increase, where respondents knew nothing more about the tax than that it would be spent for transportation purposes, but six 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 78% of respondents. One other option, a gas tax increase with funds devoted to reducing accidents and improving safety, earned 65% support, a near super-majority.

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, with a new national sales tax much more popular than either the 10¢ per gallon gas tax increase or new mileage tax with a flat rate of 1¢ per mile.

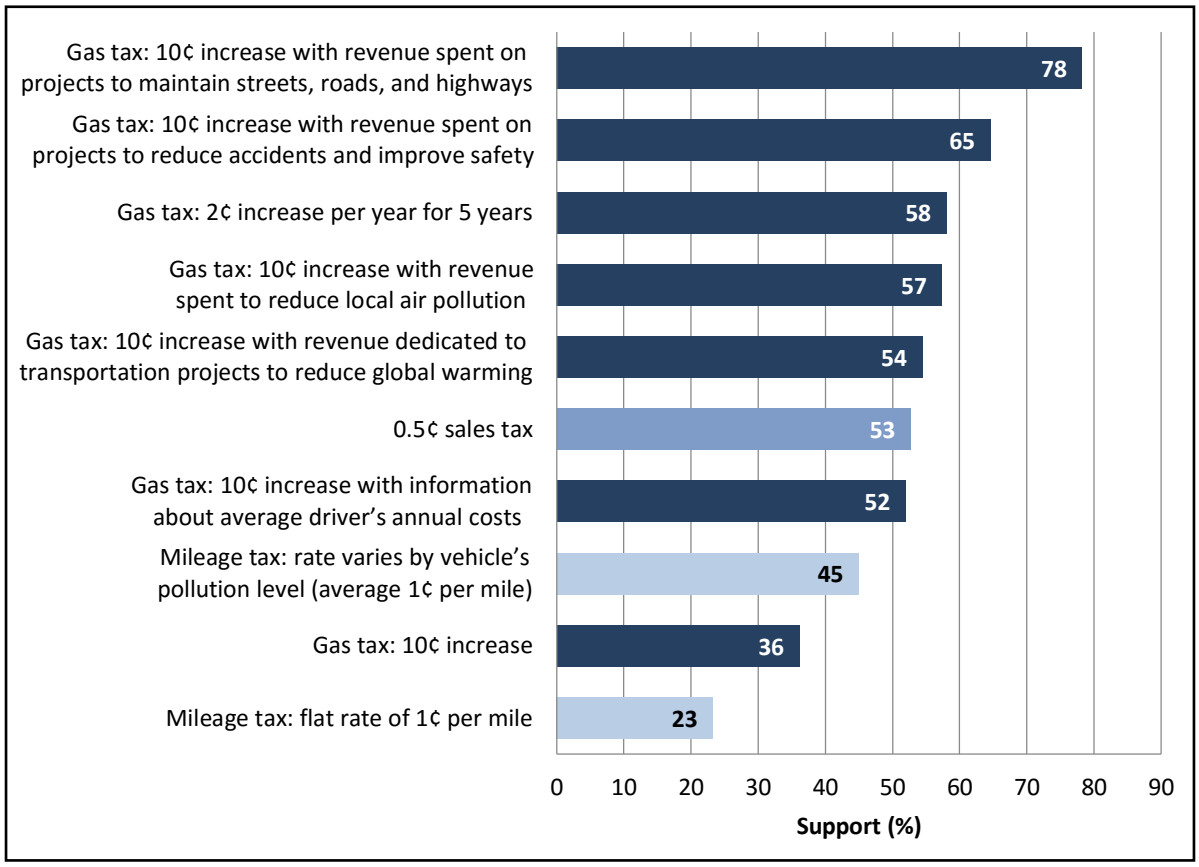

Figure 1. Support[a] Levels for the Tax Options Surveyed in 2017

[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 tests run against pairs of subgroups that do not include the first subgroup in the category.)

The following discussion focuses on 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 may exist. Rather, the variations discussed are those that fell within the cutoff points selected and could be identified by the particular statistical tests used. Choosing different cutoff points would highlight a somewhat different set of variations. Also, it is 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.[7]

Table 2 shows support for the taxes when the respondents are broken into subgroups by sociodemographic categories and U.S. Census region. The clear patterns that emerge are linked to race, ethnicity, and age. With respect to race, whites were the least supportive of the taxes. Compared with whites, Asians/Asian-Americans were, on average, 11 percentage points more likely to support each tax, and people of "other" races were on average 12 percentage points more likely than whites to support each tax. Turning to ethnicity, people of Hispanic origin were, on average, 15 percentage points more supportive than people not of Hispanic origin. 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 19 percentage points for the youngest group when compared with the oldest group.

Table 2 reveals no other clear patterns as they are defined above. For example, there are no clear patterns showing consistent variation in support for the taxes by region of the country, gender, educational attainment, employment status, or income.[8]

Table 2. Support[a] for the Tax Options, by Census Region and Sociodemographic Characteristics (2017)

		Mileage 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 (%)
All respondents	53	23	45	36	58	57	54	78	65	52
Census region										
Northeast	46	27	63	38	63	59	56	78	64	56
Midwest	48	18*	56	34	56	49*	44*	75	51*	47
South	55*	27	55	39	55	59	54	77	70	51
West	56*	19*	60	33	60	61	60	82	69	53
Gender										
Male	51	21	57	42	57	55	51	78	63	55
Female	54	26	59	30**	59	60	58*	78	66	49*
Race										
White	51	20	58	37	58	51	49	77	60	53
Black/African-American	49	30**	48*	30	48*	75**	67**	83	79**	36**
Asian/Asian-American	67*	33*	72*	21*	72*	80**	72**	77	67	64
Other	61	36**	60	49*	60	70**	74**	86*	82**	55
Of Hispanic/Latino origin/descent										
Yes	65	37	66	37	66	75	73	94	85	58
No	50**	20**	56**	36	56**	54**	50**	75**	60**	51
Education										
High school graduate or less	56	27	56	32	56	58	55	82	70	46
More than high school	51	21*	59	39*	59	57	54	75**	61**	56**
Employed										
Yes	55	24	61	39	61	57	54	78	65	55
No	49	22	52**	31**	52**	62	60	80	68	46**
Retired	48	24	55	32	55	46*	45	76	57	51

Table 2, continued

Sociodemographic category	Sales tax (%)	Mileage tax: Flat (%)	Mileage tax: Variable (%)	Gas tax: 10¢ increase (%)	Gas tax: 2¢ increase per year, for 5 years (%)	Gas tax: Revenue to reduce local air pollution (%)	Gas tax: Revenue to reduce global warming (%)	Gas tax: Revenue to maintain streets/ highways (%)	Gas tax: Revenue to improve safety (%)	Gas tax: Info about average annual costs (%)
Annual household income										
0 – $50,000	56	28	56	33	56	63	61	80	73	49
$50,001 – $100,000	48*	21*	62	38	62	57	52*	79	55**	56*
$100,001+	52	19**	57	39	57	49**	45**	74	61**	52
Age										
18 – 24 years	59	29	74	41	74	85	85	82	72	60
25 – 54 years	55	23	57**	39	57**	57**	53**	81	70	55
55 years+	47**	21*	53**	31*	53**	46**	44**	74*	55**	44**

* 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.

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 or with any political party other than the Republican party were more likely to support the taxes than people who identified themselves as Republicans. The mean difference was especially large for Democrats compared to Republicans; Democrats were, on average, 17 percentage points more supportive than Republicans across the 10 tax options. Democrats were also 11 percentage points more supportive than people who didn't identify with any political party. With respect to registered voter status, respondents who said they were *not* registered were 11 percentage points more likely to support the taxes than respondents who said they were registered. However, no clear difference emerged for likely voters compared to unlikely voters.

The survey asked three 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 more people who drove more than 12,500 miles annually were supportive than among respondents who didn't drive at all. There were no notable differences in tax support according to the fuel efficiency of respondents' primary personal vehicles or whether respondents had taken transit in the last 30 days.

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 somewhat good or very good were more likely to support the taxes than those who said they had poor service or no local public transit service at all. 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 higher percent of respondents who thought government should place a high or medium priority on reducing traffic congestion, improving local transit service, and improving safety supported the taxes, as compared to those who placed a low priority on those functions.

Table 3. Support[a] for the Tax Options, by Political Characteristics (2017)

		Mileage 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	53	23	45	36	58	57	54	78	65	52
Registered voter										
Yes	51	20	40	36	55	54	53	77	61	52
No	59*	38**	64**	35	67**	69**	59	85*	78**	52
Likely voter[b]										
Yes	50	19	38	35	54	51	50	76	60	52
No	55	21	48*	39	61	68**	66**	80	64	49
Political affiliation										
Democrat	58	27	57	41	61	69	71	76	68	58
Republican	53	14**	32**	29**	49**	40**	28**	74	60*	41**
No preference	43*	28	41*	36	55	54*	50**	70	57	44
Other[c]	51	27	46**	38	63	61*	60**	85**	66	56

* 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.

Table 4. Support[a] for the Tax Options, by Travel Behavior (2017)

		Mileage 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	53	23	45	36	58	57	54	78	65	52
Annual miles driven										
1 – 7,500	51	28	47	36	58	61	58	80	66	47
7,501 – 12,500	51	21	37*	39	59	49**	51	77	57*	53
12,501+	54	11**	33**	41	58	48**	44**	74	59*	62**
Don't know	45	28	52	22*	59	77*	70	82	73	46
Don't drive	58	34	69**	31	55	68	61	81	78**	50
Miles per gallon[b]										
≤ 19 mpg	48	15	32	35	59	52	52	79	60	51
20 – 30 mpg	50	20	39	37	57	50	48	75	59	51
31+ mpg	57	27**	46*	35	54	65*	61	82	65	53
Taken transit in last 30 days										
Yes	58	32	58	40	57	65	63	79	76	58
No	51	21**	41**	35	58	55**	52**	78	61**	50*

* 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] 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 11, 2017).

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.

Table 5. Support[a] for the Tax Options, by Opinions of the Transportation System (2017)

		Mileage 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	53	23	45	36	58	57	54	78	65	52
Opinion on condition of roads and highways in local community										
Very good	55	31	60	42	56	60	57	80	71	57
Somewhat good	55	20**	43**	36	60	57	55	77	63*	52
Bad	45*	25	38**	32*	55	54	51	80	63	48
Opinion on public transit service in local community										
Very good	54	34	49	38	63	71	71	83	79	59
Somewhat good	54	22**	48	32	60	60**	59**	80	67**	51*
Poor	47	20**	39	43	53*	45**	42**	66**	50**	45**
No service	54	16**	40	35	53*	47**	40**	76	54**	53
Role of government in reducing traffic congestion										
High priority	54	23	47	33	59	60	59	80	68	53
Medium priority	56	27	48	39	59	60	54	78	66	54
Low priority	41**	15*	28**	43*	49*	39**	35**	71*	45**	44
Role of government in maintaining streets, roads, and highways										
High priority	53	23	44	35	59	60	55	81	65	53
Medium priority	54	25	50	42	54	45**	50	68**	65	48
Low priority	43	35	40	43	47	55	50	62*	50	62
Role of government in expanding and improving local public transit service										
High priority	58	25	51	38	61	66	65	77	67	55
Medium priority	49**	23	44*	36	58	57**	53**	83**	67	52
Low priority	47**	17*	29**	30	49**	35**	30**	71	51**	45*

Table 5, continued

		Mileage 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 reducing accidents and improving safety										
High priority	54	23	47	36	60	60	57	80	73	51
Medium priority	57	28	45	40	60	58	56	74*	52**	61*
Low priority	33**	18	33*	34	43**	35**	34**	73	24**	41

* 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.

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 base-case 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.

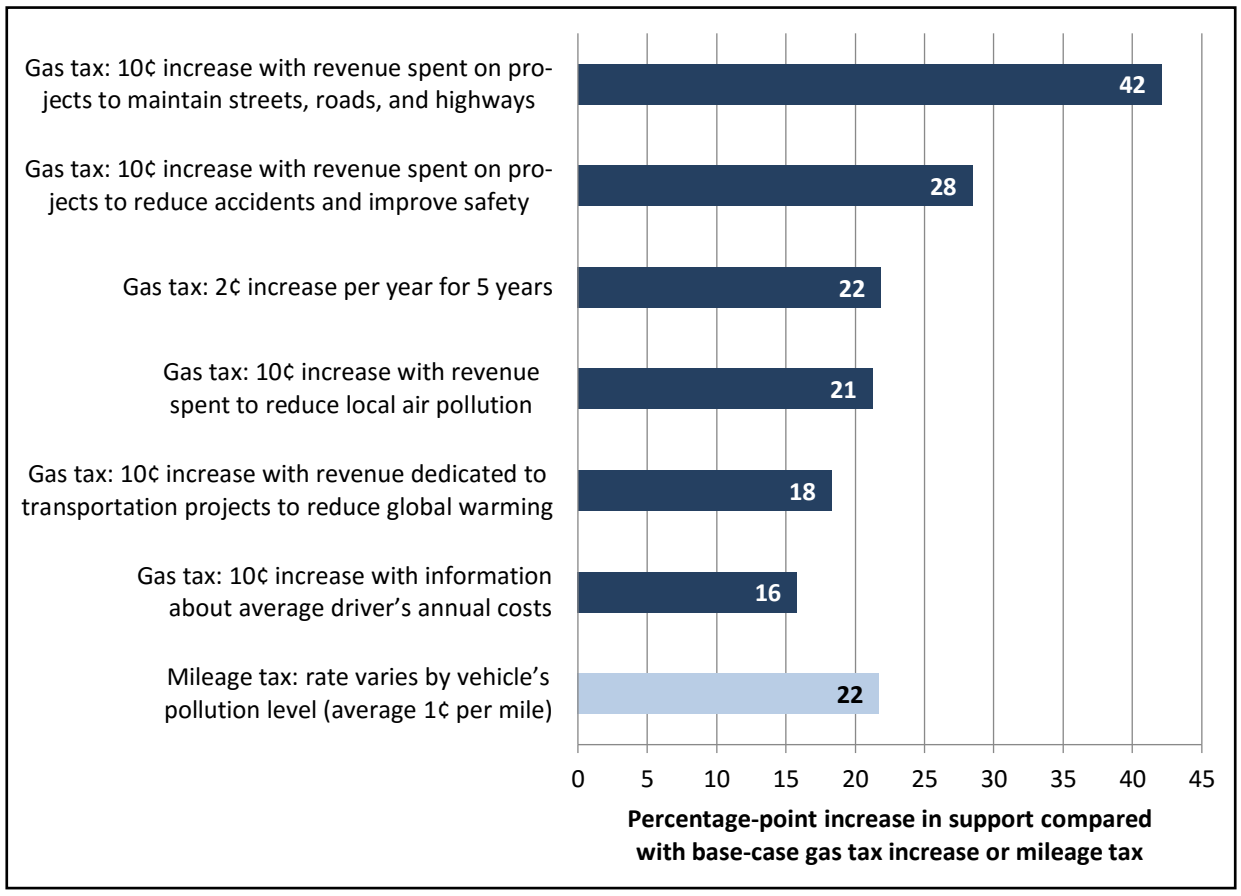

Figure 2. Relative Increases in Support[a] for Variations of the Base-Case[b] Gas Tax and Mileage Tax Concepts (2017)

[a] "Support" is the sum of those who said they "strongly" or "somewhat" support 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 by respondent subgroups that are defined by census region, sociodemographic and political characteristics, travel behavior characteristics, and opinions about the system. Collectively, the tables include 60 population subgroups, for each of which there are 7 tax comparisons, resulting in a total of 420 population groups examined.

The overall pattern of increased support for the variants holds for the subgroups, just as for the respondent pool as a whole. Across all 420 cases examined, in no case did the variant lead to a statistically significantly drop in support, compared with the base-case tax. In fact, the tax variants improved support in all but two cases. Further, the increases were very often substantial:

- At least 10 percentage points for 92% of cases
- At least 20 percentage points for 61% of cases
- At least 30 percentage points for 30% of cases
- At least 40 percentage points for 14% of cases

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

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 (2017)

		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 (%)
All respondents	22**	22**	21**	18**	42**	28**	16**
Census regions							
Northeast	36**	25**	22**	19**	40**	26**	18**
Midwest	38**	22**	15**	10*	41**	17**	13**
South	28**	16**	20**	16**	38**	32**	12**
West	41**	26**	28**	27**	49**	36**	20**
Gender							
Male	37**	15**	13**	8**	36**	20**	13**
Female	33**	28**	29**	28**	48**	36**	19**
Race							
White	39**	22**	14**	12**	40**	23**	17**
Black/African-American	18**	18**	45**	37**	52**	49**	6
Asian/Asian-American	39**	50**	59**	51**	56**	46**	43**
Other	24**	11	21**	25**	37**	33**	6
Of Hispanic/Latino origin/descent							
No	29**	30**	38**	37**	57**	49**	21**
Yes	36**	20**	18**	14**	39**	24**	15**
Education							
High school graduate or less	30**	25**	26**	23**	50**	38**	14**
More than high school	38**	20**	18**	15**	36**	22**	17**
Employed							
Yes	38**	22**	18**	14**	38**	25**	16**
No	30**	21**	31**	29**	49**	37**	15**
Retired	31**	23**	14*	14*	45**	25**	19**

Table 6, continued

Sociodemographic category	Variable-rate mileage tax (%)	Gas tax: 2¢ increase per year, for 5 years (%)	Gas tax: Revenue to reduce local air pollution (%)	Gas tax: Revenue to reduce global warming (%)	Gas tax: Revenue to maintain streets/ highways (%)	Gas tax: Revenue to improve safety (%)	Gas tax: Info about average annual costs (%)
Annual household income							
0 – $50,000	28**	23**	30**	28**	46**	40**	16**
$50,001 – $100,000	41**	24**	19**	14**	41**	17**	19**
$100,001+	38**	18**	9*	6	35**	22**	13**
Age							
18 – 24 years	45**	33**	44**	44**	41**	31**	19**
25 – 54 years	34**	18**	18**	14**	42**	31**	17**
55 years+	32**	22**	16**	14**	43**	24**	14**

* 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.

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 (2017)

		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	22**	22**	21**	18**	42**	28**	16**
Registered voter							
Yes	20**	19**	18**	17**	41**	25**	16**
No	26**	32**	33**	24**	49**	43**	17**
Likely voter[c]							
Yes	19**	19**	16**	15**	41**	25**	16**
No	27**	22**	28**	27**	41**	25**	9
Political affiliation							
Democrat	30**	20**	28**	30**	35**	26**	17**
Republican	18**	20**	11**	-1	45**	31**	12**
No preference	13	19	18	14	34**	21*	9
Other[d]	19**	25**	23**	22**	47**	28**	18**

* 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 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] Independent or affiliated with any other party.

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

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 (2017)

		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	22**	22**	21**	18**	42**	28**	16**
Opinion on condition of roads and highways in local community							
Very good	29**	14**	18**	15**	38**	29**	15**
Somewhat good	22**	24**	21**	18**	41**	27**	15**
Bad	14**	24**	23**	20**	48**	31**	17**
Opinion on public transit service in local community							
Very good	15**	25**	33**	34**	45**	41**	22**
Somewhat good	26**	27**	28**	26**	48**	35**	19**
Poor	19**	10	2	-1	23**	7	2
No service	24**	18**	12**	5	41**	19**	18**
Role of government in reducing traffic congestion							
High priority	24**	26**	27**	26**	47**	35**	20**
Medium priority	21**	21**	22**	16**	40**	27**	15**
Low priority	13**	6	-4	-8	28**	2	1
Role of government in maintaining streets, roads, and highways							
High priority	21**	25**	25**	20**	46**	30**	18**
Medium priority	25**	12*	3	8	26**	23**	6
Low priority	5	5	12	7	19	7	19
Role of government in expanding and improving local public transit service							
High priority	26**	23**	27**	26**	38**	28**	16**
Medium priority	22**	22**	21**	17**	48**	31**	16**
Low priority	12**	18**	5	0	41**	21**	15**

Table 8, continued

	Variable-rate mileage tax (%)	Gas tax: 2¢ increase per year, for 5 years (%)	Gas tax: Revenue to reduce local air pollution (%)	Gas tax: Revenue to reduce global warming (%)	Gas tax: Revenue to maintain streets/ highways (%)	Gas tax: Revenue to improve safety (%)	Gas tax: Info about average annual costs (%)
Role of government in reducing accidents and improving safety							
High priority	24**	24**	25**	21**	45**	38**	15**
Medium priority	17**	20**	17**	16**	34**	11*	20**
Low priority	16*	9	1	0	39**	-9	7

* 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.

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 (2017)

		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	22**	22**	21**	18**	42**	28**	16**
Annual miles driven							
1 – 7,500	19**	23**	25**	22**	44**	31**	12**
7,501 – 12,500	16**	20**	10*	12**	38**	18**	14**
12,501+	23**	17**	7	3	33**	18**	21**
Don't know	24**	37**	56**	48**	60**	51**	24**
Don't drive	35**	24**	36**	30**	50**	47**	18**
Miles per gallon[c]							
≤ 19 mpg	18**	24**	16**	17**	44**	25**	15**
20 – 30 mpg	19**	19**	13**	10**	38**	22**	14**
31+ mpg	19**	19**	30**	26**	47**	31**	18**
Taken transit in last 30 days							
Yes	27**	17**	25**	23**	39**	36**	18**
No	20**	23**	20**	17**	43**	26**	15**

* 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.

[c] 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 11, 2017).

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.

TRENDS IN SUPPORT OVER TIME (2010 – 2017)

Most of the 2017 survey questions replicate those in the seven surveys previously administered in this series, so it is possible to look at trends in support over time.[9] The trend analysis shows that the year-to-year changes are generally quite small. However, across all eight surveys, support for all but the flat-rate mileage fee 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 2016 to 2017, support stayed flat for two options, dropped slightly for two, and increased slightly for six tax options. The increases vary from one to six percentage points, and in four cases the increase is statistically significant.

While there is little noticeable change from year to year, there is a steady growth comparing 2017 with 2010 (or 2011, for those questions added in 2011). Over that six or seven-year period, support has grown noticeably for all the taxes except the flat-rate mileage tax, with growth ranging from 9 to 27 percentage points. (This growth is a statistically significant change in every case.) The one exception to this pattern is the flat-rate mileage tax, for which support has remained essentially flat. The growth in support for most of the taxes mirrors findings from a 2017 study by the Pew Research Center that found public support for government spending has increased since 2013.[10]

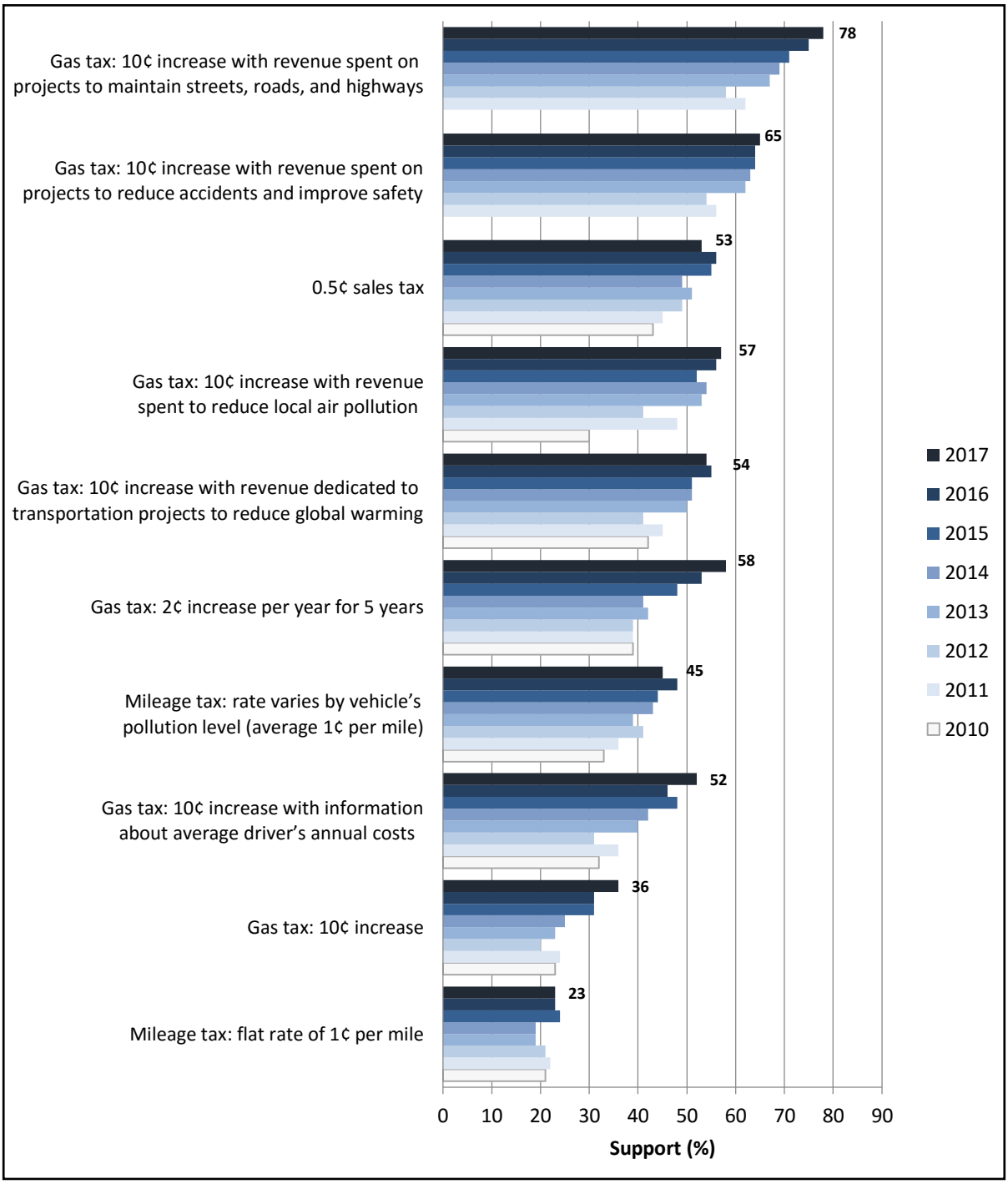

Figure 3. Trends in Support[a] for the Tax Options, 2010 – 2017

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

Table 10. Trends in Support[a] for the Tax Options, 2010 – 2017

Tax option	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	Differences 2017-2010 (%)	Differences 2017-2011 (%)	Differences 2017-2016 (%)
Gas tax											
10¢ increase	23	24	20	23	25	31	31	36	13**	12**	5**
10¢ increase, phased in over 5 years at 2¢ per year	39	39	39	42	41	48	53	58	19**	19**	5*
10¢ increase, revenues spent to reduce local air pollution	30	48	41	53	54	52	56	57	27**	9**	1
10¢ increase, revenues spent to reduce global warming	42	45	41	50	51	51	55	54	12**	9**	0
10¢ increase, revenues spent to maintain streets, roads, and highways	--b	62	58	67	69	71	75	78	--	16**	4*
10¢ increase, revenues spent to reduce accidents and improve safety	--b	56	54	62	63	64	64	65	--	9**	1
10¢ increase, respondents informed of the annual tax burden for the typical driver	32	36	31	40	42	48	46	52	20**	2	6**
Mileage tax											
1¢ per mile	21	22	21	19	19	24	23	23	2	1	0
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	12**	9**	-3
National 0.5% sales tax	43	45	49	51	49	55	56	53	10**	8**	-3

* 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] 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 2017 to 2010, 2017 to 2011, and 2017-2016.

The series of eight surveys also found that a few population subgroups were more likely to support the taxes in every year:

- Asians/Asian-Americans (compared with whites);
- Younger people (compared with people in the oldest age group);
- Democrats (compared with Republicans);
- People who think government should place a high priority on expanding and improving local public transit service, as well as on reducing accidents and improving safety (compared with people who think government should place a low priority on these goals).

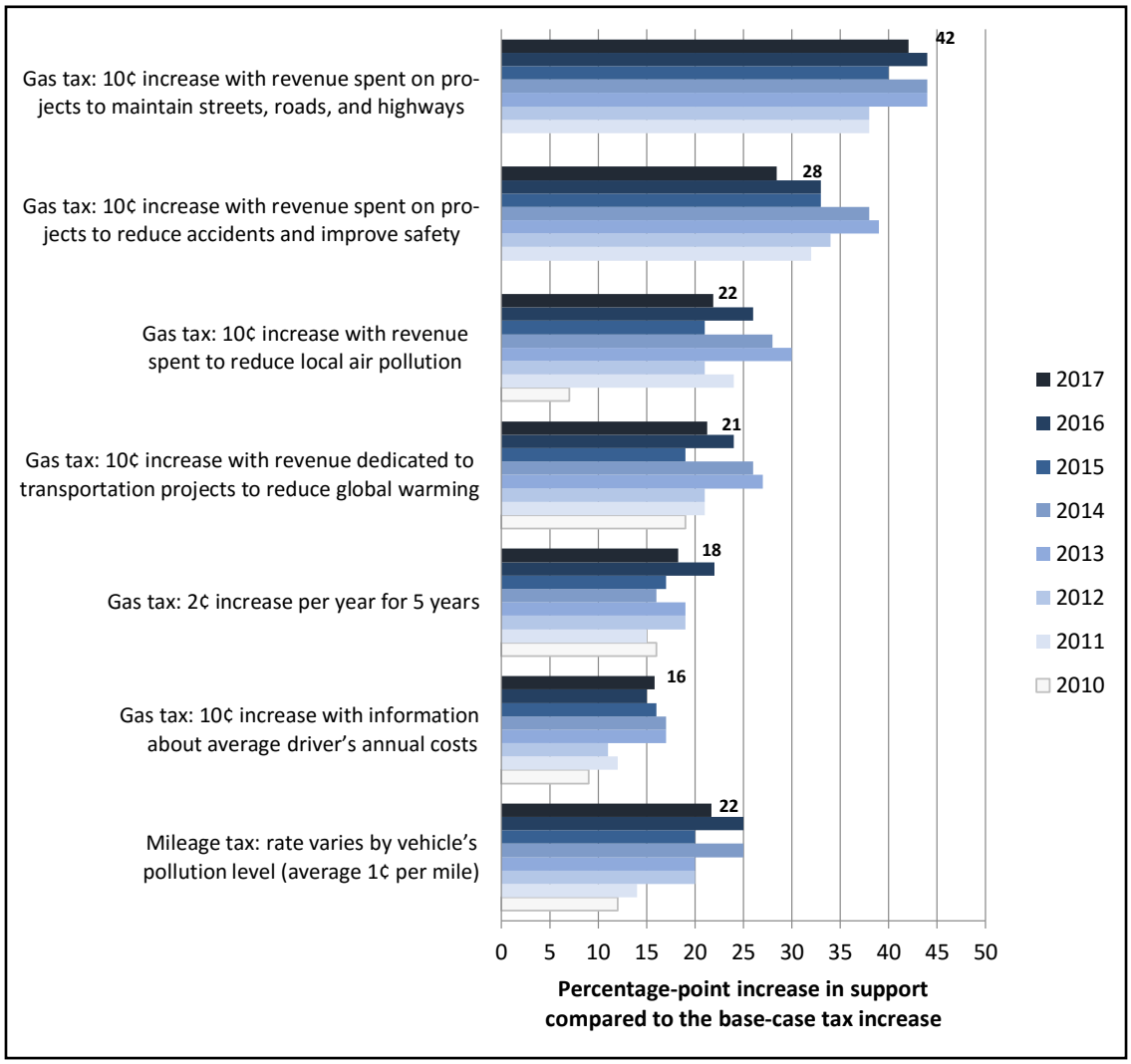

Figure 4. Changes over Time for the Relative Increases in Support[a] for Variations of the Base-Case[b] Gas Tax and Mileage Tax Concepts (2010 – 2017)

[a] "Support" is the sum of those who said they "strongly" or "somewhat" support 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, without any additional detail.

V. FINDINGS RELATED TO OPINIONS ON PUBLIC TRANSIT

Starting in 2012, the survey project added additional questions designed to explore perceptions related to public transit, including knowledge and opinions about federal taxes to support transit. This chapter pulls together all the survey findings related to transit.

A question early in the survey asked respondents their opinions on the quality of public transit in their community. The majority of respondents (58%) said that it is very or somewhat good, 15% said that it is poor, and 27% said either that there is no service in their community or that they do not know about transit quality. These values are very close to those from identical questions asked in all prior surveys. (To compare the responses from all six surveys, see Q2 in Appendix A.)

Another early series of questions in the survey asked respondents how highly they would prioritize various things "government could do to improve the transportation system for everyone in the state where you live" (Table 11). One of the priorities tested was expanding and improving local public transit service. Public transit was a high priority for close to one-half of respondents (45%), though this was the lowest percentage among the five priorities tested. However, when looking at those who felt transit was at least a medium priority, transit rated not so differently from the other options – 83% of respondents felt this way, compared with the other options that ranged from 87% to 98%. The two most popular priorities were road maintenance and improving safety.

Table 11. Priority Placed on Ways that Government Could Improve the Transportation System for Everyone in the Respondent's State (2012 – 2017)

	2012	2013	2014	2015	2016	2017				
	High or medium (%)	High or medium (%)	High or medium (%)	High or medium (%)	High or medium (%)	High or medium (%)	High (%)	Medium (%)	Low (%)	Don't know (%)
Maintaining streets, roads, and highways in good condition, including filling potholes	95	97	95	97	95	98	80	18	2	0
Reducing accidents and improving safety	90	91	89	91	91	91	71	20	8	1
Reducing traffic congestion	81	84	80	84	80	87	57	30	12	1
Expanding and improving local public transit service, like buses or light rail	83	80	79	81	79	83	45	38	16	2

Later in the survey, respondents were asked if they knew how the cost of providing transit service is covered. The first question in the series was asked as follows:

> When people ride public transit, they pay a fare. This money is used to pay for the service. Do you think that the money collected from public transit fares in general covers the full cost of the service?

Thirty-one percent of respondents (incorrectly) said "yes," 11% said that they did not know, and 58% (correctly) said "no." These responses are similar to those from the 2013, 2014, 2015, and 2016 surveys (Figure 5).[11] Table 12 presents the results for the same question, broken down by sociodemographic, political, and travel behavior subgroups.

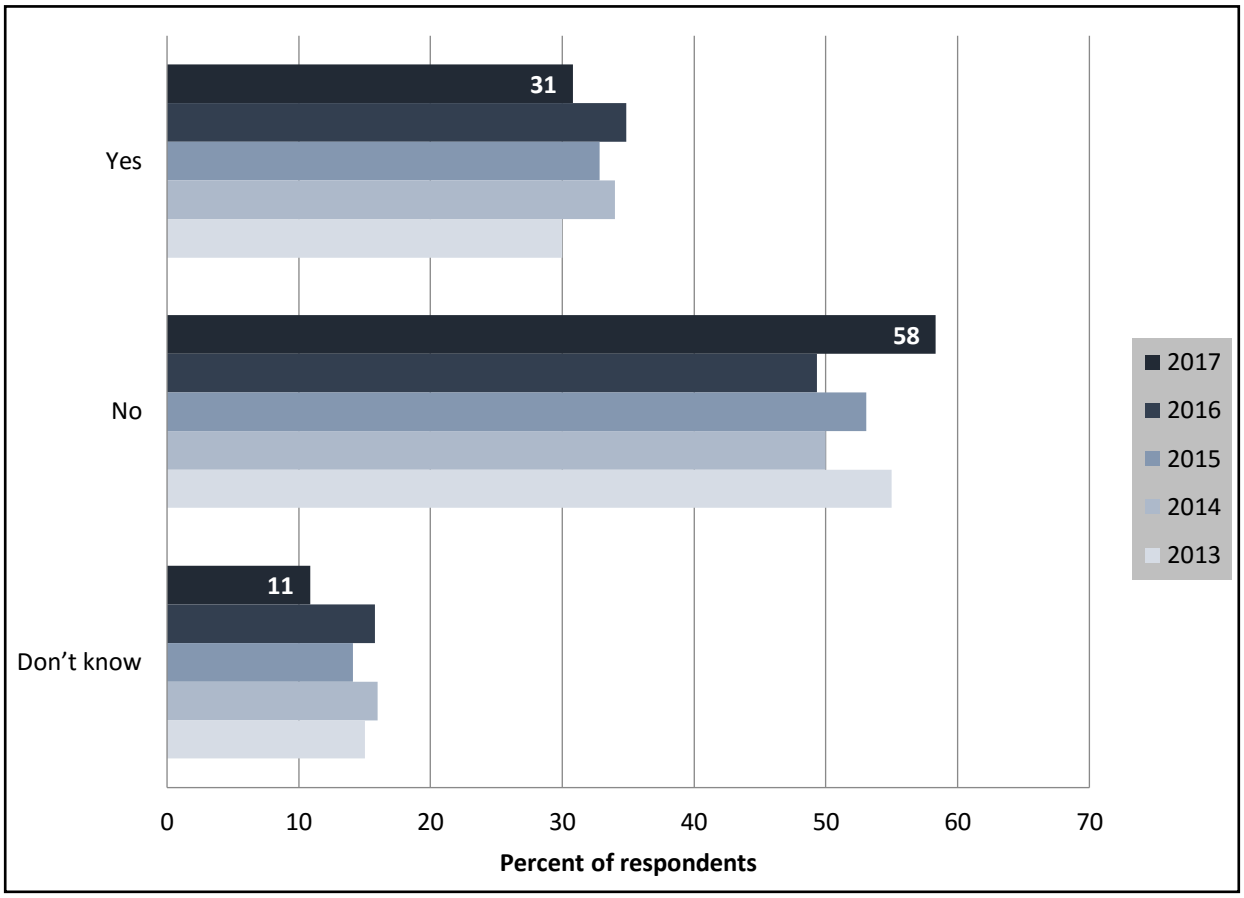

Figure 5. Respondents' Belief about Whether Transit Fares Cover the Full Cost of Transit (2013 – 2017)

Table 12. Belief about Whether Fares Cover the Full Cost of Transit Service, by Subgroup (2017)

	Yes (%)	No (%)	Don't know (%)
All respondents	31	58	11
Census region			
Northeast	33	63	4
Midwest	28	65	7
South	28	54	18**
West	33	56	11*
Gender			
Male	30	59	11
Female	32	58	10
Race			
White	25	63	12
Black/African-American	42**	50**	8
Asian/Asian-American	48**	51	2*
Other	50**	36**	15
Of Hispanic/Latino origin/descent			
Yes	43	47	11
No	28**	61**	11
Education			
High school graduate or less	38	46	15
More than high school	26**	67**	8**
Employed			
Yes	29	62	9
No	38**	49**	13*
Retired	23	61	16*
Annual household income			
0 – $50,000	44	45	11
$50,001 – $100,000	24**	66**	10
$100,001+	16**	72**	12
Age			
18 – 24 years	41	49	10
25 – 54 years	33*	57	10
55 years+	24**	64**	12
Registered voter			
Yes	24	65	11
No	56**	33**	12
Likely voter[a]			
Yes	23	65	12
No	32*	62	5*
Political affiliation			
Democrat	30	60	10
Republican	27	59	14
No preference	41	39**	20*
Other[b]	34	59	7

Table 12, continued

	Yes (%)	No (%)	Don't know (%)
Annual miles driven			
1 – 7,500	37	52	11
7,501 – 12,500	25**	67**	9
12,501+	19**	72**	9
Don't know	34	50	16
Don't drive	42	44	15
Miles per gallon[c]			
≤ 19 mpg	31	63	6
20 – 30 mpg	26	63	11*
31+ mpg	21	65	13*
Taken transit in last 30 days			
Yes	38	59	3
No	29**	58	13**
Transit service in community			
Has transit service	33	61	6
No transit service	26*	56	18**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] 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."

[b] Independent or affiliated with any other party.

[c] 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 11, 2017).

Note: The test of two proportions was used to check if there is a statistically significant difference between responses among subgroups. The first subgroup in each category is the "base"-case for the test; it is compared with the proportion of respondents in each of the other subgroups within that category who chose the same response.

Those respondents who knew that fares do not cover the full costs of transit were asked some follow-up questions. First they were asked, "In general, what percent of the full cost of public transit services do you think the fares cover?" Twenty-five percent said that fares cover 1 to 33% of the full cost, 49% said that fares cover 34 to 66% of the full cost, 13% said that fares cover more than 67% of the full cost, and 12% said that they did not know.

Those same group of respondents, those who knew that transit fares do not cover all transit costs, were also asked if they thought the federal, state, and local governments each help "to pay for public transit services around the country." Nearly three-quarters (71%) knew that the federal government helps pay for transit, with more respondents aware of the local contribution (76%) and the state contribution (87%).

An alternative way to think about the survey findings on this question is in terms of the percentage of *all* respondents who were aware of the role each government entity plays in funding transit. Calculating the numbers this way, 41% of all respondents knew the federal government pays for transit, 44% knew of the local government role, and 51% knew of the state government role. Table 13 presents the results among all respondents, broken down by sociodemographic, political, and travel behavior subgroups. Looking at the trends since

2014 (Figure 6), a particularly high percentage of this year's respondents were aware of the contribution made by every level of government.

Table 13. Knowledge among All Respondents about Which Levels of Government Pay for Public Transit, by Subgroup (2017)

	Federal gov't (%)	State gov't (%)	Local gov't (%)
All respondents	41	51	44
Census region			
Northeast	52	60	43
Midwest	54	61	55*
South	43	54	53*
West	41*	56	51
Gender			
Male	51	59	51
Female	41**	55	49
Race			
White	50	61	54
Black/African-American	37**	48**	43*
Asian/Asian-American	34*	48*	46
Other	28**	39**	35**
Of Hispanic/Latino origin/descent			
Yes	35	47	41
No	48**	59**	52**
Education			
High school graduate or less	36	46	39
More than high school	52**	65**	58**
Employed			
Yes	50	61	53
No	36**	48**	44**
Retired	49	58	50
Annual household income			
0 – $50,000	32	42	39
$50,001 – $100,000	50**	61**	53**
$100,001+	64**	79**	68**
Age			
18 – 24 years	36	53	48
25 – 54 years	47*	58	52
55 years+	48*	58	49
Registered voter			
Yes	51	63	56
No	23**	31**	26**
Likely voter[a]			
Yes	51	64	57
No	53	58	49
Political affiliation			

Table 13, continued

	Federal gov't (%)	State gov't (%)	Local gov't (%)
Democrat	45	58	52
Republican	50	60	50
No preference	24**	31**	38
Other[b]	47	56	51
Annual miles driven			
1 – 7,500	40	47	44
7,501 – 12,500	50**	65**	62**
12,501+	58**	73**	59**
Don't know	21**	51	31
Don't drive	44	47	43
Miles per gallon[c]			
≤ 19 mpg	46	59	50
20 – 30 mpg	51	61	57
31+ mpg	51	67	55
Taken transit in last 30 days			
Yes	51	57	49
No	44*	57	50
Transit service in community			
Has transit service	45	58	51
No transit service	50	55	48

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] 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."

[b] Independent or affiliated with any other party.

[c] 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 11, 2017).

Note: The test of two proportions was used to check if there is a statistically significant difference between responses among subgroups. The first subgroup listed in each category is the "base"-case for the test; it is compared with the proportion of respondents who responded that the different entities "do" pay for transit in each of the other subgroups within that category.

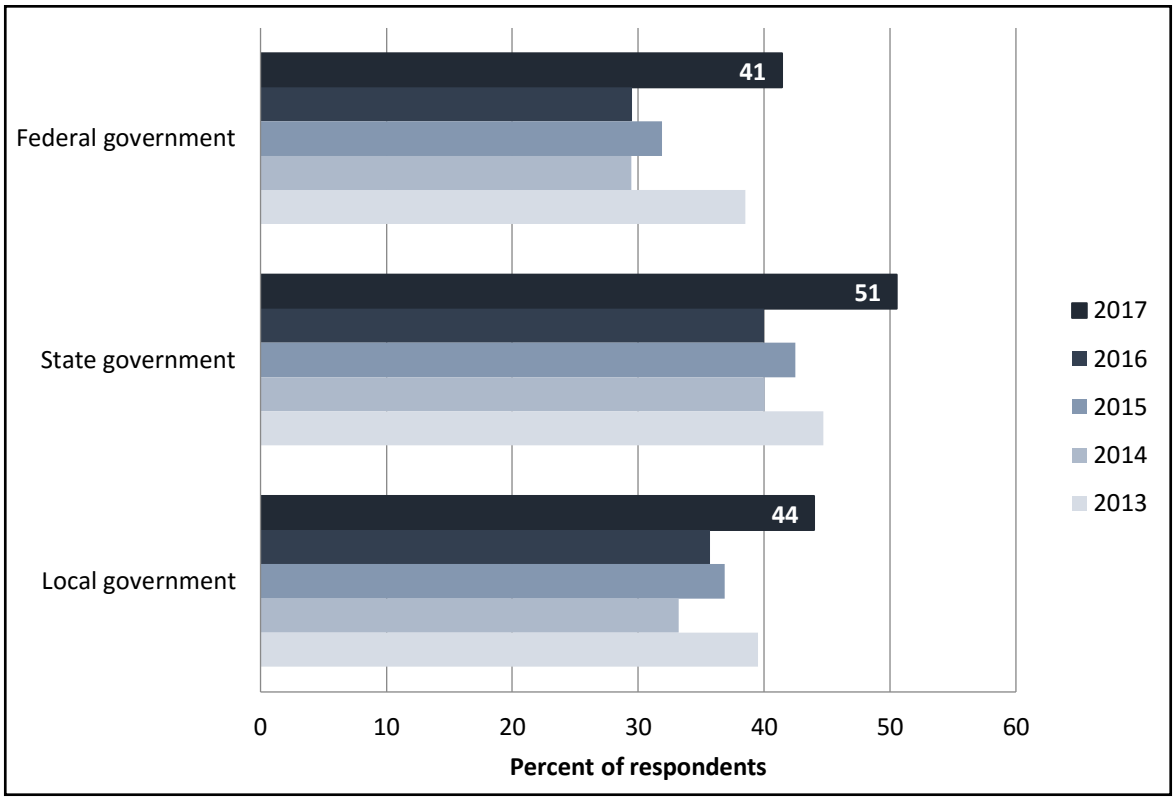

Figure 6. Knowledge among All Respondents about Which Levels of Government Pay for Public Transit (2013 – 2017)

Finally, a set of questions delved into respondents' beliefs about the best ways for Congress to help pay for transit. The first of these asked the following question:

> Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Other people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic congestion and wear-and-tear on the roads. Would you support or oppose spending SOME gas tax money on public transit?[12]

Sixty-eight percent of respondents supported spending gas tax revenues on transit, and 29% opposed this. Table 14 shows support and opposition levels for the different sociodemographic, political, and travel behavior subgroups.

Table 14. Opinion on Whether Gas Taxes Should Be Spent on Public Transit in Addition to Roads and Highways, by Subgroup (2017)

	Support (%)	Oppose (%)
All respondents	68	29
Census region		
Northeast	77	23
Midwest	65**	35**
South	71	29
West	69	31
Gender		
Male	67	33
Female	73*	27*
Race		
White	67	33
Black/African-American	78**	22**
Asian/Asian-American	79	21
Other	74	26
Of Hispanic/Latino origin/descent		
Yes	83	17
No	67**	33**
Education		
High school graduate or less	69	31
More than high school	70	30
Employed		
Yes	70	30
No	75	25
Retired	57**	43**
Annual household income		
0 – $50,000	75	25
$50,001 – $100,000	64**	36**
$100,001+	68*	32*
Age		
18 – 24 years	83	17
25 – 54 years	73**	27**
55 years+	61**	39**
Registered voter		
Yes	67	33
No	82**	18**
Likely voter[a]		
Yes	63	37
No	84**	16**
Political affiliation		
Democrat	80	20
Republican	56**	44**
No preference	69	31
Other[b]	73*	27*

Table 14, continued

	Support (%)	Oppose (%)
Annual miles driven		
1 – 7,500	71	29
7,501 – 12,500	67	33
12,501+	62*	38*
Don't know	73	27
Don't drive	82*	18*
Miles per gallon[c]		
≤ 19 mpg	67	33
20 – 30 mpg	64	36
31+ mpg	69	31
Taken transit in last 30 days		
Yes	86	14
No	65**	35**
Transit service in community		
Has transit service	75	25
No transit service	57**	43**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] 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."

[b] Independent or affiliated with any other party.

[c] 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 11, 2017).

Note: The test of two proportions was used to check if there is a statistically significant difference between responses among subgroups. The first subgroup listed in each category is the "base"-case for the test; it is compared with the proportion of respondents who supported or opposed using gas taxes to pay for transit in each of the other subgroups within that category.

A multipart question then posed the scenario that Congress has decided to spend more money on public transit but has not decided how to pay for this. Respondents were first asked whether they would support each of the following three options to pay for expanding and improving public transportation: reducing spending on other federal programs, raising transit fares, or raising the federal gas tax. As shown in Figure 7, in 2017 reducing federal spending on other programs received the most support (60%). Raising transit fares received the second highest level of support (57%). Raising the federal gas tax was the least popular of the three options, though nearly half (48%) did support this.

When respondents were asked which of the three choices they *preferred*, the clear favorite was reducing spending on other programs, with 41% support (Figure 8). The other two options had nearly equal levels of support—27% preferred raising transit fares and 29% preferred raising the federal gas tax.

Across the six years of surveying from 2012 to 2017, there is a statistically significant increase in support for all 3 options: 4 percentage points more support for reducing spending on other federal programs, 12 percentage points more support for raising transit fares, and 20 percentage points more support for raising the federal gas tax (Figure 7).

Turning to the percent of respondents choosing each option as their preferred alternative, the percent preferring to raise transit fares has remained similar from 2012 to 2017, the percent who prefer to reduce spending on other federal programs has dropped by 7 percentage points, and the percent preferring to raise the federal gas tax has risen by 15 percentage points (Figure 8). Most of this change has occurred from 2015 onwards; from 2012 to 2014, there was little variation from year to year.

Tables 15 and 16 show support and opposition levels for each of the three revenue options, as well as the preferred alternative, among different sociodemographic, political, and travel behavior subgroups.

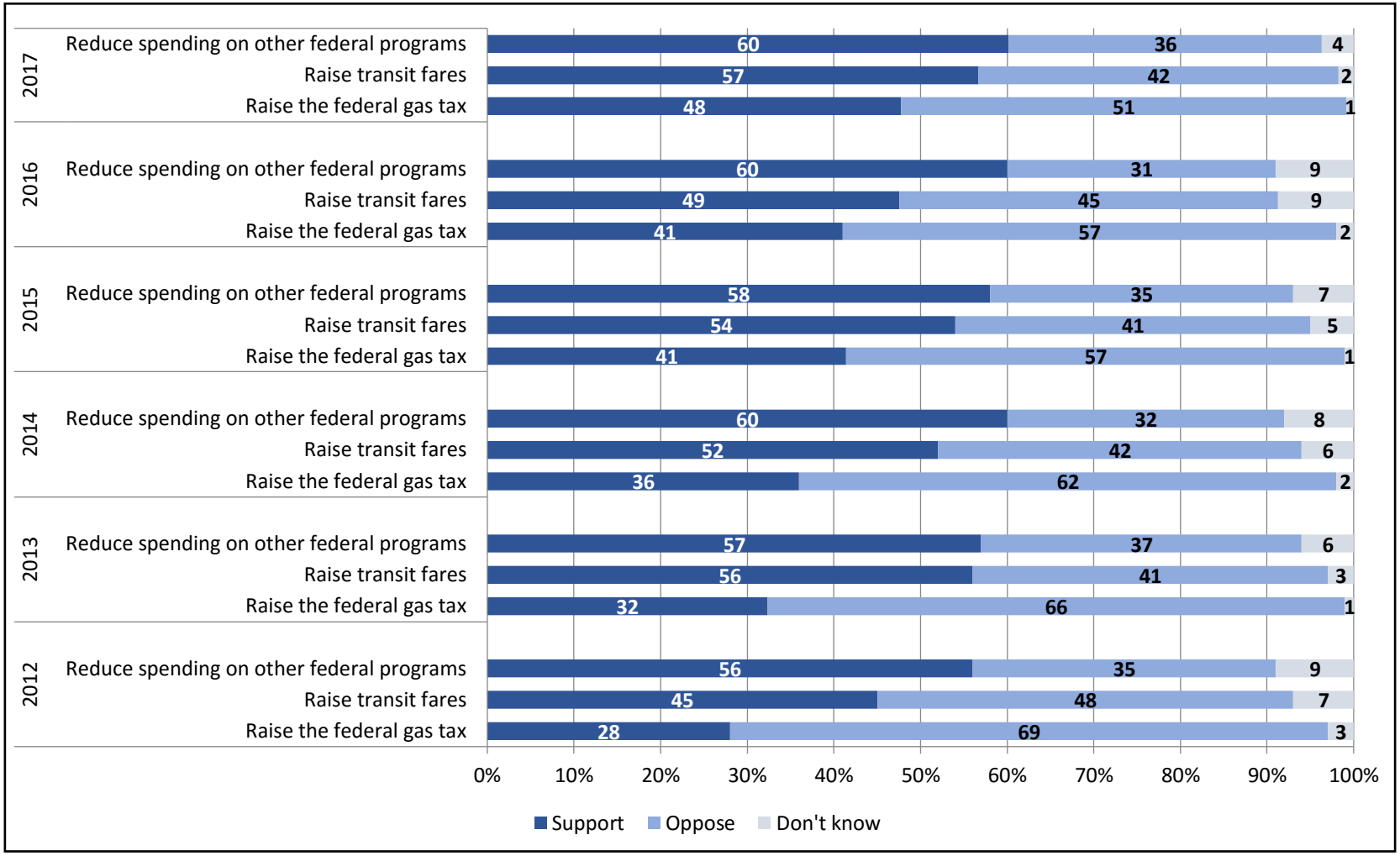

Figure 7. Opinion on Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2017)

Notes: "Support" is the sum of respondents who "strongly" or "somewhat" the method. "Oppose" is the sum of respondents who "strongly" or "somewhat" oppose the method. "Don't know" was not presented as a response option, but some respondents volunteered this answer. Not all rows sum to 100% due to rounding.

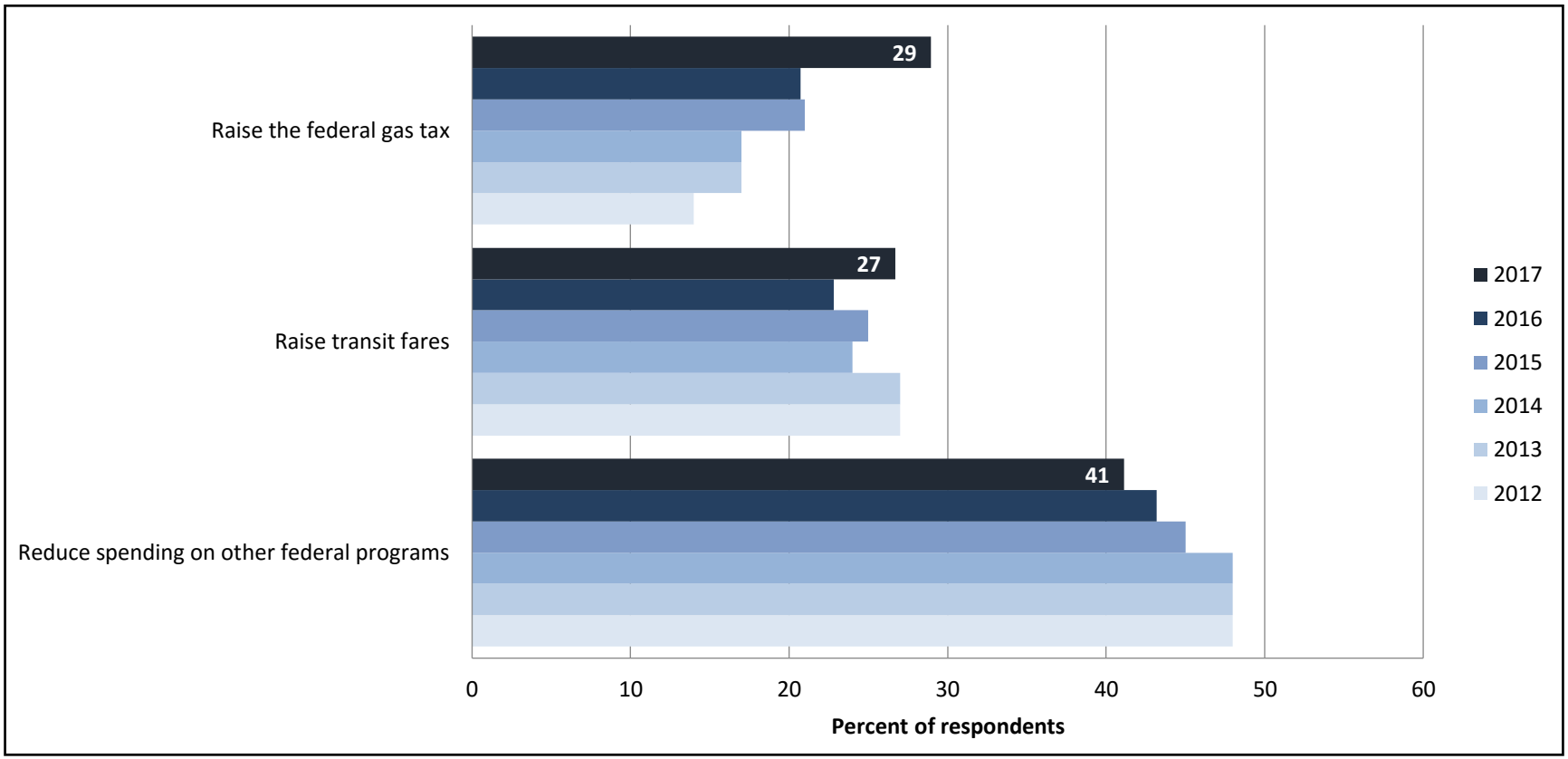

Figure 8. Preferred Alternative among Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2017)

Note: Some respondents declined to choose a preferred alternatives and instead volunteered an answer (don't know, equally oppose all three, or equally support all three): 10% in 2012, 7% in 2013, 11% in 2014, 9% in 2015, 13% in 2016, and 3% in 2017.

Table 15. Support[a] for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, by Subgroup (2017)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
All respondents	48	60	57
Census region			
Northeast	48	60	52
Midwest	45	57	66**
South	47	59	53
West	50	64	55
Gender			
Male	49	67	64
Female	46	53**	50**
Race			
White	46	62	61
Black/African-American	40	54	34**
Asian/Asian-American	70**	58	59
Other	57*	58	56
Of Hispanic/Latino origin/descent			
Yes	56	75	52
No	46**	57**	58
Education			
High school graduate or less	41	63	56
More than high school	53**	58	57
Employed			
Yes	50	64	58
No	44	54**	52
Retired	43	56	61
Annual household income			
0 – $50,000	46	59	52
$50,001 – $100,000	50	61	59*
$100,001+	48	62	62**
Age			
18 – 24 years	59	56	52
25 – 54 years	52	64*	59
55 years+	38**	57	56
Registered voter			
Yes	47	59	59
No	48	67*	50*
Likely voter[b]			
Yes	46	60	60
No	53	54	57
Political affiliation			
Democrat	53	56	49
Republican	33**	66**	66**
No preference	39	43	52
Other[c]	56	63*	59**

Table 15, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
Annual miles driven			
1 – 7,500	47	58	55
7,501 – 12,500	50	59	59
12,501+	52	72**	68**
Don't know	30*	43*	34**
Don't drive	48	58	48
Miles per gallon[d]			
≤ 19 mpg	48	64	62
20 – 30 mpg	48	60	61
31+ mpg	44	59	62
Taken transit in last 30 days			
Yes	64	63	46
No	43**	59	60**
Transit service in community			
Has transit service	51	62	53
No transit service	38**	58	72**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Percent of respondents who "strongly support" or "somewhat support" each method to raise funds for public transportation.

[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] Independent or affiliated with any other party.

[d] 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 11, 2017).

Notes: The test of two proportions was used to check if there was a statistically significant difference between responses among subgroups. The first subgroup listed in each category is the "base"-case for the test; it is compared with the proportion of respondents who "supported" using each method for raising funds to pay for transit in each of the other subgroups within that category.

Table 16. Respondents' Preferred Method to Expand and Improve Public Transportation, by Subgroup (2017)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
All respondents[a]	29	41	27	1	<1
Census region					
Northeast	36	37	25	1	1
Midwest	26*	38	33	2	0
South	29	40	29	1	0
West	27	46*	23	2	1
Gender					
Male	29	41	29	1	0
Female	29	41	25	2**	0
Race					
White	27	41	29	1	0
Black/African-American	26	46	21*	2	0
Asian/Asian-American	46**	43	11**	0	0
Other	38*	30*	28	3	1
Of Hispanic/Latino origin/descent					
Yes	26	49	22	2	0
No	30	39**	28	1	0
Education					
High school graduate or less	18	48	29	1	0
More than high school	36**	37**	25	1	0
Employed					
Yes	29	42	28	1	0
No	30	41	25	2*	0
Retired	27	39	25	4**	2*
Annual household income					
0 – $50,000	26	44	25	2	0
$50,001 – $100,000	32	38	29	1	0
$100,001+	30	41	27	1	0
Age					
18 – 24 years	33	39	28	0	0
25 – 54 years	32	40	27	1	0
55 years+	24*	43	26	3*	1
Registered voter					
Yes	28	41	29	1	0
No	31	44	19**	3	0
Likely voter[b]					
Yes	28	41	29	1	0
No	28	40	30	1	1

Table 16, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
Political affiliation					
Democrat	39	35	21	0	0
Republican	15**	49**	34**	2	0
No preference	32	30	30	6**	0
Other[c]	30*	41	26	1	1
Annual miles driven					
1 – 7,500	26	41	29	2	0
7,501 – 12,500	32	38	28	1	0
12,501+	28	48	23	0	0
Don't know	38	36	25	2	0
Don't drive	29	36	25	2	0
Miles per gallon[d]					
≤ 19 mpg	27	44	29	0	0
20 – 30 mpg	28	41	29	1	0
31+ mpg	37	42	20	1	0
Taken transit in last 30 days					
Yes	42	42	14	1	0
No	25**	41	30**	1	0
Transit service in community					
Has transit service	31	44	23	1	0
No transit service	26	34**	38**	1	0

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Numbers do not sum to 100% due to rounding and an additional 42 respondents (3%) who volunteered "don't know."

[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] Independent or affiliated with any other party.

[d] 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 11, 2017).

Note: The test of two proportions was used to check if there was a statistically significant difference between responses among subgroups. The first subgroup listed in each category is the "base"-case for the test; it is compared with the proportion of respondents who indicated their "preferred method" for raising funds to pay for transit in each of the other subgroups within that category.

VI. CONCLUSIONS

SUMMARY OF KEY FINDINGS

Overall Support Levels for the Tax Options in 2017

The survey results show that a majority of Americans would support higher taxes for transportation – under certain conditions. For example, 78% of respondents supported a gas tax increase of 10¢ per gallon to improve road maintenance and 57% supported the same increase if the revenues were used to reduce local air pollution, but support levels dropped to only 36% if the revenues would support 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 considerably by the kind of tax that would be imposed, with a sales tax much more popular (53%) than either the gas tax increase (36%) or a new mileage tax (23%).

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 increased support substantially over that for the base-cases, which were a flat-rate mileage tax of 1 cent per mile and a 10-cent gas tax increase proposed without any additional detail. Those boosts in support for the variants on the base-cases ranged from 16 to 42 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 the 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 likely *relative* preferences among different transportation tax options.

Support Levels among Population Subgroups for the Tax Options in 2017

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 Asian/Asian-American, or of "other" race (compared to whites), of Hispanic origin (compared to non-Hispanics), and in the youngest age group (compared to the oldest group). In terms of politics, party affiliation played a clear role. Respondents who self-identified with any political party other than the Republican party were more supportive than Republicans. Also, Democrats were more supportive than people who didn't identify with any party (independents), and people who said they were not registered voters were more supportive than registered voters.

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 is clearly higher among people who drive 12,500 miles or more a year (compared to those who don't drive at all). Also, support was clearly higher among respondents who

thought government should place a medium or high priority on improving local transit service, improving safety, 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 opinions about the quality of local transit service, the priority government should put on improving public transit service and reducing accidents/improving safety, age, political party, and Hispanic ethnicity.

When comparing support by population subgroup for the gas tax and mileage tax variations with their support for the base-case versions, the overall picture that emerges is simple and clear: the base-case taxes were less popular than the alternative tax options for virtually every subgroup. Further, that boost in support for the variants is generally quite large. The analysis examined 420 cases (7 tax variants for each of 60 subgroups) and found that the boost in support for the variant was 20 percentage points or more for 61% of the subgroups.

Changes in Support for the Tax Options, 2010 – 2017

The research results indicate that American public opinion about the federal transportation tax options tested has changed modestly since 2010. Comparing 2017 with 2010 (or 2011, for those questions added in 2011), support has grown for all the taxes except the flat-rate mileage tax. The growth has been modest in most cases but steady, with the growth in support for each tax ranging from 9 to 27 percentage points across the time period.

Knowledge and Preferences Related to Public Transit in 2017

The questions that focused on public transit reveal that a very high percentage of people (83%) place a high or medium priority on improving and expanding public transit in their state, though other transportation priorities have even higher support levels.

Most respondents were not knowledgeable about how public transit is funded. Only 58% knew that fares do not cover the full cost of transit. Also, only 41% knew that the federal government helps pays for transit, 44% knew of the local government role, and 51% knew of the state government role.

Several questions looked at different aspects of support for various methods the federal government could use to generate revenues for improving transit service. Sixty-eight percent of respondents supported the *concept* of spending gas tax revenues on transit. However, when asked about support for *raising* the gas tax to pay for transit, support was lower, 48%, though still quite close to majority support. Two other options for raising federal revenues for transit that were presented to respondents – raising transit fares or cutting spending on other government programs – had majority support (57% and 60%, respectively).

When respondents were asked which of the three choices for raising new transit revenues they preferred, the clear favorite was reducing spending on other programs, with 41% support. The other two options presented had nearly equal support—27% preferred raising transit fares and 29% preferred raising the federal gas tax.

POLICY IMPLICATIONS FOR TRANSPORTATION PROFESSIONALS AND POLICYMAKERS

Results from the eight years of survey data suggest several key implications for policymakers who wish to craft transportation revenue increases in ways that will 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 all eight 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 eight 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 very low 23% 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 has seen a boost in support of 20 or more percentage points for six of the eight years. The boost crossed political party lines, too, though the magnitude of increased support was greater among Democrats than people 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.

Transit is a popular concept, but it will face the same challenges as other transportation programs in finding new revenues.

The survey results from all eight years show that most people want good public transit service in their state. However, the questions exploring different methods to raise new revenues found relatively low levels of support for all of them. Policymakers seeking new funding for transit will likely find that their programs are similarly popular to more traditional priorities like reducing traffic congestion, but nevertheless face the same obstacles as other transportation programs in finding new tax revenue sources. One strategy to increase support for transit relative to other transportation programs may be to stress transit's environmental benefits. Another may be to focus on local tax measures in communities that have existing transit networks, given the survey finding that people in communities without transit service are less supportive of funding it.

APPENDIX A: SURVEY QUESTIONNAIRE AND RESULTS

This appendix presents the results of the 2017 survey, comparing these with the results from earlier surveys in the series conducted by MTI in 2010, 2011, 2012, 2013, 2014, 2015, and 2016.[13]

The data labeled as "weighted" are weighted to match the Census Bureau's 2015 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.[14]

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 on behalf of the Mineta Transportation Institute. I assure you, I am not selling anything.

We're conducting a brief survey with a small sample of randomly selected households to gather opinions about transportation services across the United States. Your opinions are very important, no matter how much or little you travel. Public officials will use the results of this survey to help shape transportation services in future across the country and in your community.

To thank you for your time, at the end of the survey, you can enter a drawing to win one of five $200 gift cards.

Is now a good time to complete this survey?

Are you a household member 18 years of age or older?

[IF NO: May I speak to a household member 18 years of age or older?]

The survey takes about 12 minutes and is completely anonymous. You may skip any item you don't want to answer, or stop the survey at any time.

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Very good condition	25	19	20	23	19	21	22	19	18
Somewhat good condition	54	62	64	60	57	55	60	57	57
Bad condition	20	19	16	16	23	24	18	23	26
Don't know (volunteered)	<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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Very good	17	16	19	19	20	20	20	20	18
Somewhat good	38	38	41	41	38	35	34	38	36
Poor	15	19	16	13	15	15	14	15	18
No service	23	21	17	21	20	24	23	22	23
Don't know (volunteered)	7	7	7	5	8	5	9	5	6

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	49	47	49	51	53	49	57	55
Medium priority	35	36	33	35	30	31	31	30	31
Low priority	15	14	17	15	17	15	18	12	13
Don't know (volunteered)	4	2	2	1	3	1	2	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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	68	73	68	75	78	80	78	80	80
Medium priority	26	23	27	22	17	17	18	18	17
Low priority	5	4	5	2	4	3	4	2	3
Don't know (volunteered)	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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	47	45	43	44	45	43	45	43
Medium priority	36	33	37	38	35	36	36	38	38
Low priority	14	17	16	18	18	17	17	16	17
Don't know (volunteered)	4	3	2	2	3	2	4	2	2

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

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	n.a.	65	68	71	69	72	69	71	70
Medium priority	n.a.	26	22	20	19	19	22	20	19
Low priority	n.a.	7	9	8	10	8	8	8	9
Don't know (volunteered)	n.a.	1	2	1	1	1	1	1	1

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]

Q7. One idea (a DIFFERENT idea) is to adopt a new national half-cent SALES TAX to pay for transportation. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose this new sales tax?

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	12	14	12	13	15	20	19	19	17
Somewhat support	30	31	37	37	32	32	34	33	30
Somewhat oppose	16	20	19	20	19	17	16	22	21
Strongly oppose	38	30	27	28	30	27	26	24	30
Don't know (volunteered)	4	5	4	3	4	4	5	2	2

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	7	6	5	8	12	12	11	12
Somewhat support	14	17	14	18	17	19	18	24	23
Somewhat oppose	20	22	19	18	19	22	20	21	21
Strongly oppose	54	52	61	57	54	46	48	42	42
Don't know (volunteered)	2	2	1	2	1	1	2	1	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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	14	13	10	14	14	19	18	21	20
Somewhat support	25	25	29	28	26	28	34	37	35
Somewhat oppose	21	20	18	20	19	20	16	18	18
Strongly oppose	36	39	43	38	38	32	30	23	26
Don't know (volunteered)	3	2	1	1	3	1	2	<1	1

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	6	6	5	6	7	8	7	6
Somewhat support	12	16	15	13	12	16	14	16	15
Somewhat oppose	15	17	17	16	20	17	16	19	19
Strongly oppose	61	58	60	64	59	57	59	56	59
Don't know (volunteered)	3	2	3	2	3	2	2	1	1

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	14	14	17	16	17	17	21	20	17
Somewhat support	19	22	24	23	26	26	27	24	24
Somewhat oppose	18	18	17	18	19	18	16	19	18
Strongly oppose	46	42	40	42	37	37	34	36	40
Don't know (volunteered)	3	4	2	2	2	2	2	1	1

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	14	14	18	19	20	21	21	17
Somewhat support	21	33	27	35	33	31	34	36	33
Somewhat oppose	23	16	16	19	19	18	16	17	19
Strongly oppose	42	33	41	28	26	28	26	25	29
Don't know (volunteered)	6	3	2	2	2	2	2	1	1

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	12	14	14	19	20	21	23	25	20
Somewhat support	30	32	26	30	29	28	31	29	29
Somewhat oppose	19	15	14	17	17	18	16	16	18
Strongly oppose	36	34	41	32	30	30	28	29	32
Don't know (volunteered)	3	6	4	2	3	2	2	1	1

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	26	23	33	33	34	38	39	34
Somewhat support	n.a.	36	35	34	36	37	36	39	38
Somewhat oppose	n.a.	12	10	12	13	12	10	9	11
Strongly oppose	n.a.	22	31	20	17	17	16	13	16
Don't know (volunteered)	n.a.	4	2	1	1	1	1	<1	1

Q13. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	23	25	27	27	29	30	31	24
Somewhat support	n.a.	34	29	35	35	34	33	34	32
Somewhat oppose	n.a.	15	12	17	16	15	16	18	21
Strongly oppose	n.a.	24	31	21	21	21	19	17	22
Don't know (volunteered)	n.a.	5	3	1	1	1	2	<1	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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	13	11	10	12	12	18	17	23	21
Somewhat support	19	25	21	28	29	29	27	29	29
Somewhat oppose	19	18	16	17	19	17	18	17	16

Strongly oppose	46	42	50	42	38	34	35	31	33
Don't know (volunteered)	3	4	3	1	2	2	2	1	1

Now I have a few questions about public transit, which means buses, light rail, and trains.

Q15. When people ride public transit, they pay a fare. This money is used to pay for the service. Do you think that the money collected from public transit fares in general covers the FULL cost of the service?

[NOTE: If respondent asks what kind of costs, say: "Please think about costs to build, operate, and maintain the system."]

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Yes	n.a.	n.a.	n.a.	30	34	33	35	31	24
No	n.a.	n.a.	n.a.	55	50	53	49	58	65
Don't know (volunteered)	n.a.	n.a.	n.a.	15	16	14	16	11	11

Note: Questions Q15A-D were *only* asked of respondents who answered "no" to Q15.

Q15A. In general, what PERCENT of the full cost of public transit services do you think the fares cover?

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
1 to 33%	n.a.	n.a.	n.a.	24	28	21	27	25	26
34 to 66%	n.a.	n.a.	n.a.	42	38	40	41	49	48
67 to 100%	n.a.	n.a.	n.a.	18	17	17	18	13	14
Don't know (volunteered)	n.a.	n.a.	n.a.	15	18	22	14	12	12

*Respondents could select any percent from 0 to 99. The mean percent was 46% (both weighted and unweighted data), with a standard deviation of 19% (weighted) and 20% (unweighted).

I'm going to read you a list of potential funding sources. For each, please tell me if you think it helps to pay for public transit services.

Q15B. The federal government?

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	n.a.	70	60	60	60	71	71
Does not pay	n.a.	n.a.	n.a.	25	31	33	33	25	25
Don't know (volunteered)	n.a.	n.a.	n.a.	5	10	7	7	3	5

Q15C. State governments?

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	n.a.	81	81	80	81	87	85
Does not pay	n.a.	n.a.	n.a.	13	11	14	13	12	12
Don't know (volunteered)	n.a.	n.a.	n.a.	6	9	6	6	2	3

Q15D. Local governments?

[NOTE: if the respondent asks about the definition of local government, say "either cities, counties, parishes, or boroughs."]

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	n.a.	72	67	70	72	76	75
Does not pay	n.a.	n.a.	n.a.	21	24	21	21	21	23
Don't know (volunteered)	n.a.	n.a.	n.a.	7	9	10	7	3	3

Q16A. Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Other people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic and wear-and-tear on the roads. Would you SUPPORT or OPPOSE spending SOME gas tax money on public transit?*

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Support	n.a.	n.a.	n.a.	64	61	65	66	68	64
Oppose	n.a.	n.a.	n.a.	33	35	34	34	29	34
Don't know (volunteered)	n.a.	n.a.	n.a.	2	4	1	1	2	2

*Half the sample received the question with this wording, and the other half received the question with the options presented in reverse order, i.e., "Some people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic congestion and wear-and-tear on the roads. Other people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Would you support or oppose spending SOME gas tax money on public transit?"

Q17. Suppose Congress has voted to spend more money to expand and improve public transit around the country but has NOT yet decided how to pay for the improvements. Would you strongly support, somewhat support, somewhat oppose, or strongly oppose each of the following ways to raise money for public transit?

[RANDOMIZE LIST A-C]

Q17A. Raise the federal gas tax

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	9	9	10	14	10	15	15
Somewhat support	n.a.	n.a.	19	24	26	27	31	33	29
Somewhat oppose	n.a.	n.a.	16	19	16	20	18	19	19
Strongly oppose	n.a.	n.a.	53	48	45	37	40	32	36
Don't know (volunteered)	n.a.	n.a.	3	1	2	1	2	1	1

Q17B. Reduce spending on OTHER federal programs

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	25	27	28	30	29	28	24
Somewhat support	n.a.	n.a.	31	30	32	28	31	32	32
Somewhat oppose	n.a.	n.a.	18	18	17	20	15	20	20
Strongly oppose	n.a.	n.a.	18	18	15	14	17	16	19
Don't know (volunteered)	n.a.	n.a.	9	6	8	7	9	4	5

Q17C. Raise transit fares

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	14	18	15	18	16	19	17
Somewhat support	n.a.	n.a.	31	38	37	36	33	38	39
Somewhat oppose	n.a.	n.a.	21	19	19	21	20	18	20
Strongly oppose	n.a.	n.a.	27	22	23	21	25	23	22
Don't know (volunteered)	n.a.	n.a.	7	3	6	5	6	2	3

Q18. If you could only select ONE of the three options I just described, which would you prefer?

1. Raise the federal gas tax
2. Reduce spending on OTHER federal programs
3. Raise transit fares

4. I WOULD EQUALLY OPPOSE ALL THREE MEASURES
5. I WOULD EQUALLY SUPPORT ALL THREE MEASURES
6. DON'T KNOW

	2010	2011	2012	2013	2014	2015	2016	2017	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Raise the federal gas tax	n.a.	n.a.	14	17	17	21	21	29	30
Reduce spending on other federal programs	n.a.	n.a.	48	48	48	45	43	41	40
Raise transit fares	n.a.	n.a.	27	27	24	25	23	27	25
Equally oppose all three (volunteered)	n.a.	n.a.	5	3	5	4	7	1	3
Equally support all three (volunteered)	n.a.	n.a.	2	1	2	2	3	<1	1
Don't know (volunteered)	n.a.	n.a.	4	3	5	3	3	1	2

APPENDIX B: PUBLIC OPINION SURVEYS REVIEWED

The tables in this appendix summarize key findings from a sampling of public opinion polls asking respondents about their support for taxes to raise transportation revenues. Table 17 presents responses to gas tax proposals, Table 18 presents responses to mileage tax proposals, and Table 19 presents responses to sales tax proposals. Complete source citations for all items in the tables are given in the report bibliography.

Table 17. Public Opinion Polling on Gas Tax Increases

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)	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.
Center for the Study of Democratic Institutions	2016	TN registered voters	67% of the respondents were "willing to pay 2 cents more per gallon on gas if it meant that more could be spent to improve roads and bridges to help ensure economic growth and public safety." In addition, 55% of 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.

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	67% 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 23%. Support was 40% when 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 Transportation Commission	2016	San Francisco Bay Area registered voters	66% of respondents who heard various arguments for and against a regional gas tax increase would "favor" 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 and pedestrian routes." If the proposed tax were 10¢ per gallon, then 58% supported it.
Center for the Study of Democratic Institutions	2015 (Nov.)	TN registered voters	66% of respondents would be "willing" to pay 2¢ more per gallon of gas "if it meant that more could be spent 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.
Metropolitan Transportation Commission (Corey, Canapary, & Galanis)	2016	San Francisco Bay Area, CA, residents	65% of respondents would "favor" a proposed ballot measure to "established 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 and pedestrian routes." 58% would support the same measure if the increase were 10 cents per gallon.
CBS News/*The New York Times*	2007	U.S. residents	64% of respondents "would be willing to pay" an unspecified increase in the gas tax if proceeds were used to research renewable energy sources, while 38% would "favor" an increase to promote conservation and reduce global warming.
Mineta Transportation Institute (Agrawal & Nixon)	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 for a 10¢ increase directed only for transportation purposes generally was 24%. Support was 32% 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 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.
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.

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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 for...road 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."
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.

Table 17, continued

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	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" 25¢, 50¢, 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.
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?"

Table 17, continued

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	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."
AAA	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."
The 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.
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 safeguards 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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Quinnipiac University	2015 (April)	NJ registered voters	50% of respondents said they would support an increase in the gasoline tax "to help finance road improvements and mass transportation."
Field Institute Faculty Fellowship (Fisher & Wassmer)	2015	CA registered voters	49% of respondents would "support … increasing the state gasoline tax by 10 cents per gallon, if the money is used to improve the conditions of state roads and highways."
The Washington Post (Morin & Ginsberg)	2005	Washington DC-area residents	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 questions on congestion-reduction strategies.
The Washington Post (Abt-SRBI, Inc)	2012	MD residents	48% of respondents "favored" a 5¢ per gallon increase in the state gas tax "if the money is used for transportation projects." Follow-up questions for 10¢ and 15¢ increases were "favored" by 26% and 25% of respondents respectively.
The Des Moines Register (Selzer & Co.)	2015	IA adults	48% of respondents said they favored an "initiative that may be debated in the Iowa legislature" to "raise the gas tax by around 10 cents a gallon to pay for road and bridge repairs."
NCPPR (Wilson Research Strategies)	2008	U.S. likely voters	47% of respondents "would be willing to pay" some level of increased gas tax as a way to promote 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 Poll	2015	NJ residents	47% of respondents said they would strongly or somewhat support "raising the state tax on gasoline if all of the 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."
Washington State Transportation Commission (EMC Research)	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 rate of inflation so it provides a more stable funding source."
Judy Ford Wason Center for Public Policy	2015	VA registered voters	46% of respondents said they would support increasing the gas tax "to ensure adequate transportation funding for maintenance and new construction."
Public Agenda (Bittle, et al.)	2009	U.S. residents	45% of respondents "favored" a 40¢ per gallon gas tax "to support development of clean renewable energy 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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Star Tribune (Mason-Dixon Polling & Research)	2015 (March)	MN adults	45% of respondents would "support . . . Governor Dayton's proposal to raise the wholesale tax on gasoline to increase spending on road and bridge projects."
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County, FL residents	44% of respondents said they "strongly agree" or "somewhat agree" with increasing the gas tax as an option "to pay for unfunded transportation needs in Pasco County."
Idaho Politics Weekly (Dan Jones & Associates)	2015	ID registered voters	44% of respondents said they "strongly support" or "somewhat support" an increase in the gas tax "to provide more funding for Idaho's roads and highways."
Eagleton Institute of Politics	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 "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 Institute (Weinstein, et al.)	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 that such an increase would have been 0.5¢ per gallon in the previous year.
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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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/ *Time*/ *The Washington Post* (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."
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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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%.
The 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."
Eagleton Institute of Politics	2014 (March)	NJ residents	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."
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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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. "
HNTB Corporation (Kelton Research)	2011	U.S. residents	36% of respondents agreed that they "would support" a 10¢ per gallon gas tax increase "now that the economy has improved" after being informed that the tax had not risen since 1993 and that it no longer "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 Association (Public Opinion Strategies)	2014	U.S. registered voters	36% of respondents said they somewhat or definitely favor "raising federal taxes on gas and diesel five cents 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 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-Constitution (Abt SRBI)	2015	GA adults	36% of respondents said they would support "paying a higher gasoline tax if the money is used for transportation projects."
Quinnipiac University	2014 (July & Aug.)	NJ registered voters	36% of respondents said they would support an increase to the gasoline tax "to help finance road improvements and mass transportation."
HNTB Corporation (Kelton Research)	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 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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
The University of Idaho James A. and Louise McClure Center for Public Policy Research	2014	ID likely voters	35% of respondents said they would "strongly support" or "somewhat support" increasing "fuel taxes" to "raise more funds for Idaho's roads and bridges." 32% said they would "strongly support" or "somewhat support" charging a "sales tax on fuel."
Utah State University Institute of Government & Politics and The Exoro Group (Dan Jones & Associates)	2014	UT registered voters	35% of a split sample said they favor or strongly favor a legislative initiative "that would increase the gas tax in order to pay for the needed building and maintaining of roads." Among the other half of respondents, who also were also told the initiative "would cost around 435 million dollars per year," 34% said they favor or strongly favor the proposal.
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."
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.
ABC News/ *The Washington Post*/ 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 25 cents per gallon.

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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 tax will help fund improvements to roads throughout the state as well as develop mass transit alternatives that would relieve traffic."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
The 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.
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."
The 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.

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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."

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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.)	Likely MD voters	22% of voters in Maryland approve of their state government's 2013 decision to raise the gas tax by 21¢ over three years.
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	Likely voters in MO State Senate Dist. 25	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.
Rasmussen Reports (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 3¢ per gallon.

Table 17, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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.
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.

Table 18. Public Opinion Polling on Mileage Taxes

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."
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 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 24%.
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	43% 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 19%.

Table 18, continued

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	41% 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 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 (EMC Research)	2015	San Francisco Bay Area residents	41% of respondents "strongly" or "somewhat favor" a "vehicle fee to fund transportation improvements that is determined by the number of miles the vehicle is driven, with strict privacy protections and no costs to the owner for new technology installation."
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist & Stoycheva)	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 replacement for the current gas tax without describing the mechanism by which miles would be determined. Respondents were asked to imagine that, instead of paying a state gas tax, they could pay at the gas pump a tax based solely on the number of miles the vehicle was driven in Georgia since it was last refueled." 36% of respondents would "support" a VMT tax of 2.10 cents per mile "as a replacement for the current 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 (Kelton Research)	2010	U.S. residents	39% of respondents agreed with the statement "the U.S. should try to reduce transportation greenhouse-gas emissions by reducing the number of miles that vehicles travel through a mileage use tax."
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	39% 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." Support decreased to 19% of respondents when all vehicles paid the same flat fee of one cent per mile.
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	36% 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.
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."

Table 18, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
The 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."
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.)

Table 18, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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.”
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.”

Table 18, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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.)
Rasmussen Reports (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."

Table 19. Public Opinion Polling on Sales Taxes

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
City of Palo Alto (Fairbank, Maslin, Maulin, Metz & Associates – FM3)	2016	Palo Alto, CA, likely voters	75% of respondents "think" they "would vote yes" on a Santa Clara County 30-year, half-cent sales tax "to 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 ease congestion on County Expresways and key highway interchanges." Support dropped to 69% after respondents heard about a possible city tax for transportation.
San Miguel County (Keating Research)	2016	San Miguel County, NM, Precincts 1, 2, & 3 likely voters	73% would support "a one-quarter of one percent increase in the San Miguel County sales tax rate" to fund "the formation of the San Miguel County Regional Transportation Authority, also known as SMART transit."
San Bernardino and Riverside Counties, CA	2002	Residents of Riverside and San Bernardino, CA, counties	72% of Riverside County residents and 75.8% of San Bernardino County residents said that they would support local sales tax measures in upcoming referendums (in 2002). Analysis of the survey data showed that the measures were supported consistently across a variety of subgroups (income level, racial identity, voter 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 Transportation Authority (EMC Research)	2016	Contra Costa County, CA, likely voters	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 Costa County; Improve transit connections to jobs and schools; Fix roads, improve highways and increase bicycle and pedestrian safety; Reduce traffic congestion and improve air quality; 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 Transportation Commission (EMC Research)	2011 (Mar.)	Alameda County, CA, registered voters	71% of respondents were "likely to vote yes to approve" an extension of a 0.5¢ county sales tax "to address an updated plan for the county's current and future transportation needs." Respondents were informed about the fact that the tax passed twelve years previously and that "money from this measure could only be spent on the voter-approved expenditure plan, and all money from this measure would stay in Alameda County and 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¢ (45% to 39%).
Virginia Transportation Construction Alliance (Public Opinion Strategies)	2013	VA likely voters	69% 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 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 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.)

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Alameda County Transportation Commission (EMC Research)	2011 (Oct.)	Alameda County, CA, registered voters	69% of one group of respondents were "likely to vote yes to approve" a measure "extending the existing transportation sales tax and increasing it by one half cent." 59% of a second group of respondents were "likely 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 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 Democratic Institutions	2017	Nashville/ \Davidson County, TN, adult residents	68% of respondents said they would be "willing to pay 50 cents more in sales tax for every $100 you spend 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 same purpose.
Sacramento Transportation Authority (Evans)	2016 (March)	Sacramento County, CA, likely voters	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 and pedestrian safety by "enacting a countywide 30-year sales tax, at a rate of one half of one percent, raising approximately 100 million dollars annually, with independent oversight and audits." Prior to hearing support message, 69% would vote "yes to approve" the measure.
Transportation Authority of Marin (Godbe Research)	2014	Marin County, CA, likely voters	68% of respondents said they would "definitely" or "probably" vote yes on a measure to "authorize a quarter cent sales tax to "provide new or improved school bus service, help reduce traffic congestion on 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 Transportation Commission (EMC Research)	2014	Contra Costa County, CA, registered voters	68% of respondents said they would vote yes to approve a ballot measure that would increase the county sales tax by a half cent to fund a "25 year Transportation Expenditure Plan." Respondents were given 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; reduce traffic congestion and improve air quality; [and] enhance transit services for seniors and people with disabilities."
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.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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 County... in 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").
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¢.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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.”
UtahPolicy.com (Bernick)	2015 (Aug.)	UT adults	52% of respondents “favor” a quarter-cent sales tax hike for local transportation needs.
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.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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."

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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."
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 raised…will 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."

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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.
The 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."

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
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."
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 seven 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 Institute, June 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-federal-taxes-public-transit-highways-streets-roads.pdf (accessed April 20, 2016); 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 4 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2013), http://transweb.sjsu.edu/PDFs/research/1228-American-tax-poll-2013-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 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); 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 7 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2016) http://transweb.sjsu.edu/PDFs/research/1528-road-and-transit-taxes-public-opinion-survey-2016.pdf (accessed date May 20, 2017).

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. 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.

4. 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).

5. 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 17, 2017).

6. 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).

7. For more information about the use of p-values in scientific research, see: American Statistical Association, "Statement on Statistical Significant and P-values," March 7, 2016, https://www.amstat.org/newsroom/pressreleases/P-ValueStatement.pdf (accessed May 22, 2017).

8. 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.

9. 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), and Agrawal and Nixon (2016).

10. 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).

11. The 2012 survey asked a similar question, but the authors determined from the responses that respondents had misunderstood the question. Therefore, the 2012 results are not presented here for comparison.

12. Half of respondents were asked the question this way, while the other half were asked the question with the two arguments presented in reverse order: "Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic congestion and wear-and-tear on the roads. Other people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Would you support or oppose spending SOME gas tax money on public transit?"

13. For the complete 2010, 2011, 2012, 2013, 2014, 2015, and 2016 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), and Agrawal and Nixon (2016).

14. 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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ABOUT THE AUTHORS

ASHA WEINSTEIN AGRAWAL, PhD

Dr. Agrawal is the Director of the MTI National Transportation Finance Center and also professor of Urban and Regional Planning at San José State University. Her research and teaching interests in transportation policy and planning include transportation finance, bicycle and pedestrian planning, and travel survey methods. She also works in the area of planning and transportation history. She has a BA from Harvard University in Folklore and Mythology, an MSc from the London School of Economics and Political Science in Urban and Regional Planning, and a PhD from the University of California, Berkeley, in City and Regional Planning.

HILARY NIXON, PhD

Dr. Nixon is professor of Urban and Regional Planning at San José State University. Her research and teaching interests in environmental planning and policy focus on the relationship between environmental attitudes and behavior, particularly with respect to waste management and linkages between transportation and the environment. She holds a BA from the University of Rochester in Environmental Management and a PhD in Planning, Policy, and Design from the University of California, Irvine.

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