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This report summarizes the results of year six of a national random-digit-dial public opinion poll asking 1,503 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. Eleven 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), and 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, a gas tax increase of 10¢ per gallon to improve road maintenance was supported by 71% of respondents, whereas support levels dropped to just 31% if the revenues were to be used more generally to maintain and improve the transportation system. 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 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, two-thirds of respondents supported spending gas tax revenues on transit. However, questions exploring different methods to raise new revenues found relatively low levels of support for raising gas tax or transit fare rates. Also, not all respondents were well informed about how transit is funded, with only half knowing that fares do not cover the full cost of transit.

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

MTI Report 12-51

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REPORT 12-51

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

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

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This report summarizes the results of year six of a national random-digit-dial public opinion poll asking 1,503 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. Eleven 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), and 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, a gas tax increase of 10¢ per gallon to improve road maintenance was supported by 71% of respondents, whereas support levels dropped to just 31% if the revenues were to be used more generally to maintain and improve the transportation system. 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 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, two-thirds of respondents supported spending gas tax revenues on transit. However, questions exploring different methods to raise new revenues found relatively low levels of support for raising gas tax or transit fare rates. Also, not all respondents were well informed about how transit is funded, with only half knowing that fares do not cover the full cost of transit.

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I. INTRODUCTION

Over the past several decades, the transportation revenues available from state and federal gas taxes have fallen significantly, especially 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 sixth 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 ten variations on raising the federal gas tax rate or creating a new mileage tax, as well as one option for creating a new federal sales tax. In addition, the survey collected standard sociodemographic data, some travel behavior data, and 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 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 likely *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, including knowledge and opinions about federal taxes to support transit. Several new transit-related questions were added to 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.

Because the survey is the sixth year of a project to assess how public support for federal transportation taxes may change over time, most of the questions are identical to those in the earlier surveys carried out in the five prior years.[1] This report compares the results of the six surveys to establish how public views may have changed over the past years.

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 POLLING ON GAS, MILEAGE, AND SALES TAXES FOR TRANSPORTATION PURPOSES

To provide context for interpreting the survey results presented in this report, Chapter 2 reviews the results from 142 other public opinion polls 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 10 years.

The surveys were identified through a search of the Internet-based archives of popular pollsters and aggregators of public opinion polls, including the Pew Center for the People and the Press, the Roper Center for Public Opinion Research, Rasmussen Reports, SurveyUSA, PollingReport.com, Quinnipiac University Polling Institute, and Polling the Nations. This work was supplemented by searching Google and newspaper databases to find mainstream media coverage on polls about transportation taxes.[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 level. 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 18 in Appendix B presents the key findings from 108 polls asking about support for gas tax increases.

Making direct comparisons among the polls 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 polls 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."

Two general trends emerge across the polls, however. First, 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. Seventeen percent of the polls show majority support, and 34% have a respectable support level of 40% or higher. Second, support tends to be particularly high when the tax increase is linked to some sort of environmental benefit. Table 19 in Appendix B, which presents the results for the 14 polls that link a gas tax increase with environmental benefits, shows that 10 of these found support above 40%.

MILEAGE TAXES

Far less polling has been done about mileage taxes because these are not currently in use anywhere in the United States, although they are under active discussion among policymakers and researchers, and the State of Oregon will begin a voluntary mileage fee program in July 2015.

Table 20 in Appendix B presents a review of 28 polls 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 context, support is not especially strong. None of the 28 polls found a majority in favor of a mileage tax, and only five had support above 40%. Support remains low even when respondents are told that the mileage tax would replace or eliminate a gas tax. Of the 12 surveys that presented a potential mileage tax as a replacement for existing funding, only one found support above 40%.

SALES TAXES

Public opinion about local sales taxes to fund transportation programs has been extensively tested. However, very little polling 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 21 in Appendix B summarizes a sampling of 50 polls testing public opinion on sales taxes. Overall support levels were quite high: 18 of the polls, or about one-third, showed support at 50% or higher.

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, 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 presented in different forms. Overall, 11 different tax options were tested—8 variants of a gas tax increase, 2 variants of a new mileage tax, and 1 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 eight 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 the revenues to be spent only on projects to add more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights; and
- 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.

A new feature of the survey project introduced in 2012 was a special focus on understanding likely public support for raising revenues to pay for 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 to the questions might vary by respondents' opinions about their local and state transportation systems, sociodemographic factors, and travel behavior characteristics. Introductory questions asked respondents to rate the quality of roads and highways and transit service in their community and to indicate the priority they thought government should place on various options for improving the transportation system for everyone in their state. The questionnaire concluded with a standard set of sociodemographic questions on factors such as age, race and 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.

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

SURVEY IMPLEMENTATION

The Social Science Survey Center at California State University, Fullerton, conducted the survey on behalf of the Mineta Transportation Institute's National Transportation Finance Center. The interviewing was conducted from February 26 to March 31, 2015. A total of 1,503 adults nationwide were interviewed by telephone in either English or Spanish, with 33 (2%) of the interviews conducted in Spanish.

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 ± 2.53 percentage points at the 95% confidence level. Smaller subgroups have larger margins of error.

Unless otherwise indicated, all results are weighted to match the Census Bureau's 2013 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.[4]

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 1,503 adult survey respondents were generally representative of the U.S. population in terms of region and sociodemographic characteristics (Table 1). The results were weighted to accommodate for the more significant differences, which were by gender, race, Hispanic ethnicity, education level, imputed income values, and age.

Table 1. Comparison of Survey Respondents to the U.S. Adult Population, by Census Region and Sociodemographic Characteristics (2015)

	Landline sample (%)	Cell sample (%)	Total sample, unweighted (%)	U.S. adults[a] (%)
Census region[b]				
Northeast	22	15	19	18
Midwest	25	26	26	21
South	34	30	33	37
West	18	29	22	23
Gender				
Male	40	55	46	49
Female	60	45	54	51
Of Hispanic/Latino origin/descent	5	16	10	17
Race				
White	83	71	78	74
Black/African-American	7	9	8	13
Asian/Asian-American	2	6	4	5
Other	8	14	10	9
Education				
Less than high school graduate	4	4	4	14
High school graduate	16	17	17	28
Some college	22	26	24	24
College graduate	30	29	30	25
Some grad school	5	4	5	--
Graduate degree	22	20	21	10
Income (annual household)				
$0 – $25,000	17	16	16	24
$25,001 – $50,000	22	21	22	25
$50,001 – $75,000	20	18	19	18
$75,001 – $100,000	14	12	13	12
$100,001 – $150,000	17	21	18	12
$150,001+	12	12	12	9
Age				
18 – 29	4	26	13	22
30 – 39	7	17	11	17
40 – 49	13	15	13	18
50 – 59	21	20	20	18
60 – 69	27	15	22	13
70 – 79	18	6	13	7
80+	11	1	7	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 are from U.S. Census Bureau, "2013 American Community Survey 1-Year Estimates" (no date), http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed April 23, 2015).

[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 April 23, 2015).

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). While only 31% of respondents supported the base-case 10¢ per gallon gas tax increase, five variants that devoted revenue to specific uses received at least 50% support, as did the proposal for a new national sales tax. The highest level of support was for a gas tax increase of 10¢ per gallon to fund road maintenance, which was supported by 71% of respondents. One other option, a gas tax increase with funds devoted to reducing accidents and improving safety, surpassed 60% support.

For tax options in which the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed, 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.

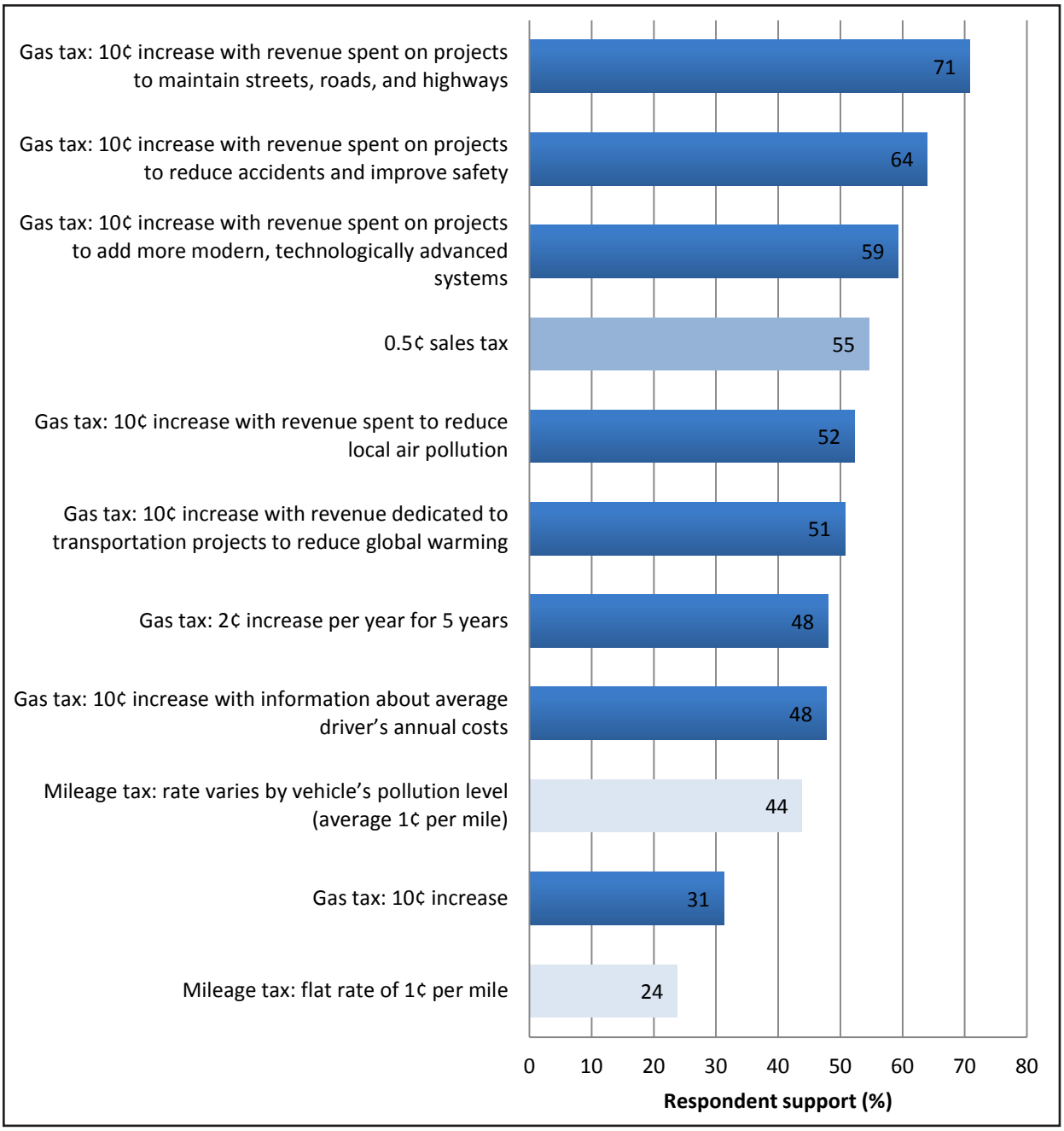

Figure 1. Support[a] Levels for the Tax Options Surveyed in 2015

[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. Results are presented in Tables 2 through 5. In each case, the first subgroup listed in a table for that set of population categories is the base case against which all the other subgroups are compared.

The following discussion focuses on those differences among subgroups in which the patterns are clearest. A pattern is defined as “clear” when (1) the variation in support is statistically significant across at least five of the tax options, and (2) the average magnitude of the difference between the groups across all 11 tax options is at least 7 percentage points or more. Readers should note that the variations described below are not necessarily the only important ones that may exist. Rather, the variations discussed are those that could be identified by the particular statistical tests used and also fell within the cutoff points selected.

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 17 percentage points more likely to support each tax, people of “Other” races were 16 percentage points more likely to support each tax, and African-Americans were on average 9 percentage points more likely to support each tax. People of Hispanic origin were on average 21 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 virtually all of the taxes than respondents in the two older groups, especially as compared with the oldest group (55 years and older). The average difference in support for the taxes was 23 percentage points for the youngest group when compared with the oldest group.

Except for those noted above, Table 2 reveals no other clear patterns of statistical significance. 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.[5]

Table 2. Support[a] for the Tax Options, by Census Region and Sociodemographic Characteristics (2015)

		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 (%)**	**Revenue to add high-tech systems (%)**	**Info about average annual costs (%)**
All respondents	55	24	44	31	48	52	51	71	64	59	48
Census region											
Northeast	48	24	48	31	46	47	49	70	63	58	45
Midwest	54	28	41	30	46	49	46	71	64	58	47
South	56	24	44	30	46	56*	53	71	68	61	50
West	59*	21	42	32	52	55	55	71	61	59	46
Gender											
Male	56	25	41	33	48	50	48	70	61	60	51
Female	54	23	46	30	48	55	53	72	66	59	45*
Race											
White	53	21	41	30	45	46	45	69	60	56	45
Black/African-American	56	29*	48	27	52	69**	57**	77*	78**	69**	48
Asian/Asian-American	54	35**	57**	50**	64**	69**	72**	74	70	69*	69**
Other	68**	32*	60**	36	59*	74**	79**	81*	77**	67*	61**
Of Hispanic/Latino origin/descent											
Yes	72	41	67	44	61	83	84	79	77	75	58
No	52**	21**	40**	29**	46**	47**	45**	70**	62**	57**	46**
Education											
High school graduate or less	58	28	47	25	44	56	52	71	69	63	46
More than high school	52	21**	42*	36**	51*	50*	50	71	60**	57*	49
Employed											
Yes	54	21	42	33	47	49	49	70	63	57	49

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: Revenue to add high-tech systems (%)	Gas tax: Info about average annual costs (%)
No	58	28**	49*	31	53*	62**	61**	72	69*	67**	50
Retired	51	26	41	27	43	45	40*	70	58	53	39*
Annual household income											
0 – $50,000	57	27	49	29	45	57	54	72	67	61	47
$50,001 – $100,000	52	22	37**	31	50	49*	45**	71	61	55	46
$100,001+	51	21*	42	36*	52	47**	51	69	62	61	52
Age											
18 – 24 years	71	33	59	37	64	73	74	91	88	78	67
25 – 54 years	54**	22**	43**	32	46**	53**	50**	66**	62**	58**	48**
55 years+	49**	22**	38**	28*	44**	42**	42**	69**	57**	53**	39**

* 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, with support for all of the taxes more likely among registered Democrats than among registered Republicans, voters registered with other parties, or registered voters who are party-independent. The level of support differed for registered Democrats and registered Republicans by an average of 14 percentage points across the 11 tax options. In addition, people who were not registered to vote were more likely to support most of the taxes than were registered voters, with an average support difference of 10 percentage points across all the taxes. However, a comparison of *likely* voters with unregistered voters showed no clear pattern.

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). Respondents who reported driving from 1 to 7,500 miles annually were more likely to support the taxes than people who reported driving more than 12,500 miles annually, but they were less likely to support the taxes than people who said they did not drive at all. Also, respondents who drove the least fuel-efficient cars were less likely to support the taxes than drivers of higher-mileage vehicles. Finally, respondents who said that they had taken public transit within the previous 30 days were more likely to support the tax options than respondents who said that they had not.

An additional set of analyses examined how support for the different tax options correlates with respondents' opinions about the transportation system (Table 5). Respondents' support for the taxes was correlated with their opinions about the quality of transportation options in their communities. Respondents who rated the condition of roads and highways as very good were more likely to support the taxes than respondents who rated the conditions as bad. Also, respondents who rated the quality of local public transit service as very good were more likely to support the taxes than those who said they had no local public transit service at all.

Another set of questions asked respondents about their priorities for how governments might spend transportation revenues: reducing traffic congestion; maintaining streets, roads, and highways; expanding and improving local public transit service; reducing accidents and improving safety; and increasing the use of modern technologies. Not surprisingly, respondents who placed a high priority on most of these goals were more likely to support almost every tax option than were those who assigned these goals a low priority.[6] The one exception was the question asking about the priority placed on maintaining streets and roads. In this case, respondents prioritizing this highly were indeed more supportive than those making this a low priority, but the magnitude of the differences was not quite large enough to meet the criteria used in this analysis to define a "clear" pattern.

Table 3. Support[a] for the Tax Options, by Political Characteristics (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	55	24	44	31	48	52	51	71	64	59	48
Registered voter											
Yes	52	23	46	30	46	48	46	69	61	55	46
No	61**	27	55**	31	55**	64**	63**	77*	74**	72**	53*
Likely voter[b]											
Yes	52	22	44	31	44	46	44	67	59	55	45
No	51	27	51	27	51	60**	55**	74	68*	59	52
Political affiliation for registered voters											
Democrat	62	32	54	38	54	65	63	76	67	63	52
Republican	50**	22**	42**	29**	42**	37**	31**	66**	61	54*	43*
Independent[c]	42**	13**	46*	26**	46*	39**	44**	63**	55**	47**	44
Other[d]	58	21	42	22**	42	41**	46*	71	58	43**	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] 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, but declined to state a party.

[d] Registered member of any other party, including the American Independent Party.

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 (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	55	24	44	31	48	52	51	71	64	59	48
Annual miles driven											
1 – 7,500	57	25	43	31	53	54	53	73	63	60	52
7,501 – 12,500	54	25	39	34	54	47	44*	66	57	56	47
12,501+	49*	16**	41	28	40**	40**	45*	67	58	50**	44*
Don't know	55	22	50	30	44	62	49	75	70	60	41*
Don't drive	61	38**	60**	37	42*	71**	71**	80	84**	82**	52
Miles per gallon[b]											
≤ 19 mpg	42	16	28	23	35	38	40	63	57	47	40
20 – 30 mpg	58**	22*	43**	33**	51**	50**	48*	72**	60	59**	49*
31+ mpg	56**	30**	57**	44**	56**	52**	59**	70	64	58*	51*
Taken transit in last 30 days											
Yes	59	38	58	42	58	69	64	72	72	73	62
No	53	20**	40**	28**	45**	48**	47**	70	62**	56**	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.

[b] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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 (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	55	24	44	31	48	52	51	71	64	59	48
Opinion on condition of roads and highways in local community											
Very good	60	23	49	34	55	66	60	69	64	64	57
Somewhat good	55	24	43	33	51	52**	50**	73	68	60	48*
Bad	49**	24	41	24**	36**	42**	46**	67	55*	53**	40**
Opinion on public transit service in local community											
Very good	59	27	48	35	47	64	62	76	72	70	58
Somewhat good	53	26	48	33	52	52**	49**	72	63*	60**	45**
Poor	58	24	44	37	52	55*	58	62**	59**	52**	52
No service	52	20*	37**	24**	44	43**	41**	72	65	55**	43**
Role of government in reducing traffic congestion											
High priority	57	24	46	35	47	56	55	71	65	64	51
Medium priority	54	25	46	31	55**	52	49	74	67	57*	50
Low priority	49	21	32**	21**	39	41**	42**	66	58	51**	33**
Role of government in maintaining streets, roads, and highways											
High priority	55	23	44	31	47	52	52	73	66	61	47
Medium priority	56	25	44	30	54	55	49	64**	59*	52*	52
Low priority	34*	35	43	54**	40	43	43	46**	43**	51	49
Role of government in expanding and improving local public transit service											
High priority	61	28	54	36	52	64	62	71	70	66	55
Medium priority	58	24	41**	32	53	53**	51**	74	66	61	47**
Low priority[b]	34**	13**	26**	19**	29**	25**	27**	66	49**	42**	34**
Role of government in reducing accidents and improving safety											
High priority	57	25	47	32	50	57	57	74	73	65	50
Medium priority	51	21	42	30	47	44**	38**	63**	50**	50**	46
Low priority	43**	16*	28**	24	35**	27**	32**	56**	22**	31**	37*

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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
Role of government in using modern technology											
High priority	58	25	48	35	50	56	56	71	67	72	52
Medium priority	55	24	46	31	52	55	53	75	64	52**	47
Low priority	45**	16*	26**	22**	33**	32**	27**	61**	57*	37**	37**

* 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 sample size for this subgroup is <40. Although the sample size is large enough to conduct statistical testing, this result should be interpreted with particular caution, which is why the numbers in this row appear in gray.

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 cent per mile and the 10-cent 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.

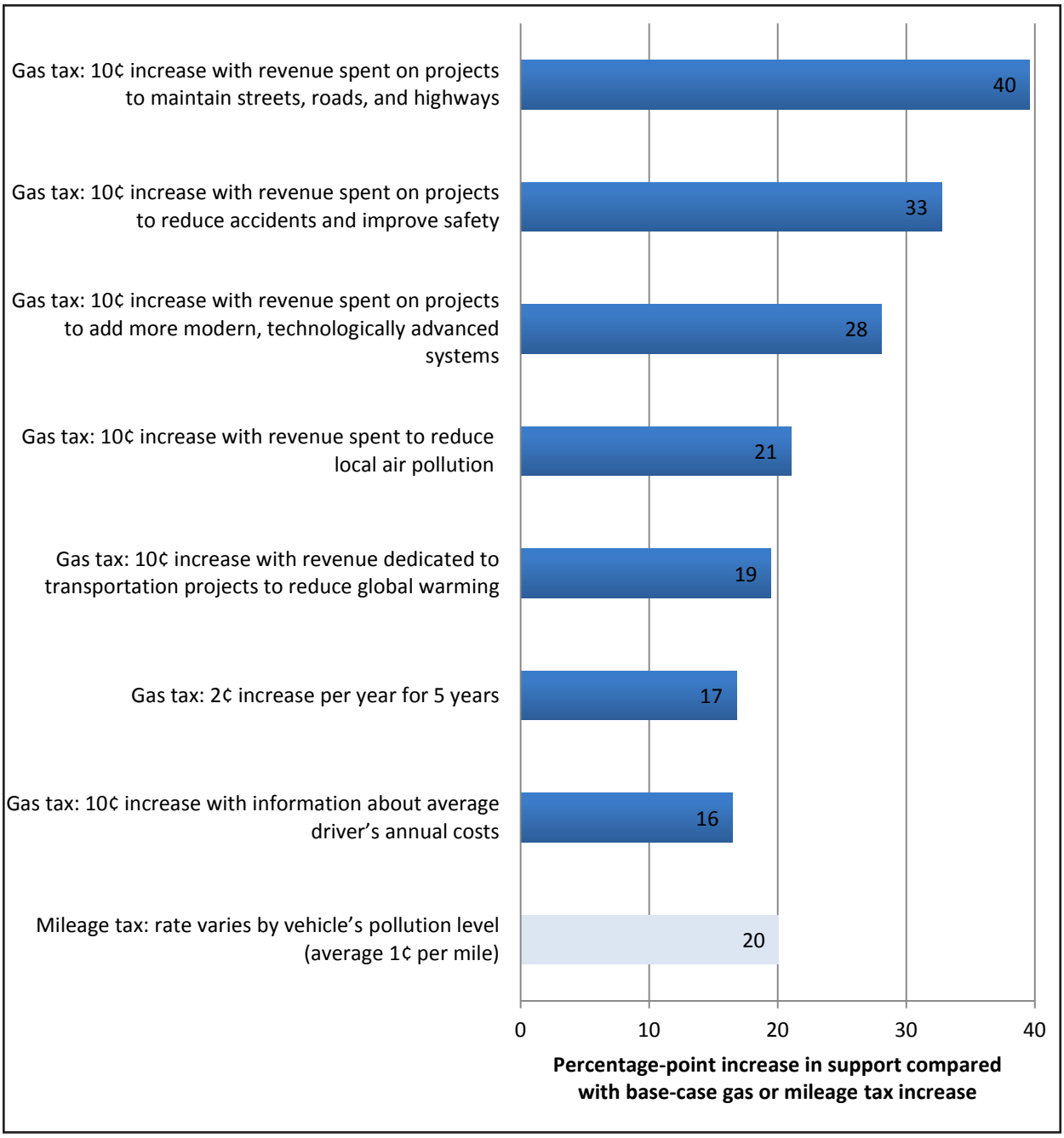

Figure 2. Relative Increases in Support[a] for Variations of the Base-Case[b] Gas Tax and Mileage Tax Concepts (2015)

[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.

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 transportation system. Collectively, the tables include 63 population subgroups; for each of which there are 8 tax comparisons, resulting in a total of 504 cases 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 504 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 for 98% of cases, and the increase was statistically significant for 96% of cases. Further, the increases were very large:

- At least 10 percentage points for 96% of cases
- At least 20 percentage points for 62% of cases
- At least 30 percentage points for 29% of cases
- At least 40 percentage points for 10% of cases

In other words, these variations on the gas and mileage taxes all produce 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 (2015)

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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	20**	17**	21**	19**	40**	33**	28**	16**
Census regions								
Northeast	25**	15**	16**	18**	39**	32**	27**	14**
Midwest	14**	16**	18**	16**	41**	33**	28**	17**
South	20**	16**	25**	22**	40**	37**	30**	19**
West	22**	20**	23**	23**	39**	29**	27**	15**
Gender								
Male	16**	15**	17**	15**	37**	29**	27**	18**
Female	24**	18**	25**	23**	42**	37**	29**	15**
Race								
White	19**	15**	16**	15**	38**	30**	26**	15**
Black/African-American	20**	25**	43**	31**	50**	52**	43**	21**
Asian/Asian-American	22**	14*	19*	22**	24**	20*	19*	19*
Other	28**	23**	38**	42**	45**	41**	31**	25**
Of Hispanic/Latino origin/descent								
No	26**	17**	40**	40**	35**	33**	31**	14**
Yes	19**	17**	18**	16**	40**	33**	28**	17**
Education								
High school graduate or less	20**	19**	31**	27**	46**	44**	38**	21**
More than high school	21**	15**	14**	14**	35**	25**	21**	13**
Employed								
Yes	21**	14**	17**	16**	38**	30**	25**	16**
No	21**	23**	31**	30**	41**	38**	36**	19**
Retired	15**	16**	18**	13**	43**	31**	26**	12*

Table 6, continued

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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
Annual household income								
0 – $50,000	22**	16**	27**	25**	43**	37**	32**	17**
$50,001 – $100,000	15**	19**	19**	14**	40**	31**	25**	16**
$100,001+	22**	15**	10**	15**	33**	26**	25**	16**
Age								
18 – 24 years	26**	27**	36**	37**	54**	51**	41**	30**
25 – 54 years	21**	14**	21**	18**	34**	30**	26**	16**
55 years+	16**	17**	15**	14**	41**	29**	25**	12**

* 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 (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	20**	17**	21**	19**	40**	33**	28**	16**
Registered voter								
Yes	23**	15**	18**	16**	39**	31**	25**	16**
No	28**	24**	33**	33**	46**	43**	41**	22**
Likely voter[c]								
Yes	23**	13**	15**	13**	36**	28**	24**	14**
No	23**	24**	33**	28**	47**	42**	32**	25**
Political affiliation for registered voters								
Democrat	23**	16**	27**	24**	37**	28**	25**	13**
Republican	20**	13**	9*	2	38**	32**	25**	14**
Independent[d]	33**	19**	13**	17**	36**	28**	20**	17**
Other[e]	22**	21*	20*	25**	49**	36**	22**	28**

* 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] Registered, but declined to state a party.

[e] Registered member of any other party, including the American Independent 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 (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	20**	17**	21**	19**	40**	33**	28**	16**
Opinion on condition of roads and highways in local community								
Very good	26**	20**	31**	26**	34**	30**	30	22**
Somewhat good	19**	18**	19**	17**	40**	35**	28**	15**
Bad	18**	12**	18**	22**	43**	31**	29**	16**
Opinion on public transit service in local community								
Very good	21**	12**	29**	27**	42**	38**	36**	24**
Somewhat good	22**	19**	18**	15**	38**	30**	27**	11**
Poor	20**	16**	18**	21**	25**	22**	15**	15**
No service	17**	19**	19**	17**	47**	41**	31**	19**
Role of government in reducing traffic congestion								
High priority	22**	12**	21**	20**	37**	30**	29**	17**
Medium priority	21**	24**	21**	18**	42**	35**	25**	18**
Low priority	11*	19**	21**	21**	45**	38**	30**	12**
Role of government in maintaining streets, roads, and highways								
High priority	21**	16**	21**	21**	42**	35**	30**	16**
Medium priority	19**	24**	25**	19**	34**	29**	22**	21**
Low priority[c]	8	-14	-11	-11	-9	-11	-3	-6
Role of government in expanding and improving local public transit service								
High priority	26**	16**	28**	25**	35**	33**	30**	19**
Medium priority	17**	22**	21**	19**	43**	35**	29**	15**
Low priority	13**	10*	6	8	46**	29**	23**	14**
Role of government in reducing accidents and improving safety								
High priority	21**	17**	25**	24**	42**	41**	33**	17**
Medium priority	21**	17**	15**	8*	33**	20**	20**	16**

Table 8, continued

		Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/ highways (%)	Revenue to improve safety (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
Low priority	12*	11	4	8	33**	-2	8	13*
Role of government in using modern technology								
High priority	22**	15**	22**	21**	37**	32**	37**	17**
Medium priority	22**	21**	24**	22**	44**	33**	22**	16**
Low priority	10*	11*	10*	5	38**	35**	15**	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] The sample size for this subgroup is <40. Although the sample size is large enough to conduct statistical testing, this result should be interpreted with particular caution, which is why the numbers in this row appear in gray.

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 (2015)

		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 (%)	Revenue to add high-tech systems (%)	Info about average annual costs (%)
All respondents	20**	17**	21**	19**	40**	33**	28**	16**
Annual miles driven								
1 – 7,500	18**	22**	23**	22**	42**	32**	29**	21**
7,501 – 12,500	14**	20**	13**	10*	32**	22**	21**	13**
12,501+	25**	12**	12**	17**	39**	30**	22**	16**
Don't know	27**	15**	32**	20**	45**	41**	30**	12*
Don't drive	22**	5	34**	34**	43**	47**	45**	15**
Miles per gallon[c]								
≤ 19 mpg	13**	12**	15**	17**	40**	34**	24**	17**
20 – 30 mpg	21**	18**	17**	14**	39**	27**	25**	15**
31+ mpg	27**	12*	8	15*	26**	19**	14*	6
Taken transit in last 30 days								
Yes	20**	15**	26**	22**	30**	30**	31**	19**
No	20**	17**	20**	19**	42**	33**	27**	16**

* 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), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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 – 2015)

Most of the survey questions replicate those in the five surveys previously administered in this series, so it is possible to look at trends in support over time.[7] The trend analysis shows that support levels have changed modestly over the six surveys (Figure 3 and Table 10). In most cases, the support for a tax varied by 5 or fewer percentage points from one year to another, a change too small to suggest a meaningful change in support. However, comparing 2015 with 2010 (or 2011, for those questions added in 2011), support has grown at least modestly for all the taxes, and the increase is statistically significant for all taxes except the flat-rate mileage tax. As for the change in just the last year, from 2014 to 2015, support increased for nine tax options, with the change statistically significant in five cases.

The tax option that has seen the greatest variation in support across the six surveys is the gas tax increase with revenues dedicated to projects that reduce air pollution. Here, support has varied considerably from year to year, with a low of 30% support in 2010 and a high of 54% support in 2014.

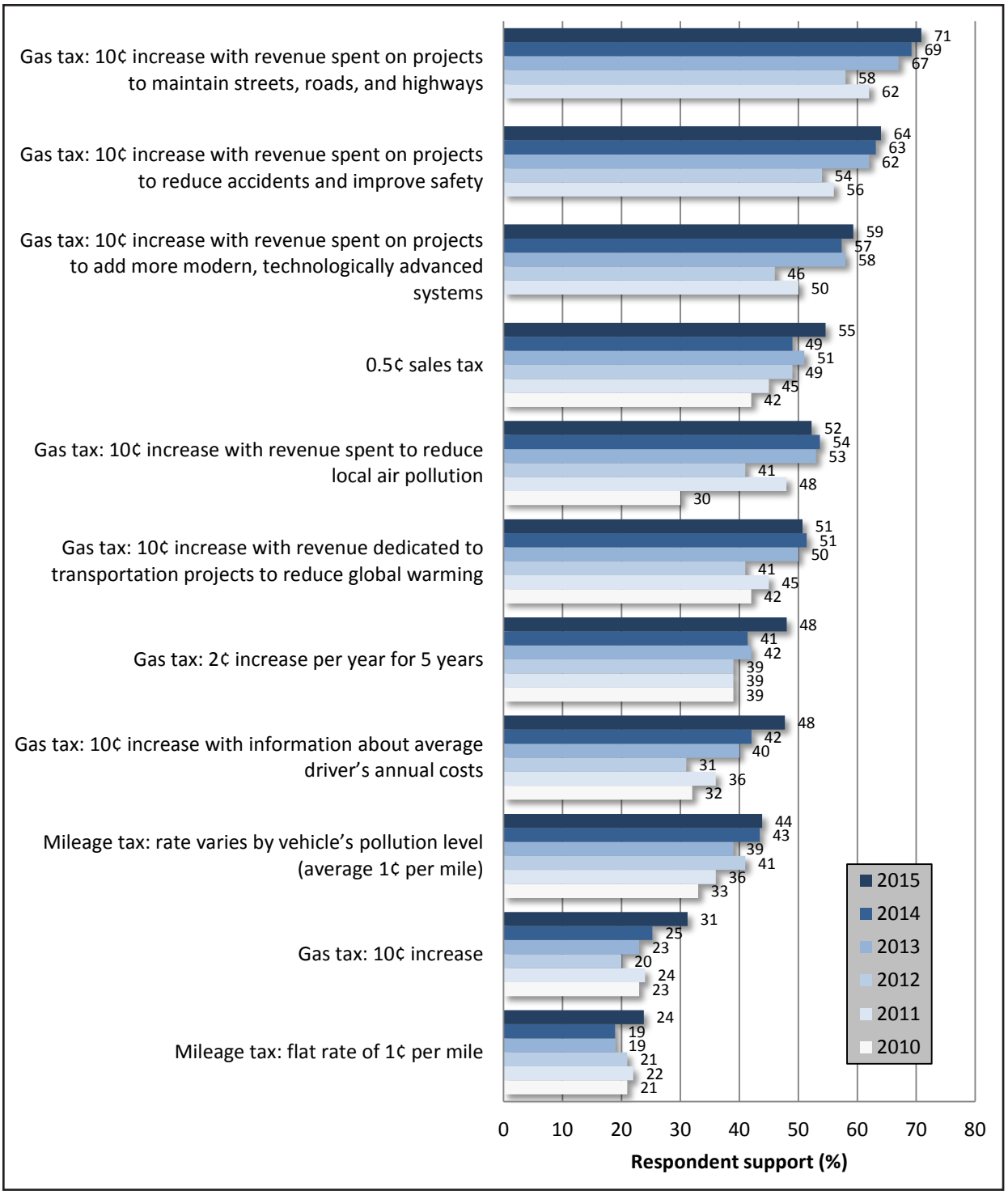

Figure 3. Trends in Support[a] for the Tax Options, 2010 – 2015

[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 – 2015

Tax option	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	Difference 2015-2010 (percentage points)	Difference 2015-2011 (percentage points)	Difference 2015-2012 (percentage points)	Difference 2015-2013 (percentage points)	Difference 2015-2014 (percentage points)
Gas tax											
10¢ increase	23	24	20	23	25	31	8**	7**	11**	8**	6**
10¢ increase, phased in over 5 years at 2¢ per year	39	39	39	42	41	48	9**	9**	9**	6**	7**
10¢ increase, revenues spent to reduce local air pollution	30	48	41	53	54	52	22**	4*	11**	-1	-2
10¢ increase, revenues spent to reduce global warming	42	45	41	50	51	51	9**	6**	10**	1	0
10¢ increase, revenues spent to maintain streets, roads, and highways	--[b]	62	58	67	69	71	--	9**	13**	4*	2
10¢ increase, revenues spent to reduce accidents and improve safety	--[b]	56	54	62	63	64	--	8**	10**	2	1
10¢ increase, revenues spent to add more modern, technologically advanced systems	--[b]	50	46	58	57	59	--	9**	13**	1	2
10¢ increase, respondents informed of the annual tax burden for the typical driver	32	36	31	40	42	48	16**	12**	17**	8**	6**
Mileage tax											
1¢ per mile	21	22	21	19	19	24	3	2	3	5**	5**
1¢ per mile average, but vehicles that pollute more pay more and vehicles that pollute less pay less	33	36	41	39	43	44	11**	8**	3	5*	1
National 0.5% sales tax	43	45	49	51	49	55	12**	10**	6**	4	6**

* 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 2015 to 2010, 2015 to 2011, 2015 to 2012, 2015 to 2013, and 2015-2014.

The findings also show that a few population subgroups were clearly more likely to support the taxes across all six surveys:[8]

- Asians/Asian-Americans and blacks/African-Americans (compared with whites)
- Younger people (compared with people in both older age groups)
- Democrats (compared with Republicans and party-independent registered voters)
- People who had used transit in the previous 30 days (compared with people who did not)
- People who think government should place a high priority on expanding and improving local public transit service, reducing accidents and improving safety, and using modern technology (compared with people who think government should place a low priority on these goals).

The analysis of how the tax variations boosted support over the base cases shows relatively little change from 2010 to 2015 (Figure 4). In every case, the variations had higher support levels than the base-case options. The boosts in support for each tax did differ from year to year, but usually only by a few points. For each tax variant, if one compares the year with the smallest boost in support to the year with the largest boost in support, the differences range from a low of 4 percentage points (the gas tax increased phased in over 5 years) to a high of 23 percentage points (the gas tax increase with revenues dedicated to reducing air pollution). The other taxes all have boosts that fluctuate a maximum of between 6 and 13 percentage points.

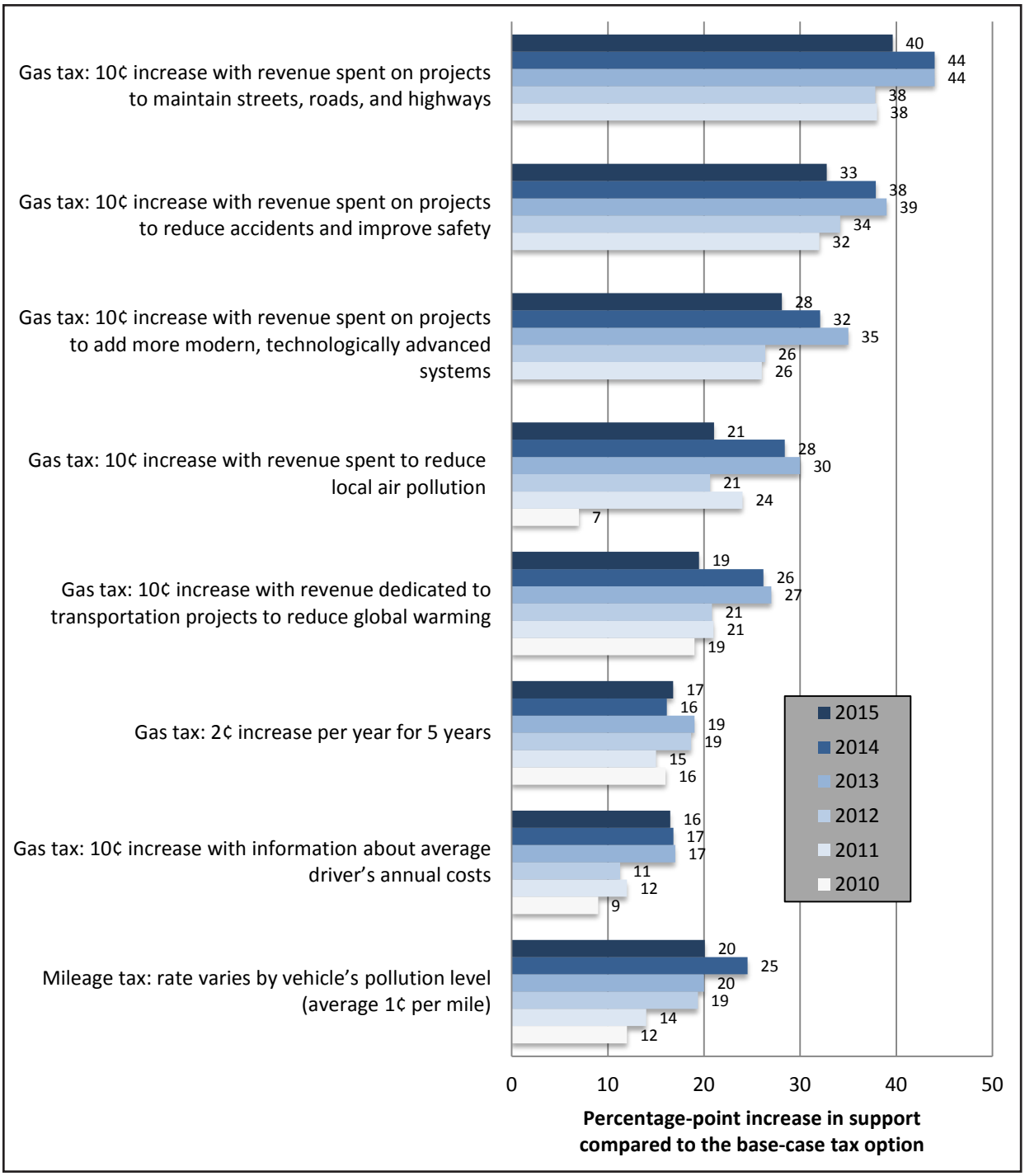

Figure 4. Changes over Time for the Relative Increases in Support[a] for Variations of the Base-Case[b] Gas Tax and Mileage Tax Concepts (2010 – 2015)

[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 (55%) said that it is very or somewhat good, 15% said that it is poor, and 29% 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—81% of respondents felt this way, compared with the other options that ranged from 84-97%. 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 – 2015)

	2012	2013	2014	2015				
	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	80	17	3	<1
Reducing accidents and improving safety	90	91	89	91	72	19	8	1
Adding more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights	83	84	86	85	49	36	13	2
Reducing traffic congestion	81	84	80	84	53	31	15	1
Expanding and improving local public transit service, like buses or light rail	83	80	79	81	45	36	17	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-three percent of respondents (incorrectly) said "yes," 14% said that they did not know, and only 53% (correctly) said "no." These responses are similar to those from the 2013 and 2014 surveys (Figure 5).[9]

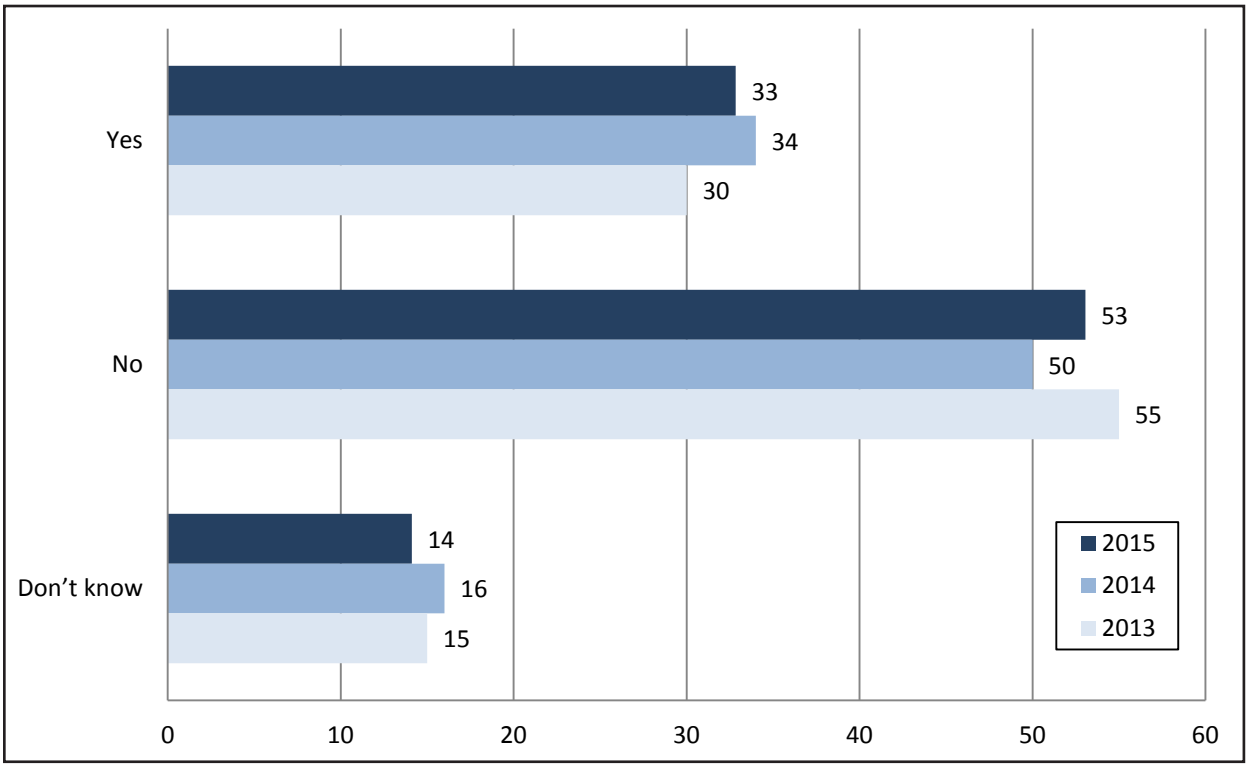

Figure 5. Respondents' Belief about Whether Transit Fares Cover the Full Cost of Transit (2013 – 2015)

Those respondents who did not think that fares 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-one percent said that fares cover 1 to 33% of the full cost, 40% said that fares cover 34–66% of the full cost, 17% said that fares cover more than 67% of the full cost, and 22% said that they did not know.

For those respondents who did not think that fares cover all transit costs, the survey asked if they thought the federal, state, and local government also "helps to pay for public transit services around the country." Slightly more than half (56%) knew that the federal government helps pay for transit, with more respondents aware of the local contribution (65%) and the state contribution (76%).

An alternative way to think about the survey findings on this topic 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, 37% 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 (Figure 6). These percentages vary relatively little from 2013 to 2015 and show no trend over time.

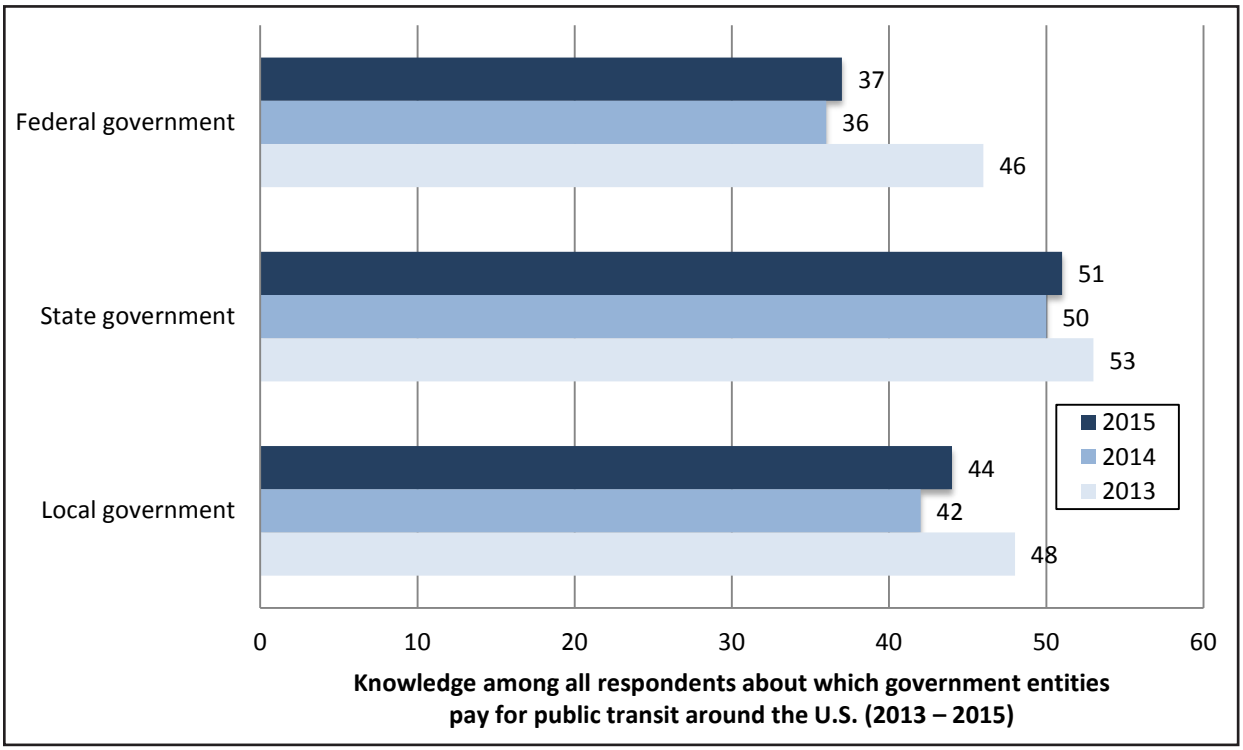

Figure 6. Knowledge among All Respondents about which Government Entities Pay for Public Transit around the U.S. (2013 – 2015)

Knowledge of whether or not fares cover transit and which government entities pay for transit varies considerably among many subgroups. Table 12 shows that a few subgroups are 15 or more percentage points more likely than the others in that category to incorrectly think that fares cover all transit costs. These respondents were:

- Unemployed (compared with retired people)
- In the youngest group (compared with the oldest age group)
- People who don't drive (compared with people who drive at all during the year or don't know their annual mileage)
- Had taken transit in the last 30 days (compared with those who had not)

Table 12. Opinions on Whether Fares Cover the Full Cost of Transit Service, by Subgroup (2015)

	Yes (%)	No (%)	Don't know (%)
All respondents	33	53	14
Census region			
Northeast	31	56	13
Midwest	34	56	10
South	35	46**	19*
West	30	58	11
Gender			
Male	31	57	12
Female	35	49**	16*
Race			
White	31	53	16
Black/African-American	44**	45	11
Asian/Asian-American	30	63	7
Other	37	55	8*
Of Hispanic/Latino origin/descent			
No	42	47	11
Yes	31**	54	15
Education			
High school graduate or less	40	45	15
More than high school	28**	58**	14
Employed			
Yes	30	57	13
No	44**	41**	14
Retired	24	59	17
Annual household income			
0 – $50,000	37	47	16
$50,001 – $100,000	30*	58**	12
$100,001+	27**	61**	12
Age			
18 – 24 years	47	46	6
25 – 54 years	34**	50	15**
55 years+	24**	60**	16**
Registered voter			
Yes	30	56	14
No	43**	43**	14
Likely voter[a]			
Yes	28	58	13
No	36*	47**	17
Political affiliation for registered voters			
Democrat	31	58	11
Republican	31	54	15
Independent[b]	25	60	14
Other[c]	25	69	6

Table 12, continued

	Yes (%)	No (%)	Don't know (%)
Annual miles driven			
1 – 7,500	34	53	13
7,501 – 12,500	25**	61*	14
12,501+	22**	64**	14
Don't know	33	44*	22**
Don't drive	60**	28**	11
Miles per gallon[d]			
≤ 19 mpg	31	54	15
20 – 30 mpg	27	59	14
31+ mpg	31	59	11
Taken transit in last 30 days			
Yes	48	45	7
No	29**	55**	16**
Transit service in community			
Has transit service	34	53	12
No transit service	33	51	17

* 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] Registered, but declined to state a party.

[c] Registered member of any other party, including the American Independent Party.

[d] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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.

With respect to knowledge about which government entities fund transit, the most variation occurs in knowledge about federal funding (Table 13). The subgroups that are at least 15 percentage points *less* likely to know about federal funding are unlikely voters, Republicans or registered voters who decline to state a party (compared with those registered to parties other than Democrat or Republican), people who don't drive or don't know their mileage, and people who have not taken transit in the last 30 days.

The subgroups at least 15 percentage points less likely to know about state government funding are people whose educational attainment is at most a high-school degree, people in the lowest income group (compared with those in the highest income group), people in the oldest age group (compared with the youngest group), and people who don't drive.

Subgroups that were at least 15 percentage points less likely to know about local government funding were people who identified their race as "other"; people not of Hispanic or Latino origin; people whose educational attainment was at most a high-school degree; and people who drive the least, don't drive, or don't know their annual mileage (compared with those whose annual mileage was in the middle group).

Table 13. Knowledge of Which Levels of Government Pay for Transit, by Subgroup (2015)[a]

	Federal gov't (%)	State gov't (%)	Local gov't (%)
All respondents who were asked the question[a]	56	76	65
Census region			
Northeast	58	79	62
Midwest	55	70	60
South	57	77	69
West	53	74	65
Gender			
Male	63	78	64
Female	49**	73*	66
Race			
White	56	77	68
Black/African-American	55	71	61
Asian/Asian-American	59	78	63
Other	58	70	37**
Of Hispanic/Latino origin/descent			
No	55	71	50
Yes	56	76	67**
Education			
High school graduate or less	47	66	53
More than high school	61**	81**	72**
Employed			
Yes	59	78	67
No	57	71*	59*
Retired	45**	73	67
Annual household income			
0 – $50,000	51	70	60
$50,001 – $100,000	58	77*	70**
$100,001+	61*	85**	69*
Age			
18 – 24 years	55	92	63
25 – 54 years	58	77**	65
55 years+	54	69**	65
Registered voter			
Yes	57	77	67
No	55	74	60
Likely voter[b]			
Yes	60	78	69
No	39**	71	59*
Political affiliation for registered voters			
Democrat	61	74	64
Republican	54	80	74*
Independent[c]	56	78	65
Other[d]	76	84	69

Table 13, continued

	Federal gov't (%)	State gov't (%)	Local gov't (%)
Annual miles driven			
1 – 7,500	58	74	61
7,501 – 12,500	61	80	78**
12,501+	60	77	67
Don't know	41**	77	53
Don't drive	41*	54**	58
Miles per gallon[e]			
≤ 19 mpg	53	75	68
20 – 30 mpg	63*	81	68
31+ mpg	58	79	77
Taken transit in last 30 days			
Yes	68	82	70
No	53**	74*	64
Transit service in community			
Has transit service	58	77	68
No transit service	56	74	60*

* Statistically significant at $p<0.05$.

** Statistically significant at $p<0.01$.

[a] This question was asked of only those respondents who, when asked if transit fares cover the full cost of transit, responded "no" or "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] Registered, but declined to state a party.

[d] Registered member of any other party, including the American Independent Party.

[e] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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.

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?[10]

Sixty-six percent of respondents supported spending gas tax revenues on transit, and 34% opposed this. Table 14 shows support and opposition levels for the different population subgroups. Support was considerably greater—by at least 15 percentage points over other subgroups in the same category—among the following groups of people:

- Black/African-American (compared with white)
- Not of Hispanic/Latino origin (compared with those who are)
- In the youngest group (compared with those in the oldest category)
- Registered Democrats (compared with both registered Republicans and party-independent voters)
- Those who don't drive (compared with those who drive the most miles annually)
- Drivers of the most efficient vehicles (compared with those driving the least efficient vehicles)
- People who had taken transit in the past 30 days (compared with those who hadn't)

Table 14. Opinion on Whether Gas Taxes Should Be Spent on Public Transit in Addition to Roads and Highways, by Subgroup (2015)

	Support (%)	Oppose (%)
All respondents	66	34
Census region		
Northeast	59	41
Midwest	62	38
South	67*	33*
West	72**	28**
Gender		
Male	63	37
Female	69**	31**
Race		
White	62	38
Black/African-American	83**	17**
Asian/Asian-American	70	30
Other	73*	27*
Of Hispanic/Latino origin/descent		
No	80	20
Yes	63**	37**
Education		
High school graduate or less	64	36
More than high school	67	33
Employed		
Yes	68	32
No	67	33
Retired	57**	43**
Annual household income		
0 – $50,000	67	33
$50,001 – $100,000	66	34

Table 14, continued

	Support (%)	Oppose (%)
$100,001+	65	35
Age		
18 – 24 years	77	23
25 – 54 years	69*	31*
55 years+	57**	43**
Registered voter		
Yes	64	36
No	71*	29*
Likely voter[a]		
Yes	64	36
No	64	36
Political affiliation for registered voters		
Democrat	73	27
Republican	58**	42**
Independent[b]	58**	43**
Other[c]	66	34
Annual miles driven		
1 – 7,500	68	32
7,501 – 12,500	63	37
12,501+	59*	41*
Don't know	72	28
Don't drive	76	24
Miles per gallon[d]		
≤ 19 mpg	55	45
20 – 30 mpg	65**	35**
31+ mpg	71**	29**
Taken transit in last 30 days		
Yes	81	19
No	62**	38**
Transit service in community		
Has transit service	70	30
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] Registered, but declined to state a party.

[c] Registered member of any other party, including the American Independent Party.

[d] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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 2015 reducing federal spending on other programs received the most support (58%). Raising transit fares received the second highest level of support (54%) and raising the federal gas tax received the lowest level of support (41%). When respondents were asked which of the three choices they *preferred*, the same hierarchy emerged: 45% preferred reducing spending on other programs, 25% preferred raising transit fares, and 21% preferred raising the federal gas tax (Table 15).

Across the four years of surveying from 2012 to 2015, there was a statistically significant increase in support for 2 of the 3 options: 9 points more support for raising transit fares and 13 points more support for raising the federal gas tax (Figure 7). There was only a 2 percentage point increase in support for reducing spending on other federal programs, which was a statistically insignificant change. However, the percent of respondents choosing each option as their preferred alternative remained almost the same from year to year (Table 15).

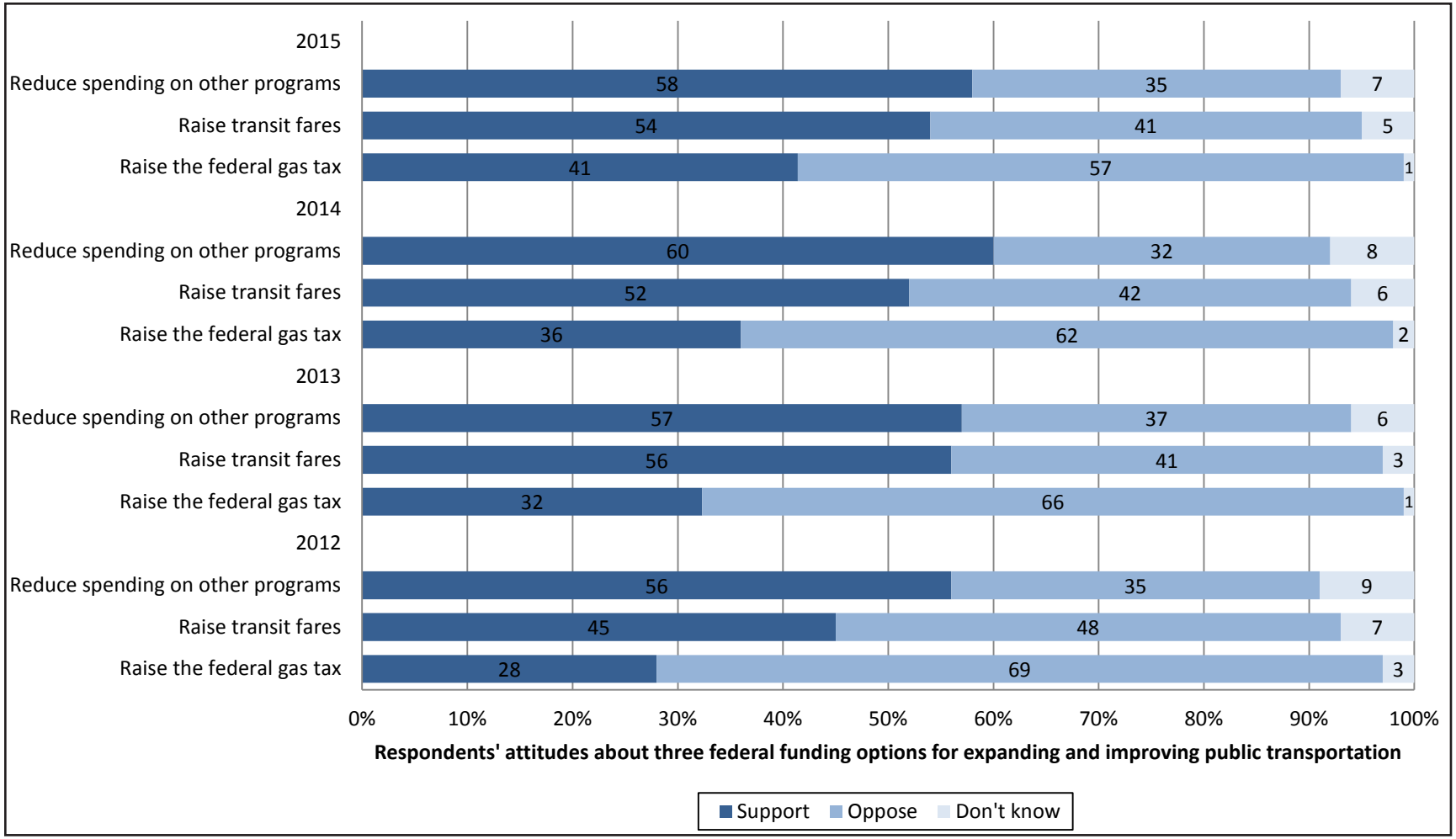

Figure 7. Support for Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2015)

Note: "Support" is the sum of respondents who "strongly support" or "somewhat" support" the method to raise funds for public transportation. "Oppose" is the sum of respondents who "strongly oppose" or "somewhat" oppose" each method. "Don't know" was not presented as an option on the questionnaire, but some respondents volunteered this answer.

Table 15. Preferred Alternative among Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2015)

	2012[a] (%)	2013[b] (%)	2014[c] (%)	2015[d] (%)
Reduce spending on other federal programs	48	48	48	45
Raise transit fares	27	27	24	25
Raise the federal gas tax	14	17	17	21

[a] An additional 10% declined to choose a preferred alternative and instead volunteered an answer (don't know, equally oppose all three, or equally support all three).
[b] An additional 7% volunteered don't know, equally oppose all three, or equally support all three.
[c] An additional 11% volunteered don't know, equally oppose all three, or equally support all three.
[d] An additional 9% volunteered don't know, equally oppose all three, or equally support all three.

Investigating what proportion of people in each respondent subgroups supported each of the three options for raising more federal money for transit shows a few clear differences (Table 16), with the most clearly supportive subgroups defined as those with at least 15 percentage points more support than one or more other subgroups within the same category.

Those most supportive of raising the federal gas tax were respondents who fell into one of the following subgroups:

- Were in the youngest age group (as opposed to the middle and oldest age groups)
- Drove the fewest annual miles (compared with the highest mileage drivers) or didn't know their annual mileage (compared with the highest-mileage drivers and people who don't drive)
- Drove vehicles in the middle and highest efficiency categories (compared with people driving the least efficient vehicles)

Those most supportive of reducing spending on other government programs were respondents who fell into one of the following subgroups:

- "Other" race (as compared with whites, black/African-Americans, or Asian/Asian-Americans)
- Republicans and registered voters affiliated with a party other than Democrat or Republican (compared with registered voters unaffiliated with a party)

Those most supportive of raising transit fares were respondents who fell into one of the following subgroups:

- Republicans (compared with Democrats)
- Drove any annual mileage or didn't know their annual mileage (compared with people who didn't drive)

Table 16. Support[a] for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, by Subgroup (2015)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
All respondents	41	60	55
Census region			
Northeast	39	50	50
Midwest	41	58*	59*
South	42	63**	53
West	42	59*	54
Gender			
Male	45	63	58
Female	38*	54**	49**
Race			
White	39	58	56
Black/African-American	45	58	45*
Asian/Asian-American	50	50	54
Other	47	73**	46
Of Hispanic/Latino origin/descent			
No	50	66	44
Yes	40**	57*	55**
Education			
High school graduate or less	39	60	53
More than high school	43	58	54
Employed			
Yes	43	63	59
No	42	50**	45**
Retired	33**	57	50*
Annual household income			
0 – $50,000	38	58	48
$50,001 – $100,000	43	60	59**
$100,001+	46*	57	58**
Age			
18 – 24 years	58	53	60
25 – 54 years	41**	60	55
55 years+	34**	58	50*
Registered voter			
Yes	41	60	56
No	39	57	49*
Likely voter[b]			
Yes	42	61	58
No	41	53*	46**
Political affiliation for registered voters			
Democrat	48	55	49
Republican	41	69**	68**
Independent[c]	38*	53	55

Table 16, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
Other[d]	34*	69*	55
Annual miles driven			
1 – 7,500	48	58	55
7,501 – 12,500	40	60	58
12,501+	32**	63	58
Don't know	49	52	55
Don't drive	33**	59	32**
Miles per gallon[e]			
≤ 19 mpg	29	62	60
20 – 30 mpg	47**	57	56
31+ mpg	49**	69	59
Taken transit in last 30 days			
Yes	49	61	44
No	39**	58	56**
Transit service in community			
Has transit service	45	60	53
No transit service	34**	53*	59

* 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] Registered, but declined to state a party.

[d] Registered member of any other party, including the American Independent Party.

[e] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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.

When respondents were asked which of the three options they *preferred*, some but not all of the same subgroups were at least 15 percentage points more supportive than other subgroups within the same category (Table 17). For each preferred policy option, the most supportive subgroups were:

- Those most likely to prefer raising the federal gas tax were respondents living in the Western Census region (compared with those from the South).

- Those most likely to prefer reducing spending on other government programs were respondents who fell into any one of the following subgroups: those living in the South (compared with the West); who identified their race as "other" (compared with Asian/Asian-Americans); and Republicans and registered voters affiliated with a party other than Democrat or Republican (compared with Democrats).

- Those most likely to prefer raising transit fares were Hispanic/Latino respondents (compared with those who were not).

Table 17. Respondents' Preferred Method to Expand and Improve Public Transportation, by Subgroup (2015)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
All respondents	21	45	25	4	2
Census region					
Northeast	24	46	24	3	0
Midwest	20	42	30	3	3*
South	13**	52	24	4	3*
West	28	38	24	6	3*
Gender					
Male	24	44	24	5	2
Female	18**	45	27	4	3
Race					
White	20	45	26	4	1
Black/African-American	21	45	24	5	4*
Asian/Asian-American	29	33*	26	1	10**
Other	28	49	15*	6	1
Of Hispanic/Latino origin/descent					
No	29	54	10	3	2
Yes	20**	43**	28**	4	2
Education					
High school graduate or less	18	47	26	4	1
More than high school	23	43	25	4	3**
Employed					
Yes	20	45	28	4	2
No	22	46	21*	4	3
Retired	21	40	22	7*	1
Annual household income					
0 – $50,000	20	47	22	6	2
$50,001 – $100,000	18	45	30**	3	2
$100,001+	27*	39*	25	3	3
Age					
18 – 24 years	27	40	28	1	2
25 – 54 years	19*	45	27	5*	3
55 years+	21	46	21*	5*	1
Registered voter					
Yes	21	44	26	4	2
No	19	45	22	6	3
Likely voter[a]					
Yes	22	42	27	4	2

Table 17, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
No	16*	53**	23	2	3
Political affiliation for registered voters					
Democrat	32	36	26	3	1
Republican	15**	52**	25	5	2
Independent[b]	20**	41	32	3	1
Other[c]	18*	54**	22	3	2
Annual miles driven					
1 – 7,500	23	45	23	4	3
7,501 – 12,500	23	40	30*	3	3
12,501+	21	48	26	4	1
Don't know	10**	47	29	5	3
Don't drive	23	41	19	7	0*
Miles per gallon[d]					
≤ 19 mpg	16	46	30	6	1
20 – 30 mpg	25**	42	26	3	3
31+ mpg	21	43	30	3	2
Taken transit in last 30 days					
Yes	32	46	17	3	2
No	18**	44	27**	5	2
Transit service in community					
Has transit service	24	44	24	3	3
No transit service	14**	45	28	8**	0**

* 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] Registered, but declined to state a party.

[c] Registered member of any other party, including the American Independent Party.

[d] Categories drawn from EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "SmartWay Vehicle Thresholds MY 2015" (January 2014), http://www.epa.gov/greenvehicles/documents/420b14005.pdf (accessed May 18, 2015).

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 11 Tax Options in 2015

The survey results show that a majority of Americans would support higher taxes for transportation—under certain conditions. For example, a gas tax increase of 10 cents per gallon to improve road maintenance was supported by 71% of respondents, whereas support levels dropped to 51% if the revenues were to be devoted to reducing global warming or only 31% if the revenues were to support undefined transportation purposes. As 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 (55%) than either a gas tax increase (31%) or a new mileage tax (24%).

A central goal of the survey was to compare public support for two alternative versions of the mileage tax and eight 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 a low of 16 percentage points to a high of 40 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 2015

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, African-American or of "other" race, of Hispanic origin, and in the youngest age group. In terms of politics, party affiliation played a clear role, with registered Democrats significantly more likely than other registered voters to support the taxes. Respondents not registered to vote were also more likely supporters.

Breaking the respondents into subgroups according to their travel behaviors and perceptions of the transportation system reveals a few other clear correlations with support for the tax options. Support for many of the taxes is clearly higher among respondents who stated that they did not drive at all within the past year or drove the least, as compared with people who drove the most annual miles; people who drove the most fuel-efficient cars; and people who had taken public transit within the previous 30 days. Also, support was

clearly higher among respondents who rated the condition of roads and highways in their community as very good, as well as among those respondents who rated transit service in their community as very good (compared with residents who said they have no transit service in their community). Finally, support was clearly higher among respondents who place a high priority on having government reduce traffic congestion; expand and improve local public transit service; reduce accidents and improve safety; and increase use of modern technologies.

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 504 cases (8 tax variants for each of 63 subgroups) and found that the boost in support for the variant was at least 20 percentage points for 62% of the cases.

Changes in Support for the 11 Tax Options, 2010 – 2015

The research results indicate that American public opinion about the federal transportation tax options tested has changed only modestly since 2010. Overall, support levels have risen a bit over the six-year period, and support was the highest ever in 2015 for nine of the tax options. In addition, the analysis of how the variations on the gas and mileage taxes boosted support over the base cases for each shows little change from one year to the next.

Knowledge and Preferences Related to Public Transit in 2015

The questions that focused on public transit revealed that a very high percentage of people (81%) 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. For example, 33% incorrectly thought that fares cover the full cost of the service. Overall, only 37% knew the federal government 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-six percent of respondents supported the *concept* of spending gas tax revenues on transit. However, when asked about each of three mechanisms the federal government could use to raise new revenues to expand and improve transit, raising the gas tax was supported by the fewest respondents (41%). Both of the other options presented to respondents—raising transit fares or cutting spending on other government programs—had majority support (54% and 58%, respectively).

When respondents were asked which of the three choices for raising new revenues they *preferred*, the same hierarchy emerged: 45% preferred reducing spending on other programs, 25% preferred raising transit fares, and 21% preferred raising the gas tax.

POLICY IMPLICATIONS FOR TRANSPORTATION PROFESSIONALS AND POLICYMAKERS

The results of the six 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 six years show that while support for a one-time gas tax increase can be very low, support could be 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 six years show that while a new mileage fee may be very 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 24% support for a flat 1-cent-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 more than 20 percentage points for most 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 US population may increase support for transportation taxes.

The surveys found that the youngest respondents were much more supportive of the tax options than older 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 six 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 2015 survey described above, comparing these with the results from similar surveys conducted by MTI in 2010, 2011, 2012, 2013, and 2014.[11]

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

The data labeled as "weighted" are weighted to match the Census Bureau's 2013 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.[12]

For the tables in this appendix, the authors removed missing and refused responses from the dataset before calculating the response rates.

* * *

Hello, I'm calling from the Social Science Research Center at Cal State University, Fullerton. We're conducting an important research study on people's thoughts about transportation in the US. May we please have a few minutes of your time for this study?

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.

Ok. Here's my first question.

Q1. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Very good condition	25	19	20	23	19	21	20
Somewhat good condition	54	62	64	60	57	55	57
Bad condition	20	19	16	16	23	24	23
Don't know (volunteered)	<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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Very good	17	16	19	19	20	20	17
Somewhat good	38	38	41	41	38	35	35
Poor	15	19	16	13	15	15	18
No service	23	21	17	21	20	24	26
Don't know (volunteered)	7	7	7	5	8	5	5

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-Q7 RANDOMIZED]

Q.3 How about reducing traffic congestion? Should government make that a high, medium, or low priority?

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	49	47	49	51	53	50
Medium priority	35	36	33	35	30	31	31
Low priority	15	14	17	15	17	15	17
Don't know (volunteered)	4	2	2	1	3	1	1

Q.4 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	68	73	68	75	78	80	79
Medium priority	26	23	27	22	17	17	17
Low priority	5	4	5	2	4	3	3
Don't know (volunteered)	1	<1	1	<1	1	<1	1

Q.5 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	47	45	43	44	45	44
Medium priority	36	33	37	38	35	36	34
Low priority	14	17	16	18	18	17	20
Don't know (volunteered)	4	3	2	2	3	2	3

Q.6 How about reducing accidents and improving safety? Should government make that a high, medium, or low priority?

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

Q7. How about adding more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights? Should government make that a high, medium, or low priority?

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	n.a.	47	46	45	49	49	48
Medium priority	n.a.	36	37	39	37	36	36
Low priority	n.a.	15	15	15	12	13	14
Don't know (volunteered)	n.a.	1	2	1	2	2	2

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 Q8, Q9, Q10]

Q8. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	12	14	12	13	15	20	18
Somewhat support	30	31	37	37	32	32	29
Somewhat oppose	16	20	19	20	19	17	18
Strongly oppose	38	30	27	28	30	27	32
Don't know (volunteered)	4	5	4	3	4	4	3

Q9A. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	7	6	5	8	12	13
Somewhat support	14	17	14	18	17	19	20
Somewhat oppose	20	22	19	18	19	22	20
Strongly oppose	54	52	61	57	54	46	46
Don't know (volunteered)	2	2	1	2	1	1	1

Q9B. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	14	13	10	14	14	19	18
Somewhat support	25	25	29	28	26	28	29
Somewhat oppose	21	20	18	20	19	20	19
Strongly oppose	36	39	43	38	38	32	33
Don't know (volunteered)	3	2	1	1	3	1	1

Q10A. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	6	6	5	6	7	6
Somewhat support	12	16	15	13	12	16	15
Somewhat oppose	15	17	17	16	20	17	16
Strongly oppose	61	58	60	64	59	57	60
Don't know (volunteered)	3	2	3	2	3	2	2

Q10B. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	14	14	17	16	17	17	17
Somewhat support	19	22	24	23	26	26	24
Somewhat oppose	18	18	17	18	19	18	18
Strongly oppose	46	42	40	42	37	37	39
Don't know (volunteered)	3	4	2	2	2	2	2

Now, imagine that the US 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 Q11 TO Q15]

Q11. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	14	14	18	19	20	15
Somewhat support	21	33	27	35	33	31	32
Somewhat oppose	23	16	16	19	19	18	21
Strongly oppose	42	33	41	28	26	28	30
Don't know (volunteered)	6	3	2	2	2	2	2

Q12. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	12	14	14	19	20	21	17
Somewhat support	30	32	26	30	29	28	29
Somewhat oppose	19	15	14	17	17	18	19
Strongly oppose	36	34	41	32	30	30	33
Don't know (volunteered)	3	6	4	2	3	2	2

Q13. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	26	23	33	33	34	31
Somewhat support	n.a.	36	35	34	36	37	37
Somewhat oppose	n.a.	12	10	12	13	12	13
Strongly oppose	n.a.	22	31	20	17	17	18
Don't know (volunteered)	n.a.	4	2	1	1	1	1

Q14. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	23	25	27	27	29	23
Somewhat support	n.a.	34	29	35	35	34	35
Somewhat oppose	n.a.	15	12	17	16	15	19
Strongly oppose	n.a.	24	31	21	21	21	23
Don't know (volunteered)	n.a.	5	3	1	1	1	1

Q15. Would you support the gas tax increase if the money were spent ONLY on projects to add more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights?

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	16	15	22	21	24	19
Somewhat support	n.a.	34	31	34	36	35	35
Somewhat oppose	n.a.	18	15	17	19	18	20
Strongly oppose	n.a.	28	36	25	23	23	24
Don't know (volunteered)	n.a.	4	2	2	2	1	1

Q16. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	13	11	10	12	12	18	19
Somewhat support	19	25	21	28	29	29	28
Somewhat oppose	19	18	16	17	19	17	16
Strongly oppose	46	42	50	42	38	34	36
Don't know (volunteered)	3	4	3	1	2	2	1

Now I have a few questions about public transportation. By public transit, I mean buses, light rail, and trains.

Q17. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Yes	n.a.	n.a.	n.a.	30	34	33	25
No	n.a.	n.a.	n.a.	55	50	53	61
Don't know (volunteered)	n.a.	n.a.	n.a.	15	16	14	14

Note: Questions Q17A-D were not asked of respondents who answered "yes" to Q17.

Q17A. In general, what percent of the full cost of public transit services do you think the fares cover?

	2010	2011	2012	2013	2014*	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
1 to 33%	n.a.	n.a.	n.a.	21	28	21	23
34 to 66%	n.a.	n.a.	n.a.	35	38	40	42
67 to 100%	n.a.	n.a.	n.a.	16	17	17	16
Don't know (volunteered)	n.a.	n.a.	n.a.	29	18	22	18

*Respondents could select any percentage from 0-100. The mean percent was 48%, with a standard deviation of 21% (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.

[NOTE: IF THE RESPONDENT ASKS ABOUT THE DEFINITION OF LOCAL GOVERNMENT, SAY "EITHER CITIES, COUNTIES, PARISHES, OR BOROUGHS."]

Q17B. Who helps pay for public transit around the country? The federal government.

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	42	65	55	56	61
Does not pay	n.a.	n.a.	22	26	29	31	26
Don't know (volunteered)	n.a.	n.a.	36	10	17	13	13

Q17C. Who helps pay for public transit around the country? State governments.

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	56	76	76	76	78
Does not pay	n.a.	n.a.	12	14	10	14	13
Don't know (volunteered)	n.a.	n.a.	32	10	14	11	9

Q17D. Who helps pay for public transit around the country? Local governments.

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	51	68	64	65	70
Does not pay	n.a.	n.a.	16	20	22	21	19
Don't know (volunteered)	n.a.	n.a.	33	12	14	14	11

Q18. 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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Support	n.a.	n.a.	n.a.	64	61	65	64
Oppose	n.a.	n.a.	n.a.	33	35	34	36
Don't know (volunteered)	n.a.	n.a.	n.a.	2	4	1	1

*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."

Q19. 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]

Q19A. Raise the federal gas tax.

	2010	2011	2012	2013	2014	2015	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	9	9	10	14	15
Somewhat support	n.a.	n.a.	19	24	26	27	26
Somewhat oppose	n.a.	n.a.	16	19	16	20	17
Strongly oppose	n.a.	n.a.	53	48	45	37	40
Don't know (volunteered)	n.a.	n.a.	3	1	2	1	2

Q19B. Reduce spending on OTHER federal programs.

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

Q19C. Raise transit fares.

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

Q20. Now, if you could only select ONE of the three options I just described, which would you prefer? Let me read them again for you. [READ FIRST 3 ONLY] [ROTATE LIST 1-3]

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	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Raise the federal gas tax	n.a.	n.a.	14	17	17	21	24
Reduce spending on other federal programs	n.a.	n.a.	48	48	48	45	42
Raise transit fares	n.a.	n.a.	27	27	24	25	24
Equally oppose all three (volunteered)	n.a.	n.a.	5	3	5	4	4
Equally support all three (volunteered)	n.a.	n.a.	2	1	2	2	2
Don't know (volunteered)	n.a.	n.a.	4	3	5	3	3

APPENDIX B: OPINION POLLS REVIEWED

The tables in this appendix summarize key findings from a sampling of recent public opinion polls asking respondents about their support for taxes to raise transportation revenues. Table 18 and Table 19 present responses to gas tax proposals; Table 20 presents responses to mileage tax proposals; and Table 21 presents responses to sales tax proposals. Complete source citations for all items in the tables are given in the bibliography.

Table 18. Public Opinion Polling on Gas Tax Increases

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Boston Globe (Smith)	2008	Massachusetts 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.
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)	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.
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.
Mass Inc. Polling Group	2013	Massachusetts 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.
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.
Georgia Transportation Alliance (Wilson Perkins Allen Opinion Research)	2015	Georgia 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."
YouGov	2014	Registered You-Gov 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."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Rutgers Eagleton Institute of Politics (Eagleton Center for Public Interest Polling)	2014 (April)	New Jersey 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."
HNTB (Kelton Research)	2011 (March)	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.
The Winthrop Poll	2015	South Carolina 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 cents a gallon [with the money] restricted to use for infrastructure, such as repairing roads and bridges."
Loras College Poll	2015	Iowa 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."
Mountain-Plains Consortium (Ozbek, Albeiruti, and Atadero)	2013	Colorado, North Dakota, South Dakota, Utah, and Wyoming 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."
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 wiling 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	New Hampshire 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."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
The Washington Post/ University of Maryland (Abt-SRBI Inc.)	2015	Maryland adults	52% of respondents said they would "oppose eliminating automatic increases in the state's gasoline tax used to fund roads and transportation?"
Minnesota Public Radio (Pugmire)	2007	Minnesota 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.
Quinnipiac University	2015 (April)	New Jersey registered voters	50% of respondents said they would support an increase in the gasoline tax "to help finance road improvements and mass transportation."
The Field Poll	2015	California registered voters	49% of respondents said they 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." 76% correctly stated that the California gasoline tax rate is higher than most other states.
The Des Moines Register (Selzer & Co.)	2015	Iowa 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."
The Washington Post (Morin and 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	Maryland 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.
Monmouth University Poll	2015	New Jersey 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."
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.
Washington State Transportation Commission (EMC Research)	2012	Washington State 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."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Wason Center for Public Policy Survey Research Lab, Christopher Newport University (Kidd)	2015	Virginia 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."
Idaho Politics Weekly (Dan Jones & Associates)	2015	Idaho 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?"
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County, Florida, 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."
Rutgers Eagleton Institute of Politics (Eagleton Center for Public Interest Polling)	2015 (February)	New Jersey 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 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	California 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.
University of Texas, Austin (Musti et al.)	2010	Austin, Texas, 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.
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."
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 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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.
Rutgers Eagleton Institute of Politics (Eagleton Center for Public Interest Polling)	2014 (December)	New Jersey 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."
Marquette University Law School (LHK Partners Inc.)	2014	Wisconsin registered voters	40% of respondents said they were "willing" to "raise gas taxes and vehicle registration fees to pay for highway projects."
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.
Alameda County Transportation Commission (EMC Research)	2011 (March)	Alameda County, California, 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 (December)	New Jersey registered voters	39% of respondents said they would support an increase in the gasoline tax "to help finance road improvements and mass transportation."
Rutgers Eagleton Institute of Politics (Eagleton Center for Public Interest Polling)	2014 (September & October)	New Jersey 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."
The Washington Post	2007	Maryland 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."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Rutgers Eagleton Institute of Politics (Eagleton Center for Public Interest Polling)	2014 (March)	New Jersey 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.
Quinnipiac University	2015 (January)	New Jersey registered voters	37% of respondents said they would support an increase to the gasoline tax "to help finance road improvements and mass transportation."
Quinnipiac University Polling Institute	2009	New Jersey voters	37% of respondents "supported" an unspecified gas tax increase "to help finance road improvements and mass transportation."
Quinnipiac University Polling Institute	2005	Connecticut 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	2014 (July & August)	New Jersey registered voters	36% of respondents said they would support an increase to the gasoline tax "to help finance road improvements and mass transportation."
Atlanta Journal-Constitution (Abt SRBI)	2015	Georgia adults	36% of respondents said they would support "paying a higher gasoline tax if the money is used for transportation projects."
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	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.
The University of Idaho James A. and Louise McClure Center for Public Policy Research	2014	Idaho 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."
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 and Company	2013	Iowa adults	35% of respondents "favored" raising the gas tax "by around 10 cents a gallon to pay for road and bridge repairs."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Utah State University Institute of Government & Politics and The Exoro Group (Dan Jones & Associates)	2014	Utah 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.
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa (Oklahoma) region residents	34% of Tulsa residents were somewhat or very willing "to use..."slight increase in the gas and diesel tax" to "help fund public transportation improvements."
HNTB (Kelton Research)	2013 (September)	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)	New Jersey voters	33% of respondents supported an increase in the gasoline tax to balance the New Jersey state budget.
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.
Quinnipiac University	2012	Virginia voters	32% of respondents would rather have higher gas taxes than tolls to raise money for road improvements.
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.
Judy Ford Watson Center for Public Policy	2013	Virginia 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."
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist, and Stoycheva)	2012	Georgia 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.
The Des Moines Register (Selzer & Corporation)	2012	Iowa residents	31% of respondents "favored" raising the state gas tax "8 to 10 cents a gallon to pay for road and bridge repairs."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Gallup (Brown)	2013	National phone survey	29% of respondents would "vote for" a "law in your state that would increase the gas tax up to 20 cents a gallon, with the new gas tax money going to improve roads and bridges and build more mass transportation in your state."
Yale Project on Climate Change Communication (Leiserowitz, et al)	2013	U.S. adults	29% of respondents strongly or somewhat support a policy to "increase taxes on gasoline by 25 cents per gallon and return the revenues to taxpayers by reducing the Federal income tax."
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	29% of respondents said they "agree" or "strongly agree" with the statement, "The gasoline tax rate should be increased."
Quinnipiac University	2015 (May)	New York City 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."
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	Virginia 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" point.
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	Washington State registered voters	28% of respondents would "favor" or "accept" a gas tax increase as a transportation funding option.
Marquette Law School	2013	Wisconsin 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	New Jersey 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%.
Quinnipiac University Polling Institute (Brown)	2011	Virginia 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. In contrast, 60% "would rather have highway tolls."

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Gonzales Research Marketing Strategies	2013	Maryland 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."
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.
The Washington Post	2013	Maryland 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)	New York City 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.
Old Dominion University	2012	Hampton Roads, Virginia, 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 You-Gov 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	2009	Oregon 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.
Mineta Transportation Institute (Agrawal and Nixon)	2011	U.S. residents	24% of respondents "supported" a 10¢ per gallon gas tax increase "to pay for transportation." Respondents were informed of the original and new amounts of the gas tax. Support increased to 62% if revenues were dedicated to "projects to MAINTAIN streets, roads, and highways," 57% if they went to "reduce accidents and improve safety," 50% if they went to "add more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better timed traffic lights," 48% if they went to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system," 46% if they went to "projects to reduce the transportation system's contribution to GLOBAL WARMING," 38% if the increase was spread across five years, and 36% when respondents were informed of the annual cost of the increase. In comparison, 45% of respondents "supported" a national 0.5¢ sales tax, while the proportion of respondents "supporting" two mileage tax proposals were 36% and 22%.

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal and Nixon)	2010	U.S. residents	24% of respondents "supported" a 10¢ per gallon gas tax increase "to pay for transportation." Respondents were informed of the original and new amounts of the gas tax. Support increased to 43% if revenues were dedicated to "projects to reduce the transportation system's contribution to GLOBAL WARMING," 40% if the increase was spread across five years, 32% when respondents were informed of the annual cost of the increase, and 31% if revenues went to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system." In comparison, 42% of respondents "supported" a national 0.5¢ sales tax, while the proportion of respondents "supporting" two mileage tax proposals were 33% and 22%.
Gonzales Research Marketing Strategies	2012	Maryland 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."
WSB-TV (Landmark Communications)	2015	Georgia 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."
Oregon Department of Transportation	2011	Oregon 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.
Mineta Transportation Institute (Agrawal and Nixon)	2013 (June)	U.S. residents	23% of respondents "supported" a 10¢ per gallon increase "to pay for transportation." Respondents were informed of the original and new amounts of the gas tax. Support increased to 67% if revenues were dedicated to "projects to MAINTAIN streets, roads, and highways," 62% if they went to "reduce accidents and improve safety," 58% if they went to "add more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights," 53% if they went to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system," 50% if they went to projects to reduce the transportation system's contribution to GLOBAL WARMING," 42% if the increase was spread across five years, and 40% when respondents were informed of the annual cost of the increase.
Public Mind, Fairleigh Dickinson University	2014	New Jersey 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."
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 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Gonzales Research and Marketing Strategies	2013 (October)	Likely Maryland voters	22% of voters in Maryland approve of their state government's 2013 decision to raise the gas tax by 21¢ over three years.
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."
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."
Virginia Transportation Construction Alliance (Public Opinion Strategies)	2013	Virginia 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.)
Mineta Transportation Institute (Agrawal, Nixon, and Murthy)	2012	U.S. residents	20% of respondents "supported" a 10¢ per gallon gas tax increase "to pay for transportation." Respondents were informed of the original and new amounts of the gas tax. Support increased to 58% if revenues were dedicated to "projects to MAINTAIN streets, roads, and highways," 54% if they went to "reduce accidents and improve safety," 46% if they went to "add more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights," 41% if they went to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system," 41% if they went to "projects to reduce the transportation system's contribution to GLOBAL WARMING," 39% if the increase was spread across five years, and 36% when respondents were informed of the annual cost of the increase.
Oregon Department of Transportation	2013	Oregon 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.
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."
Quinnipiac University	2009 (January)	New York state registered voters	18% of respondents supported increasing the gasoline tax by an unspecified amount.
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	2011 (March)	Connecticut registered voters	17% of respondents supported increasing the gasoline tax by 3¢ per gallon.

Table 18, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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	Texas 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.”
HNTB Corporation (Kelton Research)	2012	U.S. residents	16% of respondents would “prefer” that “the United States get funding for the nation’s interstate projects” through an “increased federal gas tax” (as compared to tolls or a miles driven user fee).
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	2015	Boone, Campbell, and Kenton Counties, Kentucky, 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 19. Public Opinion Polling on Gas Tax Increases Linked to Environmental Benefits

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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.
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.
Metropolitan Transportation Commission (BW Research Partnership)	2007	San Francisco Bay Area residents	56% of respondents would "support" an unspecified increase in the cost of gas 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.
Mineta Transportation Institute (Agrawal and Nixon)	2013 (June)	U.S. residents	53% of respondents "supported" a 10¢ per gallon gas tax increase where revenues were dedicated to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system." Support was 50% if revenues were dedicated to "projects to reduce the transportation system's contribution to GLOBAL WARMING."
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	52% of respondents said they would "strongly support" or "somewhat support" a 10¢ per gallon gas tax increase where revenues were dedicated to "projects to reduce local air pollution caused by the transportation system." Support was 49% if revenues were dedicated to "projects to reduce the transportation system's contribution to global warming."
Mineta Transportation Institute (Agrawal and Nixon)	2011	U.S. residents	48% of respondents "supported" a 10¢ per gallon gas tax increase where revenues were dedicated to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system," while support was 46% if revenues were dedicated to "projects to reduce the transportation system's contribution to GLOBAL WARMING." When asked if they "supported" the increase without a funding restriction, only 24% of respondents did so, but this did increase to 36% of respondents when they were informed of the annual costs and 38% if the increase was spread over 5 years.
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.
Mineta Transportation Institute (Agrawal and Nixon)	2010	U.S. residents	43% of respondents "supported" a 10¢ per gallon gas tax increase where revenues were dedicated to "projects to reduce the transportation system's contribution to GLOBAL WARMING," while support was 31% if revenues were dedicated to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system," When asked if they "supported" the increase without a funding restriction, only 22% of respondents did so, but this did increase to 32% of respondents when they were informed of the annual costs and 40% if the increase was spread over 5 years.

Table 19, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
University of Texas, Austin (Musti, et al.)	2010	Austin, Texas, 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 tax of $50 per ton of greenhouse gas emissions "produced by electricity generation and motor fuel use" was given as an example.
Mineta Transportation Institute (Agrawal, Nixon, and Murthy)	2012	U.S. residents	41% of respondents "supported" a 10¢ per gallon gas tax increase where revenues were dedicated to "projects to reduce the transportation system's contribution to GLOBAL WARMING." Support was also 41% if revenues were dedicated to "projects to reduce LOCAL AIR POLLUTION caused by the transportation system."
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 was in response to a series of questions on strategies to reduce global warming.
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."
YouGov	2015	Registered YouGov members	18% of respondents said gas taxes should be "increased to a level which would reduce how much people drive and the carbon emissions from driving."
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.

Table 20. Public Opinion Polling on Mileage Taxes

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal, et al.)	2009	California 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.
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County, Florida, 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."

Table 20, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Washington State Transportation Commission (EMC Research)	2012	Washington state 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 and 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 18%.
Mineta Transportation Institute (Agrawal, Nixon, and 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."
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist, and Stoycheva)	2012	Georgia adult drivers	39% of respondents would "support" a VMT tax of 1.60 cents per mile. They 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 and 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 and 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.

Table 20, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa (Oklahoma) region residents	33% of Tulsa residents were somewhat or very willing to pay "a small user tax that would be based on the number of miles a vehicle is driven each year" to "help fund public transportation improvements."
Mineta Transportation Institute (Agrawal and 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.
The Field Poll	2015	California registered voters	30% of respondents who own a motor vehicle would be willing to have an electronic device installed "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 that you pay."
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."
Mountain-Plains Consortium (Ozbek, Albeiruti, and Atadero)	2013	Colorado, North Dakota, South Dakota, Utah and Wyoming residents	23% of South Dakota respondents agreed or strongly agreed with the statement, "I support the use of Mileage-Based User Fees to fund the highway system." Researchers also surveyed residents of Colorado, North Dakota, Utah and Wyoming. Among all five states, support ranged from 18%-23%
HNTB Corporation (Kelton Research)	2012	U.S. residents	23% of respondents would "most prefer" a "vehicle miles driven user fee" when asked to choose whether they would "most prefer" as a way to "get funding for the nation's interstate projects." (The alternatives were tolls or an increased federal gas tax.)
Reason-Rupe Public Opinion Survey (Princeton Survey Research Associates International)	2014	Adult residents of the continental United States	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	Idaho 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	California 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."

Table 20, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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	Michigan 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."
MassINC Polling Group	2013	Massachusetts registered voters	17% of respondents would "support" the state adopting "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	Texas 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	North Carolina 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."
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 21. Public Opinion Polling on Sales Taxes

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
San Bernardino County, CA and Riverside County, CA	2002	Riverside County and San Bernardino County, (California) residents	72.2% 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.
Alameda County Transportation Commission (EMC Research)	2011 (March)	Alameda County, California, 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	Virginia 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.)
Alameda County Transportation Commission (EMC Research)	2011 (October)	Alameda County, California, 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."
Transportation Authority of Marin (Godbe Research)	2014	Marin County, California, 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, California, 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."

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
City of San Jose, CA (Fairbank, Maslin, Maullin, Metz & Associates)	2014	San Jose, California, 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.
Santa Cruz County Department of Public Works (Gene Bregman & Associates)	2014	Likely voters in unincorporated areas of Santa Cruz County, California	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.
Judy Ford Watson Center for Public Policy	2013	Virginia 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, North Carolina, 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	Durham, Orange, and Wake Counties, North Carolina, registered voters	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, California, 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¢.
UtahPolicy (Dan Jones & Associates)	2015	Utah 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."

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Center for the Study of Los Angeles, Loyola Marymount University	2012	Los Angeles, California, 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.
University of Arkansas (Parry)	2012	Arkansas 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."
Atlanta Journal-Constitution/ Channel 2 Action News (Mason-Dixon Polling & Research, Inc.)	2011	Atlanta, Georgia, 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, Colorado, 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)	2011	U.S. residents	51% of respondents "supported" a 0.5¢ national sales tax "to pay for transportation."
Regional Transportation Alliance (Fallon Research)	2012	Wake County, North Carolina, 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").
Mineta Transportation Institute (Agrawal, Nixon, and Murthy)	2012	U.S. residents	49% of respondents "supported" a 0.5¢ national sales tax "to pay for transportation."
SaintPetersBlog (St. Pete Polls)	2014	Pinellas County, Florida, 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."

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Tampa Bay Partnership (FrederickPolls)	2014	Pinellas County, Florida, 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 said they would "strongly support" or "somewhat support" a "new national half-cent sales tax to pay for transportation."
Public Policy Institute of California (Baldassare)	2005	Los Angeles County, California, residents	47% of respondents "would vote yes" for a 0.5¢ local sales tax "for local transportation projects."
Mineta Transportation Institute (Agrawal and Nixon)	2011	U.S. residents	45% of respondents "supported" a 0.5¢ national sales tax "to pay for transportation."
Talkbusiness.net (Brock)	2012	Arkansas 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 and Nixon)	2010	U.S. residents	42% of respondents "supported" a 0.5¢ national sales tax "to pay for transportation."
Mineta Transportation Institute (Weinstein, et al.)	2006	California 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, Florida, 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	Texas 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.

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Vanguard Public Affairs (Denno Research)	2015	Michigan 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, Georgia, 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, Florida, 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, Georgia, 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	Virginia residents	33% "favor" a proposal that "[t]he gas tax would be eliminated, but the sales tax would be increased. Vehicle registration fees would also increase. The additional funds from the sales tax would go to transportation and a higher percentage of the existing sales tax revenue would go to transportation as well."
WSB-TV (Landmark Communications)	2015	Georgia 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, California, 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	Washington state 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	Maryland 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	Colorado, North Dakota, South Dakota, Utah, and Wyoming 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%

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
HNTB Corporation (Kelton Research)	2013 (February)	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, Kentucky, 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 (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 (March)	U.S. residents	18% of respondents would be "willing to spend more money on" sales taxes if the money was allocated to "long-term transportation investments such as expanding highway capacity to reduce congestion or introducing high-speed rail in [their] area."
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	18% of respondents said they "agree" or "strongly agree" with the statement, "The gasoline tax should be replaced with a higher general retail sales tax rate."
Quinnipiac University	2015	New York City 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 (Kelton Global)	2015	Adults in the greater New York City 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 four 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 May 11, 2015); 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 May 11, 2015); 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 May 21, 2015); 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 May 11, 2015); 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 May 11, 2015).

2. The search terms used included transportation tax, transit tax, gas tax, mileage tax, sales tax, and transportation finance.

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. U.S. Census Bureau, “2013 American Community Survey 1-Year Estimates” (no date), downloaded http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed May 11, 2015).

5. 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.

6. Very few respondents placed a low priority on having government prioritize expanding and improving local public transit service, so these results should be interpreted with particular caution.

7. 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), and Agrawal and Nixon (2014).

8. Clear support is defined as subgroups who meet the following criteria in at least five of the six years: (1) support varied in a statistically significant manner across at least 5 of the tax options, and (2) the average magnitude of the difference between the groups across all 11 tax options was at least 8 percentage points or more.

9. 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.

10. 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?"

11. For the complete 2010, 2011, 2012, 2013, and 2014 results, see Agrawal and Nixon (2010), Agrawal and Nixon (2011), Agrawal, Nixon, and Murthy (2012), Agrawal and Nixon (2013), and Agrawal and Nixon (2014).

12. U.S. Census Bureau, "2013 American Community Survey 1-Year Estimates" (no date), downloaded http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed May 11, 2015).

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