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

MTI Report 12-01

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REPORT 12-01

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

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16. Abstract

This report summarizes the results of a national random-digit-dial public opinion poll that asked 1,519 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 and creating a new mileage tax, and creating a new federal sales tax. Other questions probed various perceptions related to public transit, including knowledge and opinions about federal taxes to support transit. In addition, the survey collected data on standard socio-demographic factors, travel behavior (public transit usage, annual miles driven, and vehicle fuel efficiency), and attitudinal data about how respondents viewed the quality of their local transportation system and their priorities for government spending on transportation in their state. All of this information was 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 58 percent of respondents, whereas support levels dropped to just 20 percent if the revenues were to be used more generally to maintain and improve the transportation system. For tax options where the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed, with a sales tax much more popular than either a gas tax increase or a new mileage tax.

With respect to public transit, the survey results from all three years show that most people want good public transit service in their state. However, the 2012 questions exploring different methods to raise new revenues found relatively low levels of support for all of them. Also, large minorities of respondents did not know that all levels of government— local, state, and federal—support transit. The federal government was the least widely recognized source of support.

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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 a growing desire at all levels of government to substantially upgrade and expand infrastructure to support public transit, walking, and bicycling, modes that have been relatively neglected in the past 50 years.

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 of Year 3 of a telephone survey investigating public opinion about a variety of transportation tax options at the federal level. The specific taxes tested were 10 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 socio-demographic data, some travel behavior data, and attitudinal data about how respondents view the quality of their local transportation system and their priorities for government spending on transportation in their state. All of this information was used to assess support levels for the tax options among different population subgroups.

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

For 2012, an important new emphasis in the survey project was to understand various 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 improve and expand transit service.

Because the survey was the third year of a project to assess how public support for federal transportation taxes may change over time, most of the questions asked were identical to those in the earlier surveys carried out in 2010 and 2011.[1] This report compares the results of the three surveys to establish how public views may have shifted over the past years.

The remaining chapters of the report contain the following material. Chapter II describes findings from other polling on similar transportation taxes, to provide context for

understanding this survey's results. Chapter III describes the survey methodology and presents an overview of the questionnaire and details on the implementation procedure. Detailed discussion of the survey findings for the different tax options and the transit-related questions follow in Chapter IV and Chapter V. Chapter VI 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 II reviews the results from other public opinion polls that asked about support for gas, mileage, and sales taxes whose revenues would be used for transportation purposes.

Surveys conducted in the past seven years were identified by searching 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, and PollingReport.com. This work was supplemented by searching Google 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; a few others were 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 raised 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 19 in Appendix B presents the key findings from 37 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 both vary widely. For example, some proposals call for unspecified increases in the gas tax, while others propose specific increases that range from 5¢ 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 do emerge across the polls, however. First, support levels tend to be below 50 percent and are often considerably lower. Second, support tends to be particularly high when the tax increase is linked to some sort of environmental benefit. Table 20 in Appendix B, which presents the results for the 11 polls that link a gas tax with environmental benefits, shows that eight of these found support levels above 40 percent.

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 transportation policymakers and researchers. A review of 11 polls shows that support is not especially strong but can be strengthened when the taxes are linked to environmental

benefits (see Table 21 in Appendix B). The six polls linking a mileage tax to environmental benefits found support levels ranging from 33 percent to 50 percent, but the other five polls without that environmental link found support levels no higher than 23 percent.

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 very strong 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, where the great majority of the population currently lives in counties whose 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 22 in Appendix B summarizes a sampling of 19 polls testing public opinion on sales taxes. Overall support levels were quite high: nine of the polls showed support at 50 percent or higher, and only five had support levels under 40 percent.

Conventional wisdom among transportation policymakers holds that the public is relatively supportive of local sales taxes for transportation because people trust local government more than they trust the state or federal government. The small number of polls conducted at the state or national level makes this conclusion difficult to confirm, but Table 22 does provide some support for the argument. All the polls with support above 50 percent were at the county or regional level.

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 dedicated to 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—eight variants of a gas tax increase, two variants of a new mileage tax, and one new sales tax option.

Gas tax increases. All variants of a federal gas tax increase involved raising the existing 18¢ per gallon tax[3] to 28¢ per gallon, but each included a different set of information for respondents to consider. The 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¢ a 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.
- 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 used to track miles driven and drivers billed when they buy gas. The two variants, which differ only in the rate structure, were:

- A base-case 1¢ per mile tax, with every car taxed at the same rate.
- 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 percent sales tax.

A new feature of Year 3 of the survey project was a special focus on understanding support for raising revenues to support public transit. Respondents were asked if they knew whether different entities help to pay for transit (transit riders, plus local, state, and the federal governments), 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 improve and expand transit services.

For both support of the tax options and opinions about public transit, the survey was designed to assess how responses to the questions might vary by socio-demographic factors, travel behavior characteristics, and respondents' opinions about their local and state transportation systems. 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 socio-demographic questions on such factors 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 previous 30 days. Respondents were also asked the average fuel efficiency of the vehicle they drove the most for personal reasons.

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

SURVEY IMPLEMENTATION

The Survey and Policy Research Institute at San José State University conducted the survey from March 6 to May 11, 2012, on behalf of the Mineta Transportation Institute's National Transportation Finance Center. A total of 1,519 adults nationwide were interviewed by telephone in either English or Spanish, with 2.9 percent of the interviews conducted in Spanish.

Telephone numbers included in this sample were randomly generated, and survey respondents were reached by both cell phone (N = 349) and landline phone (N = 1,170).

The margin of error for the total sample is ± 2.51 percentage points at the 95 percent confidence level. Smaller subgroups have larger margins of error.

Unless otherwise indicated, all results presented in the report are weighted by gender, race, Hispanic ethnicity, age, education, and income to match the U.S. population estimates from the Census Bureau's American Community Survey (2006–2010, five-year average).[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 support levels 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, as well as a comparison of the survey results across all three years of the project. (Appendix A presents the complete results of the survey.)

SURVEY RESPONDENTS

The 1,519 adult survey respondents were generally representative of the U.S. population in terms of region and socio-demographic characteristics, although the sample diverged from the national average by more than five percentage points along a few dimensions (see Table 1). In terms of geographic location, the unweighted sample had more people from the West and fewer from the South. The sample also had fewer people with a high school diploma or less than does the U.S. population as a whole, but more people with college and graduate school experience. Finally, the sample included fewer adults in the 18- to 39-year range but more adults 50 to 79 years old.

Table 1. Comparison of Census Region and Socio-Demographic Characteristics of Survey Respondents with Those of the U.S. Adult Population

	RDD sample (%)	Cell sample (%)	Total sample unweighted (%)	U.S. adults[a] (%)
Census region				
Northeast	16	2	13	18
Midwest	22	23	22	22
South	27	29	28	37
West	35	45	37	22
Gender				
Male	45	58	48	48
Female	55	42	52	52
Hispanic/Latino origin/descent	8	20	11	14
Race				
White	80	77	79	76
Black or African-American	7	6	7	12
Asian or Asian-American	3	4	3	5
Other	11	14	11	7
Education				
< High school grad	3	5	4	15
High school grad	20	20	20	29
Some college	23	24	23	30
College grad	31	31	31	16
Some grad school	3	2	3	--[b]
Graduate degree	20	18	19	9
Income (annual household)				
$0 – $25,000	21	23	21	24
$25,001 – $50,000	21	19	21	25
$50,001 – $75,000	19	19	19	19
$75,001 – $100,000	14	17	15	12
$100,001 – $125,000	9	7	9	8
$125,001 – $150,000	6	6	6	4
$150,001+	11	9	11	9
Age (years)				
18 – 29	6	24	10	22
30 – 39	8	19	10	17
40 – 49	16	18	16	19
50 – 59	24	19	23	18
60 – 69	24	14	22	12
70 – 79	16	5	13	7
80+	7	1	6	5

[a] All data are for adults 18 years and older except for household income, which is for all U.S. households. The U.S. population estimates are from U.S. Census Bureau, “2006-2 010 American Community Survey 5-Year Estimates” (no date), downloaded from http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml (accessed May 24, 2012).

[b] Comparable data not available.

Note: Some percentages do not sum to 100 due to rounding.

OVERALL SUPPORT LEVELS FOR THE TRANSPORTATION TAX OPTIONS

The survey results show that a majority of Americans would support higher taxes for transportation—under certain conditions (see Figure 1). A gas tax increase of 10¢ per gallon to improve road maintenance was supported by 58 percent of respondents, whereas support levels dropped to 20 percent if the revenues were to be used more generally to maintain and improve the transportation system. The only other variant on a gas tax that received at least 50 percent support in 2012 was a 10¢ per-gallon increase with the revenues dedicated to reducing accidents and improving safety. Support for another five tax options was still above 40 percent (a healthy showing of support given that taxes generally tend to be unpopular).

For tax options where the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed, with a sales tax (49 percent approval) much more popular than either a gas tax increase (20 percent) or a new mileage tax (21 percent).

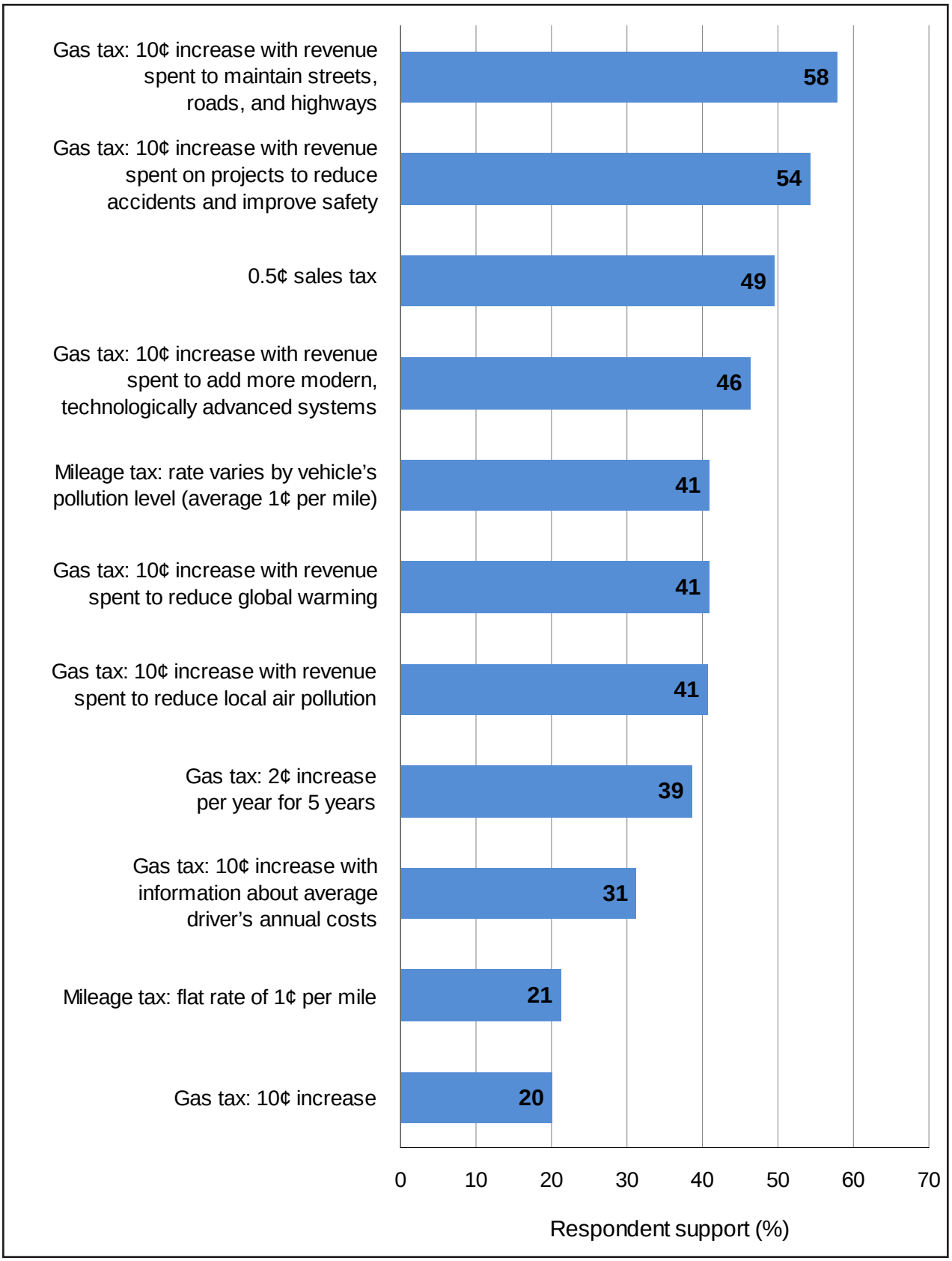

Figure 1. Support Levels for the Tax Options Surveyed in 2012

Note: "Support" is the sum of those who said they strongly or somewhat supported the tax option.

SUPPORT BY POPULATION SUBGROUPS

We 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 percent and 99 percent confidence levels. Results are presented in Tables 2 through 5. In the tables, the first subgroup listed for each set of population categories (e.g., Census region) is the base case against which all the other subgroups are compared.

In looking at the differences among subgroups, this discussion focuses on cases where the patterns are very clear. Small variation in support among subgroups may not reflect deep and real differences among the subgroups and thus are not discussed. We defined "clear" patterns as ones where (1) support varies consistently across most of the taxes (i.e., one subgroup supported most or all of the tax options more strongly than another subgroup), and (2) the magnitude of the difference between the subgroups is at least 10 percentage points or more for many of the taxes.

Table 2 shows support for the taxes when the respondents are broken into subgroups by socio-demographic categories and Census region. The only clear patterns that emerge are linked to race and age. White respondents were the least likely to support most of the taxes as compared to all other racial categories, especially Asian/Asian-Americans. In terms of age, respondents in the youngest group (18- to 24-year olds) were significantly more likely to support all of the taxes than respondents in the two older groups.

Table 2. Support[a] for the 2012 Tax Options, by Census Region and Socio-Demographic Characteristics

		Mileage tax		Gas tax							
Socio-demographic 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	49	21	41	20	39	41	41	58	54	46	31
Census region											
Northeast	39	18	36	17	30	41	37	62	58	51	24
Midwest	46	15	34	20	33	33	35	61	49	44	30
South	51**	20	40	20	43**	37	38	53*	54	45	27
West	52**	25	47*	23	44**	48	49**	62	57	50	38**
Gender											
Male	48	20	40	22	40	39	36	61	55	48	35
Female	51	22	42	18*	38	43	45**	55*	54	44	27**
Race											
White	46	20	36	22	40	35	34	53	46	40	29
Black/ African American	66**	21	53**	17	40	47**	60**	64**	73**	50*	36
Asian/ Asian American	57	37**	56**	24	54*	70**	63**	75**	80**	61**	54**
Other	52	23	46**	16	32*	49**	55**	70**	67**	67**	30
Hispanic/Latino origin/decent											
No	50	22	41	23	40	42	42	62	56	46	35
Yes	47	20	40	12**	37	37	40	46**	48*	46	22

Table 2, continued

Socio-demographic 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 (%)
Education											
High school grad or less	51	24	45	17	39	42	42	59	58	46	29
More than high school	48	19*	37**	23**	39	39	40	57	51**	47	34*
Employed											
Yes	51	19	38	20	39	38	40	59	54	48	32
No	49	28**	50**	21	40	51**	46	59	58	49	35
Retired	42*	16	31	18	37	30*	33	51*	48	32**	21**
Annual household income											
0 - $50,000	51	24	42	16	37	42	39	56	53	48	28
$50,001 – $100,000	49	18*	42	19	34	38	43	58	52	40*	31
$100,001+	46	19	47	30**	44	42	40	61	48	48	41**
Age (years)											
18 – 24	63	27	58	31	51	64	67	80	80	66	49
25 – 54	47**	21	40**	18**	37**	38**	36**	53**	49**	44**	29**
55+	44**	17	33**	18**	36**	30**	34**	54**	47**	39**	26**

* Statistically significant at $p<0.05$.

** Statistically significant at $p<0.01$.

[a] Sum of those who said they “strongly” or “somewhat” supported the option.

Notes: The test of two proportions was used to check if there was a statistically significant difference between “support” levels among subgroups. The first subgroup listed in each category is the “base” case for the test; it is compared to the proportion of respondents who supported the individual policies in each of the other subgroups within that category. For the “support” levels crossed out, too few respondents in that category supported the policies to run the test of two proportions.

Otherwise, Table 2 reveals few 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, education, gender, or income.[5]

Table 3 shows support levels by political characteristics. Political party affiliation played a fairly strong role, with Democrats more likely than Republicans or independents to support all of the taxes, though the difference is significant for only six of the tax options. The difference is particularly large for the three taxes with an environmental slant (the variable-rate mileage tax and the gas tax increases to be used for projects to reduce global warming or local air pollution).

Table 3. Support[a] for the 2012 Tax Options, by Political Characteristics

		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	49	21	41	20	39	41	41	58	54	46	31
Registered voter											
Yes	49	20	42	23	37	41	41	58	52	46	32
No	50	25**	40	12**	44**	42	43	58	59*	48	29
Likely voter[b]											
No	52	25	45	14	39	47	43	62	61	50	34
Yes	47*	18**	38**	25**	38	35**	39	54**	48**	43**	29*
Political affiliation											
Democrat	59	25	50	25	46	49	51	62	58	49	32
Republican	43**	16	36**	21	29**	30**	29**	54*	51	43	30
Independent[c]	44**	13**	38**	21	32	36**	34**	56	44**	48	40
Other[d]	52	20	36**	28	42	41	44	64	43**	32**	34

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they "strongly" or "somewhat" supported the option.

[b] Likely voters are those respondents who said 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.

Notes: The test of two proportions was used to check if there was a statistically significant difference between "support" levels among subgroups. The first sub-group listed in each category is the "base" case for the test; it is compared to the proportion of respondents who supported the individual policies in each of the other subgroups within that category. For the "support" levels crossed out, too few respondents supported the policies to run the test of two proportions.

Trends by voter status differ depending on how that status is defined. There were no significant differences according to self-reported voter registration status. However, when respondents are characterized as “unlikely” versus “likely” voters, the likely voters were less supportive of all but one of the tax options. The differences between the two groups are statistically significant in nine cases, but the magnitude of the differences was not especially large. (Likely voters are defined as those respondents who said they are registered *and* that they vote either “all of the time” or “most of the time.”)

The survey asked three questions about travel behavior and personal vehicle mileage in order to examine whether support for the tax options varied by these factors. As Table 4 shows, respondents who did not drive at all tended to be more supportive of the taxes, while those who did not know their annual mileage tended to be less supportive of the taxes.

The average self-reported fuel economy of respondents’ personal vehicles is correlated somewhat with support for the taxes. Respondents driving very high mileage vehicles, getting 39 or more miles per gallon, were more likely to support all but one of the taxes, with the difference significant in seven cases. However, there was little difference in support between respondents driving the vehicles in the lower two mileage categories. An additional analysis not shown in Table 4 that checked for different support among people driving the least efficient vehicles (12 miles per gallon or less) found no clear difference in support from those driving vehicles with more average efficiency levels.

The clearest finding related to travel behavior is the link between public transit use and support for the taxes. Respondents who had taken public transit within the previous 30 days were more likely to support all of the tax options, with the difference statistically significant in eight cases, even though the magnitudes of the differences in support were not especially large.

Table 4. Support[a] for the 2012 Tax Options, by Travel Behavior

		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	49	21	41	20	39	41	41	58	54	46	31
Annual miles driven											
1 – 7,500	46	20	38	24	45	41	44	64	64	50	38
7,501 – 12,500	52	17	38	22	38	39	40	55*	46**	44	32
12,501+	46	23	35	21	40	36	36	53**	44**	47	29*
Don't drive	65**	35**	58**	20	32**	57**	58**	70	72	60*	36
Don't know	50	22	41	12**	37*	37	36*	44**	47**	34**	23**
Miles per gallon[b]											
≤ 24	48	17	40	19	39	39	38	63	56	48	31
25 – 38	49	22*	40	23	39	39	45*	59	49*	47	38*
39+	75**	35**	68**	44**	48	61**	60	60	81**	56	38
Taken transit in last 30 days?											
Yes	61	21	51	22	47	56	48	64	63	53	35
No	46**	21	38**	19	36**	36**	39**	56**	52**	45**	31

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they "strongly" or "somewhat" supported the option.

[b] Categories correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov/greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

Notes: The test of two proportions was used to check if there was a statistically significant difference between "support" levels among subgroups. The first sub-group listed in each category is the "base" case for the test; it is compared to the proportion of respondents who supported the individual policies in each of the other subgroups within that category. For the "support" levels crossed out, too few respondents in that category supported the policies to run the test of two proportions.

Another set of analyses examined how support for the different tax options correlates with respondents' opinions about the transportation system. Table 5 presents these findings.

One section of the survey asked respondents for their opinion about road and transit services in their local community. There is no consistent pattern linking support for the taxes with how respondents rated either the condition of roads and highways or the quality of public transit service in their community. 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 use of modern technologies. Not surprisingly, respondents who placed a high priority on these goals were generally more likely to support almost every tax option than were those who placed a low priority on them. This was particularly true with respect to public transit service; respondents who placed high priority on this were much more likely to support the taxes than respondents who gave low priority to government support for transit.

Table 5. Support[a] for the 2012 Tax Options, by Opinions of the Transportation System

		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	49	21	41	20	39	41	41	58	54	46	31
Opinion on condition of roads and highways in local community											
Very good	50	23	44	33	49	38	43	58	55	44	44
Somewhat good	50	22	41	17**	38**	43	41	58	55	49	30**
Bad	48	17	37	16**	28**	37	39	60	52	41	21**
Opinion on public transit service in local community											
Very good	51	25	45	25	39	45	54	62	58	48	33
Somewhat good	51	21	43	19*	41	44	39**	54*	53	46	31
Poor	45	19	42	21	36	42	36**	59	55	46	33
No service	54	20	31**	17*	37	30**	37**	62	55	47	30
Role of government in reducing traffic congestion											
High priority	55	21	42	19	46	45	44	59	56	50	31
Medium priority	48*	22	41	19	33**	41	40	58	55	48	29
Low priority	40**	20	40	24	31**	29**	36*	57	48*	37**	37
Role of government in maintaining streets, roads, and highways											
High priority	52	19	41	19	39	43	45	63	59	50	32
Medium priority	46*	24*	38	21	39	36*	33**	49**	43**	39**	30
Low priority	46	36**	52	33**	39	34	29**	39**	46*	33**	35

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 expanding and improving local public transit service											
High priority	57	24	49	27	47	47	47	59	57	51	37
Medium priority	46**	20	39**	17**	37**	39**	42	59	57	47	31*
Low priority	39**	15**	24**	9*	20**	27**	22**	54	39**	33**	17**
Role of government in reducing accidents and improving safety											
High priority	54	21	46	19	42	44	46	62	63	52	32
Medium priority	47*	24	33**	20	31**	38*	36**	55*	38**	38**	30
Low priority	31**	21	27*	29**	33*	20**	14**	34**	28**	30**	29
Role of government in using modern technology											
High priority	57	19	43	21	46	44	43	60	55	57	32
Medium priority	49**	27**	45	20	36**	40	45	60	59	44**	35
Low priority	31**	11**	26**	19	27**	34**	26**	51*	41**	23**	23**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they “strongly” or “somewhat” supported the option.

Notes: The test of two proportions was used to check if there was a statistically significant difference between “support” levels among subgroups. The first sub-group listed in each category is the “base” case for the test; it is compared to the proportion of respondents who supported the individual policies in each of the other subgroups within that category. “Support” levels that are crossed out indicate that too few respondents supported the policies to run the test of two proportions.

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, a “standard” proposal for each type of tax (the flat-rate mileage tax of 1¢ per mile and the 10¢ gas tax increase without any additional detail) was put forward, along with a single variant of the mileage tax (a variable tax based on how much a vehicle pollutes) and a series of variants on the gas tax (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 standard proposal. For both tax types, the base case had the lowest support level, and applying the test of two proportions confirmed that in all cases the increase in support is statistically significant.

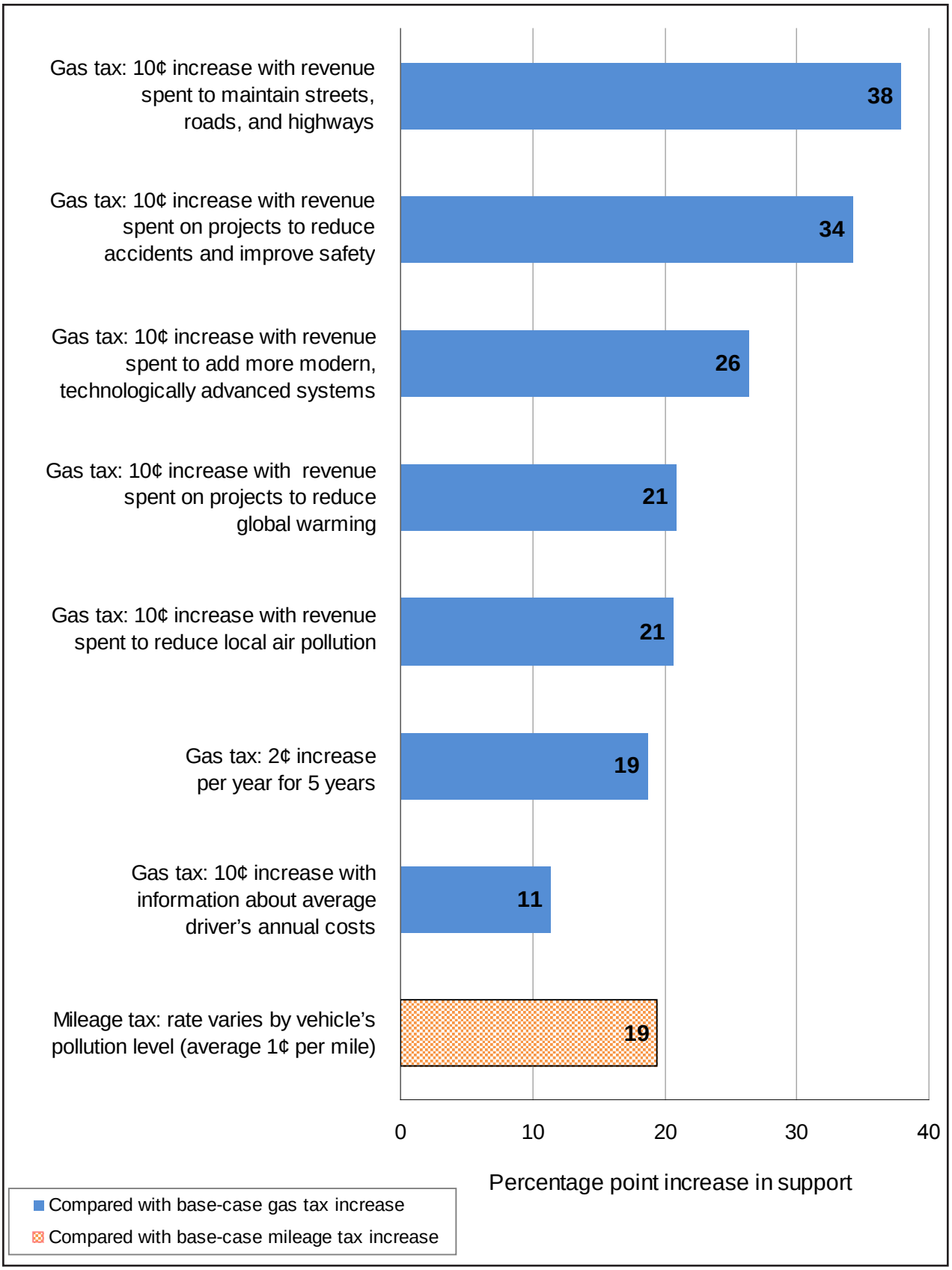

Figure 2. Relative Increases in Support for Variations of the 2012 Base-Case Gas Tax and Mileage Tax Concepts

Note: "Support" is the sum of those who said they strongly or somewhat supported the tax option.

Tables 6 through 9 present the change in support levels for each tax variant by respondent subgroups that are defined by Census region, socio-demographic and political characteristics, travel behavior characteristics, and opinions about the transportation system. Collectively, the tables include 64 population subgroups, for each of which there are eight tax comparisons, resulting in a total of 512 cases examined.

The overall pattern of increased support amongst subgroups is quite similar to the respondent pool as a whole – virtually each tax variant increased support compared to the base case among all subgroups by at least 10 percentage points (but often by much more), and this increase in support is usually statistically significant. Across all cases examined, the tax variants improved support in more than 98 percent of the 512 cases, and the increase in support is statistically significant for 92 percent of cases. In only six cases out of the 512 was an alternative less popular than the base case.

The largest increases in support tended to come for the variants dedicating new gas tax revenues to either highway maintenance or safety. By contrast, gas tax variants that propose spreading an increase over five years or inform respondents of the annual costs of the proposal often resulted in either a smaller increase compared to other variants or no significant increase in support.

There were only two subgroups that appeared to vary from this pattern – the rather small minorities of respondents who believed that either maintaining streets, roads, and highways or reducing accidents and improving safety should be a low priority for the government (these groups were 5 percent and 10 percent of all respondents, respectively). For the former group, the mileage tax variant provided a statistically significant increase in support for the tax proposal, but no gas tax variant did so. For the latter, no tax variants significantly increased support, while dedicating increased gas tax revenues to combat global warming significantly reduced support for the tax.

Table 6. Percentage-Point Increases in Support[a] for 2012 Variants of the Mileage Tax and Gas Tax Over Support for the Base-Case Versions of Those Taxes, by Census Region and Socio-Demographic Characteristics

		Gas tax						
Socio-demographic category	**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**	19**	21**	21**	38**	34**	26**	11**
Census regions								
Northeast	18**	13**	24**	20**	45**	41**	34**	7
Midwest	19**	13**	13**	15**	41**	29**	24**	10**
South	20**	23**	17**	18**	33**	34**	25**	7*
West	22**	21**	25**	26**	39**	34**	27**	15**
Gender								
Male	20**	18**	17**	14**	39**	33**	26**	13**
Female	20**	20**	25**	27**	37**	36**	26**	9**
Race								
White	16**	19**	14**	13**	31**	25**	19**	8**
Black/African-American	32**	23*	30**	43**	47**	56**	33**	19**
Asian/Asian-American	19**	30*	46**	39**	51**	56**	37**	30**
Other	23**	16	33**	39**	54**	51**	51**	14**
Hispanic/Latino origin								
No	19**	28**	30**	30**	50**	44**	34**	23**
Yes	20**	14**	14**	17**	23**	25**	23**	-1

Table 6, continued

Socio-demographic category	Mileage tax (%)	Gas tax: 2¢ increase per year, for 5 years (%)	Gas tax: Revenue to reduce local air pollution (%)	Gas tax: Revenue to reduce global warming (%)	Gas tax: Revenue to maintain streets / highways (%)	Gas tax: Revenue to improve safety (%)	Gas tax: Revenue to add high tech systems (%)	Gas tax: Info about average annual costs (%)
Education								
High school graduate or less	21**	22**	25**	25**	42**	41**	29**	12**
More than high school	18**	16**	16**	17**	34**	28**	24**	11**
Employed								
Yes	19**	19**	18**	20**	39**	34**	28**	12**
No	22**	19**	30**	25**	38**	37**	28**	14**
Retired	15**	19**	12**	15**	33**	30**	14**	3
Annual household income								
$0 – $50,000	18**	21**	26**	23**	40**	37**	32**	12**
$50,001 – $100,000	24**	15**	19**	24**	39**	33**	21**	12**
$100,001+	28**	14**	12**	10	31**	18**	18*	11*
Age (years)								
18 – 24	31**	20**	33**	36**	49**	49**	35**	18**
25 – 54	18**	19**	20**	18**	35**	31**	26**	11**
55+	16**	18**	12**	16**	36**	29**	21**	8**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they “strongly” or “somewhat” supported the option.

Notes: 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) was statistically significant. “Support” levels that are crossed out indicate that too few respondents supported the policies to run the test of two proportions.

Table 7. Percentage-Point Increases in Support[a] for 2012 Variants of the Mileage Tax and Gas Tax Over Support for the Base-Case Versions of Those Taxes, by Political Characteristics

		Gas tax						
	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**	19**	21**	21**	38**	34**	26**	11**
Registered voter?								
Yes	22**	14**	18**	18**	35**	29**	23**	9**
No	15**	32**	30**	31**	46**	47**	36**	17**
Likely voter?[b]								
No	20**	25**	33**	29**	48**	47**	36**	20**
Yes	20**	13**	10*	14**	29**	23**	18**	4
Political affiliation								
Democrat	25**	21**	24**	26**	37**	33**	24**	7*
Republican	20**	8*	9**	8*	33**	30**	22**	9**
Independent[c]	25**	11*	15**	13**	35**	23**	27**	19**
Other[d]	16**	14*	13**	16*	36**	15*	4	6

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they "strongly" or "somewhat" supported the option.

[b] Likely voters are those respondents who said 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.

Notes: 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) was statistically significant.

Table 8. Percentage-Point Increases in Support[a] for 2012 Variants of the Mileage Tax and Gas Tax Over Support for the Base-Case Versions of Those Taxes, by Opinions of the Transportation System

		Gas tax						
Socio-demographic category	**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**	19**	21**	21**	38**	34**	26**	11**
Opinion on condition of roads and highways in local community								
Very good	21**	16**	5	10**	25**	22**	11**	11**
Somewhat good	19**	21**	26**	24**	41**	38**	32**	13**
Bad	20*	12**	21**	23**	44**	36**	25**	5
Opinion on public transit service in local community								
Very good	20**	14**	20**	29**	37**	33**	23**	8*
Somewhat good	22**	22**	25**	20**	35**	34**	27**	12**
Poor	23**	15**	21**	15**	38**	34**	25**	12**
No service	11**	20**	13**	20**	45**	38**	30**	13**
Role of government in reducing traffic congestion								
High priority	21**	27**	26**	25**	40**	37**	31**	12**
Medium priority	19**	14**	22**	21**	39**	36**	29**	10**
Low priority	20**	7	5	12**	33**	24**	13**	13**
Role of government in maintaining streets, roads, and highways								
High priority	22**	20**	24**	26**	44**	40**	31**	13**
Medium priority	14**	18**	15**	12**	28**	22**	18**	9**
Low priority	16*	6	2	-4	6	13	0	2

Table 8, continued

Socio-demographic category	Mileage tax (%)	Gas tax: 2¢ increase per year, for 5 years (%)	Gas tax: Revenue to reduce local air pollution (%)	Gas tax: Revenue to reduce global warming (%)	Gas tax: Revenue to maintain streets / highways (%)	Gas tax: Revenue to improve safety (%)	Gas tax: Revenue to add high tech systems (%)	Gas tax: Info about average annual costs (%)
Role of government in expanding and improving local public transit service								
High priority	25**	20**	20**	20**	32**	30**	24**	10*
Medium priority	19**	20**	22**	25**	42**	40**	30**	14**
Low priority	9**	11**	18**	13**	45**	30**	24**	8**
Role of government on reducing accidents and improving safety								
High priority	25**	23**	25**	27**	43**	44**	33**	13**
Medium priority	9**	11**	18**	16*	35**	18**	18**	10**
Low priority	6	4	-9	-15**	5**	-1	1	0
Role of government in using modern technology								
High priority	24**	25**	23**	22**	39**	34**	36**	11**
Medium priority	18**	16**	20**	25**	40**	39**	24**	15**
Low priority	15	8*	15**	7	32**	22**	4	4

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they “strongly” or “somewhat” supported the option.

Notes: 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) was statistically significant. “Support” levels that are crossed out indicate that too few respondents supported the policies to run the test of two proportions.

Table 9. Percentage-Point Increases in Support[a] for 2012 Variants of the Mileage Tax and Gas Tax Over Support for the Base-Case Versions of Those Taxes, by Travel Behavior

		Gas tax						
	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**	19**	21**	21**	38**	34**	26**	11**
Annual miles driven								
1 – 7,500	18**	21**	17**	20**	40**	40**	26**	14**
7,501 – 12,500	19**	16**	17**	18**	33**	24**	22**	10*
12,501+	13**	19**	15**	15**	32**	23**	26**	8*
Don't drive	23**	12*	37**	38**	50**	52**	40**	16**
Don't know	19**	25**	25**	24**	32**	35**	22**	11**
Miles per gallon[b]								
≤ 24	23**	20**	20**	19**	44**	37**	29**	12**
25 – 38	18**	16**	16**	22**	36**	26**	24**	15**
39+	33**	4	17	16	16	37**	12	-6
Taken transit in last 30 days?								
Yes	30**	25**	34**	26**	42**	41**	31**	13**
No	17**	17**	17**	20**	37**	33**	26**	12**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Sum of those who said they "strongly" or "somewhat" supported the option.

[b] Categories correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov/greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

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) was statistically significant.

COMPARISONS OF SUPPORT OVER TIME (2010 – 2012)

Most of the Year 3 survey questions were the same as those in parallel surveys carried out in 2010 and 2011.[6] A trend analysis shows that Americans were about as willing to support tax increases for transportation in 2012 as they were in the previous two years (see Figure 3 and Table 10). In most cases, the support for a tax varies by five or fewer percentage points from year to year, a variation too small to suggest a meaningful change in support. The only notable exception is for the gas tax increase with revenues dedicated to projects that reduce local air pollution. Here, support varied more from year to year, with support noticeably lower in 2010 than in the subsequent years.

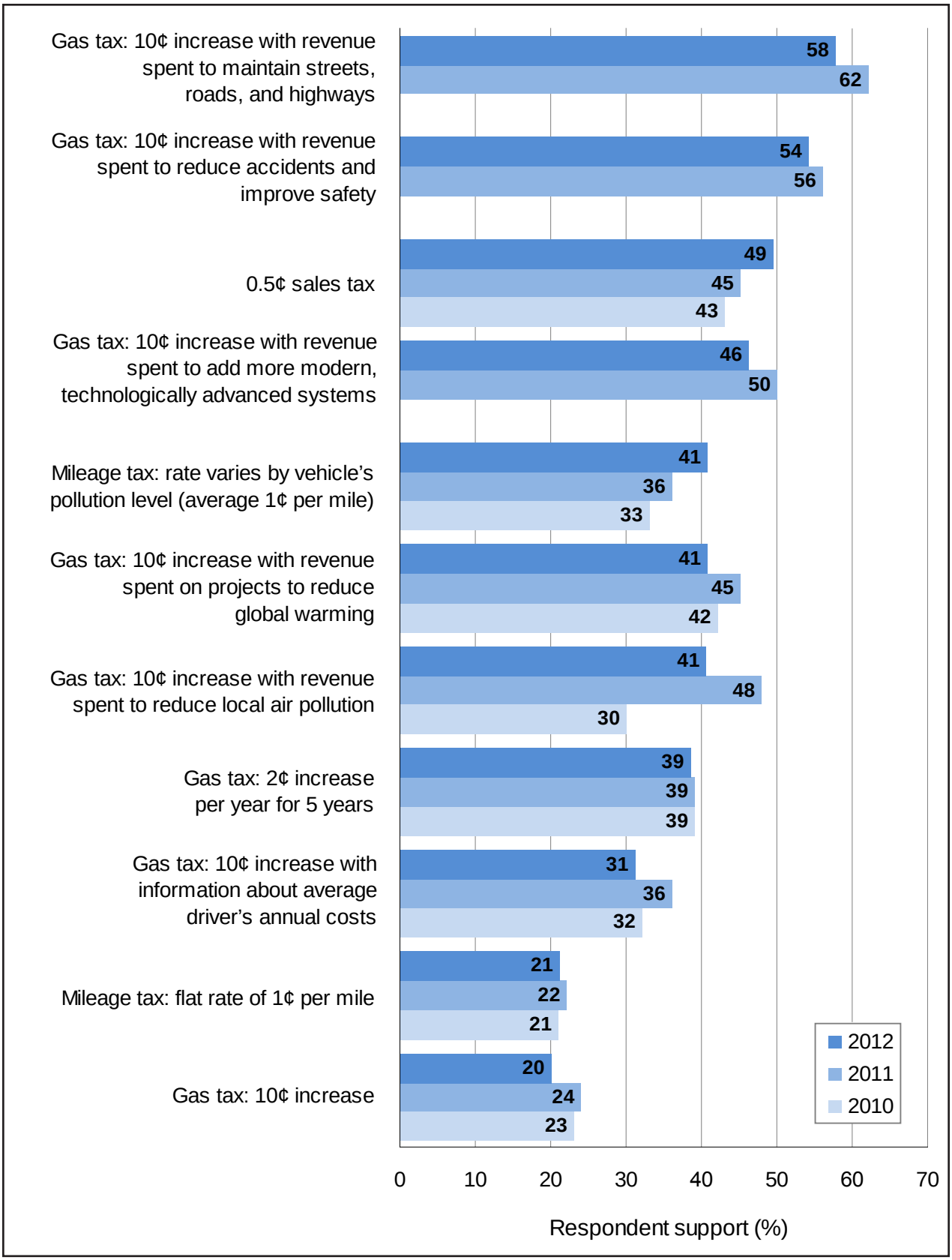

Figure 3. Changes in Support for the Tax Options, 2010 – 2012

Note: "Support" is the sum of those who said they strongly or somewhat supported the tax option.

Table 10. Trends in Support[a] for the Tax Options, 2010 – 2012

Tax option	2010 (%)	2011 (%)	2012 (%)	Difference 2010 – 2011 (%)	Difference 2010 – 2012 (%)	Difference 2011 – 2012 (%)
Gas tax						
10¢ increase	23	24	20	1	-3*	-4**
10¢ increase, phased in over 5 years at 2¢ per year	39	39	39	0	0	0
10¢ increase, revenues spent to reduce local air pollution	30	48	41	18**	11**	-7**
10¢ increase, revenues spent to reduce global warming	42	45	41	3	-1	-4*
10¢ increase, revenues spent to maintain streets, roads, and highways	--[b]	62	58	--	--	-4*
10¢ increase, revenues spent to reduce accidents and improve safety	--[b]	56	54	--	--	-2
10¢ increase, revenues spent to add more modern, technologically advanced systems	--[b]	50	46	--	--	-4*
10¢ increase, respondents informed of the annual tax burden for the typical driver	32	36	31	4*	-1	-5**
Mileage tax						
1¢ per mile	21	22	21	1	0	-1
1¢ per mile average, but vehicles that pollute more pay more and vehicles that pollute less pay less	33	36	41	3	8**	5**
National 0.5% sales tax	43	45	49	2	6**	4*

[a] Sum of those who said they “strongly” or “somewhat” supported the option.

[b] These options were not included in the 2010 survey.

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

Notes: The test of two proportions was used to check if there was a statistically significant difference in support for the different tax options from 2010 to 2011, 2010 to 2012, and 2011 to 2012.

A few population subgroups were noticeably more likely supporters of the taxes in all three years (as shown in Tables 2 through 5). For example, when the respondents were broken down by race, some racial groups were more supportive than others. The differences in support among the subgroups remain statistically significant for at least some of the tax variants across all three surveys for the following supgroups:

- Asians/Asian-Americans and Blacks/African-Americans (as compared with Whites)
- Younger people aged 18 to 24 years (compared with older people)
- Unlikely voters (compared with likely voters)
- People who used transit in the previous 30 days (compared with people who did not)
- People who place a high priority on expanding and improving local public transit service (compared with people who do not prioritize this)

In addition, political party was a stable predictor of relative support levels over time. In all three surveys, Democrats were more supportive of the taxes than Republicans and almost always more supportive than independents (Table 3 shows the 2012 results). In both 2011 and 2012, the difference in support between Democrats and Republicans was statistically significant in most cases. With respect to independents, the difference in opinion between Democrats and independents was significant every year only for the sales tax.

Our analysis of how the tax variations boosted support over the base cases shows little change from 2010 to 2012 (see Figure 4). In every case, the variations had higher support levels than the base-case options, and the boosts in support were quite similar all three years. One exception is the gas tax linked to projects to reduce local air pollution, which provided little boost in support in 2010, but then provided a relatively consistent boost in 2011 and 2012 (24 percentage points in 2011 and 21 points in 2012). Additionally, there appears to be a steadily increasing boost in support gained by making a mileage tax variable based on vehicle emissions. That boost was 12 points in 2010, 14 points in 2011, and 19 points in 2012.

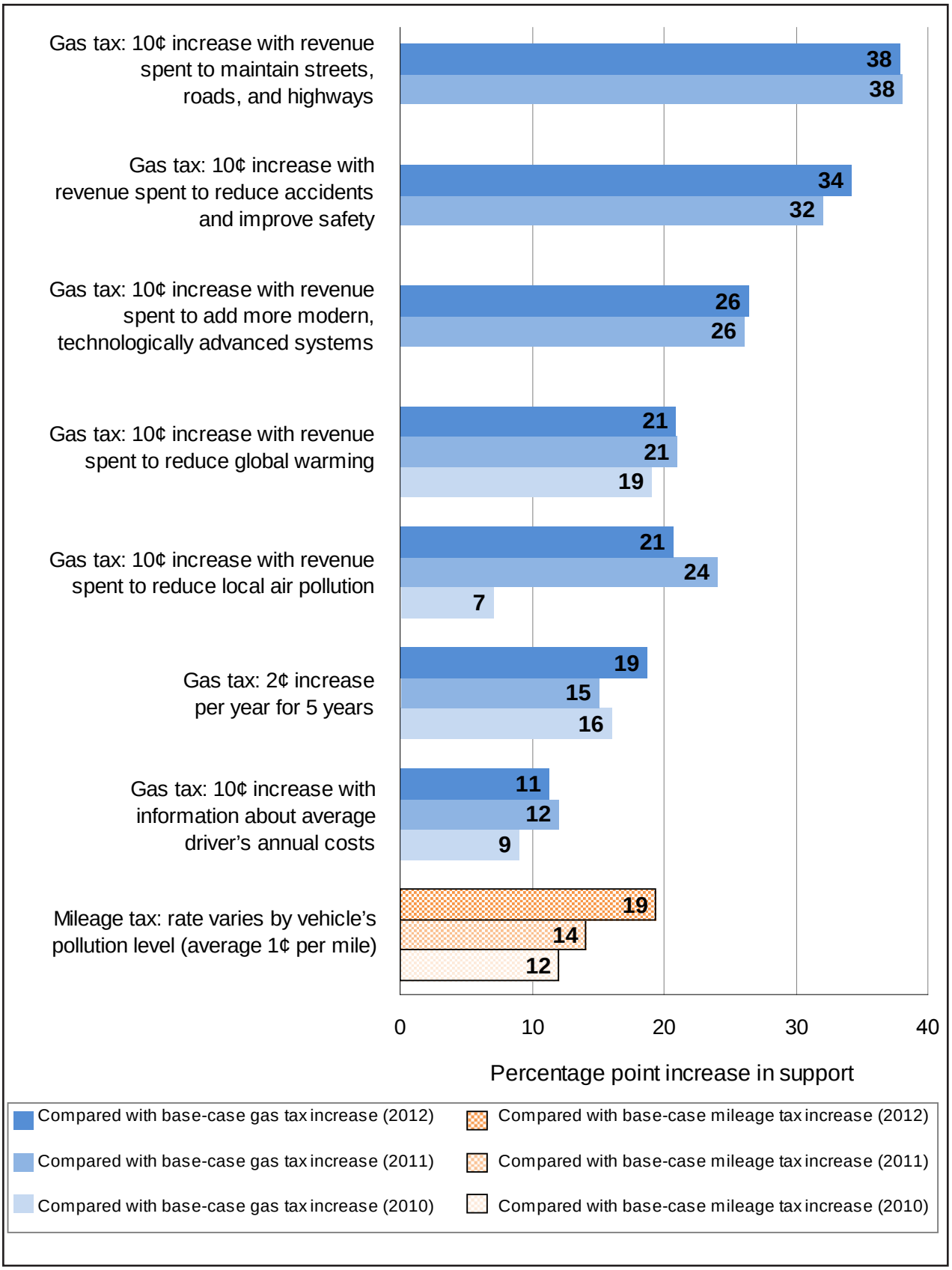

Figure 4. Changes over Time for the Relative Increases in Support for Variations of the Base-Case Gas Tax and Mileage Tax Concepts (2010 – 2012)

Note: "Support" is the sum of those who said they strongly or somewhat supported the tax option.

V. FINDINGS RELATED TO OPINIONS ON PUBLIC TRANSIT

For 2012, a new emphasis in the survey project was to understand various perceptions related to public transit, including knowledge and opinions about federal taxes to support transit. This chapter pulls together the different pieces of the survey to highlight all findings related to transit.

A question early in the survey asked respondents their opinion of the quality of public transit in their community (see Appendix A). The majority of respondents (60 percent) said that transit service is very or somewhat good, 16 percent said that it is poor, and 24 percent said either that there is no service in their community or that they didn't know.

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" (see Table 11). One of the priorities tested was expanding and improving local public transit service. Public transit was a high priority for almost half of respondents (45 percent), though this was the lowest percentage among the five priorities tested. However, when looking at those who felt transit was either a high or medium priority, transit rated not so differently from the other options – 83 percent of respondents considered it a priority, compared to the other options that ranged from a low of 81 percent to a high of 95 percent. 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 State Where the Respondent Lives

	High or medium (%)	High (%)	Medium (%)	Low (%)	Don't know (%)
Maintaining streets, roads, and highways in good condition, including filling potholes	95	68	27	5	1
Reducing accidents and improving safety	90	68	22	9	2
Adding more modern, technologically advanced systems like real-time travel alerts, longer lasting pavements, and better-timed traffic lights	83	46	37	15	2
Expanding and improving local public transit service, like buses or light rail	83	45	37	16	2
Reducing traffic congestion	81	47	33	17	2

Later in the survey, respondents were asked if they happened to know whether each of four different entities "pay for public transit around the country": transit riders, the federal government, the state government, and local governments (see Table 12). The fewest knew that the federal government pays for transit (only 42 percent). For all four entities, about a third of respondents answered "don't know" when asked if that entity helps to pay for transit or not, highlighting that many people know little about how transit is funded. For the question asking whether people knew if public transit fares help to pay for transit, the

highest number of people responded “does pay” (62 percent), but this was still a surprisingly low response rate. The fact that virtually everyone did not reply “does pay” suggests that the question was not worded clearly and caused misunderstanding.

Table 12. Knowledge of Which Entities Pay for Public Transportation

	Does pay (%)	Does not pay (%)	Don’t know (%)
Public transit riders	62	7	31
Federal government	42	22	36
State government	56	12	32
Local governments	51	16	33

Looking at the different population subgroups’ knowledge of which entities pay for transit shows very little variation among the subgroups (see Table 13). The only sharp distinctions are by education and income. People with higher education and those in the highest income category (which is likely highly correlated with education) were more likely to believe that all the listed entities help to fund transit.

Table 13. Knowledge of Which Entities Pay for Public Transportation, by Subgroup

	Transit riders (%)	Federal gov't (%)	State gov't (%)	Local gov't (%)
Census region				
Northeast	67	44	52	46
Midwest	58	44	55	51
South	56*	39	48	49
West	67	45	62*	56*
Gender				
Male	65	49	62	55
Female	60*	36**	50**	48**
Race				
White	65	45	55	52
Black/African-American	62	40	60	51
Asian/Asian-American	68	41	57	66*
Other	52**	36*	53	41**
Hispanic/Latino origin/decent				
No	64	45	58	54
Yes	60	36**	52*	45**
Education				
High school graduate or less	54	33	46	42
More than high school	71**	51**	66**	62**
Employed?				
Yes	68	45	59	54
No	58**	39*	55	50
Retired	53**	38	48**	45*
Annual household income				
$0 – $50,000	58	37	49	48
$50,001 – $100,000	66*	43	59**	56*
$100,001+	75**	59**	68**	63**
Age (years)				
18 – 24	48	40	64	48
25 – 54	72**	44	56*	55*
55+	48	42	52**	49
Registered voter				
Yes	63	42	57	53
No	65	42	52	49
Likely voter[a]				
No	60	37	51	49
Yes	64	47**	60**	54*
Political affiliation				
Democrat	62	44	58	49
Republican	61	41	57	48
Independent[b]	63	45	66	66**
Other[c]	75**	42	61	52

Table 13, continued

	Transit riders (%)	Federal gov't (%)	State gov't (%)	Local gov't (%)
Annual miles driven				
1 – 7,500	63	46	68	59
7,501 – 12,500	64	51	65	54
12,501+	68	57**	68	60
Don't drive	59	29**	41**	40**
Don't know	61	28**	34**	41**
Miles per gallon[d]				
≤ 24	63	46	59	53
25 – 38	62	46	64	55
39 – 65	67	43	72	53
Taken transit in last 30 days?				
Yes	70	41	61	50
No	60**	43	54*	52
Transit service in community?				
Has transit service	65	42	57	53
No transit service	55**	44	54	44**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Likely voters are those respondents who said 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 correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

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 to 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 (see Table 14). The first of these asked respondents which of two statements was closer to their opinion: "Some people say that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic 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 are the ones who pay the tax." Almost half (48 percent) of respondents felt gas taxes should be spent only on roads and highways, though 33 percent did say that gas taxes make sense for public transit. Another 13 percent of people volunteered the response "both," which suggests that they did not understand the question and wanted to say that they would support gas taxes for both roads and transit. If this hypothesis is correct, that suggests that almost as many people support gas taxes for transit as don't (46 percent versus 48 percent).

Table 14. Opinion on Whether Gas Taxes Should Only Be Spent on Roads and Highways or Should Be Spent on Public Transportation[a]

	Respondents (%)
Gas taxes only for roads and highways	48
Gas taxes make sense for public transportation	33
Both (volunteered)	13
Neither (volunteered)	2
Don't know (volunteered)	3

[a] Half the sample received the question with this wording: "Some people say that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic 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 are the ones who pay the tax. Which statement is closer to your opinion?" The other half received the question with the options presented in the reverse order.

The analysis of opinions on this topic by population subgroup identified a few differences (see Table 15). The subgroups more supportive of spending gas tax revenue on transit are people living in the West (as compared to Northeasterners), Asian/Asian-Americans, Black/African-Americans (assuming that those who responded "both" do indeed support gas taxes for transit), unemployed people, people in the lowest income group, people in the youngest age group, and people who had some transit service in their community (as compared to people who said their community had no service).

Table 15. Opinion on Whether Gas Taxes Should Only Be Spent on Roads and Highways or Should Be Spent on Public Transportation, by Subgroup[a]

	Gas taxes only for roads / highways (%)	Gas taxes make sense for transit (%)	Both (%)	Neither (%)
Census region				
Northeast	59	26	7	3
Midwest	52	30	11	4
South	50	30	15**	~~2~~
West	42**	41**	14*	~~1~~
Gender				
Male	53	29	12	3
Female	43**	37**	14	2
Race				
White	52	31	12	3
Black/African-American	35**	37	23**	5
Asian/Asian-American	39*	54**	5	~~0~~
Other	51	34	7*	5
Hispanic/Latino origin/decent				
No	49	34	12	3
Yes	46	35	15	1*
Education				
High school graduate or less	50	33	12	1
More than high school	47	34	14	3**
Employed?				
Yes	52	30	14	2
No	39**	45**	11	3
Retired	55	21**	13	~~2~~
Annual household income				
$0 – $50,000	44	39	12	1
$50,001 – $100,000	51*	29**	16	
$100,001+	55*	29*	13	
Age (years)				
18 – 24	48	43	6	0
25 – 54	48	35*	13**	3**
55+	48	26**	17**	~~2~~
Registered voter				
Yes	48	33	13	3
No	49	37	13	1*
Likely voter[b]				
No	45	40	11	2
Yes	51*	28**	14	3

Table 15, continued

	Gas taxes only for roads / highways (%)	Gas taxes make sense for transit (%)	Both (%)	Neither (%)
Political affiliation				
Democrat	41	39	15	1
Republican	60**	21**	11	3*
Independent[c]	41	45	9	~~4~~
Other[d]	51	30	10	~~4~~
Annual miles driven				
1 – 7,500	49	32	12	2
7,501 – 12,500	53	29	13	3
12,501+	49	32	12	5*
Don't drive	32**	45**	19*	~~1~~
Don't know	46	34	16	~~1~~
Miles per gallon[e]				
≤ 24	55	29	11	2
25 – 38	49*	31	14	3
39 – 65	35**	38	20*	~~2~~
Taken transit in last 30 days?				
Yes	31	54	14	1
No	54**	27**	13	4**
Rating of transit service quality in community				
High, medium, or low	44	36	15	2
No service available	62**	24**	6**	5**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Half the sample received the question with this wording: "Some people say that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic 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 are the ones who pay the tax. Which statement is closer to your opinion?" The other half received the question with the options presented in the reverse order.

[b] Likely voters are those respondents who said 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 correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

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 to the proportion of respondents who held a similar opinion in each of the other subgroups within that category. For the numbers crossed out, there were too few respondents to run the test.

A multi-part question then posed the hypothetical scenario that Congress had decided to spend more money to expand and improve public transit but had not decided how to pay for this (see Table 16). Respondents were asked whether they would support each of three options: reducing spending on other federal programs, raising transit fares, or raising the federal gas tax. Then the survey asked respondents which of the three options they would prefer. The level of support for raising transit fares fell in the middle of the three options (at 45 percent), with 27 percent choosing this as their preferred choice among the three alternatives. Reducing spending on other federal programs was more popular (56 percent), and raising the federal gas tax less so (28 percent).

Table 16. Support[a] for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, Plus the Preferred Alternative

	Support for the option (%)			Preferred alternative[b] (%)
	Support	Oppose	Don't know	
Reduce spending on other federal programs	56	35	9	48
Raise transit fares	45	48	7	27
Raise the federal gas tax	28	69	3	14

[a] Percent of respondents who "strongly supported" or "supported" each method to raise funds for public transportation.
[b] An additional 10 percent either did not know, opposed all three, or equally supported all three.

Investigating how the subgroups responded to the three methods to raise more federal money for public transit shows a few trends (Table 17 and Table 18). Political party is relevant, with Republicans less likely than Democrats to support raising the gas tax and more likely to support reducing spending on other federal programs. However, there is no party link with preference for raising transit fares. Another correlation showed up with high-mileage drivers, who are similar to Republicans: less likely to support raising the federal gas tax and more likely to support reducing spending on other government programs. Respondents with annual mileage in the middle category (7,500-12,500 miles per year) were particularly likely to support raising transit fares, though this was still not their preferred alternative. And men were more supportive than women of all three options.

A few demographic factors showed results that suggest different levels of support depending on the *way* support was tested. On the one hand, the following characteristics are all significantly correlated with particularly strong support for one of the *preferred* Congressional options for raising public transit funds: Hispanic/Latino identity, being of Black/African-American or Asian/Asian-American race, and having education beyond high school. At the same time, when those options were tested in separate questions, the factors just mentioned did not show up as particularly relevant. However, when each of the three options was tested individually, income and gender showed the clearest correlations.

Similarly, the link between vehicle efficiency and support suggests different results according to the different question types. People driving the most efficient vehicles were more likely to *prefer* raising transit fares and less likely to prefer reducing government spending on other programs, yet they were also relatively unsupportive of each of the three options (including raising transit fares) when it was presented individually.

Table 17. Support[a] for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, by Subgroup

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
Census region			
Northeast	22	56	46
Midwest	25	58	57*
South	30	60	44
West	31*	53	39
Gender			
Male	34	61	52
Female	22**	51**	39**
Race			
White	26	58	48
Black/African-American	38**	53	40*
Asian/Asian-American	33	62	49
Other	24	46**	43
Hispanic/Latino origin/decent			
No	32	57	49
Yes	19**	54	35**
Education			
High school graduate or less	23	57	41
More than high school	33**	56	50**
Employed?			
Yes	29	59	47
No	27	53*	41*
Retired	26	51*	48
Annual household income			
$0 – $50,000	23	54	41
$50,001 – $100,000	30*	62*	51**
$100,001+	37**	66**	53**
Age (years)			
18 – 24	31	52	41
25 – 54	29	59*	46
55+	26	56	47
Registered voter			
Yes	29	55	50
No	26	59	35**
Likely voter[b]			
No	28	57	38
Yes	28	55	52**
Political affiliation			
Democrat	36	53	49
Republican	23**	59	49
Independent[c]	23**	66**	48
Other[d]	35	52	57
Annual miles driven			
1 – 7,500	35	50	46
7,501 – 12,500	30	61**	57**
12,501+	26*	64**	47
Don't drive	29	49	40
Don't know	21**	55	36**

Table 17, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
Miles per gallon[e]			
≤ 24	30	59	51
25 – 38	34	60	45*
39 – 65	20	43*	35*
Taken transit in last 30 days			
Yes	32	54	43
No	27	57	46
Rating of transit service quality in community			
High, medium, or low	29	56	44
No service available	30	63*	56**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

[b] Likely voters are those respondents who said 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 correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

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

Table 18. The "Preferred" Way for Congress to Pay for Expanding and Improving Public Transportation, by Subgroup

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
Census region					
Northeast	14	53	24	2	1
Midwest	15	49	27	4	1
South	16	54	22	4	3
West	16	45	28	6*	2
Gender					
Male	15	48	27	5	1
Female	13	48	27	5	2
Race					
White	14	51	26	4	1
Black/African-American	18	40**	27	7	3
Asian/Asian-American	31**	32**	30	1	6
Other	7**	48	32	8**	2
Hispanic/Latino origin/decent					
No	17	46	27	5	2
Yes	6**	56**	29	5	2
Education					
High school graduate or less	9	54	27	4	2
More than high school	20**	43**	28	5	2
Employed?					
Yes	17	46	29	6	1
No	11**	52*		2**	2
Retired	12	48		7	3*
Annual household income					
$0 – $50,000	14	50	26	4	2
$50,001 – $100,000	17	45	29	6	2
$100,001+	22*	48	26	3	1
Age (years)					
18 – 24	11	53	28	1	3
25 – 54	16*	46*	30	5**	1*
55+	13	49	23	7**	2
Registered voter					
Yes	16	48	26	5	2
No	11**	49	31*	5	2
Likely voter[a]					
No	13	49	28	6	1
Yes	15	48	26	5	2

Table 18, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
Political affiliation					
Democrat	21	44	24	5	2
Republican	10**	52*	29	6	2
Independent[b]	13*	61**	21	3	~~1~~
Other[c]	18	45	30	3	~~0~~
Annual miles driven					
1 – 7,500	16	40	33	~~4~~	1
7,501 – 12,500	15	50*	28	3	~~1~~
12,501+	14	55**	22**	8*	~~0~~
Don't drive	19	40	26	6	~~7~~
Don't know	8**	52**	30	3	~~2~~
Miles per gallon[d]					
≤ 24	15	50	26	5	2
25 – 38	15	51	25	~~4~~	2
39 – 65	17	35*	~~46~~**	~~2~~	~~0~~
Taken transit in last 30 days?					
Yes	17	~~47~~	27	~~4~~	2
No	14	49	27	5	2
Rating of transit service quality in community					
High, medium, or low	15	48	27	5	2
No service available	~~11~~	57**	24	5	~~4~~*

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

[a] Likely voters are those respondents who said 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 correspond to the EPA's "SmartWay" vehicle rating system (U.S. Environmental Protection Agency, "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (no date), http://ofmpub.epa.gov greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012).

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 to the proportion of respondents who preferred the financing method in each of the other subgroups within that category. For the numbers crossed out, there were too few respondents to run the test.

VI. CONCLUSIONS

SUMMARY OF KEY FINDINGS

Overall Support Levels for the 11 Tax Options

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 58 percent of respondents, whereas support levels dropped to around 40 percent if the revenues were to be devoted to reducing local air pollution or global warming. The only other variant on a gas tax that received at least 50 percent support was an increase of 10¢ per gallon with the revenues dedicated to projects to reduce accidents and improve safety. For tax options where 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 than either a gas tax increase or a new mileage tax.

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 two taxes increased support over that for the base case of each (a flat-rate mileage tax of 1¢ per mile and a 10¢ gas tax increase proposed without any additional detail).

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 *relative* preferences among different transportation tax options.

Support Levels Among Population Subgroups for the 11 Tax Options

In addition to examining support for the different tax options among the overall population, we examined support by subgroups within the population. Breaking the population into subgroups by socio-demographic categories reveals surprisingly few links with support for the taxes. For example, looking across all the taxes there are no clear patterns showing that support varies consistently by region of the country, gender, or income. The clearest patterns that emerge are that the taxes generally had greater support from younger people and non-whites.

In terms of politics, party affiliation plays a striking role, with Democrats significantly more likely to support every one of the taxes. Also, respondents characterized as unlikely voters were more supportive of many of the tax options than were likely voters.

Breaking the respondents into subgroups according to their travel behavior and perceptions of the transportation system reveals only a few significant correlations with support for the tax options. However, support for many of the taxes was at least modestly higher among respondents who stated that they did not drive, had taken public transit within the previous

30 days, drove highly efficient vehicles (39+ miles per gallon), or placed a high priority on having government improve various aspects of the transportation system in their state.

When comparing support by subgroup for the gas tax and mileage tax variations to 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 among nearly every subgroup, even those subgroups that were generally less supportive (such as Republicans). The only exceptions to this pattern were the subgroups who placed a low priority on having government maintain roadways or reduce accidents. For these groups, the alternative tax options were no more popular than the base-case ones.

Changes in Support for the 11 Tax Options, 2010 – 2012

The survey results indicate that American public opinion about the federal transportation tax options tested has changed very little in the past two years. The 2012 survey found Americans approximately as willing to support tax increases for transportation as they were in 2010 and 2011. Support for the sales tax and variable mileage tax increased a few percentage points each year, while support for most of the gas tax variants rose slightly in 2011 and then dropped back a few points in 2012. Finally, the analysis of how the variations on the gas and mileage taxes boosted support over the base cases for each shows very little change from one year to the next.

The fact that all three surveys show such similar results suggests that the views expressed are indeed generally representative of the American public and are not aberrations caused by an unusual and unrepresentative sample in any year of the survey.

Knowledge and Preferences Related to Public Transit

The questions focused on public transit revealed that a very high percentage of people (83 percent) placed a high or medium priority on improving and expanding public transit in their state, though some other priorities had even higher support levels. Many respondents were not aware of the different government entities that fund transit. Knowledge was particularly low about the federal role; only 42 percent of people knew that the federal government helps to pay for public transit. As to how respondents wanted to see the federal government find revenues for improving and expanding public transit, neither raising the gas tax nor raising transit fares was particularly popular, though more people supported the latter. The most popular option was to cut spending on other government programs.

POLICY IMPLICATIONS FOR TRANSPORTATION PROFESSIONALS AND POLICYMAKERS

The results of the three surveys suggest several key implications for policymakers who wish to craft transportation revenue increases that will be more appealing – or at least less objectionable – to the public:

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

The survey results from all three 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 improving support levels.

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 three years also show that while a new mileage fee may be very unpopular, support could be increased by modifying the tax structure to incorporate a variable rate linked 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 21% support for the flat 1¢ per mile tax option.

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 our survey, support improved notably for both the gas tax increase and the mileage tax increase when they were linked to environmental benefits. For the mileage tax, the pollution-linked variant boosted support as compared to the flat-rate version a few more percentage points each year, from a 12 percentage point boost in 2010 to a 19 point boost in 2012. The boost crossed political party lines, too, though the magnitude of increased support was greater among Democrats than people with other political affiliations.

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 three years show that most people want good public transit service in their state. However, the 2012 questions exploring different methods to raise new revenues for expanding and improving transit found relatively low levels of support for all of them. Policymakers seeking new funding for public 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 those communities that have existing transit networks, given the survey finding that people in communities with no transit service are less supportive of funding it.

APPENDIX A: SURVEY QUESTIONNAIRE AND RESULTS

The following pages present the results of the 2012 survey described above, comparing them to the results from similar surveys conducted by MTI in 2010 and 2011.[7]

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

The data labeled as "weighted" have been weighted by gender, race, Hispanic ethnicity, age, education, and income to match the U.S. population estimates from the Census Bureau's American Community Survey (2004-2009, five-year average).

* * *

Hello, I'm calling from San José State University. We're conducting an important study on people's thoughts about transportation in the U.S. 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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Very good condition	25	19	20	22
Somewhat good condition	54	62	64	61
Bad condition	20	19	16	17
Don't know (volunteered)	<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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Very good	17	16	19	16
Somewhat good	38	38	41	38
Poor	15	19	16	19
No service	23	21	17	20
Don't know (volunteered)	7	7	7	6

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

[Q3 - Q7 RANDOMIZED]

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
High priority	47	49	47	46
Medium priority	35	36	33	34
Low priority	15	14	17	17
Don't know (volunteered)	4	2	2	3

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
High priority	68	73	68	70
Medium priority	26	23	27	25
Low priority	5	4	5	5
Don't know (volunteered)	1	<1	1	1

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
High priority	47	47	45	43
Medium priority	36	33	37	34
Low priority	14	17	16	21
Don't know (volunteered)	4	3	2	3

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
High priority	n.a.	65	68	63
Medium priority	n.a.	26	22	24
Low priority	n.a.	7	9	10
Don't know (volunteered)	n.a.	1	2	2

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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
High priority	n.a.	47	46	41
Medium priority	n.a.	36	37	38
Low priority	n.a.	15	15	19
Don't know (volunteered)	n.a.	1	2	3

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.

[Q8 - Q10 RANDOMIZED]

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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	12	14	12	12
Somewhat support	30	31	37	32
Somewhat oppose	16	20	19	16
Strongly oppose	38	30	27	37
Don't know (volunteered)	4	5	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 the 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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	9	7	6	8
Somewhat support	14	17	14	16
Somewhat oppose	20	22	19	16
Strongly oppose	54	52	61	59
Don't know (volunteered)	2	2	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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	14	13	10	12
Somewhat support	25	25	29	27
Somewhat oppose	21	20	18	16
Strongly oppose	36	39	43	44
Don't know (volunteered)	3	2	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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	9	6	6	5
Somewhat support	12	16	15	13
Somewhat oppose	15	17	17	14
Strongly oppose	61	58	60	65
Don't know (volunteered)	3	2	3	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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	14	14	17	15
Somewhat support	19	22	24	21
Somewhat oppose	18	18	17	16
Strongly oppose	46	42	40	46
Don't know (volunteered)	3	4	2	2

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

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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	9	14	14	11
Somewhat support	21	33	27	24
Somewhat oppose	23	16	16	16
Strongly oppose	42	33	41	46
Don't know (volunteered)	6	3	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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	12	14	14	11
Somewhat support	30	32	26	25
Somewhat oppose	19	15	14	14
Strongly oppose	36	34	41	46
Don't know (volunteered)	3	6	4	4

Q13. Would you support the gas tax increase if the money were spent ONLY on projects to MAINTAIN streets, roads, and highways?

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	n.a.	26	23	23
Somewhat support	n.a.	36	35	33
Somewhat oppose	n.a.	12	10	11
Strongly oppose	n.a.	22	31	31
Don't know (volunteered)	n.a.	4	2	2

Q14. Would you support the gas tax increase if the money were spent ONLY on projects to reduce accidents and improve safety?

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	n.a.	23	25	18
Somewhat support	n.a.	34	29	29
Somewhat oppose	n.a.	15	12	16
Strongly oppose	n.a.	24	31	35
Don't know (volunteered)	n.a.	5	3	3

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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	n.a.	16	15	13
Somewhat support	n.a.	34	31	30
Somewhat oppose	n.a.	18	15	16
Strongly oppose	n.a.	28	36	38
Don't know (volunteered)	n.a.	4	2	3

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 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	13	11	10	12
Somewhat support	19	25	21	20
Somewhat oppose	19	18	16	16
Strongly oppose	46	42	50	49
Don't know (volunteered)	3	4	3	3

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

Q17. Do you happen to know who pays for public transit around the country? I'm going to read you several possibilities. Please let me know if each one DOES or DOES NOT pay for public transit. Or if you are not sure, just say "don't know."

Q17A. Who pays for public transit around the country? Public transit riders

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Does pay	n.a.	n.a.	62	67
Does not pay	n.a.	n.a.	7	8
Don't know	n.a.	n.a.	31	26

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Does pay	n.a.	n.a.	42	50
Does not pay	n.a.	n.a.	22	21
Don't know	n.a.	n.a.	36	30

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Does pay	n.a.	n.a.	56	59
Does not pay	n.a.	n.a.	12	13
Don't know	n.a.	n.a.	32	28

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

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Does pay	n.a.	n.a.	51	57
Does not pay	n.a.	n.a.	16	15
Don't know	n.a.	n.a.	33	28

Q18. Some people say that money from gas taxes should only be spent on roads and highways, since drivers are the ones who pay the tax. Other people say that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic and wear-and-tear on the roads. Which statement is closer to your opinion?[a]

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Gas taxes only for roads and highways	n.a.	n.a.	48	50
Gas taxes make sense for public transportation	n.a.	n.a.	33	30
Both (volunteered)	n.a.	n.a.	13	14
Neither (volunteered)	n.a.	n.a.	2	3
Don't know (volunteered)	n.a.	n.a.	3	3

[a] 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 that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic 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 are the ones who pay the tax. Which statement is closer to your opinion?"

Q19. Suppose Congress has voted to spend more money to expand and improve public transit around the country but has not yet d ecided 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? [options rotated]

Q19A. Raise the federal gas tax

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	n.a.	n.a.	9	11
Somewhat support	n.a.	n.a.	19	20
Somewhat oppose	n.a.	n.a.	16	15
Strongly oppose	n.a.	n.a.	53	53
Don't know (volunteered)	n.a.	n.a.	3	2

Q19B. Reduce spending on other federal programs

	2010 Weighted (%)	2011 Weighted (%)	2012 Weighted (%)	2012 Unweighted (%)
Strongly support	n.a.	n.a.	25	27
Somewhat support	n.a.	n.a.	31	28
Somewhat oppose	n.a.	n.a.	18	17
Strongly oppose	n.a.	n.a.	18	19
Don't know (volunteered)	n.a.	n.a.	9	8

Q19C. Raise transit fares

	2010 Weighted (%)	2011 Weighted (%)	2012	
			Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	14	16
Somewhat support	n.a.	n.a.	31	34
Somewhat oppose	n.a.	n.a.	21	18
Strongly oppose	n.a.	n.a.	27	25
Don't know (volunteered)	n.a.	n.a.	7	7

Q20. Now, if you could only select one of the three options I just described, which would you prefer? [Options rotated, to match order in Q19A – C.]

	2010 Weighted (%)	2011 Weighted (%)	2012	
			Weighted (%)	Unweighted (%)
Raise the federal gas tax	n.a.	n.a.	14	18
Reduce spending on other federal programs	n.a.	n.a.	48	46
Raise transit fares	n.a.	n.a.	27	25
Equally oppose all three (volunteered)	n.a.	n.a.	5	6
Equally support all three (volunteered)	n.a.	n.a.	2	1
Don't know (volunteered)	n.a.	n.a.	4	4

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 19 and Table 20 present responses to gas tax proposals, Table 21 presents responses to mileage tax proposals, and Table 22 presents responses to sales tax proposals. Complete source citations for all items in the tables are given in the Bibliography.

Table 19. 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.
CBS/ 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.
New York Times/ CBS News	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 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.
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.
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.
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.

Table 19, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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."
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."
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."
University of Texas, Austin (Musti et al.)	2010	Austin, TX, area residents	43% of respondents "supported" a $1 per gallon increase in the gas tax "to combat climate change." 62% of respondents "supported" energy taxes with this same purpose -- a $50 tax per ton of greenhouse gas emissions "produced by electricity generation and motor fuel use" was given as an example of such a tax.
CBS News/ 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."
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.

Table 19, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
ABC News/ Time Magazine/ 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.
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 (Oakland), CA, registered voters	39% of respondents were "likely to vote yes" for a 10¢ per gallon increase in gas taxes for the surrounding region to "pay for maintenance of local streets and roads as well as improvements to public transportation." Approval dropped to 38% when more information was provided. In contrast, 71% of respondents "were likely to vote yes" for an extension of a 0.5¢ county sales tax "to address an updated plan for the county's current and future transportation needs" after being informed that "money from this measure could only be spent on the voter-approved expenditure plan… and could not be taken by the state."
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."
Quinniapac University Polling Institute	2009	New Jersey voters	37% of respondents "supported" an unspecified gas tax increase "to help finance road improvements and mass transportation."
Quinniapac 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."
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."
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."
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.

Table 19, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
ABC News/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.
Des Moines Register (Selzer & co.)	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."
Quinniapac 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."
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.
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%.
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%.

Table 19, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Pew Research Center	2010	U.S. residents	22% of respondents "approved" of an unspecified increase to the national gasoline tax when "thinking about ways to reduce the federal budget deficit."
Rasmussen Reports	2009	U.S. residents	22% preferred raising the gas tax an unspecified amount to "cutting back nationally on transportation projects." 15% of respondents agreed that the federal government should increase gas taxes "to help meet new transportation needs."
Pew Research Center	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."
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."
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."
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."
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 Gas Tax Increases Linked to Environmental Benefits

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
CBS/ 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.
Washington State Transportation Commission (EMC Research)	2012	Washington State residents	61% of respondents thought "a vehicle emissions fee – vehicles that pollute more would pay a higher fee" was "definitely" or "probably" a "good way to fund increased transportation investment." 45% of respondents thought the same for "a fee based on fuel efficiency of a vehicle – less fuel efficient vehicles would pay a higher fee."
New York Times/ CBS News	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)	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.

Table 20, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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.
University of Texas, Austin (Musti et al.)	2010	Austin, TX, area residents	43% of respondents "supported" a $1 per gallon increase in the gas tax "to combat climate change." 62% of respondents "supported" energy taxes with this same purpose -- a $50 tax per ton of greenhouse gas emissions "produced by electricity generation and motor fuel use" was given as an example of such a tax.
ABC News/ 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."
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 21. 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.
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."
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)	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.
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.

Table 21, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
HNTB Corporation (Kelton Research)	2012	U.S. residents	23% of respondents chose a mileage fee when asked to choose whether they would "most prefer" "increased" federal gas taxes, tolls, or "a vehicle miles driven user fee" as a way to "get funding for the nation's interstate projects."
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."
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."
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."
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.)

Table 22. Public Opinion Polling on Sales Taxes

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Alameda County Transportation Comission (EMC Research)	2011 (March)	Alameda County (Oakland), CA, registered voters	71% of respondents were "likely to vote yes to approve" an extension of a 0.5¢ county sales tax "to address an updated plan for the county's current and future transportation needs." Respondents were informed about the fact that the tax passed twelve years previously and that "money from this measure could only be spent on the voter-approved expenditure plan, and all money from this measure would stay in Alameda County and could not be taken by the state." In separate questions, respondents showed a preference for making the tax permanent with votes on the spending plan every 20 years to just extending the tax 20 years (54% to 29%) and maintaining the tax at its current rate rather than increasing it by 0.25¢ (45% to 39%).
Alameda County Transportation Commission (EMC Research)	2011 (October)	Alameda County (Oakland), CA, registered voters	69% of one group of respondents were "likely to vote yes to approve" a measure "extending the existing transportation sales tax and increasing it by one half cent." 59% of a second group of respondents were "likely to vote yes to approve" a measure that "authorizes a one half cent transportation sales tax." In both cases, respondents were informed that the measure would "address the County's current and future transportation needs," would require "voter approval every 20 years on a new expenditure plan, with citizen oversight and a local jobs creation program" and that "no money can be taken by the state."
Regional Transportation Alliance (Fallon Research)	2012	Orange County (Chapel Hill), NC, registered voters	60% of respondents "would vote for" a 0.5¢ local sales tax "to pay for new or expanded public transportation." Exempting "food, medicine, utilities, and gasoline" from the tax increased support for the measure (41% said they were "more likely" to vote for the measure vs. 7% "less likely"), as did a scenario where gas prices rose to $5/gallon (27% "more likely" to 14% "less likely"). A scenario where "funding was used just for more bus routes and services, and did not include any rail systems" reduced support for the measure (8% "more likely" to 35% "less likely").
Triangle Transportation Authority (Fallon Research)	2010	Durham, Orange, and Wake Counties (Raleigh-Durham), NC, 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."

Table 22, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
Los Angeles Metro (Fairbank Maslin Maullin)	2007	Los Angeles County, CA, registered voters	56% of respondents "would vote yes in favor" of a 0.5¢ county sales tax for transportation projects "with local control, required annual independent financial audits, and no funds to be used for administrators' salaries." Respondents were presented with the types of projects that would be funded with the tax. 57% of respondents "would vote yes in favor" of the same measure if the tax was set at 0.25¢.
Center for the Study of Los Angeles, Loyola Marymount University	2012	Los Angeles, CA, registered voters	54% of respondents "would vote yes" to extend a 0.5¢ county sales tax "for transportation-related projects, like the metro rail." Respondents were informed about the fact that the tax was passed four years previously and was going to last a total of thirty years, and that their vote would be to extend the tax another thirty years.
Denver RTD (The Kenney Group)	2010	Metro Denver and Boulder County,CO, likely voters	51% of respondents "would vote for" a 0.4¢ increase in county sales taxes devoted to a set of regional transportation projects. Earlier in the survey, 48% of respondents agreed that "we should double the sales tax from four pennies on ten dollars to a total of eight pennies on ten dollars" in order to complete the set of projects "on time in 2017."
Atlanta Journal-Constitution and Channel 2 Action News (Mason-Dixon Polling & Research, Inc.)	2011	Atlanta, GA, area registered voters	51% of respondents "would vote yes, in favor" of a 1¢ local sales tax to "fund transportation projects in the [local] special transportation district." Respondents were informed that "projects to be funded would be requested by each county and then selected by a regional group of elected officials."
Regional Transportation Alliance (Fallon Research)	2012	Wake County (Raleigh), NC, registered voters	50% of respondents "would vote for" a 0.5¢ local sales tax "to pay for new or expanded public transportation." Exempting "food, medicine, utilities, and gasoline" from the tax increased support for the measure (44% said they were "more likely" to vote for the measure vs. 9% "less likely"), as did a scenario where gas prices rose to $5/gallon (23% "more likely" to 20% "less likely"). A scenario where "funding was used just for more bus routes and services, and did not include any rail systems" reduced support for the measure (12% "more likely" to 40% "less likely").
PPIC (Baldassare)	2005	Los Angeles County 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."
Mineta Transportation Institute (Agrawal and Nixon)	2010	U.S. residents	42% 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."

Table 22, continued

Sponsor (and author, if different)	Survey date	Sampling frame	Findings
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."
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.
SurveyUSA	2012	Atlanta, GA, area likely voters	36% of respondents were "certain to vote yes" on a 1¢ sales tax increase "to fund regional transportation projects."
20/20 Insight Polling	2011	Atlanta, GA, area registered voters	33% of respondents "favored" a measure "to increase their local sales tax by one cent for every dollar spent" if "the money raised…will be used solely for transportation projects on a list approved by regional leaders."
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.
HNTB Corporation (Kelton Research)	2012	U.S. residents	21% of respondents stated they would be "willing to spend more money on" a sales tax "if it was allocated to long-term interstate improvements in [their] area."

ENDNOTES

1. For the results of the first two 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 31, 2012); 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 31, 2012).

2. The search terms used included *transportation tax*, *transit tax*, *gas tax*, *mileage 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, "2006-2010 American Community Survey 5-Year Estimates" (no date), downloaded from http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_submenuId=&_lang=en&_ts= (accessed May 31, 2012).

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. However, no clear pattern emerged.

6. For the results of the first two years of polling in this series, see Agrawal and Nixon (2010 and 2011).

7. For the complete 2010 and 2011 results, see Agrawal and Nixon (2010) and Agrawal and Nixon (2011).

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