

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



MTI Report 12-68



MINETA TRANSPORTATION INSTITUTE

The Mineta Transportation Institute (MTI) was established by Congress in 1991 as part of the Intermodal Surface Transportation Equity Act (ISTEA) and was reauthorized under the Transportation Equity Act for the 21st century (TEA-21). MTI then successfully competed to be named a Tier I Center in 2002 and 2006 in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Most recently, MTI successfully competed in the Surface Transportation Extension Act of 2011 to be named a Tier I Transit-Focused University Transportation Center. The Institute is funded by Congress through the United States Department of Transportation's Office of the Assistant Secretary for Research and Technology (OST-R), University Transportation Centers Program, the California Department of Transportation (Caltrans), and by private grants and donations.

The Institute receives oversight from an internationally respected Board of Trustees whose members represent all major surface transportation modes. MTI's focus on policy and management resulted from a Board assessment of the industry's unmet needs and led directly to the choice of the San José State University College of Business as the Institute's home. The Board provides policy direction, assists with needs assessment, and connects the Institute and its programs with the international transportation community.

MTI's transportation policy work is centered on three primary responsibilities:

Research

MTI works to provide policy-oriented research for all levels of government and the private sector to foster the development of optimum surface transportation systems. Research areas include: transportation security; planning and policy development; interrelationships among transportation, land use, and the environment; transportation finance; and collaborative labor-management relations. Certified Research Associates conduct the research. Certification requires an advanced degree, generally a Ph.D., a record of academic publications, and professional references. Research projects culminate in a peer-reviewed publication, available both in hardcopy and on TransWeb, the MTI website (<http://transweb.sjsu.edu>).

Education

The educational goal of the Institute is to provide graduate-level education to students seeking a career in the development and operation of surface transportation programs. MTI, through San José State University, offers an AACSB-accredited Master of Science in Transportation Management and a graduate Certificate in Transportation Management that serve to prepare the nation's transportation managers for the 21st century. The master's degree is the highest conferred by the California State University system. With the active assistance of the California

Department of Transportation, MTI delivers its classes over a state-of-the-art videoconference network throughout the state of California and via webcasting beyond, allowing working transportation professionals to pursue an advanced degree regardless of their location. To meet the needs of employers seeking a diverse workforce, MTI's education program promotes enrollment to under-represented groups.

Information and Technology Transfer

MTI promotes the availability of completed research to professional organizations and journals and works to integrate the research findings into the graduate education program. In addition to publishing the studies, the Institute also sponsors symposia to disseminate research results to transportation professionals and encourages Research Associates to present their findings at conferences. The World in Motion, MTI's quarterly newsletter, covers innovation in the Institute's research and education programs. MTI's extensive collection of transportation-related publications is integrated into San José State University's world-class Martin Luther King, Jr. Library.

DISCLAIMER

The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the information presented herein. This document is disseminated under the sponsorship of the U.S. Department of Transportation, University Transportation Centers Program and the California Department of Transportation, in the interest of information exchange. This report does not necessarily reflect the official views or policies of the U.S. government, State of California, or the Mineta Transportation Institute, who assume no liability for the contents or use thereof. This report does not constitute a standard specification, design standard, or regulation.

REPORT 12-68

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

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

June 2016

A publication of

Mineta Transportation Institute

Created by Congress in 1991

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

TECHNICAL REPORT DOCUMENTATION PAGE

1. Report No. CA-MTI-16-1528	2. Government Accession No.	3. Recipient's Catalog No.			
4. Title and Subtitle What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Seven of a National Survey		5. Report Date June 2016			
		6. Performing Organization Code			
7. Authors Asha Weinstein Agrawal, Ph.D. and Hilary Nixon, Ph.D.		8. Performing Organization Report MTI Report 12-68			
9. Performing Organization Name and Address Mineta Transportation Institute College of Business San José State University San José, CA 95192-0219		10. Work Unit No.			
		11. Contract or Grant No. DTRT12-G-UTC21			
12. Sponsoring Agency Name and Address <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> Metropolitan Transportation Commission Bay Area Metro Center 375 Beale Street San Francisco, CA 94105 </td> <td style="width: 50%; border: none;"> U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology University Transportation Centers Program 1200 New Jersey Avenue, SE Washington, DC 20590 </td> </tr> </table>		Metropolitan Transportation Commission Bay Area Metro Center 375 Beale Street San Francisco, CA 94105	U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology University Transportation Centers Program 1200 New Jersey Avenue, SE Washington, DC 20590	13. Type of Report and Period Covered Final Report	
		Metropolitan Transportation Commission Bay Area Metro Center 375 Beale Street San Francisco, CA 94105	U.S. Department of Transportation Office of the Assistant Secretary for Research and Technology University Transportation Centers Program 1200 New Jersey Avenue, SE Washington, DC 20590		
		14. Sponsoring Agency Code			
15. Supplemental Notes					
16. Abstract <p>This report summarizes the results of year seven of a national random-digit-dial public opinion poll asking 1,503 respondents if they would support various tax options for raising federal transportation revenues, with a special focus on understanding support for increasing revenues for public transit. Ten specific tax options tested were variations on raising the federal gas tax rate, creating a new mileage tax, and creating a new federal sales tax. Other questions probed perceptions related to public transit, including knowledge and opinions about federal taxes to support transit. In addition, the survey collected data on standard sociodemographic factors, travel behavior (public transit usage, annual miles driven, and vehicle fuel efficiency), respondents' views on the quality of their local transportation system, their priorities for government spending on transportation in their state, and environmental concerns. All of this information is used to assess support levels for the tax options among different population subgroups.</p> <p>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 75% of respondents, whereas support levels dropped to just 31% if the revenues were to be used more generally to maintain and improve the transportation system. For tax options in which the revenues were to be spent for undefined transportation purposes, support levels varied considerably by what kind of tax would be imposed, with a sales tax much more popular than either a gas tax increase or a new mileage tax.</p> <p>With respect to public transit, the survey results show that most people want good public transit service in their state. In addition, two-thirds of respondents supported spending gas tax revenues on transit. However, questions exploring different methods to raise new revenues found relatively low levels of support for raising gas tax or transit fare rates. Also, not all respondents were well informed about how transit is funded, with only half knowing that fares do not cover the full cost of transit.</p>					
17. Key Words Transportation fees; public transit; public opinion; gasoline tax; highway user taxation		18. Distribution Statement No restrictions. This document is available to the public through The National Technical Information Service, Springfield, VA 22161			
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 119	22. Price \$15.00		

Copyright © 2016
by **Mineta Transportation Institute**
All rights reserved

Library of Congress Catalog Card Number:
2016944553

To order this publication, please contact:

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

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

transweb.sjsu.edu

ACKNOWLEDGMENTS

The authors thank the following people for their important contributions to this project:

- Marie Myers, who provided research assistance;
- Laura Gil-Trejo, Director of the Social Science Research Center (SSRC) at California State University, Fullerton, and Frederick Rose, Research Operations Coordinator at SSRC, who managed the survey implementation, as well as the rest of the staff at SSRC;
- The 1,503 individuals who responded to the survey; and
- Mineta Transportation Institute staff, including Executive Director Karen Philbrick, Ph.D., editor and webmaster Frances Cherman, research support coordinator Joseph Mercado, research assistant Claire Horner, and executive administrative assistant Jill Carter.

TABLE OF CONTENTS

I. Introduction	1
II. A Review of Polling on Gas, Mileage, and Sales Taxes for Transportation Purposes	3
Gas Taxes	3
Mileage Taxes	3
Sales Taxes	4
III. Survey Design and Administration	5
Questionnaire Design	5
Survey Implementation	6
IV. Findings on Support for the Taxes	8
Survey Respondents	8
Overall Support Levels for the Transportation Tax Options	10
Support by Population Subgroups	11
Support for Different Versions of the Mileage and Gas Taxes	21
Trends in Support over Time (2010 – 2016)	30
V. Findings Related to Opinions on Public Transit	35
VI. Conclusions	53
Summary of Key Findings	53
Policy Implications for Transportation Professionals and Policymakers	55
Appendix A: Survey Questionnaire and Results	57
Appendix B: Opinion Polls Reviewed	71
Endnotes	99
Bibliography	101
About the Authors	118
Peer Review	119

LIST OF FIGURES

1. Support Levels for the Tax Options Surveyed in 2016	11
2. Relative Increases in Support for Variations of the Base-Case Gas Tax and Mileage Tax Concepts (2016)	21
3. Trends in Support for the Tax Options, (2010 – 2016)	31
4. Changes over Time for the Relative Increases in Support for Variations of the Base-Case Gas Tax and Mileage Tax Concepts (2010 – 2016)	34
5. Respondents' Belief About Whether Transit Fares Cover the Full Cost of Transit (2013 – 2016)	37
6. Knowledge among All Respondents about Which Government Entities Pay for Public Transit around the U.S. (2013 – 2016)	38
7. Opinion on Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2016)	46
8. Preferred Alternative among Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2016)	47

LIST OF TABLES

1. Comparison of Survey Respondents to the Adult U.S. Population, by Census Region and Sociodemographic Characteristics	9
2. Support for the Tax Options, by Census Region and Sociodemographic Characteristics	13
3. Support for the Tax Options, by Political Characteristics	16
4. Support for the Tax Options, by Travel Behavior	17
5. Support for the Tax Options, by Opinions of the Transportation System	18
6. Support for the Tax Options, by Environmental Concerns	20
7. Percentage-Point Increases in Support for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case Versions of Those Taxes, by Census Region and Sociodemographic Categories	23
8. Percentage-Point Increases in Support for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case Versions of Those Taxes, by Political Affiliation	25
9. Percentage-Point Increases in Support for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case Versions of Those Taxes, by Opinions of the Transportation System	26
10. Percentage-Point Increases in Support for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case Versions of Those Taxes, by Travel Behavior	28
11. Percentage-Point Increases in Support for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case Versions of Those Taxes, by Environmental Concerns	29
12. Trends in Support for the Tax Options, 2010 – 2016	32
13. Priority Placed on Ways that Government Could Improve the Transportation System for Everyone in the Respondent’s State (2012 – 2016)	36
14. Belief about Whether Fares Cover the Full Cost of Transit Service, by Subgroup	39
15. Belief about Which Government Entities Pay for Transit, by Subgroup	41

16. Opinion on Whether Gas Taxes Should Be Spent on Public Transit in Addition to Roads and Highways, by Subgroup	43
17. Support for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, by Subgroup	48
18. Respondents' Preferred Method to Expand and Improve Public Transportation, by Subgroup	50
19. Public Opinion Polling on Gas Tax Increases	72
20. Public Opinion Polling on Mileage Taxes	87
21. Public Opinion Polling on Sales Taxes	92

I. INTRODUCTION

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

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

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

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

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

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

The remaining chapters of the report contain the following material. Chapter 2 describes findings from other polling on similar transportation taxes to provide context for understanding this survey's results. Chapter 3 describes the survey methodology and

presents an overview of the questionnaire and details of the implementation procedure. Detailed discussion of the survey findings on the different tax options and the transit-related questions follow in Chapters 4 and 5. Chapter 6 summarizes key findings and suggests some implications of those findings for policymakers.

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

To provide context for interpreting the survey results presented in this report, Chapter 2 reviews the results from over 175 other public opinion polls that asked about support for gas, mileage, and sales taxes whose revenues would be used for transportation purposes. Almost all surveys are from the past 10 years.

The surveys were identified through a search of the Internet-based archives of popular pollsters and aggregators of public opinion polls, including the Pew Center for the People and the Press, the Roper Center for Public Opinion Research, Rasmussen Reports, SurveyUSA, PollingReport.com, Quinnipiac University Polling Institute, and Polling the Nations. This work was supplemented by searching Google and newspaper databases to find mainstream media coverage on polls about transportation taxes.² Complete survey results were obtained directly from the survey sponsors' websites or through personal contact with the sponsors.

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

GAS TAXES

Gas taxes are a primary source of transportation revenue at both the state and the federal level. However, the federal government and many states have not raised the tax rates in a decade or more, so the real value of the revenues collected has fallen with inflation. As a result, there is frequent talk about raising gas tax rates, and public opinion on such increases has been extensively polled. Table 19 in Appendix B presents the key findings from 130 polls asking about support for gas tax increases.

Making direct comparisons among the polls is difficult because the specific tax increases proposed and the contexts in which they are presented vary widely. For example, some proposals call for unspecified increases in the gas tax, while others propose specific increases that range from 1¢ to \$2 per gallon. Some polls link the gas tax increase to a particular purpose, such as maintaining bridges, while others link the increase to very general uses, such as “to help meet new transportation needs.”

Although support levels are not universally high, they are often higher than one might expect given the frequent pronouncements in the news media that the public simply will not tolerate an increase in the gas tax rate. Twenty-four percent of the polls found at least majority support, and 42% found a respectable support level of 40% or higher.

MILEAGE TAXES

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

Table 20 in Appendix B presents a review of 35 polls that included at least one question about mileage taxes. As with gas taxes, there is wide variation in how the surveys presented the mileage tax option. Some simply asked how respondents felt about an unspecified fee charged per mile driven, while others gave a detailed explanation of the tax and the technology that would be used to collect it.

Regardless of question wording, support is not especially strong. Only 2 of the 35 polls found a majority in favor of a mileage tax, and only 23% had support above 40%.

SALES TAXES

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

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

Table 21 in Appendix B summarizes a sampling of 55 polls testing public opinion on sales taxes. Overall, support levels were quite high: 44% found majority support – a very strong majority in some cases.

III. SURVEY DESIGN AND ADMINISTRATION

QUESTIONNAIRE DESIGN

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

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

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

Gas tax increases. All variants of a federal gas tax increase involved raising the existing 18¢-per-gallon tax³ to 28¢ per gallon, but each included a different set of information for respondents to consider. The seven variations were:

- A base-case 10¢ increase in the gas tax without further stipulations;
- A 10¢ increase in the gas tax that would be phased in over five years, increasing by 2¢ per year;
- A 10¢ increase in the gas tax, with the revenues to be spent only for projects to reduce local air pollution caused by the transportation system;
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to reduce the transportation system's contribution to global warming;
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to maintain streets, roads, and highways;
- A 10¢ increase in the gas tax, with the revenues to be spent only on projects to reduce accidents and improve safety;
- A 10¢ increase in the gas tax, with respondents informed of the annual tax burden for a typical driver under both the current and increased tax rates. Respondents were told that the tax burden would increase from an average of \$100 a year to \$150 a year for someone driving 10,000 miles a year in a car with a fuel economy of 20 miles per gallon.

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

- A base-case 1¢-per-mile tax, with every car taxed at the same rate; and
- A variable-rate mileage tax for which the average rate would be 1¢ per mile, but vehicles that pollute less would be charged less and vehicles that pollute more would be charged more.

A new national sales tax. In this option, the federal government would levy a new 0.5% sales tax.

A new element of the survey project introduced in 2012 was a special focus on understanding likely public support for raising revenues to pay for public transportation. Respondents were asked if they knew whether different entities help to pay for transit (transit riders, plus government at the local, state, and federal levels); their opinion about whether or not gas tax revenues should be spent on public transit; and their support for, and preference among, different Congressional options to find additional revenues to support improved and expanded transit.

In addition to testing population-wide support levels for the tax options and opinions about public transit, the survey was designed to assess how responses might vary by respondents' sociodemographic characteristics, travel behavior characteristics, and opinions on several topics related to transportation and environmental issues. The sociodemographic questions addressed common characteristics such as age, race/ethnicity, and income. To assess travel behavior, the survey included one question asking how many miles the respondent drove in the previous year and another question asking if the respondent had used any form of public transit within the past 30 days. Respondents were also asked the average fuel efficiency of the vehicle they drove most often for personal use. As for opinions, respondents were asked to rate the quality of roads and highways in their community, as well as its transit service. They were then presented with various options for improving the transportation system in their state and asked what priority (high, medium or low) they thought the government should assign to each. Later, respondents also answered two opinion questions related to air pollution and environmental protection.

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

SURVEY IMPLEMENTATION

The Social Science Survey Center at California State University, Fullerton, conducted the survey on behalf of the Mineta Transportation Institute's National Transportation Finance Center. The interviewing was conducted from February 19 to March 31, 2016. A total of 1,503 adults nationwide were interviewed by telephone in either English or Spanish, with 70 (5%) of the interviews conducted in Spanish.

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

The margin of error for the total sample is ± 2.53 percentage points at the 95% confidence level. Smaller subgroups have larger margins of error.

Unless otherwise indicated, all results are weighted to match the Census Bureau's 2014 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.⁴

IV. FINDINGS ON SUPPORT FOR THE TAXES

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

SURVEY RESPONDENTS

The 1,503 adult survey respondents were generally representative of the U.S. population in terms of Census region and sociodemographic characteristics (Table 1). The results were weighted to match the sample to the US adult population in terms of gender, Hispanic ethnicity, race, education level, imputed annual household income, and age.

Table 1. Comparison of Survey Respondents to the Adult U.S. Population, by Census Region and Sociodemographic Characteristics (2016)

	Landline sample (%)	Cell sample (%)	Total sample, unweighted (%)	U.S. adults ^a (%)
Census region ^b				
Northeast	21	15	19	18
Midwest	28	23	26	21
South	32	37	34	38
West	18	25	21	24
Gender				
Male	42	58	49	49
Female	58	42	51	51
Of Hispanic/Latino origin/descent	8	18	12	15
Race				
White	79	66	74	73
Black/African-American	8	10	9	13
Asian/Asian-American	3	5	4	5
Other	10	19	13	9
Education				
Less than high school graduate	4	6	5	13
High school graduate	19	20	20	28
Some college	24	26	25	31
College graduate	29	28	28	18
Some grad school	2	2	2	-- ^c
Graduate degree	21	18	20	10
Income (annual household)				
\$0 – \$25,000	16	19	17	23
\$25,001 – \$50,000	24	22	23	24
\$50,001 – \$75,000	16	16	16	18
\$75,001 – \$100,000	20	17	19	12
\$100,001 – \$150,000	14	16	15	12
\$150,001+	9	9	9	11
Age				
18 – 29	6	22	12	22
30 – 39	8	20	13	17
40 – 49	10	17	13	17
50 – 59	20	19	19	18
60 – 69	29	13	23	14
70 – 79	19	6	14	8
80+	9	3	7	5

^a All data are for adults 18 years and older, with the exception of household income, which is for all U.S. households. The U.S. population estimates are from U.S. Census Bureau, “2014 American Community Survey 1-Year Estimates” (no date), <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed April 13, 2016).

^b Census regions are defined at U.S. Census Bureau, “Census Regions and Divisions of the United States with State FIPS Codes” (no date), http://www2.census.gov/geo/docs/maps-data/maps/reg_div.txt (accessed April 13, 2016).

^c American Community Survey data not available.

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

OVERALL SUPPORT LEVELS FOR THE TRANSPORTATION TAX OPTIONS

The survey results show that a majority of Americans would support higher taxes for transportation – under certain conditions (Figure 1). While only 31% of respondents supported the base-case 10¢ per gallon gas tax increase, five variants that devoted revenue to specific uses received at least 50% support, as did the proposal for a new national sales tax. The highest level of support was for a gas tax increase of 10¢ per gallon to fund road maintenance, which was supported by 75% of respondents. One other option, a gas tax increase with funds devoted to reducing accidents and improving safety, surpassed 60% support.

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

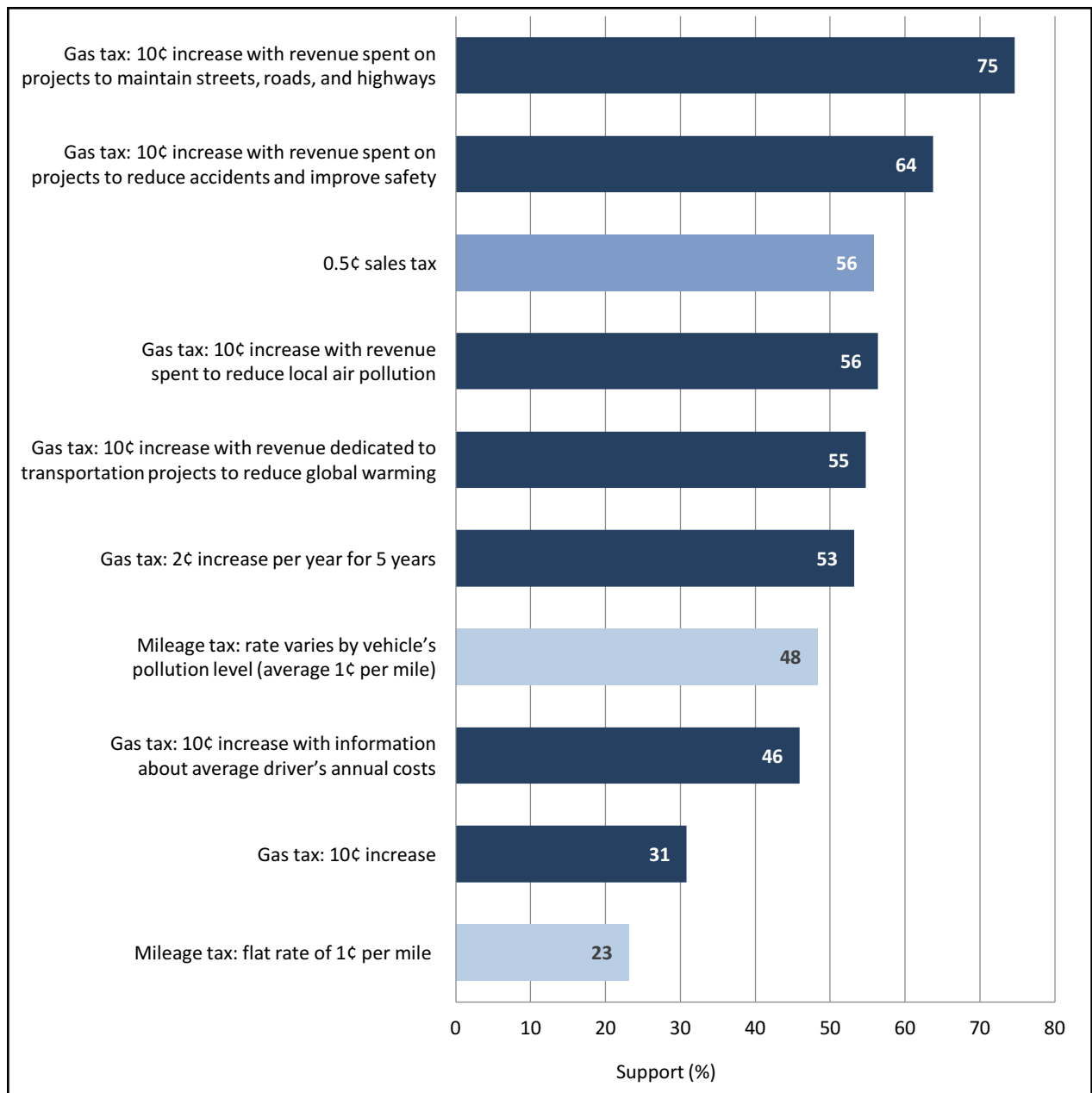


Figure 1. Support^a Levels for the Tax Options Surveyed in 2016

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

SUPPORT BY POPULATION SUBGROUPS

The researchers also examined support levels for the different tax options by subgroups within the population. The statistical test of two proportions was used to check whether differences among subgroups (e.g., men versus women) are statistically significant at the 95% and 99% confidence levels. Tables 2 through 6 present the results from statistical testing in which the first subgroup listed in a table for that set of population categories is the base case against which all the other subgroups are compared. (The tables do not show the results of tests run against pairs of subgroups that do not include the first subgroup in the category.)

The following discussion focuses on those differences among subgroups in which the patterns are “clear,” which we define as cases where (1) the variation in support is statistically significant across at least five of the tax ten options, and (2) the average magnitude of the difference between the groups across all tax options is at least 10 percentage points or more. Readers should note that the differences among subgroups highlighted as “clear” are not necessarily the only important differences that may exist. Rather, the variations discussed are those that fell within the cutoff points selected and could be identified by the particular statistical tests used. Choosing different cutoff points would highlight a somewhat different set of variations. Also, it is important to keep in mind that “statistical significance” is not an automatic indicator of scientific or policy importance, as discussed in a 2016 statement from the American Statistical Association.⁵

Table 2 shows support for the taxes when the respondents are broken into subgroups by sociodemographic categories and U.S. Census region. The clear patterns that emerge are linked to race, ethnicity, and age. With respect to race, whites were the least supportive of the taxes. Compared with whites, Asians/Asian-Americans were, on average, 16 percentage points more likely to support each tax; African-Americans were, on average, 11 percentage points more likely to support each tax; and people of “other” races were 10 percentage points more likely to support each tax. People of Hispanic origin were, on average, 11 percentage points more supportive than people not of Hispanic origin. Employment status also played a role, with unemployed respondents more supportive than retirees. As for age, respondents in the youngest group (18 – 24 years) were more likely to support all of the taxes than respondents in the two older groups, especially as compared with the oldest group (55 years and older). The average difference in support for the taxes was 21 percentage points for the youngest group when compared with the oldest group.

Except for those noted above, Table 2 reveals no other clear patterns as they are defined above. For example, there are no clear patterns showing consistent variation in support for the taxes by region of the country, gender, educational attainment, or income.⁶

Table 2. Support^a for the Tax Options, by Census Region and Sociodemographic Characteristics (2016)

Sociodemographic category	Mileage tax				Gas tax						
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
All respondents	56	23	48	31	53	56	55	75	64	46	
Census region											
Northeast	53	28	52	30	58	59	58	73	64	55	
Midwest	59	22	48	28	51	49*	51	71	60	46*	
South	54	21	44	30	49*	56	53	76	65	43**	
West	57	24	53	33	56	62	55	78	66	48	
Gender											
Male	52	23	45	33	51	56	51	76	61	50	
Female	59**	23	51*	29	55	57	58*	73	67*	42**	
Race											
White	53	21	46	30	50	50	48	73	59	45	
Black/African-American	70**	24	46	34	61**	68**	71**	82*	83**	51	
Asian/Asian-American	48	39**	71**	41*	76**	83**	70**	72	78**	57*	
Other	66**	27	59**	32	56	76**	76**	75	71*	41	
Of Hispanic/Latino origin/descent											
Yes	65	26	58	34	63	80	77	82	78	39	
No	54**	23	47**	30	52**	52**	51**	73**	61**	47*	
Education											
High school graduate or less	58	26	52	26	54	62	58	76	70	44	
More than high school	54	21	46*	34**	53	52**	52*	74	59**	47	
Employed											
Yes	54	23	46	33	52	54	51	76	63	48	
No	66**	25	59**	30	61**	70**	68**	77	73**	46	
Retired	45*	21	40	26*	47	43**	46	66**	53**	40*	

Table 2, continued

Sociodemographic category	Sales tax (%)	Mileage tax			Gas tax					
		Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
Annual household income										
0 – \$50,000	59	27	51	34	56	62	62	76	70	47
\$50,001 – \$100,000	56	18**	46	25**	49*	53**	49**	75	63*	43
\$100,001+	50**	22	46	31	52	49**	49**	71	51**	47
Age										
18 – 24 years	64	34	60	45	70	79	84	85	75	60
25 – 54 years	59	22**	48**	29**	52**	60**	56**	76*	66*	46**
55 years+	49**	21**	45**	29**	49**	43**	44**	70**	57**	41**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

Table 3 shows support levels by political characteristics. Political party affiliation played a strong role. People who are registered as Democrats or with “other” parties,⁷ or who are registered but unaffiliated with a party, showed higher support for the taxes than did those registered as Republicans. The difference was especially large for Democrats compared to Republicans; Democrats were, on average, 20 percentage points more supportive than Republicans across the 10 tax options. Democrats were also more likely than party-independent registered voters to support the tax options. With respect to voting proclivity, people identified as unlikely to be voters were more supportive of the taxes than those identified as likely voters, which we defined as respondents who were registered voters and stated that they voted “all of the time” or “most of the time.”

The survey asked three questions about travel behavior and personal vehicle fuel efficiency in order to examine whether support for the tax options varied by these factors (Table 4). Respondents whose annual miles driven fell into the “middle” or “upper” mileage categories were less supportive than respondents who didn’t drive at all. Also, respondents who said that they had taken public transit within the previous 30 days were, on average, 16 points more likely to support the tax options than respondents who said that they had not. The fuel efficiency of respondents’ primary personal vehicles found no clear differences in their support for the taxes.

The next set of analyses examines how support for the different tax options correlates with respondents’ opinions about the transportation system (Table 5). Respondents who rated the quality of local public transit service as very good or somewhat good were more likely to support the taxes than those who said they had no local public transit service at all. By contrast, respondents’ rating of the condition of roads and highways in their community was not clearly correlated with support for the taxes. Another set of questions asked respondents to assign a high, medium, or low priority to four functions on which governments might spend transportation revenues: reducing traffic congestion; maintaining streets, roads, and highways; expanding and improving local public transit service; and reducing accidents and improving safety. Respondents who thought government should place a high or medium priority on improving either local transit service or safety were more supportive of the taxes than those who placed a low priority on those functions.

Lastly, this year we added two new questions to probe respondents’ concerns about the natural environment, and these questions generated among the largest of any differences between the subgroups compared. Respondents who strongly agreed with the statement “We must protect the environment, even if it means paying higher prices for gasoline” were more likely to support the taxes than those who only somewhat agreed or disagreed with the statement. The difference was starkest (a 38 point difference, on average) between those who strongly agreed and those who strongly disagreed with the statement. Even those who only somewhat agreed with the statement were much more likely to support the taxes than those who somewhat or strongly disagreed with the statement. The second environmental question asked people how much of a problem air pollution is for them and their community. Here again, on average, those who think air pollution is a big problem or somewhat of a problem showed much stronger support for taxes than those who think it is not much of a problem or no problem at all. The difference between the two most extreme positions – those thinking air pollution is a big problem versus those thinking it is no problem at all – was 28 points.

Table 3. Support^a for the Tax Options, by Political Characteristics (2016)

	Mileage tax					Gas tax				
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets / highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	23	48	31	53	56	55	75	64	46
Registered voter										
Yes	56	21	45	32	53	52	51	75	62	47
No	57	29**	58**	25*	50	71**	65**	75	70*	45
Likely voter ^b										
Yes	53	20	42	33	52	49	49	72	58	45
No	72**	24	55**	27	55	64**	61**	88**	81**	54*
Political affiliation for registered voters										
Democrat	64	27	53	41	64	67	70	76	65	57
Republican	45**	16**	34**	21**	41**	38**	28**	71	54**	35**
Independent ^c	58	16**	43*	31*	53*	45**	49**	76	60	49
Other ^d	54	33	51	41	56	51*	52*	73	69	55

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

^c Registered, but declined to state a party.

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

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

Table 4. Support^a for the Tax Options, by Travel Behavior (2016)

	Mileage tax					Gas tax				
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	23	48	31	53	56	55	75	64	46
Annual miles driven										
1 – 7,500	56	24	52	36	58	59	56	78	67	51
7,501 – 12,500	49	23	45	29*	48*	48**	46**	71*	56**	43*
12,501+	55	18*	40**	24**	45**	50*	47*	70*	55**	42**
Don't know	56	20	44	26*	57	68*	68*	73	77*	44
Don't drive	72**	40**	67**	41	62	71*	73**	83	74	43
Miles per gallon ^b										
≤ 19 mpg	51	22	49	29	49	52	43	70	58	45
20 – 30 mpg	56	20	45	30	53	52	53**	75	62	48
31+ mpg	48	18	42	31	53	55	54*	74	57	42
Taken transit in last 30 days										
Yes	68	34	65	44	62	74	75	77	72	56
No	52**	20**	44**	27**	50**	51**	49**	74	61**	43**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

^b Categories drawn from EPA’s “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT> (accessed April 16, 2016)).

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

Table 5. Support^a for the Tax Options, by Opinions of the Transportation System (2016)

	Mileage tax				Gas tax						
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)	
All respondents	56	23	48	31	53	56	55	75	64	46	
Opinion on condition of roads and highways in local community											
Very good	57	28	53	30	59	64	65	73	68	47	
Somewhat good	56	22	48	33	53	54**	52**	74	63	46	
Bad	52	19*	43*	24	45**	55*	51**	79	61	43	
Opinion on public transit service in local community											
Very good	63	30	56	31	56	69	62	80	73	45	
Somewhat good	60	27	56	38	59	63	60	77	66	48	
Poor	58	16**	46*	32	56	48**	55	71*	53**	48	
No service	47**	19**	36**	24	43**	44**	45**	70**	58**	40	
Role of government in reducing traffic congestion											
High priority	59	24	51	32	54	61	57	76	65	46	
Medium priority	56	21	51	30	57	55	58	73	63	45	
Low priority	47**	24	41*	29	44**	48**	44**	73	62	46	
Role of government in maintaining streets, roads, and highways											
High priority	57	22	48	30	53	55	52	76	65	44	
Medium priority	54	28	52	35	57	63*	64**	71	64	55**	
Low priority	44	15	43	27	41	57	57	59**	46**	40	
Role of government in expanding and improving local public transit service											
High priority	60	26	55	33	60	65	65	74	64	49	
Medium priority	62	25	51	35	56	55**	54**	79*	70	50	
Low priority	33**	14**	28**	16**	33**	37**	33**	64**	50**	32**	

Table 5, continued

	Mileage tax				Gas tax					
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
Role of government in reducing accidents and improving safety										
High priority	60	24	52	29	56	59	57	77	71	47
Medium priority	50**	25	43**	34	50	54	52	75	50**	48
Low priority	37**	16	31**	39*	43*	43**	46*	57**	37**	37

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

Table 6. Support^a for the Tax Options, by Environmental Concerns (2016)

	Mileage tax				Gas tax					
	Sales tax (%)	Flat (%)	Variable (%)	10¢ increase (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	56	23	48	31	53	56	55	75	64	46
“Do you agree or disagree with the following statement? We must protect the environment, even if it means paying higher prices for gasoline.”										
Strongly agree	68	34	66	45	69	75	78	81	69	65
Somewhat agree	61*	21**	47**	29**	61*	59**	55**	80	71	46**
Somewhat disagree	34**	11**	35**	21**	30**	37**	33**	68**	57**	27**
Strongly disagree	33**	12**	19**	10**	24**	26**	18**	60**	47**	20**
“In your community, do you think that smog and air pollution is a big problem, somewhat of a problem, not much of a problem, or no problem at all?”										
Big problem	79	38	61	41	62	82	78	79	76	59
Somewhat of a problem	58**	26**	58	40	64	69**	66**	77	68	50
Not much of a problem	59**	22**	50*	29**	56	50**	51**	77	62**	50
No problem at all	40**	16**	31**	19**	36**	38**	37**	68**	56**	32**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

SUPPORT FOR DIFFERENT VERSIONS OF THE MILEAGE AND GAS TAXES

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

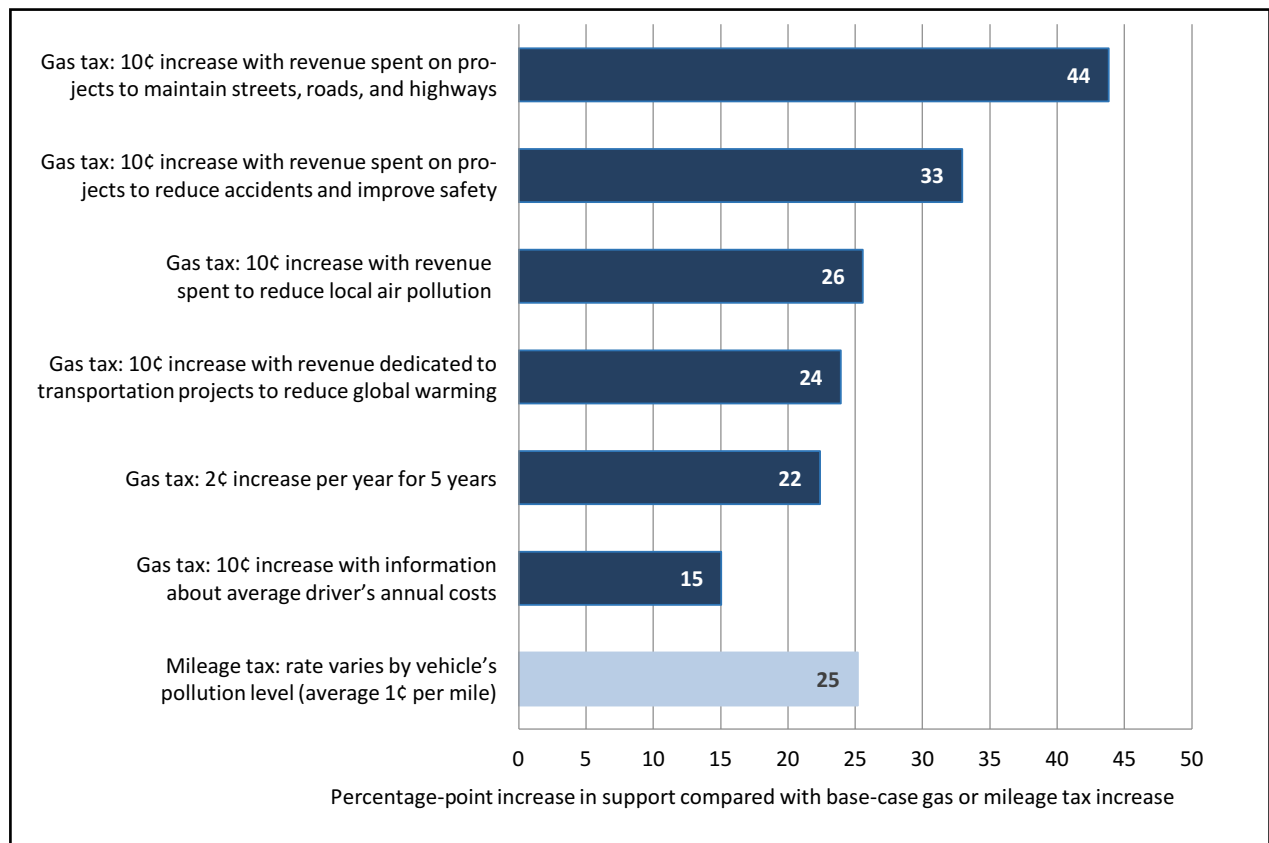


Figure 2. Relative Increases in Support^a for Variations of the Base-Case^b Gas Tax and Mileage Tax Concepts (2016)

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

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

Tables 7 through 10 present the change in support levels for each tax variant by respondent subgroups that are defined by census region, sociodemographic and political characteristics, travel behavior characteristics, and opinions about the transportation system. Collectively, the tables include 71 population subgroups; for each of which there are 7 tax comparisons, resulting in a total of 497 cases examined.

The overall pattern of increased support for the variants holds for the subgroups, just as for the respondent pool as a whole. Across all 497 cases examined, in no case did the variant lead to a statistically significant drop in support, compared with the base-case tax. In fact, the tax variants improved support in all but 2 cases. Further, the increases were very often substantial:

- At least 10 percentage points for 98% of cases
- At least 20 percentage points for 74% of cases
- At least 30 percentage points for 36% of cases
- At least 40 percentage points for 16% of cases

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

Table 7. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Census Region and Sociodemographic Categories (2016)

Sociodemographic category	Variable-rate mileage tax (%)	Gas tax					Info about average annual costs (%)
		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 (%)	
All respondents	25**	22**	26**	24**	44**	33**	15**
Census regions							
Northeast	24**	29**	30**	28**	43**	34**	25**
Midwest	26**	22**	21**	22**	43**	32**	17**
South	23**	19**	26**	23**	46**	35**	12**
West	30**	23**	29**	22**	45**	33**	15**
Gender							
Male	22**	18**	23**	19**	43**	28**	17**
Female	28**	26**	28**	29**	44**	38**	13**
Race							
White	25**	20**	21**	19**	44**	29**	15**
Black/African-American	22**	27**	35**	37**	48**	49**	17**
Asian/Asian-American	33**	35**	42**	29**	30**	36**	16
Other	32**	25**	45**	44**	44**	39**	10
Of Hispanic/Latino origin/descent							
No	33**	28**	46**	43**	48**	44**	5
Yes	24**	21**	22**	20**	43**	31**	17**
Education							
High school graduate or less	26**	27**	36**	32**	50**	44**	17**
More than high school	25**	19**	18**	18**	40**	25**	13**
Employed							
Yes	23**	19**	22**	19**	43**	30**	15**
No	34**	31**	40**	38**	47**	43**	16**
Retired	19**	21**	18**	20**	40**	27**	14**

Table 7, continued

Sociodemographic category	Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
Annual household income							
0 – \$50,000	24**	22**	28**	27**	42**	36**	13**
\$50,001 – \$100,000	28**	24**	28**	23**	49**	38**	18**
\$100,001+	24**	21**	18**	18**	40**	20**	16**
Age							
18 – 24 years	26**	25**	34**	39**	40**	30**	15*
25 – 54 years	26**	23**	31**	27**	47**	37**	17**
55 years+	24**	21**	15**	15**	41**	28**	12**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

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

Table 8. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Political Affiliation (2016)

	Variable-rate mileage tax (%)	Gas tax					Info about average annual costs (%)
		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 (%)	
All respondents	25**	22**	26**	24**	44**	33**	15**
Registered voter							
Yes	24**	21**	20**	19**	43**	30**	15**
No	29**	25**	46**	40**	51**	45**	21**
Likely voter ^c							
Yes	22**	20**	16**	16**	39**	25**	12**
No	31**	29**	37**	34**	61**	54**	27**
Political affiliation for registered voters							
Democrat	26**	23**	26**	30**	35**	24**	16**
Republican	18**	20**	16**	6	50**	33**	14**
Independent ^d	27**	22**	13*	18**	44**	28**	18**
Other ^e	18	15	10	11	32**	29**	14

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

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

^d Registered, but declined to state a party.

^e Registered member of any other party, including the American Independent Party.

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

Table 9. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Opinions of the Transportation System (2016)

	Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	25**	22**	26**	24**	44**	33**	15**
Opinion on condition of roads and highways in local community							
Very good	25**	29**	34**	35**	43**	38**	17**
Somewhat good	26**	20**	21**	19**	41**	30**	13**
Bad	24**	20**	30**	27**	55**	36**	19**
Opinion on public transit service in local community							
Very good	26**	25**	38**	31**	49**	42**	14**
Somewhat good	29**	21**	24**	22**	39**	28**	10**
Poor	30**	24**	16**	23**	39**	20**	16**
No service	16**	20**	20**	21**	46**	35**	16**
Role of government in reducing traffic congestion							
High priority	27**	21**	28**	24**	44**	33**	14**
Medium priority	30**	27**	24**	27**	43**	33**	15**
Low priority	18**	15**	18**	15**	44**	33**	17**
Role of government in maintaining streets, roads, and highways							
High priority	25**	23**	25**	22**	46**	35**	14**
Medium priority	24**	22**	28**	29**	36**	29**	20**
Low priority	28**	14	30**	30**	32**	19*	12
Role of government in expanding and improving local public transit service							
High priority	29**	26**	32**	31**	41**	31**	15**
Medium priority	27**	21**	20**	19**	45**	35**	15**
Low priority	14**	17**	21**	16**	48**	33**	15**
Role of government in reducing accidents and improving safety							
High priority	29**	27**	30**	28**	48**	42**	18**
Medium priority	18**	16**	20**	17**	41**	16**	14**
Low priority	15**	4	4	7	18**	-1	-1

Table 9, continued

	Gas tax						Info about average annual costs (%)
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	
Role of government in using modern technology							
High priority	25**	29**	34**	35**	43**	38**	17**
Medium priority	26**	20**	21**	19**	41**	30**	13**
Low priority	24**	20**	30**	27**	55**	36**	19**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

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

Table 10. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Travel Behavior (2016)

	Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	25**	22**	26**	24**	44**	33**	15**
Annual miles driven							
1 – 7,500	28**	22**	23**	21**	42**	32**	16**
7,501 – 12,500	23**	20**	19**	18**	43**	28**	15**
12,501+	23**	21**	25**	23**	46**	30**	17**
Don't know	24**	31**	42**	42**	47**	51**	18**
Don't drive	27**	21**	30**	32**	42**	33**	2
Miles per gallon ^c							
≤ 19 mpg	27**	20**	22**	14**	41**	29**	15**
20 – 30 mpg	25**	23**	22**	23**	45**	32**	18**
31+ mpg	24**	22**	25**	23**	43**	27**	11
Taken transit in last 30 days							
Yes	30**	18**	30**	31**	33**	27**	12**
No	24**	24**	25**	22**	47**	35**	16**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

^c Categories drawn from EPA’s “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=P100HP2R.TXT> (accessed April 16, 2016).

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

Table 11. Percentage-Point Increases in Support^a for Variants of the Mileage Tax and Gas Tax over Support for the Base-Case^b Versions of Those Taxes, by Environmental Concerns (2016)

	Gas tax						
	Variable-rate mileage tax (%)	2¢ increase per year, for 5 years (%)	Revenue to reduce local air pollution (%)	Revenue to reduce global warming (%)	Revenue to maintain streets/highways (%)	Revenue to improve safety (%)	Info about average annual costs (%)
All respondents	25**	22**	26**	24**	44**	33**	15**
“Do you agree or disagree with the following statement? We must protect the environment, even if it means paying higher prices for gasoline.”							
Strongly agree	32**	24**	29**	32**	36**	24**	20**
Somewhat agree	26**	32**	30**	26**	50**	41**	16**
Somewhat disagree	24**	10*	17**	13**	48**	37**	7
Strongly disagree	6	14**	16**	8*	49**	36**	10**
“In your community, do you think that smog and air pollution is a big problem, somewhat of a problem, not much of a problem, or no problem at all?”							
Big problem	23**	21**	40**	36**	38**	34**	17**
Somewhat of a problem	33**	24**	30**	26**	37**	28**	11**
Not much of a problem	28**	27**	21**	22**	48**	33**	21**
No problem at all	15**	17**	19**	18**	49**	37**	13**

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

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

TRENDS IN SUPPORT OVER TIME (2010 – 2016)

Most of the survey questions replicate those in the six surveys previously administered in this series, so it is possible to look at trends in support over time.⁸ The trend analysis shows that support levels have changed modestly over the seven surveys (Figure 3 and Table 12). In most cases, the support for a tax varied by 5 or fewer percentage points from one year to another, a change too small to suggest a meaningful change in support. However, comparing 2016 with 2010 (or 2011, for those questions added in 2011), support has grown at least modestly for all the taxes, and the increase is statistically significant for all taxes except the flat-rate mileage tax. In seven cases, the increase in support is more than 10 percentage points between the first year the question was asked and 2016. As for the change in just the last year, from 2015 to 2016, support increased modestly for six tax options (in five cases the increase is statistically significant, stayed flat for two, and dropped slightly for two).

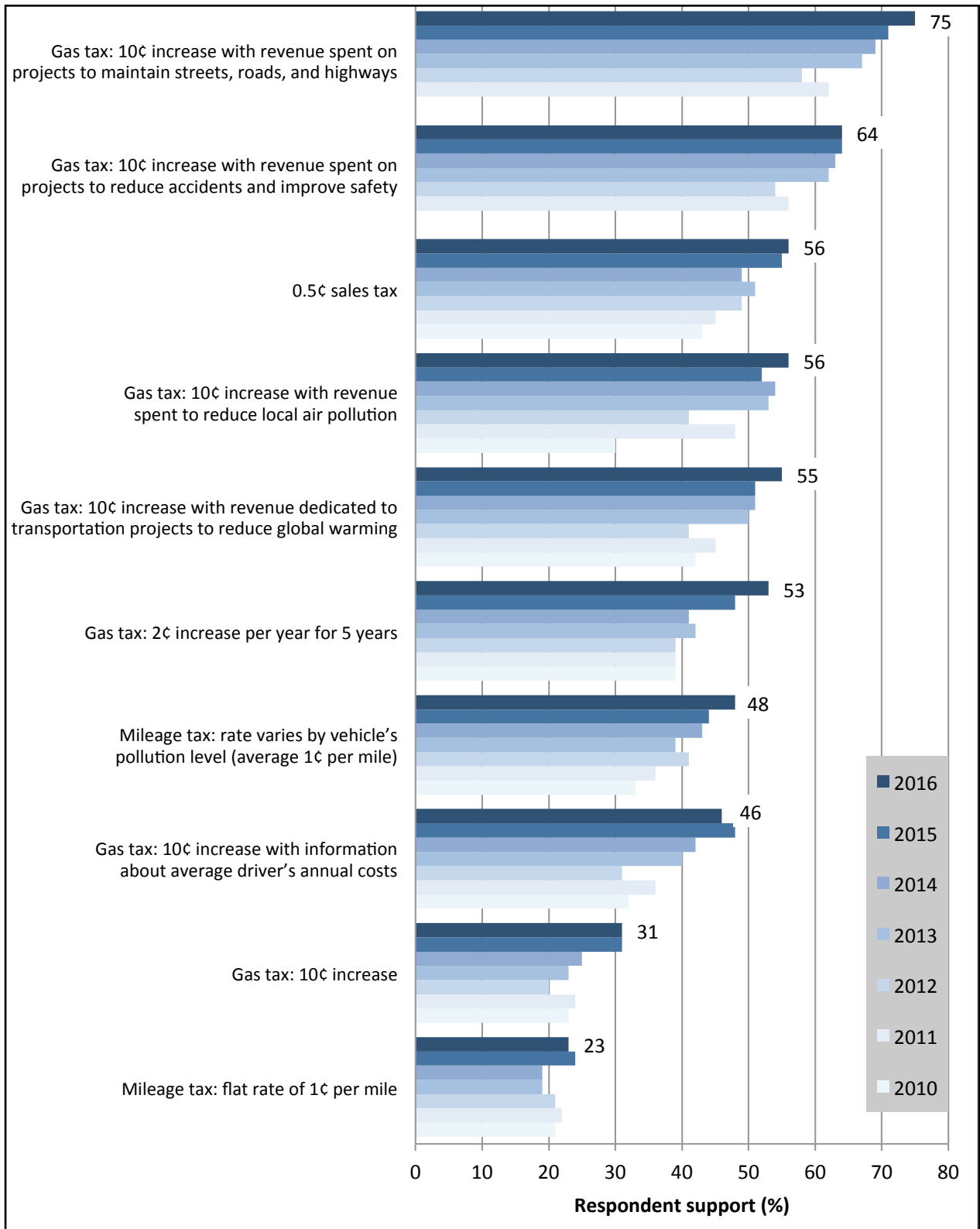


Figure 3. Trends in Support^a for the Tax Options, (2010 – 2016)

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

Table 12. Trends in Support^a for the Tax Options, 2010 – 2016

Tax option	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	Differences		
								2016-2010 (%)	2016-2011 (%)	2016-2015 (%)
Gas tax										
10¢ increase	23	24	20	23	25	31	31	8**	7**	0
10¢ increase, phased in over 5 years at 2¢ per year	39	39	39	42	41	48	53	14**	14**	5**
10¢ increase, revenues spent to reduce local air pollution	30	48	41	53	54	52	56	26**	8**	4*
10¢ increase, revenues spent to reduce global warming	42	45	41	50	51	51	55	13**	10**	4*
10¢ increase, revenues spent to maintain streets, roads, and highways	-- ^b	62	58	67	69	71	75	--	13**	4*
10¢ increase, revenues spent to reduce accidents and improve safety	-- ^b	56	54	62	63	64	64	--	8**	0
10¢ increase, respondents informed of the annual tax burden for the typical driver	32	36	31	40	42	48	46	14**	10**	-2
Mileage tax										
1¢ per mile	21	22	21	19	19	24	23	2	1	-1
1¢ per mile average, but vehicles that pollute more pay more and vehicles that pollute less pay less	33	36	41	39	43	44	48	15**	12**	4*
National 0.5% sales tax	43	45	49	51	49	55	56	13**	11**	1

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

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

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

Note: The test of two proportions was used to check if there is a statistically significant difference in support for the different tax options from 2016 to 2010, 2016 to 2011, and 2016-2015.

The series of seven surveys also found that a few population subgroups were more likely to support the taxes through the years, including:

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

The analysis of how the tax variations boosted support over the base cases shows only modest change from 2010 to 2016 (Figure 4). In every case, the variations had higher support levels than the base-case options. In most cases (80%) the year-to-year change in support for each tax was 5 percentage points or less.

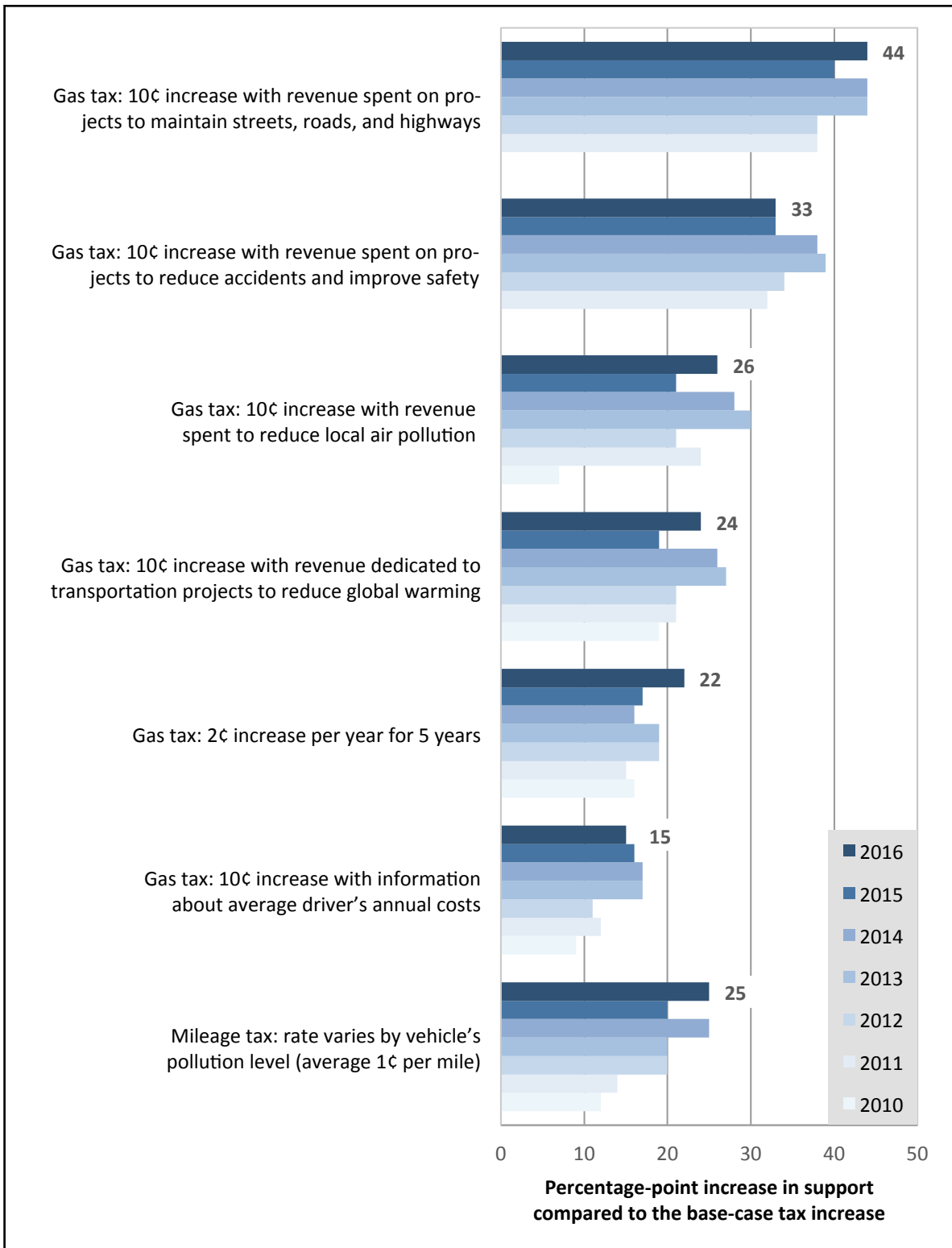


Figure 4. Changes over Time for the Relative Increases in Support^a for Variations of the Base-Case^b Gas Tax and Mileage Tax Concepts (2010 – 2016)

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

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

V. FINDINGS RELATED TO OPINIONS ON PUBLIC TRANSIT

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

A question early in the survey asked respondents their opinions on the quality of public transit in their community. The majority of respondents (53%) said that it is very or somewhat good, 14% said that it is poor, and 32% said either that there is no service in their community or that they do not know about transit quality. These values are very close to those from identical questions asked in all prior surveys. (To compare the responses from all six surveys, see Q2 in Appendix A.)

Another early series of questions in the survey asked respondents how highly they would prioritize various things “government could do to improve the transportation system for everyone in the state where you live” (Table 13). One of the priorities tested was expanding and improving local public transit service. Public transit was a high priority for close to one-half of respondents (45%), though this was the lowest percentage among the five priorities tested. However, when looking at those who felt transit was at least a medium priority, transit rated not so differently from the other options – 82% of respondents felt this way, compared with the other options that ranged from 81% to 96%. The two most popular priorities were road maintenance and improving safety.

Table 13. Priority Placed on Ways that Government Could Improve the Transportation System for Everyone in the Respondent’s State (2012 – 2016)

	2012	2013	2014	2015	2016			
	High or medium (%)	High or medium (%)	High or medium (%)	High or medium (%)	High or medium (%)	High (%)	Medium (%)	Low (%)
Maintaining streets, roads, and highways in good condition, including filling potholes	95	98	96	97	96	78	18	4
Reducing accidents and improving safety	89	92	90	90	92	70	22	8
Reducing traffic congestion	83	85	83	83	81	50	32	19
Expanding and improving local public transit service, like buses or light rail	79	82	82	80	82	45	37	18

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

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

Thirty-five percent of respondents (incorrectly) said “yes,” 16% said that they did not know, and 49% (correctly) said “no.” These responses are similar to those from the 2013, 2014, and 2015 surveys (Figure 5).⁹

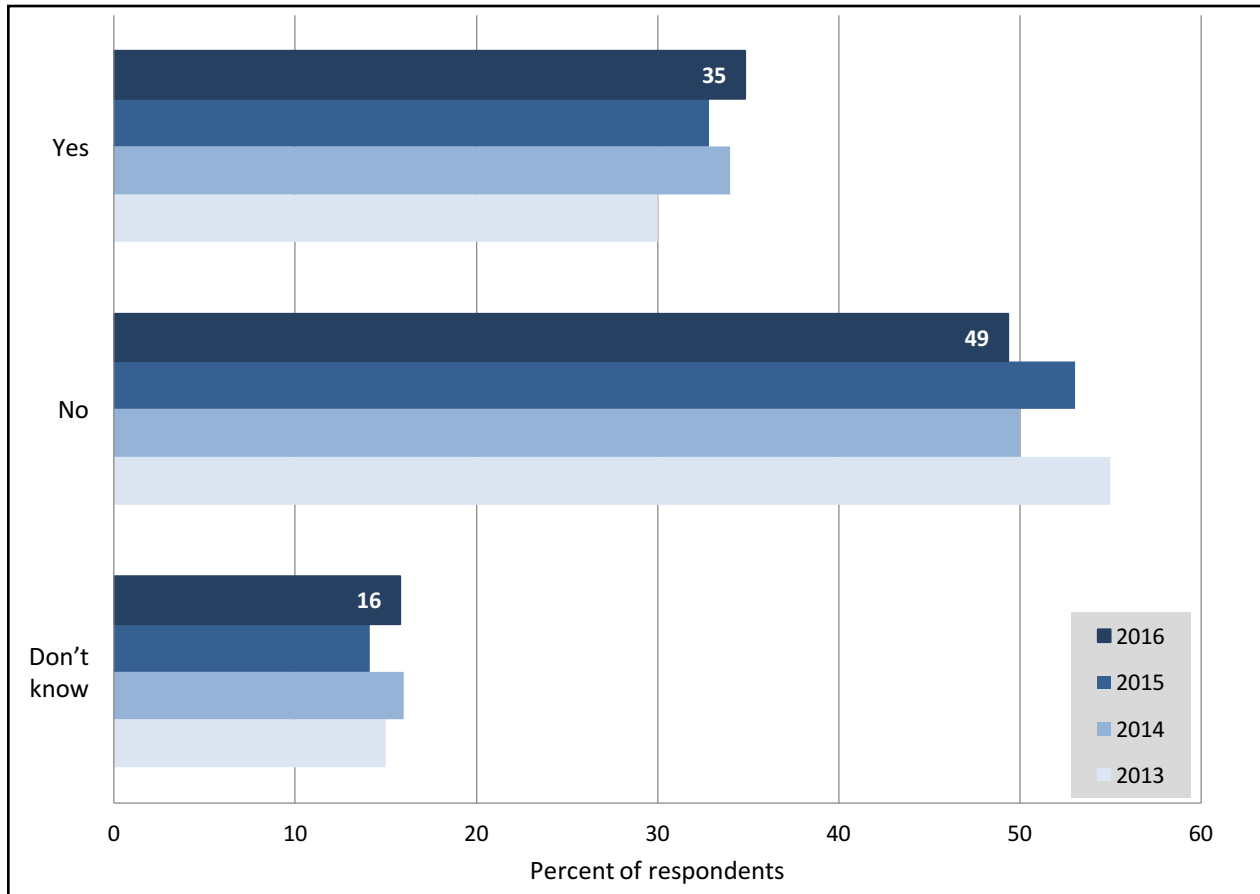


Figure 5. Respondents’ Belief About Whether Transit Fares Cover the Full Cost of Transit (2013 – 2016)

Those respondents who did not think that fares cover the full costs of transit were asked some follow-up questions. First, they were asked, “In general, what percent of the full cost of public transit services do you think the fares cover?” Twenty-two percent said that fares cover 1 to 33% of the full cost, 35% said that fares cover 34 – 66% of the full cost, 15% said that fares cover more than 67% of the full cost, and 28% said that they did not know. Table 14 presents the results for the same question, broken down by sociodemographic, political, and travel behavior subgroups.

For those respondents who did not think that fares cover all transit costs, the survey asked if they thought the federal, state, and local government also “helps to pay for public transit services around the country.” Slightly less than half (45%) knew that the federal government helps pay for transit, with more respondents aware of the local contribution (55%) and the state contribution (61%). Table 15 presents the results for the same question, broken down by sociodemographic, political, and travel behavior subgroups.

An alternative way to think about the survey findings on this topic is in terms of the percentage of *all* respondents who were aware of the role each government entity plays in funding transit. Calculating the numbers this way, 29% of all respondents knew the federal government pays for transit, 36% knew of the local government role, and 40% knew of the state government role (Figure 6). These percentages appear to be on the decline since 2013.

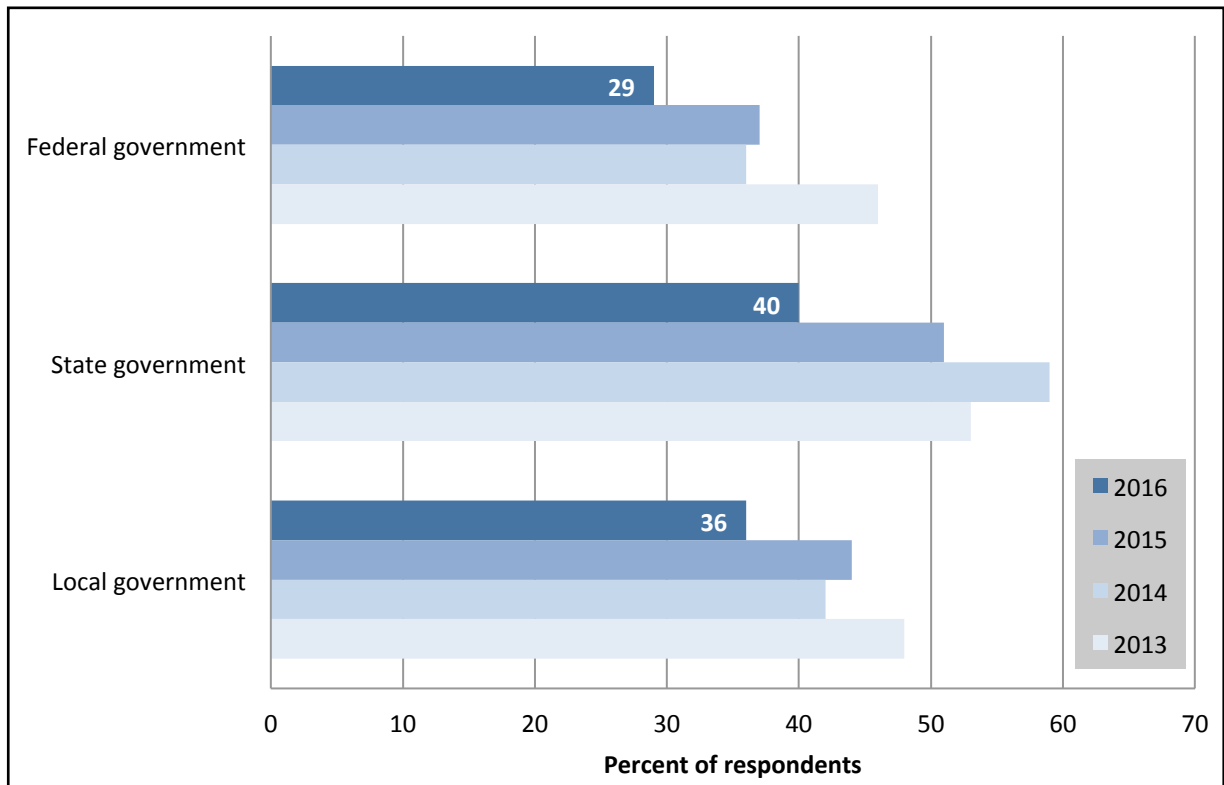


Figure 6. Knowledge among All Respondents about Which Government Entities Pay for Public Transit around the U.S. (2013 – 2016)

Table 14. Belief about Whether Fares Cover the Full Cost of Transit Service, by Subgroup (2016)

	Yes (%)	No (%)	Don't know (%)
All respondents	35	49	16
Census region			
Northeast	43	46	11
Midwest	23**	59**	18*
South	38	47	15
West	40	44	16
Gender			
Male	35	53	12
Female	35	46**	20**
Race			
White	29	54	18
Black/African-American	52**	40**	9**
Asian/Asian-American	56**	39*	4**
Other	50**	32**	18
Of Hispanic/Latino origin/descent			
No	50	32	18
Yes	32**	52**	15
Education			
High school graduate or less	42	40	18
More than high school	30**	56**	14
Employed			
Yes	33	54	13
No	47**	34**	19**
Retired	22**	58	20**
Annual household income			
0 – \$50,000	42	43	15
\$50,001 – \$100,000	30**	51**	19
\$100,001+	26**	61**	14
Age			
18 – 24 years	45	43	12
25 – 54 years	38	47	15
55 years+	27**	54*	19*
Registered voter			
Yes	33	52	15
No	44**	40**	16
Likely voter ^a			
Yes	30	55	15
No	47**	37**	16
Political affiliation for registered voters			
Democrat	37	52	11
Republican	26**	57	18*
Independent ^b	28*	57	15
Other ^c	41	41	18
No transit service	26**	55*	19**

Table 14, continued

	Yes (%)	No (%)	Don't know (%)
Annual miles driven			
1 – 7,500	37	45	18
7,501 – 12,500	26**	61**	13
12,501+	28**	60**	12
Don't know	45	31**	24
Don't drive	51**	35*	14
Miles per gallon ^d			
≤ 19 mpg	35	52	13
20 – 30 mpg	32	53	15
31+ mpg	25*	57	18
Taken transit in last 30 days			
Yes	45	49	7
No	32**	50	18**
Transit service in community			
Has transit service	39	49	12
No transit service	26**	55*	19**

* Statistically significant at $p < 0.05$.

** Statistically significant at $p < 0.01$.

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

^b Registered, but declined to state a party.

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

^d Categories drawn from EPA's “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockkey=P100HP2R.TXT> (accessed April 16, 2016).

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

Table 15. Belief about Which Government Entities Pay for Transit, by Subgroup (2016)

	Federal gov't (%)	State gov't (%)	Local gov't (%)
All respondents who were asked the question ^a	60	81	72
Census region			
Northeast	63	88	53
Midwest	60	78*	75**
South	58	81	77**
West	64	84	80**
Gender			
Male	65	83	74
Female	54**	79	71
Race			
White	63	81	72
Black/African-American	40**	82	81
Asian/Asian-American	75	93	71
Other	42*	68	58
Of Hispanic/Latino origin/descent			
No	45	71	64
Yes	61**	82*	73
Education			
High school graduate or less	49	72	71
More than high school	65**	86**	73
Employed			
Yes	62	81	72
No	50*	79	72
Retired	63	83	75
Annual household income			
0 – \$50,000	55	75	77
\$50,001 – \$100,000	61	83*	64**
\$100,001+	66*	87**	76
Age			
18 – 24 years	52	92	81
25 – 54 years	59	79*	74
55 years+	63	81*	68*
Registered voter			
Yes	62	83	76
No	56	76	61**
Likely voter ^b			
Yes	63	84	77
No	49*	77	70
Political affiliation for registered voters			
Democrat	58	85	74
Republican	67	89	82
Independent ^c	62	80	73
Other ^d	80	79	65

Table 15, continued

	Federal gov't (%)	State gov't (%)	Local gov't (%)
Annual miles driven			
1 – 7,500	56	75	75
7,501 – 12,500	64	88**	67
12,501+	71**	90**	79
Don't know	47	77	73
Don't drive	30**	52**	55**
Miles per gallon ^e			
≤ 19 mpg	59	79	76
20 – 30 mpg	67	86*	75
31+ mpg	65	86	69
Taken transit in last 30 days			
Yes	61	80	68
No	60	81	74
Transit service in community			
Has transit service	64	88	77
No transit service	50**	65**	62**

* Statistically significant at $p < 0.05$.

** Statistically significant at $p < 0.01$.

^a This question was asked of only those respondents who, when asked if transit fares cover the full cost of transit, responded “no” or “don't know.”

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

^c Registered, but declined to state a party.

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

^e Categories drawn from EPA's “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT> (accessed April 16, 2016).

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

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

Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Other people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic congestion and wear-and-tear on the roads. Would you support or oppose spending SOME gas tax money on public transit?¹⁰

Sixty-six percent of respondents supported spending gas tax revenues on transit, and 34% opposed this. Table 16 shows support and opposition levels for the different sociodemographic, political, and travel behavior subgroups.

Table 16. Opinion on Whether Gas Taxes Should Be Spent on Public Transit in Addition to Roads and Highways, by Subgroup (2016)

	Support (%)	Oppose (%)
All respondents	66	34
Census region		
Northeast	66	34
Midwest	59	41
South	66	34
West	75*	25*
Gender		
Male	64	36
Female	69*	31*
Race		
White	62	38
Black/African-American	78**	22**
Asian/Asian-American	80**	20**
Other	71	29
Of Hispanic/Latino origin/descent		
No	72	28
Yes	65	35
Education		
High school graduate or less	66	34
More than high school	66	34
Employed		
Yes	66	34
No	75**	25**
Retired	55**	45**
Annual household income		
0 – \$50,000	68	32
\$50,001 – \$100,000	63	37
\$100,001+	67	33
Age		
18 – 24 years	74	26
25 – 54 years	71	29
55 years+	56**	44**
Registered voter		
Yes	65	35
No	71	29
Likely voter ^a		
Yes	63	37
No	73*	27*
Political affiliation for registered voters		
Democrat	71	29
Republican	53**	47**
Independent ^b	68	32
Other ^c	67	33

Table 16, continued

	Support (%)	Oppose (%)
Annual miles driven		
1 – 7,500	64	36
7,501 – 12,500	60	40
12,501+	66	34
Don't know	70	30
Don't drive	84**	16**
Miles per gallon ^d		
≤ 19 mpg	61	39
20 – 30 mpg	65	35
31+ mpg	65	35
Taken transit in last 30 days		
Yes	79	21
No	63**	38**
Transit service in community		
Has transit service	71	29
No transit service	52**	48**

* Statistically significant at $p < 0.05$.

** Statistically significant at $p < 0.01$.

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

^b Registered, but declined to state a party.

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

^d Categories drawn from EPA's “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT> (accessed April 16, 2016).

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

A multipart question then posed the scenario that Congress has decided to spend more money on public transit but has not decided how to pay for this. Respondents were first asked whether they would support each of the following three options to pay for expanding and improving public transportation: reducing spending on other federal programs, raising transit fares, or raising the federal gas tax. As shown in Figure 7, in 2016 reducing federal spending on other programs received the most support (60%). Raising transit fares received the second highest level of support (49%) and raising the federal gas tax received the lowest level of support (41%). When respondents were asked which of the three choices they *preferred*, the same hierarchy emerged: 43% preferred reducing spending on other programs, 23% preferred raising transit fares, and 21% preferred raising the federal gas tax (Figure 8).

Across the five years of surveying from 2012 to 2016, there was a statistically significant increase in support for all 3 options: 4% more support for raising transit fares and reducing spending on other federal programs and 13% more support for raising the federal gas tax (Figure 7). However, the percent of respondents choosing each option as their preferred alternative remained very similar from year to year (Figure 8).

Tables 17 and 18 show support and opposition levels for three revenue options, as well as the preferred alternative, among different sociodemographic, political, and travel behavior subgroups.

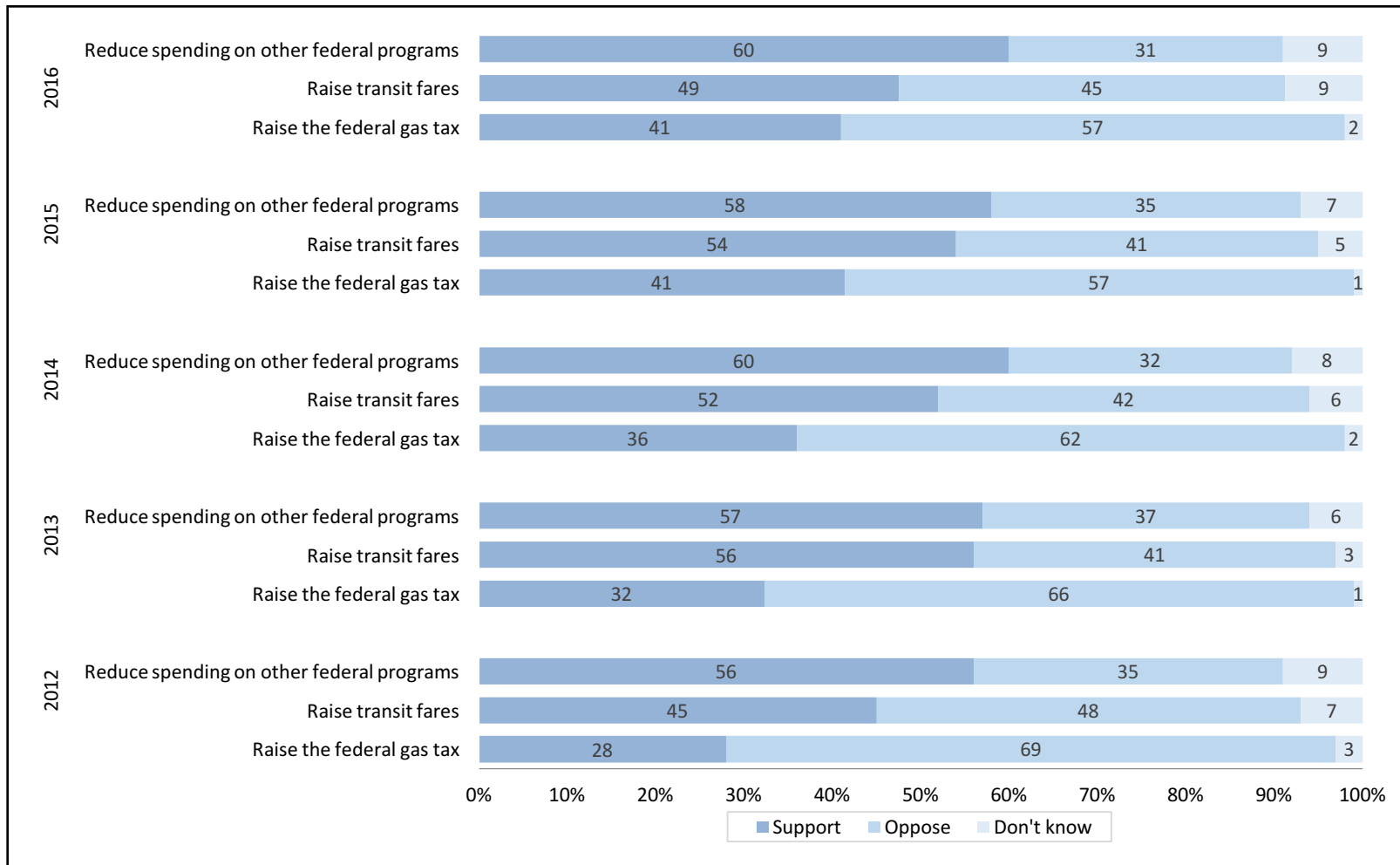


Figure 7. Opinion on Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2016)

Note: “Support” is the sum of respondents who “strongly support” or “somewhat” support the method to raise funds for public transportation. “Oppose” is the sum of respondents who “strongly oppose” or “somewhat” oppose each method. “Don’t know” was not presented as an option on the questionnaire, but some respondents volunteered this answer. Not all rows sum to 100% due to rounding.

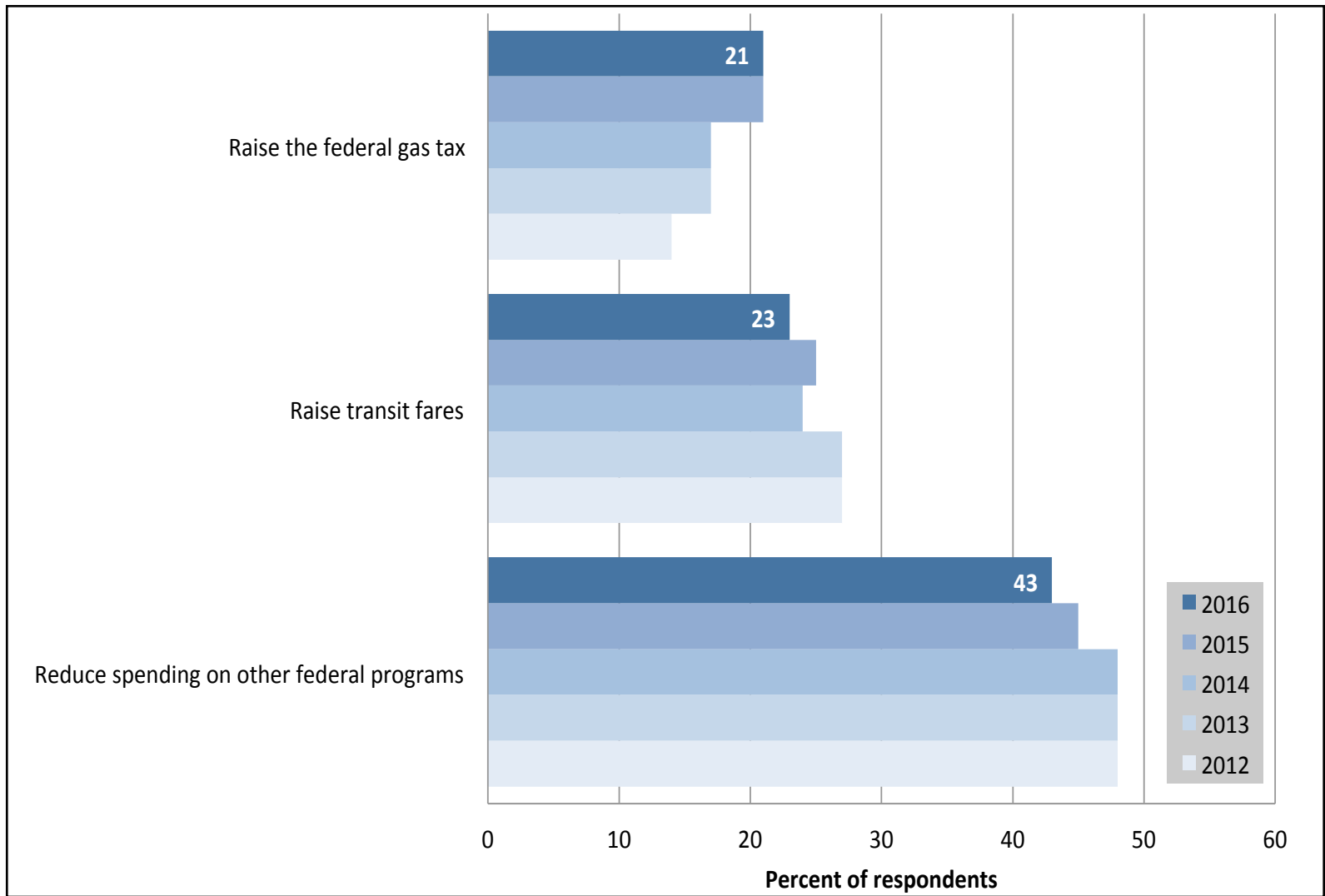


Figure 8. Preferred Alternative among Three Ways Congress Could Pay for Expanding and Improving Public Transportation (2012 – 2016)^a

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

Table 17. Support^a for Three Ways Congress Could Pay for Expanding and Improving Public Transportation, by Subgroup (2016)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
All respondents	41	60	49
Census region			
Northeast	43	63	40
Midwest	37	60	56**
South	39	60	50*
West	44	59	50*
Gender			
Male	43	63	56
Female	38	57*	42**
Race			
White	39	61	54
Black/African-American	46	56	39**
Asian/Asian-American	49	53	31**
Other	39	58	31**
Of Hispanic/Latino origin/descent			
No	41	64	29
Yes	41	59	53**
Education			
High school graduate or less	36	61	46
More than high school	44**	59	52*
Employed			
Yes	44	62	53
No	39	60	39**
Retired	32**	54*	51
Annual household income			
0 – \$50,000	41	58	40
\$50,001 – \$100,000	39	60	59**
\$100,001+	42	63	55**
Age			
18 – 24 years	57	55	48
25 – 54 years	43**	63	46
55 years+	32**	57	54
Registered voter			
Yes	42	60	52
No	36	59	42**
Likely voter ^b			
Yes	40	59	53
No	47	66	49
Political affiliation for registered voters			
Democrat	51	55	43
Republican	30**	67**	59**
Independent ^c	41*	69**	65**
Other ^d	47	65	41

Table 17, continued

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)
Annual miles driven			
1 – 7,500	43	62	50
7,501 – 12,500	36	64	53
12,501+	39	57	63**
Don't know	37	59	31**
Don't drive	52	51*	29**
Miles per gallon ^e			
≤ 19 mpg	38	66	50
20 – 30 mpg	41	62	56
31+ mpg	39	54*	57
Taken transit in last 30 days			
Yes	53	65	38
No	37**	58*	52**
Transit service in community			
Has transit service	46	61	46
No transit service	31**	59	58**

* Statistically significant at $p < 0.05$.

** Statistically significant at $p < 0.01$.

^a Percent of respondents who “strongly support” or “somewhat support” each method to raise funds for public transportation.

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

^c Registered, but declined to state a party.

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

^e Categories drawn from EPA's “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014),

<https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100HP2R.TXT> (accessed April 16, 2016).

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

Table 18. Respondents' Preferred Method to Expand and Improve Public Transportation, by Subgroup (2016)

	Raise federal gas tax (%)	Reduce spending on other gov't programs (%)	Raise transit fares (%)	Equally oppose all three (%)	Equally support all three (%)
All respondents ^a	21	43	23	7	3
Census region					
Northeast	28	46	14	9	2
Midwest	17**	44	27**	6	2
South	17**	46	22*	9	3
West	22	40	26**	5	4
Gender					
Male	22	47	21	5	3
Female	20	39**	25	9**	3
Race					
White	19	44	24	7	2
Black/African-American	20	46	16*	12*	3
Asian/Asian-American	33**	44	19	0*	4
Other	26	34*	21	9	6*
Of Hispanic/Latino origin/descent					
No	28	37	20	9	3
Yes	19**	44	23	7	3
Education					
High school graduate or less	18	45	22	7	3
More than high school	23*	42	23	7	3
Employed					
Yes	22	43	24	6	2
No	20	45	20	9	2
Retired	16*	40	22	11**	5*
Annual household income					
0 – \$50,000	23	43	21	7	3
\$50,001 – \$100,000	18*	43	26*	7	4
\$100,001+	20	45	23	8	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 (%)
Age					
18 – 24 years	25	42	30	1	2
25 – 54 years	23	45	21*	7**	3
55 years+	17*	40	23	10**	4
Registered voter					
Yes	21	43	24	7	3
No	18	45	20	8	4
Likely voter ^b					
Yes	21	42	24	7	3
No	19	49	21	7	2
Political affiliation for registered voters					
Democrat	30	37	21	8	1
Republican	9**	50**	29*	7	3
Independent ^c	22*	49**	19	3*	4*
Other ^d	31	43	10	12	2
Annual miles driven					
1 – 7,500	22	42	21	9	4
7,501 – 12,500	20	46	25	3**	3
12,501+	18	46	27*	4*	2
Don't know	18	50	21	6	1
Don't drive	30*	25**	15	17*	6
Miles per gallon					
≤ 19 mpg	18	48	25	4	2
20 – 30 mpg	19	47	23	5	3
31+ mpg	19	44	28	3	4
Taken transit in last 30 days					
Yes	32	40	14	6	5
No	17**	44	25**	8	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 (%)
Transit service in community					
Has transit service	22	44	21	8	3
No transit service	20	37*	29**	4*	4

* Statistically significant at p<0.05.

** Statistically significant at p<0.01.

^a Numbers do not sum to 100% due to rounding and an additional 42 respondents (3%) who volunteered “don’t know.”

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

^c Registered, but declined to state a party.

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

^e Categories drawn from EPA’s “SmartWay” vehicle rating system (U.S. Environmental Protection Agency, “SmartWay Vehicle Thresholds MY 2015” (January 2014), <http://www.epa.gov/greenvehicles/documents/420b14005.pdf> (accessed May 18, 2015).

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

VI. CONCLUSIONS

SUMMARY OF KEY FINDINGS

Overall Support Levels for the 11 Tax Options in 2016

The survey results show that a majority of Americans would support higher taxes for transportation – under certain conditions. For example, 75% of respondents supported a gas tax increase of 10¢ per gallon to improve road maintenance and 56% supported the same increase if the revenues were used to reduce local air pollution, but support levels dropped to only 31% if the revenues would support undefined transportation purposes. Support also varied considerably by tax type. For tax options in which the revenues were to be spent for undefined transportation purposes, support levels varied considerably by the kind of tax that would be imposed, with a sales tax much more popular (56%) than either the gas tax increase (31%) or a new mileage tax (23%).

A central goal of the survey was to compare public support for two alternative versions of the mileage tax and seven versions of a gas tax increase. Variations on the base cases increased support substantially over that for the base cases, which were a flat-rate mileage tax of 1 cent per mile and a 10-cent gas tax increase proposed without any additional detail. Those boosts in support for the variants on the base cases ranged from 15 to 44 percentage points.

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

Support Levels among Population Subgroups for the Tax Options in 2016

In addition to examining support for the different tax options among the overall population, the analysis examined support by subgroups within the population. Breaking the population into subgroups by sociodemographic categories reveals only a few links with support for the taxes. Subgroups showing clearly higher levels of support compared with other subgroups in the same category are respondents who are Asian/Asian-American, African-American or of "other" race (compared to whites), of Hispanic origin (compared to non-Hispanics), unemployed (compared to retired), and in the youngest age group (compared to the two older groups). In terms of politics, party affiliation played a clear role. Registered voters of any affiliation *except* Republican were more supportive than Republicans. Also, Democrats were more supportive than Independents, and unlikely voters were more supportive than likely voters.

Breaking the respondents into subgroups according to their travel behaviors and certain opinions reveals other clear correlations with support for the tax options. Support for the taxes is clearly higher among people who drive 7,500 miles or more a year (compared to those who don't drive at all) and among respondents who had taken public transit within the

previous 30 days (compared to those who had not). Also, support was clearly higher among respondents who rated the transit service in their community as “good,” as compared with residents who said they have no transit service in their community. Support was clearly higher, too, among respondents who thought government should place a medium or high priority on improving either local transit service or safety, compared to those who placed a low priority on these government functions. Finally, stark differences in support came from people who agreed that we must protect the environment, even if it means paying higher prices for gasoline (compared to those who somewhat agreed or disagreed), and believed that air pollution is a big problem or somewhat of a problem in their community (compared to those who think air pollution is not much of a problem or no problem at all).

Looking across all respondent characteristics and opinions, the factors that stand out as correlated with the very largest differences between subgroups – 20 percentage points or more – are opinions related to environmental concerns, opinions about the priority government should put on improving public transit service, age, and political party.

When comparing support by population subgroup for the gas tax and mileage tax variations with their support for the base-case versions, the overall picture that emerges is simple and clear: the base-case taxes were less popular than the alternative tax options for virtually every subgroup. Further, that boost in support for the variants is generally quite large. The analysis examined 497 cases (7 tax variants for each of 71 subgroups) and found that the boost in support for the variant was at least 20 percentage points for 74% of the cases.

Changes in Support for the Ten Tax Options, 2010 – 2016

The research results indicate that American public opinion about the federal transportation tax options tested has changed modestly since 2010. Comparing 2016 with 2010 (or 2011, for those questions added in 2011), support has grown for all the taxes, and the increase is statistically significant for all taxes except the flat-rate mileage tax. In seven cases, the increase in support is more than 10 percentage points between the first year the question was asked and 2016. In addition, the analysis of how the variations on the gas and mileage taxes boosted support over the base cases for each shows relatively little change from one year to the next.

Knowledge and Preferences Related to Public Transit in 2016

The questions that focused on public transit revealed that a very high percentage of people (79%) place a high or medium priority on improving and expanding public transit in their state, though other transportation priorities have even higher support levels.

Most respondents were not knowledgeable about how public transit is funded. Only half (49%) knew that fares do not cover the full cost of transit. Also, only 29% believed the federal government helps pay for transit, 36% were aware of a local government role, and 40% knew of a state government role.

Several questions looked at different aspects of support for various methods the federal government could use to generate revenues for improving transit service. Sixty-six percent

of respondents supported the *concept* of spending gas tax revenues on transit. However, when asked about each of three mechanisms the federal government could use to raise new revenues to expand and improve transit, raising the gas tax was supported by the fewest respondents (41%). Both of the other options presented to respondents – raising transit fares or cutting spending on other government programs – had near or above majority support (49% and 60%, respectively).

When respondents were asked which of the three choices for raising new revenues they *preferred*, the same hierarchy emerged: 43% preferred reducing spending on other programs, 23% preferred raising transit fares, and 21% preferred raising the gas tax.

POLICY IMPLICATIONS FOR TRANSPORTATION PROFESSIONALS AND POLICYMAKERS

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

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

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

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

The survey results from all seven years show that while a new mileage fee has been unwaveringly unpopular, support could be increased by modifying the tax structure so the rate varies according to the vehicle's environmental performance (defined in this survey as the vehicle's pollution level). The survey did not test any other variations on the mileage tax, but it is likely that there are others that would also have support levels above the very low 23% support for a flat 1¢-per-mile tax.

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

Linking a transportation tax increase to environmental benefits can increase support, a trend found among other public opinion polls as well. In all years of this survey, support improved notably for both the gas tax increase and the mileage tax when they were linked to environmental benefits. For the mileage tax, the pollution-linked variant as compared to the flat-rate version has seen a boost in support of 19 or more percentage points for five of the seven years. The boost crossed political party lines, too, though the magnitude of increased support was greater among Democrats than people with other political affiliations.

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

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

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

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

APPENDIX A: SURVEY QUESTIONNAIRE AND RESULTS

This appendix presents the results of the 2016 survey described above, comparing these with the results from similar surveys conducted by MTI in 2010, 2011, 2012, 2013, 2014, and 2015.¹¹

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

The data labeled as “weighted” are weighted to match the Census Bureau’s 2014 *American Community Survey* one-year estimates with respect to gender, race, Hispanic ethnicity, education level, imputed income values, and age.¹²

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

* * *

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

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

Ok. Here's my first question.

Q1. In the community where you live, would you say that roads and highways are in very good condition, somewhat good condition, or bad condition?

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Very good condition	25	19	20	23	19	21	22	22
Somewhat good condition	54	62	64	60	57	55	60	58
Bad condition	20	19	16	16	23	24	18	20
Don't know (volunteered)	<1	<1	1	1	1	<1	<1	<1

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

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

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

[Q3-Q6 RANDOMIZED]

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	49	47	49	51	53	49	49
Medium priority	35	36	33	35	30	31	31	29
Low priority	15	14	17	15	17	15	18	20
Don't know (volunteered)	4	2	2	1	3	1	2	2

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

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

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	47	47	45	43	44	45	43	43
Medium priority	36	33	37	38	35	36	36	33
Low priority	14	17	16	18	18	17	17	20
Don't know (volunteered)	4	3	2	2	3	2	4	4

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
High priority	n.a.	65	68	71	69	72	69	66
Medium priority	n.a.	26	22	20	19	19	22	23
Low priority	n.a.	7	9	8	10	8	8	10
Don't know (volunteered)	n.a.	1	2	1	1	1	1	2

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

[RANDOMIZE BLOCKS Q7, Q8, Q9]

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

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

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	9	7	6	5	8	12	12	13
Somewhat support	14	17	14	18	17	19	18	19
Somewhat oppose	20	22	19	18	19	22	20	18
Strongly oppose	54	52	61	57	54	46	48	48
Don't know (volunteered)	2	2	1	2	1	1	2	2

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	14	13	10	14	14	19	18	20
Somewhat support	25	25	29	28	26	28	34	31
Somewhat oppose	21	20	18	20	19	20	16	15
Strongly oppose	36	39	43	38	38	32	30	33
Don't know (volunteered)	3	2	1	1	3	1	2	2

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

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

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

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

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

[RANDOMIZE BLOCKS Q10 TO Q14]

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

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

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	12	14	14	19	20	21	23	21
Somewhat support	30	32	26	30	29	28	31	27
Somewhat oppose	19	15	14	17	17	18	16	16
Strongly oppose	36	34	41	32	30	30	28	33
Don't know (volunteered)	3	6	4	2	3	2	2	3

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	26	23	33	33	34	38	36
Somewhat support	n.a.	36	35	34	36	37	36	35
Somewhat oppose	n.a.	12	10	12	13	12	10	10
Strongly oppose	n.a.	22	31	20	17	17	16	19
Don't know (volunteered)	n.a.	4	2	1	1	1	1	1

Q13. Would you support the gas tax increase if the money were spent ONLY on projects to reduce accidents and improve safety?

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

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	13	11	10	12	12	18	17	18
Somewhat support	19	25	21	28	29	29	27	26
Somewhat oppose	19	18	16	17	19	17	18	15
Strongly oppose	46	42	50	42	38	34	35	39
Don't know (volunteered)	3	4	3	1	2	2	2	2

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

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

[NOTE: IF RESPONDENT ASKS WHAT KIND OF COSTS, SAY: “PLEASE THINK ABOUT COSTS TO BUILD, OPERATE, AND MAINTAIN THE SYSTEM.”]

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Yes	n.a.	n.a.	n.a.	30	34	33	35	29
No	n.a.	n.a.	n.a.	55	50	53	49	55
Don't know (volunteered)	n.a.	n.a.	n.a.	15	16	14	16	16

Note: Questions Q15A-D were not asked of respondents who answered “yes” to Q15.

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
1 to 33%	n.a.	n.a.	n.a.	21	28	21	22	21
34 to 66%	n.a.	n.a.	n.a.	35	38	40	35	37
67 to 100%	n.a.	n.a.	n.a.	16	17	17	15	15
Don't know (volunteered)	n.a.	n.a.	n.a.	29	18	22	28	27

* Respondents could select any percentage from 0-100. The mean percent was 46% (weighted) and 47% (unweighted) with a standard deviation of 22%.

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

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

Q15B. Who helps pay for public transit around the country? The federal government.

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	42	65	55	56	60	65
Does not pay	n.a.	n.a.	22	26	29	31	33	29
Don't know (volunteered)	n.a.	n.a.	36	10	17	13	7	6

Q15C. Who helps pay for public transit around the country? State governments.

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	56	76	76	76	81	82
Does not pay	n.a.	n.a.	12	14	10	14	13	12
Don't know (volunteered)	n.a.	n.a.	32	10	14	11	6	6

Q15D. Who helps pay for public transit around the country? Local governments.

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Does pay	n.a.	n.a.	51	68	64	65	72	72
Does not pay	n.a.	n.a.	16	20	22	21	21	23
Don't know (volunteered)	n.a.	n.a.	33	12	14	14	6	6

Q16. Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Other people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic and wear-and-tear on the roads. Would you support or oppose spending SOME gas tax money on public transit?*

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Support	n.a.	n.a.	n.a.	64	61	65	66	63
Oppose	n.a.	n.a.	n.a.	33	35	34	34	36
Don't know (volunteered)	n.a.	n.a.	n.a.	2	4	1	1	1

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

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

[RANDOMIZE LIST A-C]

Q17A. Raise the federal gas tax

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	9	9	10	14	10	12
Somewhat support	n.a.	n.a.	19	24	26	27	31	28
Somewhat oppose	n.a.	n.a.	16	19	16	20	18	16
Strongly oppose	n.a.	n.a.	53	48	45	37	40	42
Don't know (volunteered)	n.a.	n.a.	3	1	2	1	2	3

Q17B. Reduce spending on OTHER federal programs

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

Q17C. Raise transit fares

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly support	n.a.	n.a.	14	18	15	18	16	16
Somewhat support	n.a.	n.a.	31	38	37	36	33	34
Somewhat oppose	n.a.	n.a.	21	19	19	21	20	18
Strongly oppose	n.a.	n.a.	27	22	23	21	25	26
Don't know (volunteered)	n.a.	n.a.	7	3	6	5	6	6

Q18. Now, if you could only select ONE of the three options I just described, which would you prefer? Let me read them again for you. [READ FIRST 3 ONLY] [ROTATE LIST 1-3]

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

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

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Raise the federal gas tax	n.a.	n.a.	14	17	17	21	21	22
Reduce spending on other federal programs	n.a.	n.a.	48	48	48	45	43	40
Raise transit fares	n.a.	n.a.	27	27	24	25	23	22
Equally oppose all three (volunteered)	n.a.	n.a.	5	3	5	4	7	9
Equally support all three (volunteered)	n.a.	n.a.	2	1	2	2	3	3
Don't know (volunteered)	n.a.	n.a.	4	3	5	3	3	4

Q19. Do you agree or disagree with the following statement? We must protect the environment, even if it means paying higher prices for gasoline.

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Strongly agree	--	--	--	--	--	--	40	41
Somewhat agree	--	--	--	--	--	--	27	25
Somewhat disagree	--	--	--	--	--	--	13	12
Strongly disagree	--	--	--	--	--	--	16	19
Don't know (volunteered)	--	--	--	--	--	--	3	4

Q20. In your community, do you think that smog and air pollution is a big problem, somewhat of a problem, not much of a problem, or no problem at all?

	2010	2011	2012	2013	2014	2015	2016	
	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Weighted (%)	Unweighted (%)
Big problem	--	--	--	--	--	--	12	10
Somewhat of a problem	--	--	--	--	--	--	29	27
Not much of a problem	--	--	--	--	--	--	31	30
No problem at all	--	--	--	--	--	--	27	31
Don't know (volunteered)	--	--	--	--	--	--	1	1

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 presents responses to gas tax proposals; Table 20 presents responses to mileage tax proposals; and Table 21 presents responses to sales tax proposals. Complete source citations for all items in the tables are given in the bibliography.

Table 19. Public Opinion Polling on Gas Tax Increases

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Boston Globe (Smith)	2008	MA residents	77% “would be willing to increase” the gas tax 5¢ or more, “knowing that maintaining roads and bridges is expensive.” 40% would “favor” increasing the gas tax to reduce tolls or state debt.
National Highway Users Association (Fabrizio McLaughlin & Associates)	2008	U.S. likely voters	71% of respondents “supported” some form of unspecified increase in the gas tax “to pay for needed transportation projects” when the question followed a series of informative questions on the values of investing in roads and bridges. Initially, 57% of respondents had supported the increase. In both cases, respondents were informed about the current level of the tax and how long it has been set at its current level.
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	71% of respondents said they would “strongly support” or “somewhat support” a 10¢ per gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a 10¢ increase not directed toward a specific purpose was 31%. When the increase was spread out over five years so that “the tax would go up by 2 cents a year,” or when told how much the increase would “costs the average driver,” support increased to 48%. Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 51% when the money would be “spent only on projects to reduce the transportation system’s contribution to global warming” to 64% support if the revenue were dedicated for improving safety.
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	69% of respondents said they would “strongly support” or “somewhat support” a 10¢ per gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a general 10¢ increase not directed toward a specific purpose was 25%. When the increase was spread out over five years so that “the tax would go up by 2 cents a year,” support increased to 40%. Respondents were then given five options for how tax revenue could be spent. Support for these options ranged from a low of 49% when the money would be “spent only on projects to reduce the transportation system’s contribution to global warming” to 69% for road maintenance. After being given information on how much “the current federal gas tax costs the average driver,” support was 41% for a 10¢ increase.
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	67% of respondents said they would “strongly support” or “somewhat support” a 10¢-per-gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a 10¢ increase directed only for transportation purposes generally was 23%. Support was 40% when respondents were informed of the annual cost of the increase, and 42% when respondents were told the increase was spread out over five years so that “the tax would go up by 2 cents a year.” Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 50% when the money would be “spent only on projects to reduce the transportation system’s contribution to global warming” to 62% support if the revenue were dedicated for improving safety.”
Metropolitan Transportation Commission	2016	San Francisco Bay Area registered voters	66% of respondents who heard various arguments for and against a regional gas tax increase would “favor” a ballot measure “to establish a gas tax which would increase the cost of gasoline by [5] cents per gallon in all Bay Area counties. The revenue would directly fund local road repairs, as well as improvements for bicycle and pedestrian routes.” If the proposed tax were 10¢ per gallon, then 58% supported it.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Vanderbilt University, Center for the Study of Democratic Institutions	2015 (Nov.)	TN registered voters	66% of respondents would be “willing” to pay 2¢ more per gallon of gas “if it meant that more could be spent on projects to improve roads and bridges to help ensure economic growth.” 54% would be willing to pay 8¢ more; 46% would be willing to pay 15¢ more.
CBS News/ <i>The New York Times</i>	2007	U.S. residents	64% of respondents “would be willing to pay” an unspecified increase in the gas tax if proceeds were used to research renewable energy sources, while 38% would “favor” an increase to promote conservation and reduce global warming.
Mineta Transportation Institute (Agrawal & Nixon)	2010	U.S. residents	62% of respondents said they would “strongly support” or “somewhat support” a 10¢-per-gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a 10¢ increase directed only for transportation purposes generally was 24%. Support was 32% when respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that “the tax would go up by 2 cents a year.” Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 31% when the money would be “spent only on projects to reduce local air pollution caused by the transportation system,” to 56% support if the revenue were dedicated for improving safety.
MassINC Polling Group	2013	MA registered voters	61% of respondents “support” increasing the state gas tax “if the money were spent ONLY on projects to MAINTAIN streets, roads, and highways.” Lower percentages supported a gas tax increase for other transportation purposes.
Winthrop University, Social & Behavioral Research Lab	2015	SC Republican primary likely voters	61% of respondents would “support” an increase in South Carolina’s gas tax “if the money was to be used for repairing roads and transportation infrastructure.”
CBS News/ <i>The New York Times</i>	2006	U.S. residents	59% of respondents “favored” an unspecified increase in the gas tax if it “would cut down on energy consumption and reduce global warming.” 55% also favored the increase if it “would reduce the United States’ dependence on foreign oil.” This dropped to 28% if the tax increase reduced other taxes, 24% if it helped pay for the war on terror, and 12% if no reason was given. 17% of respondents continued to “favor” the tax increase when it was specified as a \$2 per gallon increase.
YouGov	2014	Registered YouGov members	58% of respondents said they strongly or somewhat support “raising the gas tax by 1 cent per gallon in order to provide more money to pay for...road repairs and construction.” There was less support for using the additional revenue for other purposes, ranging from 29% for “museum construction and maintenance” to 47% for “handicap accessible buses and subways.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Georgia Transportation Alliance (Wilson Perkins Allen Opinion Research)	2015	GA likely voters	58% of respondents said they would support a transportation funding option that would reform “Georgia’s gas tax formula [to] simplify and streamline the revenue system so that it keeps up with the current rate of inflation.” 57% said they would “be willing to pay a little more in gas tax if [they] knew that it would go to improving [Georgia’s] roads and transportation infrastructure needs.” 49% said they would support “a gas tax increase that is dedicated to addressing the state’s road maintenance backlog.” 44% said they would support “a gas tax increase that allows larger transportation projects to be completed quicker.”
Eagleton Institute of Politics	2014 (April)	NJ adult residents	58% of New Jerseyans would support increasing the gas tax when told that the (recently proposed) increase “would be five cents per year over three years, raising an additional \$250 million per year for road and bridge repairs” and that “given current prices, this would increase gas costs by about one and one half percent per year.” This represents an increase from a 48% approval rate when the question did not explain the percentage increase in the price of gas and a 31% approval rate when the question merely stated that “any increase would be dedicated to pay for road maintenance and improvements.”
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	58% of respondents said they would “strongly support” or “somewhat support” a 10¢-per-gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a 10¢ increase directed only for transportation purposes generally was 24%. Support was 36% when respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that “the tax would go up by 2¢ a year.” Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 45% when the money would be “spent only on projects to reduce the transportation system’s contribution to global warming” to 54% support if the revenue were dedicated for improving safety.
Mineta Transportation Institute (Agrawal, Nixon, & Murthy)	2012	U.S. residents	58% of respondents said they would “strongly support” or “somewhat support” a 10¢-per-gallon gas tax increase “if the money were spent only on projects to maintain streets, roads, and highways.” Initial support for a 10¢ increase directed only for transportation purposes generally was 20%. Support was 31% when respondents were informed of the annual cost of the increase, and 39% when respondents were told the increase was spread out over five years so that “the tax would go up by 2¢ a year.” Respondents were then given other options for how tax revenue could be spent. Support for these options ranged from a low of 41% when the money would be “spent only on projects to reduce the transportation system’s contribution to global warming” to 54% support if the revenue were dedicated for improving safety.
HNTB Corporation (Kelton Research)	2011	U.S. residents	57% of respondents agree that “the gas tax should be increased and decreased with inflation.”
Metropolitan Transportation Commission (BW Research Partnership)	2007	San Francisco Bay Area residents	56% of respondents would “support” an unspecified increase in the cost of gasoline to either reduce public transit fares or increase transit service. 57% supported the increase for providing incentives for carpooling, but only 47% supported the increase to pay for bike lanes and sidewalks. 46%, 28%, and 17% were “willing to pay” 25¢, 50¢, or \$1 more per gallon of gas, respectively, when these amounts were called out. All questions framed increased gas costs as a way to reduce greenhouse-gas emissions or global warming.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Winthrop University, Social and Behavioral Research Lab	2015	SC adults	55% of respondents said they would support a current proposal in the South Carolina Legislature to increase the state gas tax by up to 10¢ a gallon [with the money] restricted to use for infrastructure, such as repairing roads and bridges.”
Steve Novick’s 2016 Portland City Council election campaign (City of Portland, Office of Public Safety)	2015	Portland OR likely primary voters	55% of respondents would “vote yes” for the city of Portland to “fund street repair and traffic safety investments [including safer pedestrian crosswalks and sidewalks] with a 10 cents per gallon gasoline tax” limited to four years, with “a citizen oversight board and public audits” required.”
Oregon Public Broadcasting (DHM Research)	2016	Portland OR voters	55% of respondents would vote “yes” to support a 4-year 10¢-per-gallon gas tax on fuel sold in Portland. The question was preceded by statement of the ballot measure language: “Temporary Motor Vehicle Fuel Tax for Street Repair, Traffic Safety ... Shall Portland adopt four year, 10 cents per gallon fuel tax dedicated to street repair, safety including safer crossings, sidewalks?”
Mountain-Plains Consortium (Ozbek, Albeiruti & Atadero)	2013	CO, ND, SD, UT, and WY residents	54% of North Dakota respondents agreed or strongly agreed with the statement, “I support increasing the state gas tax that is collected at the time of purchase to fund the highway system.” Researchers also surveyed residents of Colorado, South Dakota, Utah and Wyoming. Among all five states, support for raising state gas taxes ranged from 45%-54%, and support for raising the federal gas tax ranged from 43%-50%. For every state, an increase in the federal gas tax was the top choice when respondents were asked to choose one funding mechanism from eight options, with 18%-39% choosing that option. Additionally, 28%-39% agreed or strongly agreed that gas taxes “should be indexed to the price of gas and change (increase or decrease) as gas prices change.”
Loras [College] Public Opinion Survey Center	2015	IA adults who voted in November 2014	54% of respondents said they would tell their state legislator to vote for “a 10 cents per gallon gas tax increase which would be used to repair roads and bridges in Iowa.”
AAA	2014	Continental U.S. adults	52% of respondents said they would be “willing to pay” more in federal fuel taxes to support roads, bridges, and mass transit. Among them, 20% were willing to pay up to \$4.99 more per month, 11% were willing to pay \$5 to \$9.99 per month, and 21% were willing to pay more than \$10 per month.
WMUR Granite State Poll (University of New Hampshire Survey Center)	2014	NH adults	52% of respondents said the strongly or somewhat favor legislation passed by the New Hampshire legislature that increased “the gasoline tax by 4 cents per gallon to pay for improvements and maintenance on the state’s roads and bridges.”
The Washington Post/ University of Maryland (Abt-SRBI Inc.)	2015	MD adults	52% of respondents said they would “oppose eliminating automatic increases in the state’s gasoline tax used to fund roads and transportation?”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Montana Chamber of Commerce (Moore Information)	2016	MT registered voters	52% of respondents expressed “support” for “increasing the state tax on gasoline and diesel to pay for roads, highways, and bridges throughout the state.”
Minnesota Public Radio (Pugmire)	2007	MN registered voters	51% of respondents supported a 5¢ per gallon increase in the state gas tax “to pay for improvements to roads and bridges.” This was a follow-up question regarding a 10¢ per gallon increase for which support was only 37%. The poll was conducted two months after a bridge collapsed in Minnesota.
AAA Mid-Atlantic	2016	DE drivers	51% of respondents would strongly or somewhat “support ... a reasonable increase, of 5 to 10 cents a gallon, in the gasoline tax to be dedicated to the Transportation Trust Fund, which funds transportation projects, so long as there are safeguards in place to ensure there is no waste, abuse or diversion of that money.” The question was preceded by the statement: “Delaware’s gas tax is currently 23-cents a gallon, and ranked 35th highest nationally.”
Quinnipiac University	2015 (April)	NJ registered voters	50% of respondents said they would support an increase in the gasoline tax “to help finance road improvements and mass transportation.”
Field Institute Faculty Fellowship (Fisher & Wassmer)	2015	CA registered voters	49% of respondents would “support ... increasing the state gasoline tax by 10 cents per gallon, if the money is used to improve the conditions of state roads and highways.”
The Washington Post (Morin & Ginsberg)	2005	Washington DC- area residents	48% of respondents “supported” a gas-tax increase if the money was used for “transportation projects such as building roads, traffic management, or public transportation.” This question was asked after a series of questions on congestion-reduction strategies.
The Washington Post (Abt-SRBI, Inc.)	2012	MD residents	48% of respondents “favored” a 5¢ per gallon increase in the state gas tax “if the money is used for transportation projects.” Follow-up questions for 10¢ and 15¢ increases were “favored” by 26% and 25% of respondents respectively.
The Des Moines Register (Selzer & Co.)	2015	IA adults	48% of respondents said they favored an “initiative that may be debated in the Iowa legislature” to “raise the gas tax by around 10 cents a gallon to pay for road and bridge repairs.”
NCPPR (Wilson Research Strategies)	2008	U.S. likely voters	47% of respondents “would be willing to pay” some level of increased gas tax as a way to promote conservation and reduce greenhouse-gas emissions. 62% reported that they would be less likely to accept such an increase if Americans’ transportation emissions were shown to be “a small fraction of a percentage point” of all greenhouse-gas emissions.
Monmouth University Poll	2015	NJ residents	47% of respondents said they would strongly or somewhat support “raising the state tax on gasoline if all of the revenue was used to pay for road and bridge improvements.” 27% of respondents, including 22% of those who said they were opposed to raising the gas tax, said they would be more likely “to support an increase in the gas tax if it was coupled with a decrease in the taxes people pay when they inherit a family home or other property.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Washington State Transportation Commission (EMC Research)	2012	WA residents	46% of respondents thought that the state gas tax was “definitely” or “probably” a “good way to fund increased transportation investment.” Additionally, 41% of respondents “supported” allowing the gas tax to “rise with the rate of inflation so it provides a more stable funding source.”
Judy Ford Wason Center for Public Policy	2015	VA registered voters	46% of respondents said they would support increasing the gas tax “to ensure adequate transportation funding for maintenance and new construction.”
Public Agenda (Bittle, et al.)	2009	U.S. residents	45% of respondents “favored” a 40¢ per gallon gas tax “to support development of clean renewable energy sources” when presented in a series of energy-related proposals. Levels of favor for other gas-tax proposals included 40% for a 40¢ tax “to help achieve energy independence,” 38% for a 40¢ tax “to improve roads, bridges, tunnels, and other public works,” and 25% for a federal \$4 per gallon fixed price on gasoline to “encourage the development of alternative fuels.”
Star Tribune (Mason-Dixon Polling & Research)	2015 (March)	MN adults	45% of respondents would “support . . . Governor Dayton’s proposal to raise the wholesale tax on gasoline to increase spending on road and bridge projects.”
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County FL residents	44% of respondents said they “strongly agree” or “somewhat agree” with increasing the gas tax as an option “to pay for unfunded transportation needs in Pasco County.”
Idaho Politics Weekly (Dan Jones & Associates)	2015	ID registered voters	44% of respondents said they “strongly support” or “somewhat support” an increase in the gas tax “to provide more funding for Idaho’s roads and highways.”
Eagleton Institute of Politics	2015 (Feb.)	NJ adults	44% of a split sample, which was informed that New Jersey’s gasoline tax “is currently the third lowest in the nation and has not been raised in twenty years,” said they support a proposed state gas tax increase that “would be dedicated to paying for road maintenance and improvements.” Among the other respondents, who were not given any information about how New Jersey’s tax compares nationally or when it was last raised, 39% said they support the proposed increase.
Mineta Transportation Institute (Weinstein, et al.)	2006	CA likely voters	43% of respondents “would vote for” a 1¢-per-gallon increase in the state gas tax during each of the next 10 years. 28% of respondents “would vote for” indexing the state gas tax to inflation when the question prompted that such an increase would have been 0.5¢ per gallon in the previous year.
CBS News/ <i>The New York Times</i>	2009	U.S. residents	43% of respondents “favored” an unspecified increase to the federal gas tax “if it would reduce U.S. dependence on foreign oil.”
University of Texas, Austin (Musti, et al.)	2010	Austin TX-area residents	43% of respondents “supported” a \$1-per-gallon increase in the gas tax “to combat climate change.” 62% of respondents “supported” energy taxes with this same purpose – a \$50 tax per ton of greenhouse gas emissions “produced by electricity generation and motor fuel use” was given as an example of such a tax.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Metropolitan Transportation Commission (EMC Research)	2012	San Francisco Bay Area likely voters	43% of respondents “approved” a 10¢ per gallon gas tax increase across the region “for no longer than 20 years with expenditures subject to strict citizen oversight and requiring that at least 95 percent of revenue generated by each county be spent on benefits for that county” after mentioning some potential improvements. 36% of respondents “agreed” to support the increase without additional information, although follow-up questions on 5¢ and 2¢ increases garnered 51% and 66% agreement. 44% of respondents “agreed” to support the 10¢ increase “only for road improvements,” while 41% “agreed” to support the increase “only for transit improvements.”
Barr Foundation (MassINC Polling Group)	2013	MA registered voters	43% of respondents would “strongly” or “somewhat” support increasing the state gas tax “to pay for maintaining and improving transportation.” The question was preceded by the statement: “The actual amount of all federal and state taxes in Massachusetts is 41.9 cents per gallon. The state gas tax of 21 cents per gallon was last increased in 1991, and no sales tax is charged on gasoline. Because the gas tax is not adjusted for inflation, the gas tax has lost nearly half its purchasing power since 1991.”
Y’allPolitics	2016	MS likely primary voters	43% of likely primary voters would “support” an increase in the state gas tax “if this tax increase was dedicated to only fixing roads and bridges.” The question was preceded by the statement: “In 2016, several Mississippi organizations have called for an increase in the state tax on gasoline that consumers pay to provide more funds for fixing roads and bridges.”
ABC News/ <i>Time</i> / <i>The Washington Post</i> (Langer)	2005	U.S. residents	42% of respondents were “willing to pay” some higher level of gas tax “to fund transportation projects.” 32% of respondents “supported” higher gas taxes for building roads, public transportation, or managing traffic.
Eagleton Institute of Politics	2016	NJ adults	42% of respondents would “support” an increase in New Jersey’s gasoline tax “to pay for road maintenance and improvements.”
Eagleton Institute of Politics	2014 (Dec.)	NJ adults	41% of a split sample said they would support a gas tax increase that “would be dedicated to pay for road maintenance and improvements.” The rest of the respondents were also informed that, at 15 cents a gallon, New Jersey’s gasoline tax is “nearly the lowest in the country”; 36% of this group supported an increase. When respondents were given a hypothetical situation in which the only ways to “raise the money to maintain and improve the state’s roads” were an increase in the gas tax or borrowing money, and then asked to state their preference, 58% selected the gas tax. Respondents were then assigned to one of three groups and given different details about a proposed gas tax increase of 25 cents a gallon. 40% of Group A, which was told that such a tax plan would “would increase gas cost by about 10%,” supported the proposal; 37% of Group B, which was told that such an increase “would add about 80 cents a day to driving costs” for the average driver, supported the proposal; and 33% of Group C, which was told that such an increase would “triple the state’s share of the gas tax,” supported the proposal. 37% of respondents said they would be “more likely” to support an increase in the gas tax if it were combined “with a decrease in estate and inheritance taxes.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
National Association of Realtors (Hart Research Associates)	2009	U.S. registered voters	40% of respondents favored a 5¢ per gallon gas-tax increase “to pay for transportation projects and create jobs.” Support fell to 23% for a 10¢ increase.
Marquette University Law School (LHK Partners Inc.)	2014	WI registered voters	40% of respondents said they were “willing” to “raise gas taxes and vehicle registration fees to pay for highway projects.”
Alameda County Transportation Commission (EMC Research)	2011	Alameda County CA registered voters	39% of respondents were “likely to vote yes” for a 10¢ per gallon increase in gas taxes for the surrounding region to “pay for maintenance of local streets and roads as well as improvements to public transportation.” Approval dropped to 38% when more information was provided. In contrast, 71% of respondents “were likely to vote yes” for an extension of a 0.5¢ county sales tax “to address an updated plan for the county’s current and future transportation needs” after being informed that “money from this measure could only be spent on the voter-approved expenditure plan... and could not be taken by the state.”
Quinnipiac University	2014 (December)	NJ registered voters	39% of respondents said they would support an increase in the gasoline tax “to help finance road improvements and mass transportation.”
Institute of Governmental Studies (Maclay)	2015	CA residents	39% of respondents would “favor” a “bill before the state legislature [that] would increase the gas tax by 10 cents a gallon for five years to generate more money for road repairs.” The question was preceded by the statement: “California faces a backlog of road repair projects estimated at \$59 billion.” Another group of respondents received the same question, but without the statement about the repair backlog; this group favored the bill by 36%.
The Washington Post	2007	MD residents	38% of respondents “favored” a 10¢ per gallon increase in the state gas tax “if the money is used for transportation projects such as building roads, traffic management, or public transportation.”
Eagleton Institute of Politics	2014 (March)	NJ residents	38% of New Jerseyans supported raising the gas tax when they were informed that it “is currently the third lowest in the nation and has not been raised in twenty years.” This rate of support is higher than the 27% of New Jerseyans who supported the raising the gas tax when not given the additional information.
Eagleton Institute of Politics	2014 (Sept. & Oct.)	NJ adults	38% of respondents said they would support “an increase in the gas tax if it were dedicated solely to paying for roads, bridges, and other transportation costs.” Given three options to pay “for needed road and bridge repairs,” 17% of respondents said they would “most prefer” an option to “raise the gas tax by a fixed amount, like 15 cents per gallon,” while 18% said they would “most prefer” an option to “apply the standard 7% sales tax to gasoline purchases.”
Quinnipiac University Polling Institute	2005	CT registered voters	37% of respondents “supported” a 6¢ per gallon gas tax increase to pay for “transportation improvement projects to reduce traffic congestion.”
Quinnipiac University Polling Institute	2009	NJ voters	37% of respondents “supported” an unspecified gas tax increase “to help finance road improvements and mass transportation.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
American Trucking Association (Public Opinion Strategies)	2015	U.S. registered voters	37% of respondents “favor” a proposal “raising federal taxes on gas and diesel five cents a year, every other year for the next eight years.”
Quinnipiac University	2015 (Jan.)	NJ registered voters	37% of respondents said they would support an increase to the gasoline tax “to help finance road improvements and mass transportation.”
Morning Consult	2015 (June)	U.S. registered voters	37% of respondents thought an increase in the federal gas tax “a good idea” to deal with the expiration of “the federal fund to build and maintain interstates and highways.” The question was preceded by the statement: “the federal fund to build and maintain interstates and highways will expire at the end of July.”
Eagleton Institute of Politics	2015 (Oct.)	NJ adults, 18 or older	37% of respondents chose “support” in response to the question: “Legislative leaders have proposed increasing New Jersey’s gasoline tax. Do you support or oppose a gas tax increase?” Support was similar (36%) among a different subset of respondents who were asked a different version of the question, one telling them that revenue “would be dedicated entirely to paying for road maintenance and improvement, as well as other transportation costs” Support was 29% among yet another subset of respondents who were told, “Legislative leaders have proposed increasing New Jersey’s gasoline tax. The increase would be about 50 cents more per day for the average driver in New Jersey, or \$180 a year. “
HNTB Corporation (Kelton Research)	2011	U.S. residents	36% of respondents agreed that they “would support” a 10¢ per gallon gas tax increase “now that the economy has improved” after being informed that the tax had not risen since 1993 and that it no longer “collects enough funds to fully support current or future federal highway and transit programs.” In a follow-up question, 58% of respondents agreed that the gas tax “should rise and fall along with the rate of inflation.”
American Trucking Association (Public Opinion Strategies)	2014	U.S. registered voters	36% of respondents said they somewhat or definitely favor “raising federal taxes on gas and diesel five cents a year, every other year for the next eight years” to raise money “to repair, update and modernize the nation’s roads, highways and bridges.” 23% chose raising the gas tax as their top choice among “four proposals to pay to modernize the nation’s roads bridges and highways.” Respondents were then told that, as a result of the proposed tax increase, “the average driver would pay \$2 a week more in fuel taxes”; 34% said this information made them definitely or somewhat more supportive of the proposal.
Atlanta Journal-Constitution (Abt SRBI)	2015	GA adults	36% of respondents said they would support “paying a higher gasoline tax if the money is used for transportation projects.”
Quinnipiac University	2014 (July & August)	NJ registered voters	36% of respondents said they would support an increase to the gasoline tax “to help finance road improvements and mass transportation.”
HNTB Corporation (Kelton Research)	2009	U.S. residents	35% of respondents “would support” a 10¢ per gallon gas-tax increase “once the economy improves.” The question informed respondents about the level of the federal gas tax, when it was set, and the reasons why it is no longer sufficient. Earlier in the poll, 57% of respondents agreed that current gas taxes “are no longer sufficient to properly maintain our roads and bridges.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Selzer & Company	2013	IA adults	35% of respondents “favored” raising the gas tax “by around 10 cents a gallon to pay for road and bridge repairs.”
The University of Idaho James A. and Louise McClure Center for Public Policy Research	2014	ID likely voters	35% of respondents said they would “strongly support” or “somewhat support” increasing “fuel taxes” to “raise more funds for Idaho’s roads and bridges.” 32% said they would “strongly support” or “somewhat support” charging a “sales tax on fuel.”
Utah State University Institute of Government & Politics and The Exoro Group (Dan Jones & Associates)	2014	UT registered voters	35% of a split sample said they favor or strongly favor a legislative initiative “that would increase the gas tax in order to pay for the needed building and maintaining of roads.” Among the other half of respondents, who also were also told the initiative “would cost around 435 million dollars per year,” 34% said they favor or strongly favor the proposal.
Quinnipiac University	2015 (Nov.)	NJ voters	35% of respondents would “support” an increase in the gas tax “to help finance road improvements and mass transportation.”
Americans for Prosperity (Brawner)	2015	AR voters	35% of respondents would “strongly” or “somewhat support” raising the state’s gas tax by 10¢ per gallon to pay for repairs to roads and bridges. The question was preceded by a statement that “repairs to Arkansas’ roads and bridges are mostly supported by the state tax paid on gasoline.”
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa OK-region residents	34% of Tulsa residents were somewhat or very willing “to use ... “slight increase in the gas and diesel tax” to “help fund public transportation improvements.”
CNN (Bursk)	2007	U.S. residents	33% of respondents “favored” an unspecified increase in the federal gas tax to pay for additional “inspection and repair of bridges across the country.” The poll was conducted one week after a bridge collapsed in Minnesota.
HNTB Corporation (Kelton Research)	2013	U.S. residents	33% of respondents supported an unspecified increase in the gas tax to fund highway improvements. Support for using increases in the gas tax to fund other transportation improvements was lower.
Quinnipiac University	2014 (April)	NJ voters	33% of respondents supported an increase in the gasoline tax to balance the New Jersey state budget.
ABC News/ <i>The Washington Post</i> / Stanford University (Krosnick)	2007	U.S. residents	32% of respondents “favored” an unspecified increase in gas taxes to promote fuel-efficient vehicles and conservation. This question was asked as part of a series of questions on strategies to reduce global warming.
Quinnipiac University	2012	VA voters	32% of respondents would rather have higher gas taxes than tolls to raise money for road improvements.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist & Stoycheva)	2012	GA adult drivers	31% of respondents would “support” a gas tax increase of 10 cents per gallon to fund transportation. 23% of respondents would “support” a gas tax increase of 15 cents per gallon. 21% of respondents would “support” a gas tax increase of 25 cents per gallon.
The Des Moines Register (Selzer & co.)	2012	IA residents	31% of respondents “favored” raising the state gas tax “8 to 10 cents a gallon to pay for road and bridge repairs.”
Judy Ford Wason Center for Public Policy	2013	VA registered voters	31% of respondents would “support” an increase in the state gas tax in order to fund the state’s “transportation needs, including building new roads and bridges and maintaining current roads and bridges.”
Gallup (Brown)	2013	National phone survey	29% of respondents would “vote for” a “law in your state that would increase the gas tax up to 20 cents a gallon, with the new gas tax money going to improve roads and bridges and build more mass transportation in your state.”
Yale Project on Climate Change Communication (Leiserowitz, et al.)	2013	U.S. adults	29% of respondents strongly or somewhat support a policy to “increase taxes on gasoline by 25 cents per gallon and return the revenues to taxpayers by reducing the Federal income tax.”
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	29% of respondents said they “agree” or “strongly agree” with the statement, “The gasoline tax rate should be increased.”
Metropolitan Washington Council of Governments	2013	Washington DC-area participants in forums on congestion pricing	29% of respondents “strongly agree” that the gas tax should be raised to pay for transportation (this was after an informational presentation). Before the presentation, only 13% of respondents “strongly agreed” with this proposal.
Roanoke College	2013	VA residents	29% of respondents “favored” linking the gas tax to inflation in order to raise revenues for transportation. 24% of respondents said that raising taxes and designating them for roads is “closest to their view” point.
Quinnipiac University	2015 (May)	NYC registered voters	29% of respondents chose raising the New York state gas tax over two other options – raising the New York City sales tax and adding tolls on bridges into Manhattan – as their preferred way for the city to “get additional money to maintain roads, bridges and mass transit.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Vanderbilt University (Princeton Survey Research Associates International)	2015	TN registered voters	28% of respondents “support” an “increase in the gas tax.” The question was preceded by the text: “Elected officials in Tennessee are considering raising the gas tax for the first time in more than 25 years. Revenues from the tax will help fund improvements to roads throughout the state.” By contrast, 22% of respondents supported a gas tax increase if the question was preceded with this text: “Elected officials in Tennessee are considering raising the gas tax for the first time in more than 25 years. Revenues from the tax will help fund improvements to roads throughout the state as well as develop mass transit alternatives that would relieve traffic.”
Quinnipiac University Polling Institute (Brown)	2011	VA registered voters	28% of respondents “would rather have ... a higher gas tax to raise money for road improvement” when asked to choose between gas taxes and tolls. By contrast, 60% “would rather have highway tolls.”
The Wall Street Journal	2012	Readers of the paper’s blog who responded to an invitation to vote	28% said the gas tax should be “increased.” 16% said that the gas tax should be indexed to inflation.
Elway Research	2013	WA registered voters	28% of respondents would “favor” or “accept” a gas tax increase as a transportation funding option.
Marquette Law School	2013	WI voters	28% of respondents were “willing” to “raise gas taxes and vehicle registration fees for highway projects.”
Public Mind, Fairleigh Dickinson University (Opinion America)	2015	NJ adults	28% of respondents agreed that “New Jersey needs to raise the gasoline tax because all of the current money is committed and without new revenue there cannot be any new road or bridge projects.” 44% correctly stated that the current gas tax in New Jersey is lower than the national average. Among those who said they were opposed to any increase in the gas tax, “taxes are already too high” was the most popular explanation for their opposition, cited by 45%.
The Rockefeller Foundation (Hart Research Associates)	2011	U.S. registered voters	27% of respondents found it “acceptable” to increase the federal gas tax an unspecified amount in order to “provide additional funding for transportation projects” after being informed that the tax had not increased since 1993.
Gonzales Research Marketing Strategies	2013 (Jan.)	MD registered voters who vote regularly	27% of respondents would “favor” a “10 cent per gallon increase in Maryland’s gas tax rate to be used for transportation projects.”
Hassenfeld Institute for Public Leadership (Gregg)	2015	RI registered voters	27% of respondents were “strongly” or “somewhat supportive” of having the State of Rhode Island “raise gas taxes so everyone helps pay for the repairs to the bridges in the state.” Respondents were told that this gas tax increase would be in lieu of assessing a toll on large trucks.
High Point University Survey Research Center	2016	NC likely voters in Republican and Democratic primaries	27% of likely primary voters in North Carolina “support” a proposal of “additional motor fuel taxes.” The question was preceded by the statement: “Now we would like to ask you about some transportation issues here in North Carolina. Please tell me if you support or oppose each of these proposals to pay for new highways and additional lanes of traffic.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
The Washington Post	2013	MD residents	26% of respondents would “favor” a “new 3 percent sales tax on gasoline, if the money were used for transportation projects such as building roads, traffic management or public transportation.”
Quinnipiac University	2014 (June)	NYC registered voters	26% of respondents chose increasing the state fuel tax as their preferred method of raising “additional money to maintain roads, bridges and mass transit” over increasing the city sales tax and additional bridge tolls. The gas tax had the highest level of support among the three options.
Oregon Department of Transportation	2009	OR adults	25% of respondents chose increasing the gasoline tax as the “most fair” method for raising additional funds for transportation projects from a list of three options that also included charging tolls and increasing vehicle registration fees. Additionally, 49% said they believe they “get good value” from the money they pay in gas taxes and registration fees, versus 30% who said they do not.
Old Dominion University	2012	Hampton Roads VA residents	25% of respondents would “support” increasing the state fuel tax “if additional funds are needed to maintain or expand the road, highway, and bridge systems in Hampton Roads.”
YouGov	2015	Registered YouGov members	25% of respondents said they would favor “raising the [federal] gas tax by 12 cents over the next two years, and indexing the tax to the inflation for the future to fund highway and road improvement projects.” 18% said gas taxes “should be the main way that governments pay for road repairs and construction.”
Oregon Department of Transportation	2011	OR adults	23% of respondents chose increasing the gasoline tax as the “most fair” method for raising additional funds for transportation projects from a list of three options that also included charging tolls and increasing vehicle registration fees. When asked to choose from among “a temporary increase in [the] gas tax for a specific time,” “taking funds from other construction and maintenance projects,” and “making do with existing resources, even if it means closing bridges” as the method they would be most likely to support if additional funding were needed “to fix the most urgent bridge problems,” 34% chose the gas tax. Additionally, 46% said they believe they “get good value” from the money they pay in gas taxes and registration fees, versus 31% who said they do not.
Gonzales Research Marketing Strategies	2012	MD voters who vote regularly	23% of respondents would “favor” a “10 cents per gallon increase in Maryland’s gas tax rate to be used for transportation projects.” 3% of respondents “favored” a “law in Maryland that would automatically increase the gas tax rate each year without Legislative review or approval.”
Public Mind, Fairleigh Dickinson University	2014	NJ residents	23% of New Jerseyans support raising the state gas tax “because all of the current money is committed and without new revenue there cannot be any new road or bridge projects.” 72% of respondents opposed a new gas tax, “regardless of the need.”
WSB-TV (Landmark Communications)	2015	GA adults who voted within the last 4 years	23% of respondents said they would support “an increase in the gas tax to fund maintenance of existing roads and bridges.” Support increased to 35% if the gas tax increase were to be “offset by a reduction in the income tax rate.”
Pew Research Center	2008	U.S. residents	22% of respondents “favored” an unspecified increase in the gas tax “to encourage carpooling and conservation.” This was in response to a series of questions on policies that “address America’s energy supply.”

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Rasmussen Reports	2009	U.S. residents	22% preferred raising the gas tax an unspecified amount to “cutting back nationally on transportation projects.” 15% of respondents agreed that the federal government should increase gas taxes “to help meet new transportation needs.”
Pew Research Center	2010	U.S. residents	22% of respondents “approved” of an unspecified increase to the national gasoline tax when “thinking about ways to reduce the federal budget deficit.”
Gonzales Research and Marketing Strategies	2013 (Oct.)	MD likely voters	22% of voters in Maryland approve of their state government’s 2013 decision to raise the gas tax by 21¢ over three years.
Virginia Transportation Construction Alliance (Public Opinion Strategies)	2013	VA likely voters	21% of respondents said that the following proposal to increase transportation funding was “closest” to their opinion: “in order to increase transportation funding, the current gas tax of seventeen point five cents per gallon should be increased by ten cents to twenty seven point five cents per gallon. The gas tax would also be indexed to inflation so that it would increase at the same rate as inflation.” (The alternative presented was to eliminate the gas tax and increase the state sales tax.)
Missouri Alliance for Freedom (Johnson)	2015	Likely voters in Missouri State Senate Dist. 25	21% of respondents would “support ... raising the tax on gas to support transportation projects in Missouri.”
Reason Foundation	2011	U.S. residents	19% of respondents “favored” an unspecified increase in the gas tax. Respondents were informed that the tax pays for highways and transit, and were given the following opposing viewpoints: “Roads and transit systems are crumbling and need more funding” and “The government wastes a lot of the gas money it already receives.”
Oregon Department of Transportation	2013	OR adults	19% of respondents chose increasing the gasoline tax as the “most fair” method for raising additional funds for “transportation maintenance, repair, and development within the state” from a list of three options that also included charging tolls and increasing vehicle registration fees.
Rasmussen Reports (Pulse Opinion Research)	2012	U.S. residents	18% of respondents agreed that the government should “raise the gas tax to help meet new transportation needs.” 48% of respondents agreed that the government should “eliminate the federal gasoline tax until gas prices come down.”
Quinnipiac University	2009 (Jan.)	NY registered voters	18% of respondents supported increasing the gasoline tax by an unspecified amount.
HNTB Corporation (Kelton Research)	2012	U.S. residents	17% of respondents stated they would be “willing to spend more money on” the gas tax “if it was allocated to long-term interstate improvements in [their] area.”
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	17% of respondents expressed support for “increasing the state fuel tax by five cents per gallon” by rating the proposal 7 or higher on a 0-to-10 scale. Support dropped to 10% for a proposed increase of 10 cents per gallon. 17% supported “linking the state fuel tax to the average yearly inflation rate.”
Quinnipiac University	2011 (March)	CT registered voters	17% of respondents supported increasing the gasoline tax by 3¢ per gallon.

Table 19, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta National Transit Research Consortium (Noland, Weiner & Greenberg)	2016	NJ adults	17% of respondents “strongly” or “somewhat” agreed with a proposal to “add a 5-cents-per-gallon tax on gasoline sales in New Jersey for 5 years.” The question was preceded by this prompt: “Some people say even though New Jersey will receive funds from the federal government, insurance companies, and charitable organizations to help rebuild areas devastated by Hurricane Sandy, eventually New Jersey will need to generate even more funds to better protect our vulnerable areas against future disasters.” The gas tax increase was one of 5 funding proposals that respondents were asked to rate.
Associated Press- GfK Poll	2014	U.S. adults	14% of respondents said they would support raising “federal gasoline taxes from their current levels of 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel” as a way to “pay for transportation projects, such as highway construction, improvements to roads and bridges, and maintenance of public roads.”
Build Our Bridge Now Coalition (Public Opinion Strategies)	2015	Boone, Campbell, and Kenton Counties KY registered voters	14% of respondents said they would support a gas tax increase “rather than having tolls” as a way to pay for a new bridge span for Interstate 75 traffic over the Ohio River.
Reason Foundation (Princeton Survey Research Associates International)	2014	Continental U.S. adults	13% of respondents said they favor raising the federal gas tax above the current rate of 18.4 cents per gallon. When asked to choose between two options, 32% of respondents said they would rather raise the gas tax than pay tolls “to pay for repairing and expanding existing Interstate highways,
Rasmussen Reports	2009	U.S. residents	10% of respondents “favored” a federal government policy to increase gas taxes “a large amount” to encourage the purchase of fuel-efficient cars.
HNTB Corporation (Kelton Global)	2015	Adults in the greater New York City area	5% of respondents chose increased gas taxes as their preferred method to fund “maintenance or expansion of service to accommodate increased ridership for the local transportation network” from a list of eight options that included fares, tolls, other taxes, and increased federal and private funding.

Table 20. Public Opinion Polling on Mileage Taxes

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
HNTB Corporation (Kelton Global)	2016	U.S. residents, over 18 years old	65% of respondents were “extremely” or “somewhat likely” to “support” a “Vehicle Miles Traveled system” or “Mileage Based User Fee” to help fund “maintenance or construction of local roads, bridges, or interstate highways.” The question was preceded by the statement “A Vehicle Miles Traveled system or Mileage Based User Fees are alternatives to gas taxes in which vehicles owners are assessed a fee based on how much a vehicle is driven.”
Mineta Transportation Institute (Agrawal, et al.)	2009	CA residents	50% of respondents “supported” replacing the state gas tax with a fee averaging 1¢ per mile for every mile driven within the state, with the fee rate varying by how much the vehicle pollutes so that “vehicles that pollute the least would pay less, and vehicles that pollute the most would pay more per mile.” Respondents were informed that “vehicles would be equipped with an electronic means to keep track of miles driven, and the fee would be paid when drivers buy gas.” Support for the proposal was only 28% for a variation in which all vehicles paid the same 1¢ per mile rate.
Pasco County, FL (National Research Center, Inc.)	2014	Pasco County FL residents	46% of respondents said they “strongly agree” or “somewhat agree” with a “tax on the number of miles driven” as an option “to pay for unfunded transportation needs in Pasco County.”
Washington State Transportation Commission (EMC Research)	2012	WA residents	44% of respondents thought that “a fee based on the number of miles driven – people who used the system more would pay a higher fee” was “definitely” or “probably” a “good way to fund increased transportation investment.”
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	44% of respondents said they would “strongly support” or “somewhat support” a new mileage tax in which, “on average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more,” and “vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas.” Support for a mileage tax not tied to vehicle pollution, in which “each driver would pay a tax of 1 cent for every mile driven,” was 24%.
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	43% of respondents said they would “strongly support” or “somewhat support” a new mileage tax in which, “on average, vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more,” and “vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas.” Support for a mileage tax not tied to vehicle pollution, in which “each driver would pay a tax of 1 cent for every mile driven,” was 19%.
Mineta Transportation Institute (Agrawal, Nixon & Murthy)	2012	U.S. residents	41% of respondents “supported” a tax where “vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more. ... Vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas.” Support for a mileage tax not tied to vehicle pollution, in which “each driver would pay a tax of 1 cent for every mile driven,” was 21%.

Table 20, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Bay Area Council (EMC Research)	2015	San Francisco Bay Area residents	41% of respondents “strongly” or “somewhat favor” a “vehicle fee to fund transportation improvements that is determined by the number of miles the vehicle is driven, with strict privacy protections and no costs to the owner for new technology installation.”
Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University (Ellen, Sjoquist & Stoycheva)	2012	GA adult drivers	39% of respondents would “support” a VMT tax of 1.60 cents per mile. The survey described the tax “as a replacement for the current gas tax without describing the mechanism by which miles would be determined. Respondents were asked to imagine that, instead of paying a state gas tax, they could pay at the gas pump a tax based solely on the number of miles the vehicle was driven in Georgia since it was last refueled.” 36% of respondents would “support” a VMT tax of 2.10 cents per mile “as a replacement for the current gas tax without describing the mechanism by which miles would be determined. 33% of respondents would “support” a VMT tax of 1.35 cents per mile “as a replacement for the current gas tax without describing the mechanism by which miles would be determined.”
HNTB Corporation (Kelton Research)	2010	U.S. residents	39% of respondents agreed with the statement “the U.S. should try to reduce transportation greenhouse-gas emissions by reducing the number of miles that vehicles travel through a mileage use tax.”
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	39% of respondents “supported” a tax where “vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more.” Support decreased to 19% of respondents when all vehicles paid the same flat fee of one cent per mile.
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	36% of respondents “supported” a tax where “vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more. . . . Vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas.” Support decreased to 22% of respondents when all vehicles paid the same flat fee of one cent per mile.
The Rockefeller Foundation (Hart Research Associates)	2011	U.S. registered voters	34% of respondents found it “acceptable” to replace the federal gas tax with “a fee based on the number of miles driven per year.” 40% of respondents “favored” developing a pilot program in “select states and localities” to test such a replacement.
Indian Nations Council of Governments (Collective Strength)	2010	Tulsa OK-region residents	33% of Tulsa residents were somewhat or very willing to pay “a small user tax that would be based on the number of miles a vehicle is driven each year” to “help fund public transportation improvements.”
Mineta Transportation Institute (Agrawal & Nixon)	2010	U.S. residents	33% of respondents “supported” a tax where “vehicles would be charged one cent per mile, but vehicles that pollute less would be charged less, and vehicles that pollute more would be charged more. . . . Vehicles would have an electronic meter to keep track of the miles driven, and the tax would be paid each time drivers buy gas.” Support decreased to 22% of respondents when all vehicles paid the same flat fee of one cent per mile.
Mason-Dixon Polling and Research (Coker)	2015	OR registered voters	32% of respondents “support” a “1.5 cent per mile driving mileage tax as an alternative to the existing state and local fuel taxes to pay for road maintenance.”

Table 20, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Field Institute Faculty Fellowship (Fisher & Wassmer)	2015	CA registered voters who own a motor vehicle	30% of respondents would “support ... the “installation of an electronic device on your motor vehicle to measure the exact amount of miles that you drive ... to enable the state to assess an accurate fee for road funding based upon the number of miles driven ... to replace or eliminate the current gasoline taxes.”
The Wall Street Journal	2012	Readers of the paper’s blog who responded to an invitation to vote	28% of respondents said that in place of the gas tax there should be a “tax instead by miles driven.”
Hoover Institution	2015	CA residents, 18 and older	27% of respondents “support” replacing the state gas tax with “a new tax on the number of miles a vehicle drives.” The question was preceded by the statement: “Some people argue that in order to raise enough revenue to pay for California’s transportation infrastructure needs, California should end the current state tax on each gallon of gas purchased and replace it with a new tax on the number of miles a vehicle drives. Supporters of this change point out that, in 2014, Californians drove 2% more miles than they did in 2006. But the cars and trucks they drove consumed 7% less gasoline because of better fuel efficiency in gas-powered vehicles and the use of more electric vehicles, so the total amount of money collected from the gas tax each year is less than it used to be.” Two alternative versions of the question asked of other subsets of respondents had slightly lower support, at 19% and 23%.
Michigan Infrastructure and Transportation Association (Fisher & Wassmer)	2014	MI likely voters	24% of respondents “support” the “use of an electronic device to measure miles for a mileage-based fee.”
Mountain-Plains Consortium (Ozbek, Albeiruti & Atadero)	2013	CO, ND, SD, UT and WY residents	23% of South Dakota respondents agreed or strongly agreed with the statement, “I support the use of Mileage-Based User Fees to fund the highway system.” Researchers also surveyed residents of Colorado, North Dakota, Utah and Wyoming. Among all five states, support ranged from 18%-23%
HNTB Corporation (Kelton Research)	2012	U.S. residents	23% of respondents would “most prefer” a “vehicle miles driven user fee” when asked to choose whether they would “most prefer” as a way to “get funding for the nation’s interstate projects.” (The alternatives were tolls or an increased federal gas tax.)
Reason-Rupe Public Opinion Survey (Princeton Survey Research Associates International)	2014	Adult residents of the continental U.S.	23% of respondents said they would favor “a plan to eliminate the gas tax and instead charge drivers a fee based on the number of miles they drive.”
The University of Idaho James A. and Louise McClure Center for Public Policy Research	2014	ID likely voters	23% of respondents said they would “strongly support” or “somewhat support” adding “a mileage-based fee that charges drivers according to how many miles they drive each year” to “raise more funds for Idaho’s roads and bridges.”

Table 20, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Weinstein, et al.)	2006	CA likely voters	23% of respondents “would vote for” replacing the state gas tax with a mileage fee where “each driver would pay a fee of 1¢ per mile for every mile driven within the state.” Respondents were informed that “vehicles would be equipped with an electronic means to keep track of miles driven, and the fee would be paid when drivers buy gas.”
Indiana University– School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	22% of respondents said they would “support” or “strongly support” replacing the gasoline tax with a “mileage user-fee” plan that was described in detail and would require drivers to report “the mileage on your odometer to the department of motor vehicles in your state.” Half of respondents were also presented with an alternate plan, in which an advanced GPS device would “count the number of miles you drive each year, and wirelessly report this number to the department of motor vehicles in your state” while also collecting “data on your location including when and where (the specific roads) you drive,” and drivers would be “required to pay \$250 for the device and its installation”; 11% of the subset said they would “support” or “strongly support” replacing the gasoline tax with such a plan. Support for several other variations, both general and detailed, ranged from 12% to 21%.
Associated Press- GfK Poll	2014	U.S. adults	20% of respondents said they would support replacing “federal gas and diesel taxes with taxes based on how many miles a vehicle is driven” as a way to “pay for transportation projects, such as highway construction, improvements to roads and bridges, and maintenance of public roads.”
Detroit Free Press/ WXYZ-TV 7/ WLNS- TV 6/ WOOD-TV 8/ WJRT-TV 12 (EPIC-MRA)	2014	MI likely voters	18% of respondents said it was a “very good” or “somewhat good” idea “to change to a system where motorists pay a new fee that would be based on several factors, including the number of miles they drive, the time of day they travel, the route taken and the weight of the vehicle they drive” in order to “provide the increased funding needed to improve and repair the roads” in Michigan.
Rasmussen Reports	2009	U.S. residents	18% of respondents “favored” some form of mileage tax “to help fund the building and repair of roads and bridges.”
Barr Foundation (MassINC Polling Group)	2013	MA registered voters	17% of respondents would “strongly” or “somewhat” support a mileage fee based on miles driven. The question was preceded by the statement: “Assuming the Massachusetts state government decided to raise funds for maintaining and improving our transportation system, one option is to adopt a new tax based on the number of miles a person drives. Each driver would pay a tax for every mile driven. The car’s mileage would be read during annual vehicle inspections, and the tax would be paid at that time.”
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	12% of respondents expressed support for replacing the state fuel tax with “a user fee of one cent per mile driven” by rating the statement 7 or higher on a 0-to-10 scale.
Civitas Institute	2009	NC registered voters	12% of respondents “would view favorably” a switch to “a plan that would charge all drivers based on the number of miles they drive in North Carolina.” (The question did not specify what the “current system” was.)

Table 20, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Rasmussen Reports (Pulse Opinion Research)	2012	U.S. residents	12% of respondents “favored” a mileage tax when it was presented as “a good way to raise funds for highway maintenance.”
High Point University Survey Research Center	2016	NC likely voters in Rep. and Dem. primaries	12% of likely primary voters in North Carolina “support” a “tax on the number of miles people drive.” The question was preceded by the statement: “Now we would like to ask you about some transportation issues here in North Carolina. Please tell me if you support or oppose each of these proposals to pay for new highways and additional lanes of traffic.”
American Trucking Association (Public Opinion Strategies)	2014	U.S. registered voters	10% of respondents said they “somewhat support” or “definitely support” the concept of “raising money for transportation by using technology to charge drivers a fee for each mile a vehicle is driven.”

Table 21. Public Opinion Polling on Sales Taxes

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
San Bernardino and Riverside Counties, CA	2002	Residents of Riverside and San Bernardino CA counties	72% of Riverside County residents and 75.8% of San Bernardino County residents said that they would support local sales tax measures in upcoming referendums (in 2002). Analysis of the survey data showed that the measures were supported consistently across a variety of subgroups (income level, racial identity, voter registration status, and likelihood of voting). All groups except black/African-Americans in Riverside County showed more than 69% support for the measures.
Alameda County Transportation Commission (EMC Research)	2011 (Mar.)	Alameda County CA registered voters	71% of respondents were “likely to vote yes to approve” an extension of a 0.5¢ county sales tax “to address an updated plan for the county’s current and future transportation needs.” Respondents were informed about the fact that the tax passed twelve years previously and that “money from this measure could only be spent on the voter-approved expenditure plan, and all money from this measure would stay in Alameda County and could not be taken by the state.” In separate questions, respondents showed a preference for making the tax permanent with votes on the spending plan every 20 years to just extending the tax 20 years (54% to 29%) and maintaining the tax at its current rate rather than increasing it by 0.25¢ (45% to 39%).
Virginia Transportation Construction Alliance (Public Opinion Strategies)	2013	VA likely voters	69% of respondents said that the following proposal to increase transportation funding was “closest” to their opinion: “in order to increase transportation funding, the current gas tax of seventeen point five cents per gallon should be eliminated and replaced with an eight tenths of a penny increase in the state sales tax. The additional revenue from the state sales tax increase would be dedicated entirely to transportation and Virginia’s state sales tax would still be the lowest in the region.” (The alternative presented was to raise the state per-gallon gas tax and also index the rate to inflation.)
Alameda County Transportation Commission (EMC Research)	2011 (Oct.)	Alameda County CA registered voters	69% of one group of respondents were “likely to vote yes to approve” a measure “extending the existing transportation sales tax and increasing it by one half cent.” 59% of a second group of respondents were “likely to vote yes to approve” a measure that “authorizes a one half cent transportation sales tax.” In both cases, respondents were informed that the measure would “address the County’s current and future transportation needs,” would require “voter approval every 20 years on a new expenditure plan, with citizen oversight and a local jobs creation program” and that “no money can be taken by the state.”
Sacramento Transportation Authority (Evans)	2016 (March)	Sacramento County CA likely voters	70% of respondents who heard support messages would “vote yes to approve” a measure to repair streets and bridges, relieve traffic, build an expressway, extend light rail, support bus operations, and improve bicycle and pedestrian safety by “enacting a countywide 30-year sales tax, at a rate of one half of one percent, raising approximately 100 million dollars annually, with independent oversight and audits.” Prior to hearing support message, 69% would vote “yes to approve” the measure.
Transportation Authority of Marin (Godbe Research)	2014	Marin County CA likely voters	68% of respondents said they would “definitely” or “probably” vote yes on a measure to “authorize a quarter cent sales tax to “provide new or improved school bus service, help reduce traffic congestion on our local roads, provide seniors low cost or no cost mobility options, improve pedestrian travel while also accommodating bikes, and fix potholes and maintain local roads.”

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Contra Costa Transportation Commission (EMC Research)	2014	Contra Costa County CA registered voters	68% of respondents said they would vote yes to approve a ballot measure that would increase the county sales tax by a half cent to fund a “25 year Transportation Expenditure Plan.” Respondents were given details of the plan, which would “expand [Bay Area Rapid Transit] in Contra Costa County; improve transit connections to jobs and schools; fix roads, improve highways and increase bicycle and pedestrian safety; reduce traffic congestion and improve air quality; [and] enhance transit services for seniors and people with disabilities.”
City of San Jose, CA (Fairbank, Maslin, Maullin, Metz & Associates)	2014	San Jose CA likely voters	66% of respondents said they would “definitely” or “probably” vote yes on a possible ballot measure to “enact a one-quarter cent sales tax for 9 years used exclusively for street improvements, with citizens’ oversight and independent audits of all expenditures” after being given information on how revenue could be spent, as well as arguments for and against the measure. Before being given this additional information, 65% of respondents said were in favor of the measure. Throughout the survey, 52% of respondents consistently said they would vote yes each time they were asked.
Santa Cruz County Department of Public Works (Gene Bregman & Associates)	2014	Likely voters in unincorporated areas of Santa Cruz County CA	64% of respondents said they would “definitely” or “probably” vote yes on a possible ballot measure to establish a one-quarter cent sales tax “in the unincorporated areas of the county for a period of seven years, with local citizen oversight, and all funds being used only in the unincorporated areas of Santa Cruz County... in order to repair, maintain and improve local streets, roads, sidewalks and bike lanes, and make neighborhood roads safer” after hearing arguments for and against the measure. 59% said they would “definitely” or “probably” vote yes on such a measure if the tax increase were a half cent. Before hearing pro and con arguments, 62% supported the quarter-cent increase and 55% supported the half-cent increase. 34% said they would “definitely” or “probably” vote yes if the tax were permanent rather than expiring after seven years.
Marquette Law School	2016	WI registered voters	64% of respondents “favor ... legislation that would allow counties to add a one-half percent sales tax for four years to be used for local, street and highway maintenance so long as voters approve the increase in a referendum vote.”
Judy Ford Wason Center for Public Policy	2013	VA registered voters	63% of respondents said they would “support replacing the gas tax with an increased sales tax.” 45% of respondents said they would support an “increase the state sales tax” in order to fund “transportation needs, including building new roads and bridges and maintaining current roads and bridges.”
Regional Transportation Alliance (Fallon Research)	2012	Orange County NC registered voters	60% of respondents “would vote for” a 0.5¢ local sales tax “to pay for new or expanded public transportation.” Exempting “food, medicine, utilities, and gasoline” from the tax increased support for the measure (41% said they were “more likely” to vote for the measure vs. 7% “less likely”), as did a scenario where gas prices rose to \$5/gallon (27% “more likely” to 14% “less likely”). A scenario where “funding was used just for more bus routes and services, and did not include any rail systems” reduced support for the measure (8% “more likely” to 35% “less likely”).

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Triangle Transportation Authority (Fallon Research)	2010	Registered voters in Durham, Orange, and Wake Counties, NC	58% of respondents “would vote for” a 0.5¢ sales-tax increase “to pay for new or expanded public transportation.” 53% of a segment of respondents “would vote for” a 0.75¢ county sales tax to fund “new or expanded public transportation, new school construction, and the purchase of open space for preservation.”
Los Angeles Metro (Fairbank Maslin Maullin)	2007	Los Angeles County CA registered voters	56% of respondents “would vote yes in favor” of a 0.5¢ county sales tax for transportation projects “with local control, required annual independent financial audits, and no funds to be used for administrators’ salaries.” Respondents were presented with the types of projects that would be funded with the tax. 57% of respondents “would vote yes in favor” of the same measure if the tax was set at 0.25¢.
Mineta Transportation Institute (Agrawal & Nixon)	2015	U.S. residents	55% of respondents “supported” a “new national half-cent sales tax to pay for transportation.”
UtahPolicy (Dan Jones & Associates)	2015 (April)	UT registered voters	54% of respondents said they would “strongly favor” or “somewhat favor” a local “sales tax increase” as allowed by Utah HB362, which lets cities and counties seek voter approval of a quarter-cent sales tax to fund local roads and transit districts, if their local officials were to “put this sales tax increase on the ballot.”
Center for the Study of Los Angeles, Loyola Marymount University	2012	Los Angeles CA registered voters	54% of respondents “would vote yes” to extend a 0.5¢ county sales tax “for transportation-related projects, like the metro rail.” Respondents were informed about the fact that the tax was passed four years previously and was going to last a total of thirty years, and that their vote would be to extend the tax another thirty years.
Greater Tampa Chamber of Commerce (SEA Polling & Strategic Design)	2016	Hillsborough County FL adults	54% of respondents who heard positive messaging would “vote for” a measure to raise the sales tax 0.5% “to fund transportation projects across Hillsborough County.” 47% of respondents said they would vote for the 0.5¢ sales tax increase after they had heard statements opposing the measure. 49% of respondents would vote for the measure when it was first described to them, without either positive or negative messaging.
University of Arkansas (Parry)	2012	AR adult residents	53% of respondents “favor” a measure that would “increase the statewide sales tax from 6 percent to 6.5 percent for the next 10 years in order to generate money for Arkansas highways and other road construction projects. The increase would not apply to groceries.”
UtahPolicy.com (Bernick)	2015 (August)	UT adults	52% of respondents “favor” a quarter-cent sales tax hike for local transportation needs.
Atlanta Journal- Constitution/ Channel 2 Action News (Mason-Dixon Polling & Research, Inc.)	2011	Atlanta GA-area registered voters	51% of respondents “would vote yes, in favor” of a 1¢ local sales tax to “fund transportation projects in the [local] special transportation district.” Respondents were informed that “projects to be funded would be requested by each county and then selected by a regional group of elected officials.”

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Denver RTD (The Kenney Group)	2010	Metro Denver and Boulder County CO likely voters	51% of respondents “would vote for” a 0.4¢ increase in county sales taxes devoted to a set of regional transportation projects. Earlier in the survey, 48% of respondents agreed that “we should double the sales tax from four pennies on ten dollars to a total of eight pennies on ten dollars” in order to complete the set of projects “on time in 2017.”
Mineta Transportation Institute (Agrawal & Nixon)	2013	U.S. residents	51% of respondents “supported” a “new national half-cent sales tax to pay for transportation.”
Regional Transportation Alliance (Fallon Research)	2012	Wake County NC registered voters	50% of respondents “would vote for” a 0.5¢ local sales tax “to pay for new or expanded public transportation.” Exempting “food, medicine, utilities, and gasoline” from the tax increased support for the measure (44% said they were “more likely” to vote for the measure vs. 9% “less likely”), as did a scenario where gas prices rose to \$5/gallon (23% “more likely” to 20% “less likely”). A scenario where “funding was used just for more bus routes and services, and did not include any rail systems” reduced support for the measure (12% “more likely” to 40% “less likely”).
Mineta Transportation Institute (Agrawal, Nixon & Murthy)	2012	U.S. residents	49% of respondents “supported” a “new national half-cent sales tax to pay for transportation.”
SaintPetersBlog (St. Pete Polls)	2014	Pinellas County FL likely voters	48% of respondents said they “support the Greenlight Pinellas Plan to improve public transit including expanded bus service, local passenger rail and regional connections to be funded by levying a one percent sales surtax.”
Tampa Bay Partnership (FrederickPolls)	2014	Pinellas County FL residents who voted in the November 2014 election	48% of respondents said that – regardless of how they voted on the defeated Greenlight Pinellas ballot issue, which would have raised sales taxes by 1 cent to expand bus service and build a light rail system – there was “a time over the last year or so when they supported it or thought it might be a good idea.” 37% said they had voted yes. 39% said they would vote yes if they “had the chance to vote on a new and different transportation plan for Pinellas County that included expanded bus transit service but no light rail at a cost of a one-half cent sales tax increase.” Respondents were also asked to rate specific aspects of the plan. 33% rated the sales tax increase as “very positive” or “somewhat positive.” 40% rated the fact that the plan “would have done away with the current property tax for transportation and replaced it with a penny sales tax increase” as “very positive” or “somewhat positive.”
Mineta Transportation Institute (Agrawal & Nixon)	2014	U.S. residents	47% of respondents said “supported” a “new national half-cent sales tax to pay for transportation.”
Public Policy Institute of California (Baldassare)	2005	Los Angeles County CA residents	47% of respondents “would vote yes” for a 0.5¢ local sales tax “for local transportation projects.”

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Mineta Transportation Institute (Agrawal & Nixon)	2011	U.S. residents	45% of respondents “supported” a “new national half-cent sales tax to pay for transportation.”
Talkbusiness.net (Brock)	2012	AR likely voters	42% of respondents “would vote for” a 0.5¢ statewide sales tax increase that “would be used to pay for a four-lane highway system statewide.”
Mineta Transportation Institute (Agrawal & Nixon)	2010	U.S. residents	42% of respondents “supported” a “new national half-cent sales tax to pay for transportation.”
Mineta Transportation Institute (Weinstein, et al.)	2006	CA likely voters	41% of respondents would “support” a 0.5¢ increase in the state sales tax “for transportation purposes, such as maintaining and improving local streets, highways, and mass transit.”
Pasco County, Florida (National Research Center, Inc.)	2014	Pasco County FL residents	40% of respondents said they “strongly agree” or “somewhat agree” with an increase in sales tax as an option “to pay for unfunded transportation needs in Pasco County.”
Texas A&M Transportation Institute (ETC Institute)	2014	TX registered voters	39% of respondents expressed support for “dedicating state sales tax on vehicles to transportation” by rating the proposal 7 or higher on a 0-to-10 scale. 13% supported replacing “the state fuel tax with a 6.25% state sales tax on fuel.”
SurveyUSA	2007	Seattle-Tacoma MSA residents	38% of respondents “would support” raising the sales tax by 0.6¢ “in order to pay for transportation projects.” Also, 25% of respondents “would support” the sales-tax increase in concert with an increased “car license tab tax” to pay for “a combination of road, highway, and mass transit improvements” in the survey area.
Vanguard Public Affairs (Denno Research)	2015	MI likely voters	37% of respondents said they were “supportive” or “very supportive” of a ballot measure “to raise the state sales tax by 1%, with a majority of the funds going to fix Michigan’s roads.”
SurveyUSA	2012	Atlanta GA-area likely voters	36% of respondents were “certain to vote yes” on a 1¢ sales tax increase “to fund regional transportation projects.”
Ax the Tax (St. Pete Polls)	2014	Pinellas County FL likely voters	35% of respondents said they would vote no on an upcoming referendum “to increase your sales tax to pay for the proposed light rail program” between Clearwater and St. Petersburg, Florida. After being given more information about the proposal – including information about route and stops, that the sales tax would increase to 8%, that it would be the highest sales tax rate of any Florida county, and “that the light rail plan would cost your household over \$4,000” – 33% said they would be more likely to vote for the plan and 62% said they would be less likely.
20/20 Insight Polling	2011	Atlanta GA-area registered voters	33% of respondents “favored” a measure “to increase their local sales tax by one cent for every dollar spent” if “the money raised...will be used solely for transportation projects on a list approved by regional leaders.”

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
Roanoke College	2013	VA residents	33% “favor” a proposal that “[t]he gas tax would be eliminated, but the sales tax would be increased. Vehicle registration fees would also increase. The additional funds from the sales tax would go to transportation and a higher percentage of the existing sales tax revenue would go to transportation as well.”
WSB-TV (Landmark Communications)	2015	GA adults who voted within the last 4 years	32% of respondents said they would support “an increase of 1¢ in the statewide sales tax to fund maintenance of existing roads and bridges.”
USC Sol Price School of Public Policy (M4 Strategies and Benson Strategy Group)	2013	City of Los Angeles CA likely voters	30% of respondents would vote “definitely yes” on Proposition A which “would enact a one-half cent sales tax in order to offset severe and repeated state cuts and provide local funding for: 911 emergency response services; maintaining firefighter, paramedic, and police officer staffing levels; continuing community policing, senior services, after-school gang and drug prevention programs; repairing potholes and sidewalks; and other general municipal services.”
Washington State Transportation Commission (EMC Research)	2012	WA residents	30% of respondents thought that “adding the sales tax to gas purchases” was “definitely” or “probably” a “good way to fund increased transportation investment.
The Washington Post	2013	MD adult residents	27% of respondents would “favor . . . raising Maryland’s overall sales tax from 6 percent to 7 percent, if the money were used for transportation projects such as building roads, traffic management or public transportation.”
Mountain-Plains Consortium (Ozbek, Albeiruti, and Atadero)	2013	CO, ND, SD, UT, and WY residents	24% of South Dakota respondents agreed or strongly agreed with the statement, “I support the collection of additional sales tax on all goods to fund the highway system.” Researchers also surveyed residents of Colorado, North Dakota, Utah and Wyoming. Among all five states, support ranged from 13% to 24%
HNTB Corporation (Kelton Research)	2013	U.S. residents	24% of respondents stated that they would be “willing to spend more money on” a sales tax “if it was dedicated to long term surface transportation improvements in their area.”
Build Our Bridge Now Coalition (Public Opinion Strategies)	2015	Boone, Campbell, and Kenton Counties, KY, registered voters	23% of respondents said they would support a local sales tax increase “rather than having tolls” as a way to pay for a new bridge span for Interstate 75 traffic over the Ohio River.
HNTB Corporation (Kelton Global)	2014	Adults in the greater NYC area	22% of respondents chose sales taxes as their preferred method to raise funds “to go toward improving the transportation network in the tri-state area” from a list of four options that also included public transportation fares, property taxes, and tolls and user fees.
HNTB Corporation (Kelton Research)	2012	U.S. residents	21% of respondents stated that they would be “willing to spend more money on” a sales tax “if it was allocated to long-term interstate improvements in [their] area.”

Table 21, continued

Sponsor (and author of source in this report bibliography, if different)	Survey date	Sampling frame	Findings
HNTB Corporation (Kelton Research)	2011	U.S. residents	18% of respondents would be “willing to spend more money on” sales taxes if the money was allocated to “long-term transportation investments such as expanding highway capacity to reduce congestion or introducing high-speed rail in [their] area.”
Indiana University School of Public and Environmental Affairs (Duncan, et al.)	2013	U.S. adults	18% of respondents said they “agree” or “strongly agree” with the statement, “The gasoline tax should be replaced with a higher general retail sales tax rate.”
Quinnipiac University	2015	NYC registered voters	13% of respondents chose raising the New York City sales tax over two other options – raising the New York state gas tax and adding tolls on bridges into Manhattan – as their preferred way for the city to “get additional money to maintain roads, bridges and mass transit.”
YouGov	2015	Registered YouGov members	6% said sales taxes “should be the main way that governments pay for road repairs and construction.”
HNTB Corporation (Kelton Global)	2015	Adults in the greater NYC area	4% of respondents chose increased sales taxes as their preferred method to fund “maintenance or expansion of service to accommodate increased ridership for the local transportation network” from a list of eight options that included fares, tolls, other taxes, and increased federal and private funding.

ENDNOTES

1. For the results of the first six years of polling in this series, see Asha Weinstein Agrawal and Hilary Nixon, *What Do Americans Think about Federal Transportation Tax Options? Results from a National Survey* (San José, CA: Mineta Transportation Institute, June 2010), http://transweb.sjsu.edu/MTIportal/research/publications/documents/2928_09-18.pdf (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, *What Do Americans Think About Federal Transportation Tax Options? Results from Year 2 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2011), http://transweb.sjsu.edu/PDFs/research/Transportation_taxes_public_opinion_1031.pdf (accessed April 20, 2016); Asha Weinstein Agrawal, Hilary Nixon, and Vinay Murthy, *What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 3 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2012), <http://transweb.sjsu.edu/PDFs/research/1128-american-survey-federal-taxes-public-transit-highways-streets-roads.pdf> (accessed April 20, 2016); and Asha Weinstein Agrawal and Hilary Nixon, *What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 4 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2013), <http://transweb.sjsu.edu/PDFs/research/1228-American-tax-poll-2013-public-transit-highways-streets-roads.pdf> (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, *What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 5 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2014), <http://transweb.sjsu.edu/PDFs/research/1328-road-tax-public-opinion-poll-2014.pdf> (accessed April 20, 2016); Asha Weinstein Agrawal and Hilary Nixon, *What Do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year 6 of a National Survey* (San José, CA: Mineta Transportation Institute, June 2015), <http://transweb.sjsu.edu/PDFs/research/1428-road-tax-public-opinion-poll-2015.pdf> (accessed April 20, 2016).
2. The search terms used included transportation tax, transit tax, gas tax, mileage tax, sales tax, transportation finance, motor fuel fee, road use, road charge, and vehicle miles.
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, “2014 American Community Survey 1-Year Estimates” (no date), <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed April 13, 2016).
5. For more information about the use of p-values in scientific research, see: American Statistical Association, “Statement on Statistical Significant and P-values,” March 7, 2016, <https://www.amstat.org/newsroom/pressreleases/P-ValueStatement.pdf> (accessed May 18, 2016).

-
6. To test whether support levels might be lowest among people with the very lowest incomes, we compared support among households with an annual income of \$25,000 per year or less to support among households with higher income levels, but no clear pattern emerged.
 7. Respondents who said they were registered with any party other than the Republican or Democratic parties. “Others” include members of the American Independent Party.
 8. For the results of the first years of polling in this series, see Agrawal and Nixon (2010), Agrawal and Nixon (2011), Agrawal, Nixon, and Murthy (2012), Agrawal and Nixon (2013), Agrawal and Nixon (2014), and Agrawal and Nixon (2015).
 9. The 2012 survey asked a similar question, but the authors determined from the responses that respondents had misunderstood the question. Therefore, the 2012 results are not presented here for comparison.
 10. Half of respondents were asked the question this way, while the other half were asked the question with the two arguments presented in reverse order: “Now I have a question about whether or not GAS tax money should be spent to pay for public transit. Some people say gas tax money should be used to pay for public transit IN ADDITION to roads and highways, because transit helps reduce traffic congestion and wear-and-tear on the roads. Other people say that money from gas taxes should only be spent on roads and highways, since drivers pay the tax. Would you support or oppose spending SOME gas tax money on public transit?”
 11. For the complete 2010, 2011, 2012, 2013, 2014 and 2015 results, see Agrawal and Nixon (2010), Agrawal and Nixon (2011), Agrawal, Nixon, and Murthy (2012), Agrawal and Nixon (2013), Agrawal and Nixon (2014), and Agrawal and Nixon (2015).
 12. U.S. Census Bureau, “2014 American Community Survey 1-Year Estimates” (no date), downloaded <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. (accessed April 13, 2016).

BIBLIOGRAPHY

- 20/20 Insight Polling. "New Poll Shows Trouble for Transportation Tax in Metro Atlanta." *20/20 Insight Polling Blog*. June 22, 2011. <http://2020insight.blogspot.com/2011/06/new-poll-show-trouble-for.html> (accessed March 5, 2012).
- AAA. "Two-Thirds of Americans Believe the Federal Government Should Increase Transportation Spending." Washington, DC: AAA, June 10, 2014. <http://newsroom.aaa.com/2014/06/two-thirds-americans-believe-federal-government-increase-transportation-spending/> (accessed February 19, 2015).
- AAA Mid-Atlantic. "AAA Mid-Atlantic Poll Reveals Drivers Split on Gas Tax." Press release. Wilmington, DE: AAA Mid-Atlantic, February 18, 2016.
- Abt-SRBI, Inc. "Maryland Politics Poll." *The Washington Post*. January 29, 2012. <http://www.washingtonpost.com/wp-srv/special/local/maryland-politics-poll/> (accessed April 11, 2012).
- . "Poll of Georgia Voters, January 2015." Atlanta, GA: *Atlanta Journal-Constitution*, January 10, 2015. <http://www.myajc.com/news/jan-2015-poll/> (accessed April 16, 2015).
- Agrawal, Asha, Jennifer Dill, and Hilary Nixon. "Green" *Transportation Taxes and Fees: A Survey of Californians*. San José, CA: Mineta Transportation Institute, June 2009. http://transweb.sjsu.edu/MTIportal/research/publications/documents/green_transportation_taxes_fees.pdf (accessed June 11, 2011).
- Agrawal, Asha Weinstein, 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 June 1, 2012).
- . *What Do American 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 February 28, 2012).
- . *What Do Americans Think About Federal Transportation Tax Options? Results from Year 4 of a National Survey*. San José, CA: Mineta Transportation Institute, June 2013. <http://transweb.sjsu.edu/PDFs/research/1228-American-tax-poll-2013-public-transit-highways-streets-roads.pdf> (accessed June 2, 2014).
- . *What do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Five of a National Survey*. San José, CA: Mineta Transportation Institute, June 2014. <http://transweb.sjsu.edu/PDFs/research/1328-road-tax-public-opinion-poll-2014.pdf> (accessed May 5, 2015).

-
- . *What do Americans Think About Federal Tax Options to Support Public Transit, Highways, and Local Streets and Roads? Results from Year Six of a National Survey*. San José, CA: Mineta Transportation Institute, June 2015. <http://transweb.sjsu.edu/PDFs/research/1428-road-tax-public-opinion-poll-2015.pdf> (accessed April 12, 2016).
- Agrawal, Asha, Hilary Nixon, and Vinay Murthy. *What Do American Think About Federal Transportation Tax Options? Results from Year 3 of a National Survey*. San José, CA: Mineta Transportation Institute, June 2012. <http://transweb.sjsu.edu/PDFs/research/1128-american-survey-federal-taxes-public-transit-highways-streets-roads.pdf> (accessed May 21, 2013).
- Associated Press-GfK Poll. “The AP-GfK Poll, July 2014.” Washington, D.C.: Associated Press, August 5, 2014. <http://ap-gfkipoll.com/main/wp-content/uploads/2014/08/AP-GfK-July-2014-Poll-Topline-FINAL-Transportation.pdf> (accessed March 11, 2015).
- American Statistical Association. “Statement on Statistical Significant and P-Values.” March 7, 2016, <https://www.amstat.org/newsroom/pressreleases/P-ValueStatement.pdf> (accessed May 18, 2016).
- Baldassare, Mark. *Statewide Survey: Special Survey of Los Angeles*. San Francisco, CA: Public Policy Institute of California, 2005.
- Bernick, Bob. “Poll: Idaho Residents Want More Funding for Roads, Divided on How to Pay For It.” *Idaho Politics Weekly*, January 12, 2015. <http://idahopoliticsweekly.com/politics/30-poll-idaho-residents-want-more-funding-for-roads-divided-on-how-to-pay-for-it> (accessed March 9, 2015).
- . “Poll: Support for Sales Tax Hike Is Slipping Slightly.” *Utahpolicy.com*, September 9, 2015. <http://utahpolicy.com/index.php/features/today-at-utah-policy/6918-poll-support-for-sales-tax-hike-is-slipping-slightly> (accessed May 2, 2016).
- . “Poll: Utahns Favor Sales Tax Hike to Pay for Transportation.” *UtahPolicy*, April 22, 2015. <http://utahpolicy.com/index.php/features/today-at-utah-policy/5450-poll-utahns-favor-sales-tax-hike-to-pay-for-transportation> (accessed April 23, 2015).
- Bittle, Scott, Jonathan Rochkind, and Amber Ott. *The Energy Learning Curve*. Public Agenda, January 2009. <http://www.publicagenda.org/pages/energy-learning-curve> (accessed June 1, 2010).
- Brawner, Steve. “Poll: 64% Oppose Raising Gas Tax for Arkansas Highway Needs.” *Talk Business & Politics/The City Wire*, October 5, 2015. <http://talkbusiness.net/2015/10/afp-poll-64-oppose-raising-gas-tax-for-arkansas-highway-needs/> (accessed March 21, 2016).

- Brock, Roby. "Differing Results for Three Major Ballot Issues." *TalkBusiness.Net*. April 2, 2012. <http://talkbusiness.net/2012/04/differing-results-for-three-major-ballot-issues/> (accessed April 12, 2012).
- Brown, Alyssa. "In U.S., Most Oppose State Gas Tax Hike to Fund Repairs." Gallup, April 22, 2013. <http://www.gallup.com/poll/161990/oppose-state-gas-tax-hike-fund-repairs.aspx> (accessed April 30, 2013).
- Brown, Peter. "Virginia Voters Satisfied with State, But Not U.S., Quinnipiac University Poll Finds; Voters Support Nuclear Plants, Oppose I-95 Tolls." Quinnipiac University Polling Institute. October 11, 2011. <http://www.quinnipiac.edu/images/polling/va/va10122011.doc> (accessed March 5, 2012).
- Bursk, Steve. "Poll: Americans Worried but Reject Higher Taxes to Fix Bridges." CNN. August 10, 2007. <http://www.cnn.com/2007/POLITICS/08/09/bridges.poll/index.html> (accessed May 28, 2010).
- BW Research Partnership. "MTC – RTP 2035 – Visioning Resident Survey Toplines." October 2007. http://www.mtc.ca.gov/planning/2035_plan/poll.htm (accessed July 3, 2008).
- CBS News/New York Times. "Barack Obama/George Bush Presidency/Finances." January 2009. USCBSNYT2009-01A. <http://webapps.ropercenter.uconn.edu/CFIDE/cf/action/catalog/> (accessed May 27, 2010).
- Center for the Study of Los Angeles. "LA Riots Anniversary Study." Los Angeles: Loyola Marymount University, April 18, 2012. http://www.lmu.edu/Assets/Colleges+Schools/BCLA/Center+for+the+Study+of+Los+Angeles/measure_r.pdf (accessed April 19, 2012).
- City of Portland, Oregon, Office of Public Safety. "News Release: Momentum Builds for Portland Gas Tax to Fund Street Repair and Traffic Safety." October 5, 2015. <https://www.portlandoregon.gov/transportation/article/558681> (accessed April 9, 2016).
- Civitas Institute. "Decision Maker Poll." Raleigh, NC: Civitas Institute, January 2009. http://www.nccivitas.org/files/January_percent202009_percent20Poll.pdf (accessed April 27, 2010).
- Coker, Brad. "Mason-Dixon Oregon Poll, June 2015: Oregon Voters Oppose Mileage Tax." Mason-Dixon Polling & Research, June 2015. <http://mason-dixon.com/wp-content/uploads/2015/06/OR-May-2015-Poll-Part-1-8ef.pdf> (accessed May 13, 2016).
- Collective Strength. "Tulsa Transportation Research Findings." Tulsa, OK: Indian Nation Council of Governments, January 2010.

Denno Research. "Survey of Michigan Statewide General Election Voters." East Lansing, MI: Vanguard Public Affairs, February 15, 2015.

DHM Research. "Portland Primary Election Survey Results," May 10, 2016. <http://dhmresearch.com/wp-content/uploads/2016/05/OPB-Portland-Primary-Election-Survey-Memo-May-2016.pdf> (accessed May 13, 2016).

Duncan, Denvil, Venkata Nadella, Ashley Bowers, Stacey Giroux, and John D. Graham. "Bumpy Designs: Impact of Privacy and Technology Costs on Support for Road Mileage User Fees." Social Science Research Network, January 17, 2014. <http://ssrn.com/abstract=2391357> (accessed March 14, 2015).

———. "The Road Mileage User Fee: Level, Intensity, and Predictors of Public Support." Social Science Research Network, April 27, 2014. <http://ssrn.com/abstract=2439335> (accessed March 14, 2015).

Eagleton Institute of Politics, Rutgers University. "Gas Tax Hike a Nonstarter for New Jerseyans; Proposed Estate Tax Trade-off Fails to Boost Support." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, October 20, 2015. <http://eagletonpoll.rutgers.edu/rutgers-eagleton-nj-gas-tax-estate-tax-oct2015/> (accessed March 24, 2016).

———. "Gas Tax Hike Still Opposed by New Jerseyans." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, February 20, 2015. http://eagletonpoll.rutgers.edu/new-wp/wp-content/uploads/2015/02/release_02-20-15.pdf (accessed March 15, 2015).

———. "New Jersey Gas Tax Hike: Significant Opposition Persists." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, December 16, 2014. http://eagletonpoll.rutgers.edu/new-wp/wp-content/uploads/2014/12/release_12-16-14.pdf (accessed March 13, 2015).

———. "Time For Gas Tax Hike in New Jersey? Not for Most Residents: Rutgers-Eagleton Poll." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, October 10, 2014. <http://eagletonpoll.rutgers.edu/rep-gas-tax-oct2014> (accessed May 18, 2016).

———. "New Jerseyans Continue to Oppose Gas Tax Hike; Possible Estate Tax Trade-Off Does Little to Boost Support." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, March 17, 2016. <http://eagletonpoll.rutgers.edu/rutgers-eagleton-nj-gas-tax-mar2016/> (accessed April 6, 2016).

———. "New Jerseyans Express Limited Support for Gas Tax Hike: Support Varies Depending on How Tax Is Explained." New Brunswick, NJ: Rutgers Eagleton Institute of Politics, March 10, 2014. <http://www.rci.rutgers.edu/~redlawsk/EP/Tables2014/NJGasTaxMarch2014.pdf> (accessed June 2, 2014).

-
- . “Strong Opposition to Higher Gas Tax Decreases as New Jerseyans Learn Why More Revenue is Needed.” New Brunswick, NJ: Rutgers Eagleton Institute of Politics, April 17, 2014. <http://www.rci.rutgers.edu/~redlawsk/EP/Tables2014/NJGasTaxApril2014.pdf> (accessed June 2, 2014).
- Ellen, Pam Scholder, David L. Sjoquist, and Rayna Stoycheva. *Measuring Preferences for and Responses to Alternative Revenue Sources for Transportation*. Atlanta, Georgia: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University, June 2012. [http://frc.gsu.edu/sites/default/files/documents/Rpt_244FIN\(1\).pdf](http://frc.gsu.edu/sites/default/files/documents/Rpt_244FIN(1).pdf) (accessed March 14, 2013).
- Elway Research, Inc. “Tough Road Ahead for Transportation Package.” *The Elway Poll*, March 4, 2013. <http://seattletimes.wpengine.netdna-cdn.com/politicsnorthwest/files/2013/03/Elway-Poll-030413-Transportation.pdf> (accessed March 14, 2013).
- EMC Research. “Contra Costa County Voter Research: CCTA Board Meeting – 2/19/14.” Walnut Creek, CA: Contra Costa Transportation Authority, February 19, 2014. http://64.166.146.155/docs/2014/BOS/20140812_465/18462_Exhibit%203%20CCTA%20Report%20-%20Board%20presentation%202-19-14.pdf (accessed April 16, 2015).
- . “EMC #11-4407: Telephone Survey of Alameda County Voters Conducted for Alameda County Transportation Commission (ACTC).” Oakland, CA: EMC Research, March 14, 2011.
- . “EMC #11-4453: Telephone survey of Alameda County voters conducted for Alameda County Transportation Commission (ACTC).” Oakland, CA: EMC Research, October 9, 2011.
- . *Statewide Transportation Survey: Report on Findings*. Olympia, WA: Washington State Transportation Commission. January 2012. http://www.wstc.wa.gov/StudiesSurveys/StatewideTransportationSurvey/documents/2012_0209_WSTCSurveyReport.pdf (accessed February 24, 2012).
- . “Telephone Survey of Bay Area Likely November 2012 Voters.” Oakland, CA: Metropolitan Transportation Commission, April 11, 2012.
- . “The 2015 Bay Area Council Poll; Report of Selected Results: Transportation and Top Issues.” 2015.
- EPIC-MRA. “EPIC-MRA Statewide Poll, Frequency of Survey Responses - May 2014.” Lansing, MI: EPIC-MRA, May 28, 2014. http://www.epicmra.com/press/Stwd_Survey_May2014_Media_Freq.pdf (accessed March 31, 2015).
- Evans, Alex. “Public Opinion Research Results Regarding a Supplemental Transportation Sales Tax Measure” (presentation to the Sacramento Transportation Authority Governing Board Meeting). April 14, 2016. <http://www.sacta.org/pdf/agendas/2016/041416/041416-AGP.pdf> (accessed April 28, 2016).
-

- Fabrizio McLaughlin & Associates. "American Highway Users Alliance National Survey of Likely Voters." Washington, DC: American Highway Users Alliance, April 2008. <http://www.highways.org/pdfs/survey.pdf> (accessed June 1, 2010).
- Fairbank, Maslin, Maullin and Associates. "Los Angeles County Transportation Ballot Measure Survey 2007." November 2007.
- Fairbank, Maslin, Maullin, Metz and Associates. "Summary of Findings From the July 2014 Ballot Measures Public Opinion Survey." San Jose, CA: City of San Jose, August 5, 2014 [City Council agenda item 3.3]. <http://www.sanjoseca.gov/DocumentCenter/View/33388> (accessed May 1, 2015).
- Fairleigh Dickinson University's PublicMind. "Pumping the Taxpayers for More Money: New Jerseyans Tell Legislators to Take a Hike." Madison, N.J.: Fairleigh Dickinson University, January 19, 2015. <http://publicmind.fdu.edu/2015/gastax/> (accessed March 10, 2015).
- Fallon Research. "2010 Triangle Transportation Survey (Durham, Orange, and Wake Counties, North Carolina)." Regional Transportation Alliance. March 23, 2010. <http://www.letsgetmoving.org/images/uploads/RTAtransitcompositeresults-Mrpercent2710.pdf> (accessed June 1, 2010).
- . "2012 Triangle Transit Survey: Orange County, North Carolina." Regional Transportation Alliance. May 15, 2012. <http://www.letsgetmoving.org/images/uploads/pages/RTAtransitOrange-May'12.pdf> (accessed May 25, 2012).
- . "2012 Triangle Transportation Survey: Wake County, NC." Regional Transportation Alliance. May 15, 2012. <http://www.letsgetmoving.org/images/uploads/pages/RTAtransitWake-May'12.pdf> (accessed May 25, 2012).
- Field Poll. "While Voters Strongly Believe the State Should Be Spending More on Road Maintenance, No Clear Consensus on How to Pay for It." San Francisco: Field Research Corporation, February 27, 2015. <http://www.field.com/fieldpollonline/subscribers/RIs2502.pdf> (accessed February 27, 2015).
- File, Thom, and Sarah Crissey. "Voting and Registration in the Election of November 2008: Population Characteristics." Washington, DC: U.S. Census Bureau, Economic Statistics Bureau, May 2010. <http://www.census.gov/prod/2010pubs/p20-562.pdf> (accessed June 10, 2010).
- Fisher, Ronald C., and Robert W. Wassmer. "Does Perception of Gasoline Taxes Paid Influence Support for a State Gas Tax Increase for Highway Improvements? Evidence from California and Michigan." August 2015. http://www.csus.edu/PPA/about/in_the_community/2015/Fisher%20and%20Wassmer%20Gas%20Tax%20Paper%20for%20Murphy%20Inst.pdf (accessed March 22, 2016).
- FrederickPolls. "Post-Election Survey in Pinellas County." Tampa, FL: Tampa Bay Partnership, November 2014.

-
- Gene Bregman and Associates. "Santa Cruz County Unincorporated Area Study 2014." Santa Cruz, CA: Santa Cruz County Department of Public Works., September 5, 2014.
- Godbe Research. "2014 Voter Survey." San Rafael, CA: Transportation Authority of Marin, July 2014. <http://www.tam.ca.gov/Modules/ShowDocument.aspx?documentid=7554> (accessed April 16, 2015).
- Gonzales Research & Marketing Strategies, Inc. *Maryland Poll*. Gonzalez Research & Marketing Strategies, Inc., January 2013. <http://www.gonzalesresearch.com/polls/Maryland%20Poll%20January%202013.pdf> (accessed June 6, 2013).
- . *Maryland Poll*. Gonzalez Research & Marketing Strategies, Inc., October 2013. <http://www.gonzalesresearch.com/polls/Maryland%20Poll%20October%202013.pdf> (accessed June 2, 2014).
- . *[Poll Conducted for] Mid-Atlantic Petroleum Distributors Association*. January 2012. http://mapda.com/pdf/Report_-_MAPDA_January_2012.pdf (accessed June 6, 2013).
- Green, Andrew D., Max Neiman, Shel Bockman, and Barbara Sirotnik. "Public Support for Transportation Sales Taxes in California: A Two County Assessment." *California Journal of Politics and Policy* 5, no. 4 (2013): 645-670.
- Gregg, Katherine. "Poll: Truck Toll Favored over Gas-Tax Hike to Fund R.I. Road-Bridge Repairs." *Providence Journal*, October 6, 2015. <http://www.providencejournal.com/article/20151006/NEWS/151009606> (accessed March 21, 2016).
- Hart Research Associates. "NAR/SGA Survey: Final." National Association of Realtors, January 2009. <http://www.realtor.org/wps/wcm/connect/a974a4804d3d185ba091bea1d5758593/Topline+Survey+Results+Jan+2009.doc?MOD=AJPERES&CACHEID=a974a4804d3d185ba091bea1d5758593> (accessed April 27, 2010).
- Hart Research Associates/Public Opinion Strategies. "Study #10177: The Rockefeller Foundation Transportation Survey: January/February 2011." New York: The Rockefeller Foundation, February 2011. <http://www.rockefellerfoundation.org/uploads/files/8095e806-a876-41a6-9f35-7485287cf0d2.pdf> (accessed May 31, 2011).
- High Point University Survey Research Center. "News and Record/High Point University Poll Memo Release." February 9, 2016. <http://www.highpoint.edu/src/files/2016/02/43memoB.pdf> (accessed May 2, 2016).
- HNTB Corporation. "America THINKS Surveys." http://www.hntb.com/HNTB/media/HNTBMediaLibrary/AThinks_Compilation_2015.pdf (accessed March 26, 2016).

-
- Hoover Institution. "Hoover Institution Golden State Poll; Fieldwork by YouGov; November 30 - December 13, 2015." December 2015. http://www.hoover.org/sites/default/files/hoover_gsp_january_2016_release_public_results_final_011216.pdf (accessed May 19, 2016).
- Johnson, Ryan. "Senator Doug Libla's Voters Oppose His Gas Tax Hike." Missouri Alliance for Freedom, January 14, 2016. <http://www.missourifreedom.com/news/senator-doug-libla%E2%80%99s-voters-oppose-his-gas-tax-hike> (accessed April 19, 2016).
- Judy Ford Wason Center for Public Policy. "Virginia Survey: 2013 General Assembly Session, Strong Support for McDonnell's Transportation Plan." Newport News, VA: Christopher Newport University, January 24, 2013. http://www.cnu.edu/cpp/pdf/Jan_24_General_Assembly_Report.pdf (accessed March 15, 2013).
- . "Virginians Think McDonnell Prison Sentence Fair; Back Gift Ban, Redistricting Reform, Reporting Campus Rape to Police, Looser Marijuana Laws." Newport News, VA: Christopher Newport University, January 27, 2015. <http://cnu.edu/cpp/pdf/jan%2027%202015%20report.pdf> (accessed March 15, 2015).
- Kelton Global. "America THINKS Mobility Survey - NewsWorthy Analysis; Prepared for HNTB." Kansas City, MO: HNTB Corporation, March 2016.
- Kelton Research. "America THINKS 2012 Highway Survey." HNTB, 2012. http://news.hntb.com/images/bulk_media_upload/docs/AThinks_Highway_factsheet_0612.pdf (accessed April 11, 2013).
- . "America THINKS 2013: Use of Tolls for Transportation Funding." Kansas City, MO: HNTB Corporation, February 2013.
- . "DOT and Tolling Survey 1: Breakout Report." Kansas City, MO: HNTB, April 2012.
- . "HNTB Q1 Survey." Kansas City, MO: HNTB Corporation, March 2011.
- . "HNTB's Tri-State Transportation Survey 2015: NewsWorthy Analysis." Kansas City, MO: HNTB Corporation, January 2015.
- . "Public Transit Survey: Topline Report." Kansas City, MO: HNTB Corporation, February 2011.
- . "Surface Transportation Survey: America THINKS 2009 Infrastructure Survey." Kansas City, MO: HNTB Corporation, August 2009.
- . "Sustainability Survey: America THINKS 2010 Sustainability Survey." Kansas City, MO: HNTB Corporation, April 2010.

-
- . “Tri-State Transportation Survey: NewsWorthy Analysis.” Kansas City, MO: HNTB Corporation, May 2014.
- Krosnick, Jon A. “ABC News/Washington Post/Stanford University Poll.” Stanford, CA: Woods Institute for the Environment at Stanford University, April 20, 2007. http://woods.stanford.edu/docs/surveys/GW_2007_ABC_News_Release.pdf (accessed April 27, 2010).
- Landmark Communications Inc. “Statewide Poll of 800 Georgia Voters.” Alpharetta, GA: Landmark Communications Inc., January 20, 2015. <http://landmarkcommunications.net/wp-content/uploads/2015/01/Statewide-Jan-20th-Transportation-Funding-Poll-.pdf> (accessed March 10, 2015).
- Langer, Gary. “A Look Under the Hood of a Nation on Wheels: ABC News/Time Magazine/Washington Post Poll.” ABC News/Time Magazine /Washington Post, February 13, 2005.
- Leiserowitz, Anthony, et al. *Public Support for Climate & Energy Policies in April 2013*. New Haven, CT: Yale Project on Climate Change Communication, 2013. <http://environment.yale.edu/climate-communication/files/Climate-Policy-Support-April-2013.pdf> (accessed May 27, 2013).
- Loras [College] Public Opinion Survey Center. “Loras College Statewide Survey.” Dubuque: Loras College, January 2015.
- M4 Strategies and Benson Strategy Group. *USC Sol Price School of Public Policy/ LA Times Los Angeles City Primary Poll*. February 2013. http://www.mfour.com/docs/2/poll/USC%20Sol%20Price%20School%20of%20Public%20Policy_LA%20Times%20Los%20Angeles%20City%20Primary%20Poll_Topline_PHONE_FINAL%20ms.pdf (accessed June 6, 2013).
- Maclay, Kathleen. “IGS Poll: Californians Oppose Higher Gas Taxes, Registration Fees.” September 1, 2015. <https://igs.berkeley.edu/news/igs-poll-californians-oppose-higher-gas-taxes-registration-fees> (accessed March 22, 2016).
- Marquette Law School. “Marquette Law School Poll – February 18-21, 2016; Results for Registered Voters.” No date. <https://law.marquette.edu/poll/wp-content/uploads/2016/02/MLSP33Toplines.pdf> (accessed May 30, 2016).
- . “Marquette Law School Poll Toplines, March 11-14, 2013.” Milwaukee, WI: Marquette Law School, 2013. <https://law.marquette.edu/poll/wp-content/uploads/2013/03/MLSP15CompleteToplines.pdf> (accessed March 22, 2013).
- . “Marquette Law School Poll, May 15-18 Topline Results.” Milwaukee, WI: Marquette Law School, May 2014. <http://law.marquette.edu/poll/wp-content/uploads/2014/07/MLSP22Toplines.pdf> (accessed February 20, 2015).
-

Mason-Dixon Polling & Research, Inc. "Atlanta Metro Transit Poll." Atlanta, GA: *Atlanta Journal-Constitution* and Channel 2 Action News, September 26, 2011.

———. "Star Tribune Minnesota Poll, Conducted by Mason-Dixon." March 2015.

MassINC Polling Group. "Massachusetts Statewide Poll of 1,506 Registered Voters Field Dates: February 4-11, 2013." No date. <http://031d482.netsolhost.com/WordPress/wp-content/uploads/2013/03/Crosstabs-02-13-Transportation-Poll.pdf> (accessed May 18, 2016).

Metropolitan Transportation Commission. "MTC Survey of Bay Area Voters; Marginals; Survey Version 6.2." 2016.

Metropolitan Washington Council of Governments. *Keypad Polling Results -- Cumulative Total -- Final*. Washington, D.C.: Metropolitan Washington Council of Governments, no date. http://www.mwcog.org/transportation/activities/congestionpricing/materials/Appendices/KeypadVoting_PricingForums2011-2012.pdf (accessed April 14, 2013).

Morin, Richard, and Steven Ginsberg. "Painful Commutes Don't Stop Drivers." *The Washington Post*, February 13, 2005. <http://www.washingtonpost.com/wp-dyn/articles/A19884-2005Feb12.html> (accessed June 13, 2010).

Monmouth University Poll. "New Jersey Divided on Gas Tax Hike." West Long Branch, NJ: Monmouth University, February 5, 2015. <http://www.monmouth.edu/assets/0/32212254770/32212254991/32212254992/32212254994/32212254995/30064771087/821b5d62-0eb5-4c10-a413-c35fd96223d2.pdf> (accessed March 31, 2015).

Moore Information. "Montana Chamber Power-Base Voter Survey Results: Spring 2016." March 7, 2016. <https://assets-production-webvanta-com.s3-us-west-2.amazonaws.com/000000/41/82/original/Advocacy/Spring%202016%20MT%20Chamber%20Power-Base%20Executive%20Summary%20FINAL.pdf> (accessed April 9, 2016).

Morning Consult. "Morning Consult: National Tracking Poll #150608, June 26-29, 2015; Crosstabulation Results." 2015. <http://morningconsult.com/wp-content/uploads/2015/06/150608-MC-National-Topical-Poll-CROSSTABS.pdf> (accessed May 18, 2016).

Musti, Sashank, Katherine Kortum, and Kara M. Kockelman. "Household Energy Use and Travel: Opportunities for Behavioral Change." *Transportation Research Part D: Transport and Environment* 16, no. 1 (January 2011): 49 – 56.

National Research Center, Inc. "The National Citizen Survey: Pasco County, FL, Community Liveability Report." Dade City, FL: Pasco County, 2014. <http://www.pascocountyfl.net/ArchiveCenter/ViewFile/Item/2133> (accessed April 30, 2015).

- New York Times/CBS News. "New York Times/CBS News Poll, February 22 – 26, 2006." *The New York Times*. February 28, 2006. http://www.nytimes.com/packages/pdf/national/20060228_poll_results.pdf (accessed April 27, 2010).
- Noland, Robert B., Marc D. Weiner, and Michael R. Greenberg. *Funding Resilient Infrastructure in New Jersey: Attitudes Following a Natural Disaster*. Mineta National Transit Research Consortium, 2016. <http://transweb.sjsu.edu/PDFs/research/1243-infrastructure-funding-attitudes-after-natural-disaster-new-jersey.pdf> (accessed April 1, 2016).
- Old Dominion University Social Science Research Center. "How is Life in the Hampton Roads? 2012 Report for the 3rd Annual Life in Hampton Roads Survey." Norfolk, VA: Social Science Research Center, Old Dominion University, no date. http://images.bimedia.net/documents/odu_lifestyle_study.pdf (accessed March 14, 2013).
- Oregon Department of Transportation. *FY 2009 Oregon Transportation Needs and Issues Survey*. Salem, OR: Oregon Department of Transportation, December 2009 [report authors Amanda Joy Pietz and Myra Sperley]. http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2009/FY_2009_Oregon_Transportation_Needs_and_Issues_Survey.pdf (accessed March 9, 2015).
- . *FY 2011 Oregon Transportation Needs and Issues Survey*. Salem, OR: Oregon Department of Transportation, January 2011 [report author Myra Sperley]. http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2011/TNIS2011final.pdf (accessed March 4, 2015).
- . *FY 2013 Oregon Transportation Needs and Issues Survey*. Salem, OR: Oregon Department of Transportation, July 2013 [report author Myra Sperley]. http://www.oregon.gov/ODOT/TD/TP_RES/docs/Reports/2013/TNIS2013.pdf (accessed March 3, 2015).
- Ozbek, Mehmet E., Nasser Albeiruti and Rebecca Atadero. *Understanding Public Perceptions of Different Revenue Generation Systems for Highway Construction and Maintenance*. Paper presented at Transportation Research Board 94th Annual Meeting, Washington, DC, January 11-15, 2015.
- Parry, Janine A. *The Arkansas Poll, 2012 Summary Report*. Fayetteville: University of Arkansas, 2012. http://www.uark.edu/depts/plscinfo/partners/arkpoll/12/2012_Arkansas_Poll_Summary_Report.pdf (accessed April 14, 2013).
- Pew Research Center for the People and the Press. "Consensus in Principle, Resistance in Practice: Deficit Solutions Meet with Public Skepticism." Washington, DC: Pew Research Center for the People and the Press, December 9, 2010. <http://pewresearch.org/pubs/1824/poll-federal-budget-deficit-reductions-tax-spend-specifics-opposed-obama-trust> (accessed May 31, 2011).

-
- . “Public Sends Mixed Signals on Energy Policy.” Washington, DC: Pew Research Center for the People and the Press, March 6, 2008. <http://people-press.org/report/400/public-sends-mixed-signals-on-energy-policy> (accessed May 18, 2010).
- Princeton Survey Research Associates International. “Tennessee Poll Spring 2015; Topline results” (for Vanderbilt University). May 11, 2015. <http://www.vanderbilt.edu/csdi/VanderbiltSpring2015ToplineResultsfinal.pdf> (accessed May 19, 2016).
- Public Mind, Fairleigh Dickinson University. “Disapproval for Middle Class Tax Hikes.” Hackensack, NJ: Fairleigh Dickinson University, March 17, 2014. <http://publicmind.fdu.edu/2014/taxattack/final.pdf> (accessed June 2, 2014).
- Public Opinion Strategies. “Virginia Statewide: Key Findings from a Statewide Survey of 500 Likely Voters in Virginia, with 125 Cell Phone Interviews, Conducted January 19-21, 2012.” Richmond: Virginia Transportation Construction Alliance, January 24, 2013. http://www.vtca.org/images/uploads/VTCA_Press_Release_1-24-13.pdf (accessed June 6, 2013).
- . “New Poll Shows Public Recognizes Trucking’s Commitment to Safety.” San Diego: National Trucking Associations, October 6, 2014. <http://www.trucking.org/article.aspx?uid=8191f784-76ae-4b64-b426-f1a616a27243> (accessed March 11, 2015).
- . “Northern Kentucky Survey.” Covington, KY: *River City News*, February 25, 2015. <http://www.scribd.com/doc/256925891/Brent-Spence-Bridge-Toll-Poll> (accessed March 17, 2015).
- . “National Trucking Survey: Key Findings from a Surveys [sic] of 800 Registered Voters Conducted September 20-24, 2014 and August 30-September 1, 2015.” September 2015. [http://www.trucking.org/ATA%20Docs/News%20and%20Information/Testimony%20and%20Comments/10%2016%2015%20-%2015361%20ATA%20Board%20Presentation%20Final%20\(2\).pdf](http://www.trucking.org/ATA%20Docs/News%20and%20Information/Testimony%20and%20Comments/10%2016%2015%20-%2015361%20ATA%20Board%20Presentation%20Final%20(2).pdf) (accessed March 16, 2016).
- Pugmire, Tim. “MPR Poll on Gas Tax: Five Cents ... Maybe.” Saint Paul, MN: Minnesota Public Radio News, May 11, 2007. <http://minnesota.publicradio.org/display/web/2007/05/11/gastax/> (accessed June 1, 2010).
- Pulse Opinion Research, LLC. “Toplines - Mileage Tax - March 24-25, 2012.” *Rasmussen Reports*. March 27, 2012. http://www.rasmussenreports.com/platinum/econ_crosstabs/march_2012/toplines/toplines_mileage_tax_march_24_25_201 (accessed April 11, 2012).
- Quinnipiac University Polling Institute. “Bridgagate Takes One-Year Toll On New Jersey Gov, Quinnipiac University Poll Finds; 92 Percent Say Rail Tunnel Repair Is Important.” Hamden, CT: Quinnipiac University, January 21, 2015. http://www.quinnipiac.edu/images/polling/nj/nj01212015_Nk88mxjg.pdf (accessed March 19, 2015).
-

-
- . “Connecticut Gov Hits New High in Midst of Gun Debate, Quinnipiac University Poll Finds; Voters Back Tolls to Repair Roads, Reduce Gas Tax.” Hamden, CT: Quinnipiac University, 2013. <http://www.quinnipiac.edu/images/polling/ct/ct03122013.pdf/> (accessed June 6, 2013).
- . “Connecticut Gov. Rell’s Approval Slips, Quinnipiac University Poll Finds; Voters Say No to Gas Tax, Yes to Beer, Cigarette Tax.” Hamden, CT: Quinnipiac University, February 18, 2005. <http://www.quinnipiac.edu/x1296.xml?ReleaseID=651> (accessed April 27, 2010).
- . “New Jersey Voters Back Wage Freeze, Nix Gas Tax Hike, Quinnipiac University Poll Finds; Voters Split on Recreational Marijuana.” Hamden, CT: Quinnipiac University, April 10, 2014. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/new-jersey/release-detail?ReleaseID=2031> (accessed June 2, 2014).
- . “New Jersey Voters Go 50 – 47 Percent For Gas Tax Hike, Quinnipiac University Poll Finds; Support Almost 2-1 For Millionaires’ Tax To Pay Pensions.” Hamden, CT: Quinnipiac University, April 21, 2015. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/new-jersey/release-detail?ReleaseID=2220> (accessed April 22, 2015).
- . “New Jersey Voters Say 3 – 1 Freeze State Worker Wages, Quinnipiac University Poll Finds; Voters Back Layoffs Almost 2 – 1.” Hamden, CT: Quinnipiac University, November 24, 2009. <http://www.quinnipiac.edu/x1299.xml?ReleaseID=1399> (accessed April 27, 2010).
- . “New Jersey Voters Want No Pain In Pension Fix, Quinnipiac University Poll Finds; Support For Bail Reform Is 4-1.” Hamden, CT: Quinnipiac University, August 11, 2014. http://www.quinnipiac.edu/images/polling/nj/nj08112014_nq93cfa.pdf (accessed March 19, 2015).
- . “New Jersey Voters Want Rail Tunnel, But No Gas Tax Hike, Quinnipiac University Poll Finds; Christie Approval Rating Stuck In Traffic.” Hamden, CT: Quinnipiac University, December 10, 2014. http://www.quinnipiac.edu/images/polling/nj/nj12102014_N5ghq49.pdf (accessed March 9, 2015).
- . “New York City Voters Oppose East River Bridge Tolls, Quinnipiac University Poll Finds; But Cuts In Other Tolls Help Win Some Support.” Hamden, CT: Quinnipiac University, June 16, 2014. http://www.quinnipiac.edu/images/polling/nyc/nyc06162014_y193vs.pdf (accessed February 23, 2015).
- . “No Honeymoon For Connecticut’s New Governor, Quinnipiac University Poll Finds; Voters Say Budget Plan Taxes Too Much, Unfair to Them.” Hamden, CT: Quinnipiac University, March 9, 2011. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/connecticut/release-detail?ReleaseID=1565> (accessed June 2, 2014).
-

-
- . “Opposition to New York Fat Tax Gets Fatter, Quinnipiac University Poll Finds; Statewide Opposition to East River Tolls is Narrow.” Hamden, CT: Quinnipiac University, January 15, 2009. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/new-york-state/release-detail?ReleaseID=1247> (accessed June 2, 2014).
- . “Support for New Bridge Toll Plan Nears 50 Percent, Quinnipiac University New York City Poll Finds; Voters Back Vets Preference, And Dimming Skyline.” Hamden, CT: Quinnipiac University, May 14, 2015. http://www.quinnipiac.edu/images/polling/nyc/nyc05142015_nj47ghp.pdf (accessed May 15, 2015).
- . “Support for New Jersey Gas Tax Hike Drops, Quinnipiac University Poll Finds.” November 11, 2015. <http://www.quinnipiac.edu/news-and-events/quinnipiac-university-poll/new-jersey/release-detail?ReleaseID=2302> (accessed April 1, 2016).
- . “Women, Young Voters Like Virginia’s Republican Gov, Quinnipiac University Poll Finds; Year-Round School is a Bad Idea, Voters Say.” Hamden, CT: Quinnipiac University, November 15, 2012. <http://www.quinnipiac.edu/institutes-centers/polling-institute/virginia/release-detail/?ReleaseID=1814> (accessed June 6, 2013).
- Rasmussen Reports. “73 percent Steer Clear of Mileage Tax.” *Rasmussen Reports*. February 23, 2009. http://www.rasmussenreports.com/public_content/business/taxes/february_2009/73_steer_clear_of_mileage_tax (accessed April 27, 2010).
- . “81 percent Oppose Gas Tax Hike to Encourage Sales of More Efficient Cars.” *Rasmussen Reports*. May 11, 2009. http://www.rasmussenreports.com/public_content/business/gas_oil/may_2009/81_oppose_gas_tax_hike_to_encourage_sales_of_more_efficient_cars (accessed April 27, 2010).
- . “Just 15 percent Favor Higher Gas Tax to Fund More Transportation Projects.” *Rasmussen Reports*. December 7, 2009. http://www.rasmussenreports.com/public_content/business/taxes/december_2009/just_15_favor_higher_gas_tax_to_fund_more_transportation_projects (accessed April 27, 2010).
- Reason Foundation. “Reason-RUPE Public Opinion Survey: Winter 2011 Topline Results.” No date. http://reason.org/files/reason_rupe_transportation_poll.pdf (accessed June 6, 2013).
- . “August 2014 Topline Results.” Los Angeles: Reason Foundation, August 19, 2014. <http://reason.com/assets/db/1410370199707.pdf> (accessed March 13, 2015).
- Roanoke College. “Roanoke College Poll, 2013 General Assembly, January 24, 2013.” Salem, VA: Roanoke College, 2013. <http://roanoke.edu/Documents/polls/Jan%202013%20Qs%20Part%201.pdf> (accessed June 6, 2013).
-

- SEA Polling & Strategic Design. "Hillsborough County Transit Toplines (March 28-31, 2016)" (poll conducted for Greater Tampa Chamber of Commerce). No date.
- Selzer & Company. "The Iowa Poll." *DesMoinesRegister.com*, February 15, 2013. <http://www.desmoinesregister.com/article/20130215/NEWS/302150077/iowa-Poll-63-oppose-raising-state-gas-tax> (accessed June 6, 2013).
- . "The Iowa Poll: Study #2040." Des Moines, IA: *Des Moines Register*, February 12 – 15, 2012.
- . "Iowa Poll: Iowans Sharply Split on 10-Cent Gas Tax Hike." Des Moines, IA: *Des Moines Register*, February 22, 2015. <http://www.desmoinesregister.com/story/news/politics/iowa-poll/2015/02/22/iowa-poll-gas-tax-10-cent-tax-hike-vote/23814689/> (accessed March 17, 2015).
- Simek, Chris, and Tina Geiselbrecht. *Texas Transportation Poll*. College Station, TX: Texas A&M Transportation Institute, September 2014. <http://tti.tamu.edu/policy/texas-transportation-poll/> (accessed March 3, 2015).
- Smith, Andrew E. "Boston Globe Poll #20: Transportation Issues in MA." Durham, NH: The Survey Center, University of New Hampshire, December 2008. http://www.unh.edu/survey-center/news/pdf/bg_2008-dec21.pdf (accessed January 7, 2009).
- St. Pete Polls. "Greenlight Pinellas, Pinellas County Florida General Election Survey Conducted for SaintPetersBlog.com." St. Petersburg, FL: St. Pete Polls, June 4, 2014. http://stpetepolls.org/files/StPetePolls_2014_SaintPetersBlog_GreenlightPinellas_June_4.pdf (accessed April 23, 2015).
- St. Pete Polls. "Pinellas County Survey Conducted for Ax the Tax." St. Petersburg, FL: St. Pete Polls, July 22, 2014. http://stpetepolls.org/files/StPetePolls_2014_PinellasCounty_RailTax_July_22.pdf (accessed May 4, 2015).
- SurveyUSA of Clifton, NJ. "Results of SurveyUSA News Poll #12214." *SurveyUSA*. May 31, 2007. <http://www.surveyusa.com/client/PollReportEmail.aspx?g=d19736e9-c3a8-44b5-9612-28b2af3e96ff> (accessed June 4, 2010).
- . "Georgia Voters Say Roads, Not Mass Transit, Should Be Transportation Funding Priority; Outcome of T-SPLOST Uncertain." *SurveyUSA*. February 27, 2012. <http://www.surveyusa.com/client/PollReport.aspx?g=89931e1a-e757-41ef-a92e-beaffd3801e0> (accessed April 11, 2012).
- The Kenney Group. "Survey of Likely Voters in RTD District." Denver, CO: Coalition for Smart Transit, March 2010. http://www.rtd-fastracks.com/media/uploads/main/FasTrack_survey_March_2010_RTD_summary.pdf (accessed June 4, 2010).

- University of Idaho James A. and Louise McClure Center for Public Policy Research. "Likely Voter Opinions On Highway Funding In Idaho: Methodology and Results." Moscow, ID: University of Idaho, July 2014. <http://www.uidaho.edu/~media/Files/orgs/CLASS/McClure-Center/Research-Reports/Idaho-Highway-Funding-Final-July-2014.ashx> (accessed April 16, 2015).
- U.S. Census Bureau. "2011 American Community Survey 1-Year Estimates." No date. Downloaded from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t> (accessed May 21, 2013).
- . "Census Regions and Divisions of the United States." No date. https://www.census.gov/geo/www/us_regdiv.pdf (accessed May 21, 2013).
- U.S. Environmental Protection Agency. "Vehicle Rating System and SmartWay Thresholds, MY 2011 & MY 2012" (EPA-420-B-13-015). January 2010. http://ofmpub.epa.gov/greenvehicles/SmartWay_2012.pdf (accessed May 31, 2012). <http://www.epa.gov/greenvehicles/documents/420b13015.pdf> (accessed May 20, 2014).
- Utah State University Institute of Government & Politics, The Exoro Group, and Dan Jones & Associates. "Poll: Utahns Split on Gas Tax Hike." *UtahPolicy*, February 3, 2015 [article by Bob Bernik]. <http://utahpolicy.com/index.php/features/today-at-utah-policy/4692-poll-utahns-split-on-gas-tax-hike> (accessed March 18, 2015).
- Wall Street Journal*. "Vote: What Should Happen to the Gas Tax?" August 30, 2012. <http://blogs.wsj.com/drivers-seat/2012/08/30/vote-what-should-happen-to-the-gas-tax/> (accessed March 4, 2013).
- Washington Post*. "Maryland Residents Reject Gas Tax Hikes, Support Wind Power in Washington Post Poll." March 2, 2013. http://www.washingtonpost.com/politics/polling/maryland-residents-reject-gas-tax-hikes/2013/03/02/5c282fc2-80cf-11e2-a671-0307392de8de_print.html (accessed June 6, 2013).
- . "Maryland Poll—State Politics and Finances." October 2007. USWASH2007-160464. <http://webapps.ropercenter.uconn.edu/CFIDE/cf/action/catalog/> (accessed May 27, 2010).
- Washington Post-University of Maryland Poll. "Maryland's Gov. Hogan popular, but proposals receive mixed reviews." Washington, DC: *Washington Post*, February 28, 2015. http://www.washingtonpost.com/page/2010-2019/WashingtonPost/2015/02/10/National-Politics/Polling/release_387.xml (accessed March 10, 2015).
- WMUR Granite State Poll. "NH Aware of Gas Tax Increase, Small Majority Support It." Durham, NH: University of New Hampshire, July 22, 2014. http://cola.unh.edu/sites/cola.unh.edu/files/research_publications/gsp2014_summer_gastax072214.pdf (accessed March 31, 2015).

-
- Weinstein, Asha, et al. *Transportation Financing Opportunities for the State of California*. San José, CA: Mineta Transportation Institute, October 2006. http://transweb.sjsu.edu/mtiportal/research/publications/documents/06-01/TransportFinanceOpps5_020107.pdf (accessed June 13, 2011).
- Wilson Perkins Allen Opinion Research. "Polling Memorandum: Key Findings of Georgia Statewide Transportation Survey." Atlanta: Georgia Transportation Alliance, February 15, 2015.
- Wilson Research Strategies. "NCPPR Global Warming Poll." *National Center for Public Policy Research*. February 26, 2008. http://www.nationalcenter.org/NCPPR_Global_Warming_Poll_Questions_0208.pdf (accessed February 26, 2008).
- Winthrop University, Social and Behavioral Research Lab. "March 2015 Winthrop Poll." Rock Hill, SC: Winthrop University, March 2015. <http://www.winthrop.edu/winthroppoll/default.aspx?id=9804> (accessed March 17, 2015).
- . "Winthrop University: Winthrop Poll - Current Findings." Winthrop University. <http://www.winthrop.edu/winthroppoll/default.aspx?id=9804> (accessed April 6, 2016).
- Y'all Politics. "Mississippi 2016 Presidential Primary Survey Toplines." March 2016. http://www.realclearpolitics.com/docs/2016/Magellan_MS_GOP_2016.pdf (accessed May 4, 2016).
- YouGov. "Little Support for Gas Tax Hike." New York: YouGov, February 2, 2015 [article by Peter Moore]. <https://today.yougov.com/news/2015/02/02/little-support-gas-tax-hike> (accessed March 26, 2016).
- . "What Would You Pay a Penny For?" New York: YouGov, April 8, 2014 [article by Peter Moore]. <https://today.yougov.com/news/2014/04/08/what-would-you-pay-penny> (accessed May 26, 2015).

ABOUT THE AUTHORS

ASHA WEINSTEIN AGRAWAL, PH.D.

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

HILARY NIXON, PH.D.

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

PEER REVIEW

San José State University, of the California State University system, and the MTI Board of Trustees have agreed upon a peer review process required for all research published by MTI. The purpose of the review process is to ensure that the results presented are based upon a professionally acceptable research protocol.

Research projects begin with the approval of a scope of work by the sponsoring entities, with in-process reviews by the MTI Research Director and the project sponsor. Periodic progress reports are provided to the MTI Research Director and the Research Associates Policy Oversight Committee (RAPOC). Review of the draft research product is conducted by the Research Committee of the Board of Trustees and may include invited critiques from other professionals in the subject field. The review is based on the professional propriety of the research methodology.

Hon. Norman Y. Mineta

MTI BOARD OF TRUSTEES

Founder, Honorable Norman Mineta (Ex-Officio)
Secretary (ret.), US Department of Transportation
Vice Chair
Hill & Knowlton, Inc.

Honorary Chair, Honorable Bill Shuster (Ex-Officio)
Chair
House Transportation and Infrastructure Committee
United States House of Representatives

Honorary Co-Chair, Honorable Peter DeFazio (Ex-Officio)
Vice Chair
House Transportation and Infrastructure Committee
United States House of Representatives

Chair, Nuria Fernandez (TE 2017)
General Manager and CEO
Valley Transportation Authority

Vice Chair, Grace Crunican (TE 2016)
General Manager
Bay Area Rapid Transit District

Executive Director, Karen Philbrick, Ph.D.
Mineta Transportation Institute
San José State University

Joseph Boardman (Ex-Officio)
Chief Executive Officer
Amtrak

Anne Canby (TE 2017)
Director
OneRail Coalition

Donna DeMartino (TE 2018)
General Manager and CEO
San Joaquin Regional Transit District

William Dorey (TE 2017)
Board of Directors
Granite Construction, Inc.

Malcolm Dougherty (Ex-Officio)
Director
California Department of Transportation

Mortimer Downey* (TE 2018)
President
Mort Downey Consulting, LLC

Rose Guilbault (TE 2017)
Board Member
Peninsula Corridor Joint Powers Board (Caltrain)

Ed Hamberger (Ex-Officio)
President/CEO
Association of American Railroads

Steve Heminger* (TE 2018)
Executive Director
Metropolitan Transportation Commission

Diane Woodend Jones (TE 2016)
Principal and Chair of Board
Lea+Elliot, Inc.

Will Kempton (TE 2016)
Executive Director
Transportation California

Art Leahy (TE 2018)
CEO
Metrolink

Jean-Pierre Loubinoux (Ex-Officio)
Director General
International Union of Railways (UIC)

Abbas Mohaddes (TE 2018)
CEO
The Mohaddes Group

Jeff Morales (TE 2016)
CEO
California High-Speed Rail Authority

Beverley Swaim-Staley (TE 2016)
President
Union Station Redevelopment Corporation

Michael Townes* (TE 2017)
President
Michael Townes LLC

Marlene Turner, Ph.D. (Ex-Officio)
Interim Dean, College of Business
San José State University

Richard A. White (Ex-Officio)
Interim President and CEO
American Public Transportation Association (APTA)

Bud Wright (Ex-Officio)
Executive Director
American Association of State Highway and Transportation Officials (AASHTO)

Edward Wytkind (Ex-Officio)
President
Transportation Trades Dept., AFL-CIO

(TE) = Term Expiration or Ex-Officio
* = Past Chair, Board of Trustee

Directors

Karen Philbrick, Ph.D.
Executive Director

Hon. Rod Diridon, Sr.
Emeritus Executive Director

Peter Haas, Ph.D.
Education Director

Brian Michael Jenkins
National Transportation Safety and Security Center

Asha Weinstein Agrawal, Ph.D.
National Transportation Finance Center

Research Associates Policy Oversight Committee

Asha Weinstein Agrawal, Ph.D.
Urban and Regional Planning
San José State University

Jan Botha, Ph.D.
Civil & Environmental Engineering
San José State University

Katherine Kao Cushing, Ph.D.
Environmental Science
San José State University

Dave Czerwinski, Ph.D.
Marketing and Decision Science
San José State University

Frances Edwards, Ph.D.
Political Science
San José State University

Taeho Park, Ph.D.
Organization and Management
San José State University

Diana Wu
Martin Luther King, Jr. Library
San José State University





SAN JOSÉ STATE
UNIVERSITY

Funded by U.S. Department of
Transportation and California
Department of Transportation

