# What Do Americans Think about Public Transit? A Review of U.S. Public Opinion Polling Survey Questions





MTI Report WP 12-03







### **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 1 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 1 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 labormanagement 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 WP 12-03

## WHAT DO AMERICANS THINK ABOUT PUBLIC TRANSIT? A REVIEW OF U.S. PUBLIC OPINION POLLING SURVEY QUESTIONS

Asha Weinstein Agrawal, Ph.D.

July 2015

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**

-	<b>oort No.</b> -MTI-15-1132	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle What Do Americans Think about Public Transit? A Review of U.S. Public Opinion		5. Report Date July 2015	
Poli	ling Survey Questions		6. Performing Organization Code
7. Aut Ash	<b>hors</b> na Weinstein Agrawal, Ph.D.		8. Performing Organization Report MTI Report WP 12-03
Min	forming Organization Name and A eta Transportation Institute	Address	10. Work Unit No.
San	lege of Business n José State University n José, CA 95192-0219		11. Contract or Grant No. DTRT12-G-UTC21
12. Spc	onsoring Agency Name and Addre	SS	13. Type of Report and Period Covered
	fornia Department of Transportation sion of Research, Innovation and	U.S. Department of Transportation Office of the Assistant Secretary for	Final Report
Sys MS-	etems Information -42, PO Box 942873 cramento, CA 94273-0001	Research and Technology University Transportation Centers Program 1200 New Jersey Avenue, SE Washington, DC 20590	14. Sponsoring Agency Code
15. Sup	oplemental Notes		
tran to ir que A su surv follo sup of ti ben imp tran	s "seed grant" research project comp nait. The first and primary goal of the napire the design of future surveys estion identified. econd objective of the project was veys. Reviewing the entire set of po owing themes: the reasons people s oport improving transit as a general of he poll questions on these topics a refits to their community, especially of provements to transit as a general of	iled a set of 56 US public opinion polls that asl project was to assemble a large set of transit on the topic of public transit. The report prese to identify general patterns in public opinion lling questions related to public transit reveale support public transit; opinions about transit s oncept; and support levels for raising additions shows that strong majorities of people believ congestion relief and accessibility to vulnerabl oncept. However, fewer people support the g f support raising any specific tax to increase transit	-related survey questions that can be used ents the specific wording of every relevant about transit that emerge across multiple ed that the surveys commonly address the service quality; the extent to which people al revenues to support transit. The analysis ve that transit brings a number of specific le residents. Strong majorities also support general concept of increased spending on
Pub	<b>/ Words</b> blic transit; Public opinion; rket surveys	<b>18. Distribution Statement</b> No restrictions. This document is availab The National Technical Information Serv	

Copyright © 2015 by **Mineta Transportation Institute** All rights reserved

Library of Congress Catalog Card Number: 2015947025

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

Many thanks to Maria Louise Javier and Jennifer Piozet for research assistance, as well as to the many professionals who shared their survey results with me.

I also thank Mineta Transportation Institute staff: Executive Director Karen Philbrick, PhD; Director of Communications and Tech Transfer Donna Maurillo, MSTM, who provided additional editorial support; Research Support Coordinator Joseph Mercado; and Webmaster Frances Cherman.

## TABLE OF CONTENTS

Executive Summary	1
Study Objective	1
Methodology	1
Summary of Findings	2
I. Introduction	3
II. Methodology	4
III. Overview of the Polls Analyzed	5
The Poll Sponsors/Authors	5
The Polling Objectives	5
The Topics Covered	5
The Sampling Frames (Geography and Type of Person)	6
IV. Findings	7
Reasons People Support Public Transit	7
Opinions of Transit Service Quality	23
Support for Improving Transit	26
Support for Funding Transit	32
V. Conclusion	42
Summary of Findings	42
Suggestions for Future Research	43
Appendix A: Public Opinion Polls Reviewed	44
Endnotes	46
Bibliography	47
About the Author	55
Peer Review	56

## LIST OF TABLES

1.	Poll Questions Testing If People See a Link between Public Transit and Congestion Relief	9
2.	Poll Questions Testing If Respondents See a Link between Public Transit and the Local Economy	13
3.	Poll Questions Testing If Respondents See a Link between Public Transit and Improved Air Quality	16
4.	Poll Questions Testing If Respondents See a Link between Public Transit and Reduced Greenhouse Gas Emissions	18
5.	Poll Questions Testing If Respondents See a Link between Public Transit and Personal Cost Savings	19
6.	Poll Questions Testing If Respondents See a Link between Public Transit and Providing Mobility Options for Vulnerable Populations	21
7.	Survey Questions Asking Respondents to Rate the Quality of Transit Service Near Them	24
8.	Poll Questions Asking about Importance Placed on Public Transit	27
9.	Poll Questions Asking about Support for Increasing Transit Funding, in General	33
10.	Support for Spending Gas Tax Revenue on Public Transit	37
11.	Support for Spending Vehicle Registration Fee Revenue on Public Transit	39
12.	Support for Spending Sales Tax Revenue on Public Transit	40
13.	Public Opinion Polls Reviewed	44

## EXECUTIVE SUMMARY

#### STUDY OBJECTIVE

This "seed grant" research project compiled a set of 56 US public opinion polls that asked respondents their opinions about public transit. The goal of the work was two-fold. The first and primary goal was to assemble a large set of transit-related survey questions that can be used to inspire the design of future surveys on the topic of public transit. The assembled collection of questions will help future researchers and transit planners by:

- 1. Identifying the key topics of interest in public opinion research on public transit;
- 2. Identifying topics that have been poorly researched to date and may thus be worthwhile for future research; and
- 3. Providing a bank of questions that can be used to generate ideas for future question wording.

A further objective of the project was to identify general patterns in public opinion about transit that may emerge across multiple surveys.

#### METHODOLOGY

This study identified and analyzed surveys of US residents that included questions about attitudes regarding public transportation. Public transportation was defined as local or regional services. (Surveys asking only about long-distance rail were excluded.) The project excluded the transit passenger surveys that transit agencies routinely conduct, since the focus of the research was to ascertain the views of the American public *at large* rather than opinions from transit passengers only.

The initial search for relevant surveys netted well over 80 that asked something related to public transportation. The questionnaires obtained were further reviewed to identify those surveys that contained questions relevant to the study as defined by two criteria:

- 1. Questions had to be opinion-based (as opposed to questions about travel behaviors such as the frequency of transit usage).
- 2. Questions had to ask about public transit on its own (without combining public transit with another topic such as roads/highways or bike infrastructure).

The review process identified a final set of 56 surveys containing one or more questions each that match the criteria.

The survey questions were then reviewed to identify themes covered in many polls, and all questions on each theme were compiled and analyzed.

#### SUMMARY OF FINDINGS

Reviewing the entire set of polling questions related to public transit revealed that the surveys commonly address the following themes: the reasons people support public transit; opinions about transit service quality; the extent to which people support improving transit as a general concept; and support levels for raising additional revenues to support transit.

The analysis of the poll questions found that strong majorities of people believed that transit brings a number of specific benefits to their community, especially congestion relief and accessibility to vulnerable residents. Strong majorities also support improvements to transit as a general concept. However, fewer people support the general concept of increased spending on transit, and considerably fewer than half support raising any specific tax to increase transit funding, except for sales taxes, which usually enjoy majority support.

The study findings suggest that fruitful avenues for building upon this review of poll findings would be to:

- Expand the range of surveys reviewed to include the household travel surveys conducted by regional and state agencies, as well as to include the National Household Travel Survey.
- Compile a set of transit passenger surveys, each of which include opinion questions, to compare the views of transit riders with the views of the general public.
- For the subset of polls for which data files or crosstabs are available, review how opinions vary by key socio-demographic and travel behavior factors (age, gender, transit use, etc.).

The findings from the current review also suggest some types of questions that have not been commonly asked but might fill important gaps in knowledge, such as:

- More directly ask respondents *why* they support public transit. The existing polls typically break this information into two questions, one asking about benefits perceived and another asking whether or not people support more or better transit.
- More directly ask respondents who say they would not support additional funding for transit *why* they hold this opinion.

## I. INTRODUCTION

This "seed grant" research project compiled a wide set of 56 US public opinion polls that asked respondents their opinions about public transit. The goal of the work was two-fold. The first and primary goal was to assemble a large set of transit-related survey questions that can be used to inspire the design of future surveys on the topic of public transit. The assembled collection of questions will help future researchers and transit planners by:

- 1. Identifying the key topics of interest in public opinion research on public transit;
- 2. Identifying topics that have been poorly researched to date and may thus be worthwhile for future research; and
- 3. Providing a bank of questions that can be used to generate ideas for future question wording.

A further objective of the project was to identify general patterns in public opinion about transit that may emerge across multiple surveys, such as the extent to which the public believes transit can achieve objectives such as reduced traffic congestion, an improved economy, or a healthier environment.

This report adds to a very small body of detailed reviews of public opinion on transport topics. Most notably, Goodwin and Lyons<sup>1</sup> conducted a deep analysis of over 300 United Kingdom polls looking at a wide range of transportation topics. In the United States, no such comprehensive review of polling on transportation has been completed, though a few studies have compiled a range of polling about a particular, narrow transportation topic. For example, in 2008 the Transportation Research Board published a detailed review of public opinion research looking at the issues of tolling and road pricing.<sup>2</sup> Agrawal and Nixon have also collected polling questions that explored public support for gas taxes, mileage fees, and sales taxes dedicated for transportation purposes.<sup>3</sup> Finally, specific to public transit. They concluded that survey respondents generally believed that transit brought collective benefits rather than benefits personal to them. They also found that people who support sales taxes for transportation did not necessarily favor increased spending for transit, and vice versa.<sup>4</sup>

The next section of this report explains the study methodology. This is followed by a findings section, which presents and discusses polling questions from the public opinion polls collected, dividing the discussion into the themes of reasons people support public transit, their opinions of transit service quality, their support for improving transit, and their support for raising revenues for transit. The final report section summarizes the key findings and suggests avenues for future research.

## **II. METHODOLOGY**

This study analyzed 56 surveys of US residents that included questions about attitudes regarding public transportation. Public transportation was defined as local or regional services. (Surveys asking only about long-distance rail were excluded.)

The polls, which date from 2005 to 2013, were conducted by interest groups, nonprofits, pollsters, academic researchers, and media organizations. The project excluded the transit passenger surveys that transit agencies routinely conduct, since the focus of the research was to ascertain the views of the American public *at large* rather than opinions from transit passengers only. National and regional household travel surveys were also excluded due to time constraints.

Because there are no existing databases or other sources that identify the types of polls relevant to this study, identifying suitable ones was a major focus of the research. Polls were found through a number of different search strategies:

- Reviewing archives of mainstream pollsters, including the Pew Center for the People and the Press, PollingReport.com, Rasmussen Reports, the Roper Center for Public Opinion Research, and SurveyUSA
- Searching newspaper databases and the Internet at large to find references to public opinion polls that might include transit questions
- Searching traditional library catalogs and databases to find published literature on relevant polls

When the full survey questionnaire and topline results were not available publicly, these were obtained directly from the survey authors or sponsors if possible.

The initial search process netted well over 80 surveys that asked something related to public transportation. The questionnaires obtained were further reviewed to identify those surveys that contained questions relevant to the study. The review used two criteria: questions had to be opinion-based (as opposed to questions about travel behaviors such as the frequency of transit usage) and they had to ask about public transit on its own (without combining public transit with another topic such as roads/highways or bike infrastructure). The review process identified a final set of 56 surveys containing one or more questions each that matched the criteria. (Appendix A presents a list of the polls selected for further analysis.)

## III. OVERVIEW OF THE POLLS ANALYZED

This chapter presents a brief overview of the 56 public opinion polls analyzed, describing the sponsors, reasons the polls were conducted, topics covered, and types of people polled (sampling frame).

#### THE POLL SPONSORS/AUTHORS

The polls were sponsored or authored by a variety of organizational types:

- Government agencies
- Interest groups
- · News organizations
- Nonpartisan, nonprofit public interest research groups
- University-based researchers
- Public opinion polling groups

Most polls were stand-alone efforts, but the dataset includes multiple polls from three series:

- The HNTB Corporation's "America Thinks" series about infrastructure planning
- The General Social Survey from NORC/University of Chicago
- An annual series of polls on transportation taxes and fees from academic researchers Agrawal and Nixon

#### THE POLLING OBJECTIVES

Many of the polls, especially those conducted by government agencies and some by special interest groups, were designed to test public support for a proposed ballot measure. Other polls more generally tested the waters of public opinion, without a specific ballot measure or policy action in mind.

#### THE TOPICS COVERED

The polls vary widely in the topics they cover. A few were specifically about public transit, while more were about transportation generally, covering multiple modes. Still other polls asked questions about a wide range of community issues, with no special focus on transportation.

#### THE SAMPLING FRAMES (GEOGRAPHY AND TYPE OF PERSON)

The largest number of surveys were conducted at the national level (22), followed by the state (12), region (11), county (9), and local (2) level.

The type of person sampled in the majority of the polls (30) was an adult of any age. Twenty-four polls sampled some variant of "voters," usually defined as either "registered" or "likely" voters. Finally, one poll sampled drivers on a particular toll facility, and another sampled older adults.

## **IV. FINDINGS**

This section of the report describes key findings about the final set of 56 polls reviewed. The topics covered are: the reasons people support public transit, opinions about transit service quality, the extent to which people support improving transit as a general concept, and their support for raising additional revenues to support transit.

#### **REASONS PEOPLE SUPPORT PUBLIC TRANSIT**

One topic explored in many polls was the reasons respondents might believe that public transit benefits either them personally or the community at large. The potential benefits mentioned most commonly were the potential to reduce traffic congestion, reduce commute costs, support a strong economy, reduce air pollution (or, in a few cases, greenhouse gas emissions), or lower commute costs. In all cases, majorities of respondents agreed that public transit provides these benefits.

Many polls asked if respondents see a link between public transit and congestion relief. Table 1 lists 12 polls that asked 13 questions specifically about the link between public transit and congestion relief.<sup>5</sup> The wording of the questions varied considerably, but it falls into three general categories. The first set of questions asked variants on the idea of whether respondents believe public transit is an effective way to reduce traffic congestion. For all closed-answer versions of this question, well over half of respondents answered affirmatively. The only question with a lower percentage of support for this concept was an open-ended question asking the reasons they would support or oppose a particular lightrail extension project.

Next, Table 1 presents four questions that asked respondents to specify the greatest benefit they would expect from transit. Congestion relief was related as the top benefit listed in three of the four polls, and in all four cases, between one-quarter and almost one-third of respondents chose congestion relief as the main transit benefit.

Finally, a set of three questions asked respondents which policy option they thought would best reduce congestion. In two polls, public transit improvement was the most common answer chosen (30% and 42% of respondents). The third poll asked the question in a slightly different way, asking respondents to choose between two fairly long statements that touched on road funding, as well as strategies for congestion relief. In this case, respondents were more than twice as likely to choose the option about prioritizing funding for public roads and highways than the option prioritizing funding for transit. Overall, respondents tended to agree that congestion relief is a benefit of public transit, and when asked to rank this among other possible benefits, congestion was usually near the top of the list.

Table 2 presents 11 questions that ask about the link between public transit and the health of the local economy. The question wording varies considerably, from whether public transit creates jobs to whether it helps improve local growth and development generally. Clear majorities of respondents said yes when asked if they see a link between public transit and some description of a healthy economy. The only poll with less than 67% agreeing with such a statement is a poll for which only data on "strong" agreement was available (e.g.,

data on "somewhat" agreement was unavailable). By contrast, when respondents were asked to pick the most important benefit of transit, the option for jobs and the economy was selected by no more than 17% of respondents.

Polls also asked respondents if they believed that public transit use supported environmental objectives, most asking specifically about air pollution (6 questions, shown in Table 3) or, less commonly, global warming (3 questions, shown in Table 4). When respondents were asked to pick the most important benefit of public transit, improved air quality came second or third, though majorities from 61% to 76% saw improved air quality as *a* benefit of public transit. Slightly lower majorities in two polls saw reduced greenhouse gas emissions as a benefit of public transit. A final poll asking what *actions* respondents take to reduce their carbon footprint found only 2% mentioning using public transit. (This last question's low percentage of respondents mentioning transit is likely because the question required respondents not only to see a link between transit use and reduced carbon emissions but also to actually be using public transit.)

Another benefit that people see flowing from public transit is a possible reduction in commute costs. Table 5 shows questions from the six polls that asked about this. When respondents were asked to pick the most important transit benefit, cost savings was chosen by from 11% to 24% of respondents, and this was never the most commonly selected benefit. About two-thirds of respondents said yes when asked if lower commute costs are a benefit of public transit.

Table 6 shows questions from seven polls asking people if they believe that public transportation is valuable as a way to provide transportation alternatives for vulnerable residents, including poor, elderly, and/or disabled people. At least 75% of respondents strongly supported this viewpoint in every question asked. In the one poll asking an open-ended question about the reason why public transportation should be a local priority, by far the most common response (76%) related to providing mobility for vulnerable populations.

Many other topics were raised in just a handful of polls (three or fewer), such as the links between public transit and energy independence, safety, lower stress, public health, quality of life, transportation choices, and convenience.

Sponsor or author, date	Question wording	Response
Questions asking if public tra	insit is an effective way to reduce traffic congestion	
New Jersey Department of Transportation, 2005	And how important is a good system of public transportation for reducing traffic congestion- very important, somewhat important, or not very important?	Very or somewhat important 96%
City of Colorado Springs, 2011	I'm going to read a list of benefits that are often attributed to public transportation. For each statement I read, tell me if you think the benefit is very important, somewhat important, not that important, or not important at all.	Very or somewhat important 77%
	Public transportation relieves traffic congestion on busy roads. (16B)	
Natural Resources Defense Council, 2012	I am going to read you some statements given as reasons to support increasing local funding to expand transportation choices in your community, including public transportation like buses or trains. After hearing each statement, please tell me whether you find it very convincing, somewhat convincing, or not convincing as a reason to support increasing funding for more transportation choices. If you do not believe the statement, please tell me that too.	Very or somewhat convincing 73%
	Investing in more transportation choices makes sense for all of us – whether or not we regularly use transit. The more choices we all have, the fewer people will choose to use our roads and highways – reducing traffic congestion for those who have no choice but to drive, and giving us all a faster commute.	
Transportation for America, 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 69%
	Traffic congestion will be reduced	
	Tame congestion will be reduced	

## Table 1. Poll Questions Testing If People See a Link between Public Transit and Congestion Relief

## Table 1, Continued

Sponsor or author, date	Question wording	Response
Valley Regional Transit Authority, 2007	Next, I'd like you to think about the potential benefits of a high quality and effective public transportation system.	[Percent strongly agreeing] Improve air quality 61% Make roads, highways, and transportation safer for all drivers and
	As I reach each item please tell me whether you agree or disagree that a high quality and effective system would provide that benefit to the region.	commuters 60% Reduce traffic congestion 59% Provide people from every walk of life with opportunities 58%
	Would that be somewhat or strongly [agree / disagree]?	Give people more choices and options for travel 57% Allow people to get around easily to do the things they most want to 47%
		Increase the livability and likeability of communities 47% Contribute to the economic growth and development of a community 46% Provide easy and convenient access to the things you need in everyday life such as work, shopping and daycare 44% Minimize stress and frustration in people's lives 42% Help control growth 37% Give people more money to spend as they would like to 36% Give people more time to spend with friends and families or people they care about the most 36% Provide people with more time to do the things they want to do 33%
Lane Transit District, 2012	Why do you (oppose/support) the possible EmX extension? [Open-ended question]	SUPPORT Reduces traffic congestion 29% Increased access to public transportation 23% Public transportation is important/necessary 22% Convenience 20% Positive impression/supportive – general 14% The following were all noted by 10% of less: Make business more accessible, Encourage less vehicle use, Quicker means of transportation, Improvements to public transportation are needed, Increase in ridership, Dangerous to pedestrians, Keeping up with population growth, Affordable/cost effective, Increase in business development, Good for the communities

10

### Table 1, Continued

Sponsor or author, date	Question wording	Response
Questions assessing how tra	affic congestion reduction ranks among possible benefits of public transi	t
Regional Transportation Alliance, 2012 (Wake County poll)	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 32% Better air quality and environmental preservation 19% Greater convenience and more travel options 18% Lower commuting costs 11% More efficient land-use planning for future growth 9% Other (volunteered) 1% No benefit (volunteered) 4% Unsure/no answer 6%
Regional Transportation Alliance, 2010	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 31% Better air quality and environmental preservation 20% Lower commuting costs 11% Greater convenience and more travel options 20% More efficient land-use planning for future growth 10% Other (volunteered) 1% No benefit (volunteered) 2% Unsure/no answer 4% All of the above 1%
HNTB, 2010	Which of the following do you think is the most valuable feature of public transportation?	Reduces traffic congestion 28% Saves users money, such as on gas 24% Helps protect the environment 13% Reduces driving-related stress 11% Supports economy, such as increases jobs in the industry 9% Reduces dependence on foreign oil 9% Reduces users' travel time 4% Other 3%
Coalition for Smart Transit, 2010	What is the primary reason your impression of FasTracks is positive/ negative?	Top POSITIVE answers 1. I use public transportation/we need it 29% 2. It will reduce traffic 25% 3. It's a good plan/I support public transit 15% 4. Create jobs/economic return 11% 5. Convenience 5%

### Table 1, Continued

Sponsor or author, date	Question wording	Response
Questions asking how effect	ively transit reduces traffic congestion, compared to road improvement	S
Natural Resources Defense Council, 2012	Which of the following proposals is the best long-term solution to reducing traffic in your area?	Improving public transportation 42% Building new roads 20% Developing communities where people do not have to drive as much 21% All 5% None 5% Don't know/no answer 7%
HNTB, 2011	What do you think is the best way to address congestion on U.S. roadways?	Provide more transportation choices, such as public transit 30% Encourage flexible hours, telecommuting and other practices to avoid rush hour 26% Make low-cost improvements to get as much as we can out of current capacity, such as converting highway safety shoulders into travel lanes 18% Add capacity in critical corridors 11% Diversify development so that jobs, retail locations and entertainment are closer to homes 8% Other 7%
Reason Foundation, 2011	<ul> <li>Which statement do you agree with more:</li> <li>We can't end our traffic congestion problems by expanding current roads and building new ones. Instead we need better mass transit systems, so more funding should go to transit - even if that means roads and highways don't get the money they need for repairs or expansion</li> <li>OR</li> <li>Most people, businesses and our economy rely on roads and highways. So roads and highways should get the level of funding they need - even if that means we are unable to offer more mass transit options.</li> </ul>	Prioritize funding for roads and highways 62% Prioritize funding for public transit 30% Don't know/no opinion 8%

Sources: See bibliography.

Mineta Transportation Institute

Sponsor or author, date	Question wording	Response
Questions asking if public tra	nsit is an effective strategy for economic development/job growth	
New Jersey Department of Transportation, 2005	And how important is a good system of public transportation to the state's economy - very important, somewhat important, not very important?	Very or somewhat important 96%
City of Colorado Springs, 2011	I'm going to read a list of benefits that are often attributed to public transportation. For each statement I read, tell me if you think the benefit is very important, somewhat important, not that important, or not important at all.	Very or somewhat important 87%
	Public transportation is a key piece of infrastructure that supports our area's local economy, and helps attract and retain jobs and businesses.	
Valley Regional Transit Authority, 2007	In terms of the role you think public transportation can play in creating more attractive future growth and development in the Treasure Valley, would you say it mainly plays a	Positive role 87%
Natural Resources Defense Council, 2012	I am going to read you some statements given as reasons to support increasing local funding to expand transportation choices in your community, including public transportation like buses or trains. After hearing each statement, please tell me whether you find it very convincing, somewhat convincing, or not convincing as a reason to support increasing funding for more transportation choices. If you do not believe the statement, please tell me that too.	Very or somewhat convincing 71%
	Since the start of the recession, the U.S. has lost close to one-sixth of its manufacturing jobs. These empty factories could be back in service making high speed trains, light rail cars, and other advanced transportation vehicles. And, we could put hundreds of thousands of Americans back to work rebuilding our transit systems, roads, and bridges.	
Old Dominion University Social Science Research Center, 2012	How likely do you think it is that light rail is contributing to local economic development?	Very or somewhat likely 70%
Transportation for America, 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 67%
	Good long-term jobs will be created and maintained	

#### Table 2. Poll Questions Testing If Respondents See a Link between Public Transit and the Local Economy

Good, long-term jobs will be created and maintained

Mineta Transportation Institute

## Table 2, Continued

Sponsor or author, date	Question wording	Response
Valley Regional Transit Authority, 2007	Next, I'd like you to think about the potential benefits of a high quality and effective public transportation system.	Percent strongly agree 46%
,		[Note: data unavailable for % "somewhat agree"]
	As I reach each item please tell me whether you agree or disagree that a high quality and effective system would provide that benefit to	
	the region. Would that be somewhat or strongly [agree / disagree]?	
	Contribute to the economic growth and development of a community	
Questions assessing how eco	onomic development/job growth ranks among possible benefits of publi	c transit
Coalition for Smart Transit, 2010	What is the primary reason your impression of FasTracks is positive/ negative?	Top 5 positive answers
		I use public transportation/we need it 29%
		It will reduce traffic 25%
		It's a good plan/I support public transit 15% Create jobs/economic return 11%
		Convenience 5%
City of Colorado Springs,	And why do you say public transportation should be a VERY HIGH/	Needed by people, poor, disabled, without cars 76%
2011	SOMEWHAT HIGH priority for the future of the Pikes Peak region?	Less congestion, traffic, pollution 8%
		Good for economy, growth 11%
HNTB, 2010 ("Public Transit		Reduces traffic congestion 28%
Survey")	public transportation?	Saves users money, such as on gas 24%
		Helps protect the environment 13% Reduces driving-related stress 11%
		Supports economy, such as increases jobs in the industry 9%
		Reduces dependence on foreign oil 9%
		Reduces users' travel time 4%

Other 3%

### Table 2, Continued

Sponsor or author, date	Question wording	Response
Lane Transit District, 2012	IF the EmX light-rail extension was mentioned as "the most	Among people opposing:
	important transportation issue in Eugene that you would like your	Wastes money 19%
	local government leaders to do something about," (with respondents	Will hurt businesses/businesses oppose 17%
	either favoring or opposing the extension," then respondents were	Disprove of reconstructing streets/removing lanes 14%
	asked "Why?"	Support public transit – general 13%
	•	Support bus system/improve bus system 12%
		People will not use EmX 11%
		Disapprove – general 10%
		Among people supporting
		Reduced pollution/better for the environment 9%
		Reduced traffic 8%
		Current public transit is efficient 8%
		Support bike lanes 6%
		Support EmX in West Eugene 5%
		Benefits economy 5%
		Improve transportation on West 11th 5%
		All other responses 4% or less

Sources: See bibliography.

Sponsor or author, date	Question wording	Response
Questions asking if public tra	nsit is an effective strategy for economic development/job growth	
City of Colorado Springs, 2011	I'm going to read a list of benefits that are often attributed to public transportation. For each statement I read, tell me if you think the benefit is very important, somewhat important, not that important, or not important at all.	Very or somewhat important 76%
	Public transportation gets cars off the road, reduces emissions and improves air quality	
Transportation for America, 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 65%
	Air pollution will be reduced	
Valley Regional Transit	Next, I'd like you to think about the potential benefits of a high	Strongly agree: 61%
Authority, 2007	quality and effective public transportation system.	[% "somewhat" agreeing not available]
	As I reach each item please tell me whether you agree or disagree that a high quality and effective system would provide that benefit to the region. Would that be somewhat or strongly [agree / disagree]?	
	Improve air quality	
Questions assessing how air	pollution reduction ranks among possible benefits of public transit	
Regional Transportation Alliance (Fallon Research), 2012 (Orange County poll)	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 24% <b>Better air quality and environmental preservation 29%</b> Lower commuting costs 15% Greater convenience and more travel options 12% More efficient land-use planning for future growth 9% Other (volunteered) 2% No benefit (volunteered) 3% Unsure/no answer 6%

Mineta Transportation Institute

#### Table 3. Poll Questions Testing If Respondents See a Link between Public Transit and Improved Air Quality

16

### Table 3, Continued

Sponsor or author, date	Question wording	Response
Regional Transportation Alliance, 2010	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 31% Better air quality and environmental preservation 20% Lower commuting costs 11% Greater convenience and more travel options 20% More efficient land-use planning for future growth 10% Other (volunteered) 1% No benefit (volunteered) 2% Unsure/no answer 4% All of the above 1%
Regional Transportation Alliance, 2012 (Wake County poll)	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 32% <b>Better air quality and environmental preservation 19%</b> Greater convenience and more travel options 18% Lower commuting costs 11% More efficient land-use planning for future growth 9% Other (volunteered) 1% No benefit (volunteered) 4% Unsure/no answer 6%

Sources: See bibliography.

# Table 4.Poll Questions Testing If Respondents See a Link between Public Transit and Reduced Greenhouse GasEmissions

Sponsor or author, date	Question wording	Response
Lane Transit District, 2012	I am now going to read you some reasons that community members have offered to support the West Eugene EmX Extension. For each please let me know if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.	Strongly or somewhat agree 62%
	Climate change is a real and significant challenge. It is important to support public transit projects like EmX because it will help us get out our cars and reduce our consumption of fossil fuels.	
Transportation for America, 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 52%
	Global warming pollution will be reduced	
ABC News/Planet Green/ Stanford, 2008	(IF DOING ANYTHING) What are you doing to reduce your carbon footprint? [MULTIPLE RESPONSES ACCEPTED]	Using less electricity 48% Driving less 36% Recycling 33% Using compact florescent light bulbs 12% Using less gasoline 11% Buying/using smaller/more fuel efficient car 7% Carpooling 5% Walking/bicycling/scootering 5% Buying local food/organic food/growing own food 5% Using less water 5% Reducing travel/vacation travel 4% Buying energy from renewable sources/hydro/wind/solar power 3% <b>Using trains/buses/subways/other public transportation/mass transit 2%</b> Buying/using energy efficient appliances/products 2% Buying carbon offsets 1% Other 13% No opinion 1%

Table 5.	Poll Questions Testing	f Respondents See a Link between Public Transit and Personal Cost Sa	avinas

Sponsor or author, date	Question wording	Response
Questions asking if public trai	nsit is an effective strategy for reducing personal costs	
Natural Resources Defense Council, 2012	I am going to read you some statements given as reasons to support increasing local funding to expand transportation choices in your community, including public transportation like buses or trains. After hearing each statement, please tell me whether you find it very convincing, somewhat convincing, or not convincing as a reason to support increasing funding for more transportation choices. If you do not believe the statement, please tell me that too.	Very or somewhat convincing 68%
	With a gallon of gas hovering at the four dollar mark and expected to rise significantly in the next few years, more and more Americans would like to turn to use public transportation, like buses or trains. This proposal will help commuters by expanding the public transportation system, and making it a more practical and realistic alternative to costly commuting by car.	
Transportation for America (FMM&M), 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 66%
	Residents will have cheaper transportation options	
Questions assessing how per	sonal cost savings ranks among possible benefits of public transit	
HNTB, 2010 ("Public Transit Survey")	Which of the following do you think is the most valuable feature of public transportation?	Reduces traffic congestion 28% <b>Saves users money, such as on gas 24%</b> Helps protect the environment 13% Reduces driving-related stress 11% Supports economy, such as increases jobs in the industry 9% Reduces dependence on foreign oil 9% Reduces users' travel time 4% Other 3%

#### Table 5, Continued

Sponsor or author, date	Question wording	Response
Regional Transportation Alliance, 2012 (Orange County poll)	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 24% Better air quality and environmental preservation 29% <b>Lower commuting costs 15%</b> Greater convenience and more travel options 12% More efficient land-use planning for future growth 9% Other (volunteered) 2% No benefit (volunteered) 3% Unsure/no answer 6%
Regional Transportation Alliance, 2012 (Wake County poll)	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion 32% Better air quality and environmental preservation 19% Greater convenience and more travel options 18% <b>Lower commuting costs 11%</b> More efficient land-use planning for future growth 9% Other or no benefit (volunteered) 1% No benefit (volunteered) 4% Unsure/no answer 6%
Regional Transportation Alliance, 2010	Which of the following would you say is the biggest benefit from new or expanded public transportation? Is it	Less traffic congestion31% Better air quality and environmental preservation 20% <b>Lower commuting costs 11%</b> Greater convenience and more travel options 20% More efficient land-use planning for future growth 10% Other (volunteered) 1% No benefit (volunteered) 2% Unsure/no answer 4% All of the above 1%

Sources: See bibliography.

# Table 6.Poll Questions Testing If Respondents See a Link between Public Transit and Providing Mobility Options for<br/>Vulnerable Populations (Poor, Disabled, and/or Elderly)

Sponsor or author, date	Question wording	Response
Questions asking if public tra	nsit is an important strategy for providing transportation for vulnerable p	populations
City of Colorado Springs (The Kenney Group), 2011	I'm going to read a list of benefits that are often attributed to public transportation. For each statement I read, tell me if you think the benefit is very important, somewhat important, not that important, or not important at all.	Very or somewhat important 95%
	Public transportation provides transportation options to people with special mobility needs, such as the elderly, disabled, and people who are unable to drive.	
City of Colorado Springs (The Kenney Group), 2011	I'm going to read a list of benefits that are often attributed to public transportation. For each statement I read, tell me if you think the benefit is very important, somewhat important, not that important, or not important at all.	Very or somewhat important 94%
	Public transportation provides mobility to low-income families and individuals who cannot afford the costs of owning a car.	
Indian Nations Council of Governments, 2010	Please tell me if you agree or disagree with each of the following statements:	Agree 90%
	I don't use public transportation but I support it because it helps others who don't have cars or can't drive.	
Natural Resources Defense Council, 2012	I am going to read you some statements given as reasons to support increasing local funding to expand transportation choices in your community, including public transportation like buses or trains. After hearing each statement, please tell me whether you find it very convincing, somewhat convincing, or not convincing as a reason to support increasing funding for more transportation choices. If you do not believe the statement, please tell me that too.	Very or somewhat convincing 82%
	Expanding and improving our transportation options will help those of poor or modest incomes or those without cars have a way to get to their jobs, training programs or schools. And by providing reliable public transportation for seniors and people with disabilities, we can help them live independent, dignified lives where they are able to stay in their own homes.	

### Table 6, Continued

Sponsor or author, date	Question wording	Response
Lane Transit District, 2012	I am now going to read you some reasons that community members have offered to support the West Eugene EmX Extension. For each please let me know if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.	Strongly or somewhat agree 82%
	We have a responsibility to ensure that Eugene has a robust public transportation system so that all people, regardless of their income, age, or disability, are able to move throughout the community	
Transportation for America, 2010	Now I am going to read you a list of things that might happen if we expand and improve public transportation such as trains, rail, ferries and buses, as well as improve walking and biking options in your community. For each one, please tell me whether you think it would be likely or unlikely to happen if this approach were put in place.	Very or somewhat likely 79%
	Low-wage workers, seniors and the disabled will have an easier time getting where they need to go.	
Question assessing how pro	viding transportation for vulnerable populations ranks among possible b	enefits of public transit
City of Colorado Springs (The Kenney Group), 2011	And why do you say public transportation should be a VERY HIGH/ SOMEWHAT HIGH priority for the future of the Pikes Peak region? [Open-ended]	<b>Needed by people, poor, disabled, without cars 76%</b> Less congestion, traffic, pollution 8% Good for economy, growth 11%

Sources: See bibliography.

22

#### **OPINIONS OF TRANSIT SERVICE QUALITY**

Many surveys asked respondents to rate their opinion of service quality for their local transit (Table 7). These questions varied considerably in the geographic range they targeted, from "your community" up to the state level. In one-third of the ten questions, more respondents rated service positively than negatively. For about one-half of the questions, only around 40% of respondents rated service quality favorably.

Sponsor or author, date	Question wording	Response
Coalition for Smart Transit, 2010	Based on what you know, what is your impression of FasTracks?	Positive 77% Negative 21%
Contra Costa Transportation Authority, 2010	Using a scale of excellent, good, only fair, or poor, how would you rate each of the following in Contra Costa County?	Excellent or good 62% Only fair 18% Poor 7%
	BART [local heavy rail operator]	Don't know 14%
Agrawal, Nixon, and Murthy, 2012	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?	Very or somewhat good 60% Poor 16% No service 17% Don't know (volunteered) 7%
Agrawal & Nixon, 2013	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?	Very or somewhat good 60% Poor 13% No service 21% Don't know (volunteered) 5%
City of Colorado Springs, 2011	Whether you use MMT or not, what is your impression of the quality of services provided by MMT?	Excellent or good 42% Fair 15% Poor 5% Very Poor 4% Don't Know 35%
New Jersey Department of Transportation, 2005	And how would you rate New Jersey's public transportation system (that is, buses, trains, light rail, and ferry), would you say excellent, good, only fair or poor?	Excellent or good 42% Only fair 27% Poor 12% Don't know 19%
MassINC, 2013 ("Construction Ahead?")	Now I'm going to mention some specific aspects of the transportation system in Massachusetts. Please rate the condition of each one using a scale of excellent, good, fair, or poor.	Excellent or good 41% Fair 37% Poor 14% Don't know/refused 8%
	Public transportation	
Natural Resources Defense Council, 2012	Overall, how would you grade the availability of convenient public transportation in your community, including buses or trains – would you grade it an A, B, C, D, or F, with an "A" grade being excellent, and "F" being poor?	<b>A or B 36%</b> C 21% D 15% F 17% Don't know/NA 11%

# Table 7.Survey Questions Asking Respondents to Rate the Quality of Transit Service Near Them<br/>(Community or State Level)

24

### Table 7, Continued

Sponsor or author, date	Question wording	Response
Contra Costa Transportation Authority, 2010	Using a scale of excellent, good, only fair, or poor, how would you rate each of the following in Contra Costa County?	<b>Excellent or good 22%</b> Only Fair 21% Poor 14%
	Public bus transit	Don't know 43%
Alameda County Congestion Management Agency, 2010	Imagine a scale that goes from 1 to 5, where 1 means a lot WORSE and 5 means a lot BETTER. On that scale how would you rate each of the following in Alameda County? You may use any number from 1 to 5.	Mean 2.78
	Local public transportation systems over the last few years.	

Sources: See bibliography.

#### SUPPORT FOR IMPROVING TRANSIT

Many surveys asked respondents what importance they place on public transit, or how much of a priority they place on improving it (Table 8). The 12 questions that explored this theme by directly asking such a question all found at least two-thirds of respondents stating that transit is of medium or greater importance. A smaller set of three questions asked respondents how much they would prioritize improving public transit compared to other transportation improvements. In these questions, from one-quarter to one-third of respondents chose some aspect of public transit service as their highest priority. Finally, five polls asked an entirely open-ended question about what issue the local or regional government should prioritize, and in these questions public transit was mentioned only by tiny minorities (7%, at the most, and usually far fewer).

Sponsor or author, date	Question wording	Response
Questions asking responden	ts if public transit is very important	
Valley Regional Transit Authority, 2007	How important is the availability of public transportation services to the community in general? Would that be very or somewhat [important / unimportant]?	Very or somewhat important 92% Somewhat unimportant 6% Very unimportant 3%
New Jersey Department of Transportation, 2005	I am going to read you a list of issues that will be facing New Jersey in the next 5 to 10 years. For each please tell me if you think it is a critical issue, an important issue or not very important. What about	Critical or important issue 90% Not very important issue 7%
	Improving the state's public transportation system - trains and buses	
Agrawal & Nixon, 2010	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.	High or medium priority 83% Low priority 14% Don't know (volunteered) 4%
	How about expanding and improving local public transit service, like buses or light rail? Should government make that a high, medium, or low priority?	
Agrawal, Nixon, and Murthy, 2012	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.	High or medium priority 82% Low priority 16% Don't know (volunteered) 2%
	How about expanding and improving local public transit service, like buses or light rail? Should government make that a high, medium, or low priority?	
Agrawal & Nixon, 2011	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.	High or medium priority 80% Medium priority 33% Low priority 17% Don't know (volunteered) 3%
	How about expanding and improving local public transit service, like buses or light rail? Should government make that a high, medium, or low priority?	

### Table 8. Poll Questions Asking about Importance Placed on Public Transit

Mineta Transportation Institute

### Table 8, Continued

Sponsor or author, date	Question wording	Response
Agrawal & Nixon, 2013	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.	High or medium priority 81% Low priority 18% Don't know 2%
	How about expanding and improving local public transit service, like buses or light rail? Should government make that a high, medium or low priority?	
Transportation for America, 2010	Thinking about things in your community, and specifically transportation in your community. Please tell me if you agree or disagree with the following statements.	Strongly or somewhat agree 81% Somewhat disagree 8% Strongly disagree 8% Don't know/refused 2%
	The United States would benefit from an expanded and improved public transportation system, such as rail and buses.	
City of Colorado Springs, 2011	How much of a priority should expanding public transportation service be for the future of the Pikes Peak region?	Very or somewhat high priority 71% Somewhat low priority 11% Not a priority at all 10% Don't know/NA 8%
Transportation for America, 2010	Thinking about things in your community, and specifically transportation in your community. Please tell me if you agree or disagree with the following statements.	Strongly or somewhat agree 69% Somewhat disagree 12% Strongly disagree 18% Don't know/refused 1%
	My community would benefit from an expanded and improved public transportation system, such as rail and buses.	
The Atlanta Journal- Constitution and Channel 2 Action News, 2011	The Metro Atlanta Transportation Roundtable is a group of elected local officials from the 10-county metro region who are responsible for developing a list of transportation project to be funded from the 1% sales tax. The Roundtable has recommended a list of projects that dedicates 55% to rail, bus and other mass transit projects and 45% to road improvements and new road construction.	Strongly or somewhat agree 63% Somewhat disagree 13% Strongly disagree 24%
	I'm going to read a series of statements and after I read each please tell me if you agree or disagree.	
	My community would benefit from an expanded and improved public transportation system, such as rail and buses. Do you agree or disagree? (Is that strongly agree/disagree or somewhat agree/ disagree?)	

### Table 8, Continued

Sponsor or author, date	Question wording	Response
Lane Transit District, 2012	I'm going to read you a list of items that some Eugene residents consider to be transportation problems. Over the next 10 years, the community will face many difficult issues and competing demands. With limited resources, they won't be able to do everything and must establish priorities. Knowing that financial resources are limited, what priority should the City of Eugene give to each possible transportation option: low priority, medium priority, high priority, or urgent priority.	Urgent or high priority 41% Medium priority 31% Low priority 25% DK 4%
	Having faster and more frequent public transportation service in Eugene	
Indian Nations Council of Governments, 2010	Indicate whether you see the item as a Current Problem, Emerging Problem, Not a Problem in the Tulsa region.	Current problem 36% Emerging problem 36% Not a problem 33%
	Lack of public transportation/bus service	Don't know 6%
Questions asking respondent	ts which transportation problem is most pressing	
Alameda County Transportation Commission, 2011 ("EMC #11-4453")	And what would you say is the most important transportation problem facing Alameda County today? [Open-ended question. Note: Previous question asked about most important problem overall. No one mentioned transportation of any kind.]	Transit-related responses 35% BART [local heavy rail operator] 9% Poor bus service overall/Poor mass transit 9% Lack of available service/ cut-backs on transit service 7% Affordable mass transit/It is expensive 6% AC Transit [local bus operator] 5% Congestion/Traffic 16% Bad roads/Roads need repairs 14% Gas prices are high 5% Funding for transportation 4% Safety 3% Other mentions 7% Don't know 11% No answer 3%
Rockefeller Foundation, 2011	If you could improve just one or two things about the transportation infrastructure in the area where you live, what one or two things would you improve?	Transit-related responses 35% More/better public transportation, better access, more options 20% More/better bus service, better access, more routes 9% Better roads/streets/highways, fix potholes, better maintenance 38% Bridges, need repaired/maintained 7% More/better rail system, trains 6% Don't know; no response 3%

### Table 8, Continued

Sponsor or author, date	Question wording	Response
Washington State Transportation Commission, 2012	What do you think is the most urgent transportation priority facing your local area?	Transit improvements: 25% Capacity issues: 20% Maintenance issues: 15% All other issues combined: 16% Traffic flow improvements: 13% Don't know/not sure/no answer: 9% None/nothing: 2%
Questions asking which prob	lem of any kind is most pressing	
Regional Transportation Alliance (Fallon Research), 2010	What do you think should be the top priority for local elected officials to work on right now?	Improving the quality of public education 32% Attracting more businesses and jobs to the area 30% Reducing traffic congestion 5% Preventing home foreclosures 6% Expanding public transportation systems 7% Lowering taxes 15% Other (volunteered) 4% Unsure/no answer 1%
Coalition for Smart Transit (The Kenney Group), 2010	Thinking about the issues facing the Denver metropolitan area in your opinion what is the number one priority you would want local officials to focus on in the next couple years? [open ended]	Unemployment/lack of jobs 32% Economic conditions 9% Public transportation 6% Education-general 4% Balancing budget 4% Healthcare access/affordability 4% Education funding 3% Crime/public safety 3% Transportation congestion 3% Lower taxes 3%
Regional Transportation Alliance (Fallon Research), 2012 (Wake County poll)	What do you think should be the top priority for local elected officials to work on right now? Do you think it is	Improving the quality of public education 39% Attracting more businesses and jobs to the area 36% Lowering taxes 10% Expanding public transportation systems 5% Reducing traffic congestion 3% Preventing home foreclosures 3% Other (volunteered) 3% Unsure/no answer 3%

## Table 8, Continued

Sponsor or author, date	Question wording	Response	
City of Colorado Springs (The Kenney Group), 2011	What do you believe to be the most important issue facing your local community today that you want your local elected officials to do something about ?[open ended]	Jobs/employment 29%	
San Diego County Water Authority, 2011	To start off with, what do you feel is the most important issue facing San Diego County residents today? [open ended]	Economy/Jobs 28% Financial problems in the city of San Diego 11% Education quality 6% Cost of gasoline 6% Cost of living (generally) 4% Issues at 2% or 3% each: education cost, government mismanagement (general mention), financial problems in the state and other local governments, water supply, immigration issues, traffic , growth/development/sprawl, housing affordability, high taxes water quality, water rates/cost of water, infrastructure Public Transit >1% Issues at 1% or less each: mortgage crisis/home foreclosures, fire danger/disaster preparedness, homeless, health care, Middle East, credit markets/difficulty getting loans, environment/pollution, electricity and heating cost/supply, sewage treatment, terrorism, wars (Iraq, Mideast, Afghanistan, Pakistan), federal deficit	

Sources: See bibliography.

 $|\omega|$ 

### SUPPORT FOR FUNDING TRANSIT

Many surveys asked questions related to opinions about funding transit. Often these questions appeared in polls that were specifically designed to test public support for ballot measures asking voters to approve a new source of transit funding.

Quite a few poll questions asked about levels of transit funding very generally, without asking about support for specific new tax revenue. These questions covered topics such as:

- Should government spend more or less on transit, in the abstract?
- What proportion of available transportation money should be spent on transit?

Numerous other questions asked if respondents would support raising money for public transit from a particular tax type. By far the largest number of these questions asked about sales taxes. Less common but still frequent were questions about vehicle registration fee or gas tax increases, or questions that asked about increases in "taxes" with no specific tax mentioned. Much less common were questions about tolls, property taxes, income taxes, or a mileage tax.

#### Support for Spending More Money on Public Transit, as a General Concept

A number of polls ask whether respondents think that government should spend more or less on public transit than it currently does, without reference to any particular funding source (Table 9). Some polls phrased the question in terms of whether current spending levels are too high/too low, while others asked more directly if respondents would support additional spending. The four poll questions asking if respondents would favor additional spending found that more than one-half did. Among the six poll questions asking if government is currently spending too much or too little, only one poll found a majority thinking spending should rise. In the others, between one-third and almost one-half thought spending was too low, with roughly similar proportions thinking that spending levels are about right. Very few people thought that spending was too high; across the questions, the highest percentage thinking that spending was too high was only 11%.

Sponsor or author, date	Question wording	Response
Questions asking if responde	nts would favor more transit funding	
Pew Research Center, 2008	As I read some possible government policies to address America's energy supply, tell me whether you would favor or oppose each.	Favor 72% Oppose 23% Don't know 5%
	Would you favor or oppose the government spending more on subway, rail and bus systems?	
Public Agenda, 2009	Do you favor or oppose each of the following energy-related proposals?	Strongly or somewhat favor 71% Somewhat oppose 13%
	Spending more tax money on public transportation such as bus and rail systems	Strongly oppose 13% Don't know 2%
Natural Resources Defense Council, 2012	I am going to read you some statements given as reasons to support increasing local funding to expand transportation choices in your community, including public transportation like buses or trains. After hearing each statement, please tell me whether you find it very convincing, somewhat convincing, or not convincing as a reason to support increasing funding for more transportation choices. If you do not believe the statement, please tell me that too.	<b>Very or somewhat convincing 65%</b> Not convincing 17% Don't believe 13% Don't know/NA 5%
	Currently, the average state spends the vast majority of its federal transportation dollars on roads and highways - just 20 percent goes to public transportation, such as trains, buses and light rail. We should have more balance, and shift some funding from roads to expand and improve our public transit systems.	
Transportation for America, 2010	In general, would you support or oppose increasing funding to expand and improve public transportation in YOUR COMMUNITY, if it required a small increase in taxes or fees? [IF CHOICE GIVEN:] Is that STRONGLY (support/oppose) or just somewhat?	Initial <b>Strongly or somewhat support 51%</b> Somewhat oppose 14% Strongly oppose 32% Unsure/refused 3%
	LATER IN SURVEY	Informed Strongly or somewhat support 57%
	Sometimes after hearing a little more, people feel somewhat differently, so let me ask you again –	Somewhat oppose 11% Strongly oppose 30% Unsure/refused 3%
	In general, would you support or oppose increasing funding to expand and improve public transportation in YOUR COMMUNITY, if it required a small increase in taxes or fees? [IF CHOICE GIVEN:] Is that STRONGLY (support/oppose) or just somewhat?	

## Table 9. Poll Questions Asking about Support for Increasing Transit Funding, in General

ယ္သ

## Table 9, Continued

Sponsor or author, date	Question wording	Response
Questions asking if existing p	ublic transportation spending levels are too high or too low	
Transportation for America, 2010	Actually, today 80 cents out of every federal transportation dollar goes to highways, while 17 cents is used for public transportation such as such as trains, rail, ferries and buses around the country, and the remainder for other transportation needs. Having heard that, would you say more funding should be allocated	Initial <b>More 58%</b> Less 5% About right amount 35% Do not know/refused 2%
	to public transportation, less funding should be allocated to public transportation, or do you think the current amount is about right?	Informed More 63% Less 5%
	LATER IN SURVEY	About right amount 31% Do not know/refused 1%
	Sometimes after hearing a little more, people feel somewhat differently, so let me ask you again –	
	As you heard earlier, 80 cents out of every federal transportation dollar goes to highways, while 17 cents is used for public transportation such as such as trains, rail, ferries and buses around the country, and the remainder for other transportation needs.	
	Would you say more funding should be allocated to public transportation, less funding should be allocated to public transportation, or do you think the current amount is about right?	
National Data Program for the Sciences, 2008	I would like to talk with you about some things people think about today. We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.)	Too little 47% About right 39% Too much 8% DK 7%
	Mass transportation	
HNTB, 2010 ("Public Transit Survey")	Do you think the amount of money that local, state and federal governments spend on public transportation in your area is	<b>Too little 46%</b> Adequate 42% Too much 11%

## Table 9, Continued

Sponsor or author, date	Question wording	Response
National Data Program for the Sciences, 2010	I would like to talk with you about some things people think about today. We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.	<b>Too little 42%</b> About right 44% Too much 10% DK 5%
	Mass transportation	
National Data Program for the Sciences, 2006	We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.	<b>Too little 38%</b> About right 51% Too much 10%
	Mass transportation	
National Data Program for the Sciences, 2006	We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.	<b>Too little 33%</b> About right 59% Too much 9%
	Improving mass transportation.	

Sources: See bibliography.

### Support for Raising Specific Tax Types to Generate Revenue for Transit

A variety of polls tested support for using gas tax revenues to pay for transit (Table 10). Questions varied from asking if gas tax revenue should be spent on public transit, to asking if the gas tax rate should be *raised* to pay for improved transit, to asking which revenue mechanism is most appropriate to pay for transit (and including the gas tax as an option). From one-third to two-thirds of respondents per poll supported the principle of spending gas tax revenues on transit purposes, but smaller numbers supported a raise in the gas tax rate specifically for transit.

Table 11 presents findings from five questions related to spending vehicle registration fee revenues to increase funding for public transit. Two of the questions simply asked if respondents would support this; support was 48% and 39% of respondents, respectively. Another question asked respondents their preferred revenue source among several options: 22% chose registration fees, compared with 40% preferring a sales tax and 11% preferring local property taxes. Finally, two polls asked if respondents would be more or less likely to vote for a county commissioner who supported a vehicle registration fee increase for public transit. In both cases, approximately one-half of respondents said this position would make no difference, and about one-third said they would be less likely

Table 12 presents the many polls that asked about support for paying for transit with sales tax revenue. Most of these polls asked if residents would support raising the sales tax to pay for transit, and in almost all cases a majority of respondents said yes. Three other polls asked respondents to pick a preferred source of revenue from among several options, and in all cases the sales tax was the preferred option among choices that would raise a tax rate.

Sponsor or author, date	Question wording	Response
Agrawal & Nixon, 2013	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?	Support 64% Oppose 33% Don't know (volunteered) 2%
Washington State Transportation Commission, 2012	State gas tax revenues also help fund the Washington State Ferry system. Do you support or oppose using state transportation funds to help maintain and operate the Washington State Ferry system?	Strongly or somewhat support 57% Somewhat oppose 21% Strongly oppose 16% Not sure 6%
HNTB, 2010	When it comes to funding more and better public transportation options, which of the following do you think local, state and federal governments should rely on for most of the money? [respondents could select more than one option]	Greater share of the gas tax 49% Private Investors 21% Local sales tax dedicated to transit 20% Increased public transportation fares 15% Property tax dedicated to transit 10% Other 6%
MassINC, 2013	Now, imagine that state government decided that the best option to raise money for transportation is to increase the state gas tax. I'm going to read you several different options for how the money is spent. For each, please tell me if you would support or oppose the gas tax increase, if the money is spent this way.	Strongly or somewhat support 47% Somewhat oppose13% Strongly oppose 38% Don't know/refused 2%
	Would you support the gas tax increase if the money were spent mainly on improving the public transportation network in cities around Massachusetts? And do you strongly (support/oppose) this idea, or somewhat (support/oppose)?	
Metropolitan Transportation Commission, 2012	Agree/disagree with statement: I would support a gas tax only for public transit improvements.	Strongly or somewhat agree 41% Somewhat disagree 23% Strongly disagree 34% No opinion/Don't know 2%
Indian Nations Council of Governments, 2010	Please indicate how willing you would be to use the following sources of revenue to help fund public transportation improvements?	<b>Very or somewhat willing 34%</b> Not willing 65% Don't know 1%
	A slight increase in the gas and diesel tax	
Agrawal, Nixon, & Murthy 2012	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 are the ones who pay the tax. Other people say that it makes sense to spend money from gas taxes on public transportation, since transit helps reduce traffic and wear-and-tear on the roads. Which statement is closer to your opinion?	Gas taxes make sense for public transportatio 33% Gas taxes only for roads and highways 48% Both (volunteered) 13% Neither (volunteered) 2% Don't know (volunteered) 3%

#### Table 10. Support for Spending Gas Tax Revenue on Public Transit

## Table 10, Continued

Sponsor or author, date	Question wording	Response
Agrawal, Nixon, and Murthy, 2012	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?	Strongly or somewhat support 28% Somewhat oppose 16% Strongly oppose 53% Don't know (volunteered) 3%
	Raise the federal gas tax	
Agrawal & Nixon, 2013	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? Raise the federal gas tax	Strongly or somewhat support 33% Somewhat oppose 19% Strongly oppose 48% Don't know (volunteered) 1%
Old Dominion University Social Science Research Center, 2012	How do you think light rail extension should be paid for?	Increase the fuel tax 10% Other (specify) 30% Increase sales tax 23% Borrow money 19% Don't know 18% Refused >1%
Agrawal, Nixon, and Murthy, 2012	Now, if you could only select one of the three options I just described, which would you prefer? [Options: reduce spending on other federal programs, raise transit fares, raise the federal gas tax]	Reduce spending on other federal programs 48% Raise transit fares 27% <b>Raise the federal gas tax 14%</b> Equally oppose all three (volunteered) 5% Equally support all three (volunteered) 2% Don't know (volunteered) 4%

Sources: See bibliography.

Sponsor or author, date	Question wording	Response
Questions asking about sup	port for using vehicle registration fee revenue for public transit	
Indian Nations Council of Governments, 2010	Please indicate how willing you would be to use the following sources of revenue to help fund public transportation improvements?	Very or somewhat willing 48% Not willing 51% Don't know 1%
	A slight increase in vehicle registration fees	
City of Colorado Springs, 2011	I'm going to read three options on how to fund the public transportation system in the Pikes Peak region. After I read each funding option, please tell me whether you would strongly support, somewhat support, somewhat support, somewhat oppose, or strongly oppose using it to support public transportation.	Strongly or somewhat support 39% Somewhat oppose 16% Strongly oppose 40% Don't know 6%
	Local vehicle registration fee	
City of Colorado Springs, 2011	And of those three funding options, if you had to choose one, which one would be your most preferred option?	Local vehicle registration fee 22% Sales tax 40% None of the above (volunteered) 23% Property tax 11% Don't know/NA 4%
Questions asking how respo	ndents' support for an elected official would change	
Regional Transportation Alliance, 2012 (Orange County poll)	If a county commissioner voted to increase vehicle registration fees by \$10 dollars for new or expanded public transportation, would you be more likely or less likely to re-elect him or her, or would it make no difference in your decision?	<b>More likely 18%</b> Less likely 29% No difference 50% Unsure/no answer 3%
Regional Transportation Alliance, 2012 (Wake County poll)	If a county commissioner voted to increase vehicle registration fees by \$10 dollars for new or expanded public transportation, would you be more likely or less likely to re-elect him or her, or would it make no difference in your decision?	<b>More likely 11%</b> Less likely 39% No difference 47% Unsure/no answer 2%

#### Table 11. Support for Spending Vehicle Registration Fee Revenue on Public Transit

Sources: See bibliography.

Sponsor or author, date	Question wording	Response
City of Colorado Springs, 2011	I'm going to read three options on how to fund the public transportation system in the Pikes Peak region. After I read each funding option, please tell me whether you would strongly support, somewhat support, somewhat oppose, or strongly oppose using it to support public transportation.	Strongly or somewhat support 66% Somewhat oppose 15% Strongly oppose 30% Don't know:5%
	Sales tax	
Regional Transportation Alliance, 2012 (Orange County poll)	Would you vote for or against a sales tax increase of one-half of a percent to pay for new or expanded public transportation, if one was on the ballot in your county?	<b>For 60%</b> Against 33% Unsure/no answer 8%
Regional Transportation Alliance, 2010	Would you vote for or against a sale tax increase of one-half of a percent to pay for new or expanded public transportation, if one was on the ballot in your county?	<b>For 58%</b> Against 39% Unsure/no answer 3%
Center for the Study of Los Angeles, 2012	In 2008, voters in LA County passed Measure R to establish a half-cent sales tax for the next thirty years for transportation-related projects, like the metro rail. Recently a proposal was developed to extend the 2008 half-cent sales tax beyond the original thirty years. This measure will likely appear on the November 2012 ballot. If you were voting today, would you vote yes or no on this measure?	<b>Yes 54%</b> No 37% Don't know/refused 9%
Valley Regional Transit Authority, 2007	Would you support or not support an increase in the local sales tax to expand public transportation services in the Treasure Valley? Would that be strongly or somewhat [support / not support]?	Strongly or somewhat support 52% Neutral/somewhat do not support 13% Strongly do not support 36%
Regional Transportation Alliance, 2012 (Wake County poll)	Would you vote for or against a sales tax increase of one-half of a percent to pay for new or expanded public transportation, if one was on the ballot in your county?	<b>For 50%</b> Against 43% Unsure/no answer 7%
Coalition for Smart Transit, 2010	If the election were held today, would you vote for or vote against a sales tax increase for FasTracks?	<b>For 50%</b> Against 48% Don't know 3%
Indian Nations Council of Governments, 2010	Please indicate how willing you would be to use the following sources of revenue to help fund public transportation improvements?[A slight sales tax increase]	<b>Very or somewhat willing 50%</b> Not willing 49% Don't know 1%
City of Colorado Springs, 2011	And of those three funding options, if you had to choose one, which one would be your most preferred option?	Sales Tax 40% None of the above (volunteered) 23% Local vehicle reg fee 22% Property Tax 11% Don't know/NA 4%

### Table 12. Support for Spending Sales Tax Revenue on Public Transit

Mineta Transportation Institute

## Table 12, Continued

Sponsor or author, date	Question wording	Response
Old Dominion University Social Science Research Center, 2012	How do you think light rail extension should be paid for?	Increase sales tax 23% Other (specify) 30% Borrow money 19% Don't know 18% Increase the fuel tax 10% Refused >1%
HNTB, 2010 ("Public Transit Survey")	When it comes to funding more and better public transportation options, which of the following do you think local, state and federal governments should rely on for most of the money?	Local sales tax dedicated to transit 20% Greater share of the gas tax 28% Private investors 21% Increased public transportation fares 15% Property tax dedicated to transit 10% Other 6%

Sources: See bibliography.

# V. CONCLUSION

#### SUMMARY OF FINDINGS

This review of 56 polls asking about opinions related to public transit revealed that four general topics are most frequently probed: the reasons people support public transit, opinions about transit service quality, the extent to which people support improving transit as a general concept, and their support for raising additional revenues to support transit.

Many polls explored the reasons respondents might believe that public transit benefits them personally or the community at large. The benefits mentioned most commonly were reducing traffic congestion, reducing commute costs, supporting a strong economy, reducing air pollution (or, in a few cases, greenhouse gas emissions), or lowering commute costs. In all cases, majorities of respondents agreed that public transit provides these benefits.

Many surveys asked respondents to rate their opinion of transit service quality near them. In most surveys, at least 40% of respondents rated service quality favorably. It should be stressed that because most Americans do not ride transit regularly, the opinions expressed in these surveys reflect many more non-riders than actual transit riders.

Many surveys asked respondents what importance they place on public transit, or how much priority they place on improving it. The 12 questions that explored this theme by directly asking respondents such a question all found at least two-thirds of respondents stating that transit is of medium or more importance. A smaller set of three questions asking how much respondents would prioritize improving public transit compared with other transportation improvements found that from one-quarter to one-third of respondents chose some aspect of public transit service as their highest priority.

A number of polls asked whether respondents think that government should spend more or less on public transit than it currently does, without reference to any particular funding source. The four poll questions asking if respondents would favor additional spending found that more than one-half did. Among the six poll questions asking if government is currently spending too much or too little, only one poll found a majority thinking spending should rise. In the others, between one-third and almost one-half thought spending was too low, with roughly similar proportions thinking that spending levels are about right.

A variety of polls tested support for using gas tax revenues to pay for transit. Poll questions asking if respondents supported the principle of spending gas tax revenues on transit purposes found anywhere from one-third to two-thirds of people agreeing. However, much smaller percentages supported raising the gas tax rate specifically to generate funding for transit.

A few other questions related to spending vehicle registration fee revenues to increase funding for public transit. Two of the questions simply asked if respondents would support this; support was 48% and 39% of respondents, respectively. In addition, in two polls that asked if respondents would be more or less likely to vote for a county commissioner who supported a vehicle registration fee increase for public transit, about one-half of respondents said this position would make no difference and about one-third said they would be less likely.

Finally, the largest set of questions related to a specific tax type asked about support for paying for transit with sales tax revenue. Most of these polls asked if residents would support raising the sales tax to pay for transit, and in almost all cases a majority of respondents said yes. Three other polls asked respondents to pick a preferred source of revenue from among several options, and in all cases the sales tax was the preferred option among choices that would raise a tax rate.

In summary, strong majorities of people believed that transit brings a number of specific benefits to their community (especially congestion relief and accessibility to vulnerable residents), and strong majorities also support improvements to transit as a general concept. However, fewer people support raising spending on transit as a concept, and definitely less than one-half support raising any specific tax to raise transit funding, *except* for sales taxes, which usually enjoy majority support. This general conclusion matches that in Manville and Cummins' paper reviewing a smaller set of surveys.<sup>6</sup>

In concluding this discussion, one additional finding worth stressing is the large variability in the response patterns to questions on any single topic. The variation is undoubtedly explained in part by genuinely different sentiments among different groups of respondents. However, the way the questions were phrased must have played a large part in generating the wide variability in responses, a point that cannot be emphasized enough. For any survey, sponsors must take great care to phrase questions that are clear for respondents to understand. Further, for anyone interpreting polling results, it is critical to take question wording into account very carefully.

#### SUGGESTIONS FOR FUTURE RESEARCH

Fruitful avenues for expanding this review of poll findings would be to:

- Expand the range of surveys reviewed to include the household travel surveys conducted by regional and state agencies, as well as the National Household Travel Survey.
- Compile a set of transit passenger surveys that include opinion questions, to compare the views of transit riders with the views of the general public.
- For the subset of polls for which data files or crosstabs are available, examine how opinions vary by key socio-demographic and travel behavior factors (age, gender, transit use, etc.).

The findings from the current review also suggest some types of questions that have not been commonly asked but might fill important gaps in knowledge, such as to:

- More directly ask respondents *why* they support public transit. The existing polls typically break this information into two questions, one asking about benefits perceived and another asking whether or not people support more or better transit.
- More directly ask respondents who say they would not support additional funding for transit *why* they hold this opinion.

# APPENDIX A: PUBLIC OPINION POLLS REVIEWED

Sponsor or author	Publication Date	Sampling Frame	Survey Geography
20/20 Insight	2011	Registered Voters	Region
ABC News/Planet Green/Stanford	2008	Adults	National
Agrawal & Nixon	2010	Adults	National
Agrawal & Nixon	2011	Adults	National
Agrawal and Nixon	2013	Adults	National
Agrawal, Nixon, & Murthy	2012	Adults	National
Alameda County Congestion Management Agency	2010	Registered Voters	County
Alameda County Transportation Commission	2011	Registered Voters	County
Alameda County Transportation Commission	2011	Registered Voters	County
American Highway Users Alliance	2008	Likely Voters	National
American Road and Transportation Builders Association	2013	Adults	National
Center for the Study of Los Angeles	2012	Registered Voters	County
City of Colorado Springs	2011	Voters - active	County
Civitas Institute	2012	Adults	State
Coalition for Smart Transit	2010	Likely Voters	Region
Contra Costa Transportation Authority	2010	Registered Voters	County
Elway Research	2013	Registered voters	State
Greene & Smith	2010	Drivers using toll roads	Region
INTB	2009	Adults	National
INTB	2010	Adults	National
INTB	2010	Adults	National
HNTB	2010	Adults	National
HNTB	2011	Adults	National
Indian Nations Council of Governments.	2010	Adults	Region
Indianapolis Congregation Action Network	2013	Adults	State
Kinder Institute for Urban Research	2012	Adults	County
_ane Transit District	2012	Registered Voters	Locality
MassINC	2013	Registered voters	State
MassINC	2013	Registered voters	State
Metropolitan Transportation Commission	2012	Likely Voters	Region
Minnesota 2020	2008	Adults	State
National Data Program for the Sciences	2006	Adults	National
National Data Program for the Sciences	2008	Adults	National
National Data Program for the Sciences	2010	Adults	National
New Jersey Department of Transportation	2005	Adults	State
National Resources Defence Council	2012	Voters	National
Peck	2010	Adults - Older(60+)	Regional
Pew Research Center	2008	Adults	National
Public Agenda	2009	Adults	National
Quinniapac University Polling Institute	2011	Registered Voters	State

#### Table 13. Public Opinion Polls Reviewed

Sponsor or author	Publication Date	Sampling Frame	Survey Geography
Rasmussen Reports	2013	Adults	National
Reason Foundation	2011	Adults	National
Regional Transportation Alliance	2010	Registered Voters	Region
Regional Transportation Alliance (Orange County poll)	2012	Registered Voters	County
Regional Transportation Alliance (Wake County poll)	2012	Registered Voters	County
Rockefeller Foundation	2011	Registered Voters	National
San Diego Association of Governments	2008	Adults	Region
San Diego County Water Authority	2011	Adults	Locality
Social Science Research Center, Old Dominion University	2012	Adults	Region
Star Tribune (Minnesota)	2011	Adults	State
WXIA-TV Atlanta	2012	Registered Voters or Likely voters	State
The Atlanta Journal-Constitution and Channel 2 Action News	2011	Registered Voters	Region
Transportation for America	2010	Registered Voters	National
Valley Regional Transit Authority	2007	Adults	Region
Washington Policy Center	2011	Registered Voters	State
Washington State Transportation Commission	2012	Adults	State

# **ENDNOTES**

- 1. Phil Goodwin and Glenn Lyons, "Public Attitudes toward Transport: Interpreting the Evidence," *Transportation Planning and Technology* 33, no. 1 (2010): 3-17; Glenn Lyons, et al, *Public Attitudes to Transport: Knowledge Review of Existing Evidence* (Bristol: University of West England, June 2008).
- 2. Johanna Zmud and Carlos Arce, *Compilation of Public Opinion Data on Tolls and Road Pricing*, NCHRP Synthesis 377 (Washington, D.C., Transportation Research Board, 2008).
- 3. Asha 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 Jose, CA: Mineta Transportation Institute, 2014).
- 4. Michael Manville and Benjamin Cummins, "Why Do Voters Support Public Transportation? Public Choices and Private Behavior," *Transportation* 42, no. 2 (2014), pp. 303-332.
- 5. Seven other polls asked questions that mix traffic congestion with other possible benefits from public transit, making it impossible to know for sure what respondents thought about the link between transit and congestion relief.
- 6. Michael Manville and Benjamin Cummins, "Why Do Voters Support Public Transportation? Public Choices and Private Behavior," *Transportation* 42, no. 2 (2014), pp. 303-332.

# BIBLIOGRAPHY

Notes:

- This bibliography includes both items cited in the report and also other public opinion polls reviewed, but not cited above, that contained questions asking opinions about public transportation. The latter are included to assist readers who may be searching for polls that touch on public transit.
- The poll sponsor, rather than the pollster, is used as the "author" for the bibliography in cases where the poll was conducted on behalf of a sponsor.
- 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).
- ABC News, Planet Green, and Stanford. "Fuel Costs Boost Conservation Efforts; 7 in 10 Reducing 'Carbon Footprint." August 9, 2008. http://abcnews.go.com/images/Polli ngUnit/1067a1Environment2008.pdf (accessed September 26, 2012).
- 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://www.transweb.sjsu.edu/ MTIportal/research/publications/documents/2928%20-%20Annual%20Trans.%20 Survey%20%286.24.2010%29.pdf (accessed May 31, 2011).
  - –. What Do American Think About Federal Transportation Tax Options? Results from Year Four of a National Survey. San José, CA: Mineta Transportation Institute, June 2013. http://transweb.sjsu.edu/PDFs/research/1228-American-taxpoll-2013-public-transit-highways-streets-roads.pdf (accessed August 19, 2013).
- 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-streetsroads.pdf (accessed August 19, 2013).
- Alameda County Congestion Management Agency (conducted by EMC Research). "EMC #10-4203: Telephone Survey of Alameda County Likely Voters." EMC

Research, February 2-9, 2010. http://www.transplan.us/meetings/2010/PAC/may/ TPLAN-May-2010%20-%20Packet.pdf (accessed February 13, 2015).

- Alameda County Transportation Commission (conducted by EMC Research). "EMC #11-4453: Telephone Survey of Alameda County Voters Conducted for Alameda County Transportation Commission (ACTC)." October 9, 2011. http://www. alamedactc.org/files/managed/Document/5349/06\_Poll\_Results.pdf (accessed September 21, 2012).
- Alameda County Transportation Commission (prepared by EMC Research). "EMC #11-4407: Telephone Survey of Alameda County Voters Conducted for Alameda County Transportation Commission (ACTC) September 28 – October 9, 2011." October 27, 2011. http://www.alamedactc.org/files/managed/Document/5349/06\_ Poll\_Results.pdf (accessed February 13, 2015).
- American Road and Transportation Builders Association (prepared by Ipsos). "Transportation Investment and Value Study." 2013. http://www.aednet.org/ government/pdf-2013/ARTBA-HighwayFundingPoll-20130603.pdf (accessed August 20, 2013).
- Five Town Rural Transit Inc (prepared by Appel Research, LLC). *East End Transit Survey*. 2005. http://www.appelresearch.com/Five\_Towns\_Rural\_Transportation\_ Report.pdf (accessed January 25, 2013).
- Atlanta Journal-Constitution and Channel 2 Action News (prepared by Mason-Dixon Polling & Research, Inc.). "Atlanta Metro Transit Poll." September 26, 2011.
- Baldassare, Mark, Dean Bonner, Sonja Petek, and Jul Shrestha. *PPIC Statewide Survey: Californians and the Environment*. San Francisco, CA: PPIC & Pew Center on the States, July 2011. http://www.ppic.org/content/pubs/survey/ s\_711mbs.pdf (accessed January 25, 2013).
- Baldassare, Mark, and Sarah Urahn. *Facing Facts: Public Attitudes and Fiscal Realities in Five Stressed States*. San Francisco: PPIC & Pew Center on the States, October 2010. http://www.ppic.org/content/pubs/survey/s\_1010pews.pdf (accessed October 1, 2012).
- Braunger, David. "Minnesota Poll: Deficit Solution -- Tax Hikes and Spending Cuts." *Minnesota Star Tribune*. May 15, 2011. http://www.startribune.com/ politics/121721279.html (accessed September 30, 2012).
- Quinnipiac University Polling Institute. "New York Voters Back Fracking, Despite Concerns, Quinnipiac University Poll Finds; More Women in Government Means Fewer Sex Scandals." Hamden, CT: Quinnipiac University Polling Institute, August 11, 2011. http://www.quinnipiac.edu/images/polling/ny/ny08112011.doc (accessed March 5, 2012).

- 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).
- Center for Transit-Oriented Development. *Preservation in Transit-Oriented Districts*. Oakland, CA: Reconnecting America, May 2012. http://www.reconnectingamerica. org/assets/PDFs/20120524LAHDTODPreservationFinal.pdf (accessed January 25, 2013).
- Civitas Institute. "Civitas Institute North Carolina Statewide Study." Raleigh, NC: Civitas Institute, May 2012. http://www.nccivitas.org/wp-content/uploads/2012/05/xtabs-gas.pdf (accessed March 20, 2013).
- Coalition for Smart Transit (conducted by the Kenney Group). "Survey of Likely Voters in RTD District." March 2010. http://www.rtd-fastracks.com/media/uploads/main/ FasTrack\_survey\_March\_2010\_RTD\_summary.pdf (accessed September 27, 2012).
- Contra Costa Transportation Authority (conducted by EMC Research). "EMC #10-4247: Telephone Survey of Contra Costa County Voters." April 8-15, 2010. http://www. transplan.us/meetings/2010/PAC/may/TPLAN-May-2010%20-%20Packet.pdf (accessed September 21, 2012).
- de Feirbre, Conrad. "Poll Shatters Transportation Myths." Minnesota 2020, February 2008. http://www.mn2020.org/index.asp?Type=B\_BASIC&SEC={7483597B-6411-49F5-AFC4-60A791C2F0B3}&DE= (accessed September 30, 2012).
- Ellen, Pam Scholder, David L. Sjoquist, and Rayna Stoycheva. *Measuring Preferences for and Responses to Alternative Revenue Sources for Transportation*. Atlanta, GA: Georgia State University, June 2012. http://aysps.gsu.edu/sites/default/files/ documents/Rpt\_244FIN(1).pdf (accessed March 14, 2013).
- Elway Research, Inc. "Tough Road Ahead for Transportation Package." *Seattle Times*, March 4, 2013. http://seattletimes.wpengine.netdna-cdn.com/politicsnorthwest/ files/2013/03/Elway-Poll-030413-Transportation.pdf (accessed March 15, 2013).
- 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 September 26, 2012).
- Franklin and Marshall College Center for Opinion Research Floyd Institute for Public Policy. "Franklin & Marshall College Poll." Lancaster, PA: Franklin and Marshall College eDisk, February 7, 2013. https://edisk.fandm.edu/FLI/keystone/pdf/ keyfeb13.pdf (accessed March 20, 2013).

- Gallup, Inc. "In U.S., Most Oppose State Gas Tax Hike to Fund Repairs." Gallup, Inc, 2013. http://www.gallup.com/poll/161990/oppose-state-gas-tax-hike-fund-repairs. aspx (accessed April 30, 2013).
- Gonzales Research and Marketing Strategies, Inc. "Maryland Poll." January 2013. http:// www.gonzalesresearch.com/polls/Maryland%20Poll%20January%202013.pdf (accessed March 20, 2013).
- Goodwin, Phil, and Glenn Lyons. "Public Attitudes toward Transport: Interpreting the Evidence." *Transportation Planning and Technology* 33, no. 1 (2010): 3-17.
- Greene, Elizabeth, and Colin Smith. *Congestion Pricing on Highways in Chicago, Illinois: What Do Drivers Think?* White River Junction, VT: Resource Systems Group, Inc., June 2009. http://www.transportchicago.org/uploads/5/7/2/0/5720074/6congestion\_pricing\_on\_chicago\_s\_highways.pdf (accessed September 27, 2012).
- Indian Nations Council of Governments. 2010 Tulsa Regional Transportation Survey. October 2010. https://skydrive.live.com/?cid=5265b6076663e4f2&id=5265B60766 63E4F2%212630 (accessed February 14, 2013).
- Indianapolis Congregation Action Network (IndyCAN). "Poll Results: Voters in Senate District 29 & 30 Support Mass Transit Tax, Say Senate Should Act Now." PICO National, 2013. http://www.actonsoftware.com/acton/attachment/1305/1305:f-00ec/0/s-0127-1304/-/I-sf-cl-70140000000TIfFAAW-03d0/I-sf-cl-70140000000TIfFAAW-03d0:3/ (accessed May 7, 2013).

HNTB Corporation. "America Thinks: 2011 Mobile Survey." February 2011.

———. "American Thinks 2012 Highway Survey." 2012.

- ------. "DOT and Tolling Survey 1: Breakout Report." April 2012.
- ------. "Public Transit Survey." September 2010.

——. "Q1 News Bureau Survey." February 2011.

———. "Surface Transportation Survey: America THINKS 2009 Infrastructure Survey." August 2009.

———. "Sustainability Survey: America THINKS 2010 Sustainability Survey." April 2010.

Kenney Group. "Public Opinion Research of Active Voters in El Paso County." January 2011. http://www.springsgov.com/units/transit/FutureofRegionalTransit/ FoRTPollResults02\_04\_11.pdf (accessed February 29, 2012).

Kever, Jeannie. "Mass Transit Gains Momentum in Houston Area Survey." *Houston Chronicle*, April 21, 2012. http://www.chron.com/news/houston-texas/article/Masstransit-gains-momentum-in-latest-Houston-3500530.php (accessed January 25, 2013).

- Lane Transit District (prepared by DHM Research). "Lane Transit District (LTD) EmX West Eugene Extension Survey Report." March 21, 2012. http://www. ourmoneyourtransit.com/editorials.html (accessed January 25, 2013).
- Lyons, Glenn, et al. *Public Attitudes to Transport: Knowledge Review of Existing Evidence.* Bristol: University of West England, June 2008.
- Mahmoud, Moataz, and Julian Hine. "Using AHP to Measure the Perception Gap between Current and Potential Users of Bus Services." *Transportation Planning and Technology* 36, no. 1 (2013): 4-23.
- Manville, Michael, and Benjamin Cummins. "Why Do Voters Support Public Transportation? Public Choices and Private Behavior." *Transportation* 42, no. 2 (2014), pp. 303-332.
- MassINC (conducted by MassINC Polling Group). "Construction Ahead? Public Opinion on Transportation in Massachusetts." September 12-23, 2013. http://031d482. netsolhost.com/WordPress/wp-content/uploads/2013/03/Public-Opinion-on-Transportation-in-Massachusetts.pdf (accessed August 20, 2013).

- Metropolitan Transportation Commission (prepared by EMC Research). "Telephone Survey of Bay Area Likely November 2012 Voters." April 11, 2012. http://apps.mtc. ca.gov/meeting\_packet\_documents/agenda\_1852/Handout\_Item\_3-gas\_tax\_poll\_ toplines\_final\_4-11-12.pdf (accessed September 21, 2012).
- National Data Program for the Sciences. "General Social Survey 2006." Data downloaded from http://www3.norc.org/GSS+Website/ (accessed February 13, 2015).
- ———. "General Social Survey 2008." Data downloaded from http://www3.norc.org/ GSS+Website/ (accessed February 13, 2015).

———. "General Social Survey 2010." Data downloaded from http://www3.norc.org/ GSS+Website/ (accessed January 15, 2013).

Natural Resources Defense Council. "Americans Support New Transit Twice as Much as New Roads." Washington, DC: Streetsblog.org, September 12, 2012. http:// dc.streetsblog.org/2012/09/12/nrdc-poll-twice-as-many-americans-want-transit-asnew-roads/?utm\_source=feedburner&utm\_medium=email&utm\_campaign=Feed %3A+streetsblogla+%28Streetsblog+LA%29 (accessed September 20, 2012).

- New Jersey Department of Transportation. *New Jersey Long Range Transportation Plan* 2030. 2005. http://www.state.nj.us/transportation/works/njchoices/pdf/Statewide\_ Public\_Opinion\_Survey\_Report.pdf (accessed January 25, 2013).
- Oklahoma-Kentucky-Indiana Regional Council of Governments. *How Do We Grow* from Here: Strategic Regional Policy Plan. 2012. http://www.howdowegrow.org/ rawdata.html (accessed February 24, 2013).
- 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, 2012. http:// images.bimedia.net/documents/odu\_lifestyle\_study.pdf (accessed March 14, 2013).
- Peck, Michael D. Barriers to Using Fixed-Route Public Transit for Older Adults. San José, CA: Mineta Transportation Institute, June 2010. http://transweb.sjsu.edu/ MTIportal/research/publications/documents/2402\_09-16.pdf (accessed December 23, 2012).
- Pew Research Center. "January 2012 Political Survey Final Topline." January 17, 2012. http://www.people-press.org/files/legacy-questionnaires/Priorities%20topline%20 for%20release.pdf (accessed September 30, 2012).

———. "March 2008 Political Survey." March 2008. http://www.people-press. org/2008/03/27/march-2008-political-survey/ (accessed September 30, 2012).

- Princeton Survey Research Associates International. "National Poll: Americans Support Funding for Sidewalks and Bikeways." Americabikes.org, May 9, 2012. https:// americabikes.nationbuilder.com/assets/pages/151/America\_Bikes\_White\_paper\_ final.pdf (accessed May 14, 2012).
- Public Agenda. *The Energy Learning Curve*. New York, NY: Public Agenda, January 2009. http://www.c2es.org/docUploads/Energy-Learning-Curve.pdf (accessed October 1, 2012).
- Quinnipiac University Polling Institute. "Spitzer Approval Bounces Back In New York, Quinnipiac University Poll Finds; State Voters Prefer Congestion Pricing To Fare Hike." June 19, 2007. http://www.quinnipiac.edu/x1318.xml?ReleaseID=1077 (accessed October 1, 2012).
  - ——. "New Jersey Voters Say 3-1 Freeze State Worker Wages, Quinnipiac University Poll Finds; Voters Back Layoffs Almost 2-1." November 24, 2009. http://www. quinnipiac.edu/x1299.xml?ReleaseID=1399 (accessed October 1, 2012).
- Rasmussen Reports. "74% Rarely or Never Use Mass Transit." August 6, 2013. http://www.rasmussenreports.com/public\_content/lifestyle/general\_lifestyle/ august\_2013/74\_rarely\_or\_never\_use\_mass\_transit (accessed August 6, 2013).

- Reason Foundation. "Reason-RUPE Public Opinion Survey Topline Results." Los Angeles, Reason Foundation, 2011. http://reason.org/files/reason\_rupe\_ transportation\_poll.pdf (accessed March 1, 2012).
- Regional Transportation Alliance (conducted by Fallon Research). "2010 Triangle Transportation Survey (Durham, Orange, and Wake Counties, North Carolina)." March 23, 2010. http://www.letsgetmoving.org/images/uploads/ RTAtransitcompositeresults-Mr percent2710.pdf (accessed October 7, 2012).

  - ——. "2012 Triangle Transportation Survey: Wake County, NC." May 15, 2012. http:// www.letsgetmoving.org/images/uploads/pages/RTAtransitWake-May'12.pdf (accessed May 25, 2012).
- Rockefeller Foundation (prepared by Hart Research Associates/Public Opinion Strategies). "The Rockefeller Foundation Infrastructure Survey." February 2011. http://www.rockefellerfoundation.org/uploads/files/80e28432-0790-4d42-91ecafb6d11febee.pdf (accessed October 2, 2012).
- Rodier, Caroline J., and Susan A. Shaheen. *Transit-Based Smart Parking: An Evaluation of the San Francisco Bay Area Field Test.* Berkeley, CA: Transportation Sustainability Research Center, University of California, Berkeley, 2010.
- San Diego County Water Authority (poll prepared by Rea & Parker Research). San Diego County Water Authority: 2011 Public Opinion Poll Report. San Diego, CA: San Diego County Water Authority, April 2011. http://www.sdcwa.org/sites/default/files/ files/news-center/2011\_SurveyReport.pdf (accessed January 25, 2013).
- Santa Clara Valley Transportation Authority (poll conducted by Fairbank, Maslin, Maullin, Metz & Associates). "Polling Results for Vehicle Registration Fee." May 21, 2010. http://131.103.70.39/inside/boards/correspondence/2010/05\_May/05\_21\_10.pdf (accessed February 4, 2015).
- Transportation for America (conducted by Fairbank, Maslin, Maullin, Metz & Associates). "National Survey: The Future of Transportation." March 2010. http://t4america.org/ wp-content/uploads/2010/03/031010-Future-of-Transportation-Poll-Summary.pdf (accessed October 6, 2012).
- True North Research. San Diego Region Transit Public Opinion Study Final Report. Encinitas, CA: San Diego Association of Governments, December 2008. http:// www.sandag.org/uploads/publicationid/publicationid\_1428\_9419.pdf (accessed January 25, 2013).

- Valley Regional Transit District (prepared by Northwest Research Group). "Valley Regional Transit Telephone Survey of Treasure Valley Residents: Summary Report January 2007." 2007. http://www.valleyregionaltransit.org/Portals/0/ Surveys/VRT\_Final\_Survey\_Report.pdf (accessed 1/25/2013).
- Walls, Margaret, and Jean Hanson. Distributional Impacts of an Environmental Tax Shift: The Case of Motor Vehicle Emissions Taxes. Washington, DC: Resources for the Future, February 1996. http://www.rff.org/documents/RFF-DP-96-11.pdf (accessed October 2, 2012).
- Washington Policy Center. "Washington Policy Center 2011 Statewide Transportation Poll Results." Washington Policy Center, May 2011. http://www.washingtonpolicy. org/publications/notes/voters-oppose-raising-transportation-taxes (accessed September 21, 2012).
- Washington Post. "Maryland Residents Reject Gas Tax Hikes, Support Wind Power in Washington Post Poll." The Washington Post, March 2, 2013. http://www. washingtonpost.com/politics/polling/maryland-residents-reject-gas-taxhikes/2013/03/02/5c282fc2-80cf-11e2-a671-0307392de8de\_print.html (accessed March 20, 2013).
  - —. "Washington Post Poll # 2006-139390: Virginia--U.S. Senate Elections in Virginia/Transportation/War in Iraq." Roper Center, October 12, 2006. http://www. biologybrowser.org/weblinks/goto/1405931 (accessed October 8, 2012).
- Washington State Transportation Commission (prepared by EMC Research). *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).
- Wright, James D., Jana L. Jasinski, and Rachel E. Morgan. *Transportation Issues in Central Florida: 2011 Survey of Public Opinion*. Orlando, FL: University of Central Florida, June 2011. http://www.metroplanorlando.com/files/view/public\_opinion\_research\_2011.pdf (accessed January 25, 2013).
- WXIA-TV Atlanta (conducted by SurveyUSA). "Results of SurveyUSA Election Poll #19023." February 27, 2012. http://www.surveyusa.com/client/PollReport. aspx?g=89931e1a-e757-41ef-a92e-beaffd3801e0 (accessed February 4, 2015).
- YouGov. "The Economist/YouGov Poll [conducted November 19 -22, 2011]." *The Economist*. http://cdn.yougov.com/downloads/releases/econ/2011119\_econToplines.pdf (accessed November 18, 2013).
- Zmud, Johanna, and Carlos Arce. *Compilation of Public Opinion Data on Tolls and Road Pricing.* NCHRP Synthesis 377. Washington, D.C., Transportation Research Board, 2008.

## ABOUT THE AUTHOR

#### ASHA WEINSTEIN AGRAWAL, PHD

Dr. Agrawal is the Director of the MTI National Transportation Finance Center and a Professor of Urban and Regional Planning at San José State University. Her research and teaching interests in transportation policy and planning include transportation finance, pedestrian planning, and urban street design. 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. For a complete listing of her publications, see http://www.sjsu.edu/faculty/weinstein.agrawal/.

# 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 Research Associated 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.

# **MTI FOUNDER**

#### 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

#### **Directors**

Karen Philbrick, Ph.D. Executive Director

Hon. Rod Diridon, Sr. Emeritus Executive Director

**Peter Haas, Ph.D.** Education Director

Donna Maurillo Communications Director

Brian Michael Jenkins National Transportation Safety and Security Center

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

**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)

Michael Melaniphy (Ex-Officio) President and CEO American Public Transportation Association (APTA)

Abbas Mohaddes (TE 2018) CEO The Mohaddes Group

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

David Steele, Ph.D. (Ex-Officio) Dean, College of Business San José State University

Beverley Swaim-Staley (TE 2016) President Union Station Redevelopment Corporation Michael Townes\* (TE 2017) Senior Vice President Transit Sector, HNTB

**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

### **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. Enviromental 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







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