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MTI MINETA TRANSPORTATION INSTITUTE

Investing in California's Transportation Future: Public Opinion on Critical Needs

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MINETA TRANSPORTATION INSTITUTE

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INVESTING IN CALIFORNIA'S TRANSPORTATION FUTURE: PUBLIC OPINION ON CRITICAL NEEDS

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16. Abstract

In 2017, the State of California adopted landmark legislation to increase the funds available for transportation in the state: Senate Bill 1 (SB1), the Road Repair and Accountability Act of 2017. Through a combination of higher gas and diesel motor fuel taxes, SB1 raises revenue for four critical transportation needs in the state: road maintenance and rehabilitation, relief from congestion, improvements to trade corridors, and improving transit and rail services.

To help state leaders identify the most important projects and programs to fund within those four topical areas, we conducted an online survey that asked a sample of 3,574 adult Californians their thoughts on how the state can achieve the SB1 objectives. The survey was administered from April to August 2019 with a survey platform and panel of respondents managed by Qualtrics. Quota sampling ensured that the final sample closely reflects California adults in terms of key socio-demographic characteristics and geographic distribution.

Key findings included very strong support for improving all transportation modes, reducing air pollution and greenhouse gas emissions from transportation, and more convenient options to travel without driving. Respondents placed particular value on better maintenance for both local streets and roads, as well as highways. Finally, the majority of respondents assessed all types of transportation infrastructure in their communities as somewhat or very good.

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In 2017, the State of California adopted landmark legislation to increase the funds available for transportation in the state: Senate Bill 1 (SB1), the Road Repair and Accountability Act of 2017. Through a combination of higher gas and diesel motor fuel taxes, SB1 raises revenue for four critical transportation needs in the state: road maintenance and rehabilitation, relief from congestion, improvements to trade corridors, and improving transit and rail services.

This research project is designed to help state leaders identify the most important projects and programs to fund within those four topical areas. To do so, we conducted an online survey in 2019 that asked a random sample of 3,574 adult Californians their thoughts on how the state can achieve the SB1 objectives. By understanding California residents' opinions related to these issues, policymakers can shape programs and policies to meet the needs identified by the public. The study results are also useful to local and regional agencies planning their future transportation programs.

STUDY METHODS

The survey questionnaire probed respondents about how they assess the current state of transportation infrastructure and systems and the government agencies that provide these, their high-level priorities for how the transportation system can be improved, and what specific programs they would prefer to see funded with SB1 revenues. In addition, we asked how respondents would prefer that the state communicate with them about SB1 expenditures. Finally, the survey also asked standard socio-demographic questions, simple travel behavior questions, home zip code and city, and community type (urban, suburban, small-town, rural) so that the responses can be analyzed by these all factors.

The survey was administered online with a survey platform and panel of respondents managed by Qualtrics. Quota sampling was used to ensure a sample that closely represented the California adult population in terms of gender, race and ethnicity, employment status, annual household income, and age. A total of 3,574 California adults responded with usable data.

FINDINGS

The primary study findings cluster into three main topics: how respondents rated transportation in their community, their broad goals for improving transportation, and their preferences for how California spends SB1 revenues.

Three key findings relate to how respondents rated the transportation system in their community and the state and local agencies that manage transportation:

1. The majority of respondents rated all transportation infrastructure and services—state highways, local streets, public transit, and bicycle/pedestrian infrastructure—as at least "somewhat good."

2. Most respondents were at least "somewhat concerned" about traffic congestion.

3. The majority of respondents rated the performance of transportation agencies as at least “somewhat good,” with the highest approval for Caltrans.

The survey also revealed what kinds of broad goals respondents had for improving transportation in California:

4. Virtually all respondents wanted to see improvements to all modes, reductions in air pollution and greenhouse gas emissions from transportation, and more convenient options to travel without driving.

The third set of findings relate to how respondents wanted to see SB1 revenues spent:

5. Supermajorities supported each of the 11 spending options presented, including options that relate to roads and highways, public transit, and encouraging electric vehicles.

6. The public saw highway and local street maintenance as top priorities.

7. Modestly more people prioritized maintenance of local streets and roads than maintenance of highways.

8. For both highways and local streets, maintenance was a top priority for considerably more people than was expansion.

9. Most respondents supported transit-related spending improvements, but these were a top priority for only small minorities.

10. The least popular spending options related to electric vehicles, though even these options were rated positively by a supermajority.

11. Most respondents would find it “useful” to get information about how SB1 money is spent via monthly emails and/or as inserts in annual vehicle registration notices mailed by the state’s Department of Motor Vehicles (DMV).

I. INTRODUCTION

In 2017, the State of California adopted landmark legislation to increase the funds available for transportation in the state: Senate Bill 1 (SB1), the Road Repair and Accountability Act of 2017. Through a combination of higher gas and diesel motor fuel taxes, SB1 raises revenue for four critical transportation needs in the state: road maintenance and rehabilitation, relief from congestion, improvements to trade corridors, and improving transit and rail services.

This research project is designed to help state leaders identify the most important projects and programs to fund within those four topical areas. To do so, we conducted an online survey in 2019 that asked a random sample of 3,574 adult Californians their thoughts on how the state can achieve the SB1 objectives. By understanding California residents' opinions related to these issues, policymakers can shape programs and policies to meet the needs identified by the public. The study results are also useful to local and regional agencies planning their future transportation programs.

The survey questionnaire probed respondents about four topics:

- How they assess the current state of transportation infrastructure and systems, as well as performance by the government agencies that provide these
- Their high-level priorities for how the transportation system can be improved
- The specific programs they would prefer to see funded with SB1 revenues
- How they would prefer that the state communicates with them about SB1 expenditures

The survey also asked respondents to rate the quality of the transportation system and agencies managing it, plus standard socio-demographic questions, simple travel behavior questions, home zip code and city, and community type (urban, suburban, small-town, rural).

The remainder of the report is organized as follows:

- Chapter 2 describes the survey methodology, including questionnaire design, sampling and survey administration, and the statistical tests used for data analysis.
- Chapter 3 presents findings on how Californians travel.
- Chapter 4 presents findings on how Californians assess transportation system quality and needs.
- Chapter 5 presents their priorities for how to spend SB1 revenue and how they receive information about SB1 expenditures.
- Chapter 6 concludes the report with a summary of key findings that suggest opportunities for state leaders to craft spending programs directly targeting the types of improvements that the public prioritizes.

II. METHODOLOGY

The online survey was completed by 3,574 California adults. This chapter describes the questionnaire design, survey sampling and administration, and characteristics of the respondents.

QUESTIONNAIRE DESIGN

The underlying research goal was to understand California residents' preferences for how SB1 funds are allocated, as well as to assess if different preferences were associated with socio-demographic characteristics, travel behaviors, and opinions. In addition, the questionnaire probed respondents about how they assess the current state of transportation infrastructure and systems and the government agencies that provide these, as well as how respondents would prefer that the state communicates with them about SB1 expenditures.

This primary objective was addressed with a series of four questions about California residents' goals for the transportation system, the ways they thought funds should be spent, and how they would like the state government to share updates on how SB1 revenue has been spent.

The first of these questions asked respondents to rate the importance of six different over-arching goals for the transportation system. For each, respondents chose "very important," "somewhat important," or "not at all" important. The goals were:

- Reduce traffic congestion
- Reduce crashes and improve safety for everyone
- Reduce health impacts caused by air pollution from cars and trucks
- Reduce greenhouse gas emissions from transportation sources that contribute to climate change
- Maintain and improve roads, streets, highways, and bridges
- Make it more convenient to go places without driving (bus, walk, bike, etc.)

Second, respondents were asked to rate the priority they would place on 13 different ways that the state could spend SB1 revenues. Respondents rated the priority for each as a high, medium, low, or "not at all," and also selected the three options from the list that they thought were most important. The options presented for this pair of questions were:

- Build/improve sidewalks
- Subsidize public transit fares for low-income people

- Develop programs that encourage people to switch from driving their cars to walking, biking, or using transit
- Provide financial incentives for people to purchase electric vehicles (EVs)
- Build/improve bike lanes and bike paths
- Use advanced technologies to reduce congestion and increase reliability
- Install more charging stations for electric vehicles
- Add more frequent public transit service on existing routes
- Expand public transit service into new areas not already served
- Maintain local streets and roads
- Build/widen local roads and streets
- Build/widen highways and freeways
- Maintain highways and freeways

Finally, a fourth question asked respondents how they would like to have the state share updates about how the money is spent. Respondents rated each of four options as "very useful," "somewhat useful," or "not at all" useful.

The other sections of the survey gathered data on respondents' opinions about the condition of the transportation system, the travel modes they had used in the previous 30 days, their annual miles driven and the fuel efficiency of the vehicle they drove most often, the type of community they lived in (urban, suburban, small town, or rural), political affiliation, and standard socio-demographic characteristics (gender, age, Hispanic ethnicity, race,[1] education, employment status, and annual household income).

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

SURVEY ADMINISTRATION

The survey was administered online with a survey platform and panel of respondents managed by Qualtrics. Online surveys are increasingly popular, in part due to their low cost, the speed at which they can be administered, convenience for respondents, and the ability to include question design options that are difficult or impossible to implement via telephone or mail.[2] A 2019 analysis from the Pew Research Center found that 90% of Americans are online,[3] which suggests that online surveys are currently a reasonable method to reach a representative sample of U.S. adults, despite evidence that some population subgroups are often underrepresented in online surveys. Less well-represented groups include people who

are older, low-income, have less formal education, live in rural communities, and do not have high-speed internet access at home.[4]

Quota sampling was used to ensure the respondents would closely represent the California adult population, including groups that are typically less well represented with online surveys. We requested a sample closely representative of California adults, as defined by U.S. American Community Survey (ACS) data on gender, race and ethnicity, employment status, annual household income, and age. In addition, to ensure that the sample was geographically diverse, we set quotas based on population by Caltrans districts. Table 1 shows all quotas for the sample.

Table 1. Quotas Used for Sampling

		(%)[a]
Caltrans District	District 1: North Coast	2
	District 2: Redding and Northern California	2
	District 3: Sacramento/Chico	8
	District 4: Bay Area	18
	District 5: Central Coast	4
	District 6: Fresno/Northern San Joaquin Valley	7
	District 7: Los Angeles/Ventura	25
	District 8: San Bernardino/Riverside	12
	District 9: Mono/Inyo	1
	District 10: Stockton/Northern San Joaquin Valley	5
	District 11: San Diego/Imperial	9
	District 12: Orange County	8
Gender	Male	50
	Female	50
Of Hispanic/Latino origin/descent		39
Race	White only	65
	Black/African-American only	7
	Asian/Asian-American only	16
	Other, including multiracial	16
Income (annual household)	$0–$4,999	4
	$5,000–$9,999	4
	$10,000–$24,999	17
	$25,000–$49,999	20
	$50,000–$74,999	16
	$75,000–$99,999	12
	$100,000–$149,999	14
	$150,000–$199,999	7
	$200,000 or more	7
Age (years)	18–24	14
	25–44	35
	45–64	31
	65–74	11
	75–84	6
	85+	3

[a] Percentages for quotas were based on population values for California from the American Community Survey.

Respondents completed the survey between April 15 and August 13, 2019. The median time to complete each survey was 6.5 minutes, and the mean time was ten minutes. A total of 3,574 California adults responded with usable data. Qualtrics does not recommend calculating response or frequency rates because their sampling method does not track how many people ever received an invitation.

SURVEY RESPONDENTS

The 3,574 survey respondents were generally representative of the California population in terms of geography (Caltrans district) and sociodemographic characteristics (Table 2). For the survey findings and analysis presented in this report, we lightly weighted the data using a raking method to match the Census Bureau's 2017 American Community Survey five-year estimates for California adults with respect to gender, race, Hispanic ethnicity,[a] education level, household income, and age.[5]

Table 2. Comparison of Survey Respondents to the Adult California Population by Caltrans District and Sociodemographic Characteristics

		Sample, unweighted (%)	California adults[a] (%)
Caltrans district	District 1: North Coast	2	1
	District 2: Redding and NorCal	1	1
	District 3: Sacramento/Chico	8	7
	District 4: Bay Area	18	20
	District 5: Central Coast	4	4
	District 6: Fresno/Northern San Joaquin Valley	7	7
	District 7: Los Angeles/Ventura	25	28
	District 8: San Bernardino/Riverside	12	11
	District 9: Mono/Inyo	1	<1
	District 10: Stockton/N. San Joaquin Valley	5	4
	District 11: San Diego/Imperial	8	9
	District 12: Orange County	8	8
Gender	Male	43	50
	Female	56	50
	Other	1[b]	--[c]
Of Hispanic/Latino origin/descent		38	39
Race	White only	70	65
	Black/African-American only	6	7
	Asian/Asian-American only	13	16
	Other, including multiracial	11	18
Education	Less than high school graduate	2	17
	High school graduate	17	22
	Some college	36	32
	College graduate	29	19
	Graduate degree	16	11
Employment status	Working for pay	68	58
	Unemployed but looking for work	6	5
	Not working for pay, by choice (retired, etc.)	27	37
Income (annual household)	$0–$4,999	5	4
	$5,000–$9,999	3	3
	$10,000–$24,999	11	15
	$25,000–$49,999	20	20
	$50,000–$74,999	16	16
	$75,000–$99,999	14	12
	$100,000–$149,999	16	14
	$150,000–$199,999	8	7
	$200,000 or more	8	9

Table 2, continued

		Sample, unweighted (%)	California adults[a] (%)
Age (years)	18–24	13	14
	25–44	40	35
	45–64	32	31
	65–74	11	11
	75–84	4	6
	85+	<1	3

[a] All data are for California adults 18 years and older, with the exception of household income, which is for all California households. Caltrans district population statistics from U.S. Census Bureau: https://www.census.gov/popclock/data_tables.php?component=growth. All other population data from ACS 2017 5-Year Estimates.

[b] Due to small sample size, the 26 respondents who stated "other" are not included in the analyses on gender in this report.

[c] The ACS questionnaire restricts answer options to male or female.

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

STATISTICAL ANALYSIS PROCESS

For each topic, we looked at how responses differed by socio-demographic factors, characteristics of the place the respondent lives (geography), political affiliation, and travel behavior. This analysis used the statistical test of two proportions to check whether differences among subgroups (e.g., men versus women) are statistically significant at the 95% and 99% confidence levels. Tables 7 through 24 present the results from this statistical testing. For each set of population categories (i.e., male vs. female or do vs. do not use transit), the first subgroup listed is the reference case against which the other subgroups are compared.

Readers should note that the statistically significant differences among subgroups identified in the tables are not necessarily the only important differences that exist. Rather, the highlighted differences are those that were statistically significant *according to the particular statistical tests used*. It is also important to keep in mind that statistical significance is not an automatic indicator of scientific or policy importance, as discussed in a 2016 statement from the American Statistical Association.[6]

The following chapters highlight those variations by subgroups that were not only statistically significant but also of large enough magnitude to suggest meaningful differences. The criterion selected to identify "meaningful" differences is statistically significant differences of at least ten percentage points.

III. FINDINGS: HOW CALIFORNIANS TRAVEL

The survey asked simple travel behavior questions in order to identify what modes respondents used, their level of driving, and the type of vehicle they drove.

Respondents indicated all travel modes they had used in the past 30 days (Table 3). Travel by private car as a driver or passenger were the most common responses, though a high percentage had also walked to get somewhere. Eighty-six percent of respondents had driven themselves, and 74% had ridden as a passenger. As for walking, 72% had done so for transportation purposes. Modes all used by roughly one-third of respondents were public transit (41%), ride-sharing (38%), and bicycling (30%). Taxis were used by only 17%, closely followed by use of micromobility devices such as electric kick-scooters and skateboards (16%).

Table 3. Percent of Respondents Who Used Different Travel Modes Within the Last 30 Days

Travel mode	%
Drive yourself (car, truck, motorcycle, etc.)	86
Ride as a passenger in a personal vehicle (exclude trips in taxis, rideshare like Uber/Lyft, etc.)	74
Walk to get somewhere (a store, work, friend's house, etc.)	72
Public transit (bus, train, ferry, etc.)	41
Ridesharing services like Uber or Lyft	38
Bicycle to get somewhere (a store, work, friend's house, etc.)	30
Taxi	17
Electric kick-scooter, skateboard, or other small device	16
Other	11

The survey asked respondents whether they had a mobility impairment limiting their ability to use the main modes. Just under one-fourth had limitations to walking and biking, 13% had limitations related to using transit, and 12% had impairments that limited their ability to drive.

Table 4. Percent of Respondents With a Mobility Impairment Limiting Their Ability to Use Specific Travel Modes

Travel mode	%
Walk	24
Bike	23
Drive	12
Transit	13

To get a sense of driving intensity and fuel use, respondents were asked to estimate both how many miles they drove annually for personal use and the fuel efficiency of the vehicle they drove most often. As Table 5 shows, roughly one-fifth did not drive at all (19%). For those who reported driving, the mean value was around 11,000 miles annually, and the median was 8,000 miles annually. About a quarter (24%) drove quite little, at no more than 3,000 miles per year, while at the other extreme, 18% drove 13,000 or more miles per year.

As for vehicle efficiency, Table 6 shows that about one-third drove quite inefficient vehicles getting no more than 21 mpg (28%), 42% drove moderately or very efficient vehicles getting 22 to 43 mpg, and only 9% drove the most efficient vehicles (at least 44 mpg) or electric vehicles (EVs). Finally, 19% did not drive at all.

Table 5. Respondents' Annual Mileage Driven

Annual mileage	%
1–3,000 miles	24
3,001–9,000 miles	20
9,001–13,000 miles	19
13,001+ miles	18
Don't drive	19

Note: For those who reported any driving, the mean value was 11,116 miles, and the median was 8,000 miles.

Table 6. Fuel Efficiency of Respondents' Primary Vehicle

Fuel efficiency	%
<=16 mpg	12
17–21 mpg	16
22–28 mpg	24
29–43 mpg	18
44+ mpg and EVs	9
Don't know	21

IV. FINDINGS: ASSESSMENT OF TRANSPORTATION SYSTEM QUALITY AND NEEDS

ASSESSMENT OF TRANSPORTATION INFRASTRUCTURE QUALITY

Respondents assessed the quality of transportation infrastructure and services in their community in terms of state highways, public transit, bicycle and pedestrian facilities, and local streets and roads (Figure 1). Although less than 20% rated any of these as "very good," few people were highly critical. The percentages of "very bad" ratings ranged from just 7% to 13%. The majority gave positive ratings of either "somewhat good" or "very good" for state highways (68%), public transit (61%), and bicycle and pedestrian facilities (60%). Fewer respondents rated local streets and roads as somewhat or very good, though this was still the majority (53%).

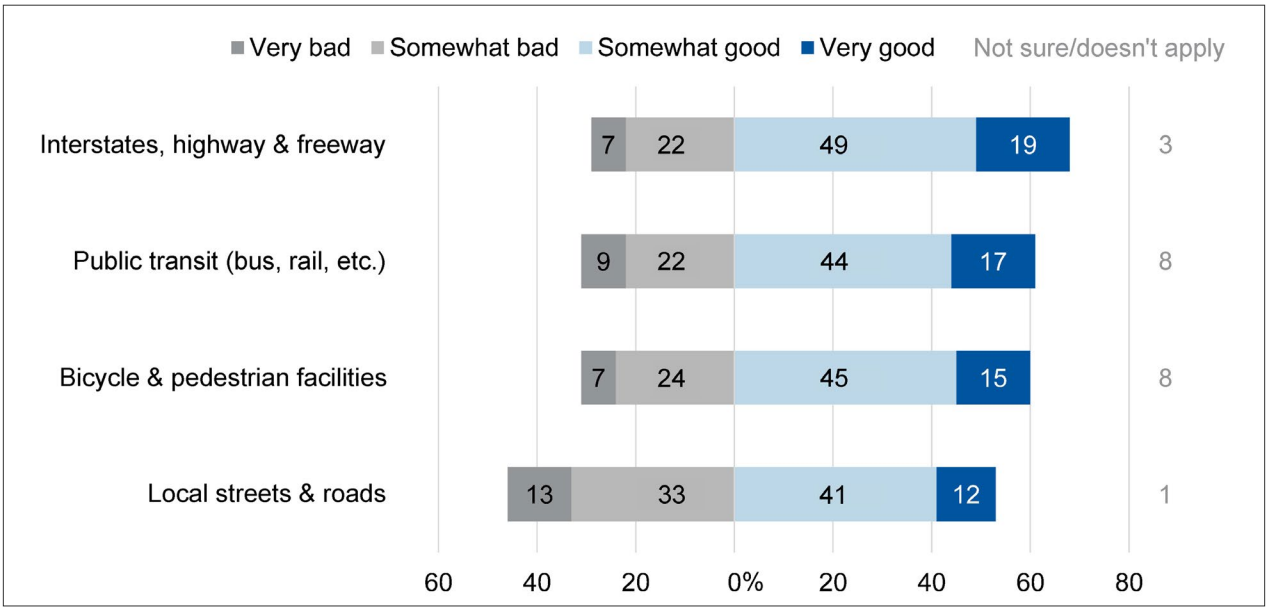

Figure 1. Assessment of the Quality of Transportation Infrastructure and Services in "Your Community"

Note: NS/DA means "Not sure/doesn't apply"

For the various assessments of transportation performance, we looked at whether opinions varied by demographics, political affiliation, geography, and travel behavior (see Tables 7–10). There were very few notable differences, especially for state highways. Across all four types of infrastructure, there were no notable differences by gender, race, employment status, or having walked or used ridehailing in the preceding 30 days. Across the other subgroups, there were scattered differences with no particular pattern.

Table 7. Percent of Respondents with a Positive Assessment[a] of the Quality of the Transportation System, by Demographics

	State highways	Local roads	Bike/pedestrian infrastructure	Public transit
Gender				
Male	68	55	63	61
Female	68	51**	58**	60
Of Hispanic/Latino origin/descent				
Yes	70	53	60	67
No	67*	53	61	56**
Race				
White only	68	53	60	59
Black/African-American only	67	54	66	60
Asian/Asian-American only	69	55	63	58
Other, including multiracial	70	47*	54*	63
Education				
High school or less	67	51	55	64
Some college	68	52	63**	63
College graduate	69	57**	64**	54**
Employment status				
Working for pay	68	54	62	61
Unemployed but looking for work	76** [b]	58	62	68*
Not working for pay, by choice (retired, etc.)	66	49**	56**	57* [c]
Income (annual household)				
$0–$49,999	68	51	56	64
$50,000–$99,999	68	50	64**	61
$100,000–$149,999	71	61** [d]	67**	59
$150,000 or more	68	61** [e]	64**	48** [f]
Age (years)				
18–24	75	57	62	60
25–44	68**	53	58	63
45–64	63**	52*	62	62
65+	70	50*	61	53** [g]

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very” or “somewhat” good.

[b] Statistically significantly different (p<0.01) by ten percentage points from respondents not working for pay by choice.

[c] Statistically significantly different (p<0.01) by ten percentage points from respondents unemployed but looking for work.

[d] Statistically significantly different (p<0.01) by at least ten percentage points from respondents in households with annual income of $50,000–$99,999.

[e] Statistically significantly different (p<0.01) by at least ten percentage points from respondents in households with annual income of $50,000–$99,999.

[f] Statistically significantly different (p<0.01) by at least ten percentage points from respondents in all other income groups.

[g] Statistically significantly different (p<0.01) by at least ten percentage points from respondents 25 to 44 years old.

Table 8. Percent of Respondents with a Positive Assessment[a] of the Quality of the Transportation System, by Travel Behavior

	State highways	Local roads	Bike/pedestrian infrastructure	Public transit
Transit use				
Used in last 30 days	70	57	63	66
Not used in last 30 days	67	50**	59**	56**
Walk				
Used in last 30 days	69	54	61	63
Not used in last 30 days	66	49**	58	54**
Bicycle				
Used in last 30 days	72	64	65	66
Not used in last 30 days	67**	48**	58**	58**
Ridehail (i.e., Uber/Lyft)				
Used in last 30 days	69	57	62	62
Not used in last 30 days	68	51**	60	60
E-scooter, skateboard, etc.				
Used in last 30 days	70	62	61	57
Not used in last 30 days	68	52**	60	61
Annual miles driven				
1–3,000	69	52	60	65
3,001–9,000	69	53	59	55**
9,001–13,000	69	50	65*	59*
13,001+	65	53	63	56**
Don't drive	68	56	55[b]	66[d]
Miles per gallon				
≤ 16	70	54	62	67
17–21	62*	49	60	55**
22–28	69	50	63	55**
29–43	69	53	64	61*
44+ (or EV)	80** [c]	69** [c]	66	60
Don't know	66	47*	59	62

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating "very" or "somewhat" good.

[b] A statistically significant difference (p<0.01) of at least ten percentage points from respondents who drove 9,001–13,000 miles annually.

[c] A statistically significant difference (p<0.01) of at least ten percentage points from respondents in all other mileage sub-groups.

[d] A statistically significant difference (p<0.01) of at least ten percentage points from respondents who drove 3,001–9,000 annually and respondents who drove more than 13,001 miles annually.

Table 9. Percent of Respondents with a Positive Assessment[a] of the Quality of the Transportation System, by Geography

	State highways	Local roads	Bike/pedestrian infrastructure	Public transit
Regions[b]				
Northern California	65	45	55	59
Bay Area	63	52*	58	60
Central Coast/Central Valley	61 [c]	47	66**	54
Los Angeles Metro Area	73**	61** [d]	63**	65* [e]
San Diego/Inland Empire	72**	51*	58	61
Urban form (self-reported)				
Urban	68	53	60	68
Suburban	68	55	65**	58**
Small town or rural	69	48*	54** [f]	55**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very” or “somewhat” good.

[b] Regions are defined as follows: Northern California includes Caltrans District 1, Caltrans District 2, and Caltrans District 3; Bay Area includes Caltrans District 4; Central Coast/Central Valley includes Caltrans District 5, Caltrans District 6, Caltrans District 9, and Caltrans District 10; Los Angeles Metro Area includes Caltrans District 7 and Caltrans District 12; San Diego/Inland Empire includes Caltrans District 8 and Caltrans District 11.

[c] Statistically significantly different (p<.01) by at least ten percentage points from respondents in the Los Angeles and San Diego regions.

[d] Statistically significantly different (p<.01) by at least ten percentage points from respondents in the Bay Area and San Diego regions.

[e] Statistically significantly different (p<.01) by at least ten percentage points from respondents in the Bay Area.

[f] Statistically significantly different (p<.01) by eleven percentage points from suburban respondents.

Table 10. Percent of Respondents with a Positive Assessment[a] of the Quality of the Transportation System, by Political Affiliation

	State highways	Local roads	Bike/pedestrian infrastructure	Public transit
Republican/lean Republican[b]	69	56	64	57
Democrat/lean Democratic[c]	68	51*	62	63**
Some other party[d]	67	60	66	54
Independent (no party affiliation)	68	50* [e]	51** [f]	60

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very” or “somewhat” good.

[b] Includes respondents who considered themselves a Republican or “lean” towards the Republican Party.

[c] Includes respondents who considered themselves a Democrat or “lean” towards the Democratic Party.

[d] Respondents who considered themselves some other party (not Republican, Democrat, or independent).

[e] Statistically significantly different (p<.05) by at least ten percentage points from “some other party.”

[f] Statistically significantly different (p<.01) by at least ten percentage points from respondents identifying with all parties.

CONCERN ABOUT TRAFFIC CONGESTION

The survey also asked respondents if they were concerned about traffic congestion in their community, and the great majority (86%) were at least "somewhat" concerned. Forty-four percent were "very concerned," 42% "somewhat concerned," and only 14% "not at all concerned."

An analysis of how different subgroups rated their concern about congestion[7] revealed no notable differences at all by socio-demographic characteristics or political affiliation, but some by travel choices and geography. There was notably less concern among people who do not drive; 79% who did not drive were concerned, as compared to people who drove 9,001 to 13,000 miles per year (90%) or more than 13,000 miles per year (89%). Also, people living in the more rural regions (Northern California and the Central Coast/Central Valley) were less concerned than people living in the more urban regions of the Bay Area, Los Angeles Metro Area, and San Diego/Inland Empire. Echoing that finding, people who lived in self-identified small towns or rural communities were less likely to be concerned than people living in urban and suburban communities.

ASSESSMENT OF TRANSPORTATION AGENCY PERFORMANCE

When asked to rate the performance of different government agencies involved in transportation, the findings tracked those for the assessment of infrastructure and services themselves: the majority rated all three as either "somewhat good" or "very good," though more people approved of Caltrans (65%) and public transit agencies (64%) than local city and county governments (54%).

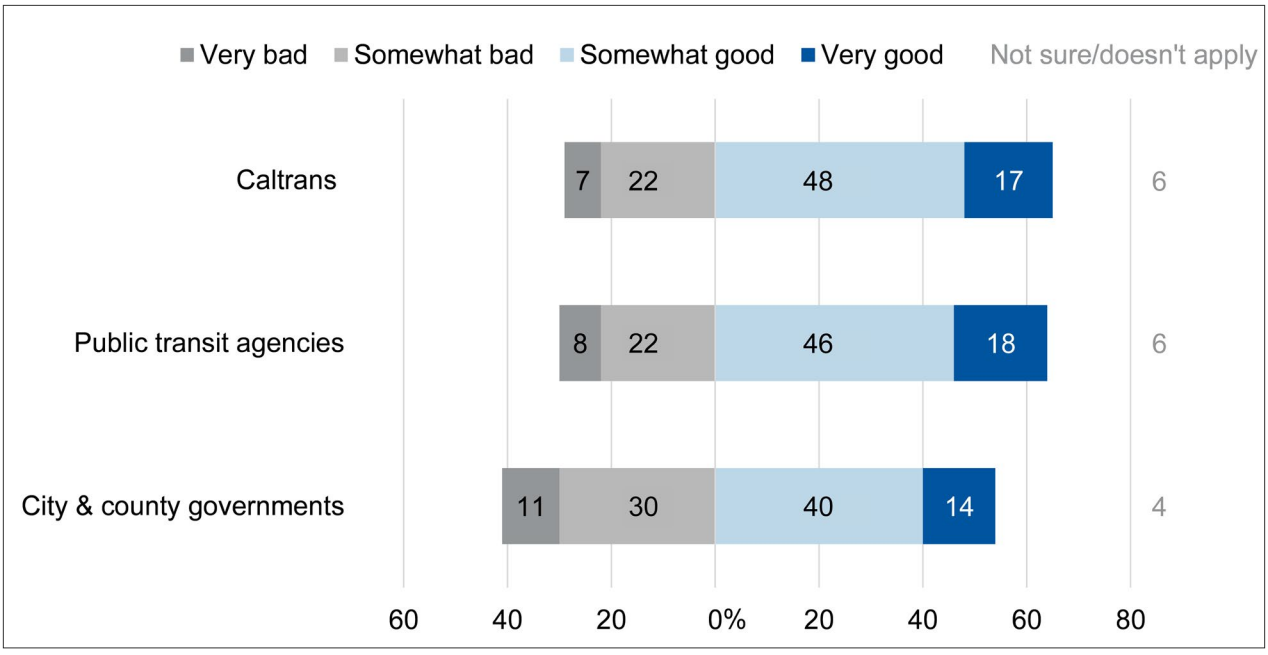

Figure 2. Assessment of Transportation Agency Performance

Note: NS/DA means "Not sure/doesn't apply"

For the assessment of performance, we looked at how responses varied among subgroups defined by opinions regarding the quality of the transportation system, as well as those defined by socio-demographics, geography, travel behavior, and political affiliation (Tables 11 to 15). Several cross-cutting patterns stand out with respect to sub-groups that met our criteria for meaningful variation, a statistically significant difference of at least ten percentage points:

- There were no meaningful differences by gender, education, having used public transit in the preceding 30 days, annual miles driven, or political party.

- Respondents who rated the quality of state highways, local roads, bicycle and pedestrian infrastructure, or public transit as “somewhat good” or “very good” were notably more likely to rate all three types of government agencies as doing a good job.

- The only variations among how sub-groups rated Caltrans were higher ratings by people who rated the quality of state highways, local roads, bicycle and pedestrian infrastructure, or public transit as “somewhat good” or “very good.”

Table 11. Percent of Respondents Rating Government Agencies as Doing a Good Job[a], by Socio-Demographics

	Caltrans (%)	Public transit agencies (%)	City and county government (%)
Gender			
Male	65	63	54
Female	66	65	55
Of Hispanic/Latino origin/descent			
Yes	69	74	57
No	62**	57**	52**
Race			
White only	65	62	52
Black/African-American only	68	64	59*
Asian/Asian-American only	58*	57	58
Other, including multiracial	67	73** [b]	51
Education			
High school or less	65	65	54
Some college	67	67	55
College graduate	64	59**	54
Employment status			
Working for pay	66	68	57
Unemployed but looking for work	71	73*	62
Not working for pay, by choice (retired, etc.)	61** [c]	55** [c]	47** [c]
Income (annual household)			
$0–$49,999	66	68	54
$50,000–$99,999	65	62**	52
$100,000–$149,999	66	62*	56
$150,000 or more	62	55**	58
Age (years)			
18–24	64	68	60
25–44	67	70	60
45–64	65	61**	51**
65+	62	52** [d]	42** [d]

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very” and “somewhat” good.

[b] Statistically significantly difference (p<.01) of at least ten percentage points from Asian/Asian-American respondents.

[c] Statistically significantly difference (p<.01) of at least ten percentage points from unemployed respondents.

[d] Statistically significantly difference (p<.01) of at least ten percentage points from respondents 25 to 44 years old.

Table 12. Percent of Respondents Rating Government Agencies as Doing a Good Job[a], by Travel Behavior

	Caltrans (%)	Public transit agencies (%)	City and county government (%)
Transit use			
Used in last 30 days	65	69	58
Not used in last 30 days	65	61**	52**
Walk			
Used in last 30 days	66	67	56
Not used in last 30 days	62*	56**	49**
Bicycle			
Used in last 30 days	69	70	66
Not used in last 30 days	64**	62**	49**
Ridehail (i.e. Uber/Lyft)			
Used in last 30 days	66	67	59
Not used in last 30 days	64	62**	51**
Electric kick-scooter, skateboard, other small device			
Used in last 30 days	64	69	69
Not used in last 30 days	65	63**	52**
Annual miles driven			
1–3,000	66	68	55
3,001–9,000	68	59**	50
9,001–13,000	63	60**	51
13,001+	67	64	60
Don't drive	61*	67	55
Miles per gallon[a]			
≤ 16	72	74	62
17–21	63**	57**	47**
22–28	64**	58**	48**
29–43	67	66*	54*
44+ (or EV)	64*	75	71*
Don't know	66*	62**	55*

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents rating the agency as "very" and "somewhat" good.

[b] Statistically significant difference from all mileage subgroups except the 29–43 mpg subgroup.

Table 13. Percent of Respondents Rating Government Agencies as Doing a Good Job[a], by Geography

	Caltrans (%)	Public transit agencies (%)	City and county government (%)
Regions[b]			
Northern California	61	58	45
Bay Area	67*	66**	57**
Central Coast/Central Valley	57[c]	60	51
Los Angeles Metro Area	67*	66**	59**
San Diego/Inland Empire	69**	65**	52*
Urban form (self-reported)			
Urban	65	66	58
Suburban	65	63	55
Small town or rural	66	66	47**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very” and “somewhat” good.

[b] Regions are defined as follows: Northern California includes Caltrans District 1, Caltrans District 2, and Caltrans District 3; Bay Area includes Caltrans District 4; Central Coast/Central Valley includes Caltrans District 5, Caltrans District 6, Caltrans District 9, and Caltrans District 10; Los Angeles Metro Area includes Caltrans District 7 and Caltrans District 12; San Diego/Inland Empire includes Caltrans District 8 and Caltrans District 11.

[c] A statistically significant difference at p<0.01 of at least ten percentage points from respondents in all other regions except Northern California.

Table 14. Percent of Respondents Rating Government Agencies as Doing a Good Job[a], by Political Affiliation

	Caltrans (%)	Public transit agencies (%)	City and county government (%)
Republican/lean Republican[b]	64	62	53
Democrat/lean Democratic[c]	67	67*	56
Some other party[d]	69	65	62* [e]
Independent, no party affiliation	61	61	51

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05.

[a] Sum of respondents rating the agency as “very” and “somewhat” good.

[b] Respondents who considered themselves a Republican or “lean” towards the Republican Party.

[c] Includes respondents who considered themselves a Democrat or “lean” towards the Democratic Party.

[d] Respondents who considered themselves some other party (not Republican, Democrat, or independent).

[e] Statistically significantly different from “Independents” at p<.01.

Table 15. Percent of Respondents Rating Government Agencies as Doing a Good Job[a], by Assessment of Transportation System Quality

	Caltrans (%)	Public transit agencies (%)	City and county government (%)
Quality of state highways			
Very/somewhat good	75	72	66
Very/somewhat bad	45**	49**	31**
Quality of local roads			
Very/somewhat good	76	72	73
Very/somewhat bad	53**	55**	33**
Quality of bike/pedestrian infrastructure			
Very/somewhat good	74	75	65
Very/somewhat bad	51**	52**	38**
Quality of public transit			
Very/somewhat good	74	82	63
Very/somewhat bad	51**	36**	41**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

** Statistically significant at $p<0.01$.

[a] Sum of respondents rating the agency as “very” and “somewhat” good.

V. FINDINGS: PRIORITIES FOR SPENDING SB1 REVENUES

The primary research objective was to understand California residents' preferences for how SB1 funds are allocated, as well as to assess whether different preferences were associated with socio-demographic characteristics, travel behaviors, and opinions. This chapter presents findings from four questions that directly address this topic: respondents' goals for the transportation system, the ways they thought funds should be spent, and how they would like to receive updates on how SB1 revenue has been spent.

OVERARCHING GOALS FOR SYSTEM IMPROVEMENT

To learn what vision Californians have for how to improve the transportation system, the survey asked respondents to rate the priority they thought the state government should place on each of six possible goals for improving the transportation system. As Figure 3 shows, all six proved almost universally popular, with at least 90% of respondents rating each goal as "somewhat important" or "very important." The three most popular options were maintaining and improving roads, streets, highways, and bridges (98%), reducing crashes and improving safety for everyone (97%), and reducing traffic congestion (97%).

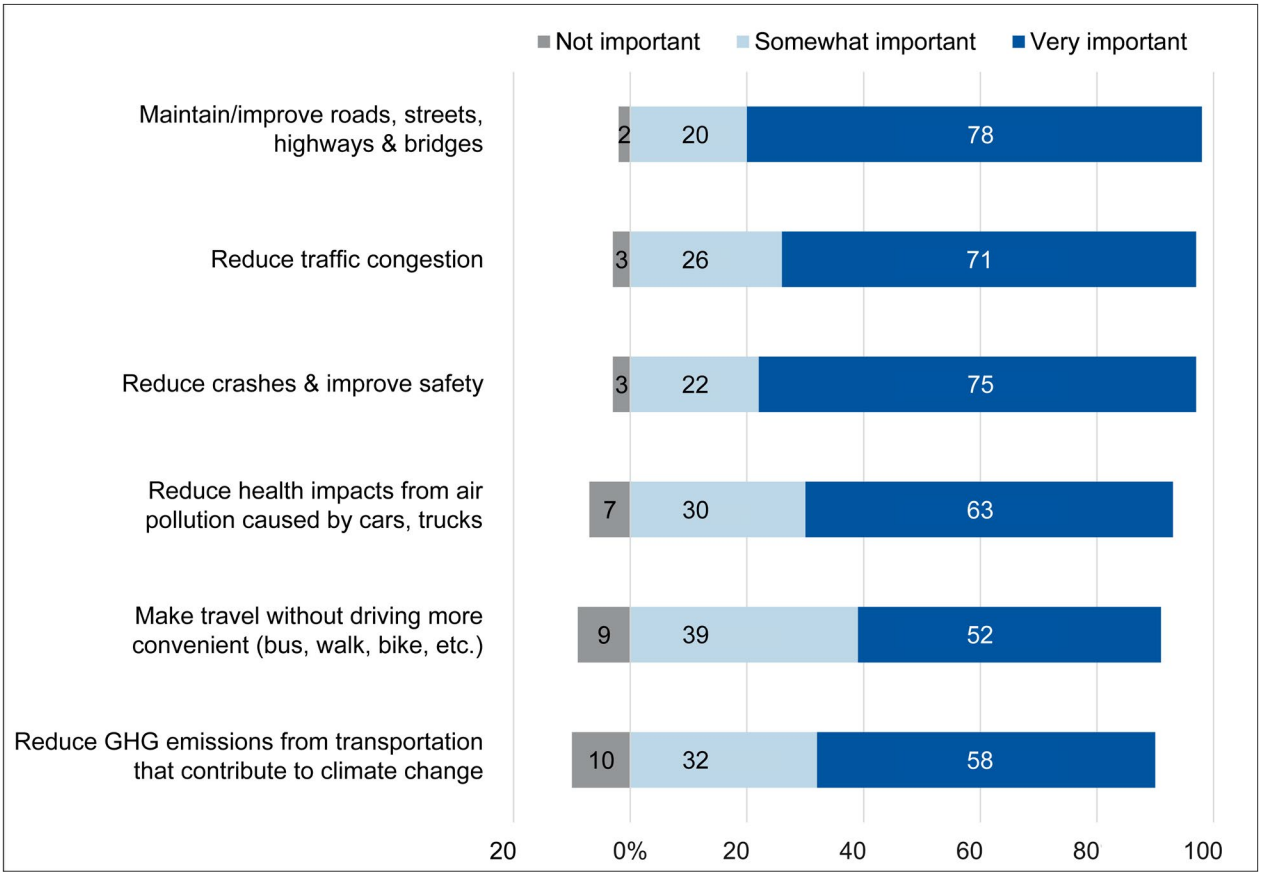

Figure 3. Assessment of the Importance of Transportation-Related Goals for California

Reflecting the near-universal importance placed on the six goals, the analysis by subgroup found virtually no statistically significant differences of at least ten percentage points for any goal (Tables 16 through 19). However, one exception was that Democratic-leaning respondents and party-independent respondents were more likely than Republican-leaning respondents to rate reducing green-house gas emissions as ”somewhat important” or “very important.” Also, the goal of making it more convenient to go places without driving was supported by larger proportions of Democratic-leaning respondents and respondents living in the Central Coast/Central Valley.

Table 16. Percent of Respondents Rating Transportation-Related Goals for California as Important[a], by Socio-Demographics

	Maintain/improve roads, streets, highways, and bridges	Reduce traffic congestion	Reduce crashes/ improve safety for everyone	Reduce health impacts caused by air pollution from cars and trucks	Make it more convenient to go places without driving	Reduce GHG emissions from transportation
Gender						
Male	99	97	97	92	90	87
Female	97**	97	98	95**	92*	92**
Of Hispanic/Latino origin/descent						
Yes	98	98	97	94	92	92
No	98	97	97	93	90*	88**
Race						
White only	98	97	97	92	89	88
Black/African-American only	95**	96	95	95	98**	89
Asian/Asian-American only	99	98	97	96**	95**	96**
Other, including multiracial	99	98	96*	91	93*	92**
Education						
High school or less	96	95	96	92	90	88
Some college	99**	97**	98*	94*	92*	91
College graduate	99**	99**	98**	94*	91	91
Employment status						
Working for pay	98	97	98	94	93	90
Unemployed but looking for work	97	97	95**	93	96*	93
Not working for pay, by choice (retired, etc.)	98	96	96*	92**	86**	88*
Income (annual household)						
$0–$49,999	97	97	97	93	92	89
$50,000–$99,999	99**	97	98	94	89*	90
$100,000–$149,999	100**	99*	99*	97**	93	94**
$150,000 or more	99**	97	96	91	88**	89
Age (years)						
18–24	96	95	96	93	91	91
25–44	97	97**	97	93	92	90
45–64	99**	98**	97	94	91	90
65+	100**	98**	99**	91	86**	87*

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared.

* Statistically significant at $p<0.05$. ** Statistically significant at $p<0.01$.

[a] Sum of respondents stating “very important” and “somewhat important.”

Table 17. Percent of Respondents Rating Transportation-Related Goals for California as Important[a], by Geography

	Maintain/improve roads, streets, highways, and bridges	Reduce traffic congestion	Reduce crashes/improve safety for everyone	Reduce health impacts caused by air pollution from cars and trucks	Make it more convenient to go places without driving	Reduce GHG emissions from transportation
Regions[b]						
Northern California	95	95	97	88	84	87
Bay Area	99**	98	97	96**	94**	94**
Central Coast/Central Valley	98**	94	96	93**	90**	90
Los Angeles Metro Area	99**	99**	97	95**	92**	91*
San Diego/Inland Empire	97*	98*	98	90	92**	86
Urban form (self-reported)						
Urban	98	98	97	95	92	91
Suburban	99	98	97	93*	92	90
Small town or rural	96**	94**	97	89**	87**	87**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at $p<0.05$. ** Statistically significant at $p<0.01$.

[a] Sum of respondents stating “very important” and “somewhat important.”

[b] Regions are defined as follows: Northern California includes Caltrans District 1, Caltrans District 2, and Caltrans District 3; Bay Area includes Caltrans District 4; Central Coast/Central Valley includes Caltrans District 5, Caltrans District 6, Caltrans District 9, and Caltrans District 10; Los Angeles Metro Area includes Caltrans District 7 and Caltrans District 12; San Diego/Inland Empire includes Caltrans District 8 and Caltrans District 11.

Table 18. Percent of Respondents Rating Transportation-Related Goals for California as Important[a], by Political Affiliation

	Maintain/improve roads, streets, highways, and bridges	Reduce traffic congestion	Reduce crashes/improve safety for everyone	Reduce health impacts caused by air pollution from cars and trucks	Make it more convenient to go places without driving	Reduce GHG emissions from transportation
Republican/lean Republican[b]	99	96	95	89	85	80
Democrat/lean Democratic[c]	98**	99**	98**	96**	97**[e]	96**
Some other party[d]	96**	96	97	92	86	89**
Independent, no party affiliation	99	90**	97	96**	90	94**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very important” and “somewhat important.”

[b] Respondents who considered themselves a Republican or “lean” towards the Republican Party.

[c] Includes respondents who considered themselves a Democrat or “lean” towards the Democratic Party.

[d] Respondents who considered themselves some other party (not Republican, Democratic, or independent).

[e] Notably different from “some other party” at p<0.01.

Table 19. Percent of Respondents Rating Transportation-Related Goals for California as Important[a], by Travel Behavior

	Maintain/improve roads, streets, highways, and bridges	Reduce traffic congestion	Reduce crashes/improve safety for everyone	Reduce health impacts caused by air pollution from cars and trucks	Make it more convenient to go places without driving	Reduce GHG emissions from transportation
Transit use						
Used in last 30 days	97	97	95	95	94	94
Not used in last 30 days	98	98	98**	92**	89**	89**
Walk						
Used in last 30 days	98	97	97	94	92	92
Not used in last 30 days	98	98	97	92*	88**	88**
Bicycle						
Used in last 30 days	97	97	95	93	92	92
Not used in last 30 days	98*	97	98**	93	90	90
Ridehail (i.e. Uber/Lyft)						
Used in last 30 days	99	98	97	96	94	94
Not used in last 30 days	97**	97	97	92**	89**	89**
Electric kick-scooter, skateboard, etc.						
Used in last 30 days	96	94	92	91	93	93
Not used in last 30 days	98**	98**	98**	94*	90	90
Annual miles driven						
1–3,000	98	98	99	93	93	93
3,001–9,000	99*	98	98	93	90*	90*
9,001–13,000	98	99*	98	95	90	90
13,001+	99	96	96**	92	89*	89*
Don't drive	96**	94**	93**	93	91	91
Miles per gallon[a]						
≤ 16	97	95	98	89	90	90
17–21	99*	98*	98	88	89	89
22–28	99*	98**	98	94**	90	90
29–43	98	99**	98	93*	91	91
44+ (or EV)	98	98*	96	98**[b]	89	89
Don't know	99**	98**	98	97**	95**	95**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating "very important" and "somewhat important."

[b] Statistically significant difference (p<0.01) of at least ten percentage points from respondents with vehicles getting 17 to 21 miles per gallon.

PRIORITY RATING FOR SPENDING OPTIONS

In addition to asking respondents about their broad goals for improving the transportation system, the survey listed 13 different ways the state could spend the money collected through SB1 taxes and asked respondents what priority they would place on each. All options were quite popular; at least two-thirds of respondents rating each option as a medium or high priority. The two options with the largest percent of respondents rating them a medium or high priority were maintaining interstates, highways, and freeways (94%) and maintaining local streets and roads (93%). The least popular options related to encouraging people to buy electric vehicles, but even these were rated positively by at least 63% of respondents.

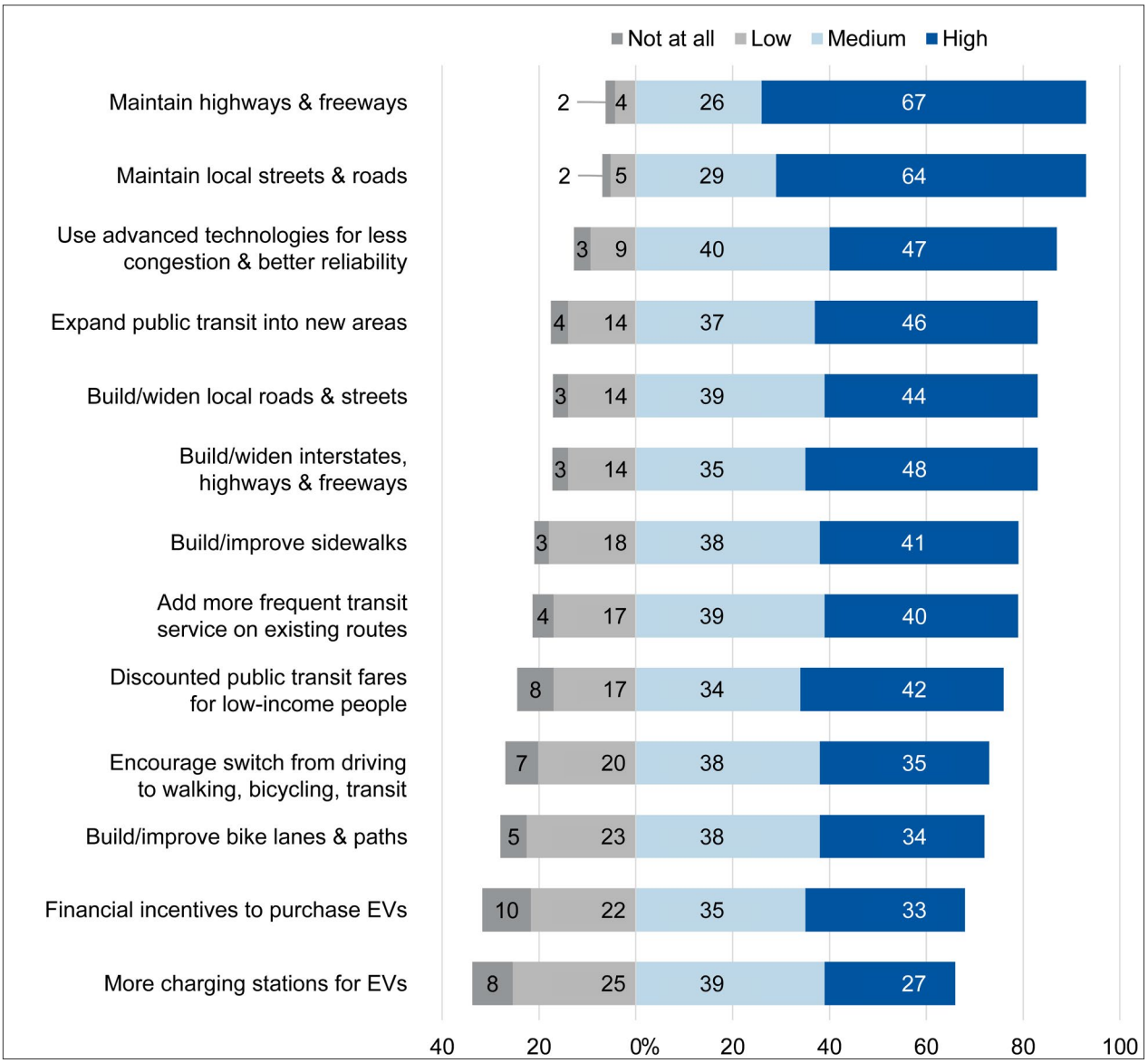

Figure 4. Priority Placed on Different Options for Spending SB1 Revenue

Tables 20 through 24 present an analysis of how different subgroups rated the 13 spending options. Several cross-cutting patterns stand out with respect to sub-groups that met our criteria for meaningful variation, a statistically significant difference of at least ten percentage points:

- Respondents' satisfaction with both transportation infrastructure and the agencies managing them was strongly correlated with the priority they put on all the options. Respondents who rated any of these as "somewhat good" or "very good" were more likely to support almost all the different spending options.

- There were very few differences among subgroups in the priority placed on any of the options related to local streets and highways. The only variations were linked to the assessment of transportation infrastructure and transportation agencies.

- The youngest respondents (18 to 24 years old) were more supportive than the oldest respondents (65 years and older) of virtually all the options related to public transit, active transportation, and electric vehicles.

- Democrat-leaning respondents were more supportive than Republican-learning respondents of all the options related to public transit, active transportation, and electric vehicles. People who leaned towards parties other than the Democratic or Republican parties, or were party-independent, were also more supportive than Republicans of many of the options.

- The majority of respondents in every subgroup, even subgroups comparatively less supportive of an option, rated each option as at least "somewhat" of a priority.

Table 20. Percent of Respondents Identifying Spending Priorities as Important[a], by Socio-Demographic Characteristics

		Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Gender	Male	94	93	84	84	88	77	81	73	74	69	68	69	73
	Female	93	93	81	81*	86	80	84*	79**	84**	75**	64*	67	74
Hispanic/ Latino	Yes	93	92	82	85	87	82	87	84	84	77	70	73	76
	No	94	94*	83	81**	88	76**	80**	70**	75**	69**	64**	65**	71**
Race	White only	94	94	83	82	87	77	81	73	79	70	64	66	72
	Black/African-American only	94	90*	73**	81	88	79	92**	82**	73*	76*	69	72	73
	Asian/Asian-American only	95	93	87	85	92*	84**	84	74	80	74	70*	74**	83** [b]
	Other, including multiracial	93	87**	79*	83	85	78	89**	80**	78	73	71**	72*	71
Education	High school or less	90	90	79	86	84	79	85	81	82	76	68	71	73
	Some college	96**	95**	85**	83	88**	78	82	77*	80	72*	66	67*	72
	College graduate	97**	95**	84**	79**	90**	78	81*	68**	74**	67**	64	66*	74
Employment	Working for pay	93	93	85	85	88	81	84	77	82	74	67	71	77
	Unemployed but looking	96	90	70**[h]	84	90	82	92** [e]	86** [e]	80	81* [e]	76** [e]	76	74
	Not working by choice	94	94	81**	79**	84**	73**	78**	71**	74**	66**	63*	61** [c]	66**
Income (annual household)	$0–$49,999	92	92	79	82	85	79	85	82	82	77	67	70	74
	$50,000–$99,999	95**	94*	86**	83	88*	78	80**	71**	78*	67**	65	67	73
	$100,000–$149,999	98**	97**	88**	83	93**	82	82	73** [f]	82 [f]	71*	70	71	76
	$150,000 or more	93	93	87**	84	90**	76	79**	60** [b]	68** [b]	63**	61*	63**	68*

Table 20, continued

		Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Age (years)	18–24	90	92	75	84	86	79	88	82	80	78	73	76	75
	25–44	92	89*	83**	84	87	80	84**	80	83	76	67**	72	77
	45–64	96**	96**	88**	84	87	81	83**	73**	80	70**	65**	65**	70*
	65+	98**	98**	84**	78*	89	71** [g]	74** [d]	64** [d]	69** [b]	60** [b]	60**	56** [d]	67** [d]

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very important” and “somewhat important.”

[b] A statistically significant difference (p<.01) of at least ten percentage points from respondents in all other subgroups.

[c] A statistically significant difference (p<.01) of at least ten percentage points from unemployed respondents.

[d] A statistically significant difference (p<.01) of at least ten percentage points from respondents 22–44 years old.

[e] A statistically significant difference (p<.01) of at least ten percentage points from respondents not working by choice.

[f] A statistically significant difference (p<.01) of at least ten percentage points from respondents with household incomes of $150,000 or more.

[g] A statistically significant difference (p<.01) of at least ten percentage points from 45–64 years old.

[h] A statistically significant difference (p<.01) of at least ten percentage points from respondents not working by choice.

Table 21. Percent of Respondents Identifying Spending Priorities as Important[a], by Travel Behavior

	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Public transit													
Used in last 30 days	93	92	81	84	89	86	88	83	82	80	73	75	79
Not used in last 30 days	94	94*	84*	82	86*	74**	79**	71**	77**	67**	62**	64**	69**
Walk													
Used in last 30 days	93	92	82	82	88	81	85	79	81	75	68	70	76
Not used in last 30 days	96**	96**	86**	84	86	71**	77**	68**	75**	63**	63**	63**	66**
Bicycle													
Used in last 30 days	90	88	79	85	85	80	87	80	78	83	74	76	78
Not used in last 30 days	95**	95**	84**	82**	88*	78	81**	74**	80	68**	63**	65**	71**
Ridehail													
Used in last 30 days	93	92	86	86	90	83	88	79	83	79	71	76	76
Not used in last 30 days	94	93	81**	81**	86**	76**	79**	74**	77**	67**	63**	64**	71**
E-scooter, skateboard, etc.													
Used in last 30 days	84	86	76	87	82	78	85	77	74	79	75	74	76
Not used in last 30 days	96**	94**	84**	82**	88**	79	83	76	80**	71**	65**	67**	73
Annual miles driven													
1–3,000	93	92	79	80	86	81	84	81	80	74	69	70	71
3,001–9,000	98**	96**	84*	80	90**	75**	78**	70**	75*	64**	63*	64*	70
9,001–13,000	96*	94	87**	85*	89	79	84	74**	81	67**	66	68	76
13,001+	93	94	88**	86**	87	80	79*	72**	79	70*	63*	67	75
Don't drive	89**	89*	76	83	84	78	89**	81	81	84**	69	71	73

Table 21, continued

	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Miles per gallon													
≤ 16	89	94	85	82	89	79	83	81	80	70	60	67	69
17–21	98**	95	88	82	85	70**	74**	65**	72*	64	63	58**	67
22–28	98**	97*	83	81	89	77	79	69**	75	66	63	65	70
29–43	96**	94	84	82	89	79	82	73*	81	67	63	66	76*
44+ (incl. EV)	89	87**	83	88*	87	91**	88	87* [b]	83	82** [b]	85** [b]	84** [b]	89** [b]
Don't know	94**	93	82	83	88	83	86	80	82	72	68*	71	74

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating "very important" and "somewhat important."

[b] The difference between this group and all other mileage sub-groups except "Don't know" is at least ten percentage points and statistically significant at p<0.05.

Table 22. Percent of Respondents Identifying Spending Priorities as Important[a], by Geography

	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Technology to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Region[b]													
Northern CA	89	92	78	82	80	74	79	74	77	69	57	64	72
Bay Area	90	91	82	82	84	78	83	75	79	76**	64*	67	70
Central Coast/Central Valley	97**	95*	83	82	91**	81**	84	74	77	69	65**	68	76
LA Metro Area	96**	93	83*	85	89**	83**	85**	78	83*	75**	71**	73**	77*
San Diego/Inland Empire	95**	94	85**	81	89**	74	80	76	77	68	67**	64	68
Urban form (self-reported)													
Urban	93	93	83	86	88	85	87	81	85	79	72	74	78
Suburban	95**	95*	84	80**	89	76**	81**	72**	74**	67**	64**	66**	70**
Small town or rural	92	90*	79*	81**	82**	74**	80**	76**	80**	70**	61**	63**	71**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very important” and “somewhat important.”

[b] Regions are defined as follows: Northern California includes Caltrans District 1, Caltrans District 2, and Caltrans District 3; Bay Area includes Caltrans District 4; Central Coast/Central Valley includes Caltrans District 5, Caltrans District 6, Caltrans District 9, and Caltrans District 10; Los Angeles Metro Area includes Caltrans District 7 and Caltrans District 12; San Diego/Inland Empire includes Caltrans District 8 and Caltrans District 11.

Table 23. Percent of Respondents Identifying Spending Priorities as Important[a], by Political Affiliation

Political affiliation	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit service	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Republican/lean Rep[b]	95	94	85	84	86	70	75	60	69	59	58	58	61
Democratic/lean Dem[c]	94	94	82	83	89	85**	88**	84**	82**	78**	72**	74**	81**
Other party[d]	93	80**	76**	86	80*	76	86**	78**	81**	76**	68*	67*	78**
Independent, no party affiliation	90**	94	83	80*	87	78**	83**	80**	86**	78**	64**	71**	71**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Sum of respondents stating “very important” and “somewhat important.”

[b] Includes respondents who considered themselves a Republican or “lean” towards the Republican Party.

[c] Includes respondents who considered themselves a Democrat or “lean” towards the Democratic Party.

[d] Respondents who considered themselves some other party (not Republican, Democrat, or independent).

Table 24. Percent of Respondents Identifying Spending Priorities as Important[a], by Assessment of the Transportation System and Agencies

Assessment[a]	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
State highways quality													
Good	95	94	83	84	89	81	85	79	81	75	70	72	76
Bad	94	93	86*	82	86*	76**	79**	70**	75**	66**	62**	62**	69**
Don't know	60**	61**	49**	71**	58**	63**	76*	66**	71**	68	34**	42**	55**
Local roads quality													
Good	95	93	84	84	89	81	84	78	79	76	71	73	76
Bad	93*	95*	82	82	86*	77**	82	73**	80	67**	61**	63**	70**
Don't know	52[b]	29[b]	29[b]	77[b]	48[b]	39[b]	78[b]	55[b]	47[b]	72[b]	28[b]	16[b]	65[b]
Bike/ped infrastructure quality													
Good	96	94	84	84	90	80	84	79	80	73	69	71	75
Bad	91**	92*	81*	82	86**	80	84	75**	80	76*	66	66**	75
Don't know	85**	87**	76**	76**	74**	58**	69**	56**	66**	53**	45**	56**	53**
Public transit quality													
Good	95	94	85	85	89	82	86	81	84	77	70	73	77
Bad	91**	92	80**	79**	85**	79	82**	70**	75**	67**	63**	62**	69**
Don't know	94	92	73**	80*	80**	53**	65**	55**	62**	55**	47**	55**	59**
Concern about congestion													
Very	96	94	86	87	92	83	86	78	82	73	68	73	76
Somewhat	94*	94	81**	80**	87**	78**	82**	76	79*	73	67	66**	73
Not at all	89**	91*	79**	76**	75**	69**	76**	70**	72**	66**	58**	62**	61**[c]
Caltrans													
Good job	95	94	84	83	89	81	85	80	82	76	71	72	76
Bad job	93**	93	82	83	86*	75**	79**	67**	74**	64**	59**	62**	66**
Don't know	82**	80**	66**	75**	75**	68**	75**	63**	73**	63**	56**	56**	68**

Table 24, continued

Assessment[a]	Maintain highways	Maintain local roads	Build/widen highways	Build/widen local roads	Tech to reduce congestion	More frequent transit	Add public transit in new areas	Lower fares for low-income	Sidewalks	Bike facilities	EV chargers	Incentives to buy EVs	Encourage less driving
Transit agencies													
Good job	94	94	85	85	90	82	86	82	83	77	71	73	78
Bad job	94	93	80**	81**	85**	75**	80**	66**	73**	65**	62**	62**	65**
Don't know	82**	82**	70**	69**	72**	52**	61**	55**	62**	49**	40**	45**	57**
Local government													
Good job	94	94	84	84	89	83	87	81	83	79	72	74	78
Bad job	95	94	82*	81*	87*	77**	80**	71**	77**	65**	61**	62**	68**
Don't know	81**	69**	68**	78*	65**	40**	59**	51**	50**	54**	49**	45**	60**

Note: The test of two proportions was used to check if there is a statistically significant difference between support levels among subgroups. The first subgroup in each category is the reference case against which the proportion of respondents in other subgroups is compared. Values in yellow cells are at least ten percentage points different from the reference case at p<0.05.

* Statistically significant at p<0.05. ** Statistically significant at p<0.01.

[a] Good = "somewhat good" or "very good"; bad = "somewhat bad" or "very bad"; and don't know = "don't know" or "doesn't apply."

[b] Sample size is too small to conduct statistical testing.

[c] A statistically significant difference (p<.01) of at least ten percentage points from respondents rating it as "somewhat good."

TOP SPENDING PRIORITIES

The survey also asked respondents to select their top three spending priorities from the list. Maintenance, especially for local streets and roads, came out clearly ahead of the other options. Thirty-four percent chose maintaining highways and freeways as a priority, whereas 45% chose maintaining local streets and roads as a priority.

Looking across the various road-related spending options, it is clear that maintenance was a top priority for more people than was facility expansion, especially for local roads. Only 15% said building and widening local streets and roads was a top priority, compared to the 45% who said maintaining them was a top priority.

The various public transit options offered were a top priority for small minorities. The most popular was to subsidize fares for low-income riders (21%), followed by expanding service into new areas (19%), and adding more frequent service on existing routes (16%).

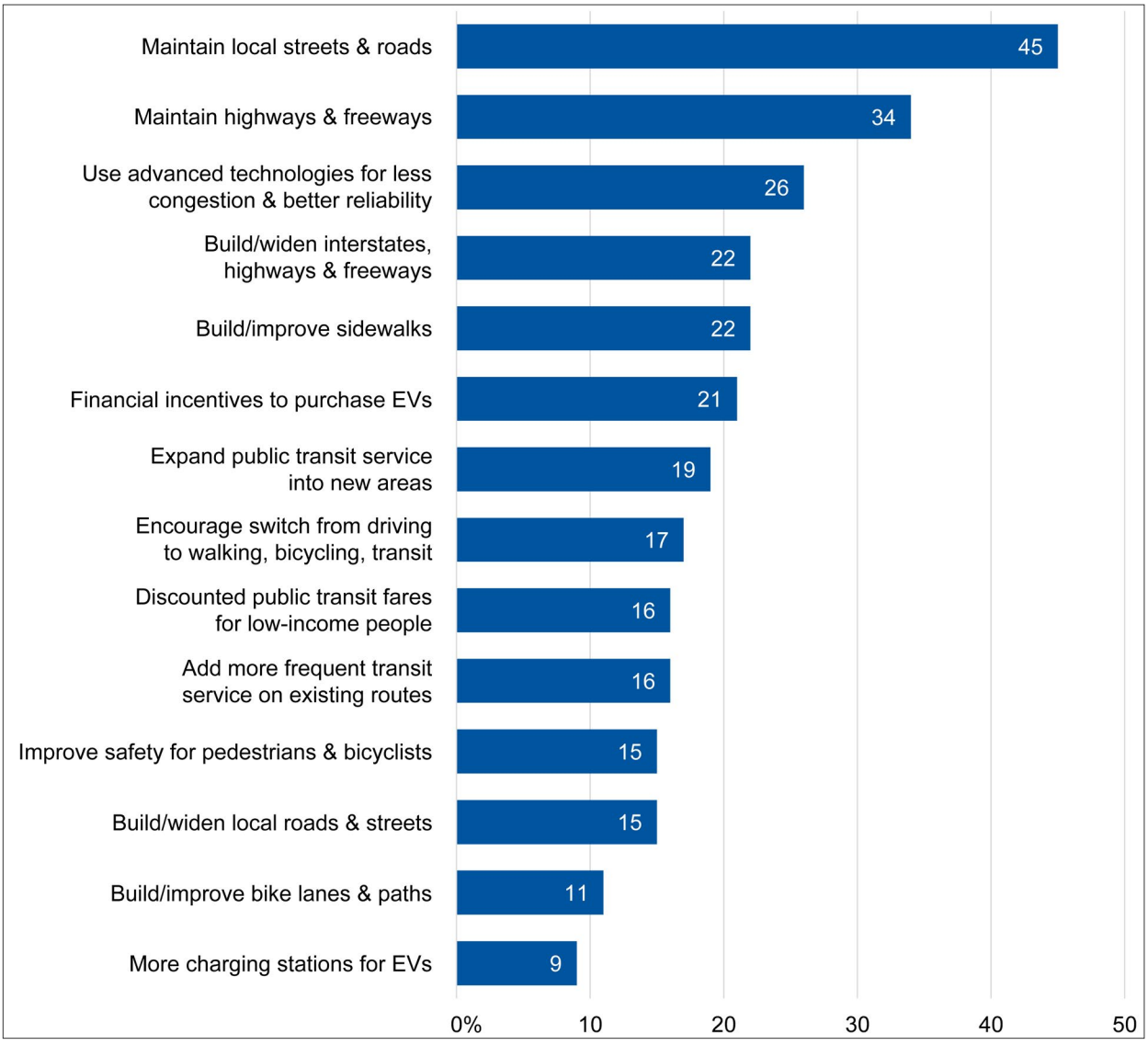

Figure 5. Options Selected as One of the Top Three Priorities for Spending SB1 Revenue

PREFERRED WAY TO RECEIVE SB1 INFORMATION

Respondents were asked to what extent they would find "useful" various ways that Caltrans could communicate with the public about how SB1 revenues are spent—with annual DMV registration notices, via monthly emails, via monthly social media, or monthly updates posted on a website. All four options were rated as "somewhat useful" or "very useful" by at least three-quarters of respondents, though monthly social media updates was a modestly less popular option than the other three. Both monthly emails and sharing information in annual DMV vehicle registration notices was rated as "somewhat useful" or "very useful" by 87%, but the latter had slightly higher numbers among those rating it "very useful" (44% vs. 40%).[8]

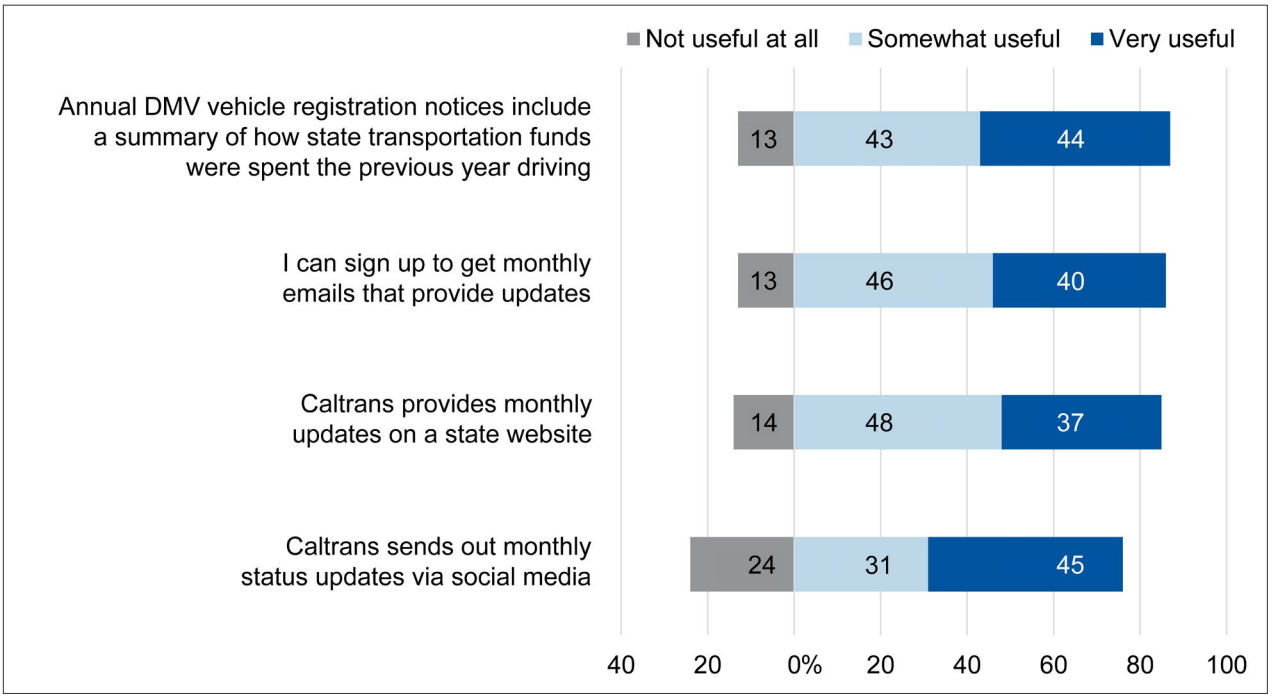

Figure 6. Preferred Way to Receive SB1 Information

VI. CONCLUSION

This section concludes the report with a summary of 11 key survey findings about how Californians assessed the state's transportation system, their goals for improvement, and their priorities for how the state invests SB1 revenues. These findings suggest opportunities for state leaders to craft spending programs that directly target the types of improvements the public wishes to see.

RATINGS OF THE TRANSPORTATION SYSTEM AND AGENCIES

1. **The majority of respondents rated all transportation infrastructure and services—local state highways, local streets, public transit, and bicycle/pedestrian infrastructure—as at least "somewhat good."** The percentage was noticeably highest for state highways (68%) and lowest for local streets and roads (53%).

2. **Most respondents were at least "somewhat concerned" about traffic congestion.** Eighty-six percent of respondents were at least "somewhat concerned" about congestion in their community.

3. **The majority of respondents rated the performance of transportation agencies as at least "somewhat good," with the highest approval for Caltrans.** These findings mirror those for the assessment of transportation infrastructure and services: the majority of respondents rated all three agency types as either "somewhat good" or "very good," though more respondents approved of Caltrans (65%) and public transit agencies (64%) than local city and county governments (54%).

A VISION FOR IMPROVING THE TRANSPORTATION SYSTEM

4. **Virtually all respondents wanted to see improvements to all modes, reductions in air pollution and greenhouse gas emissions from transportation, and more convenient options to travel without driving.** Respondents were asked what priority the state should place on each of six potential goals for improving the transportation system, and at least 90% of respondents rated each goal as "somewhat important" or "very" important. The three most popular options were maintaining and improving roads, streets, highways, and bridges (98%), reducing crashes and improving safety for everyone (97%), and reducing traffic congestion (97%).

PREFERENCES FOR HOW CALIFORNIA SPENDS SB1 REVENUE

5. **At least two-thirds of respondents supported every spending option presented.** The survey listed 13 different ways the state could spend the money collected through SB1 taxes and asked respondents what priority they would place on each. The options presented covered streets and highways, public transit, active transportation facilities, and electric vehicle incentives. All thirteen options were quite popular, with at least two-thirds rating each one as a medium or high priority.

6. **The public sees highway and local street maintenance as top priorities.** The two spending options with the largest percent of respondents rating them a medium or high priority were maintaining interstates, highways, and freeways (94%) and maintaining local streets and roads (93%).

7. **Modestly more people prioritized maintenance of local streets and roads than maintenance of highways.** The survey asked respondents to select their top three spending priorities from the list of thirteen. Forty-five percent chose maintaining local streets and roads as a priority, compared to 34% who chose maintaining highways and freeways as a priority.

8. **For both highways and local streets, maintenance was a top priority for considerably more people than was expansion.** Only 15% chose building and widening local streets and roads as a top priority, compared to the 45% who chose maintaining them as a top priority.

9. **Most respondents supported transit-related spending improvements, but these were a top priority for only small minorities.** The most popular transit option was to subsidize fares for low-income riders (21%), followed by expanding service into new areas (19%), and adding more frequent service on existing routes (16%).

10. **The least popular spending options related to electric vehicles, though even these options were rated positively by more than two-thirds.** For example, 69% of respondents supported offering subsidies as an incentive to buy electric vehicles.

11. **Most respondents would find it "useful" to get information about how SB1 money is spent via monthly emails and/or as inserts in DMV vehicle registration notices.** Both options were rated as "somewhat useful" or "very useful" by 87% of respondents. Slightly fewer respondents, though still a great majority, thought that monthly updates on a Caltrans website would be useful.

APPENDIX A: SURVEY QUESTIONNAIRE AND TOPLINE RESULTS

This appendix presents the survey questionnaire and topline results.

The results have been weighted to match the Census Bureau's 2013–2017 *American Community Survey* five-year estimates with respect to gender, race, Hispanic ethnicity, education level, annual household income, and age for California adults.[9]

The authors removed missing and refused responses from the dataset before calculating the response rates.

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

* * *

Researchers at the Mineta Transportation Institute, San Jose State University, are conducting a survey to gather your thoughts about transportation in California. Your opinions are very important, no matter how much or little you travel. Public officials can use the survey results to decide what transportation improvements are most critical throughout the state. The survey takes about 10 minutes and is anonymous. Your participation is completely voluntary. You can refuse to participate or stop the survey at any time without any negative effect on your relations with San José State University. If you participate, there are no anticipated risks to you and no anticipated benefits other than the satisfaction of sharing your views with the researchers. For more information about the study, contact Professor Asha W. Agrawal at asha.weinstein.agrawal@sjsu.edu. By agreeing to participate in the study, it is implied that you have read and understand the above information. Please do not write any identifying information on the survey/questionnaire.

This survey is about transportation in California: local streets and roads, state highways, and public transit services like buses, light rail, and trains.

Q1. In your community, how is the quality of each of the following?

	Very good (%)	Somewhat good (%)	Somewhat bad (%)	Very bad (%)	Not sure / doesn't apply (%)
Interstates, highways, and freeways	19	49	22	7	3
Local streets and roads	12	41	33	13	1
Bicycle and pedestrian facilities	15	45	24	7	8
Public transit (bus, rail, etc.)	17	44	22	9	8

Q2. How concerned are you about traffic congestion in your community?

	%
Very concerned	44
Somewhat concerned	42
Not at all concerned	14

The next questions ask for your opinion about what government can do to improve transportation across all of California.

Q3. How important are the following transportation-related goals for California?

	Very important (%)	Somewhat important (%)	Not important (%)
Reduce crashes and improve safety for everyone	75	22	3
Reduce traffic congestion	71	26	3
Reduce health impacts caused by air pollution from cars and trucks	63	30	7
Reduce greenhouse gas emissions from transportation sources that contribute to climate change	58	32	10
Maintain and improve roads, streets, highways, and bridges	78	20	2
Make it more convenient to go places without driving (bus, walking, bike, etc.)	52	39	9

Q4. As you may be aware, California charges a gas tax and spends the money collected for transportation. Listed below are different ways the state could spend that money to improve the transportation system. How much of a priority should each one be for the state?

	High (%)	Medium (%)	Low (%)	Not at all (%)
Build/improve sidewalks	41	38	18	3
Subsidize public transit fares for low-income people	42	34	17	8
Develop programs that encourage people to switch from driving their cars to walking, biking, or using transit	35	38	20	7
Provide financial incentives for people to purchase electric vehicles	33	35	22	10
Build/improve bike lanes and bike paths	34	38	23	5
Use advanced technologies to reduce congestion and increase reliability	47	40	9	3
Install more charging stations for electric vehicles	27	39	25	8
Add more frequent public transit service on existing routes	40	39	17	4
Expand public transit service into new areas not already served	46	37	14	4
Maintain local streets and roads	64	29	5	2
Build/widen local roads and streets	43	39	14	3
Build/widen interstates, highways, and freeways	48	35	14	3
Maintain interstates, highways, and freeways	67	26	4	2

Q5. Here is the same list of transportation purposes that the state government could spend the gas tax money on. Select the <u>three</u> you think are most important.

	Selected as top 3 (%)
Build/improve sidewalks	22
Subsidize public transit fares for low-income people	21
Develop programs that encourage people to switch from driving their cars to walking, biking, or using transit	17
Provide financial incentives for people to purchase electric vehicles	16
Build/improve bike lanes and bike paths	11
Use advanced technologies to reduce congestion and increase reliability	26
Install more charging stations for electric vehicles	9
Add more frequent public transit service on existing routes	16
Improve safety for pedestrians and bicyclists	15
Expand public transit service into new areas not already served	19
Fix local streets and roads	45
Build/widen local roads and streets	15
Build/widen interstates, highways, and freeways	22
Fix interstates, highways, and freeways	34

Q6. Many government agencies help to provide transportation infrastructure and services. In your community, how good a job do you think each one does?

	Very good (%)	Somewhat good (%)	Somewhat bad (%)	Very bad (%)	Not sure / doesn't apply (%)
Caltrans (state highway department)	17	48	22	7	6
Public transit agencies (bus, rail, etc.)	18	46	22	8	6
City & county governments (streets, roads)	14	40	30	11	4

Q7. Imagine that the state plans to give people regular updates on how the gas tax money is spent in their county. For you personally, how useful would each of the following be for you as a way to receive updates?

	Very useful (%)	Somewhat useful (%)	Not useful at all (%)
Caltrans provides monthly updates on a state website	37	48	14
Annual DMV vehicle registration notices include a summary of how state transportation funds were spent the previous year	44	43	13
Caltrans send out monthly status updates via social media	31	45	24
I can sign up to get monthly emails that provide updates	40	47	13

Now we have a few questions about your personal transportation and how you get around.

Q8. What is the most recent time you used each type of transportation?

	Last 7 days (%)	Last 30 days (%)	Not used (%)
Drive yourself (car, truck, motorcycle, etc.)	79	7	14
Ride as a passenger in a personal vehicle (exclude trips in taxis, rideshare like Uber/Lyft, etc.)	50	24	26
Public transit (bus, train, ferry, etc.)	16	24	59
Taxi	5	12	83
Ridesharing services like Uber or Lyft	14	25	62
Walk to get somewhere (a store, work, friend's house, etc.)	50	23	28
Bicycle to get somewhere (a store, work, friend's house, etc.)	15	15	70
Electric kick-scooter, skateboard, or other small device	7	9	84
Other	6	5	89

Q9. About how many miles did you, personally, drive during the past 12 months in all motorized vehicles? If you work, include the commute to and from work, but not any miles driven while on the job.

	%
1 to 3,000 miles	24
3,001 to 9,000 miles	20
9,001 to 13,000	19
More than 13,000 miles	18
Don't drive	19

Q10. Now think about the vehicle you drove the most in the past 12 months, to get around for personal reasons like shopping, commuting to work, or vacation trips. How many miles per gallon does the vehicle get?

	%
Less than 16 mpg	12
17 to 21 mpg	16
22 to 28 mpg	26
29 to 43 mpg	19
More than 43 mpg, including electric vehicle	9
Don't know	19

Q11. How would you describe the area where you live?

	%
Urban part of a city/region	36
Suburban part of a city/region	42
Small town	12
Rural area	9

ENDNOTES

1. We report race and Hispanic ethnicity separately, in accordance with current practice at the U.S. Census Bureau.

2. Valerie M. Sue and Lois A. Ritter, *Conducting Online Surveys*, 2nd edition (Sage Publications, 2012).

3. Monica Anderson, et al., "10% of Americans Don't Use the Internet; Who Are They?" Pew Research Center, April 22, 2019, https://www.pewresearch.org/fact-tank/2019/04/22/some-americans-dont-use-the-internet-who-are-they/.

4. Pew Research Center, "Collecting Survey Data" (no date), https://www.pewresearch.org/methods/u-s-survey-research/collecting-survey-data/.

5. Steven Ruggles, et al, "IPUMS USA: Version 10.0 [2013-2017 American Community Survey 5-Year Estimates]," Minneapolis, MN: IPUMS, 2020, https://doi.org/10.18128/D010.V10.0.

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

7. Results of this analysis are not shown in table form in the report.

8. The difference between those finding it "somewhat useful" and "very useful" was statistically significant at $p<0.05$.

9. Steven Ruggles, et al.

ABBREVIATIONS AND ACRONYMS

DMV	Department of Motor Vehicles
EV	Electric Vehicle
MPG	Miles per gallon
SB1	Senate Bill 1

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