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# 2022-2023 National Survey of Speeding Attitudes and Behaviors

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The National Highway Traffic Safety and Behaviors (NSSAB) in a series of national estimates of driver behaviors from September 28, 2022, to January respondents who drive at least a few tr strongly agree that people should keep agree that everyone should obey the sp the speed limit by more than 20 mph ( respondents (62%) agree or strongly a (48%) agree or strongly agree that the between driver types (i.e., speeders, so behaviors. In the final chapter, 2022-2	Surveys spanning 1997, 2002, 2011 and attitudes toward speeding in the 22, 2023, and included responses vi- times per year. Results indicate that to pace with the flow of traffic. Most peed limit because it's the law (87% 85%). Examining personal attitudes gree that they often get impatient w y worry a lot about having a crash. I pometime speeders, and non-speeders	, and 202 e United S a web and most resp responde ), and that indicates ith slowe Results in 3) on man	22-2023. These sur States. Data collect d mail surveys from ondents (91%) agre- ents also agree or st at it is unacceptable s that almost two-th r drivers, and only idicate that different y speeding attitude	veys yield ion occurred n 5,680 ee or rongly e to exceed nirds of about half nces exist	
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## **Executive Summary**

### Background

The 2022-2023 National Survey of Speeding Attitudes and Behavior (NSSAB) is the fourth in a series of surveys conducted by the National Highway Traffic Safety Administration that focus on speeding and yield national estimates of driver behavior and attitudes toward speeding in the United States.

The previous surveys, conducted in 1997, 2002, and 2011, were designed and implemented as random-digit-dialing telephone surveys. To address declining survey response rates for telephone surveys and the need to ensure better coverage and representativeness of the sample, the 2022-2023 survey was transitioned to an address-based sampling design that used a mail-push-to-web approach to encourage respondents to complete the survey either online or by mail. Aside from the changes in method of household sampling and mode of administration from interviewer administered to self-administered, a third notable change was that this iteration sampled drivers ages 18 and older, whereas previous iterations of the survey sampled drivers 16 and older.

#### Methodology

Survey data was collected from 5,680 respondents via web and mail survey from September 28, 2022, to January 22, 2023. This data was weighted to yield national estimates and to support inferences to the driver population. Analyses used in this report include driver characteristics, comparisons of key variables across population subgroups such as sex or age groupings, comparisons across speeder types, and trend analysis of key variables across four iterations of the speeding behaviors survey.

Of the 5,680 respondents, 5,593 reported driving at least during certain times of the year. *Those who responded to the survey and indicated they never drive are not included in analyses.* Of the 5,593 drivers, 1,930 (35%) completed the survey by mail and 3,663 (65%) completed by web.

The survey questionnaire and a full description of the survey methodology are provided in the appendices to this report.

#### Results

Highlights of the results are outlined in written summaries and graphs, charts, or tables throughout the report. Only a few of the most striking findings are referred to here.

#### **Driver Characteristics**

Almost three-quarters of the full sample (73%) reported driving every day, or almost every day, and almost half (46%) reported their primary vehicle is a car, followed by 36% reporting they drive an SUV.

**Driver Types.** Respondents were grouped into one of three latent categories based on responses to six questions about speeding-related behaviors and attitudes. Respondents were classified as either speeders, sometime speeders, or nonspeeders. The largest category was sometime speeders, representing 44% of the population, followed by nonspeeders, representing 39% of the population, and speeders being the smallest group at 17% of the population.

The driver types exhibit differences in their speeding-related behaviors and attitudes. Of those who indicated that they tend to pass other cars more often than other cars pass them, over half (61%) were speeders, compared to 25% who were sometime speeders and 14% who were non-speeders. Of those who reported that they tend to be passed by other cars, over half (58%) were non-speeders, compared to only 3% who were speeders. Similarly, of those who reported that they tend to keep up with faster traffic, more were speeders (38%) than nonspeeders (21%). Of those who tended to stay with slower-moving traffic, over half (62%) were nonspeeders, compared to only 3% who were speeders.

While most of all respondents had not been stopped for speeding in the past 12 months, more speeders (12%) reported being stopped once in the past 12 months compared to nonspeeders (2%) and sometime speeders (5%).

The driver types also differed in certain demographic characteristics. Examining the distribution of driver types by driver sex indicated that the percentage of sometime speeders was the same among males and females (44%). More females (42%) were classified as nonspeeders than were males (38%), and more males (18%) were classified as speeders than were females (14%). Examining respondent income showed that as income level rose, the percentage of respondents classified as speeders also increased.

#### **Driving Behavior on Different Types of Roads**

**Road Type.** Respondents most often used residential streets, with 70% of respondents reporting that they frequently traveled on them. Two-lane highways and multi-lane divided highways were also used frequently, with 59% and 54% of respondents reporting their frequent use, respectively.

**Driving Speed.** Comparing the average reported driving speed and the average perceived safe driving speed showed that respondents either drive at exactly or almost the speed they perceive to be safe on different types of roads. Respondents reported the same driving speed and perceived safe speed limit for multi-lane divided highways (66.4 mph). There was also no difference between the average driving speed and perceived safe driving speed for residential streets (27.8 mph). The difference for two-lane highways was miniscule (51.8 mph for driving speed versus 51.7 mph for perceived safe driving speed).

Respondents categorized as speeders reported the highest perceived safe driving speed and the highest actual driving speed for each road type. Nonspeeders reported the lowest actual driving speed for each road type.

Overall, respondents who experienced speeding-related consequences (stopped by police, received a ticket or warning, and had one or more crashes) reported, on average, believing there was a larger margin of mph over the speed limit before receiving a speeding ticket on a multi-lane divided highway and two-lane highway than respondents who had not encountered speeding-related consequences. Drivers who had one or more crashes in the past year responded with the highest reported mph over the speed limit that a driver can go before receiving a speeding ticket. This group indicated averages over the speed limit of 12.0 mph on multi-lane divided highways, 12.1 mph on two-lane highways, and 8.2 mph on residential streets.

#### Norms and Attitudes About Speeding

Respondents broadly showed consistency in their normative and personal attitudes toward speeding.

**Normative Attitudes.** Almost all respondents (91%) agreed or strongly agreed that people should keep pace with the flow of traffic. Most respondents also agreed or strongly agreed that everyone should obey the speed limit because it's the law (87%) and that it is unacceptable to exceed the speed limit by more than 20 mph (85%).

Normative attitudes toward speeding differed by driver types. More speeders (65%) strongly agreed with the statement that people should keep pace with the flow of traffic, compared to sometime speeders (46%) and nonspeeders (40%). Although the overall percentage of respondents who strongly agreed is smaller, speeders were more than twice as likely as nonspeeders to strongly agree that speeding tickets were more for raising money than reducing speeding (35% versus 14%), driving over the speed limit is not dangerous for skilled drivers (8% versus 2%), and if it is your time to die, you'll die; it doesn't matter whether you speed (6% versus 1%).

**Personal Attitudes.** Almost two-thirds of respondents (62%) agreed or strongly agreed that they often get impatient with slower drivers, and only about half (48%) agreed or strongly agreed that they worry a lot about having a crash. Agreement was notably lower for respondents who agreed or strongly agreed with the statements "driving within or near the speed limit makes me feel bored" (10%) and "I consider myself a risk-taker while driving" (7%).

**Driving the Speed Limit.** Almost three-quarters of respondents agreed or strongly agreed that driving at or near the speed limit reduces their chances of an accident (72%) and that it makes it easier to avoid dangerous situations (70%). More than half of respondents agreed or strongly agreed that driving at or near the speed limit uses less fuel (58%), and half of respondents agreed or strongly agreed that driving at or near the speed limit makes it difficult to keep up with traffic.

**Reasons for Speeding**. Over half of respondents reported speeding because they were going with the traffic flow (62%) or passing another vehicle (58%). Other commonly cited reasons for speeding were due to emergency/illness (46%) and being late (41%).

#### **Attitudes Toward Enforcement and Speeding Countermeasures**

When asked about their attitude toward speed enforcement and speeding countermeasures, respondents generally agreed with the use of enforcement, countermeasures, and types of possible countermeasures. The differences in attitudes become clear when viewed by driver type.

**Importance of Reducing Speeding.** Most respondents (84%) indicated that it is very or somewhat important to do something to reduce speeders. Examining by driver type indicated that fewer speeders, though still almost two-thirds (63%), reported that it is very or somewhat important. Most sometime speeders (91%) indicated that it is very or somewhat important, compared to 86% of nonspeeders. Few respondents of any driver type believed it is not important at all to do something to reduce speeding. Response ratings of the importance of reducing speeding declined as income level increased. Similarly, as education level increased, the percentage of respondents who indicated reducing speeding was very important decreased.

**Enforcement of Speed Limits.** Only one-third of respondents (33%) indicated that the speed limit should be enforced all the time. Slightly over one-third of respondents (34%) indicated it

should be enforced often and 26% that it should be enforced sometimes. Only 6% thought the speed limit should rarely be enforced, and just 1% reported that it should never be enforced.

**Use of Speeding Countermeasures.** Countermeasures with the highest percentage of respondents indicating they were a good idea included increasing public awareness of the risks of speeding (76%); electronic signs that warn drivers they are speeding (75%); increased use of speed safety cameras (63%); and road design changes, such as speed humps and traffic circles (56%). Older respondents (65 and older) were over twice as likely to indicate that more frequent ticketing for speeding is a good idea as the youngest drivers (18 to 24). As respondent education and income levels rose, fewer respondents indicated that more frequent ticketing is a good idea. Overall, a high percentage of all demographic groups reported that increasing public awareness of the risks of speeding is a good idea and that electronic signs warning drivers they are speeding are a good idea. Examining attitudes toward countermeasures by driver type indicated that, generally, most of each driver type agreed that increasing public awareness of the risks of speeding and using electronic signs warning drivers to slow down are good ideas.

**In-Vehicle Countermeasures.** The percentage of respondents who indicated speed governors are a good idea varied by the type of driver that would use the speed governor. For example, 44% of respondents believed speed governors are a good idea for truck drivers, while 65% believed they are a good idea for drivers 18 or younger, and 71% believed they are a good idea for drivers in one year. Overall, though, few respondents (13%) indicated that speed governors are a good idea for all drivers. Women were more likely than men to agree that speed governors are a good idea for all types of drivers. Younger respondents were less likely than older respondents to think speed governors are a good idea for drivers with multiple speeding tickets.

**Use of Digital Speed Limit Signs.** Most respondents reported that digital speed limit signs would be a good idea in situations such as school zones (90%), construction zones (86%), bad weather (82%), and congested roadways (75%).

#### **Speed Safety Cameras**

Most respondents (87%) had heard of speed safety cameras being used to ticket drivers who speed.

**Location of Speed Safety Cameras.** Most respondents agreed that it would be acceptable to have speed safety cameras in school zones (80%) and frequent crash sites (77%). Slightly fewer respondents thought it was acceptable to have speed safety cameras where it could be hazardous for a police officer to stop a driver (66%), in a construction zone (66%), and where stopping a vehicle could cause traffic congestion (63%). Only one-quarter of respondents (25%) indicated that having speed safety cameras on all roads would be acceptable.

Attitudes Toward Speed Safety Cameras. Almost half of respondents (46%) agreed or strongly agreed that speed safety cameras are used to prevent accidents. Two-thirds of respondents (67%) agreed or strongly agreed that speed safety cameras are used to generate revenue.

#### **Crash Experience**

Very few respondents (2%) reported being in a crash in the past 12 months, with very little variation based on driver type. The major variation in crash experience was based on age, with 6% of 18- to 24-year-olds responding that they have been in a crash in the past 12 months.

Of those who responded that they had been in a crash, speeders were far more likely (41%) to report having been injured in a crash, compared to 16% of sometime speeders and 12% of nonspeeders.

Of the respondents reporting a speeding-related crash in the past year, almost one-quarter (22%) reported injuries from their most recent speeding-related accident, and 78% reported they received no injuries.

#### **Personal Sanctions**

Most respondents (94%) reported that they were not stopped for speeding in the past 12 months, and only 1% reported being stopped two or more times in the past 12 months. Respondents categorized as speeders were far more likely (15%) to have been stopped for speeding in the past 12 months, compared to 5% of sometime speeders and 2% of nonspeeders. Over half of respondents who reported being stopped for speeding received a ticket, regardless of driver category.

#### **Other Risky Behavior**

Very few respondents reported other risky behavior such as driving without a seat belt (2% indicated rarely or never), driving after consuming too much alcohol to drive safely (2%), or using a mobile device while driving (1% indicated talking, sending, or receiving a text message on all trips). For driving without a seat belt and driving after consuming alcohol, age was more of a determining factor of likelihood than other categorizations. Respondents 18 to 54 were more likely than older respondents to report sometimes, rarely, or never using a seat belt. Those 35 to 44 were least likely to say they have driven a vehicle when they thought they might have had too much to drink (1%) compared to respondents in other age groups. Age and driver type were both indicative of risky behaviors while driving. While sometime speeders (2%) and nonspeeders (1%) were both equally unlikely to send text messages while driving, almost 1 in 10 speeders (9%) reported sending texts while driving.

#### **Trends From Previous Survey Iterations**

Nine variables have remained consistent across the NSSAB survey iterations in 1997, 2002, 2011, and 2022-2023. Results from the 2022-2023 survey were compared to past survey iterations to examine trends.

Generally, the proportion of "everyday drivers" has steadily decreased from 88% in 1997 to 75% in 2022-2023, and there has been a corresponding increase (9% in 1997 to 18% in 2022-2023) for respondents indicating that they drive "several days a week."

Some attitudes and beliefs associated with driving have changed. Enjoyment of fast driving decreased over time, with 26% of 2022-2023 respondents and 27% of 2011 respondents agreeing with this statement, compared with 40% in 1997. The percentage of respondents who strongly agreed or somewhat agreed that "the faster they drive, the more alert they feel" increased to 19% in 2022-2023 from 15% in 2011, after having dropped by half from 2002 respondents, who

agreed 30% of the time. In 1997 and 2002, approximately 3 in 10 respondents (30% in 1997 and 31% in 2002) strongly agreed or somewhat agreed that they try to get to their destination as quickly as possible. However, in 2011 and 2022-2023, only about 1 in 5 (21% and 22%) strongly or somewhat agreed with this statement.

Respondents were more impatient with slower drivers in 2022-2023, with more than half of respondents agreeing with this statement; the lowest agreement of 53% occurred in 2002 compared to the highest agreement of 62% in 2022-2023. Respondents worrying a lot about having a crash remained between 46% and 48% across the four iterations. Finally, the percentage of respondents stopped by the police for speeding decreased to 6% in 2022-2023 from 9% to 11% in previous years of the study.

## Introduction

#### Background

For more than 20 years, speeding has been involved in approximately one-third of all motor vehicle fatalities (NHTSA, 2023). Even as new vehicle technologies improve driver and passenger safety, a driver's propensity to drive too fast for the road conditions or more than the posted speed limit often has tragic consequences. Other risky behaviors such as driving under the influence of drugs or alcohol and distracted driving, further amplify the dangers of driving over the speed limit.

While there were fewer driving trips during 2020 due to the COVID-19 pandemic, the number of speeding-related fatalities increased during this time, with a 19% increase from 2019 to 2020 (9,592 fatalities to 11,428 fatalities) and another 8% increase from 2020 to 2021 (11,428 fatalities to 12,330 fatalities) (NCSA, 2023). Of the drivers who remained on the roads during the pandemic, some engaged in riskier behavior such as extreme speeding. Traffic data indicates that average speeds increased, and extreme speeds became more common (Office of Behavioral Safety Research, 2021). Unfortunately, technological advancements in vehicle safety and passenger protection alone cannot keep drivers and passengers safe from the dangers of speeding.

NHTSA's mission is to "save lives, prevent injuries, and reduce economic costs due to road traffic crashes, through education, research, safety standards, and enforcement activity" (NHTSA, n.d.). In support of this mission, NHTSA's Office of Behavioral Safety Research studies "behaviors and attitudes in highway safety, focusing on drivers, passengers, pedestrians, and motorcyclists," and uses that information to "develop and refine countermeasures to deter unsafe behaviors and promote safe alternatives" (NHTSA, n.d.-a).

To examine speeding behaviors specifically, the Office of Behavioral Safety Research conducts surveys on speeding attitudes and behaviors periodically since 1997. The 2022-2023 NSSAB is the fourth iteration of this survey that provides nationally representative data on speeding, including driver behavior and attitudes toward speeding in the United States.

The previous surveys, conducted in 1997, 2002, and 2011, were designed and implemented as random-digit-dialing telephone surveys. To address declining survey response rates for telephone surveys and the need to ensure better coverage and representativeness of the sample, the 2022-2023 survey was transitioned to an address-based sampling design that used a mail-push-to-web approach to encourage respondents to complete the survey either online or by mail. Aside from the changes in method of household sampling and mode of administration from interviewer administered to self-administered, a third notable change was that this iteration sampled drivers 18 and older, whereas previous iterations of the survey sampled drivers 16 and older.

The following report presents results from the 2022-2023 NSSAB, which was fielded from September 2022 to January 2023 and collected 5,680 responses. Specifically, this report examines driver characteristics, driving behavior on different types of roads, norms and attitudes about speeding, attitudes toward enforcement and speeding countermeasures, automated photo enforcement devices, crash experience, personal sanctions, and other risky behaviors. The report includes a final section that examines trend analyses for core questions studied in previous iterations of the survey.

#### Methodology

The 2022-2023 NSSAB collected data from 5,680 respondents (3,714 via web and 1,966 via mail). Data collection began on September 28, 2022, and ended on January 22, 2023. Responses were reflective of a nationally representative sample of drivers in the United States 18 and older. The samples were weighted to produce national estimates of the driving population from which valid generalizations can be made to the public. For a complete description of the methodology, including the computation of weights, please refer to Appendix A.

#### Analysis

Analyses for this report included the following:

- **Driver Characteristics:** This analysis uses descriptive and inferential statistics to describe the driver population across demographics, geographic area, driving frequency, and vehicle type.
- Subgroup Analysis: These analyses include comparisons of the substantive survey questions across population subgroups (e.g., male/female, age groups). The comparisons focus on frequency distributions for categorical variables and descriptive statistics (mean, median) for numeric variables (e.g., typical speeds). Chi-square statistics were used to identify significant differences between groups.
- **Speeder Types:** Latent class analysis was used to identify segments of the population based on speeding attitudes.
- **Trend Analysis:** To compare how behaviors and attitudes have changed over time, questions that remained the same through all past survey iterations were examined using descriptive statistics. Given the change in data collection modes between 2011 and 2022-2023, we did not conduct statistical testing and we caution readers that mode effects could confound with true change over time.

Analyses were conducted with weighted survey data to support inferences to the driver population. As noted above, chi-square statistics were used to identify significant differences between the population groups. Throughout the report, asterisks are used to identify groups with statistical differences. The asterisks correspond to the following p values: \*\*\* p < .001, \*\* p < .01, and \* p < .05. Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

Unweighted sample sizes (n) are included to show the exact number of respondents answering a given question. Throughout the report, percentages for some items may not sum to 100% because of rounding or because the question allowed for respondents to select more than one response. Sample sizes of fewer than 50 respondents have been suppressed, and findings should be interpreted with caution. These cases are indicated with a dagger symbol (†).

Outliers were addressed by using top/bottom coding at the 99.5/0.5 percentile for the following items: Q6, Q7, Q8, Q10, Q13, Q14, Q15, Q18, Q20, Q21, and Q22. Top coding using logical reporting categories was used to address outliers for items Q50, Q52, and Q61a. For Q11, Q17, and Q25, and for responses over the average speed limit for the road type, researchers subtracted the speed limit, then top coded the outliers.

## **Driver Characteristics**

This chapter describes the demographics of the sample of respondents, presents driver types developed based on patterns of responses to speeding-behavior questions, and presents the distribution of these driver types by sample demographics.

#### **Demographics and Driver Characteristics**

The survey had a total of 5,680 respondents, with 5,593 of these respondents reporting driving at least some during the year. *Those who responded to the survey and indicated they never drive are not included in analyses.* Of the 5,593 drivers responding, 1,930 (35%) completed by mail and 3,663 (65%) completed by web. Compared to mail respondents, web respondents were more likely to be in the 25 to 35 age group (18% versus 6%) and more likely to have a college (29% versus 20%) or graduate degree (32% versus 26%) than mail respondents. Mail respondents were more likely to be 65 or older (50%) than web respondents (24%). Mail respondents also skewed lower income than web respondents and were more likely to be homeowners (79%) than web respondents (73%).

The full sample was largely from metropolitan statistical areas (85%), and mail and web respondents had similar percentages of respondents living in these areas. Almost three-quarters of the full sample (73%) reported driving every day, or almost every day, and almost half (46%) reported their primary vehicle is a car, followed by 36% reporting they drive an SUV. There were minor differences between the mail and web samples regarding frequency of driving and primary type of vehicle. The demographics by survey mode are presented with unweighted percentages and unweighted sample sizes, noted by the letter "n" (Table 1).

	Mail Sample	Web Sample	Total Sample
Age	(n = 1,829)	(n = 3,654)	(n = 5,483)
Mean age	56	44	48
18 to 24	2.5%	5.3%	4.4%
25 to 34	6.3%	18.4%	14.4%
35 to 44	7.2%	17.7%	14.2%
45 to 54	11.1%	15.1%	13.8%
55 to 64	23.0%	19.8%	20.8%
65+	49.9%	23.7%	32.4%
Sex	(n = 1,839)	(n = 3,651)	(n = 5,490)
Male	48.8%	48.2%	48.4%
Female	51.2%	51.8%	51.6%
Ethnicity/race	(n = 1,877)	(n = 3,645)	(n = 5,522)
Hispanic	6.3%	10.9%	9.3%
Non-Hispanic White	78.1%	71.1%	73.5%
Non-Hispanic Black	6.9%	5.3%	5.9%
Non-Hispanic Asian	3.1%	5.7%	4.8%
Non-Hispanic Other	5.5%	7.0%	6.5%
Education	(n = 1,820)	(n = 3,650)	(n = 5,470)
Less than high school	3.1%	1.8%	2.2%

Table 1. Demographic percentages by sample type (not weighted)

	Mail Sample	Web Sample	Total Sample
High school diploma	20.2%	10.3%	13.6%
Some college	31.5%	26.7%	28.3%
College degree	19.7%	28.8%	25.8%
Graduate degree	25.5%	32.4%	30.1%
Marital status	(n = 1,831)	(n = 3,649)	(n = 5,480)
Married	55.9%	58.8%	57.8%
Divorced	12.7%	10.4%	11.1%
Separated	1.0%	1.4%	1.2%
Widowed	13.9%	4.1%	7.4%
Single	16.5%	25.4%	22.4%
Income	(n = 1,769)	(n = 3,620)	(n = 5,389)
< \$35,000	25.0%	15.4%	18.6%
\$35,000 to \$50,000	12.0%	10.1%	10.8%
\$50,000 to \$75,000	19.4%	16.9%	17.7%
\$75,000 to \$100,000	13.5%	17.0%	15.8%
\$100,000 to \$150,000	14.2%	19.0%	17.4%
\$150,000 or more	15.9%	21.6%	19.7%
Home	(n = 1,872)	(n = 3,647)	(n = 5,519)
Own	79.2%	72.8%	75.0%
Rent	16.8%	22.9%	20.8%
Some other arrangement	4.0%	4.3%	4.2%
Metro status	(n = 1,930)	(n = 3,663)	(n = 5,593)
Metropolitan	80.8%	87.8%	85.4%
Non-metropolitan	19.2%	12.2%	14.6%
Frequency of driving	(n = 1,865)	(n = 3,663)	(n = 5,528)
Every day, or almost every day	70.2%	73.7%	72.5%
Several days a week	23.6%	21.1%	22.0%
Once a week or less	5.5%	3.8%	4.4%
Only certain times of the year	0.6%	1.4%	1.1%
Vehicle	(n = 1,829)	(n = 3,662)	( <i>n</i> = 5,491)
Car	43.2%	46.8%	45.6%
Van or minivan	4.4%	3.9%	4.1%
SUV	35.0%	36.6%	36.1%
Pickup truck	15.9%	11.5%	13.0%
Other truck/box truck/semi	÷	Ť	÷
Motorcycle	÷	÷	+
Other	÷	+	+

<sup>†</sup> Note: Sample sizes of fewer than 50 respondents have been suppressed.

#### **Driver Types**

To facilitate examining driver attitudes and behaviors toward speeding, latent class analysis was used to identify different driver types based on survey responses to six questions about driving and speeding tendencies. To facilitate comparisons between the 2011 iteration and the present survey, the latent class analysis used the same six questions from the 2011 analyses to identify driver types. The latent class analysis model used the survey weights.

First, researchers examined the response distributions for each question included in the latent class analysis (Table 2 to Table 4). The first two questions examined driving behavior toward passing other cars and staying with slower- or faster-moving traffic. Half (50%) of the respondents indicated that they tend to pass other cars and be passed by other cars about equally, followed by 36% that indicated other cars tend to pass them more often than they pass other cars. When asked about staying with slower- or faster-moving traffic, less than half of respondents (46%) indicated that they keep pace with slower and faster traffic equally, followed by 33% of respondents who indicate they tend to keep up with the faster traffic only.

The next set of questions asked respondents about speeding behavior (at either 10 or 15 mph over the speed limit depending on the road type) on three types of roads: (1) driving 15 mph over the speed limit on multi-lane divided highways; (2) driving 15 mph over the speed limit on two-lane highways; and (3) driving 10 mph over the speed limit on neighborhood or residential streets. Across all three road types, more than half of respondents reported speeding rarely or never, even when driving on highway road types. Specifically, 70% reported rarely or never driving 15 mph over the speed limit on a multi-lane divided highway; 82% reported rarely or never driving 15 mph over the speed limit on a two-lane highway; and 85% reported rarely or never driving 10 mph over the speed limit on neighborhood or residential streets.

The final question in the driver type question group asked respondents to report the number of times they had been stopped for speeding in the past 12 months. Only 5% of respondents indicated they had been stopped for speeding in the past 12 months, with most of these respondents indicating they had been stopped one time.

	Percentage
Q3. Which of the following statements best describes your driving?	n = 5,540
I tend to pass other cars more often than other cars pass me	14.0%
Other cars tend to pass me more often than I pass them	35.8%
Both about equally	50.2%
Q4. When driving I tend to	<i>n</i> = 5,536
Stay with slower moving traffic	21.1%
Keep up with the faster traffic	33.0%
Both about equally	45.9%

Table 2. Questions employed in latent class analysis defining driver types

	n	Always	Often	Sometimes	Rarely	Never
How often would you say you	••					
<b>Q9.</b> Drive 15 miles an hour						
over the speed limit on Multi-	5,454	1.5%	8.4%	21.0%	38.7%	30.3%
Lane, Divided Highways?						
<b>Q16.</b> Drive 15 miles an hour						
over the speed limit on <b>Two-</b>	5,451	0.9%	2.9%	14.3%	38.9%	43.0%
Lane Highways?						
<b>Q23.</b> Drive 10 miles an hour						
over the speed limit on	5 405	1.0%	2.5%	11.4%	37.5%	47.6%
Neighborhood or Residential	5,495	1.0%	2.3%	11.4%	57.5%	4/.0%
Streets?						

Table 3. Questions employed in latent class analysis defining driver types

Note: For the latent class analysis, response options "always" and "often" were combined.

Table 4. Questions empl	loved in latent class	analvsis defining dri	ver types
$\mathcal{L}$			

Q52. How many times have you been stopped for speeding		
in the past 12 months? $(n = 5,377)$	п	Percentage
None	5,124	95.3%
Once	218	4.1%
Twice	21	0.4%
3 or more times	14	0.1%
Mean	0.08	times

Note: For the latent class analysis, responses were categorized as "stopped" or "not stopped" in the past 12 months.

Consistent with the 2011 study, we formed three latent classes representing speeders, sometime speeders, and nonspeeders. The latent class model produces the respondent's probability of belonging to each class based on their responses to the six speeding questions (Q3, Q4, Q9, Q16, Q23, and Q52). The latent class means included in Table 5 are weighted based on the latent class probabilities of class membership. For example, based on their responses to the six questions, a driver may have a 75% probability of belonging to the speeders latent class, a 20% probability of belonging to sometime speeders, and a 5% probability of belonging to nonspeeders. The drivers' responses are weighted by 75%, 20%, and 5% when calculating the latent class means for speeders, sometime speeders, nonspeeders, respectively.

To facilitate the analysis of the survey data based on the driver types, we assigned each respondent to a single latent class based on the modal class membership probability (i.e., the class with which they most aligned). In the example above, the driver is assigned to the speeders latent class because their probability of belonging to this group is largest. A description of the classes is as follows:

• **Speeders:** Speeders were the smallest segment, representing about 17% of the population. Over half of speeders said they often or always drive 15 mph over the speed limit on multi-lane divided highways and two-lane highways and an additional 43% state

that they drive this fast sometimes. Nearly three-quarters of speeders said they keep up with faster traffic, and less than 10% said they get passed by other cars more often than they pass other cars. In the past year, 14% had been stopped for speeding, and they have the highest tendency to speed on two-lane highways and neighborhood roads compared to other respondents, though most say they never or rarely speed on neighborhood roads.

- Sometime Speeders: Sometime speeders were the largest segment and represented 44% of the population. Most said they sometimes or rarely drive 15 mph over the speed limit regardless of whether they are on multi-lane divided highways or two-lane highways. Less than 10% reported that they pass others more than they are passed by others. But some preferred to keep up with faster traffic. Only 5% of sometime speeders received a speeding ticket in the past year.
- Nonspeeders: Nonspeeders represent 39% of the population. They almost never drove 15 mph over the speed limit on two-lane highways and rarely went 15 mph over the speed limit on multi-lane divided highways. They tended to be passed more than others and were most likely to stick with slower traffic. Less than 3% reported a speeding ticket in the past 12 months.

		Nonspeeders (38.9%)	Sometimes speeders (44.1%)	Speeders (17.0%)
Which of the following statements best	I tend to pass other cars more often than other cars pass me	5%	9%	48%
describes your driving?	Other cars tend to pass me more often than I pass them	52%	32%	7%
	Both about equally	43%	59%	45%
When driving I tend to	Stay with slower moving traffic	33%	17%	4%
	Keep up with the faster traffic	17%	31%	75%
	Both about equally	49%	52%	22%
How often would	Often/always	0%	1%	56%
you say you drive 15 miles an hour	Sometimes	0.2%	31%	42%
over the speed limit on multi- lane, divided highways?	Rarely	26%	64%	2%
	Never	73%	5%	0%

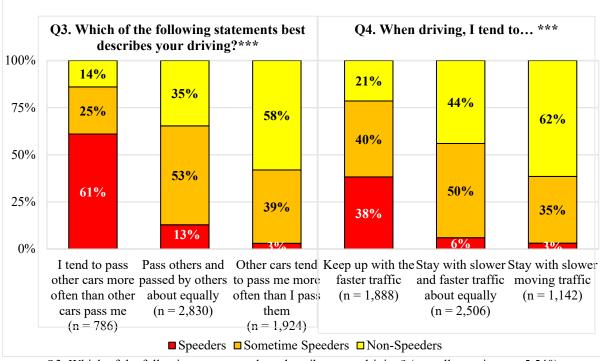
Table 5. Latent class means for driver type segments

		Nonspeeders (38.9%)	Sometimes speeders (44.1%)	Speeders (17.0%)
How often would	Often/Always	1%	1%	19%
you say you drive 15 miles an hour	Sometimes	1%	12%	49%
over the speed	Rarely	3%	75%	27%
limit on Two- Lane Highways?	Never	94%	13%	5%
How often would you say you drive	Often/Always	1%	1%	14%
10 miles an hour over the speed limit on neighborhood or residential streets?	Sometimes	2%	15%	22%
	Rarely	14%	54%	48%
	Never	82%	30%	15%
How many times have you been stopped for speeding in the past 12 months?	1+	2%	5%	15%
	0	98%	95%	85%

Note: The latent class means are weighted based on the latent class probabilities of class membership. Respondents are assigned to a single class based on their modal class membership probability (i.e., the class with which they most align). The means from the modal class assignment may be different than the latent class means.

The first set of questions used to define driver types depicts the differences between the three groups of respondents and their driving tendences. Of those who indicated that they tend to pass other cars more often than other cars pass them, over half (61%) were speeders, compared to 25% who were sometime speeders and 14% who were nonspeeders. Of those who reported that they tend to be passed by other cars, over half (58%) were nonspeeders, compared to only 3% who were speeders.

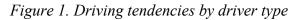
Similarly, of those who reported that they tend to keep up with faster traffic, more were speeders (38%) than nonspeeders (21%). Of those who tended to stay with slower-moving traffic, over half (62%) were nonspeeders, compared to only 3% who were speeders (Figure 1).



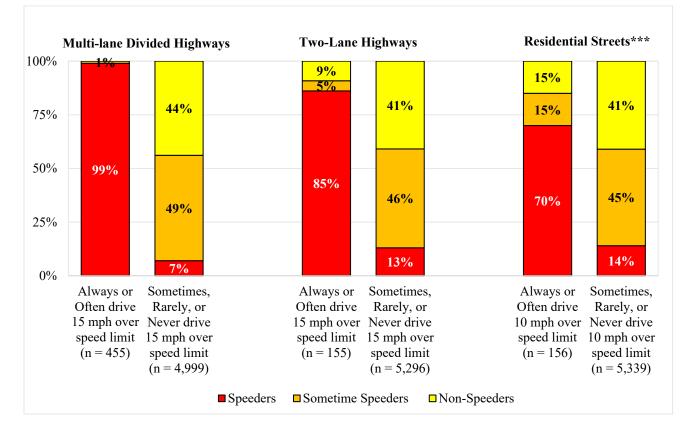
Q3. Which of the following statements best describes your driving? (overall question n = 5,540)

Q4. When driving, I tend to... (overall question n = 5,536)

\*\*\* p < .001



Examining driving behavior on multi-lane divided highways shows that, of those who indicated always or often driving 15 mph over the speed limit, 99% were speeders, while no nonspeeders selected these response options. Conversely, of those who sometimes, rarely, or never drive 15 mph over the speed limit, 44% were nonspeeders and very few (7%) were speeders. Of those who responded that they always or often drive 15 mph over the speed limit on two-lane highways, the large majority (85%) were speeders. Speeders also comprised the largest group of driver type (70%) who indicated they always or often drive 10 mph over the speed limit on residential streets (Figure 2). These findings indicate that more speeders were likely to report that they always or often speed on different road types. Of those who sometimes, rarely, or never drive 10 mph over the speed limit on residential streets, 14% of respondents were speeders. This was the highest percentage of speeders to indicate that they sometimes, rarely, or never drive over the speed limit across the three road types.



Q9. How often would you say you drive 15 miles an hour over the speed limit on Multi-Lane, Divided Highways? (overall question n = 5,454)

Q16. How often would you say you drive 15 miles an hour over the speed limit on Two-Lane Highways? (overall question n = 5,451)

Q23. How often would you say you drive 10 miles an hour over the speed limit on Neighborhood or Residential Streets? (overall question n = 5,495)

\*\*\* p < .001

Figure 2. Speeding behavior on various road types by driver type

While the vast majority of all respondents had not been stopped for speeding in the past 12 months, more speeders (12%) reported being stopped once in the past 12 months when compared to nonspeeders and sometime speeders (Table 6).

Q52. How many times have you been stopped for speeding in the past 12 months?***	Nonspeeders	Sometime Speeders	Speeders
	<i>n</i> = 2,213	<i>n</i> = 2,231	<i>n</i> = 680
None	97.8%	94.5%	85.4%
Once	1.9%	4.5%	12.3%
Twice	0.3%	0.5%	1.4%
3 or more times	0.1%	0.4%	1.0%
Mean	0 times	0.1 times	0.2 times

Table 6. Incidence of speeding stops by driver type

\*\*\* p < .001

With the three driver types defined, researchers examined the demographic characteristics of the three driver types. Results indicate statistically significant differences between the driver types in every demographic characteristic examined, as well as the frequency of driving and primary vehicle (Table 7).

	n	Nonspeeders	Sometime Speeders	Speeders
Age***				
18 to 24	240	30.6%	45.9%	23.4%
25 to 34	789	33.8%	43.1%	23.1%
35 to 44	777	34.4%	45.0%	20.6%
45 to 54	753	42.6%	42.2%	15.1%
55 to 64	1,145	43.9%	43.9%	12.3%
65+	1,775	49.3%	44.7%	6.0%
Sex*	· · · · ·			
Male	2,652	38.0%	44.0%	18.0%
Female	2,834	41.9%	43.9%	14.2%
Ethnicity/race***	· · · · ·			
Hispanic	516	36.0%	43.5%	20.4%
Non-Hispanic White	4,052	41.1%	43.1%	15.8%
Non-Hispanic Black	324	43.8%	49.0%	7.2%
Non-Hispanic Asian	266	28.6%	52.8%	18.6%
Non-Hispanic Other	357	46.6%	33.8%	19.7%
Education**				
Less than high school	120	43.9%	45.9%	10.2%
High school diploma	740	44.2%	41.2%	14.6%
Some college	1,545	39.8%	45.4%	14.7%
College degree	1,412	33.4%	44.1%	22.5%
Graduate degree	1,649	39.5%	45.3%	15.2%

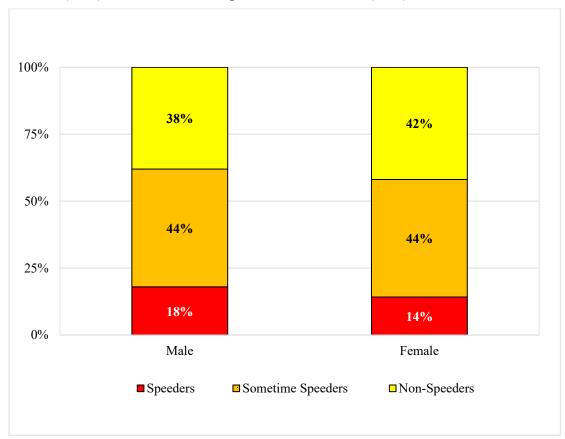
Table 7. Demographic characteristics by driver type

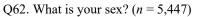
	n	Nonspeeders	Sometime Speeders	Speeders
Marital status***	<u> </u>		<b>h</b>	•
Married	3,165	42.1%	43.6%	14.3%
Divorced	610	37.3%	43.4%	19.3%
Separated	68	43.5%	38.9%	17.6%
Widowed	404	50.0%	44.0%	6.1%
Single	1,229	34.6%	45.3%	20.0%
Income**				
< \$35,000	998	43.8%	43.0%	13.2%
\$35,000 to \$50,000	579	43.5%	43.4%	13.1%
\$50,000 to \$75,000	953	42.8%	40.6%	16.5%
\$75,000 to \$100,000	853	38.3%	46.5%	15.1%
\$100,000 to \$150,000	939	32.7%	49.8%	17.5%
\$150,000 or more	1,062	33.5%	42.6%	23.9%
Home*	· · ·			
Own	4,134	41.6%	44.5%	13.9%
Rent	1,149	36.7%	43.1%	20.3%
Some other arrangement	229	40.8%	42.6%	16.6%
Metro status***	· · ·			
Metropolitan	4,768	38.1%	44.8%	17.1%
Non-metropolitan	818	52.2%	39.2%	8.7%
Frequency of driving***	· · ·			
Every day, or almost every	4,010	37.4%	44.6%	17.9%
day				
Several days a week	1,214	48.5%	42.0%	9.5%
Once a week or less	241	49.0%	39.9%	11.1%
Only certain times of the	63	42.7%	44.3%	13.1%
year				
Never	0	0.0%	0.0%	0.0%
Vehicle***				
Car	2,503	40.0%	43.9%	16.1%
Van or minivan	223	38.7%	47.2%	14.1%
SUV	1,980	38.8%	46.1%	15.0%
Pickup truck	712	43.6%	39.3%	17.1%
Other truck/box truck/semi	†	+	÷	Ť
Motorcycle	÷		÷	÷
Other	+	÷	÷	Ť

† Note: Sample sizes of fewer than 50 respondents have been suppressed.

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining the distribution of driver types by driver sex indicates that the percentage of sometime speeders is the same among males and females (44%) (Q62. What is your sex? (n = 5,447) Figure 3). More females (42%) were classified as nonspeeders than males (38%), and more males (18%) were classified as speeders than females (14%).

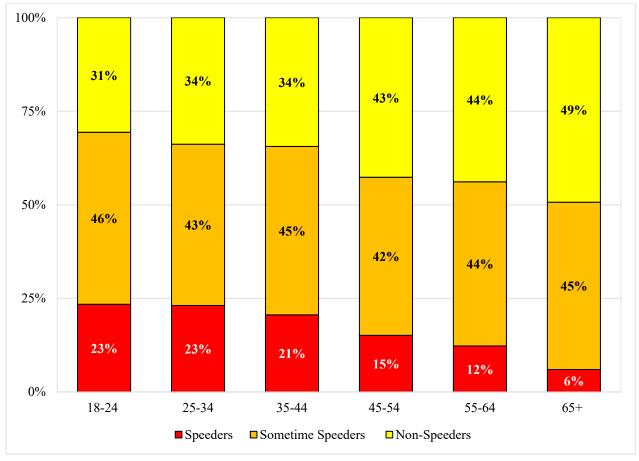




\* *p* < .05

Figure 3. Respondent sex by driver type\*

Young respondents tended to comprise a higher percentage of speeders than older respondents (Figure 4). Almost one-quarter (23%) of young respondents (18 to 24) were classified as speeders, while just 6% of respondents 65+ were speeders. As driver age increased, the percentage of respondents classified as nonspeeders increased. The percentage of respondents classified as sometime speeders remained stable (42% to 46%) across the age groups.

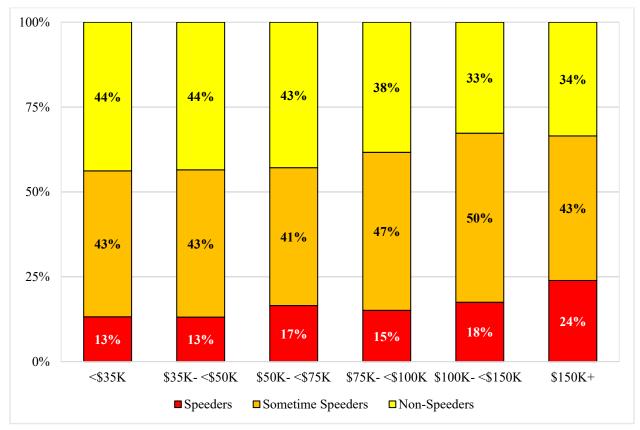


Q61. How old are you? (n = 5,436)

\*\*\* p < .001

Figure 4. Respondent age by driver type\*\*\*

Examining income groups by driver type indicated that as income level rose, the percentage of respondents classified as speeders also increased (Figure 5). In the highest income group (\$150,000 or more), almost one-quarter (24%) of respondents were classified as speeders. The percentage of sometime speeders did not have a clear trend across the income groups with the lowest percentage (41%) in the \$50k to \$75k group, and the highest percentage (50%) in the \$100k to \$150k group. The percentage of respondents classified as nonspeeders decreased as income rose. The largest driver type represented by respondents in the lowest two income groups (less than \$35,000 and less than \$50,000) were nonspeeders (44%), followed by sometime speeders (43%), and speeders at (13%).



Q68. Which of the following categories describes your household income before taxes in 2021? Your best estimate is fine. (n = 5,344)

\*\*\* p < .001

Figure 5. Respondent household income by driver type\*\*\*

Next, researchers examined each of the 10 NHTSA regions by driver type (Figure 6 to Figure 8). Results indicate there were statistically significant differences in the percentage of each driver type in each NHSTA region. Across all regions the distribution of speeders ranges from 9% to 21% (Table 8). Speeders were more prevalent in NHTSA Regions 9, 1, and 2, while Regions 5, 10, and 7 were less likely to contain speeders.

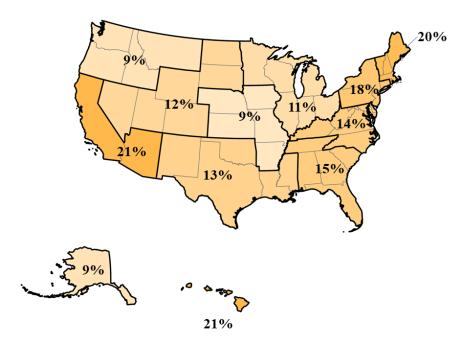


Figure 6. Overall percentage of speeders in each NHTSA region

Region	States	Percentage
9	Arizona, California, Hawaii	20.5%
1	Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	19.5%
2	Connecticut, New Jersey, New York, Pennsylvania	18.4%
4	Alabama, Florida, Georgia, South Carolina, Tennessee	14.5%
3	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia	14.2%
6	Louisiana, New Mexico, Mississippi, Oklahoma, Texas	13.2%
8	Colorado, Nevada, North Dakota, South Dakota, Utah, Wyoming	11.7%
5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	11.0%
10	Alaska, Idaho, Montana, Oregon, Washington	9.3%
7	Arkansas, Iowa, Kansas, Missouri, Nebraska	8.5%

Table 8. Percentage of speeders in each NHTSA region

The range of sometime speeders across regions was from 36% to 48% (Table 9). Sometime speeders were most likely to be found in Regions 1, 4, and 9. Regions 10 and 7 were less likely to have respondents defined as the sometime speeders type.

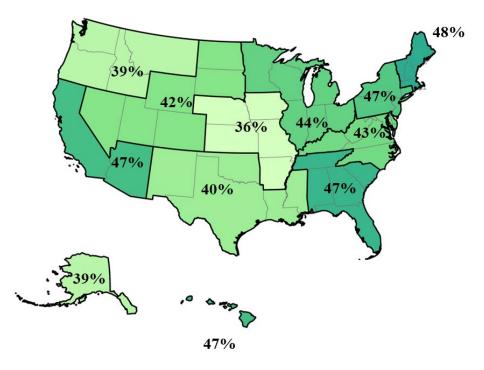


Figure 7. Percentage of sometime speeders in each NHTSA region

Region	States	Percentage
1	Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	47.8%
4	Alabama, Florida, Georgia, South Carolina, Tennessee	47.4%
9	Arizona, California, Hawaii	47.2%
2	Connecticut, New Jersey, New York, Pennsylvania	46.9%
5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	43.8%
3	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia	42.9%
8	Colorado, Nevada, North Dakota, South Dakota, Utah, Wyoming	41.9%
6	Louisiana, New Mexico, Mississippi, Oklahoma, Texas	40.4%
10	Alaska, Idaho, Montana, Oregon, Washington	38.6%
7	Arkansas, Iowa, Kansas, Missouri, Nebraska	35.6%

Table 9. Percentage of sometime speeders in each NHTSA region

The range of nonspeeders across regions was from 32% to 56%, representing the largest range of the driver types (Table 10). Nonspeeders were most likely to be found in Regions 7, 10, 6, and 8, while Regions 1 and 9 contained fewer nonspeeders than other Regions.

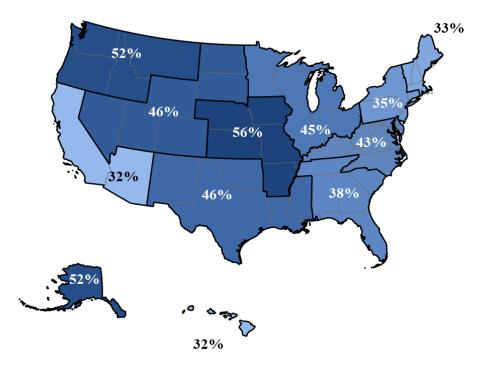


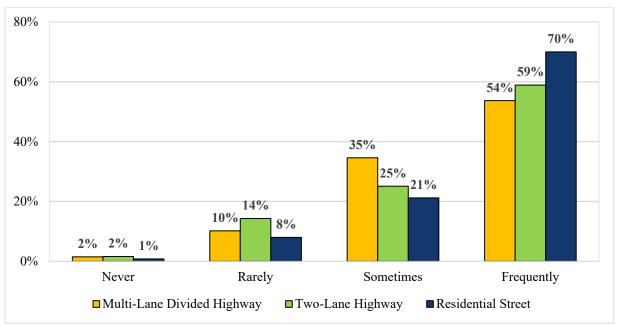
Figure 8. Percentage of nonspeeders in each NHTSA region

Region	States	Percentage
7	Arkansas, Iowa, Kansas, Missouri, Nebraska	55.9%
10	Alaska, Idaho, Montana, Oregon, Washington	52.1%
6	Louisiana, New Mexico, Mississippi, Oklahoma, Texas	46.4%
8	Colorado, Nevada, North Dakota, South Dakota, Utah, Wyoming	46.4%
5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	45.1%
3	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia	42.9%
4	Alabama, Florida, Georgia, South Carolina, Tennessee	38.2%
2	Connecticut, New Jersey, New York, Pennsylvania	34.7%
1	Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	32.8%
9	Arizona, California, Hawaii	32.3%

Table 10. Percentage of nonspeeders in each NHTSA region

# **Driving Behavior on Different Types of Roads**

Respondents were asked a series of questions about their driving behavior on different types of roads. Figure 9 shows how often respondents travel on multi-lane divided highways, two-lane highways, and residential streets. Respondents most often used residential streets, with 70% of respondents reporting that they frequently travel on them. Two-lane highways and multi-lane divided highways were also used frequently, with 59% and 54% of respondents reporting their frequent use, respectively. In contrast, more respondents sometimes used multi-lane divided highways (35%), followed by two-lane highways (25%), and lastly, residential streets (21%).



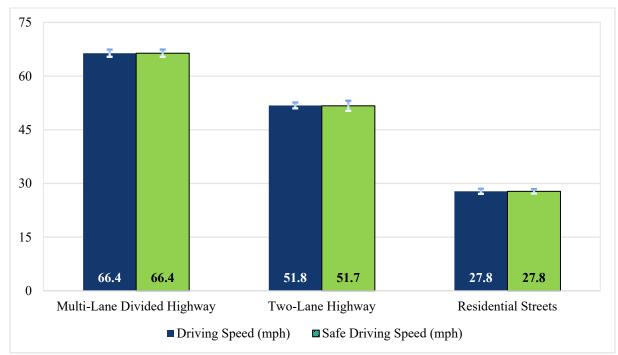
Q5. How often do you drive on Multi-Lane, Divided Highways? (n = 5,519)

Q12. How often do you drive on Two-Lane Highways that have one lane in each direction? (n = 5,497)

Q19. How often do you drive on Neighborhood or Residential Streets? (n = 5,533)

Figure 9. Frequency of driving on various road types

Comparing the average reported driving speed and the perceived safe driving speed shows that respondents either drive at exactly or almost exactly the speed they perceive to be safe on different types of roads. Respondents reported driving fastest on multi-lane divided highways, followed by two-lane highways, and slowest on residential streets. Figure 10 compares respondents perceived safe speed limit to their self-reported driving speeds in mph on multi-lane divided highways, two-lane highways, and residential streets. There were almost no differences between average reported driving speeds and average perceived safe driving speeds on these three road types. Respondents reported the same driving speed and perceived safe speed limit for multi-lane divided highways (66.4 mph). There was also no difference between the average driving speed and perceived safe driving speed for residential streets (27.8 mph). The difference for two-lane highways was miniscule (51.8 mph for driving speed versus 51.7 mph for perceived safe driving speed).



Note: Figure 10 to Figure 22 display error bars representing 95% confidence intervals.

Q7. What do you consider to be a safe speed limit for (most) Multi-Lane, Divided Highways in good weather on roads with no congestion during the day? (n = 5,429)

Q14. What do you consider to be a safe speed limit for (most) Two-Lane Highways in good weather during the day? (n = 5,444)

Q21. What do you consider to be a safe speed limit for (most) Neighborhood or Residential Streets in good weather during the day? (n = 5,492)

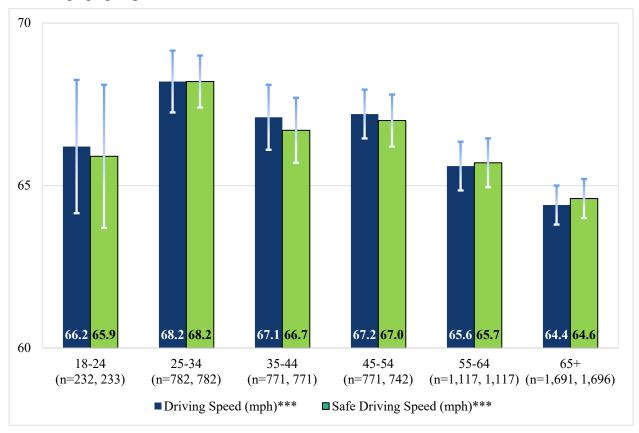
Q8. When driving on Multi-Lane, Divided Highways in good weather during the day, how fast do you normally drive? (n = 5,421)

Q15. When driving on Two-Lane Highways in good weather during the day, how fast do you normally drive? (n = 5,430)

Q22. When driving on Neighborhood or Residential Streets in good weather during the day, how fast do you normally drive? (n = 5,492)

Figure 10. Reported driving speed and perceived safe driving speed by road type

Average reported driving speed was compared to perceived safe driving speed by driver type and different demographic groups. Figure 11 to Figure 13 shows the average reported driving speed and average perceived safe speed limit across age groups. On multi-lane divided highways and two-lane highways, the overall trend shows that younger respondents either drove at or faster than the average perceived safe speed compared to older respondents (55 and older for multi-lane divided highways and 65 and older for two-lane highways), who tended to drive slightly below the speed they perceived as safe. There was an increase in both actual reported driving speeds and perceived safe driving speeds from the youngest respondents (18 to 24) to the next age group (25 to 34), while average reported driving speeds and average perceived safe driving speeds trended downwards by age for the remaining age groups.

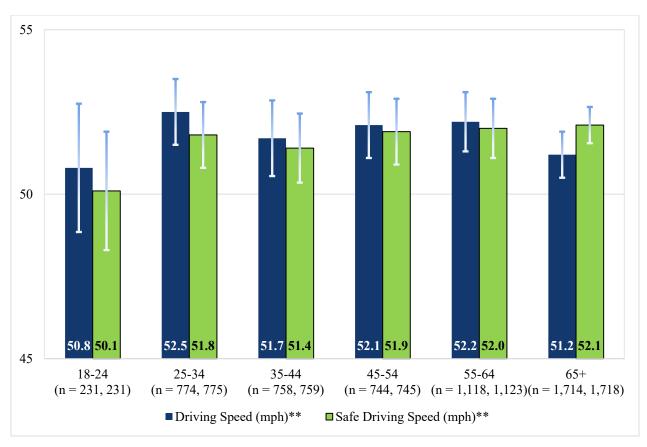


Q7. What do you consider to be a safe speed limit for (most) Multi-Lane, Divided Highways in good weather on roads with no congestion during the day? (n = 5,429)

Q8. When driving on Multi-Lane, Divided Highways in good weather during the day, how fast do you normally drive? (n = 5,421)

\*\*\* p < .001

## Figure 11. Reported driving speed and perceived safe driving speed on multi-lane divided highways by age



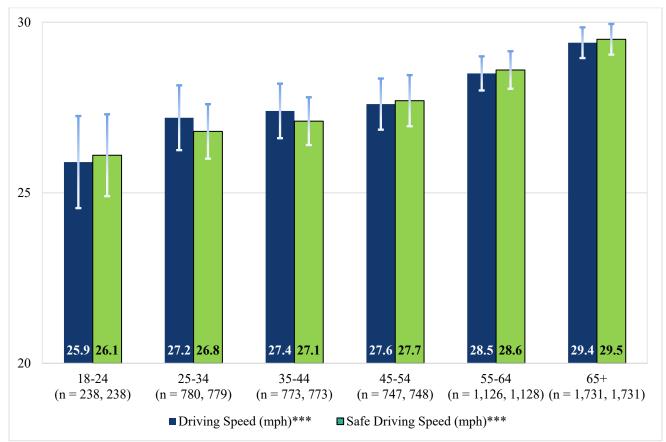
Q14. What do you consider to be a safe speed limit for (most) Two-Lane Highways in good weather during the day? (n = 5,444)

Q15. When driving on Two-Lane Highways in good weather during the day, how fast do you normally drive? (n = 5,430)

\*\* p < .01

Figure 12. Reported driving speed and perceived safe driving speed on two-lane highways by age

Figure 13 shows average reported driving speed and average perceived safe driving speed limits on residential streets by age. Unlike the previous two road types, older respondents reported higher average driving speeds and higher average perceived safe speed limits than younger respondents.



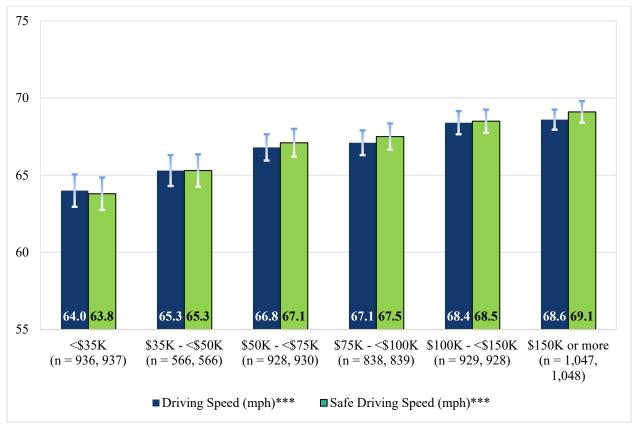
Q21. What do you consider to be a safe speed limit for (most) Neighborhood or Residential Streets in good weather during the day? (n = 5,492)

Q22. When driving on Neighborhood or Residential Streets in good weather during the day, how fast do you normally drive? (n = 5,492)

### \*\*\* p < .001

Figure 13. Reported driving speed and perceived safe driving speed on residential streets by age

Driving speed and perceived safe driving speed limits by annual household income were compared next. Figure 14 shows the average reported driving speed compared to the average perceived safe driving speed on multi-lane divided highways by income. As income increased so did the reported driving speeds and perceived safe driving speeds. Respondents with annual household incomes of \$150,000 or more reported an average driving speed of 68.6 mph, while respondents with annual household incomes of less than \$35,000 reported driving an average of 64.0 mph—a 4.6-mph difference. Also, respondents with a household income of \$50,000 or more reported safe speed limit.

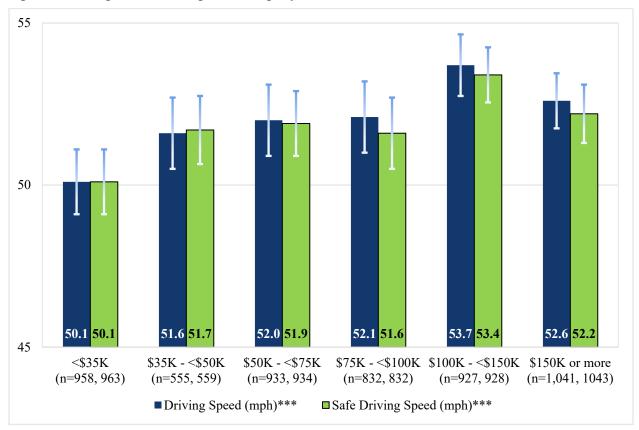


Q7. What do you consider to be a safe speed limit for (most) Multi-Lane, Divided Highways in good weather on roads with no congestion during the day? (n = 5,429)

Q8. When driving on Multi-Lane, Divided Highways in good weather during the day, how fast do you normally drive? (n = 5,421)

#### \*\*\* p < .001

Figure 14. Reported driving speed and perceived safe driving speed on multi-lane divided highways by household income As shown in Figure 15, a similar pattern emerges for two-lane highways. However, the household income group with the highest reported driving speed and safe perceived driving speed was the second-highest income group (\$100,000 to \$150,000). In contrast to multi-lane divided highways, as annual household income increases, respondents reported driving faster than the speed they would consider safe, while lower income household groups (\$50,000 or less) reported driving at the same speed or slightly slower.



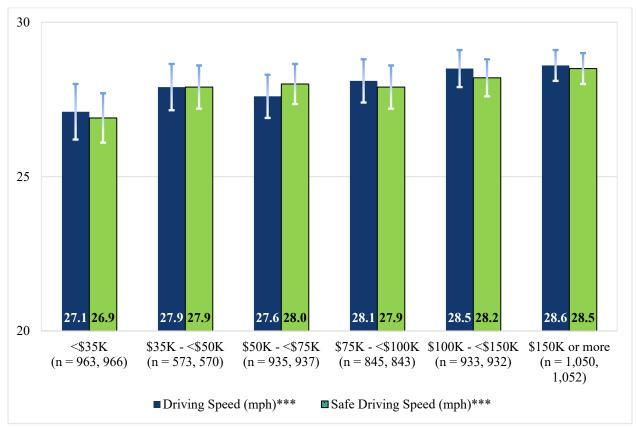
Q14. What do you consider to be a safe speed limit for (most) Two-Lane Highways in good weather during the day? (n = 5,444)

Q15. When driving on Two-Lane Highways in good weather during the day, how fast do you normally drive? (n = 5,430)

\*\*\* p < .001

Figure 15. Reported driving speed and perceived safe driving speed on two-lane highways by household income

Respondents were slightly more likely to report higher driving speeds and higher perceived safe driving speed limits on residential streets as household income increased (Figure 16). The only household income group that reported driving slower than their perceived safe driving speed on this type of road was the \$50,000 to \$75,000 group.



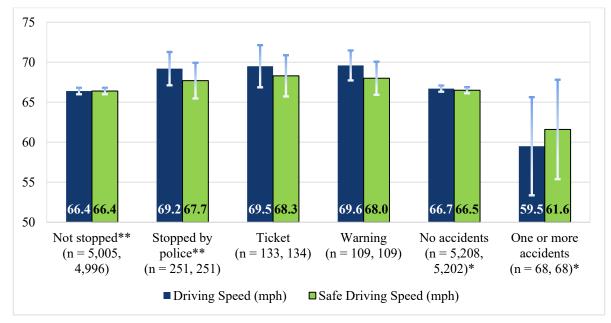
Q21. What do you consider to be a safe speed limit for (most) Neighborhood or Residential Streets in good weather during the day? (n = 5,492)

Q22. When driving on Neighborhood or Residential Streets in good weather during the day, how fast do you normally drive? (n = 5,492)

\*\*\* p < .001

Figure 16. Reported driving speed and perceived safe driving speed on residential streets by household income

Driving speed and perceived safe driving speed limits on various types of roads were further explored by respondents who had or had not experienced certain consequences of speedingrelated incidents (Figure 17 to Figure 19). Consequences included being stopped by police for speeding on any road type in the last 12 months, receiving a ticket or warning for speeding on any road type in the last 12 months, and if the driver had been in a speed-related accident in the last 12 months (see Crash Experience and Personal Sanctions sections for more information on survey results of speeding-related consequences). Overall, respondents who had been stopped by police, ticketed, or given a warning for speeding drove faster and reported higher perceived safe driving speeds than respondents who have not been stopped. In addition, those who had experienced one or more accidents in the past 12 months were the only respondents who reported driving slower than their perceived safe driving speed limit on highway road types. Respondents who had not been stopped in the past 12 months reported driving at the same speed they consider safe on multi-lane divided highways (66.4 mph) and residential streets (27.7 mph) and reported driving at almost the same speed they perceived as safe on two-lane highways (51.7 mph driving speed versus 51.6 mph perceived safe speed). Respondents who were stopped by police, received a ticket, received a warning, or had no accidents in the past 12 months reported a faster average driving speed than the average perceived safe driving speed limit on multi-lane divided and twolane highways. Respondents with these same consequences reported the same or slower average driving speed than the perceived safe driving speed limit on residential streets.



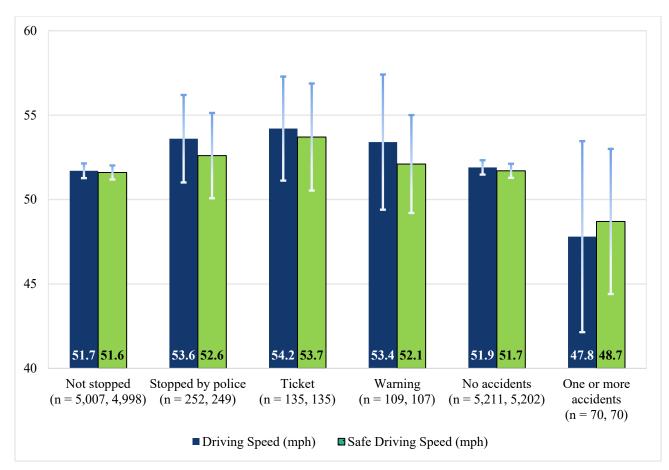
Q7. What do you consider to be a safe speed limit for (most) Multi-Lane, Divided Highways in good weather on roads with no congestion during the day? (n = 5,429)

Q8. When driving on Multi-Lane, Divided Highways in good weather during the day, how fast do you normally drive? (n = 5,421)

\*\* p < .01

\* p < .05

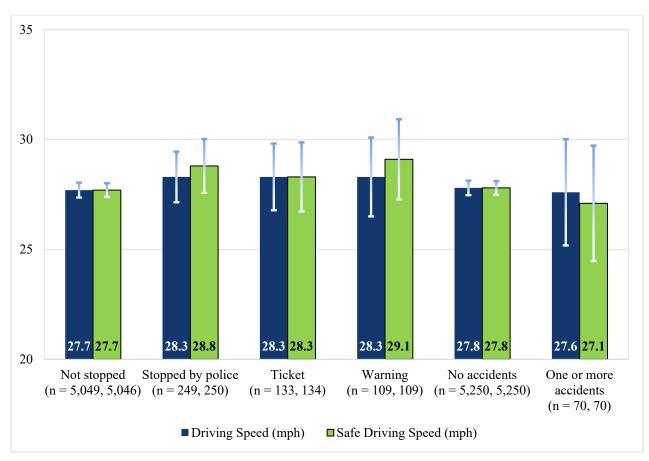
## Figure 17. Reported driving speed and perceived safe driving speed on multi-lane divided highways by consequences



Q14. What do you consider to be a safe speed limit for (most) Two-Lane Highways in good weather during the day? (n = 5,444)

Q15. When driving on Two-Lane Highways in good weather during the day, how fast do you normally drive? (n = 5,430)

Figure 18. Reported driving speed and perceived safe driving speed on two-lane highways by consequences

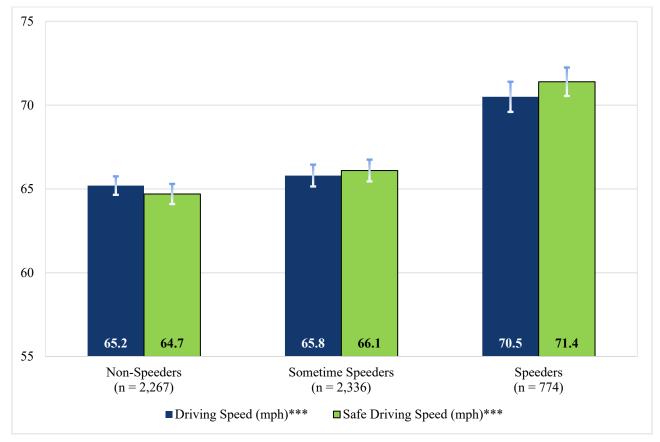


Q21. What do you consider to be a safe speed limit for (most) Neighborhood or Residential Streets in good weather during the day? (n = 5,492)

Q22. When driving on Neighborhood or Residential Streets in good weather during the day, how fast do you normally drive? (n = 5,492)

Figure 19. Reported driving speed and perceived safe driving speed on residential streets by consequences

Figure 20 compares average reported driving speeds and average perceived safe driving speed limits on multi-lane divided highways by driver type. Speeders reported the highest driving speed and perceived safe driving speed at 70.5 mph and 71.4 mph, respectively. Nonspeeders reported the lowest driving speed (65.2 mph) and perceived safe driving speed (64.7 mph). Sometime speeders reported speeds in the middle, with driving speeds of 65.8 mph and perceived safe driving speeds of 66.1 mph. Nonspeeders were the only group out of the three that reported driving speeds faster than what they considered safe.

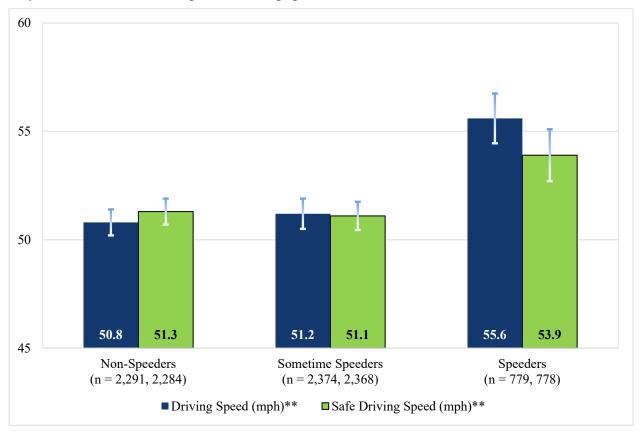


Q7. What do you consider to be a safe speed limit for (most) Multi-Lane, Divided Highways in good weather on roads with no congestion during the day? (n = 5,429)

Q8. When driving on Multi-Lane, Divided Highways in good weather during the day, how fast do you normally drive? (n = 5,421)

\*\*\* p < .001

Figure 20. Reported driving speed and perceived safe driving speed on multi-lane divided highways by driver type Figure 21 shows the average driving speed and average perceived safe driving speed limits of different types of respondents on two-lane highways. Nonspeeders and sometime speeders reported slower driving speeds and perceived safe driving speed limits than speeders. Speeders had higher average driving speeds (55.6 mph) than what they reported as an average perceived safe driving speed limit (53.9 mph). Nonspeeders reported average driving speeds below what they consider to be an average safe driving speed limit.



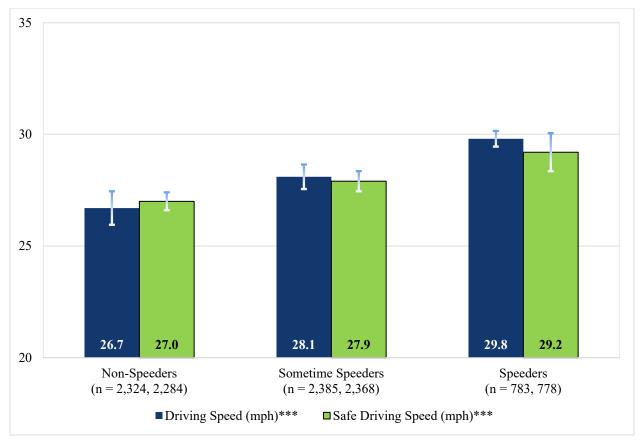
Q14. What do you consider to be a safe speed limit for (most) Two-Lane Highways in good weather during the day? (n = 5,444)

Q15. When driving on Two-Lane Highways in good weather during the day, how fast do you normally drive? (n = 5,430)

\*\* p < .01

Figure 21. Reported driving speed and perceived safe driving speed on two-lane highways by driver type

Responses about driving behavior on residential streets (Figure 22) show a similar pattern as on two-lane highways. Speeders had the highest average reported driving speeds and perceived safe driving speed limits, and nonspeeders had the lowest. Speeders also drove, on average, faster than what they reported as a perceived safe driving speed, while nonspeeders drove below this limit.



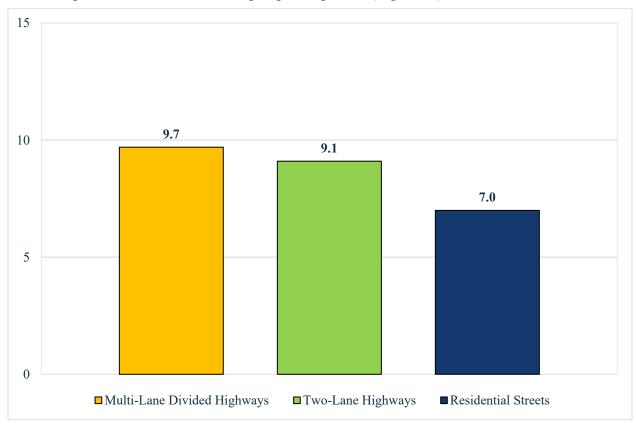
Q21. What do you consider to be a safe speed limit for (most) Neighborhood or Residential Streets in good weather during the day? (n = 5,492)

Q22. When driving on Neighborhood or Residential Streets in good weather during the day, how fast do you normally drive? (n = 5,492)

\*\*\* p < .001

Figure 22. Reported driving speed and perceived safe driving speed on residential streets by driver type

Next, respondents were asked how many mph over the speed limit the average driver can go on the three road types before receiving a speeding ticket. On average, respondents reported that respondents can go almost 10 mph over the speed limit on multi-lane divided highways and 9 mph over the speed limit on two-lane highways before receiving a speeding ticket. This number was lower for residential streets, with respondents indicating that, on average, 7 mph over the speed limit is permissible before receiving a speeding ticket (Figure 23).



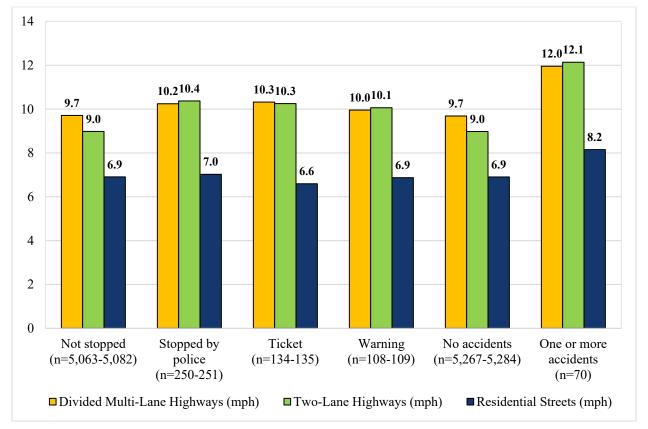
Q11. How far above the speed limit do you think the average driver can go on Multi-Lane, Divided Highways, before receiving a ticket? (n = 5,520)

Q17. How far above the speed limit do you think the average driver can go on Two-Lane Highways, before receiving a ticket? (n = 5,524)

Q24. How far above the speed limit do you think the average driver can go on Neighborhood or Residential Streets, before receiving a ticket? (n = 5,509)

Figure 23. Belief about mean mph over speed limit without receiving a ticket

Researchers examined the perceived risk of a speeding ticket among those respondents who reported encountering various consequences for speeding behavior (Figure 24). Overall, respondents who experienced speeding-related consequences (stopped by police, received a ticket or warning, and had one or more accidents) reported, on average, a larger margin of mph over the speed limit before receiving a speeding ticket on multi-lane divided and two-lane highways than respondents who had not encountered speeding-related consequences. The highest reported mph over the speed limit that a driver can go before respondents think the driver will receive a speeding ticket were reported by respondents who had one or more accidents in the past year, with this group indicating averages over the speed limit of 12.0 mph on multi-lane divided highways, 12.1 mph on two-lane highways, and 8.2 mph on residential streets. The average responses for residential streets were very similar across the other speeding-related consequences.



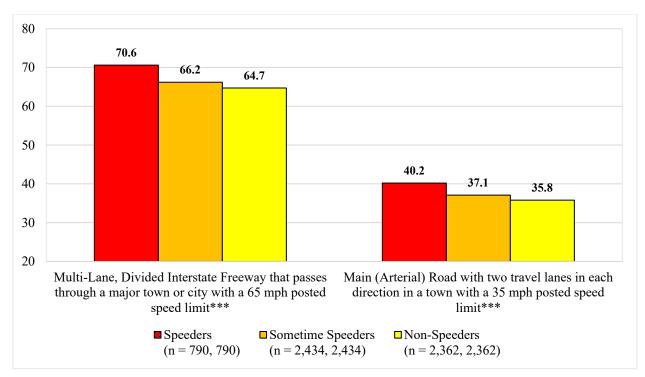
Q11. How far above the speed limit do you think the average driver can go on Multi-Lane, Divided Highways, before receiving a ticket? (n = 5,520)

Q17. How far above the speed limit do you think the average driver can go on Two-Lane Highways, before receiving a ticket? (n = 5,524)

Q24. How far above the speed limit do you think the average driver can go on Neighborhood or Residential Streets, before receiving a ticket? (n = 5,509)

*Figure 24. Belief about mean mph over speed limit without receiving a ticket by consequences* 

Respondents reported their typical driving speeds on multi-lane divided interstate freeways that pass through major towns or cities with 65-mph speed limits and main (arterial) roads with two travel lanes in each direction in a town with a 35-mph speed limit. Speeders tended to drive faster on both road types than sometime speeders and nonspeeders (Figure 25).



Q10. At what speed would you typically be driving on a Multi-Lane, Divided Interstate Freeway that passes through a major town or city with a 65-mph posted speed limit? (n = 5,442) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q18. At what speed would you typically be driving on a Main (Arterial) Road with two travel lanes in each direction in a town with a 35-mph posted speed limit? (n = 4,990) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

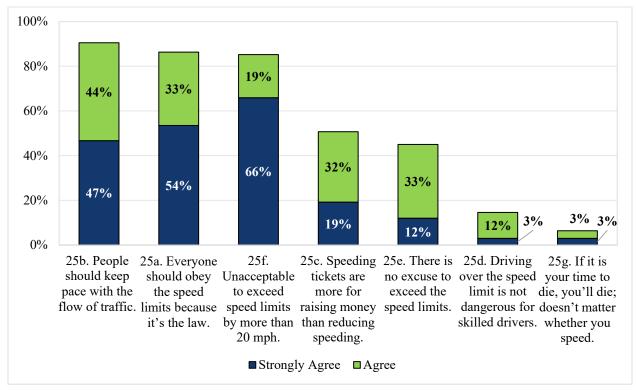
\*\*\* p < .001

Figure 25. Typical driving speeds on different types of roads by driver type

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# Norms and Attitudes About Speeding

The next set of questions asked respondents about their attitudes on speeding from both a personal and normative perspective. Almost all respondents (91%) agreed or strongly agreed that people should keep pace with the flow of traffic. Most respondents also agreed or strongly agreed that everyone should obey the speed limit because it's the law (87%) and that it is unacceptable to exceed the speed limit by more than 20 mph (85%). The percentage of respondents agreeing or strongly agreeing dropped sharply when respondents were asked if speeding tickets have more to do with raising money than reducing speeding (51%), and if there is no excuse to exceed the speed limits (45%). The smallest percentage of respondents who agreed or strongly agreed with a statement appeared in response to the prompts "driving over the speed limit is not dangerous for skilled drivers" (15%) and "if it is your time to die, you'll die; it doesn't matter whether you speed" (6%) (Figure 26).



Q25a. Everyone should obey the speed limits because it's the law. (n = 5,537)

Q25b. People should keep pace with the flow of traffic. (n = 5,529)

Q25c. Speeding tickets have more to do with raising money than they do with reducing speeding. (n = 5,508)

Q25d. Driving over the speed limit is not dangerous for skilled drivers. (n = 5,520)

Q25e. There is no excuse to exceed the speed limits. (n = 5,520)

Q25f. It is unacceptable to exceed speed limits by more than 20 mph. (n = 5,531)

Q25g. If it is your time to die, you'll die, so it doesn't matter whether you speed. (n = 5,525)

*Figure 26.* Normative attitudes regarding speeding, percentages strongly agree and agree

Table 11 and Table 12 show average ratings of the normative attitude questions by driver age, sex, ethnicity/race, education, income, metro status, and driver type. The ratings for each question range from 5 (strongly agree) to 1 (strongly disagree), meaning that higher average ratings indicate higher levels of agreement with each statement. The range presented in Table 11 and Table 12 is a recode from the scale shown in the questionnaire. Findings indicate certain differences between respondents based on income and age. For example, as income level rose, agreement that everyone should obey the speed limits decreased. Please note that in the questionnaire, the response category "strongly agree" was represented by the number 1 and "strongly disagree" was represented by the number 5. Responses below were recoded with 5-strongly agree and 1-strongly disagree to facilitate identification of stronger agreement.

	25a. Everyone should obey the speed limits because it's the law. (n = 5,537)	п	25b. People should keep pace with the flow of traffic. (n = 5,529)	п	25c. Speeding tickets have more to do with raising money than they do with reducing speeding. (n = 5,508)	п	25d. Driving over the speed limit is not dangerous for skilled drivers. (n = 5,520)	n
Overall	4.3	5,537	4.3	5,529	3.2	5,508	2.0	5,520
Age	***		*		***		***	
18 to 24	4.1	240	4.6	240	3.4	238	2.2	238
25 to 34	4.1	788	4.4	788	3.5	786	2.1	786
35 to 44	4.2	776	4.4	777	3.4	776	2.0	777
45 to 54	4.3	752	4.3	750	3.2	748	2.1	749
55 to 64	4.4	1,138	4.2	1,138	3.2	1,135	1.9	1,135
65+	4.6	1,746	4.1	1,740	2.9	1,730	1.8	1,739
Sex	***						***	
Male	4.2	2,629	4.4	2,626	3.3	2,618	2.1	2,629
Female	4.4	2,818	4.3	2,814	3.2	2,801	1.8	2,803
Ethnicity/Race	***						**	
Hispanic	4.4	513	4.4	513	3.3	508	1.9	511
Non-Hispanic White	4.2	4,016	4.3	4,010	3.2	3,997	2.0	4,002
Non-Hispanic Black	4.6	323	4.4	323	3.2	323	1.7	323
Non-Hispanic Asian	4.4	264	4.5	264	3.3	262	2.1	265
Non-Hispanic Other	4.2	354	4.4	354	3.5	353	2.1	353
Education	***				***		***	
Less than high school	4.6	119	4.3	118	3.1	115	1.8	118

Table 11. Normative attitude mean Likert Scale ratings regarding speeding by demographics (Q25a-d)

	25a. Everyone should obey the speed limits because it's the law. (n = 5,537)	п	25b. People should keep pace with the flow of traffic. (n = 5,529)	n	25c. Speeding tickets have more to do with raising money than they do with reducing speeding. (n = 5,508)	п	25d. Driving over the speed limit is not dangerous for skilled drivers. (n = 5,520)	п
High school diploma	4.5	732	4.3	730	3.2	726	1.9	729
Some college	4.3	1,529	4.3	1,526	3.3	1,518	2.0	1,522
College degree	4.1	1,405	4.4	1,405	3.4	1,400	2.2	1,403
Graduate degree	4.1	1,642	4.4	1,641	3.2	1,640	2.0	1,640
Income	***				***		***	
< \$35,000	4.5	984	4.3	980	3.1	971	1.8	977
\$35,000 to \$50,000	4.4	577	4.3	576	3.2	577	1.8	575
\$50,000 to \$75,000	4.4	942	4.3	942	3.4	935	2.0	939
\$75,000 to \$100,000	4.3	850	4.3	848	3.2	846	2.0	843
\$100,000 to \$150,000	4.1	934	4.4	933	3.3	934	2.3	934
\$150,000 or more	4.0	1,056	4.3	1,057	3.2	1,055	2.2	1,058
Metro status			***					
Metropolitan	4.3	4,731	4.3	4,725	3.2	4,709	2.0	4,718
Non-metropolitan	4.4	806	4.2	804	3.2	799	1.9	802
Driver type	***		***		***		***	
Nonspeeders	4.6	2,344	4.2	2,339	3.0	2,331	1.6	2,336
Sometime Speeders	4.3	2,408	4.3	2,405	3.3	2,392	2.0	2,400
Speeders	3.7	784	4.6	784	3.8	785	2.8	238

\*\*\* p < .001, \*\* p < .01, and \* p < .05

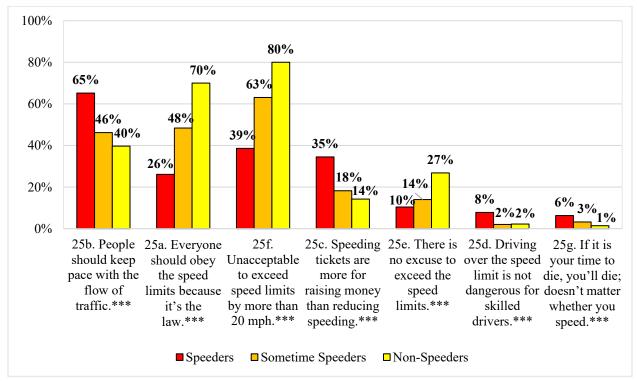
	25e. There is no excuse to exceed the speed limits. (n = 5,520)	п	25f. It is unacceptable to exceed speed limits by more than 20 mph. (n = 5,531)	п	25g. If it is your time to die, you'll die, so it doesn't matter whether you speed. (n = 5,525)	п
Overall	3.0	5,520	4.4	5,531	1.5	5,525
Age	***		***	·	***	
18 to 24	3.2	240	4.2	240	1.7	240
25 to 34	3.2	786	4.4	788	1.6	788
35 to 44	3.0	777	4.4	776	1.4	777
45 to 54	3.0	751	4.3	752	1.4	751
55 to 64	2.8	1,134	4.4	1,135	1.4	1,138
65+	2.7	1,737	4.5	1,742	1.4	1,737
Sex	***		**		*	
Male	3.1	2,624	4.3	2,628	1.5	2,625
Female	2.8	2,808	4.4	2,812	1.4	2,813
Ethnicity/Race	***					
Hispanic	2.7	513	4.3	513	1.5	513
Non-Hispanic White	3.1	4,002	4.4	4,011	1.4	4,008
Non-Hispanic Black	2.8	324	4.4	323	1.4	322
Non-Hispanic Asian	2.6	264	4.4	264	1.6	263
Non-Hispanic Other	2.9	351	4.2	353	1.5	353
Education	***				*	
Less than high school	2.5	119	4.4	119	1.7	119
High school diploma	2.7	726	4.4	730	1.5	730
Some college	3.0	1,526	4.4	1,527	1.5	1,526
College degree	3.3	1,402	4.4	1,403	1.4	1,401
Graduate degree	3.2	1,640	4.4	1,641	1.3	1,643
Income	***		**			
<\$35,000	2.7	977	4.3	982	1.5	978
\$35,000 to \$50,000	2.8	575	4.5	576	1.5	576
\$50,000 to \$75,000	3.0	937	4.4	940	1.6	940

Table 12. Normative attitude mean Likert Scale ratings regarding speeding by demographics (Q25e-g)

	25e. There is no excuse to exceed the speed limits. (n = 5,520)	п	25f. It is unacceptable to exceed speed limits by more than 20 mph. (n = 5,531)	п	25g. If it is your time to die, you'll die, so it doesn't matter whether you speed. (n = 5,525)	п
\$75,000 to \$100,000	2.9	848	4.4	849	1.4	848
\$100,000 to \$150,000	3.3	932	4.4	934	1.5	934
\$150,000 or more	3.4	1,057	4.3	1,057	1.3	1,056
Metro status						
Metropolitan	3.0	4,719	4.40	4,729	1.5	4,722
Non-metropolitan	2.8	801	4.4	802	1.5	803
Driver type	***		***		***	
Nonspeeders	2.6	2,334	4.6	2,341	1.3	2,339
Sometime Speeders	3.1	2,400	4.4	2,403	1.5	2,401
Speeders	3.5	785	3.9	786	1.8	784

\* p < .001, \*\* p < .01, and \* p < .05

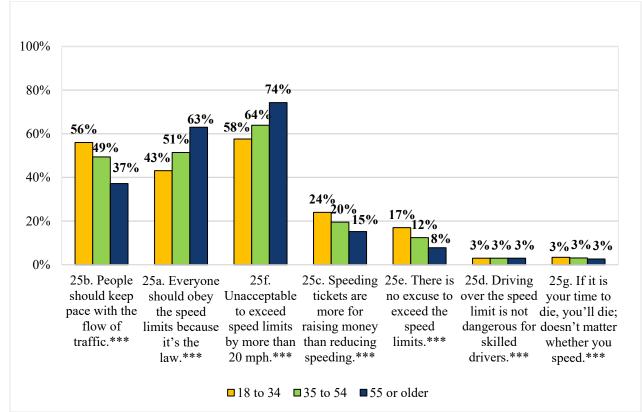
Next, researchers examined normative attitudes toward speeding by driver type. Researchers found clear differences in normative attitudes toward speeding when looking at driver type. More speeders (65%) strongly agreed with the statement that people should keep pace with the flow of traffic, compared to sometime speeders (46%) and nonspeeders (40%). Conversely, more nonspeeders (70%) strongly agreed that everyone should obey the speed limits because it is the law, compared to sometime speeders (48%) and speeders (26%). Similarly, more nonspeeders (80%) strongly agreed that it is unacceptable to exceed speed limits by more than 20 mph, compared to sometime speeders (63%) and speeders (39%). Although the overall percentage of respondents who strongly agree that: (1) speeding tickets are more for raising money than reducing speeding, (2) driving over the speed limit is not dangerous for skilled drivers (8% and 2%), and (3) if it is your time to die, you'll die; it doesn't matter whether you speed (6% and 1%) (Figure 27).



- Q25a. Everyone should obey the speed limits because it's the law. (n = 5,537)
- Q25b. People should keep pace with the flow of traffic. (n = 5,529)
- Q25c. Speeding tickets have more to do with raising money than they do with reducing speeding. (n = 5,508)
- Q25d. Driving over the speed limit is not dangerous for skilled drivers. (n = 5,520)
- Q25e. There is no excuse to exceed the speed limits. (n = 5,520)
- Q25f. It is unacceptable to exceed speed limits by more than 20 mph. (n = 5,531)
- Q25g. If it is your time to die, you'll die, so it doesn't matter whether you speed. (n = 5,525) \*\*\* p < .001

*Figure 27. Normative attitudes regarding speeding by driver type, percentages strongly agree* 

Examining normative attitudes toward speeding by age group indicates that differences are not as pronounced as those between driver types; however, certain notable differences exist between older respondents (55 or older) and younger respondents (18–34) (Figure 28). Specifically, more younger respondents strongly agreed that people should keep pace with the flow of traffic, while more older respondents strongly agreed that everyone should obey the speed limits because it is the law and that it is unacceptable to exceed the speed limits by more than 20 mph. Younger respondents were about twice as likely to strongly agree (17%) than older respondents (8%) that there is no excuse to exceed the speed limit. Very few respondents across the age groups strongly agreed with the statements "driving over the speed limit is not dangerous for skilled drivers" and "if it is your time to die, you'll die; doesn't matter whether you speed."



Q25a. Everyone should obey the speed limits because it's the law. (n = 5,537)

Q25b. People should keep pace with the flow of traffic. (n = 5,529)

Q25c. Speeding tickets have more to do with raising money than they do with reducing speeding. (n = 5,508)

Q25d. Driving over the speed limit is not dangerous for skilled drivers. (n = 5,520)

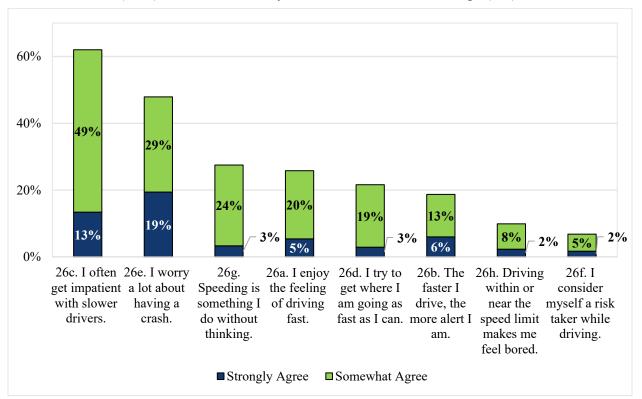
Q25e. There is no excuse to exceed the speed limits. (n = 5,520)

Q25f. It is unacceptable to exceed speed limits by more than 20 mph. (n = 5,531)

Q25g. If it is your time to die, you'll die, so it doesn't matter whether you speed. (n = 5,525) \*\*\* p < .001



The next set of questions asked survey respondents about their personal attitudes regarding speeding (Figure 29). Almost two-thirds of respondents (62%) agreed or strongly agreed that they often get impatient with slower drivers, and only about half (48%) agreed or strongly agreed that they worry a lot about having a crash. Agreement was notably lower for respondents who agreed or strongly agreed with the statements that "driving within or near the speed limit makes me feel bored" (10%) and "I consider myself a risk-taker while driving" (7%).



Q26a. I enjoy the feeling of driving fast. (n = 5,536)

Q26b. The faster I drive, the more alert I am. (n = 5,533)

Q26c. I often get impatient with slower drivers. (n = 5,531)

Q26d. I try to get where I am going as fast as I can. (n = 5,532)

Q26e. I worry a lot about having a crash. (n = 5,528)

Q26f. I consider myself a risk-taker while driving. (n = 5,533)

Q26g. Speeding is something I do without thinking. (n = 5,534)

Q26h. Driving within or near the speed limit makes me feel bored. (n = 5,538) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Figure 29. Personal attitudes regarding speeding, percentages strongly agree or somewhat agree

Table 13 shows the average ratings of the normative attitude questions by driver age, sex, ethnicity/race, education, income, metro status, and driver type. The ratings for each question range from 5 (strongly agree) to 1 (strongly disagree), meaning that higher average ratings indicate higher levels of agreement with each statement. There were some notable differences between certain driver demographics. Younger respondents (18 to 24) were more likely than older respondents (65 and older) to agree that they enjoy the feeling of driving fast, and agreement across all age groups decreases as driver age increases. Examining driver gender shows that males were more likely to agree that they enjoy the feeling of driving fast, feel more alert the faster they drive, often get impatient with slower drivers, and try to get where they are going as fast as they can.

	26a. I enjoy the feeling of driving fast. (n = 5,536)	п	26b. The faster I drive, the more alert I am. (n = 5,533)	п	26c. I often get impatient with slower drivers. (n = 5,531)	п	26d. I try to get where I am going as fast as I can. ( <i>n</i> = 5,532)	п
Age	***	5,536	***	5,533	***	5,531	***	5,532
18 to 24	3.2	240	2.6	240	3.6	240	2.7	240
25 to 34	2.9	788	2.5	788	3.5	788	2.6	788
35 to 44	2.6	777	2.3	777	3.4	777	2.5	777
45 to 54	2.5	752	2.1	751	3.5	749	2.4	750
55 to 64	2.2	1,137	2.0	1,138	3.4	1,135	2.1	1,138
65+	2.1	1,744	1.9	1,742	3.3	1,744	2.0	1,742
Sex	***		***		**		***	
Male	2.7	2,628	2.4	2,629	3.5	2,630	2.5	2,626
Female	2.3	2,817	2.0	2,813	3.4	2,810	2.2	2,815
Ethnicity/Race	***		***		***		***	
Hispanic	2.5	512	2.2	511	3.2	510	2.4	513
Non-Hispanic White	2.6	4,016	2.2	4,015	3.6	4,013	2.4	4,012
Non-Hispanic Black	2.1	324	2.0	322	3.1	323	2.	324
Non-Hispanic Asian	2.6	264	2.7	265	3.2	264	2.4	265
Non-Hispanic Other	2.8	353	2.3	354	3.4	354	2.5	353
Education	***		***		**		***	
Less than high school	2.3	118	2.0	117	3.1	119	2.2	117
High school diploma	2.4	732	2.1	729	3.3	731	2.3	731
Some college	2.6	1,527	2.2	1,527	3.5	1,525	2.4	1,527
College degree	2.7	1,405	2.4	1,405	3.6	1,404	2.6	1,404

Table 13. Personal attitude mean Likert Scale ratings regarding speeding by demographics (Q26a-d)

	26a. I enjoy the feeling of driving fast. (n = 5,536)	п	26b. The faster I drive, the more alert I am. (n = 5,533)	п	26c. I often get impatient with slower drivers. (n = 5,531)	п	26d. I try to get where I am going as fast as I can. ( <i>n</i> = 5,532)	п
Graduate degree	2.6	1,643	2.3	1,644	3.4	1,641	2.5	1,643
Income	***		***		***		***	
< \$35,000	2.4	983	2.0	980	3.2	979	2.2	979
\$35,000 to \$50,000	2.4	576	2.1	576	3.4	576	2.2	577
\$50,000 to \$75,000	2.4	941	2.2	941	3.5	940	2.4	942
\$75,000 to \$100,000	2.4	848	2.1	849	3.3	849	2.4	849
\$100,000 to \$150,000	2.8	936	2.4	935	3.7	936	2.6	934
\$150,000 or more	2.8	1,058	2.4	1,058	3.7	1,058	2.6	1,058
Metro status	*		***				**	
Metropolitan	2.6	4,731	2.2	4,729	3.4	4,728	2.4	4,728
Non-metropolitan	2.3	805	2.0	804	3.4	803	2.2	804
Driver type	***		***		***		***	
Nonspeeders	2.1	2,343	1.8	2,340	3.1	2,341	1.9	2,340
Sometime Speeders	2.6	2,406	2.3	2,407	3.5	2,403	2.4	2,406
Speeders	3.3	786	2.9	785	4.1	786	3.2	785

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Table 14 continues the findings from the personal attitudes toward speeding portion of the survey contained in Table 13. Females were more likely than males to worry about having a crash, and males were more likely than females to agree that they consider themselves risk-takers, speed without thinking, and feel bored when driving within or near the speed limit. Interestingly, younger respondents (18 to 24) reported worrying the most about having a crash yet rated themselves higher than other age groups regarding being risk-takers, speeding without thinking, and feeling bored when driving within or near the speed limit.

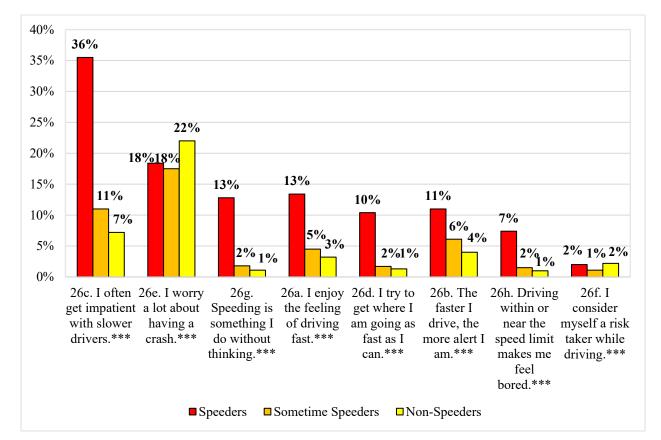
	26e. I worry a lot about having a crash. ( <i>n</i> = 5,528)	п	26f. I consider myself a risk-taker while driving. (n = 5,533)	п	26g. Speeding is something I do without thinking. (n = 5,534)	п	26h. Driving within or near the speed limit makes me feel bored. (n = 5,538)	п
Age	***	5,528	***	5,533	***	5,534	***	5,538
18 to 24	3.6	239	1.9	239	2.8	240	2.2	240
25 to 34	3.3	788	1.8	787	2.6	788	2.1	788
35 to 44	3.3	776	1.7	777	2.5	777	2.0	777
45 to 54	3.1	750	1.7	752	2.4	751	2.0	752
55 to 64	3.1	1,137	1.6	1,137	2.2	1,137	1.8	1,137
65+	3.0	1,741	1.5	1,743	2.0	1,744	1.8	1,746
Sex	**		***		***		***	
Male	3.1	2,625	1.8	2,630	2.5	2,631	2.1	2,632
Female	3.3	2,813	1.6	2,812	2.3	2,813	1.8	2,815
Ethnicity/Race	***		***		***		***	
Hispanic	3.6	510	1.9	512	2.2	513	1.9	513
Non-Hispanic White	3.1	4,011	1.6	4,013	2.5	4,013	2.0	4,016
Non-Hispanic Black	3.3	323	1.4	323	2.0	322	1.6	323
Non-Hispanic Asian	3.8	265	1.9	264	2.1	265	2.2	265
Non-Hispanic Other	3.4	353	1.8	354	2.5	354	2.1	354
Education	***		***		***		*	
Less than high school	3.4	119	1.9	117	2.1	119	2.0	118
High school diploma	3.4	730	1.7	731	2.3	730	2.0	732
Some college	3.1	1,525	1.6	1,526	2.4	1,527	2.0	1,529
College degree	3.1	1,403	1.7	1,405	2.6	1,405	2.0	1,404

Table 14. Personal attitude mean Likert Scale ratings regarding speeding by demographics (Q26e-h)

	26e. I worry a lot about having a crash. ( <i>n</i> = 5,528)	п	26f. I consider myself a risk-taker while driving. (n = 5,533)	п	26g. Speeding is something I do without thinking. (n = 5,534)	п	26h. Driving within or near the speed limit makes me feel bored. (n = 5,538)	n
Graduate degree	3.3	1,641	1.7	1,643	2.4	1,643	1.9	1,644
Income	***		***		***		***	
< \$35,000	3.3	979	1.7	981	2.2	979	1.9	982
\$35,000 to \$50,000	3.3	576	1.6	576	2.1	575	1.8	577
\$50,000 to \$75,000	3.4	940	1.6	940	2.4	942	1.9	941
\$75,000 to \$100,000	3.3	848	1.6	850	2.3	850	1.9	850
\$100,000 to \$150,000	3.0	934	1.7	935	2.7	936	2.2	936
\$150,000 or more	3.0	1,058	1.7	1,058	2.6	1,058	2.1	1,058
Metro status								
Metropolitan	3.2	4,726	1.7	4,730	2.4	4,732	2.0	4,733
Non-metropolitan	3.2	802	1.6	803	2.3	802	1.9	805
Driver type	***		***		***		***	
Nonspeeders	3.3	2,340	1.4	2,344	1.9	2,341	1.6	2,344
Sometime Speeders	3.2	2,403	1.7	2,404	2.4	2,406	2.0	2,407
Speeders	3.2	784	2.2	784	3.4	786	2.7	786

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining personal attitudes regarding speeding indicates notable differences in the level of agreement among the driver types. Figure 30 shows the percentage of respondents who strongly agreed with each statement. Speeders (36%) were more than 3 times as likely as sometime speeders (11%) and more than 5 times as likely as nonspeeders (7%) to strongly agree with the statement, "I get impatient with slower drivers." Similarly, speeders were more likely to strongly agree with "speeding is something I do without thinking," "I try to get where I am going as fast as I can," and "driving within or near the speed limit makes me feel bored." All driver types reported similar levels of agreement on worrying about having a crash and considering themselves a risk-taker while driving.

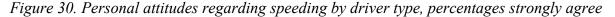


Q26a. I enjoy the feeling of driving fast. (n = 5,536)

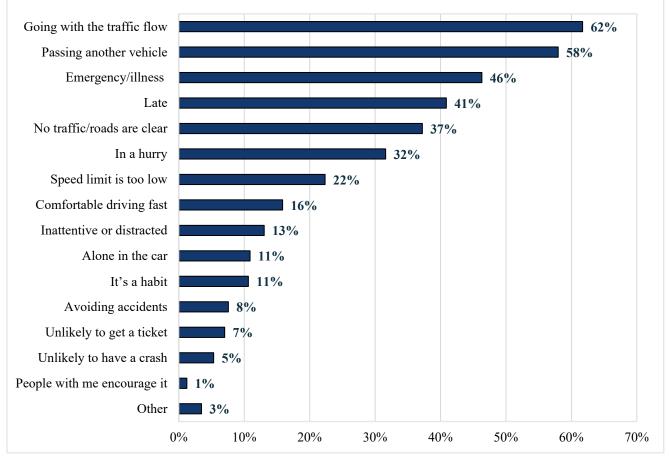
- Q26b. The faster I drive, the more alert I am. (n = 5,533)
- Q26c. I often get impatient with slower drivers. (n = 5,531)
- Q26d. I try to get where I am going as fast as I can. (n = 5,532)
- Q26e. I worry a lot about having a crash. (n = 5,528)
- Q26f. I consider myself a risk-taker while driving. (n = 5,533)
- Q26g. Speeding is something I do without thinking. (n = 5,534)

Q26h. Driving within or near the speed limit makes me feel bored. (n = 5,538) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

\*\*\* p < .001



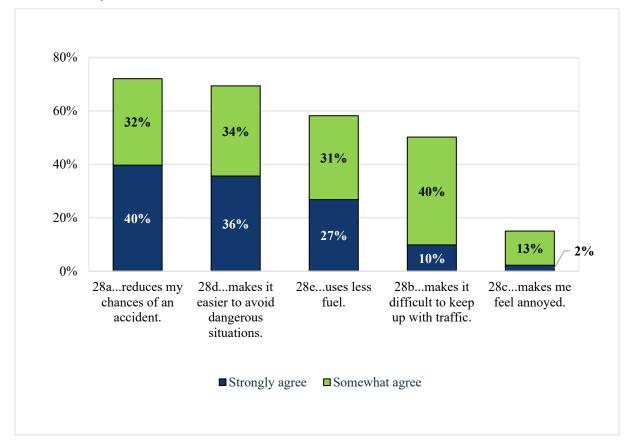
Respondents were asked to indicate the reasons that they speed. Past survey iterations included this question in an open-end format, while the 2022-2023 survey asked respondents to select all the responses that apply to them from the predetermined list shown in Figure 31. Over half of respondents reported speeding because they were going with the traffic flow (62%) or passing another vehicle (58%). Other commonly cited reasons for speeding included emergency/illness (46%) and being late (41%). Less commonly reported reasons for speeding included avoiding accidents (8%), being unlikely to get a ticket (7%), being unlikely to have a crash (5%), and being encouraged to speed by people with them (1%).



Q27. People sometimes go faster than the speed limit for different reasons. On those occasions when you do, what do you think are the main reasons you drive faster than the speed limit? Select all that apply. [Multiple select question with the above 16 response options] (n = 5,560)

Figure 31. Reasons for speeding

The next set of questions asked respondents about their attitudes toward driving at or near the speed limit (Figure 32). Almost three-quarters of respondents agreed or strongly agreed that driving at or near the speed limit reduces their chances of an accident (72%) and that it makes it easier to avoid dangerous situations (70%). More than half of respondents agreed or strongly agreed that driving at or near the speed limit uses less fuel (58%), and half of respondents agreed or strongly agreed that driving at or near the speed limit makes it difficult to keep up with traffic. Few respondents (15%) agreed or strongly agreed that driving at or near the speed limit makes it difficult to keep up with traffic. Few respondents (15%) agreed or strongly agreed that driving at or near the speed limit makes it difficult to keep up with traffic.



Q28a. Driving at or near the speed limit reduces my chances of an accident. (n = 5,575)Q28b. Driving at or near the speed limit makes it difficult to keep up with traffic. (n = 5,570)Q28c. Driving at or near the speed limit makes me feel annoyed. (n = 5,576)Q28d. Driving at or near the speed limit makes it easier to avoid dangerous situations. (n = 5,575)Q28e. Driving at or near the speed limit uses less fuel. (n = 5,577)

Figure 32. Attitudes toward driving at or near the speed limit

Table 15 shows the average ratings of the normative attitude questions by driver age, sex, ethnicity/race, education, income, metro status, and driver type. The ratings for each question range from 5 (strongly agree) to 1 (strongly disagree), meaning that higher average ratings indicate higher levels of agreement with each statement. Older respondents were less likely than younger respondents to agree that driving at or near the speed limit makes them feel annoyed. Respondents with a higher level of education and higher income were more likely to agree that driving at or near the speed limit makes it difficult to keep up with traffic. Respondents 65 and older and those with higher income levels were more likely to agree with the statement that driving at or near the speed limit uses less fuel.

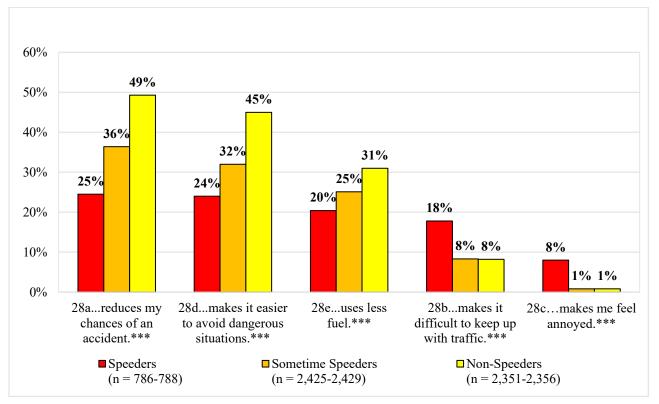
Driving at or near the speed limit	28a. Reduces my chances of an accident. ( <i>n</i> = 5,575)	п	28b. Makes it difficult to keep up with traffic. (n = 5,570)	п	28c. Makes me feel annoyed. ( <i>n</i> = 5,576)	n	28d. Makes it easier to avoid dangerous situations. (n = 5,575)	п	28e. Uses less fuel. ( <i>n</i> = 5,577)	n
Age	**	5,575		5,570	***	5,576	***	5,575	***	5,577
18 to 24	3.9	240	3.3	240	2.5	240	3.8	240	3.4	240
25 to 34	3.8	789	3.2	789	2.4	789	3.8	789	3.4	789
35 to 44	3.9	774	3.1	775	2.4	775	3.8	775	3.5	775
45 to 54	3.8	750	3.2	752	2.2	752	3.9	752	3.7	752
55 to 64	4.0	1,144	3.2	1,141	2.1	1,143	3.8	1,141	3.8	1,144
65+	4.1	1,774	3.2	1,767	2.0	1,773	3.9	1,772	3.9	1,772
Sex	*		***		***		**		*	
Male	3.9	2,649	3.4	2,649	2.3	2,649	3.8	2,650	3.7	2,652
Female	4.0	2,828	3.0	2,822	2.1	2,830	3.9	2,826	3.6	2,827
Ethnicity/Race	***		***		***		***		*	
Hispanic	4.0	514	3.1	516	2.1	516	4.0	516	3.6	516
Non-Hispanic White	3.9	4,051	3.3	4,042	2.3	4,046	3.8	4,048	3.7	4,048
Non-Hispanic Black	4.2	323	2.7	323	1.9	324	4.0	323	3.7	323
Non-Hispanic Asian	4.0	266	3.3	266	2.3	266	3.9	266	3.5	266
Non-Hispanic Other	3.9	353	3.3	354	2.5	355	3.8	353	3.5	355
Education	**		***		**		***		*	
Less than high school	4.2	119	2.9	118	1.9	119	4.1	119	3.6	118
High school diploma	3.9	738	3.1	738	2.3	738	3.8	740	3.6	739
Some college	3.9	1,542	3.2	1,541	2.2	1,542	3.9	1,542	3.7	1,543
College degree	3.9	1,412	3.3	1,409	2.3	1,412	3.8	1,411	3.6	1,412
Graduate degree	4.0	1,647	3.3	1,646	2.2	1,649	3.9	1,645	3.6	1,648

Table 15. Mean Likert Scale agreement ratings regarding driving at or near the speed limit by demographics

Driving at or near the speed limit	28a. Reduces my chances of an accident. ( <i>n</i> = 5,575)	n	28b. Makes it difficult to keep up with traffic. (n = 5,570)	n	28c. Makes me feel annoyed. ( <i>n</i> = 5,576)	n	28d. Makes it easier to avoid dangerous situations. ( <i>n</i> = 5,575)	п	28e. Uses less fuel. ( <i>n</i> = 5,577)	n
Income		007		002		005		000		005
< \$35,000	4.0	996	3.0	992	2.1	995	3.9	996	3.5	995
\$35,000 to \$50,000	4.0	578	3.0	578	2.1	578	3.8	578	3.6	579
\$50,000 to \$75,000	4.0	951	3.2	950	2.2	951	3.9	952	3.7	951
\$75,000 to \$100,000	3.9	849	3.3	852	2.2	851	3.8	850	3.7	852
\$100,000 to \$150,000	3.7	939	3.5	937	2.4	939	3.7	938	3.7	939
\$150,000 or more	3.8	1,062	3.5	1,061	2.5	1,062	3.8	1,060	3.8	1,061
Metro status					*		**			
Metropolitan	3.9	4,761	3.2	4,757	2.3	4,761	3.9	4,761	3.6	4,764
Non-metropolitan	3.9	814	3.1	813	2.1	815	3.7	814	3.7	813
Driver type	***		***		***		***		***	
Nonspeeders	4.1	2,352	3.0	2,351	1.8	2,356	4.	2,355	3.7	2,355
Sometime Speeders	3.9	2,429	3.2	2,425	2.3	2,427	3.8	2,428	3.6	2,428
Speeders	3.5	788	3.6	788	3.1	787	3.5	786	3.5	788

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining attitudes toward driving at or near the speed limit indicates clear patterns of agreement by driver type (Figure 33). In general, nonspeeders were more likely than other driver types to strongly agree with statements that reference the benefits of driving at or near the speed limit. Conversely, speeders were more likely to strongly agree that driving at or near the speed limit "…makes it difficult to keep up with traffic" and "…makes me feel annoyed" compared to sometime speeders and nonspeeders.



Q28a. Driving at or near the speed limit reduces my chances of an accident. (n = 5,575)

Q28b. Driving at or near the speed limit makes it difficult to keep up with traffic. (n = 5,570)

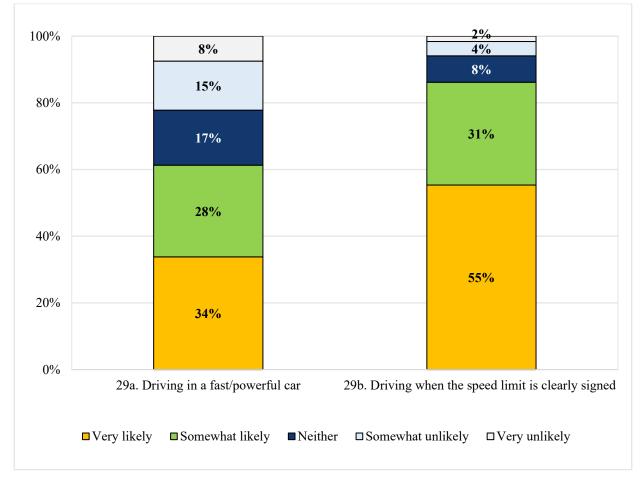
Q28c. Driving at or near the speed limit makes me feel annoyed. (n = 5,576)

Q28d. Driving at or near the speed limit makes it easier to avoid dangerous situations. (n = 5,575)

Q28e. Driving at or near the speed limit uses less fuel. (n = 5,577)

*Figure 33. Attitudes toward driving at or near the speed limit by driver type, percentages strongly agree* 

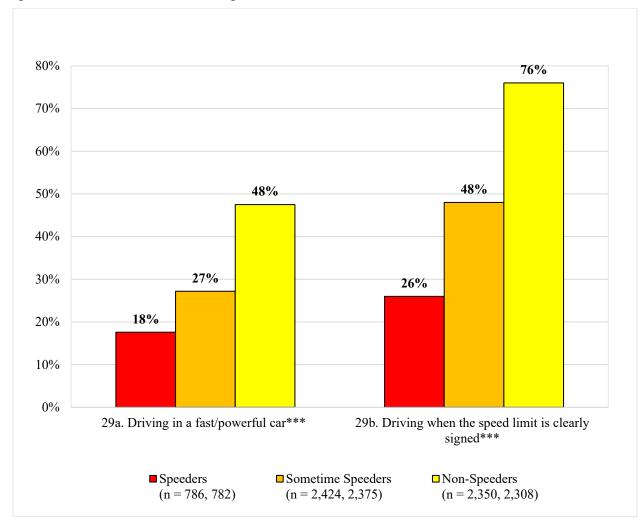
Respondents were presented with two driving scenarios and indicated their likeliness to drive at or below the speed limit in each one. The first scenario was driving a fast/powerful car. While almost two-thirds of respondents (62%) indicated they would be very likely or somewhat likely to drive at or below the speed limit in a fast/powerful car, almost one-quarter (23%) indicated they would be somewhat unlikely or very unlikely to do so. The second scenario was driving when the speed limit is clearly signed. The vast majority (86%) of respondents were very likely or somewhat likely to drive at or below the speed limit in this scenario, and only 6% of respondents were somewhat unlikely or very unlikely to follow the speed limit when it is clearly signed.



Q29a. How likely or unlikely is it that you will drive at or below the speed limit under the following circumstances? Driving in a fast/powerful car? (n = 5,566) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q29b. How likely or unlikely is it that you will drive at or below the speed limit under the following circumstances? Driving when the speed limit is clearly signed? (n = 5,471) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Figure 34. Likelihood of driving at or below the speed limit in two scenarios



Examining these same scenarios by driver type revealed notable differences between speeders and nonspeeders (Figure 35). In both scenarios, nonspeeders were over twice as likely as speeders to drive at or below the speed limit.

Q29a. How likely or unlikely is it that you will drive at or below the speed limit under the following circumstances? Driving in a fast/powerful car? (n = 5,566) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

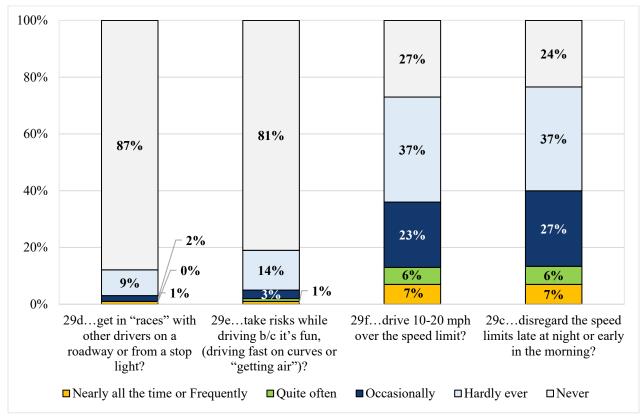
Q29b. How likely or unlikely is it that you will drive at or below the speed limit under the following circumstances? Driving when the speed limit is clearly signed? (n = 5,471) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017). \*\*\* p < .001

Figure 35. Likelihood of driving at or below the speed limit in two scenarios by driver type, percentages very likely

The next set of questions asked respondents to report on the frequency with which they engage in certain speeding behaviors, including:

- disregarding the speed limits late at night or early in the morning,
- getting in "races" with other drivers on a roadway or from a stop light,
- taking risks while driving because it's fun (e.g., driving fast on curves or "getting air"), and
- driving 10 to 20 mph over the speed limit.

Overall, very few respondents indicated that they engage in any of these behaviors either "nearly all the time or frequently" or "quite often" (Figure 36). Most respondents reported that they hardly ever or never get in races (96%) or take risks while driving (95%). Approximately one-quarter of respondents reported that, on occasion, they disregard the speed limits late at night or early in the morning (27%) and drive 10 to 20 mph over the speed limit (23%).



Q29c. How often do you...disregard the speed limits late at night or early in the morning? (n = 5,531) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

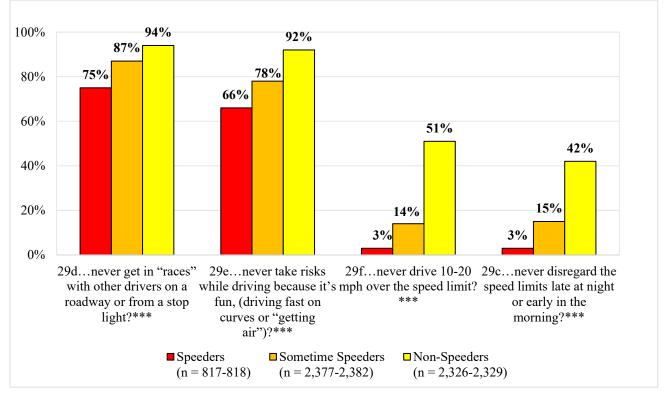
Q29d. ...get involved in "races" with other drivers on a roadway or from a stop light? (n = 5,532) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q29e. ...take risks while driving because it's fun, such as driving fast on curves or "getting air"? (n = 5,527) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q29f. ...drive 10-20 mph over the speed limit? (n = 5,532) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

## Figure 36. Frequency of speeding behaviors

Compared to other driver types, nonspeeders were more likely to report never engaging in certain surveyed speeding behaviors. Compared to other speeding behaviors, all driver types were more likely to report never getting in races or taking risks while driving because it's fun (Figure 37). Large differences between speeders and nonspeeders are observed when examining the percentage of respondents who never drive 10 to 20 mph over the speed limit, with only 3% of speeders saying they never engage in this behavior compared to over half (51%) of nonspeeders. Similarly, only 3% of speeders reported never disregarding the speed limits late at night or early in the morning, compared to 42% of nonspeeders.



Q29c. How often do you...disregard the speed limits late at night or early in the morning? (n = 5,531) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q29d. ... get involved in "races" with other drivers on a roadway or from a stop light? (n = 5,532) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

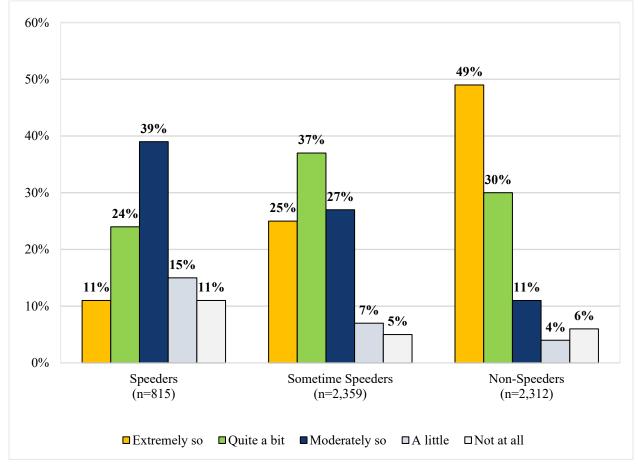
Q29e. ...take risks while driving because it's fun, such as driving fast on curves or "getting air"? (n = 5,527) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

Q29f. ...drive 10-20 mph over the speed limit? (n = 5,532) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

\*\*\* p < .001

*Figure 37. Frequency of speeding behaviors by driver type, percentages responding never* 

Respondents were next asked how much they want to drive at or near the speed limit in the next week. Over two-thirds (79%) of nonspeeders indicated a strong desire (as indicated by selecting "extremely so" or "quite a bit") to drive within the speed limit, compared to 62% of sometime speeders and 35% of speeders. Compared to sometime speeders and nonspeeders, a larger percentage of speeders (39%) indicated neutral feelings toward wanting to drive within the speed limit (as indicated by selecting "moderately so"). More speeders (11%) reported no desire to stay within the speed limit compared to sometime speeders (5%) and nonspeeders (6%).

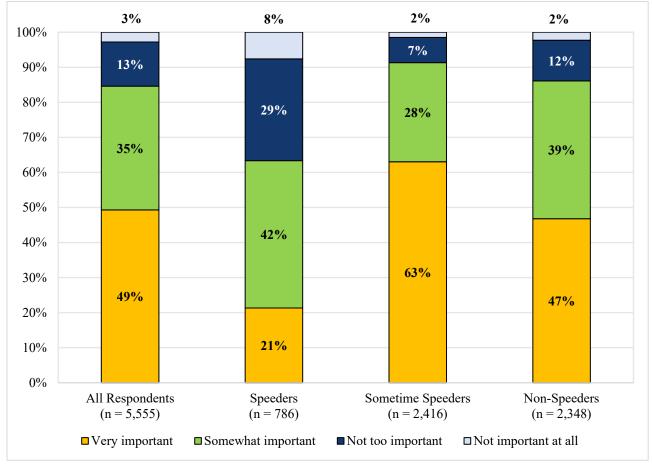


Q29g. How much do you want to drive at or near the speed limit while driving in the next week? (n = 5,535) Note: New question on the 2022-2023 survey and adapted from Richard et al. (2017).

*Figure 38. Stated desire to drive within the speed limit in the next week by driver type*<sup>\*\*\*</sup> p < .001

## **Attitudes Toward Enforcement and Speeding Countermeasures**

The next set of questions examined respondent attitudes toward enforcement of speed limits by law enforcement and speeding countermeasures, including attitudes toward countermeasures, the use of speed governors, in-vehicle countermeasures, and using countermeasures in their own vehicles. The first question asked respondents to indicate how important it is that something be done to reduce speeding by drivers (Figure 39). Most respondents (84%) indicated that it is very or somewhat important to do something to reduce speeders. Examining results by driver type indicates that fewer speeders, though still almost two-thirds (63%), reported that it is very or somewhat important. Most sometime speeders (91%) indicate that it is very or somewhat important at all to do something to reduce speeding.



Q30. How important is it that something be done to reduce speeding by drivers? (n = 5,555)

Figure 39. Importance of taking action to reduce speeding

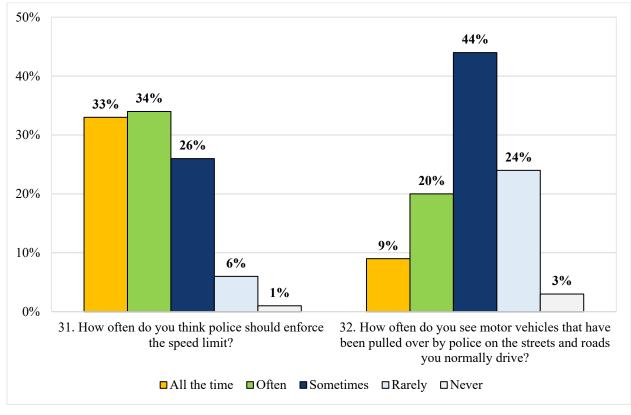
Table 16 shows the distribution of the level of importance placed on something being done to reduce speeding by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Over half of older respondents (55 and above) and women indicated it is very important that something be done to reduce speeding. However, examining results by respondent income indicates that the importance of reducing speeding declines as income level increases. Similarly, as education level increases, the percentage of respondents who indicated reducing speeding is very important decreased.

Age***           18 to 24           25 to 34           35 to 44	n 5,555 239 789 777	Very Important 49.3% 35.1% 42.0%	Somewhat Important 35.3%	Not too Important 12.6%	Not Important at All 2.8%
drivers?         Overall         Age***         18 to 24         25 to 34         35 to 44	5,555 239 789	<b>Important</b> 49.3% 35.1%	Important 35.3%	Important	at All
Overall           Age***           18 to 24           25 to 34           35 to 44	5,555 239 789	49.3% 35.1%	35.3%		
Age***           18 to 24           25 to 34           35 to 44	239 789	35.1%		12.070	
18 to 24       25 to 34       35 to 44	789				2.070
25 to 34 35 to 44	789		44.0%	15.7%	5.1%
35 to 44		$4/10^{-70}$	35.6%	18.1%	4.3%
	, , ,	42.4%	39.2%	15.8%	2.7%
45 to 54	752	45.5%	36.8%	14.3%	3.4%
55 to 64	1,138	55.9%	32.6%	9.9%	1.6%
65+	1,762	66.2%	28.1%	4.7%	1.0%
Sex***	1,702	00.270	2011/0	, , , ,	11070
	2,641	43.0%	36.4%	16.2%	4.4%
	2,823	54.7%	34.5%	9.4%	1.4%
Ethnicity/Race***	)			-	
Hispanic	513	59.1%	28.9%	9.8%	2.3%
•	4,035	43.2%	39.3%	14.8%	2.8%
Non-Hispanic Black	322	68.3%	23.2%	6.4%	2.1%
Non-Hispanic Asian	266	55.0%	35.6%	5.8%	3.7%
Non-Hispanic Other	354	43.7%	37.1%	15.8%	3.5%
Education***					
Less than high school	120	60.1%	26.5%	10.0%	3.4%
High school diploma	736	53.9%	35.0%	8.5%	2.7%
Some college	1,533	49.5%	34.9%	13.4%	2.2%
College degree	1,410	38.8%	38.1%	19.2%	3.9%
Graduate degree	1,646	46.2%	38.1%	12.7%	3.1%
Income***					
< \$35,000	994	57.6%	30.6%	8.5%	3.3%
\$35,000 to \$50,000	574	56.5%	31.3%	11.0%	1.3%
\$50,000 to \$75,000	945	51.8%	35.0%	11.7%	1.5%
\$75,000 to \$100,000	850	46.6%	36.5%	15.5%	1.4%
\$100,000 to \$150,000	936	38.5%	39.3%	16.2%	5.9%
\$150,000 or more	1,061	36.9%	42.0%	17.4%	3.8%
Metro status					
1	4,743	49.6%	34.9%	12.6%	2.9%
Non-metropolitan	812	47.6%	37.3%	12.7%	2.4%
Driver type***					
	2,348	63.1%	28.3%	7.2%	1.5%
•	2,416	46.8%	39.3%	11.6%	2.3%
Speeders *** p < .001	786	21.3%	42.0%	29.0%	7.6%

Table 16. Importance that something be done to reduce speeding by demographics

\*\*\* p < .001

Next, respondents answered a set of questions examining their preferences for how often police should enforce the speed limit and how often they see motor vehicles pulled over by police (Figure 40). Only one-third of respondents (33%) indicated that the speed limit should be enforced all the time. Slightly over one-third of respondents (34%) indicated speed limits should be enforced often and 26% that speed limits should be enforced, and just 1% reported that speed limits should never be enforced. When asked how often they see motor vehicles pulled over by police, most respondents (44%) said sometimes, followed by 24% who indicated they rarely see stopped vehicles.



Q31. How often do you think police should enforce the speed limit? (n = 5,558) Q32. How often do you see motor vehicles that have been pulled over by police on the streets and roads you normally drive? (n = 5,559)

Figure 40. Preferred and perceived enforcement of speed limits

Table 17 shows the preferred frequency of speed limit enforcement by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Females were more likely than males to want police enforcement of the speed limit all the time. In addition, as respondent age increased, interest in seeing speed limits enforced all the time increased. As education and income levels increased, fewer respondents were interested in seeing speed limits enforced all the time. Speeders were less likely than sometime speeders and nonspeeders to report that speed limits should be enforced all the time or often. Very few respondents across all demographic groups reported that speed limits should never be enforced.

31. How often do you think						
police should enforce the		All the				
speed limit?	п	Time	Often	Sometimes	Rarely	Never
Overall	5,558	32.7%	33.6%	26.4%	5.9%	1.4%
Age***						
18 to 24	240	21.8%	31.1%	35.1%	8.1%	3.9%
25 to 34	788	22.9%	30.4%	33.5%	10.7%	2.6%
35 to 44	777	29.2%	29.9%	32.3%	7.8%	0.8%
45 to 54	752	31.6%	36.1%	25.3%	5.5%	1.5%
55 to 64	1,139	38.2%	34.8%	22.9%	3.6%	0.6%
65+	1,763	45.3%	37.8%	14.9%	1.6%	0.3%
Sex***						
Male	2,643	28.2%	31.8%	31.1%	6.9%	2.0%
Female	2,823	36.4%	35.3%	22.3%	5.1%	0.9%
Ethnicity/Race***						
Hispanic	515	41.0%	26.2%	25.3%	6.1%	1.4%
Non-Hispanic White	4,036	29.5%	36.0%	26.8%	6.2%	1.4%
Non-Hispanic Black	322	42.1%	30.1%	21.7%	4.8%	1.4%
Non-Hispanic Asian	266	29.9%	31.2%	34.7%	3.2%	1.0%
Non-Hispanic Other	354	19.0%	38.6%	30.1%	10.2%	2.1%
Education***						
Less than high school	120	48.8%	22.1%	24.3%	2.4%	2.3%
High school diploma	737	41.1%	30.9%	22.5%	5.1%	0.4%
Some college	1,534	30.5%	37.6%	25.0%	5.6%	1.3%
College degree	1,409	21.2%	33.8%	33.9%	8.5%	2.6%
Graduate degree	1,647	24.4%	35.6%	30.9%	6.9%	2.3%
Income***						
< \$35,000	994	41.4%	29.4%	21.0%	6.1%	2.0%
\$35,000 to \$50,000	574	39.6%	31.4%	23.5%	4.9%	0.7%
\$50,000 to \$75,000	947	33.9%	33.3%	26.0%	5.9%	0.8%
\$75,000 to \$100,000	851	28.3%	35.0%	29.4%	5.9%	1.4%
\$100,000 to \$150,000	937	19.6%	38.7%	33.0%	6.5%	2.3%
\$150,000 or more	1,060	22.5%	37.4%	32.1%	7.1%	0.9%
Metro status						
Metropolitan	4,746	32.0%	33.2%	27.4%	6.0%	1.4%
Non-metropolitan	812	36.7%	36.2%	20.7%	5.2%	1.3%
Driver type***			<b>a</b> 4 a - :	4		0.001
Nonspeeders	2,350	44.7%	34.8%	16.4%	3.3%	0.8%
Sometime Speeders	2,418	27.6%	37.0%	28.9%	5.4%	1.1%
Speeders	785	16.2%	21.2%	44.7%	14.1%	3.8%

Table 17. Frequency of preferred speed limit enforcement by demographics

\*\*\* p < .001

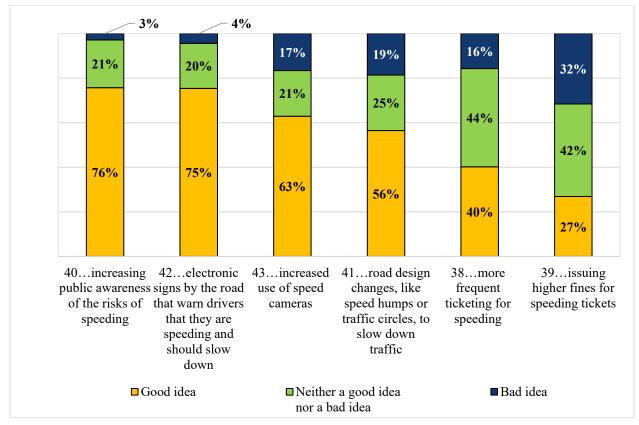
Table 18 shows the frequency of seeing vehicles stopped by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Younger respondents (18 to 24) were more likely than older respondents to report seeing vehicles stopped all the time, and respondents with a lower education level (less than high school) were more likely than those with higher education levels to report the same. Speeders were also more likely than sometime speeders and nonspeeders to report seeing vehicles pulled over all the time.

					1	1
<b>32.</b> How often do you see motor vehicles that have been pulled		All				
over by police on the streets and		the				
roads you normally drive?	n	Time	Often	Sometimes	Rarely	Never
Overall	5,559	9.3%	20.0%	43.9%	24.3%	2.6%
Age***	_				-	-
18 to 24	240	16.3%	31.7%	36.1%	13.4%	2.5%
25 to 34	788	12.0%	20.3%	41.2%	22.8%	3.7%
35 to 44	777	9.0%	21.5%	43.1%	23.0%	3.4%
45 to 54	751	8.7%	19.2%	44.6%	25.1%	2.4%
55 to 64	1,141	8.7%	16.9%	46.9%	26.2%	1.2%
65+	1,764	4.2%	15.9%	47.5%	29.8%	2.6%
Sex						
Male	2,644	9.8%	19.2%	44.6%	23.4%	3.0%
Female	2,824	8.9%	20.9%	43.0%	24.8%	2.3%
Ethnicity/Race***						
Hispanic	515	15.0%	16.5%	40.7%	22.9%	4.9%
Non-Hispanic White	4,037	6.9%	20.4%	45.3%	25.4%	2.0%
Non-Hispanic Black	322	11.9%	22.9%	39.1%	22.6%	3.5%
Non-Hispanic Asian	266	9.6%	21.6%	45.6%	20.8%	2.3%
Non-Hispanic Other	355	15.0%	18.5%	43.9%	20.2%	2.4%
Education***						
Less than high school	119	11.1%	14.6%	49.0%	18.8%	6.5%
High school diploma	735	11.6%	20.5%	43.3%	21.5%	3.0%
Some college	1,537	10.1%	21.9%	43.9%	22.7%	1.4%
College degree	1,410	4.8%	18.9%	43.2%	30.0%	3.2%
Graduate degree	1,647	6.7%	19.5%	44.1%	27.4%	2.3%
Income						
< \$35,000	991	11.5%	21.4%	42.0%	22.6%	2.5%
\$35,000 to \$50,000	574	8.5%	22.7%	45.5%	20.5%	2.9%
\$50,000 to \$75,000	947	9.2%	19.8%	44.9%	23.6%	2.4%
\$75,000 to \$100,000	852	9.7%	20.8%	42.4%	24.5%	2.6%
\$100,000 to \$150,000	937	7.9%	16.2%	44.6%	28.3%	3.0%
\$150,000 or more	1,061	6.8%	19.1%	44.9%	26.8%	2.5%
Metro status						
Metropolitan	4,747	9.6%	20.3%	43.1%	24.3%	2.8%
Non-metropolitan	812	7.4%	18.5%	48.3%	24.2%	1.6%
Driver type***						
Nonspeeders	2,348	7.8%	19.3%	42.2%	27.8%	2.9%
Sometime Speeders	2,419	9.3%	20.2%	45.1%	23.0%	2.4%
Speeders	787	12.8%	21.4%	44.5%	18.9%	2.4%
***n < 0.01	I	1	1	r	I	

Table 18. Frequency of seeing vehicles stopped by demographics

\*\*\* p < .001

The next series of questions explored driver attitudes toward various countermeasures that could reduce speeding in their community. Countermeasures with the highest percentage of respondents indicating they are a good idea included increasing public awareness of the risks of speeding (76%); electronic signs that warn drivers they are speeding (75%); increased use of speed cameras (63%); and road design changes, such as speed humps and traffic circles (56%) (Figure 41). Relatively few respondents thought that more frequent ticketing for speeding (40%) and issuing higher fines for speeding (27%) were good ideas to reduce speeding in their community.



Q38. How would you feel about using the following measures in your community to reduce speeding? ...more frequent ticketing for speeding. (n = 5,507)

Q39. ... issuing higher fines for speeding tickets? (n = 5,509)

Q40. ... increasing public awareness of the risks of speeding? (n = 5,499)

Q41....road design changes, like speed humps or traffic circles, to slow down traffic? (n = 5,511)

Q42. ... electronic signs by the road that warn drivers that they are speeding and should slow down? (n = 5513)

Q43. ... increased use of speed cameras in dangerous or high crash locations? (n = 5,511)

Figure 41. Attitudes toward countermeasures

Table 19 shows the percentage of respondents who indicated that various countermeasures are a good idea by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Some notable differences between demographic groups exist. Older respondents (65 and older) were over twice as likely as the youngest respondents (18 to 24) to indicate that more frequent ticketing for speeding is a good idea. As respondent education and income levels rose, fewer respondents indicated that more frequent ticketing is a good idea. As presented in the table, a high percentage of all demographic groups reported that increasing public awareness of the risks of speeding is a good idea (lowest agreement 64.4% among speeders, highest agreement 84.9% among Non-Hispanic Black respondents) and that electronic signs warning drivers they are speeding are a good idea (lowest agreement 63.5% among speeders, highest agreement 85.3% among Non-Hispanic Black respondents).

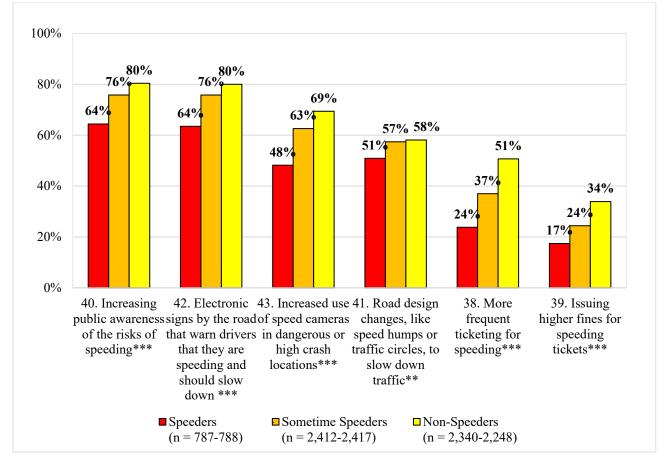
How would you feel about using the following measures in your community to reduce speeding	38. More frequent ticketing for speeding? (n = 5,552) ***	39. Issuing higher fines for speeding tickets? (n = 5,554)	40. Increasing public awareness of the risks of speeding? ( <i>n</i> = 5,554)	41. Road design changes, like speed humps or traffic circles, to slow down traffic? ( <i>n</i> = 5,556)	42. Electronic signs by the road that warn drivers that they are speeding and should slow down? (n = 5,557) ***	43. Increased use of speed cameras in dangerous or high crash locations? ( <i>n</i> = 5,556) ***
Age 18 to 24	22.5%	14.8%	78.6%	56.5%	71.7%	59.5%
25 to 34	31.8%	19.9%	71.3%	54.2%	66.1%	55.2%
35 to 44	35.3%	26.5%	69.7%	56.6%	74.5%	57.9%
45 to 54	41.8%	30.5%	75.7%	57.5%	79.2%	65.9%
55 to 64	45.8%	30.8%	79.6%	58.7%	77.9%	63.5%
65+	56.3%	34.7%	80.5%	56.3%	82.1%	73.9%
Sex	**		**	***	*	***
Male	38.7%	26.7%	73.0%	52.0%	73.2%	56.8%
Female	41.7%	27.2%	78.2%	61.2%	77.5%	68.8%
Ethnicity/Race			***	***	***	***
Hispanic	43.2%	30.0%	83.0%	65.0%	77.0%	67.3%
Non-Hispanic White	40.2%	25.8%	72.7%	51.1%	73.0%	59.7%
Non-Hispanic Black	41.3%	30.0%	84.9%	72.5%	85.3%	73.9%
Non-Hispanic Asian	34.7%	30.9%	76.8%	64.8%	82.9%	72.6%
Non-Hispanic Other	38.8%	21.5%	72.1%	57.4%	74.3%	59.1%
Education	***	***		*		***
Less than high school	54.7%	32.1%	74.7%	57.2%	77.3%	66.2%

Table 19. Percentages of respondents who indicated countermeasures are a good idea by demographics

How would you feel about using the following measures in your community to reduce speeding	38. More frequent ticketing for speeding? (n = 5,552)	39. Issuing higher fines for speeding tickets? (n = 5,554)	40. Increasing public awareness of the risks of speeding? ( <i>n</i> = 5,554)	41. Road design changes, like speed humps or traffic circles, to slow down traffic? (n = 5,556)	42. Electronic signs by the road that warn drivers that they are speeding and should slow down? (n = 5,557)	43. Increased use of speed cameras in dangerous or high crash locations? (n = 5,556)
High school diploma	44.3%	29.1%	74.8%	50.8%	75.5%	66.2%
Some college	37.9%	26.1%	77.5%	58.4%	76.0%	63.1%
College degree	33.2%	23.1%	73.2%	59.4%	72.3%	56.8%
Graduate degree	39.1%	26.5%	78.0%	62.6%	77.4%	62.0%
Income	**	*				***
<\$35,000	43.1%	26.3%	78.6%	56.6%	77.0%	66.3%
\$35,000 to \$50,000	43.7%	26.4%	77.5%	53.0%	77.3%	65.6%
\$50,000 to \$75,000	40.4%	31.8%	75.9%	58.6%	75.0%	66.7%
\$75,000 to \$100,000	40.8%	28.7%	77.4%	55.7%	75.4%	61.9%
\$100,000 to \$150,000	34.0%	22.2%	71.2%	58.2%	73.9%	58.6%
\$150,000 or more	37.0%	26.0%	73.6%	60.4%	74.3%	56.3%
Metro status		*		*		**
Metropolitan	39.6%	27.5%	76.3%	57.8%	75.7%	62.7%
Non-metropolitan	45.4%	24.3%	73.0%	50.0%	74.2%	64.9%
Driver type	***	***	***	**	***	***
Nonspeeders	50.7%	33.9%	80.4%	58.1%	80.0%	69.4%
Sometime speeders	37.0%	24.4%	75.8%	57.4%	75.8%	62.6%
Speeders	23.8%	17.4%	64.4%	50.9%	63.5%	48.2%

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining attitudes toward countermeasures by driver type indicates that, generally, most of each driver type agreed that increasing public awareness of the risks of speeding and using electronic signs warning drivers to slow down are good ideas (Figure 42). Differences between driver types emerged when asked about increased use of speed cameras in dangerous or high crash areas, with less than half (48%) of speeders reporting this is a good idea, compared to 69% of nonspeeders who indicate it is a good idea. Speeders (24%) were less likely to think that more frequent ticketing for speeding is a good idea compared to sometime speeders (37%) and nonspeeders (51%). While overall agreement across driver types was low for issuing higher fines for speeding tickets, speeders (17%) were less likely to think this is a good idea compared to sometime speeders (24%) and nonspeeders (34%).



Q38. How would you feel about using the following measures in your community to reduce speeding...more frequent ticketing for speeding? (n = 5,507)

Q39. ... issuing higher fines for speeding tickets? (n = 5,509)

Q40. ... increasing public awareness of the risks of speeding? (n = 5,499)

Q41....road design changes, like speed humps or traffic circles, to slow down traffic? (n = 5,511)

Q42. ... electronic signs by the road that warn drivers that they are speeding and should slow down? (n = 5,513)

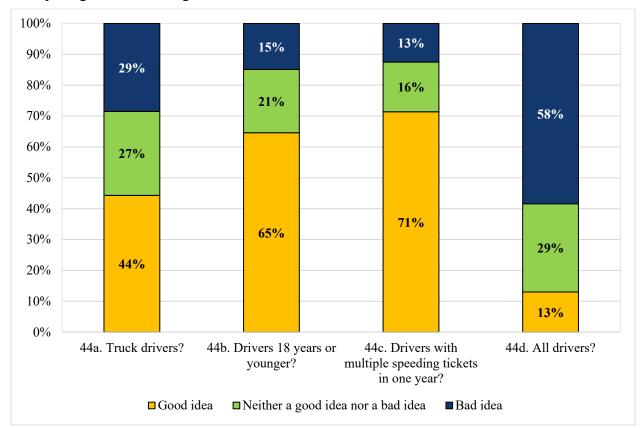
Q43. ... increased use of speed cameras in dangerous or high crash locations? (n = 5,511)

\*\*\* p < .001

\*\* p < .01

*Figure 42. Attitudes toward using countermeasures in community, percentages good idea by driver type* 

The next set of questions asked respondents whether speed governors are a good or bad idea (Figure 43). The percentage of respondents who indicated speed governors are a good idea varied by the type of driver that would use the speed governor. For example, 44% of respondents reported believing speed governors are a good idea for truck drivers, while 65% said they are a good idea for drivers 18 or younger, and 71% believed they are a good idea for drivers with multiple speeding tickets in a 1-year period. Overall, though, few respondents (13%) indicated that speed governors are a good idea for all drivers.



Q44a. A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...truck drivers? (n = 5,549) Q44b. ...drivers 18 years or younger? (n = 5,551)

Q44c. ...drivers with multiple speeding tickets in one year? (n = 5,555)

Q44d. ...all drivers? (*n* = 5,557)

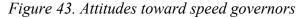


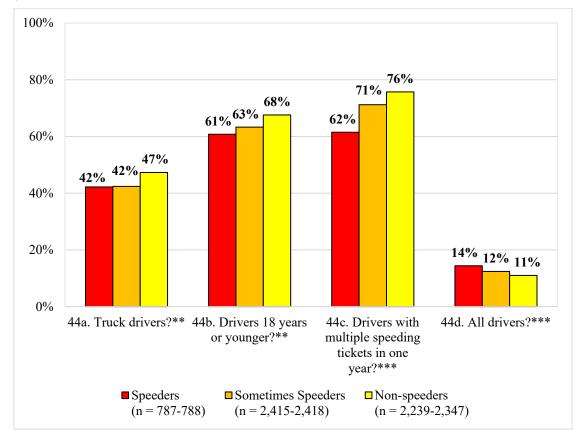
Table 20 shows the percentage of respondents in each demographic group who reported that speed governors are a good idea. Overall, women were more likely than men to agree that speed governors are a good idea for all types of drivers. Younger respondents were less likely than older respondents to think speed governors are a good idea for drivers with multiple speeding tickets and younger drivers. However, older respondents (65 and older) were less likely than respondents 18 to 24 to think speed governors are a good idea for truck drivers.

Table 20. Percentages of respondents who indicated speed governors are a good idea by
demographics

A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea for	44a. Truck drivers ( <i>n</i> = 5,549)	44b. Drivers 18 years or younger ( <i>n</i> = 5,551)	44c. Drivers with multiple speeding tickets in one year (n = 5,555)	44d. All drivers ( <i>n</i> = 5,557)
Age	*	***		
18 to 24	48.4%	49.5%	63.7%	12.9%
25 to 34	46.7%	58.7%	65.6%	14.7%
35 to 44	48.9%	68.8%	67.6%	14.4%
45 to 54	44.5%	68.5%	70.7%	9.2%
55 to 64	42.6%	70.8%	77.2%	14.1%
65+	37.5%	65.7%	79.7%	13.0%
Sex	***	***	* * *	***
Male	41.5%	57.9%	64.8%	9.9%
Female	47.1%	70.8%	77.5%	16.1%
Ethnicity/Race	***	***	* * *	***
Hispanic	52.8%	70.7%	80.1%	24.8%
Non-Hispanic White	38.8%	60.6%	68.1%	8.4%
Non-Hispanic Black	58.6%	76.0%	80.4%	19.6%
Non-Hispanic Asian	50.6%	68.3%	72.8%	16.8%
Non-Hispanic Other	46.8%	65.1%	64.9%	12.8%
Education	***	**	**	***
Less than high school	47.7%	75.0%	77.7%	26.9%
High school diploma	43.0%	66.3%	71.6%	17.4%
Some college	46.6%	65.0%	72.5%	11.7%
College degree	39.8%	57.6%	66.3%	5.6%
Graduate degree	47.8%	64.5%	72.6%	9.7%
Income	***	**	***	***
< \$35,000	46.7%	68.5%	75.9%	21.7%
\$35,000 to \$50,000	47.3%	68.0%	76.8%	11.6%
\$50,000 to \$75,000	45.0%	63.9%	72.8%	13.6%
\$75,000 to \$100,000	44.8%	63.3%	66.6%	10.6%
\$100,000 to \$150,000	38.0%	60.1%	64.4%	5.0%
\$150,000 or more	41.2%	61.2%	67.8%	7.0%
Metro status				
Metropolitan	45.2%	65.2%	72.2%	13.2%
Non-metropolitan	39.2%	61.4%	67.1%	11.8%
Driver type	**	**	***	***
Nonspeeders	47.3%	67.6%	75.7%	14.4%
Sometime speeders	42.4%	63.3%	71.2%	12.4%
Speeders	42.2%	60.8%	61.5%	11.0%

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining attitudes toward speed governors by driver type indicates that more nonspeeders (76%) think that they are a good idea for drivers with multiple speeding tickets in a 1-year period than speeders (62%). Driver types are generally in agreement about speed governors being a good idea for truck drivers and drivers 18 or younger. Interestingly, more speeders (14%) think speed governors are a good idea for all drivers than sometime speeders (12%) and nonspeeders (11%).



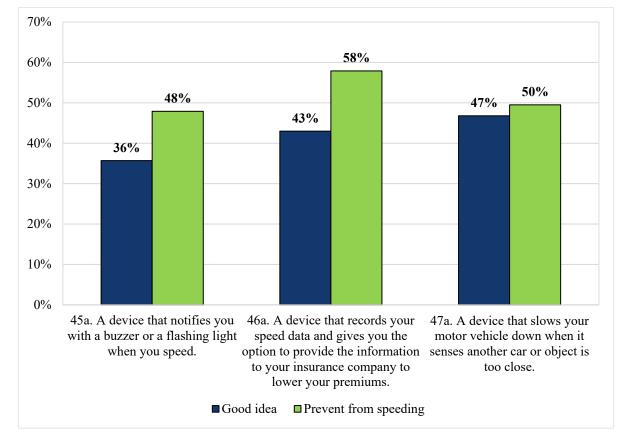
Q44a. A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...truck drivers? (n = 5,549) Q44b. ...drivers 18 years or younger? (n = 5,551) Q44c. ...drivers with multiple speeding tickets in one year? (n = 5,555) Q44d. ...all drivers? (n = 5,557)

\*\*\* p < .001

\*\* p<sup>2</sup><.01

Figure 44. Attitudes toward speed governors by driver type, percentages good idea

Respondents were presented with three in-vehicle speeding countermeasures and asked whether placing each in their vehicle was a good or bad idea. Regardless of their response, respondents were asked whether the countermeasure would prevent them from speeding. Figure 45 shows the percentage of respondents who reported that a particular countermeasure is a good idea and whether it would prevent them from speeding. For a device that notifies you when you are speeding, only slightly more than one-third of respondents (36%) indicated this was a good idea. More respondents (43%) said a device that records speed data and transmits it to insurance companies to lower premiums is a good idea, and 47% of respondents reported a device that slows your vehicle down when it senses it is too close to another car or object is a good idea. For all countermeasures more respondents reported that countermeasures would prevent them from speeding than reported that countermeasures were a good idea.



Q45a. A device in your motor vehicle that notifies you with a buzzer or a flashing light when you drive faster than the speed limit. Do you think this is a... (n = 5,517)

Q45b. Would this device prevent you from speeding? (n = 5,501)

Q46a. A device in your motor vehicle that records your speed data and gives you the option to provide the information to your insurance company to lower your premiums if you obey the speed limits. Do you think this is a... (n = 5,522)

Q46b. Would this device prevent you from speeding? (n = 5,489)

Q47a. A device in your motor vehicle that...slows your motor vehicle down when it senses another car or object is too close to your motor vehicle? Do you think this is a... (n = 5,522) Q47b. Would this device prevent you from speeding? (n = 5,475)

Figure 45. Attitudes toward in-vehicle speeding countermeasures

Table 21 and Table 22 show the percentage of respondents in each demographic group who reported that each in-vehicle speeding countermeasure is a good idea and the percentage of respondents who said that this device would prevent them from speeding by driver age, sex, ethnicity/race, education, income, metro status, and driver type. For all countermeasures women were more likely than men to indicate countermeasures are a good idea. Support for countermeasures declined as education and income levels increase.

*Table 21. Percentages of respondents indicating speeding countermeasures are a good idea and would prevent them from speeding by demographics* (045–46)

Do you think this is a good idea to help reduce speeding	45a. A device that notifies you with a buzzer or a flashing light when you drive faster than the speed limit?	п	45b. Would prevent from speeding	п	46a. A device that records your speed data and gives you the option to provide the information to your insurance company to lower your premiums, if you obey the speed limits?	n	46b. Would prevent from speeding	n
Age	***		***		**		***	
18 to 24	28.7%	240	42.9%	240	55.8%	240	70.3%	240
25 to 34	25.5%	787	41.1%	787	48.4%	788	59.5%	788
35 to 44	32.1%	775	41.5%	777	40.9%	777	59.1%	776
45 to 54	36.0%	753	45.4%	752	40.6%	752	52.7%	751
55 to 64	42.8%	1,142	52.7%	1,138	39.3%	1,144	53.6%	1,132
65+	45.3%	1,773	60.7%	1,763	38.9%	1,774	56.9%	1,757
Sex	***		***		***		***	
Male	31.4%	2,652	40.7%	2,648	40.2%	2,654	51.5%	2,640
Female	39.9%	2,824	55.0%	2,814	45.8%	2,827	64.3%	2,809
Ethnicity/Race	***		***		***		***	
Hispanic	43.5%	513	57.8%	515	42.0%	515	66.0%	514
Non-Hispanic White	30.6%	4,004	42.8%	3,989	40.7%	4,006	53.5%	3,982
Non-Hispanic Black	47.6%	322	60.8%	321	54.3%	321	69.5%	319
Non-Hispanic Asian	44.4%	264	54.8%	262	52.0%	264	68.2%	263
Non-Hispanic Other	34.4%	350	41.1%	351	43.0%	353	52.0%	350
Education	***		***		**		**	
Less than high school	50.4%	120	65.7%	120	51.4%	120	71.1%	119
High school diploma	37.4%	740	51.2%	739	45.1%	741	60.7%	737
Some college	36.5%	1,541	46.4%	1,538	42.2%	1,545	56.1%	1,529

Do you think this is a good idea to help reduce speeding	45a. A device that notifies you with a buzzer or a flashing light when you drive faster than the speed limit?	n	45b. Would prevent from speeding	n	46a. A device that records your speed data and gives you the option to provide the information to your insurance company to lower your premiums, if you obey the speed limits?	п	46b. Would prevent from speeding	n
College degree	28.1%	1,410	39.4%	1,401	40.6%	1,409	53.4%	1,401
Graduate degree	33.7%	1,645	48.3%	1,644	39.6%	1,646	56.2%	1,642
Income	***		***		***		***	
< \$35,000	39.4%	977	56.9%	976	47.4%	978	67.0%	970
\$35,000 to \$50,000	43.4%	570	55.8%	567	49.3%	571	59.8%	567
\$50,000 to \$75,000	32.7%	946	45.3%	944	42.6%	946	58.1%	943
\$75,000 to \$100,000	36.1%	844	44.2%	844	39.5%	846	55.9%	840
\$100,000 to \$150,000	29.1%	929	38.1%	927	40.7%	929	50.1%	928
\$150,000 or more	31.8%	1,058	38.7%	1,054	38.2%	1,058	49.7%	1,054
Metro status					*			
Metropolitan	35.6%	4,713	48.2%	4,700	42.3%	4,718	58.2%	4,690
Non-metropolitan	35.7%	804	46.5%	801	47.2%	804	56.0%	799
Driver type	***		***		***		***	
Nonspeeders	41.3%	2,337	57.1%	2,330	47.6%	2,395	63.9%	2,325
Sometime Speeders	35.3%	2,393	46.5%	2,384	40.5%	782	57.4%	2,378
Speeders	22.7%	784	28.9%	783	38.5%	5,518	44.4%	782

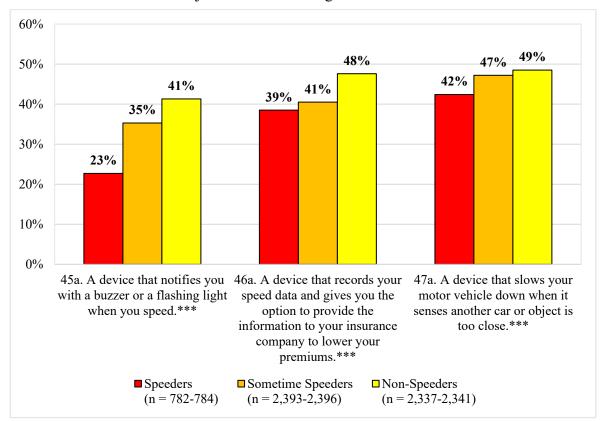
\*\*\* p < .001, \*\* p < .01, and \* p < .05

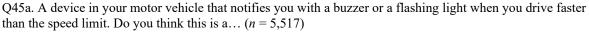
Do you think this	when it senses another			
	car or object is too close		47b. Would prevent	
is a good idea	to your motor vehicle?	n	from speeding	п
Age	***		***	
18 to 24	42.4%	240	52.8%	239
25 to 34	41.2%	788	42.7%	787
35 to 44	45.6%	777	49.0%	777
45 to 54	45.0%	753	43.4%	751
55 to 64	48.8%	1,143	52.5%	1,130
65+	55.0%	1,774	56.9%	1,749
Sex	***	,	***	
Male	43.1%	2,654	42.5%	2,635
Female	50.3%	2,827	56.1%	2,800
Ethnicity/Race	*	,,	***	,
Hispanic	48.8%	514	59.3%	515
Non-Hispanic				
White	44.4%	4,006	43.6%	3,968
Non-Hispanic	-1.00/	2.2.1	(2.20)	
Black	51.6%	321	62.3%	320
Non-Hispanic				
Asian	60.7%	264	67.1%	263
Non-Hispanic Other	42.4%	353	39.9%	348
Education			***	
Less than high		100	(2.10/	110
school	46.3%	120	62.1%	118
High school		= 10		500
diploma	43.1%	742	52.6%%	732
Some college	47.1%	1,545	49.6%	1,530
College degree	49.5%	1,407	41.9%	1,400
Graduate degree	49.8%	1,647	46.4%	1,635
Income		)	***	)
<\$35,000	45.8%	980	56.0%	972
\$35,000 to \$50,000	47.9%	569	53.1%	565
\$50,000 to \$75,000	47.8%	945	50.6%	939
\$75,000 to				
\$100,000	47.6%	846	46.6%	841
\$100,000 to				
\$150,000	43.0%	930	40.2%	925
\$150,000 or more	49.9%	1,058	42.7%	1,052
Metro status		1,000	,,,,	1,002
Metropolitan	47.5%	4,717	49.9%	4,680
Non-metropolitan	42.5%	805	47.1%	795
Driver type			***	,,,,
Nonspeeders	48.5%	2,338	53.5%	2,316
1.010peedetb		,		2,373
Sometime Speeders	47.2%	2,936	50.3%	2.3/3

Table 22. Percentages of respondents indicating speeding countermeasures are a good idea and<br/>would prevent them from speeding by demographics (Q47)

\*\*\* p < .001 and \* p < .05

Across all countermeasures, fewer speeders than sometime speeders and nonspeeders thought each countermeasure was a good idea (Figure 46). The difference is most pronounced for a device that notifies with a buzzer or flashing light when driving over the speed limit, with only 23% of speeders reporting this is a good idea, followed by 35% of sometime speeders and 41% of nonspeeders. Almost half of all driver types thought a device that slows your vehicle down when it senses another car or object is too close is a good idea.



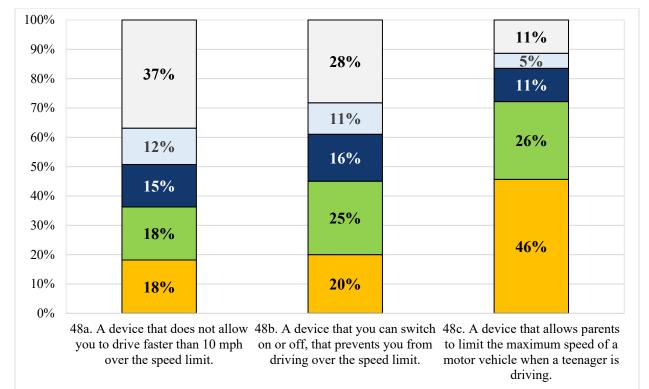


Q46a. A device in your motor vehicle that records your speed data and gives you the option to provide the information to your insurance company to lower your premiums if you obey the speed limits. Do you think this is a... (n = 5,522)

Q47a. A device in your motor vehicle that...slows your motor vehicle down when it senses another car or object is too close to your motor vehicle? Do you think this is a... (n = 5,522) \*\*\* p < .001

Figure 46. Attitudes toward in-vehicle speeding countermeasures by driver type, percentages good idea

Respondents answered a set of questions about their likeliness to use specific speeding countermeasures in their own vehicle (Figure 47) Findings were mixed regarding a device that does not allow a driver to drive faster than 10 mph over the posted speed limit. The percentage of respondents who were very likely or somewhat likely (36%) to use this type of device is almost the same as the percentage of respondents who would be very unlikely to use this device (37%). When asked about a device that could be turned on or off and prevents driving faster than the speed limit, almost half of respondents (45%) indicated they would be very likely or somewhat likely to use this device, yet still over one-quarter of respondents (28%) indicated they would be very unlikely to use it. Most respondents (72%) would be very likely or somewhat likely to use a device that limits the maximum speed of a motor vehicle when a teenager is driving.



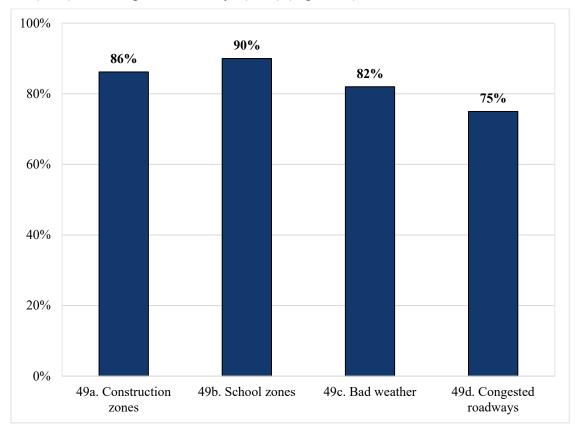
■ Very likely ■ Somewhat likely ■ Neither likely nor unlikely □ Somewhat unlikely □ Very Unlikely

Q48a. A device that does not allow you to drive faster than 10 mph over the posted speed limit? (n = 5,515) Q48b. A device that you can switch on or off, that prevents you from driving faster than the speed limit? (n = 5,518)

Q48c. A device that allows parents to limit the maximum speed of a motor vehicle, when a teenager drives the motor vehicle? (n = 5,513)

Figure 47. Likelihood to use countermeasures in own vehicle

Respondents were asked if they support the use of digital signs to change the speed limit on a section of road based on traffic or weather conditions. Most respondents reported that these signs would be a good idea in situations such as construction zones (86%), school zones (90%), bad weather (82%), and congested roadways (75%) (Figure 48).



49a. Some roadways use digital signs to change the speed limit on a section of road based on traffic or weather conditions. Do you think it is a good idea or a bad idea to use these signs in the following situations: Construction zones? (n = 5,474)

49b. School zones? (n = 5,469)

490. School Zones? (n = 5,409)49c. Bad weather? (n = 5,470)

49d. Congested roadways? (n = 5,468)

Figure 48. Use of digital signs to change speed limits in various situations, percentages good idea

Table 23 shows the percentage of respondents in each demographic group who indicated that using digital variable speed signs are a good idea in various situations. Overall, most respondents across all demographic groups indicated that the use of these signs is a good idea. More older respondents (65+) than younger respondents indicated that signs are a good idea, and women were more likely than men to indicate that signs are a good idea.

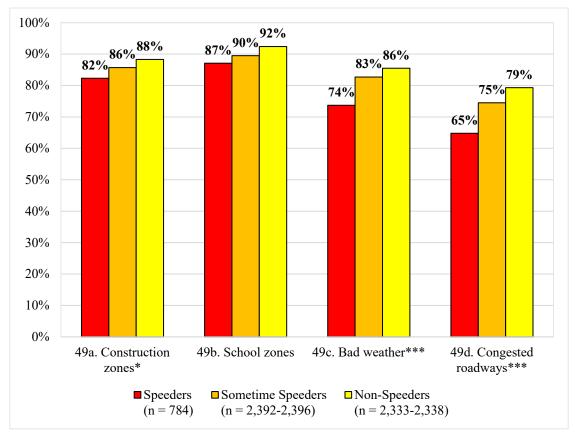
Some roadways use digital signs to change the speed limit on a section of road based on traffic or weather conditions. Do you think it is a good idea to use these signs in the following situations	49a. Construction zones	n	49b. School zones	n	49c. Bad weather	п	49d. Congested roadways	п
Age	***		***		***		***	
18 to 24	82.6%	240	82.3%	240	75.1%	240	70.3%	240
25 to 34	78.1%	787	82.1%	787	74.2%	787	63.4%	787
35 to 44	84.2%	776	89.6%	776	79.8%	776	70.2%	775
45 to 54	89.5%	754	93.5%	754	87.0%	753	77.5%	753
55 to 64	87.8%	1,143	93.8%	1,140	85.4%	1,141	80.5%	1,142
65+	93.0%	1,774	97.0%	1,772	89.2%	1,773	84.4%	1,771
Sex	*		**		***		*	
Male	84.4%	2,651	88.3%	2,651	78.8%	2,649	72.1%	2,650
Female	88.1%	2,830	92.2%	2,825	85.8%	2,828	77.5%	2,825
Ethnicity/Race								
Hispanic	83.4%	516	86.8%	515	82.0%	515	75.1%	515
Non-Hispanic White	87.4%	4,007	91.4%	4,003	81.1%	4,004	73.4%	4,004
Non-Hispanic Black	87.0%	320	89.0%	320	87.6%	320	81.0%	320
Non-Hispanic Asian	85.7%	264	91.7%	264	87.6%	263	80.2%	264
Non-Hispanic Other	74.6%	351	87.3%	351	83.6%	352	73.0%	350
Education			* * *				*	
Less than high school	82.5%	120	82.4%	119	81.9%	120	77.5%	120
High school diploma	85.0%	740	89.8%	739	81.5%	740	76.1%	738
Some college	87.0%	1,544	92.4%	1,542	83.9%	1,542	76.5%	1,544
College degree	86.3%	1,410	90.2%	1,410	79.9%	1,408	69.2%	1,408
Graduate degree	88.9%	1,647	90.0%	1,646	84.7%	1,647	74.8%	1,646

Table 23. Percentages of respondents indicating digital variable speed signs are a good idea in various situations by demographics

Some roadways use digital signs to change the speed limit on a section of road based on traffic or weather conditions. Do you think it is a good idea to use these signs in the following situations	49a. Construction zones	п	49b. School zones	п	49c. Bad weather	п	49d. Congested roadways	n
Income			***				**	
<\$35,000	83.1%	979	86.5%	975	82.5%	978	75.9%	976
\$35,000 to \$50,000	89.3%	570	90.9%	570	84.4%	571	80.8%	570
\$50,000 to \$75,000	87.1%	945	92.5%	945	84.2%	945	75.7%	945
\$75,000 to \$100,000	85.8%	845	92.2%	845	81.9%	843	73.7%	845
\$100,000 to \$150,000	87.3%	929	89.9%	928	80.4%	927	74.4%	926
\$150,000 or more	88.3%	1,058	92.8%	1,058	81.5%	1,058	71.0%	1,058
Metro status								
Metropolitan	86.3%	4,717	90.6%	4,714	82.8%	4,714	74.6%	4,712
Non-metropolitan	85.8%	805	88.5%	803	79.9%	804	76.4%	804
Driver type	*		***		***		***	
Nonspeeders	88.3%	2,338	92.4%	2,335	85.5%	2,338	79.3%	2,333
Sometime Speeders	85.7%	2,396	89.5%	2,394	82.7%	2,392	74.5%	2,395
Speeders	82.3%	784	87.1%	784	73.7%	784	64.8%	784

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Examining the percentage of respondents by driver type who indicated digital signs are a good idea shows that all driver types were generally in agreement that such signs are a good idea, but slightly fewer speeders indicate digital signs are a good idea when compared to sometime speeders and nonspeeders. Specifically for congested roadways, fewer speeders indicated signs are a good idea (65%) than sometime speeders (75%) and nonspeeders (79%).



49a. Some roadways use digital signs to change the speed limit on a section of road based on traffic or weather conditions. Do you think it is a good idea or a bad idea to use these signs in the following situations: Construction zones? (n = 5,474)

49b. School zones? (n = 5,469)49c. Bad weather? (n = 5,470)49d. Congested roadways? (n = 5,468)

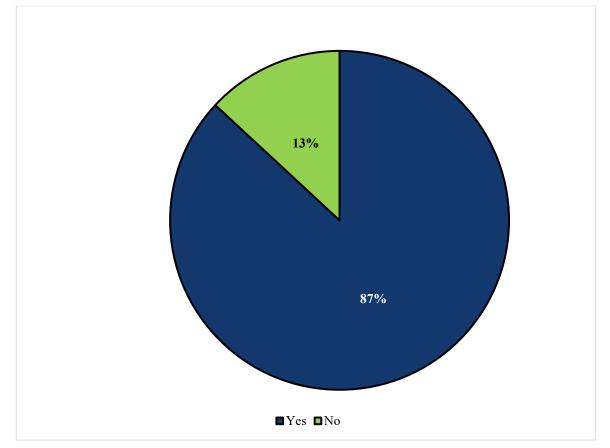
\* p < .05

\*\*\* p < .001

*Figure 49. Use of digital signs to change speed limits in various situations, percentages good idea* 

## **Speed Safety Cameras**

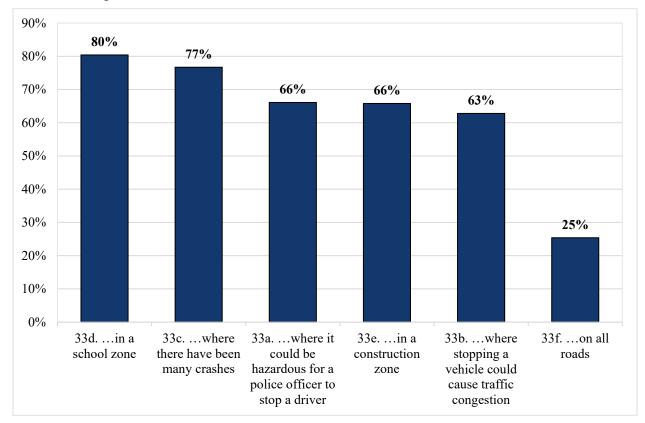
Respondents were asked a series of questions about their experiences with, and attitudes about, speed safety cameras. Most respondents (87%) had heard of these devices being used to ticket drivers who speed (Figure 50).



Q33. The next questions are about speed cameras. These are cameras set up at intersections or other locations to take pictures of speeding vehicles. A traffic ticket is mailed to the owner of the vehicle along with a photograph and information about the location and time. Before today, had you ever heard of speed cameras being used to ticket drivers who speed? (n = 5,533)

Figure 50. Awareness of speed safety cameras used to ticket drivers

Respondents were asked to indicate whether it would be acceptable to use speed safety cameras in various locations. These locations included school zones, areas where there have been many crashes, areas where it could be hazardous for a police officer to stop a driver, construction zones, and areas where stopping a vehicle could cause congestion. Respondents were also asked how acceptable it would be to use speed safety cameras on all roads. Most respondents agreed that it would be acceptable to have speed safety cameras in school zones (80%) and frequent crash sites (77%) (Figure 51). Slightly fewer respondents thought it was acceptable to have speed safety cameras where it could be hazardous for a police officer to stop a driver (66%), in a construction zone (66%), and where stopping a vehicle could cause traffic congestion (63%). Only one-quarter of respondents (25%) indicated that having speed safety cameras on all roads would be acceptable.



Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

- Q33a. ... where it could be hazardous for a police officer to stop a driver? (n = 5,533)
- Q33b. ...where stopping a vehicle could cause traffic congestion? (n = 5,528)
- Q33c. ... where there have been many crashes? (n = 5,543)
- Q33d. ... in a school zone? (n = 5,540)
- Q33e. ... in a construction zone? (n = 5,540)
- Q33f. ... on all roads? (*n* = 5,529)

Figure 51. Locations where speed safety cameras would be acceptable to use

Table 24 shows the percentage of respondents in each demographic group who think it is acceptable to have speed cameras in different locations. Respondents 65 and older were more likely to accept speed safety cameras where there have been many crashes. Women were more likely to indicate that speed safety cameras are acceptable where it could be hazardous for a police officer to stop a driver, where stopping a vehicle could cause congestion, and where there have been many crashes.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them	п	33a. Where it could be hazardous for a police officer to stop a driver?	п	33b. Where stopping a vehicle could cause traffic congestion?	п	33c. Where there have been many crashes?
Overall	5,533	66.1%	5,528	62.8%	5,543	76.7%
Age						*
18 to 24	240	62.8%	240	55.6%	240	71.8%
25 to 34	789	66.6%	789	66.6%	789	77.4%
35 to 44	776	63.3%	776	61.3%	776	74.2%
45 to 54	752	67.1%	751	63.9%	752	76.6%
55 to 64	1,135	64.1%	1,135	62.1%	1,136	75.5%
65+	1,749	70.0%	1,747	64.4%	1,755	81.7%
Sex		***		***		* * *
Male	2,637	60.0%	2,634	58.8%	2,640	69.9%
Female	2,809	71.6%	2,808	66.7%	2,813	82.9%
Ethnicity/Race						***
Hispanic	515	64.7%	515	64.4%	516	81.5%
Non-Hispanic White	4,019	65.2%	4,012	62.0%	4,024	74.3%
Non-Hispanic Black	320	69.2%	323	62.2%	322	81.4%
Non-Hispanic Asian	265	76.4%	264	69.8%	264	84.3%
Non-Hispanic Other	352	61.7%	354	61.3%	354	74.9%
Education				*		*
Less than high school	120	72.1%	119	74.1%	120	85.1%
High school diploma	736	66.2%	732	61.1%	736	76.6%
Some college	1,527	65.4%	1,526	63.1%	1,532	78.0%
College degree	1,405	63.9%	1,405	61.5%	1,404	72.2%
Graduate degree	1,638	67.6%	1,640	65.5%	1,642	75.8%

Table 24. Locations where speed safety cameras would be acceptable to use (Q33a–d)

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them	n	33a. Where it could be hazardous for a police officer to stop a driver?	п	33b. Where stopping a vehicle could cause traffic congestion?	п	33c. Where there have been many crashes?
Income		*				*
< \$35,000	986	67.9%	984	63.3%	988	79.7%
\$35,000 to \$50,000	573	71.3%	572	65.8%	572	79.5%
\$50,000 to \$75,000	943	68.1%	942	66.1%	944	78.3%
\$75,000 to \$100,000	851	62.2%	851	59.7%	851	72.4%
\$100,000 to \$150,000	934	62.2%	933	59.8%	935	72.3%
\$150,000 or more	1,058	62.7%	1,057	63.1%	1,059	74.3%
Metro status		**		***		**
Metropolitan	4,725	64.8%	4,724	61.1%	4,735	75.8%
Non-metropolitan	808	73.1%	804	73.2%	808	81.9%
Driver type		***		**		***
Nonspeeders	2,335	71.5%	2,332	66.5%	2,339	81.6%
Sometime Speeders	2,407	65.0%	2,404	62.1%	2,411	75.8%
Speeders	786	55.6%	787	55.9%	787	66.9%

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Table 25 shows respondent attitudes toward speed camera usage in other locations. Overall, acceptance of speed safety cameras in school zones and construction zones increased with age. Women were also more likely to accept speed safety cameras in school zones, in construction zones, and on all roads. Overall, as education and income increased, respondents were less likely to find speed safety cameras acceptable across locations.

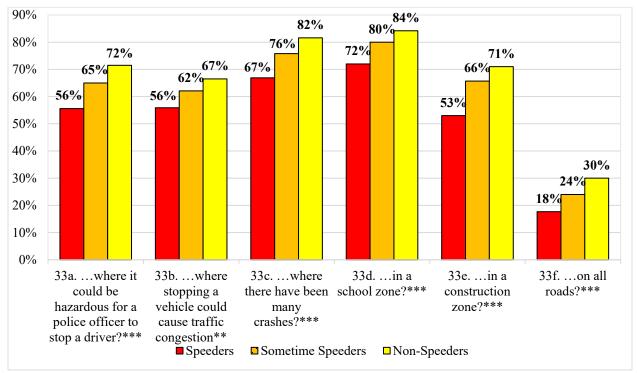
Thinking about locations where						
speed cameras might be useful, would you find it acceptable to use						
them	п	33d. In a school zone?	n	<b>33e. In a construction zone?</b>	n	33f. On all roads?
Overall	5,540	80.4%	5,540	65.8%	5,592	25.4%
Age		***		* * *		
18 to 24	240	75.2%	240	60.3%	240	21.0%
25 to 34	789	75.6%	789	58.0%	788	26.3%
35 to 44	775	80.9%	775	60.2%	775	25.8%
45 to 54	752	80.5%	752	65.7%	750	22.4%
55 to 64	1,135	80.4%	1,136	70.2%	1,133	25.9%
65+	1,752	86.9%	1,751	76.4%	1,749	28.8%
Sex		***		***		* * *
Male	2,635	74.3%	2,637	58.3%	2,634	19.5%
Female	2,814	86.0%	2,812	72.7%	2,807	30.9%
Ethnicity/Race		***		**		***
Hispanic	516	86.0%	516	69.7%	515	33.5%
Non-Hispanic White	4,025	77.6%	4,021	63.9%	4,016	21.6%
Non-Hispanic Black	322	86.4%	323	73.1%	322	37.6%
Non-Hispanic Asian	263	87.3%	264	66.5%	263	23.6%
Non-Hispanic Other	352	78.0%	353	55.1%	352	19.8%
Education		***		***		***
Less than high school	119	93.1%	120	82.5%	120	32.8%
High school diploma	735	80.3%	735	67.5%	733	29.3%
Some college	1,529	81.4%	1,529	66.5%	1,528	23.0%
College degree	1,407	75.4%	1,405	58.5%	1,403	19.6%
Graduate degree	1,642	79.4%	1,641	61.6%	1,637	25.0%
Income		**		* * *		* * *

*Table 25. Locations where speed safety cameras would be acceptable to use (Q33d–f)* 

Thinking about locations where speed cameras might be useful,						
would you find it acceptable to use						
them	n	33d. In a school zone?	n	<b>33e. In a construction zone?</b>	n	33f. On all roads?
<\$35,000	985	83.3%	986	69.1%	985	35.4%
\$35,000 to \$50,000	573	82.1%	573	71.7%	571	22.8%
\$50,000 to \$75,000	943	83.9%	945	67.7%	943	25.8%
\$75,000 to \$100,000	852	78.1%	851	63.8%	848	23.2%
\$100,000 to \$150,000	933	74.9%	933	60.5%	932	17.4%
\$150,000 or more	1,059	75.9%	1,059	58.5%	1,060	18.7%
Metro status				*		
Metropolitan	4,734	80.3%	4,733	65.0%	4,724	25.3%
Non-metropolitan	806	81.2%	807	70.4%	805	26.0%
Driver type		***		***		***
Nonspeeders	2,339	84.2%	2,338	71.0%	2,334	30.0%
Sometime Speeders	2,409	80.0%	2,409	65.7%	2,403	24.0%
Speeders	786	72.0%	787	53.0%	786	17.7%

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Acceptance of speed camera usage varied by driver type (Figure 52). While speeders were the least likely group to accept these devices in any location, they reported their highest acceptance in a school zone (72%) and places where there were many crashes (67%). Over two-thirds of nonspeeders indicated that cameras would be acceptable in school zones (84%), areas of frequent crashes (82%), where it could be hazardous for a police officer to stop a driver (72%), in construction zones (71%), and where stopping a vehicle could cause traffic congestion (67%). More nonspeeders approve of the use of speed safety cameras on all roads when compared to sometime speeders and speeders.

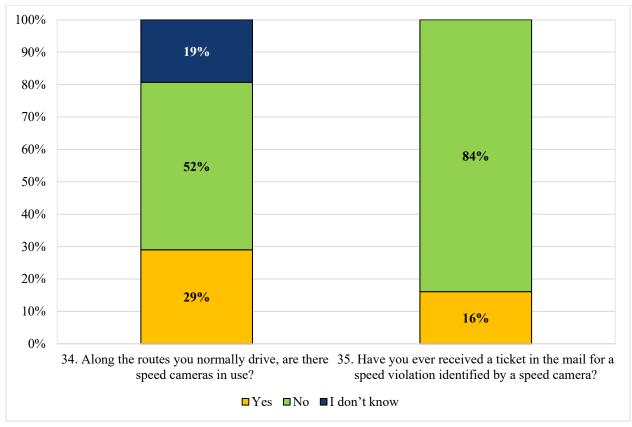


Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

- Q33a. ...where it could be hazardous for a police officer to stop a driver? (n = 5,533)
- Q33b. ... where stopping a vehicle could cause traffic congestion? (n = 5,528)
- Q33c. ... where there have been many crashes? (n = 5,543)
- Q33d. ... in a school zone? (n = 5,540)
- Q33e. ... in a construction zone? (n = 5,540)
- Q33f. ... on all roads? (n = 5,529)
- \*\*\* p < .001

Figure 52. Locations where speed safety cameras may be useful by driver type

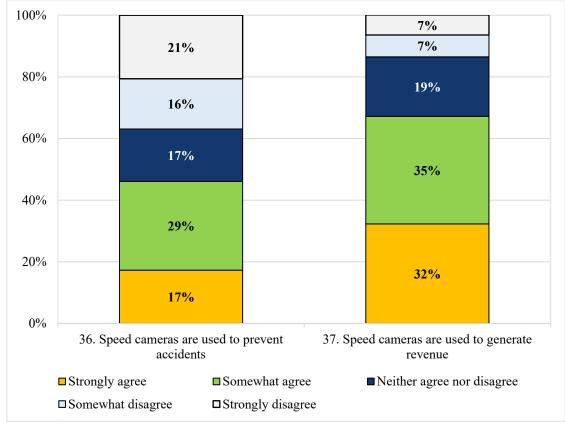
Regarding experiences along routes they normally drive, over half of respondents (52%) reported that speed safety cameras were not in use, less than one-third (29%) indicated that cameras were in use, and nearly one-fifth (19%) reported that they were unsure. Most respondents (84%) had not received a ticket in the mail for a speed violation identified by a speed camera (Figure 53).



Q34. Along the routes you normally drive, are there speed cameras in use? (n = 5,551)Q35. Have you ever received a ticket in the mail for a speed violation identified by a speed camera? (n = 5,539)

Figure 53. Speed safety cameras on normal routes and received ticket from speed camera

When asked about their attitudes regarding the use of speed safety cameras (Figure 54), almost half of respondents (46%) agree or strongly agree that speed safety cameras are used to prevent accidents. Two-thirds of respondents (67%) agreed or strongly agreed that speed safety cameras are used to generate revenue.



Q36. Speed cameras are used to prevent accidents. (n = 5,549) Q37. Speed cameras are used to generate revenue. (n = 5,544)

Figure 54. Attitudes regarding the purpose of speed safety cameras

Table 26 shows mean scores of driver attitudes toward speed safety cameras by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Scores range from 5 (strongly agree) to 1 (strongly disagree), where a higher score indicates a higher level of agreement with each statement. Compared to other age groups, respondents 65 and older exhibited the lowest level of agreement that speed safety cameras are used to prevent accidents and the highest level of agreement that speed safety cameras are used to generate revenue. As income increases so does driver agreement that speed safety cameras are used to prevent accidents. Similarly, as income rises, agreement that speed safety cameras are used to generate revenue decreases.

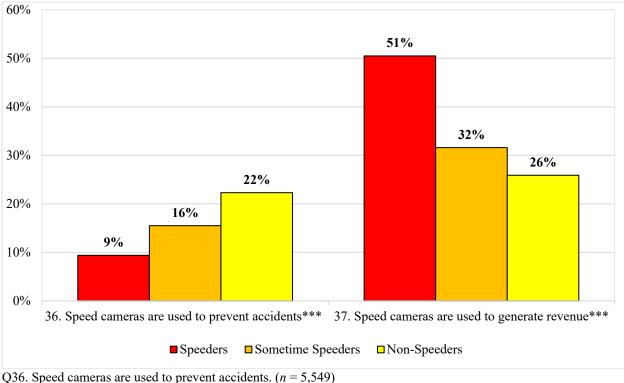
Now, please read the next few statements and		36. Speed cameras are used to prevent		<b>37. Speed cameras are used to generate</b>
tell us how much you agree or disagree.	п	accidents	n	revenue
Overall	5,549	2.90	5,544	2.20
Age		***		***
18 to 24	239	3.00	238	2.20
25 to 34	789	3.20	788	2.00
35 to 44	775	3.00	774	2.10
45 to 54	751	3.10	752	2.10
55 to 64	1,140	2.90	1,140	2.20
65+	1,759	2.40	1,758	2.60
Sex		***		***
Male	2,640	3.10	2,641	2.10
Female	2,819	2.80	2,814	2.30
Ethnicity/Race		***		
Hispanic	516	2.90	513	2.40
Non-Hispanic White	4,028	3.00	4,026	2.20
Non-Hispanic Black	322	2.60	322	2.20
Non-Hispanic Asian	266	2.50	266	2.30
Non-Hispanic Other	354	3.10	354	2.00
Education		* * *		***
Less than high school	119	2.60	119	2.80
High school diploma	735	2.90	732	2.40
Some college	1,535	2.90	1,536	2.10
College degree	1,408	3.20	1,407	1.90
Graduate degree	1,643	2.90	1,643	2.10

Table 26. Attitudes regarding purpose of speed safety cameras by demographics

Now, please read the next few statements and tell us how much you agree or disagree.	п	36. Speed cameras are used to prevent accidents	n	<b>37. Speed cameras are used to generate revenue</b>
Income		***		***
< \$35,000	990	2.70	985	2.50
\$35,000 to \$50,000	574	2.80	573	2.30
\$50,000 to \$75,000	945	3.00	946	2.20
\$75,000 to \$100,000	849	3.10	849	2.20
\$100,000 to \$150,000	935	3.20	936	2.00
\$150,000 or more	1,061	3.20	1,060	1.90
Metro status				**
Metropolitan	4,739	3.00	4,736	2.20
Non-metropolitan	810	2.90	808	2.40
Driver type		***		***
Nonspeeders	2,346	2.70	2,342	2.40
Sometime Speeders	2,410	3.00	2,410	2.20
Speeders	787	3.50	786	1.70

\*\*\* p < .001 and \*\* p < .01

Examining attitudes toward the purpose of speed safety cameras reveals differences across driver types. Figure 55 shows the percentage of respondents who strongly agreed with the two statements. More nonspeeders than sometime speeders and speeders strongly agreed that speed safety cameras are used to prevent accidents. Speeders (51%) were almost twice as likely as nonspeeders (26%) to strongly agree that speed safety cameras are used to generate revenue.

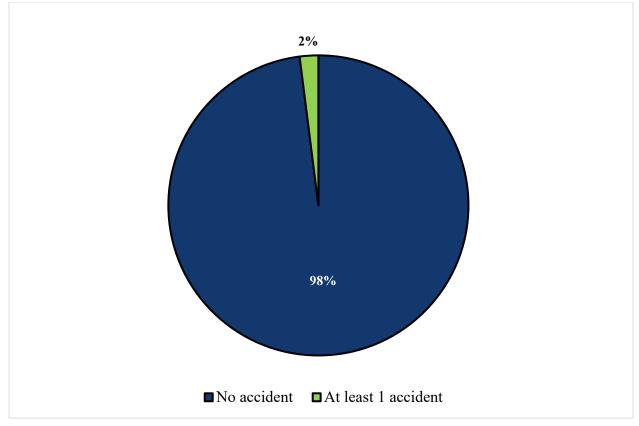


Q36. Speed cameras are used to prevent accidents. (n = 5,549) Q37. Speed cameras are used to generate revenue. (n = 5,544) \*\*\* p < .001

*Figure 55. Attitude toward purpose of speed safety cameras by driver type, percentages strongly agree* 

## **Crash Experience**

This section examines respondents' experiences with speeding-related accidents and injuries over the past 12 months. The overwhelming majority (98%) of respondents had not experienced a speeding-related accident in the past 12 months (Figure 56), with only 2% of respondents experiencing a speeding-related accident in the past 12 months.



Q50. How many times have you been in a speeding related accident in the past 12 months? (n = 5,398) Figure 56. Speeding-related accidents in the past 12 months

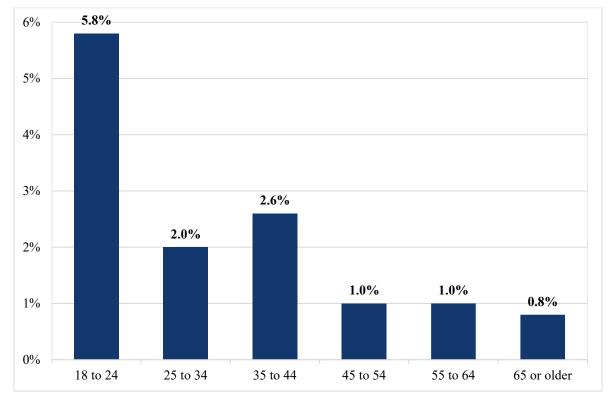
Table 27 shows the average number of speeding-related accidents and percentages of respondents reporting a speeding-related accident in the last 12 months by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Overall, respondents 18 to 24 reported the highest incidences of speeding-related accidents in the past 12 months. In addition, as education and income increased, incidences of speeding-related accidents in the past 12 months decreased.

50. How many times have you been in a speeding related accident in the past				2 or more	Total at least 1
12 months?	n	Mean	1 accident	accidents	accident
Overall	5,398	0.1	1.5%	0.4%	1.90%
Age					
18 to 24	238	0.20	4.8%	1.0%	5.80%
25 to 34	787	0.00	1.4%	0.6%	2.00%
35 to 44	772	0.10	1.9%	0.7%	2.60%
45 to 54	742	0.00	1.0%	0.0%	1.00%
55 to 64	1,122	0.00	0.5%	0.5%	1.00%
65+	1,691	0.00	0.6%	0.2%	0.80%
Sex					
Male	2,570	0.10	1.5%	0.4%	1.90%
Female	2,788	0.10	1.4%	0.5%	1.90%
Ethnicity/Race					
Hispanic	506	0.00	1.8%	0.9%	2.70%
Non-Hispanic White	3,919	0.00	1.2%	0.0%	1.20%
Non-Hispanic Black	309	0.20	2.3%	1.8%	4.10%
Non-Hispanic Asian	258	0.10	2.8%	1.8%	4.60%
Non-Hispanic Other	345	0.10	0.3%	0.0%	0.30%
Education					
Less than high school	115	0.30	3.3%	0.0%	3.30%
High school diploma	695	0.10	1.8%	0.5%	2.30%
Some college	1,503	0.00	1.5%	0.6%	2.10%
College degree	1,399	0.00	1.0%	0.6%	1.60%
Graduate degree	1,627	0.00	0.5%	0.0%	0.50%
Income					
< \$35,000	941	0.10	2.7%	0.1%	2.80%
\$35,000 to \$50,000	552	0.10	2.9%	1.1%	4.00%
\$50,000 to \$75,000	922	0.10	1.2%	0.9%	2.10%
\$75,000 to \$100,000	831	0.00	0.5%	0.6%	1.10%
\$100,000 to \$150,000	923	0.00	0.5%	0.4%	0.90%
\$150,000 or more	1,049	0.00	0.2%	0.1%	0.30%
Metro status					
Metropolitan	4,610	0.10	1.6%	0.5%	2.10%
Non-metropolitan	788	0.00	1.1%	0.4%	1.50%
Driver type					
Nonspeeders	2,283	0.00	0.9%	0.6%	6.80%
Sometime Speeders	2,344	0.10	1.4%	0.5%	5.30%
Speeders	771	0.10	3.2%	0.2%	3.40%

Table 27. Speeding-related accident involvement in the past 12 months by demographics

Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

Figure 57 shows the percentage of respondents who had at least one speeding-related accident in the past 12 months by age group. Respondents 18 to 24 reported the most accidents (5.8%), twice that of respondents 35 to 44, the age group with the second most reported speeding-related accidents (2.6%).



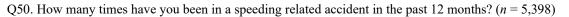
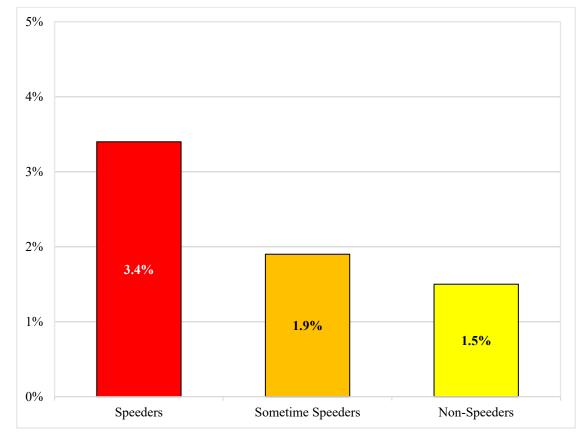


Figure 57. Percentages of respondents reporting at least one speeding-related accident in the past 12 months by age group

Figure 58 shows the percentage of respondents reporting a speeding-related accident in the past 12 months by driver type. Speeders were the most likely to report a speeding-related accident at 3%, compared to less than 2% of sometime speeders and nonspeeders.



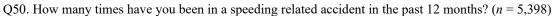
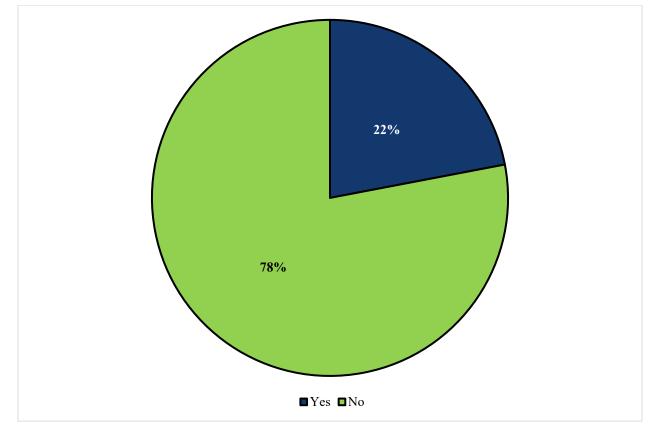


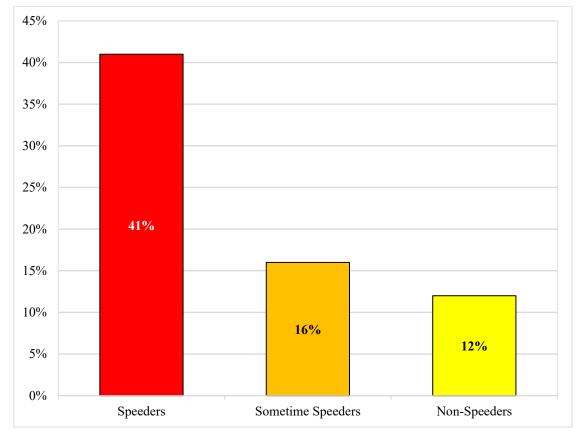
Figure 58. Percentages of respondents reporting at least one speeding-related accident in the past 12 months by driver type

Of the respondents reporting a speeding-related accident in the past 12 months, almost onequarter (22%) reported injuries from their most recent speeding-related accident, and 78% reported they received no injuries.



Q51. Did you receive any injuries as a result of the most recent speeding-related accident? (n = 74) Figure 59. Percentage of respondents reporting injuries in most recent speeding-related accident

The percentage of respondents who reported injuries in their most recent speeding-related accident indicates that speeders reported injuries more than twice as frequently (41%) as sometime speeders (16%) and over 3 times as frequently as nonspeeders (12%) (Figure 60).



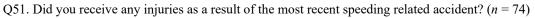
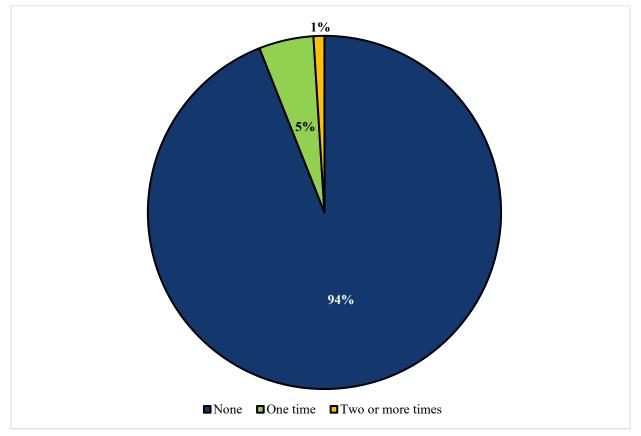


Figure 60. Percentage of respondents reporting injuries in most recent speeding-related accident by driver type

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## **Personal Sanctions**

This section examines respondents' experiences with speeding-related sanctions in the past 12 months. Figure 61 shows that most respondents (94%) have not been stopped for speeding in the past 12 months, while 5% were stopped one time and only 1% were stopped two or more times.



Q52. How many times have you been stopped for speeding in the past 12 months? (n = 5,377) Figure 61. Percentages of respondents stopped for speeding in the past 12 months

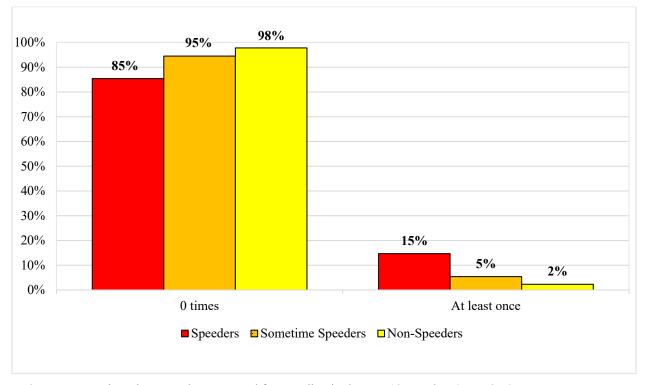
Table 28 shows the average number of times respondents were stopped for speeding in the past 12 months and the percentages of respondents reporting being stopped by driver age, sex, ethnicity/race, education, income, metro status, and driver type. As age increased, frequency of being stopped for speeding decreased.

52. How many times						
have you been stopped						3 or
for speeding in the						more
past 12 months?	n	Mean	0 times	1 time	2 times	times
Overall	5,377	0.10	94.3%	4.7%	0.6%	0.4%
Age						
18 to 24	236	0.10	88.9%	8.3%	2.2%	0.7%
25 to 34	784	0.10	91.5%	7.0%	1.3%	0.3%
35 to 44	771	0.10	94.8%	4.5%	0.3%	0.4%
45 to 54	740	0.10	95.8%	3.3%	0.0%	1.0%
55 to 64	1,117	0.00	95.2%	4.6%	0.1%	0.0%
65+	1,685	0.00	97.5%	2.1%	0.2%	0.1%
Sex						
Male	2,567	0.10	93.2%	6.1%	0.4%	0.3%
Female	2,771	0.10	95.3%	3.5%	0.8%	0.4%
Ethnicity/Race	<u> </u>					
Hispanic	502	0.10	92.0%	6.4%	1.4%	0.2%
Non-Hispanic White	3,906	0.10	95.0%	4.6%	0.2%	0.2%
Non-Hispanic Black	306	0.10	93.7%	4.7%	1.6%	0.0%
Non-Hispanic Asian	259	0.10	94.2%	2.7%	0.6%	2.5%
Non-Hispanic Other	343	0.10	94.4%	2.8%	1.1%	1.6%
Education	•					
Less than high school	115	0.10	93.4%	5.1%	0.0%	1.5%
High school diploma	686	0.10	94.9%	4.0%	1.0%	0.2%
Some college	1,510	0.10	94.5%	4.8%	0.5%	0.2%
College degree	1,392	0.10	92.7%	6.0%	0.5%	0.8%
Graduate degree	1,616	0.00	95.7%	3.9%	0.3%	0.1%
Income						
< \$35,000	935	0.10	95.1%	4.0%	0.4%	0.5%
\$35,000 to \$50,000	550	0.10	94.3%	4.1%	1.5%	0.0%
\$50,000 to \$75,000	923	0.10	92.4%	5.8%	1.1%	0.7%
\$75,000 to \$100,000	829	0.10	93.6%	5.6%	0.6%	0.3%
\$100,000 to \$150,000	919	0.10	93.7%	5.8%	0.1%	0.4%
\$150,000 or more	1,048	0.00	95.9%	3.7%	0.2%	0.2%
Metro status						
Metropolitan	4,598	0.10	94.0%	4.9%	0.6%	0.4%
Non-metropolitan	779	0.00	95.9%	3.6%	0.4%	0.1%
Driver type						
Nonspeeders	2,267	0.00	97.8%	1.9%	0.3%	0.1%
Sometime Speeders	2,336	0.10	94.5%	4.5%	0.5%	0.4%
Speeders	774	0.20	85.4%	12.3%	1.4%	1.0%
*** $p < .001$ , ** $p < .01$ , and * $p$		-			<u>.</u>	

\*\*\* p < .001, \*\* p < .01, and \* p < .05.

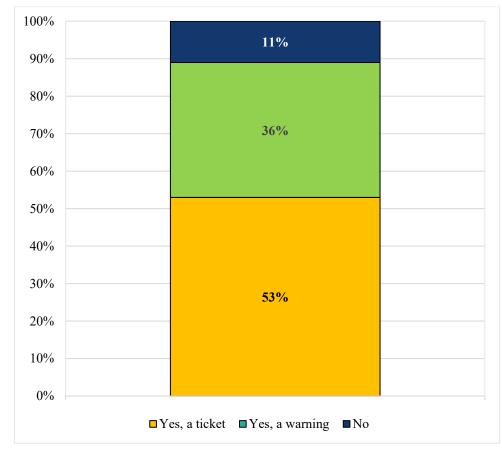
Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

Figure 62 shows the percentage of respondents stopped for speeding in the past 12 months by driver type. Speeders reported being stopped for speeding at least once in the past 12 months, three times more frequently than sometime speeders (15% and 5%). Only 2% of nonspeeders reported being stopped for speeding at least once in the past 12 months.



Q52. How many times have you been stopped for speeding in the past 12 months? (n = 5,377) Figure 62. Percentages of respondents stopped for speeding in the past 12 months by driver type

Of the respondents who were stopped for speeding, slightly more than half (53%) received a ticket as a sanction for speeding and just over one-third (36%) received a verbal or written warning the last time they were stopped for speeding. Approximately 1 in 10 (11%) respondents received neither a ticket nor a warning the last time they were stopped for speeding.



Q53. Did you receive a ticket or warning the last time you were stopped for speeding? (n = 275) Figure 63. Sanctions experienced by respondents stopped for speeding

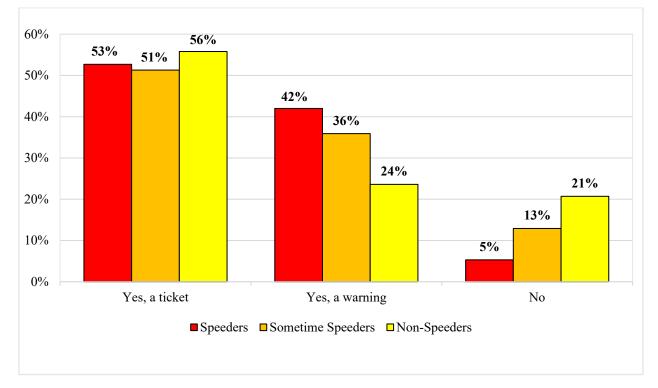
Table 29 shows sanctions for respondents who were stopped for speeding by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Respondents ages 25 to 34 were the most likely to report receiving a ticket for speeding. Men reported receiving a ticket more frequently than women, and women were more likely than men to either receive a warning or not receive any sanction for speeding. Respondents living in metro areas who were stopped were more likely than non-metro respondents to receive a ticket, and non-metro respondents were more likely to receive a warning compared to respondents living in metro areas.

53. Did you receive a ticket or warning the last time you were stopped for speeding?	n	Yes, a ticket	Yes, a warning	No
Overall	275	52.7%	35.9%	11.4%
Age				
18 to 24	†	Ť	+	Ť
25 to 34	56	64.9%	34.0%	1.2%
35 to 44	52	56.2%	40.1%	3.7%
45 to 54	†	Ť	÷	÷
55 to 64	†	†	Ť	ţ
65+	55	49.4%	27.4%	23.2%
Sex				
Male	130	57.8%	33.3%	8.9%
Female	144	45.9%	39.5%	14.6%
Ethnicity/Race*				
Hispanic	+	÷	+	ţ
Non-Hispanic White	170	60.4%	34.6%	5.0%
Non-Hispanic Black	+	ţ	+	ţ
Non-Hispanic Asian	+	÷	- <del>;</del> -	÷
Non-Hispanic Other	+	÷	- <del>;</del> -	ţ
Education				
Less than high school	+	ţ	+	†
High school diploma	+	÷	- <del>;</del> -	÷
Some college	67	36.2%	51.3%	12.6%
College degree	77	53.3%	43.4%	3.4%
Graduate degree	82	64.0%	26.5%	9.6%
Income				
< \$35,000	55	57.6%	27.8%	14.7%
\$35,000 to \$50,000	7	Ť	÷	÷ 1
\$50,000 to \$75,000	53	46.1%	37.4%	16.5%
\$75,000 to \$100,000	†	÷	Ť	+
\$100,000 to \$150,000	+	÷	+	ţ
\$150,000 or more	+	÷	+	÷
Metro status			·	
Metropolitan	237	54.1%	33.6%	12.3%
Non-metropolitan	Ť	Ť	÷	÷
Driver type				
Nonspeeders	69	55.8%	23.6%	20.7%
Sometime speeders	111	51.3%	35.9%	12.9%
Speeders	95	52.7%	42.0%	5.3%

Table 29. Sanctions for speeding by demographics

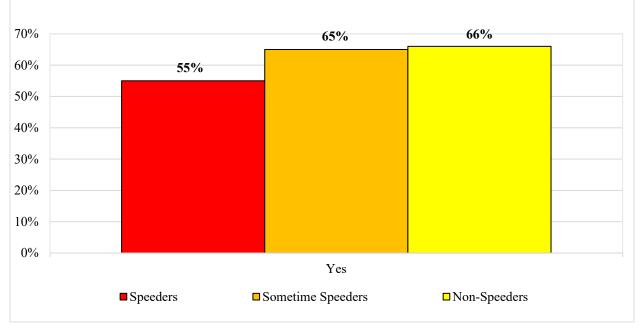
† Note: Sample sizes of fewer than 50 respondents have been suppressed. \* p < .05

Examining sanctions by driver type indicates that over half of each driver type received a ticket for speeding (Figure 64). Nonspeeders reported the highest percentage of tickets (56%). Speeders were the driver type that reported the highest percentage of warnings for speeding (42%), and the percentage drops to 36% for sometime speeders and only 24% for nonspeeders. Compared to other driver types, speeders reported not receiving sanctions for speeding less than half as frequently (5%) as sometime speeders (13%) and more than a quarter less frequently than nonspeeders (21%).



Q53. Did you receive a ticket or warning the last time you were stopped for speeding? (n = 275) Figure 64. Sanctions for speeding by driver type

Figure 65 shows the percentage of respondents by driver type who had experienced a speedrelated stop and indicated that they changed their driving behavior because of that stop. Speeders were the least likely to change their driving behavior because of their ticket or warning. Among nonspeeders, 66% reported that they changed their driving behavior because of their sanction, compared to 65% of sometime speeders and 55% of speeders.

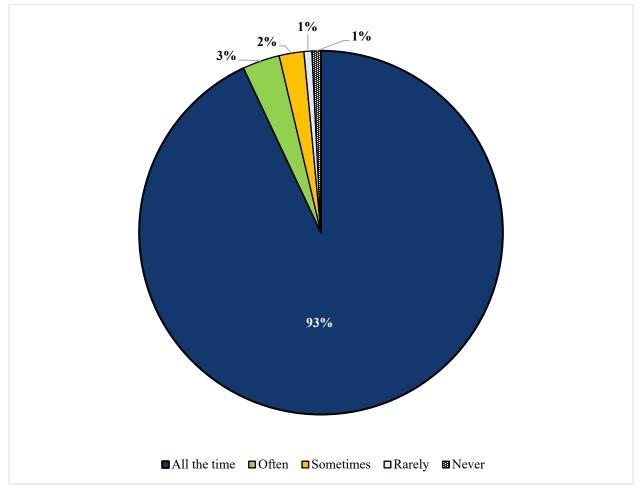


Q54. Did you change your driving behavior as a result of receiving the [ticket/warning] for speeding? (n = 266) Figure 65. Changing driving behavior as a result of sanction by driver type

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## **Other Risky Behavior**

The next series of survey questions examined the incidence of risky driving behaviors, such as not wearing seat belts while driving, driving after consuming alcohol, and talking and texting while driving. Most respondents (93%) reported that they wear a seat belt all the time while driving their primary motor vehicle (Figure 66).



Q55. When driving your primary motor vehicle how often do you wear your seat belt? (n = 5,514) Figure 66. Seat belt usage

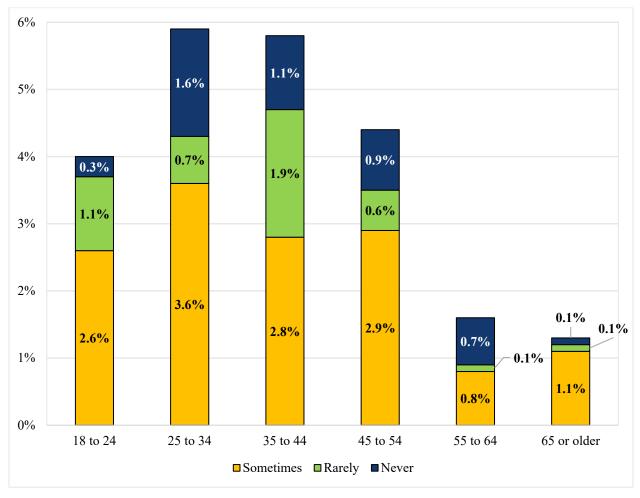
Table 30 shows the percentages of respondents selecting each response category for frequency of seat belt use. While most respondents said they wear a seat belt all the time, there were differences in seat belt use between certain demographic groups. The percentage of respondents who use a seat belt all the time decreased as both education level and income decreased. Fewer respondents who live in a non-metropolitan area reported wearing a seat belt all the time than those who live in a metropolitan area.

55. When driving your primary motor vehicle how often do you wear your seat belt?	n	All the time	Often	Sometimes	Rarely	Never	My primary vehicle is a motorcycle
Overall	5,514	93.0%	3.3%	2.2%	0.7%	0.8%	0.0%
Age	1					1	1
18 to 24	240	93.9%	2.1%	2.6%	1.1%	0.3%	0.0%
25 to 34	787	91.5%	2.6%	3.6%	0.7%	1.6%	0.0%
35 to 44	774	89.3%	4.9%	2.8%	1.9%	1.1%	0.0%
45 to 54	752	92.0%	3.6%	2.9%	0.6%	0.9%	0.0%
55 to 64	1,141	96.0%	2.4%	0.8%	0.1%	0.7%	0.0%
65+	1,774	95.2%	3.5%	1.1%	0.1%	0.1%	0.1%
Sex							
Male	2,643	90.9%	4.1%	2.7%	1.3%	0.8%	0.0%
Female	2,830	95.0%	2.4%	1.7%	0.2%	0.7%	0.0%
Ethnicity/Race							
Hispanic	513	94.3%	3.2%	1.8%	0.0%	0.7%	0.0%
Non-Hispanic White	4,001	92.4%	3.6%	2.2%	1.0%	0.9%	0.0%
Non-Hispanic Black	320	93.6%	2.6%	2.7%	0.4%	0.8%	0.0%
Non-Hispanic Asian	263	94.6%	1.8%	3.0%	0.4%	0.2%	0.0%
Non-Hispanic Other	353	92.8%	3.3%	2.7%	0.7%	0.4%	0.0%
Education							
Less than high school	119	87.9%	3.0%	4.8%	1.3%	3.0%	0.0%
High school diploma	739	92.4%	2.9%	2.9%	0.9%	0.9%	0.0%
Some college	1,542	92.6%	4.7%	1.9%	0.4%	0.4%	0.0%
College degree	1,407	93.9%	2.7%	1.8%	0.9%	0.7%	0.0%
Graduate degree	1,646	96.3%	2.0%	0.9%	0.3%	0.5%	0.0%

Table 30. Seat belt use by demographics

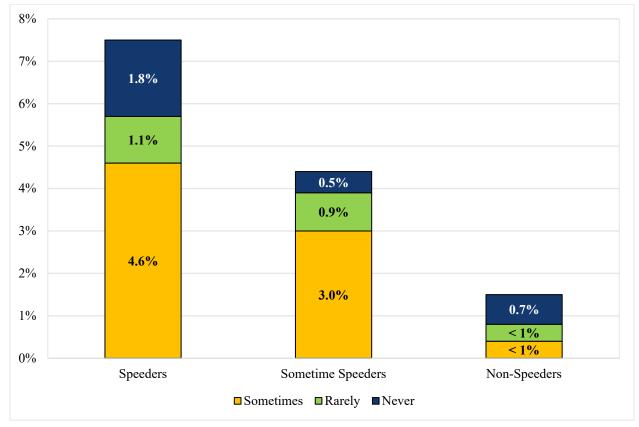
55. When driving your primary motor vehicle how often do you wear your seat belt?	n	All the time	Often	Sometimes	Rarely	Never	My primary vehicle is a motorcycle
Income							-
< \$35,000	976	89.9%	3.9%	4.3%	1.1%	0.8%	0.0%
\$35,000 to \$50,000	567	92.5%	4.1%	0.9%	1.5%	1.0%	0.0%
\$50,000 to \$75,000	945	93.9%	4.1%	1.5%	0.1%	0.4%	0.0%
\$75,000 to \$100,000	842	93.6%	2.9%	1.5%	0.9%	1.1%	0.0%
\$100,000 to \$150,000	930	96.0%	2.2%	1.1%	0.3%	0.5%	0.1%
\$150,000 or more	1,058	94.5%	1.8%	2.4%	0.1%	1.2%	0.0%
Metro status							
Metropolitan	4,710	93.4%	3.0%	2.1%	0.8%	0.6%	0.0%
Non-metropolitan	804	90.6%	4.7%	2.7%	0.3%	1.6%	0.0%
Driver type							
Nonspeeders	2,337	96.0%	2.5%	0.4%	0.4%	0.7%	0.0%
Sometime Speeders	2,394	92.0%	3.6%	3.0%	0.9%	0.5%	0.0%
Speeders	780	88.3%	4.4%	4.6%	1.1%	1.8%	0.0%

Examining seat belt usage by driver age shows that respondents ages 18 to 54 were more likely than older respondents to report sometimes, rarely, or never using a seat belt (Figure 67). Respondents 25 to 34 were more likely to report never wearing a seat belt than any other age group (2%).



Q55. When driving your primary motor vehicle how often do you wear your seat belt? (n = 5,514) Figure 67. Seat belt usage by driver age

Examining seat belt use by driver type shows that speeders were more likely (8%) than sometime speeders (4%) and nonspeeders (2%) to wear their seat belt sometimes, rarely, or never (Figure 68).



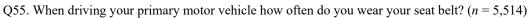
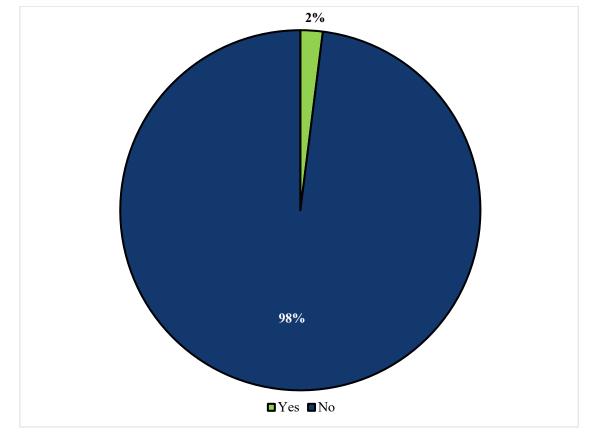


Figure 68. Seat belt usage by driver type

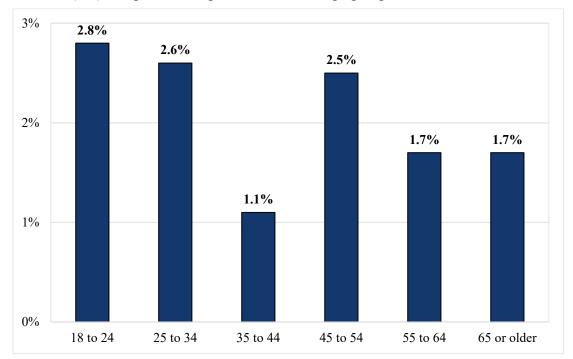
When asked about driving a motor vehicle after consuming alcohol in the past 30 days, only a small portion of respondents (2%) indicated that they had driven after consuming too much alcohol to drive safely, while the majority (98%) had not (Figure 69).



Q56. In the past 30 days, have you driven a motor vehicle when you thought you might have consumed too much alcohol to drive safely? (n = 5,518)

Figure 69. Alcohol consumption and driving

Although very few respondents reported driving a motor vehicle after consuming too much alcohol to drive safely, differences exist between age groups (Figure 70). Those aged 35 to 44 were least likely to say they have driven a vehicle when they thought they might have had too much to drink (1%) compared to respondents in other age groups.



Q56. In the past 30 days, have you driven a motor vehicle when you thought you might have consumed too much alcohol to drive safely? (n = 5,518)

Figure 70. Alcohol consumption and driving by age

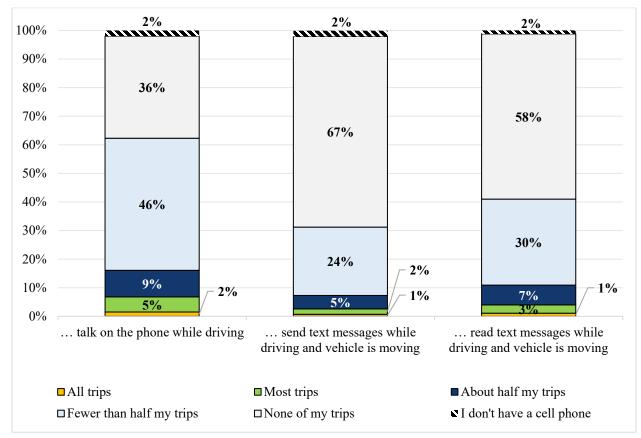
Examining the percentages of respondents who reported driving after consuming alcohol shows that respondents with less than a high school education were the most likely to drive after consuming alcohol (Table 31). As education level rises, the percentage of respondents saying they drive after consuming alcohol decreases. Additionally, speeders were more likely than sometime speeders and nonspeeders to report driving after consuming alcohol (4%), and respondents living in metropolitan areas were more likely to say so than non-metropolitan respondents.

56. In the past 30 days, have you driven a motor			
vehicle when you thought you might have			
consumed too much alcohol to drive safely?	n	Yes	No
Overall	5,518	2.0%	98.0%
Age			
18 to 24	240	2.8%	97.2%
25 to 34	789	2.6%	97.4%
35 to 44	777	1.1%	98.9%
45 to 54	753	2.5%	97.5%
55 to 64	1,143	1.7%	98.3%
65+	1,769	1.7%	98.3%
Sex			
Male	2,649	1.9%	98.1%
Female	2,830	2.2%	97.8%
Ethnicity/Race			
Hispanic	514	2.1%	97.9%
Non-Hispanic White	4,005	2.0%	98.0%
Non-Hispanic Black	321	1.6%	98.4%
Non-Hispanic Asian	263	3.5%	96.5%
Non-Hispanic Other	353	1.8%	98.2%
Education***			•
Less than high school	120	6.9%	93.1%
High school diploma	739	2.0%	98.0%
Some college	1,541	1.7%	98.3%
College degree	1,411	1.6%	98.4%
Graduate degree	1,647	1.4%	98.6%
Income			
<\$35,000	978	2.6%	97.4%
\$35,000 to \$50,000	570	0.9%	99.1%
\$50,000 to \$75,000	945	1.8%	98.2%
\$75,000 to \$100,000	845	0.8%	99.2%
\$100,000 to \$150,000	930	2.4%	97.6%
\$150,000 or more	1,059	2.1%	97.9%
Metro status*			
Metropolitan	4,714	2.2%	97.8%
Non-metropolitan	804	0.9%	99.1%
Driver type***			
Nonspeeders	2,341	1.0%	99.0%
Sometime Speeders	2,391	2.1%	97.9%
Speeders	784	4.4%	95.6%

Table 31.	Alcohol	consump	otion	and	driving	by den	10graph	ics

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Respondents were asked how often they engage in three other risky behaviors while driving: (1) talking on the phone, (2) sending text messages, and (3) reading text messages (Figure 71). These questions did not specify if cell phone usage was done manually or with a hands-free device or Bluetooth function. Almost half of respondents (46%) reported talking on their phone for fewer than half of their trips and over one-third (36%) reported never talking on the phone. Over two-thirds of respondents (67%) reported they never send text messages while driving and the vehicle is moving, and 58% reported they never read text messages while driving. The percentage of respondents engaging in any of these risky behaviors for all or most trips is low, but 5% of respondents reported talking on the phone while driving for most trips.

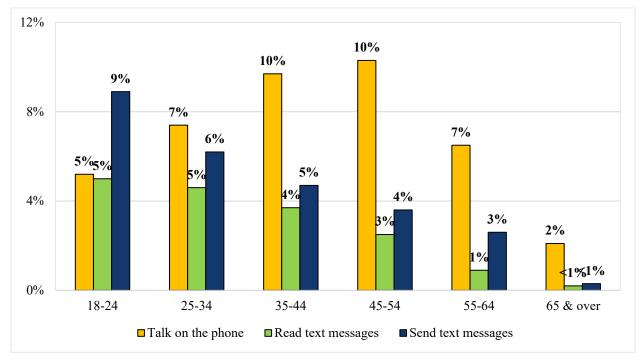


Q57. How often do you talk on the phone while you are driving? (n = 5,507)

Q58. How often do you <u>send</u> text messages while you are driving, and the vehicle is moving? (n = 5,499) Q59. How often do you <u>read</u> text messages while you are driving, and the vehicle is moving? (n = 5,496)

Figure 71. Talking on the phone, sending text messages, and reading text messages while driving

The percentage of respondents, by age, who engaged in risky driving behaviors on all or most trips was highest for respondents 35 to 54. They were more likely than other age groups to talk on the phone on all or most trips. Younger respondents were more likely than older respondents to read text messages while driving, and the youngest respondents (18 to 24) were more likely than other age groups to read text messages while driving on all or most trips. The oldest respondents (65 and older) were the least likely age group to engage in any risky cell phone usage behavior while driving (Figure 72).



Q57. How often do you talk on the phone while you are driving? (n = 5,507) Q58. How often do you <u>send</u> text messages while you are driving, and the vehicle is moving? (n = 5,499) Q59. How often do you <u>read</u> text messages while you are driving, and the vehicle is moving? (n = 5,496)

Figure 72. Percentages of respondents engaging in risky behaviors on all trips or most trips by age

Table 32 shows the frequency of talking on the phone while driving by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Men were more likely than women to report talking on the phone when driving. Respondents at higher income levels were more likely to talk on the phone while driving, with 78% of those with an income of \$150,000 or more doing so on at least some of their trips, compared to just 49% of those with an income of less than \$35,000. Respondents in metropolitan areas were more likely than those in non-metropolitan areas to talk on the phone while driving.

57. How often do					Fewer		I don't
you talk on the				About	than		have a
phone while you		All	Most	half my	half my	None of	cell
are driving?	n	trips	trips	trips	trips	my trips	phone
Overall	5,507	1.5%	5.3%	9.3%	46.2%	35.7%	2.0%
Age							
18 to 24	240	1.7%	3.5%	10.0%	47.7%	36.5%	0.7%
25 to 34	789	0.7%	6.7%	12.1%	48.7%	30.2%	1.5%
35 to 44	775	1.8%	7.9%	10.7%	48.8%	29.9%	1.0%
45 to 54	752	2.8%	7.5%	11.6%	46.9%	28.8%	2.3%
55 to 64	1,141	1.6%	4.9%	8.7%	48.0%	35.9%	0.9%
65+	1,766	0.5%	1.6%	3.9%	39.5%	49.6%	4.8%
Sex							
Male	2,640	2.0%	5.5%	9.3%	47.8%	33.7%	1.7%
Female	2,829	1.0%	5.2%	9.3%	44.9%	37.3%	2.3%
Ethnicity/Race							
Hispanic	515	1.1%	4.5%	6.6%	47.9%	37.9%	2.1%
Non-Hispanic White	3,998	1.6%	5.5%	9.5%	46.2%	35.2%	1.9%
Non-Hispanic Black	318	2.5%	6.0%	13.1%	44.8%	30.4%	3.2%
Non-Hispanic Asian	263	0.0%	1.7%	6.4%	47.7%	42.6%	1.7%
Non-Hispanic Other	353	0.3%	10.0%	8.7%	46.0%	33.3%	1.7%
Education							
Less than high school	119	1.2%	3.1%	5.9%	37.9%	47.3%	4.5%
High school diploma	738	2.0%	4.2%	7.6%	36.9%	46.6%	2.7%
Some college	1,536	1.5%	5.9%	9.6%	51.1%	30.2%	1.6%
College degree	1,410	0.7%	7.3%	11.4%	52.4%	27.0%	1.2%
Graduate degree	1,647	1.4%	5.1%	11.5%	52.2%	28.5%	1.2%
Income							
< \$35,000	976	0.7%	4.5%	7.7%	36.1%	46.9%	4.1%

Table 32. Talking on the phone while driving by demographics

57. How often do					Fewer		I don't
you talk on the				About	than		have a
phone while you		All	Most	half my	half my	None of	cell
are driving?	n	trips	trips	trips	trips	my trips	phone
\$35,000 to \$50,000	569	0.4%	5.2%	7.9%	46.6%	37.9%	1.9%
\$50,000 to \$75,000	941	1.5%	6.1%	9.5%	47.2%	34.1%	1.6%
\$75,000 to	842	0.9%	5.1%	10.9%	50.4%	31.9%	0.8%
\$100,000	042						
\$100,000 to	929	3.3%	5.3%	10.1%	53.8%	27.0%	0.5%
\$150,000	929						
\$150,000 or more	1,058	3.0%	7.2%	12.2%	55.1%	22.1%	0.4%
Metro status							
Metropolitan	4,705	1.4%	5.3%	9.9%	46.8%	34.6%	1.9%
Non-metropolitan	802	1.8%	5.3%	5.8%	42.7%	41.8%	2.7%
Driver type							
Nonspeeders	2,332	0.6%	3.2%	6.1%	41.2%	46.6%	2.4%
Sometime Speeders	2,388	1.5%	5.2%	11.2%	50.1%	30.0%	2.1%
Speeders	784	3.6%	11.1%	12.1%	48.1%	24.1%	1.0%

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

Table 33 shows the frequency of sending text messages while driving by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Men were more likely than women to report sending text messages while driving. As income and education increased, so did the likelihood of sending text messages while driving. Respondents living in metropolitan areas were more likely than respondents living in non-metropolitan areas to send text messages while driving.

				1		
58. How often do you send text messages while you are driving and the vehicle is moving?	п	All trips	Most trips	About half my trips	Fewer than half my trips	None of my trips
Overall	5,395	0.7%	2.0%	4.8%	24.4%	68.1%
Age						
18 to 24	236	0.9%	4.1%	9.6%	32.0%	53.5%
25 to 34	781	1.1%	3.5%	8.6%	32.4%	54.5%
35 to 44	771	0.8%	2.9%	7.2%	33.2%	55.9%
45 to 54	744	0.8%	1.7%	4.2%	27.7%	65.4%
55 to 64	1,129	0.5%	0.4%	1.2%	18.2%	79.6%
65+	1,694	0.1%	0.1%	0.3%	8.0%	91.5%
Sex	1,051	01170	01170	01070	0.070	71.070
Male	2,586	1.2%	2.1%	5.2%	26.0%	65.5%
Female	2,777	0.2%	1.8%	4.6%	23.2%	70.3%
Ethnicity/race		01270	11070			,
Hispanic	503	0.8%	2.6%	4.4%	27.9%	64.3%
Non-Hispanic White	3,919	0.7%	2.0%	5.3%	23.0%	69.0%
Non-Hispanic Black	308	0.6%	1.6%	2.9%	28.7%	66.2%
Non-Hispanic Asian	260	0.1%	1.2%	5.8%	20.6%	72.4%
Non-Hispanic Other	346	0.1%	1.4%	5.4%	27.9%	65.1%
Education						
Less than high school	112	1.3%	2.3%	6.5%	18.6%	71.4%
High school diploma	705	0.9%	1.3%	4.0%	22.0%	71.9%
Some college	1,507	0.5%	2.7%	4.3%	24.6%	67.9%
College degree	1,392	0.3%	1.4%	7.3%	29.4%	61.5%
Graduate degree	1,627	0.8%	2.8%	3.8%	25.9%	66.7%
Income						
< \$35,000	922	0.6%	1.8%	4.1%	22.1%	71.4%
\$35,000 to \$50,000	552	0.0%	2.2%	5.3%	17.9%	74.6%
\$50,000 to \$75,000	930	0.5%	2.0%	5.8%	25.3%	66.4%
\$75,000 to \$100,000	833	0.5%	1.6%	6.3%	24.5%	67.2%
\$100,000 to \$150,000	923	0.9%	2.6%	2.9%	30.8%	62.9%
\$150,000 or more	1,056	1.8%	2.0%	6.2%	28.9%	61.1%
Metro status						
Metropolitan	4,620	0.7%	2.0%	5.1%	24.9%	67.3%
Non-metropolitan	775	0.4%	1.6%	3.2%	21.8%	73.0%
Driver type						
Nonspeeders	2,269	0.4%	1.0%	1.1%	15.3%	82.2%
Sometime Speeders	2,345	0.3%	1.3%	6.2%	29.0%	63.2%
Speeders	778	2.3%	6.2%	10.4%	34.4%	46.7%
*** $p < 0.01$ ** $p < 0.01$			•		÷	

Table 33. Sending text messages while driving by demographics

\*\*\* p < .001, \*\* p < .01, and \* p < .05

Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

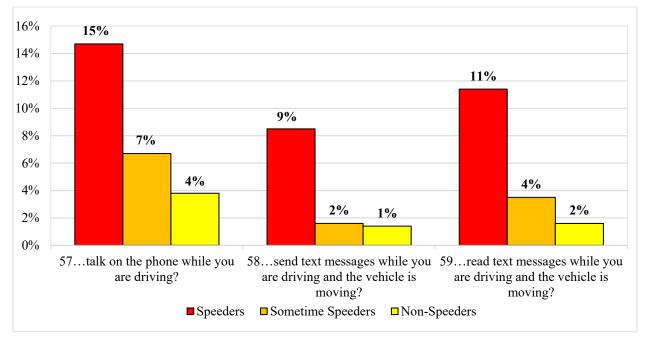
Table 34 shows the frequency of reading text messages while driving by driver age, sex, ethnicity/race, education, income, metro status, and driver type. Men were more likely than women to report reading text messages while driving. Overall, as education and income increased, the percentage of respondents reading text messages on none of their trips decreased.

59. How often do you read text messages						
while you are				About	Fewer	
driving, and the			Most	half my	than half	None of
vehicle is moving?	n	All trips	trips	trips	my trips	my trips
Overall	5,392	1.1%	2.9%	6.9%	30.1%	59.0%
Age						
18 to 24	236	2.2%	6.7%	11.8%	35.3%	44.1%
25 to 34	781	1.1%	5.1%	12.4%	35.1%	46.3%
35 to 44	771	1.2%	3.5%	10.1%	36.2%	49.0%
45 to 54	745	0.8%	2.8%	6.2%	32.7%	57.5%
55 to 64	1,129	1.5%	1.1%	2.7%	28.2%	66.6%
65+	1,691	0.1%	0.2%	0.7%	17.0%	82.0%
Sex						
Male	2,584	1.5%	3.8%	7.7%	32.0%	55.0%
Female	2,777	0.6%	2.1%	6.3%	28.5%	62.5%
Ethnicity/Race						
Hispanic	505	0.9%	3.7%	6.5%	33.4%	55.4%
Non-Hispanic White	3,917	1.0%	3.0%	7.0%	29.3%	59.7%
Non-Hispanic Black	307	1.8%	0.8%	5.4%	33.6%	58.5%
Non-Hispanic Asian	260	0.1%	4.9%	9.4%	25.3%	60.3%
Non-Hispanic Other	345	0.7%	2.8%	9.8%	27.1%	59.6%
Education						
Less than high school	112	1.3%	5.4%	7.6%	19.4%	66.4%
High school diploma	705	1.6%	2.0%	5.6%	25.3%	65.5%
Some college	1,505	1.1%	3.3%	6.4%	32.8%	56.5%
College degree	1,393	0.2%	3.5%	10.1%	34.4%	51.7%
Graduate degree	1,626	1.1%	2.8%	6.4%	34.7%	55.2%
Income						
<\$35,000	922	1.1%	2.1%	7.4%	24.9%	64.6%
\$35,000 to \$50,000	551	0.3%	4.4%	5.6%	24.9%	64.8%
\$50,000 to \$75,000	929	0.6%	3.2%	7.2%	32.8%	56.2%
\$75,000 to \$100,000	833	0.6%	2.7%	8.8%	29.7%	58.2%
\$100,000 to \$150,000	923	1.0%	3.7%	5.0%	39.0%	51.4%
\$150,000 or more	1,056	3.2%	3.0%	7.4%	34.9%	51.5%
Metro status						
Metropolitan	4,619	1.1%	2.9%	7.1%	30.7%	58.1%
Non-metropolitan	773	0.8%	2.9%	6.0%	26.1%	64.3%
Driver type						
Nonspeeders	2,269	0.4%	1.2%	2.0%	23.7%	72.8%
Sometime Speeders	2,342	0.7%	2.8%	8.3%	34.7%	53.5%
Speeders	778	3.8%	7.6%	15.1%	33.5%	40.0%

Table 34. Reading text messages while driving by demographics

Group comparisons were not conducted for any groups that included one or more cells with a count of zero.

As shown in Figure 73, speeders were more likely than sometime speeders and nonspeeders to engage in each risky cell phone usage behavior while driving. Speeders were twice as likely as sometime speeders and over three times as likely as nonspeeders to talk on the phone while driving. While sometime speeders and nonspeeders were both equally unlikely to send text messages while driving, almost 1 in 10 speeders (9%) reported sending texts while driving. Similarly, speeders were over twice as likely as sometime speeders and over five times as likely as nonspeeders to read text messages while driving.



Q57. How often do you talk on the phone while you are driving? (n = 5,507)

Q58. How often do you <u>send</u> text messages while you are driving, and the vehicle is moving? (n = 5,499) Q59. How often do you <u>read</u> text messages while you are driving, and the vehicle is moving? (n = 5,496)

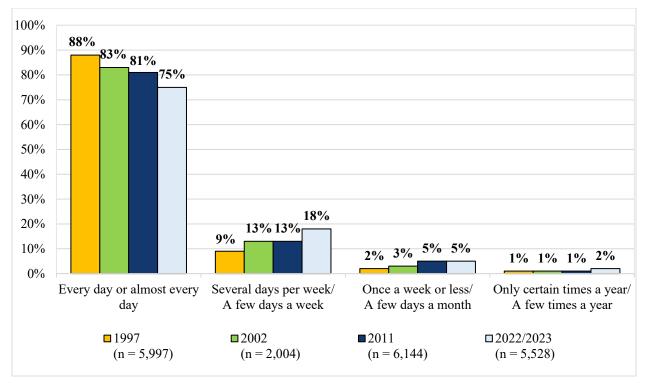
Figure 73. Percentages of respondents talking on the phone, sending text messages, and reading text messages while driving on all or most trips by driver type

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# **Trend Analysis**

There are nine variables that have remained consistent across the NSSAB survey iterations in 1997, 2002, 2011, and 2022-2023. This section examines these variables for trends over time. The topics are frequency of driving a motor vehicle, passing behavior, driver attitudes, law enforcement speeding stops, tickets and warnings for speeding violations, and tickets from a speed camera. These comparisons offer understanding of how the driving behaviors and speeding attitudes of U.S. respondents may have changed over 25 years. Readers are cautioned that the changes in methodology can affect comparability of data across years. In addition, the 2022-2023 iteration only included respondents 18 and older, whereas previous iterations included respondents ages 16 and 17.

At the beginning of each survey, respondents were asked how often they drive. As shown in Figure 74, respondents who reported driving "every day, or almost every day" remained the largest group across the years. However, the proportion of "everyday drivers" has steadily decreased from 88% in 1997 to 75% in 2022-2023, with corresponding increases (9% in 1997 to 18% in 2022-2023) for respondents indicating that they drive "several days a week."

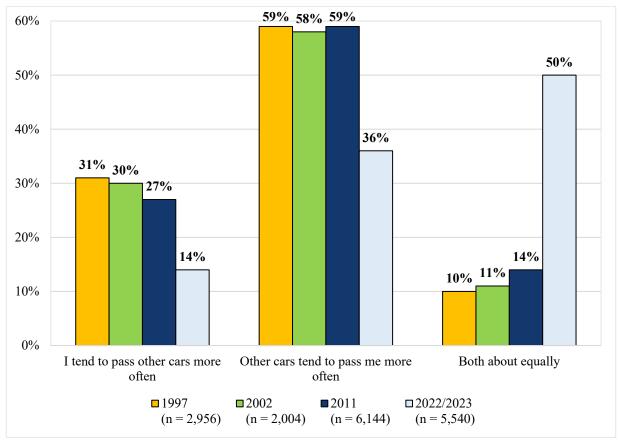


1997, 2002, 2011 – Q1. How often do you usually drive a car or other motor vehicle? Would you say that you usually drive...?

2022-2023 – Q1. The next few questions ask about your general driving experiences. For these questions, a motorcycle counts as a motor vehicle. How often do you usually drive a car or other motor vehicle?

Figure 74. Frequency of driving motor vehicles by year

Respondents in each study were asked about their passing behaviors—whether they tend to pass other cars more often or whether other cars tend to pass them more often. The 2022-2023 respondents were much more likely to indicate that they pass other cars and are passed by other cars about equally compared with previous studies (50% in 2022-2023 compared with 10% to 14% from 1997 to 2011). Of note, the 1997, 2002, and 2011 questionnaires were administered over the telephone, and the two first options (I tend to pass other cars more often/Other cars tend to pass me more often) were read out loud and in randomized order. During the 1997, 2002, and 2011 administration periods, option three ("both equally") was only recorded if the respondent volunteered this answer. In 1997, the sample was divided into two groups (Version A and Version B), and some questions were only asked of approximately half of the respondents, noted in the figure footnotes below. Figure 75 shows the drastic jump toward respondents in 2022-2023 choosing the neutral third option that previous respondents were not directly provided. Considering only those respondents who chose one of the first two response options (that were presented consistently for all four years), the pattern over time has remained consistent-it is substantially more likely for people to say they tend to be passed more often than they pass other cars.



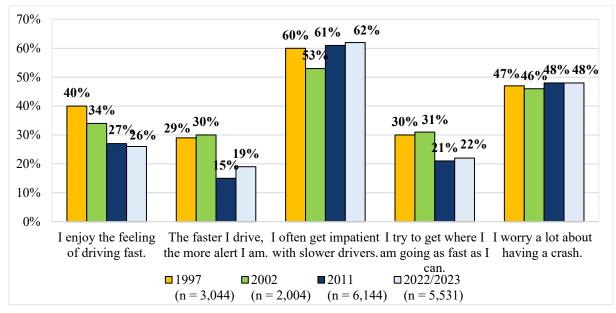
1997 – Q8a. [Ask if Version A] Which of the following statements best describes your driving? READ AND ROTATE 1&2, 3 not read aloud.

2002 - Q4a. Which of the following statements best describes your driving? READ AND ROTATE 1&2, 3 not read aloud. 2011 - Q3. Which of the following statements best describes your driving? READ AND ROTATE 1&2, 3 not read aloud. 2022-2023 - Q3. Which of the following statements best describes your driving? (All options visible in mail and web)

Figure 75. Passing behavior by year

Each study included a comparable series of attitudes and beliefs associated with driving, as shown in Figure 76. Enjoyment of fast driving continues to decrease over the four studies, with 26% of 2022-2023 respondents and 27% of 2011 respondents agreeing with this statement, compared with 40% in 1997. The percentage of respondents who strongly agreed or somewhat agreed that "the faster they drive, the more alert they feel" increased to 19% in 2022-2023 from 15% in 2011, after having dropped by half from 2002 respondents, who agreed 30% of the time. In 1997 and 2002, approximately 3 in 10 respondents (30% in 1997 and 31% in 2002) strongly agreed or somewhat agreed that they try to get to their destination as quickly as possible. However, in 2011 and 2022-2023, only about 1 in 5 (21% and 22%) strongly or somewhat agreed with this statement.

Feelings of impatience with slow drivers and worrying about having a crash remained relatively steady over the course of the four surveys. Respondents are more impatient with slower drivers in 2022-2023, with more than half of respondents agreeing with this statement; the lowest agreement of 53% occurred in 2002 compared to the highest agreement of 62% in 2022-2023. Respondents worrying a lot about having a crash remained between 46% and 48% across the four studies.



1997 – Q10. [Ask if Version B] People have different feelings about driving. I'd like you to tell me whether you agree or disagree with the following statement about driving.

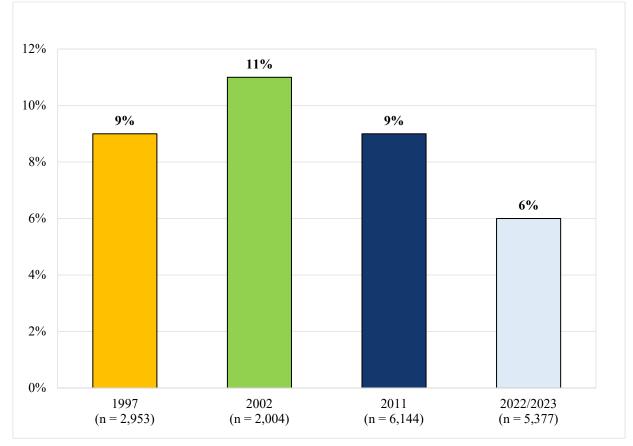
2002 - Q5. People have different feelings about driving. I'd like you to tell me whether you agree or disagree with the following statements about driving. For each of the statements, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. (Read and rotate A-E)

2011 – Q9. Now I'm going to read a few statements. After I read each one, please tell me whether you agree, disagree, or neither. (READ ITEM). Would you say you strongly (AGREE/DISAGREE) or somewhat (AGREE/DISAGREE)?

2022-2023 – Q26. Please tell us how much you agree or disagree with the following statements. Note: In 1997 and 2002, these attitude questions were collected using a 4-point scale and in 2011 and 2022-2023 using a 5-point scale, which may affect comparability of trends for these items.

Figure 76. Driver attitude trends—strongly or somewhat agree

The percentage of respondents reporting being stopped by the police for speeding decreased to 6% in 2022-2023 from 9% to 11% in previous years of the study. In the 2011 and 2022-2023 surveys, respondents were asked specifically about being pulled over for speeding, whereas in the 1997 and 2002 studies, respondents were asked if they had been pulled over in the past 12 months for any reason. In these previous questionnaires, respondents were then asked for what reason or reasons they were pulled over. To enable comparison of responses from the previous studies to the current study, a new variable was created for both the 1997 data and the 2002 data that combined the first question about being stopped with the follow-up question about the reason for the stop, which identified respondents reported they were stopped by a police officer for speeding in the past 12 months. In 2002, this percentage was 11%, and in 2022-2023, it dropped to 6%.



1997 – Q97a. [ask if Version A] In the past 12 months, have you been STOPPED by the police for any traffic-related reason? Q97c. What were you stopped for?

2002 – Q79. In the past 12 months have you been STOPPED by the police for any traffic related reason? Q81. What type of traffic related violation have you been stopped for?

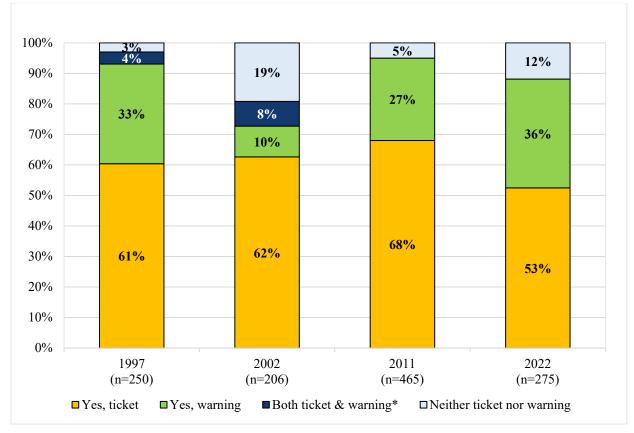
2011 - Q30. In the past TWELVE MONTHS have you been STOPPED for speeding by the police?

2022-2023 - Q52. How many times have you been stopped for speeding in the past 12 months?

Note: In the 2022-2023 survey, respondents were asked to provide the number of times they were stopped using a numeric box (without a lead-in yes/no item as with prior years), which could impact comparability over time.

Figure 77. Trends for stopped for speeding in past 12 months

The most common outcome across years when a driver is stopped for speeding was to receive a ticket (see Figure 78). The proportion of respondents who received tickets when stopped for speeding violations by police was 61%, 62%, and 68% in 1997, 2002, and 2011. The proportion of respondents reporting being ticketed by the police during a speeding violation stop dropped to 53% in 2022-2023. In the 1997 and 2002 surveys, respondents were asked if they had received a ticket, a warning, or both during any traffic stop in the past 12 months. In the 2011 survey, respondents were first asked if they'd received a ticket on their most recent traffic stop; if they reported that they had not received a ticket for speeding were not asked if they also received a warning. In 2022-2023, it was asked as a single item in which respondents could say "yes, a ticket," "yes, a warning," or "no" regarding their most recent time stopped for speeding. In 2022-2023, the proportion of respondents stopped for a speeding violation who received a warning was 36%. Over the course of the four surveys, 3% to 19% of respondents stopped for speeding violations indicated that they received neither a ticket nor a warning, with 12% reporting this in 2022-2023.



\*Response option "Both" only present in 1997 and 2002 surveys.

1997 – Q97d. Did you receive a ticket or warning (on any of those occasions)?

2002 - Q82. Did you receive (A. a ticket/B. a written warning) on any of these occasions?

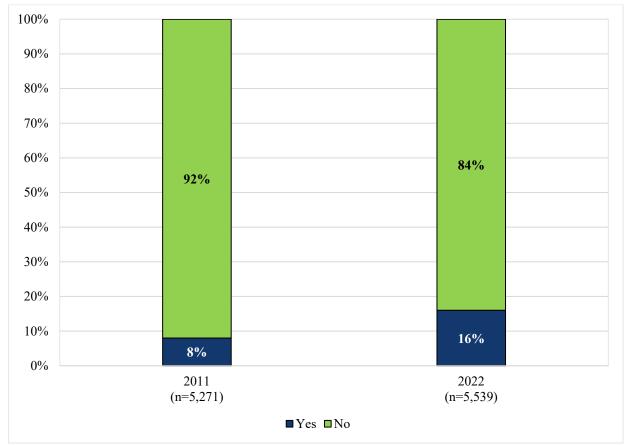
2011 – Q32a. Did you receive a ticket during the last time you were stopped for speeding?

Q32b. Did you receive a warning the last time you were stopped for speeding?

2022-2023 - Q53. Did you receive a ticket or warning the last time you were stopped for speeding?

Figure 78. Among those stopped for speeding, tickets, and warnings by year

A question was added in the 2011 and 2022-2023 surveys about whether respondents had ever received a ticket in the mail for a speeding violation, identified by a speed safety camera and sent automatically. The proportion of respondents who had ever received a ticket by mail from a speed safety camera doubled from 8% in 2011 to 16% in 2022-2023 (Figure 79).



2011 – Q18. [ask if driver ever heard of speed cameras] Have you ever received a ticket in the mail for a speed violation identified by a speed camera?

2022-2023 – Q35. [ask all] Question text identical to 2011.

Figure 79. Ever received ticket in mail for violation identified by speed camera

# Conclusion

The 2022-2023 NSSAB provides nationally representative data on speeding, including driver behavior and attitudes toward speeding in the United States. Unlike previous iterations of the survey, which used random-digit-dialing telephone surveys, the 2022-2023 survey used an address-based sampling design that used a mail-push-to-web approach to encourage respondents to complete the survey either online or by mail. The survey collected a total of 5,680 responses. The present study examined driver characteristics, driving behavior on different types of roads, norms and attitudes about speeding, attitudes toward enforcement and speeding countermeasures, automated speed safety camera devices, crash experience, personal sanctions, and other risky behaviors.

Using latent class analysis, researchers classified respondents as nonspeeders, sometime speeders, and speeders based on their responses to questions examining driving and speeding tendencies. Results from this study show that nonspeeders represent 39% of the population, sometime speeders represent 44% of the population, and speeders represent 17% of the population. Driver types show some differences in certain demographic characteristics. While the percentage of males and females classified as sometime speeders is the same, more females (42%) were classified as nonspeeders than were males (38%), and more males (18%) were classified as speeders than were females (14%). Younger respondents (18 to 24) and respondents with higher incomes (\$150,000 or more) comprised relatively higher percentages of speeders. In addition, certain NHTSA Regions had a relatively higher percentage of speeders than others (Regions 9, 1, and 2). Sometime speeders were more likely to be in Regions 1, 4, and 9, and nonspeeders were more likely to be in Regions 7, 10, 8, and 6.

Broadly, the survey results indicate that respondents have similar attitudes toward speeding from both a normative and personal perspective. Most respondents (91%) agreed or strongly agreed that people should keep pace with the flow of traffic. Most respondents also agreed or strongly agreed that everyone should obey the speed limit because it's the law (87%) and that it is unacceptable to exceed the speed limit by more than 20 mph (85%). Examining personal attitudes indicates that almost two-thirds of respondents (62%) agreed or strongly agreed that they often get impatient with slower drivers, and only about half (48%) agreed or strongly agreed that they worry a lot about having a crash.

Both normative and personal attitudes toward speeding vary by driver type. For example, nonspeeders were more than twice as likely as speeders to strongly agree that everyone should obey speed limits and that there is no excuse to exceed the speed limit. Conversely, speeders were 5 times more likely to report that they often get impatient with slower drivers and almost 12 times more likely to report that speeding is something they do without thinking. Similarly, more nonspeeders strongly agreed that driving at or near the speed limit reduces chances of an accident, while more speeders reported that driving at or near the speed limit makes them feel annoyed. These examples revealed significant attitudinal differences toward speeding between driver types.

Despite these differences observed between driver types throughout the survey results, respondents generally agreed that it is important to do something about speeding and generally agree about the use of certain countermeasures to reduce speeding, such as increasing public awareness about speeding, using electronic signs by the road to warn drivers when they are speeding, and increasing the use of speed cameras. Other countermeasures, such as more

frequent ticketing for speeding and issuing higher fines for speeding tickets, were less favorable across all respondents. Interestingly, all three driver types tended to agree about the use of countermeasures in their communities as well as the use of speed governors to reduce vehicle speed in certain situations. A large percentage of respondents said that the use of digital signs to change the speed limit on sections of road based on traffic or weather conditions is a good idea, even when examining by driver type. This data indicates that although driver types have differing attitudes toward speeding, there was some agreement about different countermeasures that can be employed to reduce speeding.

The survey concluded with questions about respondent crash experience, personal sanctions, and incidence of risky driving behaviors. Most respondents responded that they had not been involved in a speeding-related crash in the past 12 months. Of those who had, they tended to be younger respondents (18 to 24) or speeders. Fewer respondents reported that they were stopped for speeding in the past 12 months (6%) than in past iterations of the survey, but more respondents reported receiving a ticket in the mail (16%) than in the 2011 survey (8%), indicating that overall, the percentage of respondents receiving a speeding ticket may be like previous years. While most respondents indicated they wear a seat belt all the time, respondents 25 to 44 were more likely than other age groups to report wearing a seat belt sometimes, rarely, or never. Responses to questions about risky driving behaviors such as talking on the phone while driving, sending text messages while driving, and reading text messages while driving showed that over half of respondents (62%) reported talking on the phone while driving on at least some trips, compared to 32% of respondents who sent text messages while driving on at least some trips, and 41% of respondents who read text messages while driving on at least some trips. Overall, speeders were more likely to engage in these risky driving behaviors than the other driver types.

Nine variables have remained consistent across all four years of administration (1997, 2002, 2011, and 2022-2023). Results from the 2022-2023 survey were compared to past survey iterations to examine trends. The percentage of respondents who reported driving every day has steadily decreased from 88% in 1997 to 75% in 2022-2023. Some attitudes and beliefs associated with driving have changed over time. Enjoyment of fast driving decreased over time, with 26% of 2022-2023 respondents and 27% of 2011 respondents agreeing with this statement, compared with 40% in 1997. In 2022-2023, more respondents agree that "the faster they drive, the more alert they feel" (19%) than compared to 2011 (15%). Results from the 2022-2023 survey indicate that fewer respondents agree that they try to get to their destination as quickly as possible when compared to earlier iterations of the survey. Respondents were more impatient with slower drivers in 2022-2023, with more than half of respondents agreeing with this statement; the lowest agreement (53%) occurred in 2002 compared to the highest agreement (62%) in 2022-2023. Respondents worrying a lot about having a crash remained between 46% and 48% across the four iterations. Finally, the percentage of respondents self-reporting that they were stopped by the police for speeding decreased to 6% in 2022-2023 from 9% to 11% in previous years of the study.

A limitation of the survey was that it relied on respondents to self-report their driving behaviors, including sanctions and crash experience, two areas in which respondents might be hesitant to share personal experience.

Results of this study suggest that attitudinal and behavioral differences between driver types might require different speeding-reduction interventions aimed at different types of drivers.

While major differences were observed in responses between nonspeeders and speeders, most respondents were classified as sometime speeders (44%), and often, less-obvious differences existed between sometime speeders and the other two driver types. While sometime speeders generally have anti-speeding attitudes, they also engage in speeding behaviors from time to time, reflecting the nuances of identifying interventions that can reduce speeding behaviors in the general driver population.

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#### **Previous Survey Iterations**

#### 1998:

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#### 2013:

Schroeder, P., Kostyniuk, L., & Mack, M. (2013, December). 2011 national survey of speeding attitudes and behaviors (Report No. DOT HS 811 865). National Highway Traffic Safety Administration. <u>https://rosap.ntl.bts.gov/view/dot/1960</u> Appendix A. Methodology

#### **Methodology Introduction**

NHTSA has conducted four periodic administrations of surveys on speeding—in 1997, 2002, 2011, and 2022-2023. The NSSAB is a nationally representative survey of a randomly selected sample of drivers 18 and older on their attitudes, behavior, and awareness of speeding and speeding management traffic safety issues. This appendix presents the 2022-2023 NSSAB methodology.

The previous surveys in 1997, 2002, and 2011, were designed and implemented as random-digitdialing telephone surveys. To address declining survey response rates for telephone surveys and the need to ensure better coverage and representativeness of the sample, the 2022-2023 survey was transitioned to an address-based sampling design that used a mail-push-to-web approach to encourage respondents to complete the survey either online or by mail. In addition to the changes in method of household sampling and mode of administration from interviewer administered to self-administered, a third notable change was that this iteration sampled drivers 18 and older, whereas previous iterations of the survey sampled drivers 16 and older. Readers are cautioned that the changes in methodology can affect comparability of data across years.

The research team collected data from 5,680 respondents. Of those, 5,593 were drivers. A total of 3,663 completions with drivers were collected via web and 1,930 were collected via mail. Data collection began on September 28, 2022, and ended on January 23, 2023.<sup>1</sup>

# Sample Design

The 2022-2023 NSSAB was designed as a national sample of drivers 18 years and older, residing in the 50 States and the District of Columbia. A driver is defined as a person who has driven within the past year. Approximately 3% of adults in the United States are not drivers. Consequently, the design selects a probability sample of adults from sampled households. The interview screens for driving status of the selected adult and collects demographic data on nondrivers before they screen out while collecting the full survey data on drivers.<sup>2</sup>

The frame development and sample selection were conducted using Marketing Systems Group's Virtual GENESYS.<sup>3</sup>

#### Sample Frame

The sampling frame was all residential addresses on the U.S. Postal Service (USPS) computerized delivery sequence file, including city-style addresses (98.8%), PO boxes (1.1%), rural routes (< 0.1%), and highway contracts (< 0.1%). To maximize frame coverage of the population, units identified by USPS as seasonal (0.7%) and vacant (7.6%) were included. Only PO boxes designated as the "only way to get mail" were included to avoid the situation where a household has more than one chance of selection if they have a PO box and residential mail delivery.

<sup>&</sup>lt;sup>1</sup> NSSAB was carried out in compliance with International Standard 20252.

<sup>&</sup>lt;sup>2</sup> Data was collected in English and Spanish; those who speak neither language were excluded.

<sup>&</sup>lt;sup>3</sup> Marketing Systems Group, Horsham, PA. <u>www.m-s-g.com/Pages/genesys/virtual\_genesys</u>

#### Sample Size

The sample size was 7,000 drivers overall with a target of at least 500 per NHTSA region. Assuming a 1.75 design effect due to weighting, we expected national estimates to have a margin of error of  $\pm 1.5$  percentage points at the 95% confidence level and error margins for regional estimates ranging from  $\pm 4.2\%$  to  $\pm 5.8\%$ .<sup>4</sup> Table A-1 shows the size of the region in terms of total number of occupied housing units and the target sample size by region.

Prior to the start of full-scale data collection, the research team conducted a pilot study to estimate response rates. For a complete description, please refer to the Pilot Study section below. The response rate in the pilot study was 23.7%. We estimated that enhancements to the communications (enhanced postcard and additional letter) would increase the response rate to 24.7%, requiring 28,340 total addresses to obtain 7,000 completed surveys.

		2019 American Community Survey (ACS)		±95%
		Occupied	Target	Margin
NH	<b>FSA Region</b>	Housing Units	Completes	of Error
Unit	ed States	120,756,048	7,000	1.5%
1	Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	4,379,973	500	5.8%
2	Connecticut, New Jersey, New York, Pennsylvania	16,998,960	830	4.5%
3	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia	12,436,642	570	5.4%
4	Alabama, Florida, Georgia, South Carolina, Tennessee	17,882,156	870	4.4%
5	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin	20,571,711	950	4.2%
6	Louisiana, New Mexico, Mississippi, Oklahoma, Texas	14,795,848	830	4.5%
7	Arkansas, Iowa, Kansas, Missouri, Nebraska	6,726,468	500	5.8%
8	Colorado, Nevada, North Dakota, South Dakota, Utah, Wyoming	5,117,729	500	5.8%
9	Arizona, California, Hawaii	16,074,958	950	4.2%
10	Alaska, Idaho, Montana, Oregon, Washington	5,771,603	500	5.8%

Table A-1. Overall and regional sample size

<sup>&</sup>lt;sup>4</sup> The calculation for the maximum possible error, achieved for an estimated percentage of 50%, is also premised on a design effect of 1.75 due to weighting.

#### Two-Phase Sample for Stratification

The sample of addresses was a two-phase sample with a geographically stratified sample of addresses selected in phase 1. The frame was stratified geographically based on NHTSA region as well as the concentration of Hispanic and young adult populations in the census block group. Geographic areas with high concentrations of Hispanic or young adult populations were oversampled to increase the sample sizes of these populations. This oversampling was done to ensure an adequate number of respondents to represent this population. However, since the smaller regions were already being oversampled, the Hispanic and young adult geographic stratification occurred only for large NHTSA regions. The phase 1 sample included 42,510 addresses. The phase 1 geographic stratification and sample allocation is shown in Table A-2.

For the phase 2 stratification, a model-based age indicator (provided by Marketing System Group) was appended to the addresses to identify addresses where the head of household was likely to be between 18 and 34 years old. The sample of addresses was stratified based on the 18 to 34 indicator. The phase 2 selection oversampled addresses in the 18 to 34 stratum relative to the non-18 to 34 stratum. Table A-2 includes the phase 2 sample sizes.

Phase 1	Frame Counts	Phase 1 Sample Size	Phase 2	Matched Addresses	Phase 2 Sample Size
Small Regions					
1 Maine, Massachusetts, New Hampshire,	4,767,508	3,036	Likely 18–34	632	632
Rhode Island, Vermont			Not likely 18–34	2,404	1,392
7 Arkansas, Iowa, Kansas, Missouri,	7,434,046	3,036	Likely 18–34	692	692
Nebraska			Not likely 18–34	2,344	1,332
8 Colorado, Nevada, North Dakota, South	5,657,327	3,036	Likely 18–34	807	807
Dakota, Utah, Wyoming			Not likely 18–34	2,229	1,217
10 Alaska, Idaho, Montana, Oregon,	6,204,627	3,036	Likely 18–34	604	604
Washington			Not likely 18–34	2,432	1,420
Large Regions				•	
High Hispanic block groups	21,399,447	8,787	Likely 18–34	2,341	2,341
			Not likely 18–34	6,446	3,517
High young adult block groups	26,816,696	8,258	Likely 18–34	2,067	2,067
			Not likely 18–34	6,191	3,438
Not high Hispanic/young adult					
2 Connecticut, New Jersey, New	11,521,509	2,421	Likely 18–34	544	544
York, Pennsylvania			Not likely 18–34	1,877	1,070
3 Delaware, District of Columbia,	9,502,004	1,932	Likely 18–34	425	425
Kentucky, Maryland, North Carolina, Virginia, West Virginia			Not likely 18–34	1,507	863
4 Alabama, Florida, Georgia, South	13,771,801	2,620	Likely 18–34	526	526
Carolina, Tennessee	- ) )	)	Not likely 18–34	2,094	1,221
5 Illinois, Indiana, Michigan,	15,510,600	3,305	Likely 18-34	735	735
Minnesota, Ohio, Wisconsin	- ) ) )	- ,	Not likely 18–34	2,570	1,468
6 Louisiana, New Mexico,	7,706,644	1,513	Likely 18–34	330	330
Mississippi, Oklahoma, Texas	·····	y	Not likely 18–34	1,183	679
9 Arizona, California, Hawaii	6,875,035	1,530	Likely 18–34	271	271
· · · ·		,	Not likely 18–34	1,259	749

Table A-2. Two-phase stratified sample allocation

# Within Household Selection

The 2022-2023 NSSAB used a within-household respondent selection to achieve a representative sample of adults. Respondents were instructed to select the household member 18 or older with the next birthday to complete the survey.

#### Questionnaire

The 2022-2023 NSSAB questionnaire was based on the 2011 questionnaire and adapted for web and mail data collection. The average interview duration was 23.6 minutes for web administration. The questionnaires, in their entirety, are in Appendix B. The order of the final instrument sections was as follows.

- Introduction
- General driving information
- Speed behavior
- Speeding behavior on various road types
- Driving and speed limits
- Attitudes toward enforcement
- Speed safety cameras
- Opinions about reducing speeding
- Speeding tickets
- General driving behaviors
- Demographics

#### **Cognitive Testing**

The research team conducted cognitive testing for new and revised survey questions. The cognitive testing process involved reading each question, asking participants to "think aloud" while responding to the question, and asking follow-up questions to probe for additional information about the item. The goal was to identify any questions or response categories that posed problems for respondents and remove potential causes of response error.

The team conducted cognitive interviews on July 15 to 17, 2019. Respondents were 18 and older, had driver licenses, and were fluent in English. There was a mix of respondents by age, education, and gender. Each respondent signed an informed consent form and was paid \$75 for their participation. This payment was made using contract funds. All nine participants easily understood the questions. Results improved question clarity and led to modifying some response categories.

# **Usability Testing**

The team conducted usability testing on web and paper versions of the questionnaires. The goal of usability testing of self-administered questionnaires is to identify and resolve sources of confusion and error regardless of the mode of administration. The team conducted in-person user

testing sessions with a sample of representative respondents on March 10 to 11, 2020, in the Metro Washington, DC, area. Six respondents completed the web version of the questionnaire in desktop mode, six completed the web version in mobile mode, and five completed the mail/paper questionnaire.

The team asked participants a series of pre-session questions. Afterward, they were asked to complete the questionnaire on a variety of devices or on paper while implementing the thinkaloud protocol. Finally, participants were asked a series of post-session questions.

The team made changes to address usability testing feedback prior to pilot testing the survey.

## **Pilot Study**

The pilot study was used to test the entire NSSAB survey administration system prior to launching the full study. Data collection for the pilot study began on September 20, 2021, and ended December 17, 2021. Data was collected via web and mail. A total of 500 addresses were selected for the pilot study, with a goal of 150 to 160 completed responses, for a return rate of 30% to 32%. A total of 114 completed questionnaires were received for a return rate of 23%. The major finding from the pilot study was that the response rate was lower than expected and that mail delivery took longer than anticipated.

The following changes were made because of the pilot study:

- Increase the size of each mailing to ensure the required number of survey completions;
- Incorporate an experiment within the main data collection;
- Send an additional mailing; and
- Extend the data collection period to allow for slower mail delivery.

# **Data Collection**

#### Mailing Protocol

The mailing protocol had six successive events: (1) an invitation letter, (2) a reminder postcard, (3) a mail survey, (4) a final reminder postcard, (5) a final mail survey, and (6) a final reminder letter. All mailings were sent via USPS first-class mail. Mailing materials were addressed to "Current [CITY] Resident" and included the URL for the survey with a unique ID, as well as a QR code that sent respondents to a unique link. Households that completed the questionnaire either by web or mail were removed from further mailings. In addition, mailings that were returned by USPS as "undeliverable" were returned to the contractor's mail room and removed from any further mailings. There were cases that received more than one mailing before being removed from future mailings. This occurred when the completed questionnaire or "undeliverable" status was received after the mail room started processing the next mailing. The contents, dates, and quantities of the mailings are shown in Table A-3.

Event	Mailing Contents	Date Sent	Quantity
			Sent
1 - Invitation letter	One-page letter offering response by	9/28/2022	28,340
	web, \$1 cash		
2 - Reminder postcard #1	Postcard offering response by web	10/7/2022	27,613
3 - Mail survey packet #1	One-page letter offering response by	10/27/2022	25,187
	web or mail, 12-page questionnaire		
	booklet, business reply envelope		
4 - Reminder postcard #2	Postcard offering response by web or	11/7/2022	24,592
-	mail		
5 - Mail survey packet #2	One-page letter offering response by	11/21/2022	24,199
	web or mail, 12-page questionnaire		
	booklet, business reply envelope		
6 - Final reminder letter	One-page letter offering response by	12/15/2022	21,640
	web or mail		

Table A-3. Mailing protocol

# Spanish-Speaking Respondents

A Spanish-language version of the survey instrument was developed to eliminate language barriers for a small proportion of the U.S. adult population. The questionnaire was translated into Spanish by a professional translation firm. The Spanish questionnaire was then reviewed next to the English questionnaire by a different translator and checked for errors. Any translations that were not comparable were revised to be in line with the intent of the English questionnaire. Both the web and mail instruments were available in both languages.

Letters for events 1, 3, 5, and 6 were sent in both English and Spanish to households most likely to speak Spanish. The team determined these households by computing the percentage of limited English-speaking households for each block group. Addresses located in block groups where at least 15% of the households were considered limited English-speaking received bilingual materials. Bilingual materials were addressed to "Current [CITY] Resident/Residente Actual de [CITY]." Households in all other areas received letters in English with a message at the bottom, in Spanish, describing how to access the web survey in Spanish or how to request a paper survey in Spanish. As reminder postcards were smaller and included information on the front and back only, they followed a similar protocol with the main text in English and a message in Spanish at the bottom describing how to access the web survey in Spanish.

A total of 44 respondents completed the web survey in Spanish. The research team did not receive any requests for a Spanish mail survey and no mail surveys were completed in Spanish.

#### Incentives

The first invitation mailing included a \$1 bill inserted into the envelope. All materials offered \$5 for completing the questionnaire. Respondents who completed the questionnaire by web received a \$5 Amazon.com gift code at the end of the web questionnaire. Mail respondents received a letter with a \$5 bill included after the completed paper questionnaire was registered. All incentives were paid using contract funds.

## Helpdesk

A dedicated email helpdesk and a toll-free phone number were created for respondents who needed help with the survey or with accessing their incentive. The helpdesk was monitored Monday through Friday from 9 a.m. until 5 p.m. eastern standard time and was available to respondents throughout the entire fielding period. The most common messages received at the helpdesk were from respondents who wanted help with using the Amazon.com gift code incentive or wanted to be removed from the study.

## **Data Management**

## Mail Questionnaire Scanning

The team reviewed and manually entered returned mail into a database with an event code and receipt date. Completed forms were reviewed, prepared for scanning, and then scanned. The scanners collected optical marks (bubbles and checkboxes), barcodes (used for quality assurance procedures), and handwriting. In-process exception correction allowed data entry staff to view problems and make corrections on screen, alleviating the need to review the paper forms. Change logs tracked changes to data files for security. The scanner captured all mail questionnaire responses, regardless of whether they were appropriately marked.

## Mail Data Cleaning

After scanning the mail questionnaires, the team reviewed the mail questionnaire data by applying consistency and range checks. The team applied standard edits to error cases. The cleaned mail responses conformed to the skip patterns and ranges in the web survey, allowing the mail data to be merged with the data collected from the web instrument.

#### Combining Web and Mail Data

Variable naming and coding conventions differed by mode. In the final dataset, mail variables were recoded to match web variables.

#### Definition of a Complete and Partial Complete Questionnaire

For the web survey, eligible partial completes consist of records where the respondent was a current driver (Q1 = [01, 02, 03, 04]) and answered through Q50. Eligible full completes consist of records where the respondent was a current driver (Q1 = [01, 02, 03, 04]) and answered through the last substantive question asked of all respondents (Q68). For the mail survey, eligible completes were current drivers that provided at least one response to a substantive question.

### Sample Dispositions

Response rates provide one measure of a survey's quality, and there are several ways to calculate survey response rates. The team applied American Association for Public Opinion Research response rate formulas.<sup>5</sup> Final dispositions and response rates are in Table A-4 to Table A-6.

Disposition	Disposition Description	Count
Code		
1.1000	Complete	5,568
1.2000	Partial completed	25
2.1100	Refusal	62
2.1200	Break-off questionnaire too incomplete to process	378
3.1900	Nothing ever returned	19,721
4.1000	Selected respondent screened out of sample	92
4.3130	No such address	1,996
4.3134	USPS category: vacant	488
4.7000	No eligible respondent	10

*Table A-4. Dispositions* 

Summary Disposition	Count
I = Complete interviews (1.1)	5,568
P = Partial interviews (1.2)	25
R = Refusal and break off (2.1)	440
NC = Non-contact (2.2)	0
O = Other (2.0, 2.3)	0
E = Estimated proportion of cases of unknown eligibility that are eligible.	0.700
UH = Unknown household (3.19)	19,721
UO = Unknown other (3.2-3.9)	0

<sup>&</sup>lt;sup>5</sup> American Association for Public Opinion Research, Alexandria, Virginia. <u>www.aapor.org</u>

Formula	Rate
Response Rate 1: I/((I+P)+(R+NC+O)+(UH+UO))	21.6%
Response Rate 2: (I+P)/((I+P)+(R+NC+O)+(UH+UO))	21.7%
Response Rate 3: I/((I+P)+(R+NC+O)+e(UH+UO))	28.1%
Response Rate 4: (I+P)/((I+P)+(R+NC+O)+e(UH+UO))	28.2%
Cooperation Rate 1: I/((I+P)+R+O)	92.3%
Cooperation Rate 2: (I+P)/((I+P)+R+O))	92.7%
Cooperation Rate 3: I/((I+P)+R)	92.3%
Cooperation Rate 4: (I+P)/((I+P)+R)	92.7%
Refusal Rate 1: R/((I+P)+(R+NC+O)+(UH+UO))	1.7%
Refusal Rate 2: R/((I+P)+(R+NC+O)+e(UH+UO))	2.2%
Refusal Rate 3: R/((I+P)+(R+NC+O))	7.3%
<b>Contact Rate 1:</b> ((I+P)+R+O)/((I+P)+(R+NC+O)+(UH+UO))	23.4%
<b>Contact Rate 2:</b> ((I+P)+R+O)/((I+P)+(R+NC+O)+e(UH+UO))	30.4%
<b>Contact Rate 3:</b> ((I+P)+R+O)/((I+P)+(R+NC+O))	100.0%

Table A-6. Response rate formulas and response rates

# Weighting

Survey weights were computed to correct for disproportionate sampling probabilities introduced by the sampling design, including unequal probabilities due to regional stratification and young adult oversample and to correct for differences in demographic characteristics of the sample versus the population, reducing the risk of nonresponse and coverage biases in substantive estimates that may be associated with those demographics.

The weighting process computed:

- Sampling weights that incorporate the probability of selection for households and the probability of selection of a respondent within a sample household,
- Weight adjustments for nonresponse, and
- Poststratification and calibration to population totals.

Since benchmark data are not available for drivers, the weighting process included non-drivers. The final weight variable is FINALWT, which was appended to each record in the data file.

#### Design Weights

The sampling weight is the inverse of the probability of selecting the address from the frame. Since the sample was selected in two phases, we calculated the sampling probability for each phase and then combined them into an overall sampling weight.

First, we calculated the regional selection probability for each stratum (phase 1). The Hispanic stratum and young adult stratum contained areas from across NHTSA regions 2, 3, 4, 5, 6, and 9 that were found to have a high incidence of Hispanic people or a high incidence of young adults. The remaining area of each of these NHTSA regions and NHTSA regions 1, 7, 8, and 10 was a stratum. The phase 1 sampling weight is the ratio of the number of records on the sampling frame in each regional stratum to the total number of records selected.

Stratum/ NHTSA Region	Frame Size	Sample Size	First Phase Sampling Weight
Hispanic	21,399,447	8,787	2,435
Young adult	26,816,696	8,258	3,247
1	4,767,508	3,036	1,570
2	11,521,509	2,421	4,759
3	9,502,004	1,932	4,918
4	13,771,801	2,620	5,256
5	15,510,600	3,305	4,693
6	7,706,644	1,513	5,094
7	7,434,046	3,036	2,449
8	5,657,327	3,036	1,863
9	6,875,035	1,530	4,493
10	6,204,627	3,036	2,044

*Table A-7. Phase 1 sampling weight* 

Second, we calculated the phase 2 weight to account for the subsampling of households that were not flagged as 18 to 34 households. After the first phase sample was selected, additional age flags were appended to the selected addresses to stratify it into an 18 to 34 stratum and a non-18 to 34 stratum. The addresses not flagged as 18 to 34 were subsampled. The phase 2 weight is the ratio of the number of records in the stratum to the number of records selected. The sampling weight is the product of the phase 1 weight and phase 2 weight.

Stratum/ NHTSA Region	First Phase Sampling	Age Stratum	Frame Size	Sample Size	Second Phase	Sampling Weight
	Weight				Sampling Weight	
Hispanic	2,435	18–34	2,341	2,341	1.00	2,435
		Not 18–34	6,446	3,517	1.83	4,464
Young adult	3,247	18–34	2,067	2,067	1.00	3,247
		Not 18–34	6,191	3,438	1.80	5,848
1	1,570	18–34	632	632	1.00	1,570
		Not 18–34	2,404	1,392	1.73	2,712
2	4,759	18–34	544	544	1.00	4,759
		Not 18–34	1,877	1,070	1.75	8,348
3	4,918	18–34	425	425	1.00	4,918
		Not 18–34	1,507	863	1.75	8,588
4	5,256	18–34	526	526	1.00	5,256
		Not 18–34	2,094	1,221	1.71	9,015
5	4,693	18–34	735	735	1.00	4,693
		Not 18–34	2,570	1,468	1.75	8,216
6	5,094	18–34	330	330	1.00	5,094
		Not 18–34	1,183	679	1.74	8,874
7	2,449	18–34	692	692	1.00	2,449
		Not 18–34	2,344	1,332	1.76	4,309
8	1,863	18–34	807	807	1.00	1,863
		Not 18–34	2,229	1,217	1.83	3,413
9	4,493	18–34	271	271	1.00	4,493
		Not 18–34	1,259	749	1.68	7,553
10	2,044	18–34	604	604	1.00	2,044
		Not 18–34	2,432	1,420	1.71	3,500

Table A-8. Phase 2 sampling weight

#### Nonresponse Adjustment

We used a nonresponse adjustment to mitigate the risk of nonresponse bias because of differences between respondents and nonrespondents. The nonresponse adjustment is based on a response propensity score model to identify characteristics for which respondents and nonrespondents differ. The propensity score model, detailed below in the Nonresponse Bias Analysis section, used information from the address-based sampling frame and geographic data at the block group level appended from the Census Bureau's 2021 Planning Database (U.S. Census Bureau, 2022). Higher propensity scores indicate that we observed a higher proportion of similar addresses in the sample than on the frame. These addresses are overrepresented. Lower propensity scores indicate that we observed a lower proportion of similar addresses in the sample than on the frame. These addresses are overrepresented.

We corrected for over- and underrepresentation using a nonresponse adjustment factor. We poststratified the respondents and nonrespondents into response propensity score quintiles such that addresses are grouped with other addresses with similar propensities to respond. We then adjusted the respondents to represent the nonrespondents in each quintile.

Quintile	Total Address	Weighted Respondents	Weighted Nonrespondents	Nonresponse Adjustment
< 20% (lowest response)	6,526	2,806,251	20,037,773	8.14
20% up to 40%	6,031	4,303,815	20,007,505	5.65
40% up to 60%	5,483	5,693,821	19,559,701	4.44
60% up to 80%	5,194	6,992,072	19,010,409	3.72
80%+ (highest response)	5,106	8,483,627	17,888,764	3.11

*Table A-9. Propensity score quintiles* 

#### Number of Adults in Household Adjustment

Within each household, one adult was selected with probability inversely equal to the number of eligible adults in the household, as recorded during the survey (Q61a).

The nonresponse adjusted weight was multiplied by the number of eligible adults. The number of eligible adults was capped at three. For surveys with missing responses, we imputed the number of adults to be two, which is the modal number of adults in the household.

# Final Raked Weights

Finally, we used an iterative ratio adjustment, called "raking," to adjust for demographic differences in the observed sample as compared to population totals. This calibration process, sometimes called "poststratification," aligns the weighted survey sample with benchmark demographic distributions for the target population. The targets were based on age, sex, race/ethnicity, marital status, and educational attainment from the U.S. Census Bureau's 2020 ACS. Because this step aligns the survey respondents with the population, we included non-drivers and drivers in the adjustment.

We calibrated the weighted data to reflect population distributions based on:

- NHTSA region by sex
- NHTSA region by age group (18 to 34, 35 to 54, and 55+)
- Age group (18 to 34, 35 to 54, and 55+) by race/ethnicity (Hispanic, Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian, Non-Hispanic Other)
- Sex by race/ethnicity
- Marital status (married, never married, divorced/separated/widowed)
- Educational attainment (less than high school, high school graduate, some college, college graduate, graduate degree)
- Race/ethnicity
- Age group (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, and 75+) by sex

The categories of the poststratification cells were collapsed if the cell size was under 50. For the age by race/ethnicity margin, the minimum cell size was 60.

We integrated weight trimming with the raking process using a rake and trim algorithm developed by Izrael et al. (2009). We trimmed weights using the global high-cap value method, which includes a continuous quality control component that checks the sum and variability of the weights at various stages. If the variability of the adjusted weights was high, the weights were trimmed in a way that preserves the weight sum within each adjustment cell. The trimming method reduces large weights and increases small weights when they exceed the global lower or upper bounds (based on factors of the average weight). The weights were constrained such that the maximum weight was no more than 8 times the average weight and the minimum weight was no less than 0.125 times the average weight. The weights were also constrained from increasing or decreasing beyond the individual lower or upper bounds. An individual weight cannot increase more than 8 times its input weight or decrease by less than 0.125 its input weight.

#### Imputation

Missing values for the weighting variables were imputed based on a nearest neighbor hot deck algorithm (Andridge & Little, 2010). If multiple values are missing, the algorithm imputes sex, age, race/ethnicity, marital status, and educational attainment from the same respondent. Mode of response was used to determine nearest neighbors.

Mode	Total	Sex	Age	Race/ Ethnicity	Marital Status	Educational Attainment
Address-based sampling-web	3,714	12 (0.3%)	9 (0.2%)	18 (0.5%)	14 (0.4%)	13 (0.4%)
Address-based sampling- mail	1,966	92 (4.7%)	102 (5.2%)	53 (2.7%)	101 (5.1%)	112 (5.7%)
Total	5,680	104 (1.8%)	111 (2.0%)	71 (1.3%)	115 (2.0%)	125 (2.2%)

Table A-10. Number and percentage of imputations for each variable by mode

# Instructions for Calculating Weighted Estimates

The final data file includes the final weight (FINALWT) for use in weighted analyses. All weighting components for calculating the final weights are included in the delivered file for transparency. However, the final weights should be used for all analyses.

Statistical software that properly accounts for the complex sampling and weighting should be used when producing weighted survey statistics. Common software for complex samples includes SAS's SURVEY procedures, Stata's svy commands, R's survey package, and SPSS's Complex Samples module (Heeringa et al., 2017).<sup>6 7 8 9</sup>

# Nonresponse Bias Analysis

# Comparison of Respondents to Nonrespondents

Systematic nonresponse can cause biased estimates when the propensity to respond is correlated with the substantive topics of the survey. To mitigate the risk of nonresponse bias, we evaluated nonresponse using information available for respondents and nonrespondents, including information available on the frame and geographic characteristics at the block group level describing the area where the address is located. The geographic information was merged onto the frame using the Census Bureau's 2021 Planning Database (U.S. Census Bureau, 2022).

# Nonresponse Model

We evaluated nonresponse based on a response propensity model where higher and lower scores indicate addresses with higher and lower response rates, respectively. The propensity score model is based on a logistic model estimating the probability of an address responding (1=response, 0=nonresponse) conditional on the characteristics available on the frame and the appended geographic variables.

<sup>&</sup>lt;sup>6</sup> SAS Institute Inc., Cary, North Carolina. <u>www.sas.com</u>

<sup>&</sup>lt;sup>7</sup> StataCorp, LLC. College Station, Texas. <u>www.stata.com</u>

<sup>&</sup>lt;sup>8</sup> The R Foundation. <u>www.r-project.org</u>

<sup>&</sup>lt;sup>9</sup> IBM, Armonk, New York. <u>www.ibm.com/products/spss-statistics/complex-samples</u>

To determine significant predictors of response, we conducted a variable selection in stages:

- 1. Selection of frame variables
- 2. Bivariate analysis of geographic variables
- 3. Forward selection of final model effects

#### Selection of frame variables

There were several variables on the frame available for nonresponse analysis. To identify frame variables correlated with response, we estimated a response propensity model using logistic regression. The logistic regression model used the sampling weights. The variables tested, variables not used, and results of the regression are described in Table A-11.

Variables	Description	Significant
Geographic strata	Geographic strata used in sample	Yes
YA (young adult) flag	Ages 18 to 34, 35+, or missing	Yes
Delivery point type code	The type code indicates how	Yes
	mail is delivered at the address	
	and the type of service.	
	Curbline, Centralized Box Unit	
	(CBU), Central, Other	
Dwelling type	Single family, multiunit	Yes
18–24 flag	Ages 18 to 24	Yes
25–34 flag	Ages 25 to 34	Yes
RUCA code	USDA urban rural codes	No
Variables Not Used	Description	Reason
Delivery point usage code	Type of delivery (residential,	Too few cases
	business, etc.)	
Drop code/count	Drop point indicator and	Too few cases
	number of units served by	
	address	
Only way to get mail	PO box only way to get mail	Too few cases
	indicator	
PO Box/throwback	Street address is rerouted to PO	Too few cases
	box	
Route type	Single family, multiunit, PO	Highly correlated with
	box	dwelling type
Seasonal code	Unit has seasonal delivery	Too few cases
Vacant code	Flag indicating unit is	Too few cases
	unoccupied for over 90 days	

*Table A-11. Variables tested in logistic regression model* 

#### Bivariate analysis of geographic variables

Using the significant frame variables from step 1 as the base model, we introduced each of the geographic variables one at a time to test whether the variable was correlated with the propensity to respond. The geographic variables were coded into three groups:

Low: value is in the first quartile ( $\leq 25$ th percentile)

Medium: value is in the second and third quartiles (between 25th and 75th percentile) High: value is in the fourth quartile ( $\geq$  75th percentile).

Each geographic variable was tested separately with the control variables from step 1. Variables that were not significant at the 0.05 level were eliminated. The geographic variables tested and their individual status after step 2 are presented in Table A-12.

## Forward selection of final model effects

The significant geographic variables in step 2 were ordered from largest effect size (highest correlation with response propensity) to lowest effect size. Each geographic variable was introduced into the model using a forward selection process. Variables were retained in the model when they were significant at the 0.05 level. The status of the testing is presented in Table A-12. At the time of this analysis, the Census Bureau's 2021 Planning Database was the latest available (U.S. Census Bureau, 2022). This included information from the ACS 2015 to 2019 5-year estimates and 2010 Census.

Census Variables	Description	Bivariate Analysis (P < 0.05)
<u>Age/Sex</u>		
pct_Males_ACS_15_19	Percentage of ACS population that is male	Y
pct_Pop_18_24_ACS_15_19	Percentage of ACS population that is between 18 years old and 24 years old	Y
pct_Pop_65plus_ACS_15_19	Percentage of ACS population that is 65 years old or older	Y
Race/Ethnicity		
pct_NH_AIAN_alone_ACS_15_19	Percentage of ACS population that indicates no Hispanic origin and their only race as "American Indian or Alaska Native" or reports entries such as Navajo, Blackfeet, Inupiat, Yup'ik, or Central/South American Indian groups	Y
pct_NH_Asian_alone_ACS_15_19	Percentage of ACS population that indicates no Hispanic origin and their only race as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," or "Other Asian"	Y
pct_Hispanic_ACS_15_19	Percentage of ACS population that identifies as "Mexican," "Puerto Rican," "Cuban," or "another Hispanic, Latino, or Spanish origin"	Y
pct_NH_Blk_alone_ACS_15_19	Percentage of ACS population that indicates no Hispanic origin and their only race as "Black, African American, or Negro" or reports entries such as African American, Kenyan, Nigerian, or Haitian	Y
<i>Education</i>		
pct_College_ACS_15_19	Percentage of ACS population aged 25 years and older with a college degree or higher	Y

Table A-12. Census variables used in nonresponse analysis

Census Variables	Description	Bivariate Analysis (P < 0.05)
pct_Not_HS_Grad_ACS_15_19	Percentage of ACS population aged 25 years and older who did not graduate high school or receive a diploma or the equivalent	Y
Language		
pct_Othr_Lang_ACS_15_19	Percentage of ACS population aged 5 years and older that speaks a language other than English at home	Y
pct_ENG_VW_SPAN_ACS_15_19	Percentage of ACS occupied housing units where a Spanish or Spanish Creole language was assigned as the household language, and no one ages 14 years and older speaks English only or speaks English "very well"	Y
Income		
pct_Prs_Blw_Pov_Lev_ACS_15_19	Percentage of ACS eligible population classified as below the poverty level given their total family or household income within the last year, family size, and family composition	Y
pct_No_Health_Ins_ACS_15_19	Percentage of ACS population without health insurance, public or private	Y
avg_income	Average household income	Y
Households		
pct_Female_No_SP_ACS_15_19	Percentage of ACS occupied housing units with a female householder and no spouse of householder present	Ν

Census Variables	Description	Bivariate Analysis (P < 0.05)
pct_Sngl_Prns_HHD_ACS_15_19	Percentage of ACS occupied housing units where a householder lives alone	Ν
pct_Renter_Occp_HU_ACS_15_19	Percentage of ACS occupied housing units that are not owner occupied, whether they are rented or occupied without payment of rent	Y
pct_Vacant_Units_ACS_15_19	Percentage of ACS housing units where no one is living regularly at the time of interview	Ν
2010 Census Operations		
pct_Vacants_CEN_2010	Percentage of addresses in a 2010 Census mailback area that were confirmed as vacant housing units	Y
pct_RURAL_POP_CEN_2010	Percentage of 2010 Census total population that lives outside of an Urbanized Area or Urban Cluster	N
pct_Deletes_CEN_2010	Percentage of addresses in a 2010 Census mailback area deleted because they were determined to not correspond to valid housing units	N
pct_Census_UAA_CEN_2010	Percentage of addresses in a 2010 Census mailout/mailback area where the initial mail form was returned to the Census with the postal code "Undeliverable as Addressed"	Y
Low_Response_Score	A score predicting that a block group will produce a low mail return rate	Y
Mail_Return_Rate_CEN_2010	Number of mail returns received out of the total number of valid occupied housing units in the mailout/mailback universe which excludes deleted, vacant, or undeliverable as addressed units	Y

## **Final Model**

The odds ratios for the final model are presented in Table A-13. An odds ratio greater than 1.0 indicates the odds of response for an individual with the characteristic are higher than those without the characteristic. An odds ratio less than 1.0 indicates the odds of response for an individual with the characteristic are less than those without the characteristic.

Effect	Category	Odds Ratio (CI)
Geo strata	01	1.15 (1.01,1.32)
	02	$     1.06 \\     (0.91, 1.22) $
	03	$     1.05 \\     (0.89, 1.23) $
	04	1.03 (0.89,1.19)
	05	1.14 (1,1.31)
	06	0.92 (0.77,1.1)
	07	1.13 (0.98,1.3)
	08	1.22 (1.07,1.4)
	09	0.95 (0.8,1.14)
	10	1.23 (1.08,1.41)
	HI	0.87 (0.77,0.97)
	YA	Reference
Young adult strata	18–34 flag	0.79 (0.73,0.86)
	Non-18–34 flag	Reference
Dwelling type	Multiunit	0.73 (0.67,0.8)
	Single family	Reference

Table A-13. Odds ratios for response propensity model

Effect	Category	Odds Ratio (CI)
18–24 flag	Missing	0.64 (0.54,0.77)
	No	0.98 (0.87,1.11)
	Yes	Reference
Age/Sex		
The percentage of the ACS population that is 65 years old or older	0–25 percentile	0.89 (0.82,0.98)
	75–100 percentile	1.11 (1.02,1.2)
	25–75 percentile	Reference
Race/Ethnicity		
The percentage of the ACS population that indicates no Hispanic origin and	0–25 percentile	0.86 (0.79,0.93)
heir only race as "Asian Indian," Chinese," "Filipino," "Korean," Japanese," "Vietnamese," or "Other	75–100 percentile	0.92 (0.85,1.01)
Asian"	25–75 percentile	Reference
The percentage of the ACS population that indicates no Hispanic origin and	0–25 percentile	1.03 (0.95,1.11)
their only race as "Black, African American, or Negro" or reports entries such as African American, Kenyan,	75–100 percentile	0.88 (0.8,0.96)
Nigerian, or Haitian	25–75 percentile	Reference
Education		
The percentage of the ACS population aged 25 years and older without a	0–25 percentile	0.94 (0.85,1.04)
college degree or higher	75–100 percentile	1.17 (1.07,1.28)
	25–75 percentile	Reference
The percentage of the ACS population aged 25 years and older that did not	0–25 percentile	1.1 (1.01,1.2)
graduate high school or receive a diploma or the equivalent	75–100 percentile	0.8 (0.72,0.89)
	25–75 percentile	Reference

Effect	Category	Odds Ratio (CI)
2010 Census Operations		
The number of mail returns received out of the total number of valid occupied	0–25 percentile	0.81 (0.74,0.89)
housing units in the mailout/mailback universe which excludes deleted, vacant, or undeliverable as addressed	75–100 percentile	1.09 (1,1.18)
acant, or undeliverable as addressed nits. Therefore, VALID_MAILBACK_COUNT_CEN_ 010 can e less than IAILBACK AREA COUNT CEN 2	25–75 percentile	Reference
010.		

# Comparison of Respondents to Census Estimates

After adjusting the sample using the nonresponse adjustment model, the demographic distributions still differed from the population for several groups. The most notable differences were:

- <u>Age group</u>: 5.7% and 12.7% of the sample were ages 18 to 24 and ages 24 to 34. The population estimates for these groups were 11.0% and 17.9%. Older adults (65+) were overrepresented in the sample at 30.2% as compared to the population (20.8%).
- <u>*Race/ethnicity*</u>: Hispanic and non-Hispanic Black people represented 10.6% and 7.8% of the sample, which both underrepresent their population shares of 16.5% and 11.6%.
- <u>Marital status</u>: Married respondents represented 61.7% of the sample versus 51.6% of the population.
- <u>Educational attainment</u>: Adults with a high school diploma or who did not complete high school were underrepresented at 17.9% of the sample while college graduates were overrepresented at 52.9%. The population percentages for these two groups are 38.2% and 31.8%.

The sample aligned closely with the population for sex and region. The differences in these demographic distributions were corrected by calibrating the sample to the population as a weighting adjustment.

	Sample %	<b>Population %</b>
Sex		
Male	48.5	48.8
Female	51.7	51.5
Age Group		
18 to 24	5.7	11.0

Table A-14. Nonresponse adjusted demographic distributions: Sample compared to census

	Sample %	Population %
25 to 34	12.7	17.9
35 to 44	15.2	16.9
45 to 54	14.7	16.6
55 to 64	21.7	17.1
65 to 74	19.6	12.6
75+	10.6	8.2
Race/Ethnicity		·
Hispanic	10.6	16.5
Non-Hispanic White	69.2	62.6
Non-Hispanic Black	7.8	11.6
Non-Hispanic Asian	5.7	5.8
Non-Hispanic Other	6.7	3.4
Marital Status		
Married	61.7	51.6
Never married	22.0	29.4
Divorced/separated/widowed	16.3	19
Education		
High school or less	17.9	38.2
Some college/associate degree	29.2	30.0
College graduate	24.7	19.9
Graduate school	28.2	11.9
NHTSA Region		
1	3.6	3.5
2	14.0	14.1
3	10.6	10.0
4	15.5	15.0
5	17.3	16.0
6	12.1	12.5
7	5.2	5.1
8	4.1	4.2
9	13.1	14.6
10	4.6	4.8

# Comparison of Early to Late Responders

The NSSAB included six mailings to recruit participants with options to respond to the survey by web or mail. From 28,340 addresses selected, 5,680 (20%) completed surveys with 3,714 (13%) completed by web and 1,966 (7%) completed by mail. For respondents (drivers only) included in the analysis, 3,663 completed by web and 1,930 completed by mail. Mailing several communications increase the overall number of completed surveys, and since early responders often differ from late responders, multiple mailings are critical to mitigate the risk on nonresponse bias. To analyze differences in early and late responders, we examined the survey estimates for three phases of the data collection:

- 1. Phase 1: Initial letter and reminder postcard—completed survey before the first paper survey mailing (web response only).
- 2. Phase 2: First mail packet and reminder postcard—completed survey after the first paper survey mailing but before second paper survey mailing (mail or web response).
- 3. Phase 3: Second mail packet and final letter—completed survey after second survey mailing (mail or web response).

Table A-15 includes the distribution of completed surveys by web and mail for each phase. Phase 1 includes over 40% of the total completed surveys. Since web was the only option in phase 1, all are web respondents. Phase 2 includes almost 25% of the respondents with mostly mail responses (72%). The final phase includes about 30% of the total responses and 54% mail responses.

	Returns	Web	Mail	%Web
Total	5,593	3,663	1,930	65%
Phase 1	2,476	2,476	-	100%
Phase 2	1,360	382	978	28%
Phase 3	1,757	805	952	46%

Table A-15. Completed surveys per phase

Table A-16 includes the estimates for six key survey estimates by phase. The estimates are based on the final weights, following the nonresponse adjustment and population calibration. There was no significant difference in the frequency of driving, with nearly 75% of each group driving every day or almost every day. However, there are several differences in speeding behaviors between the three groups. The phase 1 respondents were less likely to agree with the statement that "other cars tend to pass me more often than I pass them," and they were more likely to "keep up with the faster traffic." There were no statistically significant differences between the groups when asked about the frequency of speeding on two-lane highways or neighborhood streets. However, they differed on their frequency of speeding on multi-lane divided highways with 66% of phase 1 respondents saying they rarely or never speed, whereas 75% of phase 2 respondents reported rarely or never speeding on multi-lane divided highways. Finally, the groups differed in terms of the number of stops by the police, with the phase 3 respondents being stopped most often (7%) and phase 2 least often (4%). The analyses in this report are based on weighted estimates using the data for respondents at all phases of data collection. However, the differences observed across the phases of data collection reiterate the importance of multiple contacts and offering web and mail to maximize the number of completes and mitigate differential nonresponse.

	Total	Phase 1	Phase 2	Phase 3
Q1. How often do you usually drive a car or other	motor veh	icle?	<u></u>	
Every day, or almost every day	75.1%	76.2%	73.6%	74.7%
Several days a week	18.5%	18.1%	19.9%	17.9%
Once a week or less	4.8%	3.9%	4.4%	6.2%
Only certain times a year	1.7%	1.7%	2.0%	1.3%
Q3. Which of the following statements best describes your driving? *				•
I tend to pass other cars more often than other cars pass me	14.0%	16.2%	12.4%	12.3%
Other cars tend to pass me more often than I pass them	35.8%	32.5%	39.3%	37.6%
Both about equally	50.2%	51.3%	48.4%	50.0%
Q4. When driving I tend to ***		•	•	•
Stay with slower moving traffic	21.1%	18.8%	24.2%	21.8%
Keep up with the faster traffic	33.0%	37.1%	26.6%	32.2%
Both about equally	45.9%	44.0%	49.2%	46.0%
Q9. How often would you say you drive 15 miles an Lane, Divided Highways? *	n hour ove	r the spee	d limit on	Multi-
Always	1.5%	1.9%	1.5%	1.1%
Often	8.4%	9.9%	7.2%	7.3%
Sometimes	21.0%	22.3%	16.7%	22.3%
Rarely	38.7%	37.9%	41.0%	38.2%
Never	30.3%	28.0%	33.7%	31.1%
Q16. How often would you say you drive 15 miles a Lane Highways?	in hour ov	er the spe	ed limit or	n Two-
Always	0.9%	1.5%	0.8%	0.3%
Often	2.9%	3.0%	2.9%	2.8%
Sometimes	14.3%	15.3%	13.0%	13.9%
Rarely	38.9%	39.4%	37.7%	39.1%
Never	43.0%	40.9%	45.6%	43.9%
Q23. How often would you say you drive 10 miles an hour over the speed limit on Neighborhood or Residential Streets?				

Table A-16. Comparisons of survey estimates for phase of data collection

	Total	Phase 1	Phase 2	Phase 3
Always	1.0%	0.8%	0.9%	1.2%
Often	2.5%	2.6%	2.6%	2.4%
Sometimes	11.4%	11.5%	9.4%	12.7%
Rarely	37.5%	37.7%	37.9%	36.9%
Never	47.6%	47.3%	49.2%	46.9%
Q52. How many times have you been stopped for sp	beeding in	the past 1	2 months	? *
None	94.3%	94.6%	96.1%	92.6%
One	4.7%	4.2%	3.2%	6.6%
Two	0.6%	0.7%	0.2%	0.8%
Three or more	0.4%	0.5%	0.5%	0.1%

\*\*\* p < .001, \*\* p < .01, and \* p < .05.

## **Precision of Sample Estimates**

The confidence interval for an estimate derived from the survey sample is:

$$\hat{y} \pm z_{1-\alpha/2} \sqrt{Var(\hat{y})}$$

where:

 $\hat{y}$  = an estimate of the population proportion;

 $Var(\hat{y})$  = is the simple random sampling variance of  $\hat{y}$ ;<sup>10</sup> and

 $z_{1-\alpha/2} = (1 - \alpha/2)$ th percentile of the standard normal distribution (95%:  $\alpha = 5\%$ , z = 1.96; 90%:  $\alpha = 10\%$ , z = 1.645).

For best results, data users should use statistical software such as SAS, SPSS, Stata, R, or SUDAAN to calculate the confidence intervals for a complex sampling design.<sup>11</sup> However, data users can use the tables that follow to approximate the confidence interval based on a simple formula.

<sup>&</sup>lt;sup>10</sup> A simple random sample is a sample of n units drawn directly from a population of N units.

<sup>&</sup>lt;sup>11</sup> RTI International, Research Triangle Park, North Carolina. <u>www.rti.org/impact/sudaanr-statistical-software-analyzing-correlated-data</u>

# Sampling Error

The sampling variance for an estimate is a measure of uncertainty from an estimate derived from a sample drawn from the population. If a second sample was drawn in the exact same manner, the estimate would be different since the sample would contain different members of the population. Sampling variance measures how different the estimates would be had we drawn different samples.

The sampling error for a complex survey depends on three things:

- 1.  $\sigma_y^2$  = population variance for the characteristic. Sampling variance is larger when there is a lot of variability in the population (large  $\sigma_y^2$ ) and smaller when there is little variability in the population.
- 2. n = sample size. Sampling variance is larger when sample size is small and smaller when sample size is large. Sampling variance for estimates of subgroups is based on sample size for those subgroups.
- 3. DEFF = design effect: Sampling design features such as stratification, clustering, and survey weighting all contribute to the sampling variability (Kish, 1965). Design effect is a measure of inefficiency (or efficiency) of the complex sample relative to a simple random sample, calculated as  $DEFF = Var(\hat{y})/Var_{srs}(\hat{y})$ .

Using this relationship, we can write the sampling variance of the complex design as:  $Var(\hat{y}) = Var_{srs}(\hat{y}) \times DEFF = \sigma_y^2/n \times DEFF$ . Therefore, the sampling variance can be calculated with the population variance (or an estimate of the population variance), the sample size, and the design effect.

## **Estimating the Population Variance**

The population variance is often estimated from the survey data,  $s^2 = \sum_n (y_i - \bar{y})^2/n$ . For percentages, the population variance is  $\sigma_y^2 = p \times (1 - p)$  and can be estimated from the survey estimate  $s^2 = \hat{p} \times (1 - \hat{p})$ . An alternative is to use the variance estimates based on the percentages presented in Table A-17. Rounding the estimated percentage up to the nearest 5 percentage points (e.g., 17% to 20%, 34% to 35%) is a conservative estimate of the population variance. The variance for a percentage is low when a small percentage of the population has the characteristic (or a large percentage of the population has the characteristic) and high when the percentage of the population with the characteristic is equal (50/50).

## **Estimating Design Effects**

The sampling design impacts the variance for each data item differently. Therefore, the design effect for one survey estimate might be higher or lower than the design effect of another survey estimate. The design effect will also vary for different subpopulations represented in the sample, such as males and females. To simplify the calculations of the sampling error, design effect approximations are presented in Table A-17. These approximations are based on the average design effect for over 100 data items.

	DEFF	n	$P = \\ \sigma^2 =$	50, 50 0.25	45, 55 0.2475	40, 60 0.24	35, 65 0.2275	30, 70 0.21	25, 75 0.1875	20, 80 0.16	15, 85 0.1275	10, 90 0.09	5, 95 0.0475
Total													
	2.39	5,593		2.0%	2.0%	2.0%	1.9%	1.9%	1.8%	1.6%	1.4%	1.2%	0.9%
NHTSA Region													
1	2.30	474		6.8%	6.8%	6.7%	6.5%	6.3%	5.9%	5.5%	4.9%	4.1%	3.0%
2	2.20	596		6.0%	5.9%	5.8%	5.7%	5.5%	5.2%	4.8%	4.3%	3.6%	2.6%
3	2.13	458		6.7%	6.6%	6.5%	6.4%	6.1%	5.8%	5.3%	4.8%	4.0%	2.9%
4	2.09	642		5.6%	5.6%	5.5%	5.3%	5.1%	4.8%	4.5%	4.0%	3.4%	2.4%
5	2.02	844		4.8%	4.8%	4.7%	4.6%	4.4%	4.2%	3.8%	3.4%	2.9%	2.1%
6	2.10	537		6.1%	6.1%	6.0%	5.8%	5.6%	5.3%	4.9%	4.4%	3.7%	2.7%
7	2.38	449		7.1%	7.1%	7.0%	6.8%	6.5%	6.2%	5.7%	5.1%	4.3%	3.1%
8	2.07	465		6.5%	6.5%	6.4%	6.2%	6.0%	5.7%	5.2%	4.7%	3.9%	2.8%
9	2.18	625		5.8%	5.8%	5.7%	5.5%	5.3%	5.0%	4.6%	4.1%	3.5%	2.5%
10	2.07	503		6.3%	6.3%	6.2%	6.0%	5.8%	5.4%	5.0%	4.5%	3.8%	2.7%
Age Group													+
18 to 24	1.74	240		8.3%	8.3%	8.2%	8.0%	7.6%	7.2%	6.7%	6.0%	5.0%	3.6%
25 to 34	2.25	789		5.2%	5.2%	5.1%	5.0%	4.8%	4.5%	4.2%	3.7%	3.1%	2.3%
35 to 44	2.16	777		5.2%	5.1%	5.1%	4.9%	4.7%	4.5%	4.1%	3.7%	3.1%	2.3%
45 to 54	2.02	754		5.1%	5.0%	5.0%	4.8%	4.6%	4.4%	4.1%	3.6%	3.0%	2.2%
55 to 64	2.02	1,145		4.1%	4.1%	4.0%	3.9%	3.8%	3.6%	3.3%	2.9%	2.5%	1.8%
65+	2.15	1,778		3.4%	3.4%	3.3%	3.3%	3.1%	3.0%	2.7%	2.4%	2.0%	1.5%

Table A-17. Estimated 95% error margins: Overall and various population subgroups

	DEFF	n	$P = \sigma^2 =$	50, 50 0.25	45, 55 0.2475	40, 60 0.24	35, 65 0.2275	30, 70 0.21	25, 75 0.1875	20, 80 0.16	15, 85 0.1275	10, 90 0.09	5, 95 0.0475
Gender													
Male	2.59	2,656		3.1%	3.0%	3.0%	2.9%	2.8%	2.6%	2.4%	2.2%	1.8%	1.3%
Female	2.21	2,834		2.7%	2.7%	2.7%	2.6%	2.5%	2.4%	2.2%	2.0%	1.6%	1.2%
Race/Ethnicity													
Hispanic	1.87	516		5.9%	5.9%	5.8%	5.6%	5.4%	5.1%	4.7%	4.2%	3.5%	2.6%
Non-Hispanic White	2.28	4,058		2.3%	2.3%	2.3%	2.2%	2.1%	2.0%	1.9%	1.7%	1.4%	1.0%
Non-Hispanic Black	1.98	324		7.7%	7.6%	7.5%	7.3%	7.0%	6.6%	6.1%	5.5%	4.6%	3.3%
Non-Hispanic Asian	2.00	266		8.5%	8.4%	8.3%	8.1%	7.8%	7.4%	6.8%	6.1%	5.1%	3.7%
Non-Hispanic Other	2.20	358		7.7%	7.6%	7.5%	7.3%	7.0%	6.6%	6.1%	5.5%	4.6%	3.3%
Educational Attainment	nt												
Less than high school	1.48	120		10.9%	10.8%	10.7%	10.4%	10.0%	9.4%	8.7%	7.8%	6.5%	4.7%
High school diploma	1.60	743		4.6%	4.5%	4.5%	4.3%	4.2%	3.9%	3.6%	3.2%	2.7%	2.0%
Some college	1.85	1,546		3.4%	3.4%	3.3%	3.2%	3.1%	2.9%	2.7%	2.4%	2.0%	1.5%
College degree	1.85	1,412		3.5%	3.5%	3.5%	3.4%	3.2%	3.1%	2.8%	2.5%	2.1%	1.5%
Graduate degree	1.96	1,649		3.4%	3.4%	3.3%	3.2%	3.1%	2.9%	2.7%	2.4%	2.0%	1.5%
Driver Type Cluster													
Nonspeeders	2.37	2,362		3.1%	3.1%	3.0%	3.0%	2.8%	2.7%	2.5%	2.2%	1.9%	1.4%
Sometime Speeders	2.49	2,434		3.1%	3.1%	3.1%	3.0%	2.9%	2.7%	2.5%	2.2%	1.9%	1.4%
Speeders	2.14	790		5.1%	5.1%	5.0%	4.9%	4.7%	4.4%	4.1%	3.6%	3.1%	2.2%
Metropolitan Status													+
Metropolitan	2.41	4,775		2.2%	2.2%	2.2%	2.1%	2.0%	1.9%	1.8%	1.6%	1.3%	1.0%

	DEFF	n	$\mathbf{P} = \mathbf{\sigma}^2 = \mathbf{r}^2$	50, 50 0.25	45, 55 0.2475	40, 60 0.24	35, 65 0.2275	30, 70 0.21	25, 75 0.1875	20, 80 0.16	15, 85 0.1275	10, 90 0.09	5, 95 0.0475
Non-metropolitan	2.25	818		5.1%	5.1%	5.0%	4.9%	4.7%	4.4%	4.1%	3.7%	3.1%	2.2%
Income													
<\$35,000	2.22	1,001		4.6%	4.6%	4.5%	4.4%	4.2%	4.0%	3.7%	3.3%	2.8%	2.0%
\$35,000 to \$50,000	2.12	580		5.9%	5.9%	5.8%	5.7%	5.4%	5.1%	4.7%	4.2%	3.6%	2.6%
\$50,000 to \$75,000	2.28	954		4.8%	4.8%	4.7%	4.6%	4.4%	4.2%	3.8%	3.4%	2.9%	2.1%
\$75,000 to \$100,000	2.32	853		5.1%	5.1%	5.0%	4.9%	4.7%	4.4%	4.1%	3.7%	3.1%	2.2%
\$100,000 to \$150,000	2.37	939		4.9%	4.9%	4.8%	4.7%	4.5%	4.3%	3.9%	3.5%	3.0%	2.1%
\$150,000 or more	2.05	1,062		4.3%	4.3%	4.2%	4.1%	4.0%	3.7%	3.4%	3.1%	2.6%	1.9%

DEFF	n	$\sigma^{2}=$	50, 50 0.2500	45, 55 0.2475	40, 60 0.2400	35, 65 0.2275	30, 70 0.2100	25, 75 0.1875	20, 80 0.1600	15, 85 0.1275	10, 90 0.0900	5, 95 0.0475
2.39	6,000		2.0%	1.9%	1.9%	1.9%	1.8%	1.7%	1.6%	1.4%	1.2%	0.9%
	5,500		2.0%	2.0%	2.0%	1.9%	1.9%	1.8%	1.6%	1.5%	1.2%	0.9%
	5,000		2.1%	2.1%	2.1%	2.0%	2.0%	1.9%	1.7%	1.5%	1.3%	0.9%
	4,500		2.3%	2.2%	2.2%	2.2%	2.1%	2.0%	1.8%	1.6%	1.4%	1.0%
	4,000		2.4%	2.4%	2.3%	2.3%	2.2%	2.1%	1.9%	1.7%	1.4%	1.0%
	3,500		2.6%	2.5%	2.5%	2.4%	2.3%	2.2%	2.0%	1.8%	1.5%	1.1%
	3,000		2.8%	2.8%	2.7%	2.6%	2.5%	2.4%	2.2%	2.0%	1.7%	1.2%
	2,500		3.0%	3.0%	3.0%	2.9%	2.8%	2.6%	2.4%	2.2%	1.8%	1.3%
	2,250		3.2%	3.2%	3.1%	3.0%	2.9%	2.8%	2.6%	2.3%	1.9%	1.4%
	2,000		3.4%	3.4%	3.3%	3.2%	3.1%	2.9%	2.7%	2.4%	2.0%	1.5%
	1,750		3.6%	3.6%	3.5%	3.5%	3.3%	3.1%	2.9%	2.6%	2.2%	1.6%
	1,500		3.9%	3.9%	3.8%	3.7%	3.6%	3.4%	3.1%	2.8%	2.3%	1.7%
	1,250		4.3%	4.3%	4.2%	4.1%	3.9%	3.7%	3.4%	3.1%	2.6%	1.9%
	1,000		4.8%	4.8%	4.7%	4.6%	4.4%	4.1%	3.8%	3.4%	2.9%	2.1%
	750		5.5%	5.5%	5.4%	5.3%	5.1%	4.8%	4.4%	3.9%	3.3%	2.4%
	500		6.8%	6.7%	6.6%	6.5%	6.2%	5.9%	5.4%	4.8%	4.1%	3.0%
	400		7.6%	7.5%	7.4%	7.2%	6.9%	6.6%	6.1%	5.4%	4.5%	3.3%
	300		8.7%	8.7%	8.6%	8.3%	8.0%	7.6%	7.0%	6.2%	5.2%	3.8%

Table A-18. Estimated 95% error margins: Overall and various sample sizes

DEFF	n	$\sigma^{2}=$	50, 50 0.2500	45, 55 0.2475	40, 60 0.2400	35, 65 0.2275	30, 70 0.2100	25, 75 0.1875	20, 80 0.1600	15, 85 0.1275	10, 90 0.0900	5, 95 0.0475
	200		10.7%	10.7%	10.5%	10.2%	9.8%	9.3%	8.6%	7.6%	6.4%	4.7%
	150		12.4%	12.3%	12.1%	11.8%	11.3%	10.7%	9.9%	8.8%	7.4%	5.4%
	100		15.1%	15.1%	14.8%	14.4%	13.9%	13.1%	12.1%	10.8%	9.1%	6.6%
	50		21.4%	21.3%	21.0%	20.4%	19.6%	18.5%	17.1%	15.3%	12.8%	9.3%

#### **Testing for Statistical Differences**

Sampling error is also used to determine whether two population subgroups are significantly different with respect to a certain statistic. In other words, the difference in the sampled subgroup estimates is large enough that it would be unlikely to randomly occur <u>if the statistics were the</u> <u>same for the subgroups</u>. Consider the hypothesis test for comparing two subgroups:

H<sub>0</sub>: 
$$Y_1 = Y_2$$
 or  $Y_1 - Y_2 = 0$   
H<sub>1</sub>:  $Y_1 \neq Y_2$  or  $Y_1 - Y_2 \neq 0$ 

One method to test whether  $Y_1$  is different from  $Y_2$  is to calculate a confidence interval around the difference in the sample estimates,  ${}^{12}(\hat{y}_1 - \hat{y}_2) \pm z_{1-\alpha/2}\sqrt{Var(\hat{y}_1 - \hat{y}_2)}$ , where  $Var(\hat{y}_1 - \hat{y}_2) = Var(\hat{y}_1) + Var(\hat{y}_2)$  is the sum of the variances for two population subgroups estimated as described above. If the interval does not contain 0, we conclude that  $Y_1$  is different from  $Y_2$ . That is, the observed difference in the sample estimates is not likely to randomly occur if  $Y_1$  was equal to  $Y_2$ ; therefore, there is evidence to indicate a difference in the population statistics. If the interval does contain 0, we cannot conclude that  $Y_1$  is different from  $Y_2$ —there is insufficient evidence to indicate a difference in the population statistics.

Table A-19 includes the estimated 95% error margins for the differences between subgroups of various size. If the observed difference is less than or equal to the error margin, the difference is not statistically significant at the  $\alpha = 0.05$  significance level. If it is greater than the error margin, the difference is statistically significant at the  $\alpha = 0.05$  significance level.

<sup>&</sup>lt;sup>12</sup> This method should only be used for large sample sizes. One rule of thumb is when  $n_1$  and  $n_2$  are both greater than 30.

DEFF	<i>n</i> <sub>1</sub>	р	$n_2 =$	6,000	5,000	4,000	3,000	2,000	1,500	1,000	500	400	300	200	100	50
2.39	6,000	50, 50		2.8%	2.9%	3.1%	3.4%	3.9%	4.4%	5.2%	7.0%	7.8%	9.0%	10.9%	15.3%	21.5%
	6,000	40, 60		2.7%	2.8%	3.0%	3.3%	3.8%	4.3%	5.1%	6.9%	7.7%	8.8%	10.7%	15.0%	21.1%
	6,000	30, 70		2.5%	2.7%	2.8%	3.1%	3.6%	4.0%	4.7%	6.5%	7.2%	8.2%	10.0%	14.0%	19.7%
	6,000	20, 80		2.2%	2.3%	2.5%	2.7%	3.1%	3.5%	4.1%	5.6%	6.3%	7.2%	8.7%	12.2%	17.2%
	6,000	10, 90		1.7%	1.7%	1.9%	2.0%	2.3%	2.6%	3.1%	4.2%	4.7%	5.4%	6.5%	9.2%	12.9%
	5,000	50, 50		2.9%	3.0%	3.2%	3.5%	4.0%	4.5%	5.2%	7.1%	7.9%	9.0%	10.9%	15.3%	21.5%
	5,000	40, 60		2.8%	3.0%	3.1%	3.4%	3.9%	4.4%	5.1%	7.0%	7.7%	8.8%	10.7%	15.0%	21.1%
	5,000	30, 70		2.7%	2.8%	2.9%	3.2%	3.7%	4.1%	4.8%	6.5%	7.2%	8.2%	10.0%	14.0%	19.7%
	5,000	20, 80		2.3%	2.4%	2.6%	2.8%	3.2%	3.6%	4.2%	5.7%	6.3%	7.2%	8.7%	12.2%	17.2%
	5,000	10, 90		1.7%	1.8%	1.9%	2.1%	2.4%	2.7%	3.1%	4.3%	4.7%	5.4%	6.6%	9.2%	12.9%
	4,000	50, 50		3.1%	3.2%	3.4%	3.7%	4.1%	4.6%	5.4%	7.2%	7.9%	9.1%	11.0%	15.3%	21.5%
	4,000	40, 60		3.0%	3.1%	3.3%	3.6%	4.1%	4.5%	5.2%	7.0%	7.8%	8.9%	10.8%	15.0%	21.1%
	4,000	30, 70		2.8%	2.9%	3.1%	3.4%	3.8%	4.2%	4.9%	6.6%	7.3%	8.3%	10.1%	14.1%	19.7%
	4,000	20, 80		2.5%	2.6%	2.7%	2.9%	3.3%	3.7%	4.3%	5.7%	6.4%	7.3%	8.8%	12.3%	17.2%
	4,000	10, 90		1.9%	1.9%	2.0%	2.2%	2.5%	2.8%	3.2%	4.3%	4.8%	5.4%	6.6%	9.2%	12.9%
	3,000	50, 50		3.4%	3.5%	3.7%	3.9%	4.4%	4.8%	5.5%	7.3%	8.1%	9.2%	11.1%	15.4%	21.6%
	3,000	40, 60		3.3%	3.4%	3.6%	3.8%	4.3%	4.7%	5.4%	7.2%	7.9%	9.0%	10.8%	15.1%	21.2%
	3,000	30, 70		3.1%	3.2%	3.4%	3.6%	4.0%	4.4%	5.1%	6.7%	7.4%	8.4%	10.1%	14.1%	19.8%
	3,000	20, 80		2.7%	2.8%	2.9%	3.1%	3.5%	3.8%	4.4%	5.9%	6.4%	7.3%	8.8%	12.3%	17.3%
	3,000	10, 90		2.0%	2.1%	2.2%	2.3%	2.6%	2.9%	3.3%	4.4%	4.8%	5.5%	6.6%	9.2%	13.0%
	2,000	50, 50		3.9%	4.0%	4.1%	4.4%	4.8%	5.2%	5.9%	7.6%	8.3%	9.4%	11.2%	15.5%	21.7%
	2,000	40, 60		3.8%	3.9%	4.1%	4.3%	4.7%	5.1%	5.7%	7.4%	8.1%	9.2%	11.0%	15.2%	21.2%

Table A-19. Estimated 95% error margins for the difference between two subgroups

DEFF	<i>n</i> <sub>1</sub>	р	$n_2 =$	6,000	5,000	4,000	3,000	2,000	1,500	1,000	500	400	300	200	100	50
	2,000	30, 70		3.6%	3.7%	3.8%	4.0%	4.4%	4.7%	5.4%	6.9%	7.6%	8.6%	10.3%	14.2%	19.9%
	2,000	20, 80		3.1%	3.2%	3.3%	3.5%	3.8%	4.1%	4.7%	6.1%	6.6%	7.5%	9.0%	12.4%	17.3%
	2,000	10, 90		2.3%	2.4%	2.5%	2.6%	2.9%	3.1%	3.5%	4.5%	5.0%	5.6%	6.7%	9.3%	13.0%
	1,500	50, 50		4.4%	4.5%	4.6%	4.8%	5.2%	5.5%	6.2%	7.8%	8.5%	9.6%	11.4%	15.6%	21.8%
	1,500	40, 60		4.3%	4.4%	4.5%	4.7%	5.1%	5.4%	6.1%	7.7%	8.3%	9.4%	11.2%	15.3%	21.3%
	1,500	30, 70		4.0%	4.1%	4.2%	4.4%	4.7%	5.1%	5.7%	7.2%	7.8%	8.8%	10.4%	14.3%	20.0%
	1,500	20, 80		3.5%	3.6%	3.7%	3.8%	4.1%	4.4%	4.9%	6.3%	6.8%	7.7%	9.1%	12.5%	17.4%
	1,500	10, 90		2.6%	2.7%	2.8%	2.9%	3.1%	3.3%	3.7%	4.7%	5.1%	5.7%	6.8%	9.4%	13.1%
	1,000	50, 50		5.2%	5.2%	5.4%	5.5%	5.9%	6.2%	6.8%	8.3%	9.0%	10.0%	11.7%	15.9%	21.9%
	1,000	40, 60		5.1%	5.1%	5.2%	5.4%	5.7%	6.1%	6.6%	8.1%	8.8%	9.8%	11.5%	15.6%	21.5%
	1,000	30, 70		4.7%	4.8%	4.9%	5.1%	5.4%	5.7%	6.2%	7.6%	8.2%	9.1%	10.8%	14.6%	20.1%
	1,000	20, 80		4.1%	4.2%	4.3%	4.4%	4.7%	4.9%	5.4%	6.6%	7.2%	8.0%	9.4%	12.7%	17.6%
	1,000	10, 90		3.1%	3.1%	3.2%	3.3%	3.5%	3.7%	4.1%	5.0%	5.4%	6.0%	7.0%	9.5%	13.2%
	500	50, 50		7.0%	7.1%	7.2%	7.3%	7.6%	7.8%	8.3%	9.6%	10.2%	11.1%	12.7%	16.6%	22.5%
	500	40, 60		6.9%	7.0%	7.0%	7.2%	7.4%	7.7%	8.1%	9.4%	10.0%	10.8%	12.4%	16.3%	22.0%
	500	30, 70		6.5%	6.5%	6.6%	6.7%	6.9%	7.2%	7.6%	8.8%	9.3%	10.1%	11.6%	15.2%	20.6%
	500	20, 80		5.6%	5.7%	5.7%	5.9%	6.1%	6.3%	6.6%	7.7%	8.1%	8.8%	10.1%	13.3%	18.0%
	500	10, 90		4.2%	4.3%	4.3%	4.4%	4.5%	4.7%	5.0%	5.7%	6.1%	6.6%	7.6%	10.0%	13.5%
	400	50, 50		7.8%	7.9%	7.9%	8.1%	8.3%	8.5%	9.0%	10.2%	10.7%	11.6%	13.1%	16.9%	22.7%
	400	40, 60		7.7%	7.7%	7.8%	7.9%	8.1%	8.3%	8.8%	10.0%	10.5%	11.3%	12.8%	16.6%	22.3%
	400	30, 70		7.2%	7.2%	7.3%	7.4%	7.6%	7.8%	8.2%	9.3%	9.8%	10.6%	12.0%	15.5%	20.8%
	400	20, 80		6.3%	6.3%	6.4%	6.4%	6.6%	6.8%	7.2%	8.1%	8.6%	9.3%	10.5%	13.5%	18.2%
	400	10, 90		4.7%	4.7%	4.8%	4.8%	5.0%	5.1%	5.4%	6.1%	6.4%	6.9%	7.9%	10.2%	13.6%

DEFF	<i>n</i> <sub>1</sub>	р	$n_2 =$	6,000	5,000	4,000	3,000	2,000	1,500	1,000	500	400	300	200	100	50
	300	50, 50		9.0%	9.0%	9.1%	9.2%	9.4%	9.6%	10.0%	11.1%	11.6%	12.4%	13.8%	17.5%	23.1%
	300	40, 60		8.8%	8.8%	8.9%	9.0%	9.2%	9.4%	9.8%	10.8%	11.3%	12.1%	13.5%	17.1%	22.7%
	300	30, 70		8.2%	8.2%	8.3%	8.4%	8.6%	8.8%	9.1%	10.1%	10.6%	11.3%	12.7%	16.0%	21.2%
	300	20, 80		7.2%	7.2%	7.3%	7.3%	7.5%	7.7%	8.0%	8.8%	9.3%	9.9%	11.1%	14.0%	18.5%
	300	10, 90		5.4%	5.4%	5.4%	5.5%	5.6%	5.7%	6.0%	6.6%	6.9%	7.4%	8.3%	10.5%	13.9%
	200	50, 50		10.9%	10.9%	11.0%	11.1%	11.2%	11.4%	11.7%	12.7%	13.1%	13.8%	15.1%	18.5%	23.9%
	200	40, 60		10.7%	10.7%	10.8%	10.8%	11.0%	11.2%	11.5%	12.4%	12.8%	13.5%	14.8%	18.2%	23.5%
	200	30, 70		10.0%	10.0%	10.1%	10.1%	10.3%	10.4%	10.8%	11.6%	12.0%	12.7%	13.9%	17.0%	21.9%
	200	20, 80		8.7%	8.7%	8.8%	8.8%	9.0%	9.1%	9.4%	10.1%	10.5%	11.1%	12.1%	14.8%	19.2%
	200	10, 90		6.5%	6.6%	6.6%	6.6%	6.7%	6.8%	7.0%	7.6%	7.9%	8.3%	9.1%	11.1%	14.4%
	100	50, 50		15.3%	15.3%	15.3%	15.4%	15.5%	15.6%	15.9%	16.6%	16.9%	17.5%	18.5%	21.4%	26.2%
	100	40, 60		15.0%	15.0%	15.0%	15.1%	15.2%	15.3%	15.6%	16.3%	16.6%	17.1%	18.2%	21.0%	25.7%
	100	30, 70		14.0%	14.0%	14.1%	14.1%	14.2%	14.3%	14.6%	15.2%	15.5%	16.0%	17.0%	19.6%	24.0%
	100	20, 80		12.2%	12.2%	12.3%	12.3%	12.4%	12.5%	12.7%	13.3%	13.5%	14.0%	14.8%	17.1%	21.0%
	100	10, 90		9.2%	9.2%	9.2%	9.2%	9.3%	9.4%	9.5%	10.0%	10.2%	10.5%	11.1%	12.8%	15.7%
	50	50, 50		21.5%	21.5%	21.5%	21.6%	21.7%	21.8%	21.9%	22.5%	22.7%	23.1%	23.9%	26.2%	30.3%
	50	40, 60		21.1%	21.1%	21.1%	21.2%	21.2%	21.3%	21.5%	22.0%	22.3%	22.7%	23.5%	25.7%	29.7%
	50	30, 70		19.7%	19.7%	19.7%	19.8%	19.9%	20.0%	20.1%	20.6%	20.8%	21.2%	21.9%	24.0%	27.8%
	50	20, 80		17.2%	17.2%	17.2%	17.3%	17.3%	17.4%	17.6%	18.0%	18.2%	18.5%	19.2%	21.0%	24.2%
	50	10, 90		12.9%	12.9%	12.9%	13.0%	13.0%	13.1%	13.2%	13.5%	13.6%	13.9%	14.4%	15.7%	18.2%

Appendix B. Survey Instruments

# 2022-2023 NSSAB Web Questionnaire

	WEB SURVEY APPEARANCE
1)	Display NHTSA/DOT logo on first page only.
2)	Display one question per screen unless otherwise noted.
3)	Display all headings on the same page as the question that appears below it.
4)	Display in the footer on all screens:
	OMB Control Number: 2127-0613
	For technical assistance, please contact our Help Desk USTrafficSurvey@icfsurvey.com
5)	Optimization for best viewing and ease of use on multiple devices (desktop, laptop, tablet, smartphone)
6)	Questions can be skipped unless otherwise noted. One warning message appears in red after a question has been skipped:
	Please try to answer each question so people like you are represented in the survey. Your answers are kept confidential.
7)	Message that appears for a forced/hard validation question:
	You skipped this question, and the information is very important for our research. Please provide response.
8)	Suspend text:
	Your responses have been saved. When you are ready to continue the survey, please return to the link provided in the message you received. You will then be taken to the point where you stopped You may now exit this page.
9)	Already completed:
	Thank you for your interest in the survey. Our records indicate that you or someone from your household already completed the survey. Thank you for your participation.
	If you believe this is an error, please contact us at <u>USTrafficSurvey@icfsurveysupport.com</u>
10)	Survey closed:
	Thank you for visiting the National Survey on Traffic Safety. The survey is now closed. If you have questions, please email the help desk at <u>USTrafficSurvey@icfsurveysupport.com</u>
11)	Survey submit completion page:
	Thank you for your participation! Your answers have been submitted. If you have questions, please email the help desk at <u>USTrafficSurvey@icfsurvey.com</u>
12)	Include a language toggle drop-down at the bottom of each screen.
13)	Set the survey time-out time to 30 minutes.

# [DO NOT DISPLAY THIS HEADING]

Landing Page

# U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA)

# Welcome to the National Survey on Traffic Safety!

As noted in the letter you received, please have the member of your household who is **18 years of age or older**, AND **has the next birthday** complete the survey. This is a method of random selection.

Τc	access the survey,	please enter	the web	login ID y	you received	in your	letter:

Go to Survey

Haga clic aquí para Español

For assistance, please contact our Help Desk <u>USTrafficSurvey@icfsurvey.com</u>.

You can find answers to frequently asked questions here.

[Paperwork Reduction Act Burden Statement is displayed as separate HTML page when link is clicked]

Paperwork Reduction Act Burden Statement [PROGRAMMER: Pop out new window when link is clicked:] Under the Paperwork Reduction Act, a federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2127-0613. The average amount of time to complete this survey is 20 minutes. All responses to this collection of information are voluntary. If you have comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them to: Information Collection Clearance Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave, S.E., Washington, DC, 20590 NHTSA Form 1538. National Survey on Traffic Safety – National Highway Traffic Safety Administration (NHTSA)

Trequently Asked Questions	
1) Who is sponsoring this survey?	The National Highway Traffic Safety Administration (NHTSA) is sponsoring this survey. NHTSA is the agency within the U.S. Department of Transportation responsible for reducing deaths and injuries resulting from motor vehicle crashes.
2) Why are you doing this survey?	NHTSA is sponsoring this survey to better understand the attitudes and behaviors of motor vehicle drivers, passengers, and other road users.
3) <u>How will my information be used?</u>	Results from this survey will help inform safety initiatives and improve the safety of drivers, passengers, and other road users. Keep in mind that any survey results shared with the public will be presented in group form and cannot be traced back to you.
4) <u>How was I selected for this study?</u>	Your household was randomly selected from a list of residential addresses in the United States.
5) Why should I participate?	Your participation is a valuable public service and will help improve the safety of all road users.
6) Who is eligible?	The person in your household who is 18 years or older with the next birthday has been selected to complete this survey.
7) <u>How long will the web survey take?</u>	It should take approximately 20 mins to complete.
8) <u>Has this study been approved by OMB?</u>	The OMB control number for this study is 2127-0613.
9) Who should I contact with questions?	Please direct any additional questions to USTrafficSurvey@icfsurvey.com

Frequently Asked Questions

#### [DO NOT DISPLAY THIS HEADING]

#### INFORMED CONSENT

## [ASK ALL]

## **YOURTHE1**

Thank you for participating in the National Survey on Traffic Safety. The information you share will help the National Highway Traffic Safety Administration improve the lives of people across the country. Your household was randomly selected for this survey. Your name will never be connected with your answers. Results of the survey will only be shown in group form so no one can be identified. The survey will take about 20 minutes. You do not need to gather any records to answer the questions—your best guess is OK. Participation in this survey is voluntary.

If you are eligible to participate, you will receive [IF EXPGROUP = 1,2 INSERT "\$5"; IF EXPGROUP = 3,4 INSERT \$10] for Amazon.com immediately after completing and submitting the questionnaire, in appreciation for your participation.

## [FOOTER FOR THIS PAGE ONLY]

For assistance, please contact our Help Desk USTrafficSurvey@icfsurvey.com.

You can find answers to frequently asked questions here.

[Paperwork Reduction Act Burden Statement is displayed as separate HTML page when link is clicked]

Paperwork Reduction Act Burden Statement [PROGRAMMER: Pop out new window when link is clicked: Under the Paperwork Reduction Act, a federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2127-0613. The average amount of time to complete this survey is 20 minutes. All responses to this collection of information are voluntary. If you have comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them to: Information Collection Clearance Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave, S.E., Washington, DC, 20590 NHTSA Form 1538.

## [DO NOT DISPLAY THIS HEADING]

AGE SCREENER			
[ASK ALL]			
[REQUIRED]			
P1			
What is your age?			
	01	18 years of age or older	
	02	17 years of age or younger	

## [ASK IF P1=02]

## P1.1

Is there anyone living in this household who is 18 years of age or older?

01 Yes 02 No

## [ASK IF P1.1=01]

## P1.2

Please ask the household member who is 18 years of age or older and has the next birthday to complete the survey.

01 Continue

## [ASK IF P1.2=01]

## P1.3

What is your age?

01 18 years of age or older

02 17 years of age or younger

## [ASK IF P1.3=02 OR P1.1=02 ]

## **P2**

You must be 18 years of age or older to complete the survey. Thank you very much for your time.

[TERMINATE, assign disp INELIGIBLE]

[DISPLAY THIS HEADING ON SAME SCREEN AS INSTRUCT]

## [ASK ALL]

INSTRUCTIONS

## [ASK ALL]

## INSTRUCT

Use the buttons to get through the survey:

- Click on the NEXT button to save your responses and continue to the next page.
- Click on the **BACK** button to go back to a previous page. You may change your answers if you need to. Do not use your browser's Back button. This may cause you to exit the questionnaire.
- You can close your browser to exit the survey at any time and your answers will be saved. You can re-enter later using the same code.

## [DISPLAY THIS HEADING ON SAME SCREEN AS Q1]

## [ASK ALL]

GENERAL DRIVING INFORMATION

## [ASK ALL]

#### [REQUIRED]

## Q1.

The next few questions ask about your general driving experiences. For these questions, a motorcycle counts as a motor vehicle.

How often do you usually drive a car or other motor vehicle?

- 01 Every day, or almost every day
- 02 Several days a week
- 03 Once a week or less
- 04 Only certain times a year
- 05 Never

## [ASK IF Q1 = (01, 02, 03, 04)]

## Q2.

What kind of vehicle do you drive most often?

(If you drive two vehicles about the same amount and can't decide which of them you drive most often, then answer for which of those two vehicles you drove last.)

01 Car
02 Van or minivan
03 SUV
04 Pickup truck
05 Other truck/box truck/semi
06 Motorcycle
07 Other

[DISPLAY THIS HEADING ON SAME SCREEN AS Q3] [ASK IF Q1 = (01, 02, 03, 04)]

## SPEED BEHAVIOR

#### [ASK IF Q1 = (01, 02, 03, 04)]

[ROTATE DISPLAY ORDER OF OPTIONS 01 AND 02]

#### Q3.

Which of the following statements best describes your driving?

01 I tend to pass other cars more often than other cars pass me

02 Other cars tend to pass me more often than I pass them

03 Both about equally

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q4.

When driving I tend to . . .

01 Stay with slower moving traffic

02 Keep up with the faster traffic

03 Both about equally

#### [DO NOT DISPLAY THIS HEADING]

#### SPEEDING BEHAVIOR ON VARIOUS ROAD TYPES

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q5int.

We want to find out how people may change the way they drive on different types of roads, such as multilane highways, rural routes, or residential streets. These next questions are about how you drive on some of these different kinds of roads.

#### [DISPLAY THIS HEADING ON SAME SCREEN AS Q6INT]

## [ASK IF Q1 = (01, 02, 03, 04)]

MULTI-LANE DIVIDED INTERSTATE TYPE HIGHWAYS

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q6int

The next questions ask about your driving on <u>Multi-Lane</u>, <u>Divided Highways</u>. These include interstates, freeways and other highways and have a barrier or a median separating traffic in opposite directions.



## [ASK IF Q1 = (01, 02, 03, 04)]

[SOFT PROMPT "Please try to answer. Your best guess is fine."]

## Q5.

How often do you drive on Multi-Lane, Divided Highways?

- 01 Frequently
- 02 Sometimes
- 03 Rarely
- 04 Never

#### [ASK IF Q5 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 5,000]

**Q6.** 

During the past seven days, approximately how many miles did you drive on <u>Multi-Lane, Divided</u> <u>Highways</u>?

RANGE 0-5000 [NUMBER BOX] Miles

#### [ASK IF Q5 = (01, 02, 03)]

#### [OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

## Q7.

What do you consider to be a safe speed limit for (most) <u>Multi-Lane, Divided Highways</u> in good weather on roads with no congestion during the day?

RANGE 0-97 [NUMBER BOX] miles per hour (mph)

#### [ASK IF Q5 = (01, 02, 03)]

#### [OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

#### **Q8**.

When driving on <u>Multi-Lane, Divided Highways</u> in good weather during the day, how fast do you normally drive?

#### RANGE 0-97 [NUMBER BOX] mph

#### [ASK IF Q5 = (01, 02, 03)]

#### **Q9**.

How often would you say you drive 15 miles an hour over the speed limit on <u>Multi-Lane, Divided</u> <u>Highways</u>?

01 Always

02 Often

03 Sometimes

04 Rarely

05 Never

#### [ASK IF Q5 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

#### Q10.

At what speed would you typically be driving on a <u>Multi-Lane, Divided Interstate Freeway</u> that passes through a major town or city with a 65 mph posted speed limit?

RANGE 0-97 [NUMBER BOX] mph

#### [ASK IF Q5 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

# Q11.

How far above the speed limit do you think the average driver can go on <u>Multi-Lane, Divided Highways</u>, before receiving a ticket?

RANGE 0-97 [NUMBER BOX] mph over the speed limit

# [ASK IF Q11>30] [IF Q11a=02 THEN SEND BACK TO Q11]

## Q11a.

You entered that the average driver could go [insert response from Q11] mph OVER THE SPEED LIMIT before receiving a ticket. Is this correct?

01 Yes

02 No

## [DISPLAY THIS HEADING ON SAME SCREEN AS Q12INT]

[ASK IF Q1 = (01, 02, 03, 04)]

TWO-LANE HIGHWAYS, ONE LANE EACH DIRECTION

# [ASK IF Q1 = (01, 02, 03, 04)]

## Q12int

The next questions ask about your driving behavior on <u>Two-Lane Highways</u> which are <u>not divided</u>. This means there is only one lane traveling in each direction and no median or barrier separating traffic traveling in opposite directions.





## [ASK IF Q1 = (01, 02, 03, 04)]

## Q12.

How often do you drive on Two-Lane Highways that have one lane in each direction?

01	Frequently
02	Sometimes

- 03 Rarely
- 04 Never

## [ASK IF Q12 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 5,000]

## Q13.

During the past seven days, approximately how many miles did you drive on <u>Two-Lane Highways</u>?

RANGE 0-5000 [NUMBER BOX] Miles

[ASK IF Q12 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

## Q14.

What do you consider to be a safe speed limit for (most) <u>Two-Lane Highways</u> in good weather during the day?

RANGE 0-97 [NUMBER BOX] mph

[ASK IF Q12 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

## Q15.

When driving on <u>Two-Lane Highways</u> in good weather during the day, how fast do you normally drive?

#### RANGE 0-97 [NUMBER BOX] mph

#### [ASK IF Q12 = (01, 02, 03)]

#### Q16.

How often would you say you drive 15 miles an hour over the speed limit on <u>Two-Lane Highways</u>?

01 Always

02 Often

03 Sometimes

04 Rarely

05 Never

#### [ASK IF Q12 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

## Q17.

How far above the speed limit do you think the average driver can go on <u>Two-Lane Highways</u>, before receiving a ticket?

RANGE 0-97 [NUMBER BOX] mph over the speed limit

## [ASK IF Q17>30] [IF Q17a=02 THEN SEND BACK TO Q17]

## Q17a.

You entered that the average driver could go [insert response from Q17] mph OVER THE SPEED LIMIT before receiving a ticket. Is this correct?

01 Yes 02 No

## [ASK IF Q1 = (01, 02, 03, 04)]

MAIN (ARTERIAL) ROADS

[ASK IF Q1 = (01, 02, 03, 04)] Q18int The next question asks about <u>Main (Arterial) Roads</u> with two travel lanes in each direction, in a town with a 35 mph posted speed limit.





[ASK IF Q1 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

# Q18.

At what speed would you typically be driving on a <u>Main (Arterial) Road</u> with two travel lanes in each direction in a town with a 35 mph posted speed limit?

RANGE 0-97 [NUMBER BOX] mph

[DISPLAY THIS HEADING ON SAME SCREEN AS Q19INT] [ASK IF Q1 = (01, 02, 03, 04)]

# NEIGHBORHOOD AND RESIDENTIAL STREETS

# [ASK IF Q1 = (01, 02, 03, 04)]

# Q19int

The next questions ask about your driving behavior on streets in <u>Neighborhoods and Residential</u> areas.





# [ASK IF Q1 = (01, 02, 03, 04)]

Q19.

How often do you drive on <u>Neighborhood or Residential Streets</u>?

- 01 Frequently
- 02 Sometimes
- 03 Rarely
- 04 Never

#### [OUT OF RANGE MESSAGE: Please enter a number between 0 and 997]

# Q20.

During the past seven days, approximately how many miles did you drive on <u>Neighborhood or</u> <u>Residential Streets</u>?

RANGE 0-997 [NUMBER BOX] Miles

### [ASK IF Q19 = (01, 02, 03)]

#### [OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

### Q21.

What do you consider to be a safe speed limit for (most) <u>Neighborhood or Residential Streets</u> in good weather during the day?

RANGE 0-97 [NUMBER BOX] mph

[ASK IF Q19 = (01, 02, 03)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

### Q22.

When driving on <u>Neighborhood or Residential Streets</u> in good weather during the day, how fast do you normally drive?

RANGE 0-97 [NUMBER BOX] mph

### [ASK IF Q19 = (01, 02, 03)]

### Q23.

How often would you say you drive 10 miles an hour over the speed limit on <u>Neighborhood or</u> Residential Streets?

01 Always

02 Often

03 Sometimes

04 Rarely

05 Never

### [ASK IF Q19 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 97]

# Q24.

How far above the speed limit do you think the average driver can go on <u>Neighborhood or Residential</u> <u>Streets</u>, before receiving a ticket?

RANGE 0-97 [NUMBER BOX] mph over the speed limit

# [ASK IF Q24>30] [IF Q24a=02 THEN SEND BACK TO Q24]

### Q24a.

You entered that the average driver could go [insert response from Q24] mph OVER THE SPEED LIMIT before receiving a ticket. Is this correct?

01 Yes 02 No

.

[DISPLAY THIS HEADING ON SAME SCREEN AS Q25INT]

[ASK IF Q1 = (01, 02, 03, 04)]

DRIVING AND SPEED LIMITS

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25int.

The next few statements are about driving and speed limits. Please tell us how much you agree or disagree with each one.

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25a.

Everyone should obey the speed limits because it's the law.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

## [ASK IF Q1 = (01, 02, 03, 04)]

### Q25b.

People should keep pace with the flow of traffic.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

#### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25c.

Speeding tickets have more to do with raising money than they do with reducing speeding.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25d.

Driving over the speed limit is not dangerous for skilled drivers.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25e.

There is no excuse to exceed the speed limits.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

[ASK IF Q1 = (01, 02, 03, 04)] Q25f. It is unacceptable to exceed speed limits by more than 20 mph.

- 01 Strongly agree
- 02 Somewhat agree

03 Neither

- 04 Somewhat disagree
- 05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q25g.

If it is your time to die, you'll die, so it doesn't matter whether you speed.

- 01 Strongly agree
- 02 Somewhat agree
- 03 Neither
- 04 Somewhat disagree
- 05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q26int.

Please tell us how much you agree or disagree with the following statements.

#### [ASK IF Q1 = (01, 02, 03, 04)]

### Q26a.

I enjoy the feeling of driving fast.

- 01 Strongly agree
- 02 Somewhat agree
- 03 Neither
- 04 Somewhat disagree
- 05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q26b.

The faster I drive, the more alert I am.

- 01 Strongly agree
- 02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q26c.

I often get impatient with slower drivers.

- 01 Strongly agree
- 02 Somewhat agree
- 03 Neither
- 04 Somewhat disagree
- 05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q26d.

I try to get where I am going as fast as I can.

- 01 Strongly agree
- 02 Somewhat agree
- 03 Neither
- 04 Somewhat disagree
- 05 Strongly disagree

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q26e.

I worry a lot about having a crash.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### Q26f.

### I consider myself a risk taker while driving.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q26g.

Speeding is something I do without thinking.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q26h.

Driving within or near the speed limit makes me feel bored.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

## [ASK IF Q1 = (01, 02, 03, 04)]

### [MUL=16]

[ROTATE OPTIONS 01-15 (RANDOM START FOR RESPONSE OPTIONS KEEPING THE LIST IN ORDER)]

# Q27.

People sometimes go faster than the speed limit for different reasons. On those occasions when you do, what do you think are the <u>main reasons</u> you drive <u>faster than the speed limit</u>?

Select all that apply.

01 I'm late

02 I am unlikely to have a crash

03 It's a habit

04 I'm alone in the car

05 I'm unlikely to get a ticket

06 People I am with encourage it

07 I'm comfortable driving fast

08 It's an emergency/illness

09 I'm not paying attention/distracted

10 I'm in a hurry

11 I'm going with the traffic flow

12 I'm passing another vehicle

13 There is no traffic/roads are clear

14 The speed limit is too low

15 I'm avoiding accidents

17 Other

18 I never speed [EXCLUSIVE]

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q28int.

Now, please read the next few statements and tell us how much you agree or disagree.

# [ASK IF Q1 = (01, 02, 03, 04)]

Q28a.

Driving at or near the speed limit reduces my chances of an accident.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### Q28b.

Driving at or near the speed limit makes it difficult to keep up with traffic.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

# [ASK IF Q1 = (01, 02, 03, 04)]

# Q28c.

Driving at or near the speed limit makes me feel annoyed.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q28d.

Driving at or near the speed limit makes it easier to avoid dangerous situations.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

05 Strongly disagree

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q28e.

Driving at or near the speed limit uses less fuel.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

### Q29int.

Please answer the following questions thinking about the posted speed limit, plus or minus a few miles per hour, in the places you will be driving over the next few days.

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q29a.

How likely or unlikely is it that you will drive at or near the speed limit under the following circumstances?

How likely is it that you will drive at or near the speed limit if you were driving in a fast or powerful car?

01 Very likely
02 Somewhat likely
03 Neither
04 Somewhat unlikely
05 Very unlikely

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q29b.

How likely is it that you will drive at or near the speed limit if the speed limit is clearly signed?

01 Very likely

02 Somewhat likely

03 Neither

- 04 Somewhat unlikely
- 05 Very unlikely

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q29c.

Please tell us how often you do the following while driving.

How often do you disregard the speed limits late at night or early in the morning?

01 Nearly all the time

02 Frequently

03 Quite often04 Occasionally05 Hardly ever

06 Never

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q29d.

How often do you get involved in "races" with other drivers on a roadway or from a stop light?

01 Nearly all the time

02 Frequently

03 Quite often

04 Occasionally

05 Hardly ever

06 Never

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q29e.

How often do you <u>take risks while driving</u> because it's fun, such as driving fast on curves or accelerating over bumps/hills to "get air"?

01 Nearly all the time

02 Frequently

03 Quite often

04 Occasionally

05 Hardly ever

06 Never

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q29f.

How often do you drive 10-20 mph over the speed limit?

01 Nearly all the time

02 Frequently

03 Quite often

04 Occasionally

05 Hardly ever

06 Never

### Q29g.

How much do you want to drive at or near the speed limit while driving in the next week?

01 Extremely so

02 Quite a bit

03 Moderately so

04 A little

05 Not at all

### [DISPLAY THIS HEADING ON SAME SCREEN AS Q30]

[ASK IF Q1 = (01, 02, 03, 04)]

ATTITUDES TOWARD ENFORCEMENT

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q30.

How important is it that something be done to reduce speeding by drivers?

- 01 Very important
- 02 Somewhat important
- 03 Not too important
- 04 Not at all important

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q31.

How often do you think police should enforce the speed limit?

01 All the time

02 Often

03 Sometimes

04 Rarely

05 Never

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q32

How often do you see motor vehicles that have been pulled over by police on the streets and roads you normally drive?

01 All the time 02 Often

03 Sometimes

04 Rarely

05 Never

# [DISPLAY THIS HEADING ON SAME SCREEN AS Q33]

[ASK IF Q1 = (01, 02, 03, 04)]

SPEED CAMERAS

[ASK IF Q1 = (01, 02, 03, 04)]

### Q33.

The next questions are about speed cameras. These are cameras set up at intersections or other locations to take pictures of speeding vehicles. A traffic ticket is mailed to the owner of the vehicle along with a photograph and information about the location and time.

Before today, had you ever heard of speed cameras being used to ticket drivers who speed?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q33a.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

### ...where it could be hazardous for a police officer to stop a driver?

01 Yes

02 No

# Q33b.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

### ...where stopping a vehicle could cause traffic congestion?

01 Yes

02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q33c.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

#### ...where there have been many crashes?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q33d.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

#### ... in a school zone?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q33e.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

#### ... in a construction zone?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q33f.

Thinking about locations where speed cameras might be useful, would you find it acceptable to use them...

#### ...on all roads?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q34.

Along the routes you normally drive, are there speed cameras in use?

01 Yes 02 No

03 I don't know [DISPLAY IF Q33=02]

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q35.

Have you ever received a ticket in the mail for a speed violation identified by a speed camera?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q36.

Now, please read the next few statements and tell us how much you agree or disagree.

### Speed cameras are used to prevent accidents.

01 Strongly agree

02 Somewhat agree

03 Neither

04 Somewhat disagree

#### 05 Strongly disagree

### Q37.

### Speed cameras are used to generate revenue.

- 01 Strongly agree
- 02 Somewhat agree
- 03 Neither
- 04 Somewhat disagree
- 05 Strongly disagree

### [DISPLAY THIS HEADING ON SAME SCREEN AS Q38]

[ASK IF Q1 = (01, 02, 03, 04)]

# OPINIONS ABOUT REDUCING SPEEDING

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q38.

How would you feel about using the following measures in your community to reduce speeding?

### More frequent ticketing for speeding.

01 Good idea02 Neither a good idea nor a bad idea03 Bad idea

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q39.

How would you feel about using the following measures in your community to reduce speeding?

#### Issuing higher fines for speeding tickets.

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

# Q40.

How would you feel about using the following measures in your community to reduce speeding?

#### Increasing public awareness of the risks of speeding.

01 Good idea02 Neither a good idea nor a bad idea03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q41.

How would you feel about using the following measures in your community to reduce speeding?

#### Road design changes, like speed humps and traffic circles, to slow down traffic.

01 Good idea02 Neither a good idea nor a bad idea03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q42.

How would you feel about using the following measures in your community to reduce speeding?

#### Electronic signs by the road that warn drivers that they are speeding and should slow down.

01 Good idea 02 Neither a good idea nor a bad idea 03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q43.

How would you feel about using the following measures in your community to reduce speeding?

#### Increased use of speed cameras in dangerous or high crash locations.

- 01 Good idea
- 02 Neither a good idea nor a bad idea

### Q44int.

There are many new technologies in use to reduce speeding on our nation's roads. These next questions ask what you think about these technologies.

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q44a.

A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...

#### **Truck drivers?**

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q44b.

A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...

#### **Drivers 18 years or younger?**

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q44c.

A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...

#### Drivers with multiple speeding tickets in one year?

01 Good idea 02 Neither a good idea nor a bad idea 03 Bad idea

### Q44d.

A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for...

#### All drivers?

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q45int.

The next questions describe some devices that can be added to a motor vehicle to reduce speeding. For each type of device, we will first ask you whether you think it is a good idea or a bad idea to help reduce speeding in general. Then we will ask you about whether you think that device would keep you from speeding.

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q45a.

A device in your motor vehicle that notifies you with a buzzer or a flashing light when you drive faster than the speed limit. Do you think this is a...

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q45b.

Would this device prevent you from speeding?

01 Yes

02 No

#### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q46a.

A device in your motor vehicle that records your speed data and gives you the option to provide the information to your insurance company to lower your premiums, if you obey the speed limits? Do you think this is a...

01 Good idea

02 Neither a good idea nor a bad idea 03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q46b.

Would this device prevent you from speeding?

01 Yes

02 No

# [ASK IF Q1 = (01, 02, 03, 04)]

# Q47a.

A device in your motor vehicle that slows your motor vehicle down when it senses another car or object is too close to your motor vehicle. Do you think this is a...

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q47b.

Would this device prevent you from speeding?

01 Yes

02 No

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q48int.

Please tell us how likely or unlikely you would be to use each of the following devices on your own vehicle.

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q48a.

A device that does not allow you to drive faster than 10 mph over the posted speed limit.

01 Very likely

- 02 Somewhat likely
- 03 Neither

04 Somewhat unlikely

05 Very unlikely

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q48b

A device that you can switch on or off, that prevents you from driving faster than the speed limit?

01 Very likely

- 02 Somewhat likely
- 03 Neither
- 04 Somewhat unlikely
- 05 Very unlikely

### [ASK IF Q1 = (01, 02, 03, 04)]

#### Q48c.

A device that allows parents to limit the maximum speed of a motor vehicle, when a teenager drives the motor vehicle.

01 Very likely02 Somewhat likely03 Neither04 Somewhat unlikely05 Very unlikely

# [ASK IF Q1 = (01, 02, 03, 04)]

### Q49a.

Some roadways use digital speed limit signs to change the speed limit on a section of road based on traffic or weather conditions.

Do you think it is a good idea or a bad idea to use digital speed limit signs in the following situation:

### Construction zones

- 01 Good idea
- 02 Neither a good idea nor a bad idea
- 03 Bad idea

### Q49b.

Do you think it is a good idea or a bad idea to use digital speed limit signs in the following situation:

#### School zones

01 Good idea02 Neither a good idea nor a bad idea03 Bad idea

# [ASK IF Q1 = (01, 02, 03, 04)]

# Q49c.

Do you think it is a good idea or a bad idea to use digital speed limit signs in the following situation:

#### Bad weather

01 Good idea

02 Neither a good idea nor a bad idea

03 Bad idea

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q49d.

Do you think it is a good idea or a bad idea to use digital speed limit signs in the following situation:

#### Congested Roadways

01 Good idea02 Neither a good idea nor a bad idea03 Bad idea

#### [ASK IF Q1 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 30]

### Q50.

How many times have you been in a speeding related accident in the past twelve months?

Number of speeding-related accidents RANGE 0-30 [NUMBER BOX]

### RANGE 0-30 [NUMBER BOX]

### [ASK IF Q50 = 1-30]

# Q51.

Did you receive any injuries as a result of the most recent speeding related accident?

01 Yes

02 No

[DISPLAY THIS HEADING ON SAME SCREEN AS Q52]

[ASK IF Q1 = (01, 02, 03, 04)]

SPEEDING TICKETS

[ASK IF Q1 = (01, 02, 03, 04)]

[OUT OF RANGE MESSAGE: Please enter a number between 0 and 20]

### Q52.

How many times have you been stopped for speeding in the past twelve months?

RANGE 0-20 [NUMBER BOX] Number of times stopped for speeding

### [ASK IF Q52 =1-20]

Q53.

Did you receive a ticket or warning the last time you were stopped for speeding?

01 Yes, a ticket

02 Yes, a warning (verbal or written)

03 No

### [ASK IF Q53 = (01, 02)]

#### Q54.

Did you change your driving behavior as a result of receiving that ticket or warning for speeding?

01 Yes 02 No

### [DISPLAY THIS HEADING ON SAME SCREEN AS Q55]

[ASK IF Q1 = (01, 02, 03, 04)]

# GENERAL DRIVING BEHAVIORS

### [ASK IF Q1 = (01, 02, 03, 04) AND Q2 NE 06]

### Q55.

When driving your primary motor vehicle how often do you wear your seat belt?

01 All the time

02 Often

03 Sometimes

04 Rarely

05 Never

### [ASK IF Q1 = (01, 02, 03, 04)]

### Q56.

In the past 30 days, have you driven a vehicle when you thought you might have consumed too much alcohol to drive safely?

01 Yes 02 No

### [ASK IF Q1 = (01, 02, 03, 04)]

# Q57.

How often do you talk on the phone while you are driving?

01 All trips

02 Most trips

03 About half my trips

04 Fewer than half my trips

05 None of my trips

06 I don't have a cell phone

# [ASK IF Q57 = (01, 02, 03, 04, 05)]

### Q58.

How often do you send text messages while you are driving and the vehicle is moving?

01 All trips

02 Most trips

03 About half my trips

04 Fewer than half my trips

05 None of my trips

# [ASK IF Q57 = (01,02,03,04,05)]

### Q59.

How often do you read text messages while you are driving and the vehicle is moving?

01 All trips

02 Most trips

03 About half my trips

04 Fewer than half my trips

05 None of my trips

# [DISPLAY THIS HEADING ON SAME SCREEN AS Q60]

# [ASK ALL]

ABOUT YOU

# [ASK ALL]

# Q60.

Now, a few last questions for statistical purposes . . .

# [ASK ALL]

[OUT OF RANGE MESSAGE: Please enter a number between 18 and 96]

# Q61.

How old are you?

RANGE 18-96 [NUMBER BOX] YEARS OLD

# [ASK ALL]

[OUT OF RANGE MESSAGE: Please enter a number between 1 and 18]

# Q61a.

How many members of your household, including yourself, are 18 years of age or older?

#### RANGE 1-18 [NUMBER BOX]

### [ASK ALL]

### Q62.

What is your sex?

01 Male

02 Female

### [ASK ALL]

### Q63.

What is the highest grade of school you have completed?

01 No formal schooling

02 First through 7th grade

03 8th grade

04 Some high school

05 High school graduate

06 Some college

07 Four-year college graduate

08 Some graduate school

09 Graduate degree

# [ASK ALL]

### Q64.

Are you currently married, divorced, separated, widowed, or single?

01 Married

02 Divorced

03 Separated

04 Widowed

05 Single

# [ASK ALL]

# Q65.

Do you consider yourself to be Hispanic or Latino/a?

01 Yes 02 No

# [ASK ALL]

[MUL=6]

# Q66.

Which of the following racial categories describes you? You may select more than one.

01 American Indian or Alaska Native

02 Asian

03 Black or African-American

04 Native Hawaiian or Other Pacific Islander

05 White

06 Other

# [ASK ALL]

### Q67.

Do you own or rent your home?

01 Own

02 Rent

03 Some other arrangement

# [ASK ALL]

# Q68.

Which of the following categories best describes your total household income before taxes in 2021?

Your best estimate is fine.

01	Less than \$15,000
02	\$15,000 to \$24,999
03	\$25,000 to \$34,999
04	\$35,000 to \$49,999
05	\$50,000 to \$74,999
06	\$75,000 to \$99,999

07 \$100,000 to \$149,999
08 \$150,000 to \$199,999
09 \$200,000 or more

[ASK IF Q1=05]

INEL.

Thank you for your responses. You are not eligible to take the full survey but the responses you provided help us make sure the data we collect is representative of the general population.

# [ASK IF Q1 = (01, 02, 03, 04) AND (EXPGROUP = 1,2 OR (EXPGROUP = 3,4 AND GETCODE IS POPULATED)]

### GC1.

In appreciation for the time you have spent answering our questions, we would like to give you a \$5 Amazon gift code. Would you like the gift code?

01	Yes	
02	No	

### [HIDDEN VARIABLE]

[ASK IF (GC1=01 AND (EXPGROUP=1,2 AND THERE IS NOT ALREADY A RESPONSE TO GETCODE) OR (EXPGROUP=3,4 AND GETCODE IS NOT POPULATED))]

### GETCODE

[PULL GIFT CODES FROM "SPEEDERS5" GIFT CODE FILE]

### [HIDDEN VARIABLE]

[ASK IF EXPGROUP = 1,2,3,4 AND GETCODE WAS POPULATED PRIOR TO 12/15/2022]]

### GETCODE\_EXP3\_4

[GIFT CODE PREVIOUSLY DISPLAYED]

### [HIDDEN VARIABLE]

[ASK IF EXPGROUP = 3,4 AND GETCODEA WAS POPULATED]]

### GETCODEA\_EXP3\_4

[NEW GIFT CODE FROM EXPGROUP 3 AND 4 FOR BACKUP]

# [ASK IF GC1=01 AND EXPGROUP=1,2 AND GETCODE IS NOT POPULATED] GC2.

### Your Amazon gift code is [XXX XXXXX INSERT FROM GETCODE]

Please note that if a gift code was not displayed, we will send \$5 cash to the address on file within 4 weeks.

#### HOW TO USE YOUR AMAZON GIFT CODE

The code is a unique number you can use to purchase items online at Amazon.com. You may enter the code online when you are ready to make a purchase at Amazon.com. There is no expiration date. Save this code in a safe space until you are ready to use it. Some ideas to keep it safe are:

- 1. Write it down on a sheet of paper and keep it in a safe and hidden location.
- 2. Take a photo or screenshot of the code with your phone.
- 3. Save the code in your Amazon.com account. If you have an Amazon.com account, you can save your code in your account until you are ready to spend it.

#### If you have any questions about your gift code, please email USTrafficSurvey@icfsurvey.com

# [ASK IF EXPGROUP = 1,2,3,4 AND GETCODE WAS POPULATED PRIOR TO 12/15/2022] GC2 2.

### Your Amazon gift code is [XXX XXXXX INSERT FROM GETCODE3\_4]

Please note that if a gift code was not displayed, we will send \$5 cash to the address on file within 4 weeks.

#### HOW TO USE YOUR AMAZON GIFT CODE

The code is a unique number you can use to purchase items online at Amazon.com. You may enter the code online when you are ready to make a purchase at Amazon.com. There is no expiration date. Save this code in a safe space until you are ready to use it. Some ideas to keep it safe are:

- 1. Write it down on a sheet of paper and keep it in a safe and hidden location.
- 2. Take a photo or screenshot of the code with your phone.
- 3. Save the code in your Amazon.com account. If you have an Amazon.com account, you can save your code in your account until you are ready to spend it.

#### If you have any questions about your gift code, please email USTrafficSurvey@icfsurvey.com

### [ASK IF Q1 = (01, 02, 03, 04) AND (EXPGROUP = 3,4 AND GETCODE IS NOT POPULATED)]

### GC1a.

In appreciation for the time you have spent answering our questions, we would like to give you two \$5 Amazon gift codes. Would you like the gift codes?

01 Yes

02 No

### [HIDDEN VARIABLE]

### [ASK IF GC1A=01 AND GETCODE OR GETCODEa VARIABLES]

#### GETCODEa

[PULL GIFT CODES FROM "SPEEDERS55" GIFT CODE FILE]

### [ASK IF GC1a=01]

#### GC2a.

Your Amazon gift codes are [XXX XXXXX INSERT CODE FROM OR GETCODEa]

Please note that if a gift code was not displayed, we will send \$10 cash to the address on file within 4 weeks.

#### HOW TO USE YOUR AMAZON GIFT CODE

The code is a unique number you can use to purchase items online at Amazon.com. You may enter the code online when you are ready to make a purchase at Amazon.com. There is no expiration date. Save this code in a safe space until you are ready to use it. Some ideas to keep it safe are:

- 1. Write it down on a sheet of paper and keep it in a safe and hidden location.
- 2. Take a photo or screenshot of the code with your phone.
- 3. Save the code in your Amazon.com account. If you have an Amazon.com account, you can save your code in your account until you are ready to spend it.

If you have any questions about your gift code, please email USTrafficSurvey@icfsurvey.com

# [ASK ALL]

### FCLOSE.

Thank you very much for your time and cooperation.

### 2022-2023 NSSAB Mail Questionnaire







NHTSA Form 1538 OMB Number: 2127-0613 Expiration Date: 07/31/2024 M a s t e r i d

# NATIONAL SURVEY N TRAFFIC SAFETY

Please have the household member age 18 or older who has the next birthday take the survey.

This is a method of random selection important to producing accurate estimates.

Thank you for participating in the National Survey on Traffic Safety. The information you share will help the National Highway Traffic Safety Administration improve the lives of people across the country. Your household was randomly selected for this survey. Your name will never be connected with your answers. Results of the survey will only be shown in group form so no one can be identified. The survey will take about 20 minutes. You do not need to gather any records to answer the questions-your best guess is OK. Participation in this survey is voluntary.

If you are eligible to participate, a \$5 bill will be mailed to this address about a month after the completed questionnaire has been received.

#### Marking Instructions

- · Please use a No. 2 pencil or a blue or black ink pen.
- Please do not use pens with ink that soaks through the paper.
  Please make solid marks that fill the response completely.
- Please make no stray marks on this form.





U.S. Department of Transportation National Highway Traffic Safety Administration



Paparwork Reduction Act Burden Statement: Under the Paparwork Reduction Act, a federal agency may not conduct or sponsor, and a period is not required to respond to, a collection of information subject to the requirements of the Repervork Reduction Act unless that collection of information objection is 2127-0013. The everage amount of time to complete this survey is 20 minutes. All responses to this collection of information are voluntary. (The you have comments regarding this burden attimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them for information are voluntary. (The Office Context and them for the State Advection 1990) and the survey of the sendence of the second office. National Highway Traffic Safety Administration, 1200 New Jersey Are, S.E., Washington, DC, 20590.

### PLEASE ANSWER THIS FIRST A What is your age? 17 years of age or younger CONTINUE Is there anyone living in this household who is 18 years of age or older? who is 18 years of age or older and has the next birthday. STOP. Please return the blank O No. questionnaire in the postage paid envelope as soon as possible. GENERAL DRIVING INFORMATION The next few questions ask about your general driving experiences. For these questions, a motorcycle counts as a motor vehicle. How often do you usually drive a car or other motor vehicle? Every day, or almost every day Several days a week Once a week or less Only certain times a year CALLED "ABOUT YOU" ON PAGE 10 What kind of vehicle do you drive most often? (If you drive two vehicles about the same amount and can't decide which of them you drive most often, then answer for which of those two vehicles you drove last.) Car O Van or minivan ⊖ suv Pickup truck Other truck/box truck/semi Motorcycle Other SPEED BEHAVIOR 3 Which of the following statements best describes your driving? I tend to pass other cars more often than other cars pass me Other cars tend to pass me more often than I pass them Both about equally When driving I tend to... Stay with slower moving traffic Keep up with the faster traffic Both about equally

We want to find out how people may change the way they drive on different types of roads, such as multi-lane highways, rural routes, or residential streets. These next questions are about how you drive on some of these different kinds of roads.

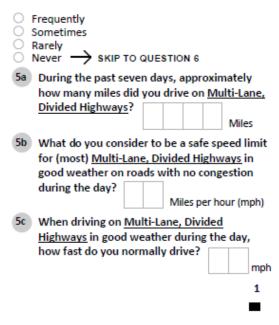
MULTI-LANE, DIVIDED INTERSTATE-TYPE HIGHWAYS

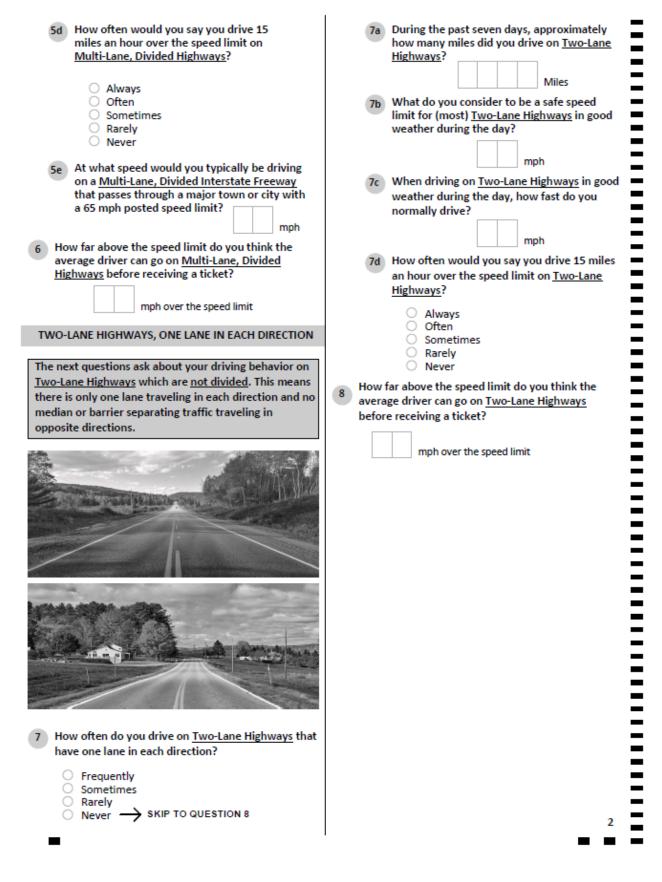
The next questions ask about your driving on <u>Multi-Lane, Divided Highways</u>. These include interstates, freeways and other highways and have a barrier or a median separating traffic in opposite directions.

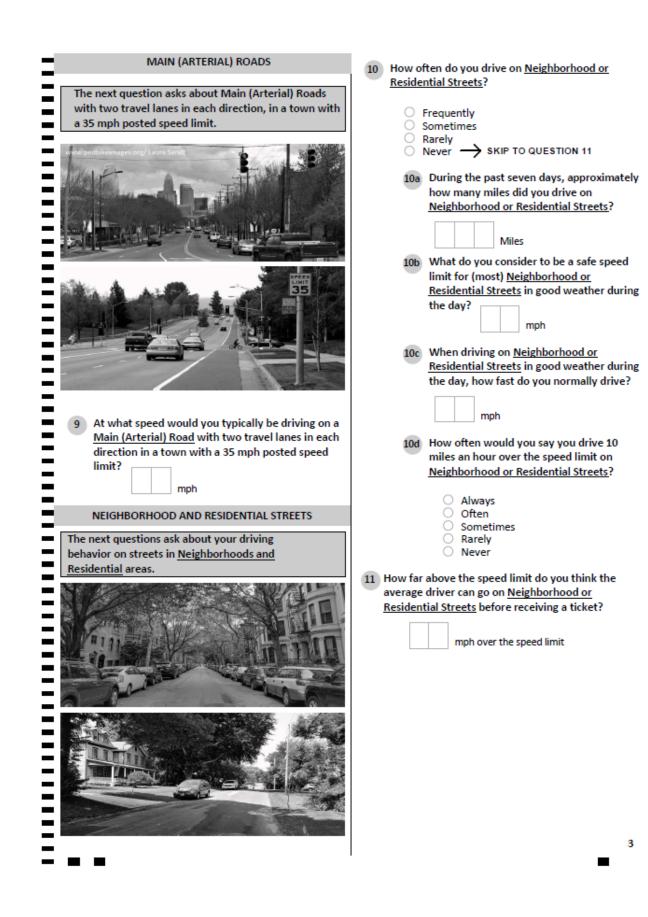




How often do you drive on <u>Multi-Lane, Divided</u> <u>Highways?</u>







	DRIVING AND SPEED LIMITS					
12	The next few statements are about driving and speed limits. Please tell us how much you agree or disagree with each one.	Somewhat has	Neither	Comestinal Disco	Strongh Dislass	AL OF
	a. Everyone should obey the speed limits because it's the law.	•	0	0	0	•
	b. People should keep pace with the flow of traffic.	0	0	0	0	0
	c. Speeding tickets have more to do with raising money than they do with reducing speeding.	0	0	0	0	•
	d. Driving over the speed limit is not dangerous for skilled drivers.	0	0	0	0	0
	e. There is no excuse to exceed the speed limits.	0	•	0	0	•
	f. It is unacceptable to exceed speed limits by more than 20 mph.	0	0	0	0	0
	g. If it is your time to die, you'll die, so it doesn't matter whether you speed.	•	•	0	0	•
	h. I enjoy the feeling of driving fast.	0	0	0	0	0
	i. The faster I drive, the more alert I am.	•	•	0	0	•
	j. I often get impatient with slower drivers.	0	0	0	0	0
	k. I try to get where I am going as fast as I can.	•	0	0	0	•
	I. I worry a lot about having a crash.	0	0	0	0	0
	m. I consider myself a risk taker while driving.	•	•	•	0	•
	n. Speeding is something I do without thinking.	0	0	0	0	0
	o. Driving within or near the speed limit makes me feel bored.	0	0	0	0	•

4

13 People sometimes go faster than the speed limit for different reasons. On those occasions when you do, what do you think are the main reasons you drive faster than the speed limit? Select all that apply.

- I'm late I am unlikely to have a crash It's a habit I'm alone in the car I'm unlikely to get a ticket People I am with encourage it I'm comfortable driving fast It's an emergency/illness I'm not paying attention/distracted I'm in a hurry
   I'm going with the traffic flow
- I'm passing another vehicle
- O There is no traffic/roads are clear
- O The speed limit is too low
- I'm avoiding accidents
- Other
- I never speed

#### Please tell us how much you agree or disagree with 14 the following statements.

1	Please tell us how much you agree or disagree with the following statements.	Somewhiat has	Neither	comential Dise	Strongh Dr	and etc
	a. Driving at or near the speed limit reduces my chances of an accident.	•	0	0	0	0
	<ul> <li>Driving at or near the speed limit <u>makes it difficult to keep up with</u> <u>traffic.</u></li> </ul>	0	0	0	0	0
	c. Driving at or near the speed limit makes me feel annoyed.	•	•	•	0	0
	<ul> <li>Driving at or near the speed limit <u>makes it easier to avoid dangerous</u> <u>situations.</u></li> </ul>	0	0	0	0	0
	e. Driving at or near the speed limit <u>uses less fuel</u> .	0	0	0	0	0

	Please answer the following questions thinking about the posted speed limit, plus or minus a few miles per hour, in the places you will be driving over the next few days.								
15	How likely is it that you will drive at or near the speed limit if <u>you were driving in a fast or powerful car?</u> Very likely Somewhat likely Neither Somewhat unlikely Very unlikely		peed lin Ven Som Neit Som	nit <u>if the</u> y likely newhat li	speed li ikely inlikely	vill drive imit is cl			
17	lease tell us how often you do the following hile driving:								
	a. How often do you <u>disregard the speed limits</u> late at nigh or early in the morning?		0	0	0	0	0	•	
	b. How often do you <u>get involved in "races"</u> with other driv on a roadway or from a stop light?	vers	0	0	0	0	0	0	
	c. How often do you <u>take risks while driving</u> because it's fu such as driving fast on curves or accelerating over bumps/hills to "get air"?	in,	•	0	0	0	0	0	
	d. How often do you <u>drive 10-20</u> mph over the speed limit	?	0	0	0	0	0	0	

6

<ul> <li>How much do you want to drive <u>at or near the speed limit</u> while driving in the <u>next week</u>?</li> <li>Extremely so</li> <li>Quite a bit</li> <li>Moderately so</li> <li>A little</li> </ul>	<ul> <li>23 Thinking about locations where speed cameras might be useful, would you find it acceptable to use them</li> <li>23awhere it could be hazardous for a police officer to stop a driver?</li> <li>Yes</li> </ul>
Not at all	O No
ATTITUDES TOWARD ENFORCEMENT	23bwhere stopping a vehicle could cause traffic congestion?
	O Yes
How important is it that something be done to	O No
reduce speeding by drivers?	23cwhere there have been many crashes?
-	O Yes
<ul> <li>Very important</li> <li>Somewhat important</li> </ul>	O No
<ul> <li>Not too important</li> </ul>	23d in a school zone?
<ul> <li>Not at all important</li> </ul>	O Yes
20 How often do you think police should enforce	
the speed limit?	23e in a construction zone?
<ul> <li>All the time</li> </ul>	O Yes O No
Often	23fon all roads?
Sometimes     Rarely	○ Yes
Never	O No
How often do you see motor vehicles that have	24 Along the routes you normally drive, are there
End of the street and the street	speed cameras in use?
roads you normally drive?	O Yes
<ul> <li>All the time</li> </ul>	O No
Often	
Sometimes	25 Have you ever received a ticket in the mail for a
Rarely     Never	speed violation identified by a speed camera?
-	O Yes
SPEED CAMERAS	O No
The next questions are about speed cameras. These are	Now, please read the next few statements and tell us
cameras set up at intersections or other locations to	how much you agree or disagree.
take pictures of speeding vehicles. A traffic ticket is	26 Speed cameras are used to prevent accidents.
<ul> <li>mailed to the owner of the vehicle along with a</li> <li>photograph and information about the location and</li> </ul>	
<ul> <li>photograph and information about the location and time.</li> </ul>	<ul> <li>Strongly agree</li> <li>Somewhat agree</li> </ul>
	O Neither
22 Before today, had you ever heard of speed	<ul> <li>Somewhat disagree</li> <li>Strongly disagree</li> </ul>
cameras being used to ticket drivers who speed?	
Yes     No	27 Speed cameras are used to generate revenue.
	<ul> <li>Strongly agree</li> </ul>
<b>_</b>	<ul> <li>Somewhat agree</li> </ul>
2	<ul> <li>Neither</li> <li>Somewhat disagree</li> </ul>
	Strongly disagree 7
<b>=</b>	l 🗖
	—

	OPINIONS ABOUT REDUCING SPEEDING				
28	How would you feel about using the following measures in your community to reduce speeding?	Neither a dy idea	Bad los	10	
	a. More frequent ticketing for speeding.	•	0	•	
	b. Issuing higher fines for speeding tickets.	0	0	0	
	c. Increasing public awareness of the risks of speeding.	•	0	•	
	d. Road design changes, like speed humps and traffic circles, to slow down traffic.	0	0	0	
	e. Electronic signs by the road that warn drivers that they are speeding and should slow down.	•	0	•	
	f. Increased use of speed cameras in dangerous or high crash locations.	0	0	0	

There are many new technologies in use to reduce speeding on our nation's roads. These next questions ask what you think about these technologies.

29	A speed governor is a device which does not allow the vehicle to go above a certain speed. Do you think the mandatory use of a speed governor is a good idea or a bad idea for	Nailman Dad	- 3 300 Hea	Bad Idea	
	a. Truck drivers?	0		0	0
	b. Drivers 18 years or younger?	0		0	0
	c. Drivers with multiple speeding tickets in one year?	0		0	•
	d. All drivers?	0		0	0

_	l
The next questions describe some devices that can be	Please tell us how likely or unlikely you would be to use
added to a motor vehicle to reduce speeding. For each	each of the following devices on your own vehicle.
<ul> <li>type of device, we will first ask you whether you think</li> </ul>	33a A device that does not allow you to drive faster
<ul> <li>it is a good idea or a bad idea to help reduce speeding</li> </ul>	
in general. Then we will ask you about whether you	than 10 mph over the posted speed limit. Very likely
think that device would keep you from speeding.	Somewhat likely
	<ul> <li>Neither</li> </ul>
30a A device in your motor vehicle that notifies you	<ul> <li>Somewhat unlikely</li> </ul>
<ul> <li>with a buzzer or a flashing light when you drive</li> </ul>	<ul> <li>Very unlikely</li> </ul>
faster than the speed limit. Do you think this is a	
Good idea	33b A device that you can switch on or off, that prevents
<ul> <li>Neither a good idea nor a bad idea</li> </ul>	you from driving faster than the speed limit?
<ul> <li>Bad idea</li> </ul>	<ul> <li>Very likely</li> </ul>
-	<ul> <li>Somewhat likely</li> </ul>
30b Would this device <u>prevent</u> you from speeding?	Neither     Semandertunkliche
Yes	<ul> <li>Somewhat unlikely</li> <li>Very unlikely</li> </ul>
-	33c A device that allows parents to limit the maximum
31a A device in your motor vehicle that records your	speed of a motor vehicle, when a teenager drives
speed data and gives you the option to provide	the motor vehicle.
the information to your insurance company to	<ul> <li>Very likely</li> </ul>
lower your premiums, if you obey the speed	Somewhat likely
limits? Do you think this is a	0 Neither
Good idea	<ul> <li>Somewhat unlikely</li> </ul>
<ul> <li>Neither a good idea nor a bad idea</li> </ul>	<ul> <li>Very unlikely</li> </ul>
<ul> <li>Bad idea</li> </ul>	Some readmans use digital speed signs to shange
	34 Some roadways use digital speed signs to change the speed limit on a section of road based on
31b Would this device <u>prevent</u> you from speeding?	traffic or weather conditions.
Yes	traine of weather contrations.
O No	Do you think it is a good idea or a bad idea to use
A device in your motor vehicle that slows your	digital speed signs in the following situations?
<ul> <li>32a A device in your motor vehicle that slows your</li> <li>motor vehicle down when it senses another car or</li> </ul>	
object is too close to your motor vehicle. Do you	
think this is a	34a Construction zones
<ul> <li>Good idea</li> <li>Neither a good idea nor a bad idea</li> </ul>	<ul> <li>Good idea</li> <li>Neither a good idea nor a bad idea</li> </ul>
O Nether a good idea nor a bad idea     O Bad idea	<ul> <li>Bad idea</li> </ul>
<ul> <li>32b Would this device <u>prevent</u> you from speeding?</li> </ul>	34b School zones
Yes	Good idea
O No	<ul> <li>Neither a good idea nor a bad idea</li> <li>Bad idea</li> </ul>
-	
	34c Bad weather
	Good idea
-	<ul> <li>Neither a good idea nor a bad idea</li> </ul>
	<ul> <li>Bad idea</li> </ul>
-	34d Congested roadways
	Good idea
-	<ul> <li>Neither a good idea nor a bad idea</li> </ul>
-	<ul> <li>Bad idea</li> </ul>
	9
<b>Ξ – –</b>	-

<ul> <li>How many times have you been in a speeding related accident in the past twelve months?</li> <li>Number of speeding-related accidents</li> <li>IF NONE, SKIP TO QUESTION 36a IN NEXT SECTION</li> <li>Did you receive any injuries as a result of the most recent speeding related accident?</li> <li>Yes</li> <li>No</li> </ul> SPEEDING TICKETS 36a How many times have you been stopped for speeding in the past twelve months? <ul> <li> Number of times stopped for speeding</li> </ul>	<ul> <li>41 How often do you <u>send</u> text messages while you are driving and the vehicle is moving?</li> <li>All trips</li> <li>Most trips</li> <li>About half my trips</li> <li>Fewer than half my trips</li> <li>None of my trips</li> <li>42 How often do you <u>read</u> text messages while you are driving and the vehicle is moving?</li> <li>All trips</li> <li>About half my trips</li> <li>About half my trips</li> <li>Some of my trips</li> <li>All trips</li> <li>About half my trips</li> <li>All trips</li> <li>About half my trips</li> <li>About half my trips</li> <li>About half my trips</li> <li>None of my trips</li> <li>None of my trips</li> <li>None of my trips</li> </ul>
IF NONE, SKIP TO QUESTION 38 IN NEXT SECTION	ABOUT YOU
<ul> <li>36b Did you receive a ticket or warning the last time you were stopped for speeding?</li> <li>Yes, a ticket</li> <li>Yes, a warning</li> <li>No</li> <li>37 Did you change your driving behavior as a result of receiving that ticket or warning for speeding?</li> <li>Yes</li> <li>No</li> </ul>	<ul> <li>43 How old are you?</li> <li>years old</li> <li>44 How many members of your household, including yourself, are 18 years of age or older?</li> <li>45 What is your sex?</li> <li>Male</li> </ul>
GENERAL DRIVING BEHAVIORS	<ul> <li>Female</li> </ul>
<ul> <li>When driving your primary motor vehicle how often do you wear your seat belt?</li> <li>All the time</li> <li>Often</li> <li>Sometimes</li> <li>Rarely</li> <li>Never</li> <li>My primary vehicle is a motorcycle</li> <li>In the past 30 days, have you driven a vehicle when you thought you might have consumed too much alcohol to drive safely?</li> <li>Yes</li> <li>No</li> <li>How often do you talk on the phone while you are driving?</li> <li>All trips</li> <li>Most trips</li> <li>About half my trips</li> <li>Server the for the form</li> </ul>	<ul> <li>46 What is the highest grade of school you have completed?</li> <li>No formal schooling <ul> <li>First through 7th grade</li> <li>8th grade</li> <li>Some high school</li> <li>High school graduate</li> <li>Some college</li> <li>Four-year college graduate</li> <li>Some graduate school</li> <li>Graduate degree</li> </ul> </li> <li>47 Are you currently married, divorced, separated, widowed, or single? <ul> <li>Married</li> <li>Divorced</li> <li>Separated</li> <li>Widowed</li> <li>Single</li> </ul> </li> <li>48 Do you consider yourself to be Hispanic or Latino/a?</li> </ul>
<ul> <li>Fewer than half my trips</li> <li>None of my trips</li> <li>I don't have a cell phone -&gt;SKIP TO QUESTION 43</li> </ul>	Ves No 10

<ul> <li>49 Which of the following racial categories describes you? You may select more than one.</li> <li>American Indian or Alaska Native</li> <li>Asian</li> <li>Black or African-American</li> <li>Native Hawaiian or Other Pacific Islander</li> <li>White</li> <li>Other</li> <li>50 Do you own or rent your home?</li> <li>Own</li> <li>Rent</li> <li>Some other arrangement</li> </ul>	<ul> <li>51 Which of the following categories best describes your total household income before taxes in 2021? Your best estimate is fine.</li> <li>Less than \$15,000</li> <li>\$15,000 to \$24,999</li> <li>\$25,000 to \$34,999</li> <li>\$35,000 to \$49,999</li> <li>\$50,000 to \$74,999</li> <li>\$75,000 to \$99,999</li> <li>\$100,000 to \$149,999</li> <li>\$150,000 to \$199,999</li> <li>\$200,000 or more</li> </ul>
That completes the survey. Please return the envelope as so	completed questionnaire in the postage paid on as possible.
<ul> <li>about a month after the completed questionr</li> <li>a car or other motor vehicle, you are not eligible</li> </ul>	vehicle, a \$5 bill will be mailed to this address naire is received. If you reported never driving ble to receive the \$5 bill but the responses you t is representative of the general population. our time and cooperation.
	masterid {tray} {presort}

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U.S. Department of Transportation

National Highway Traffic Safety Administration



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