



2020 Traffic Safety Culture Index

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Title

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Authors

AAA Foundation for Traffic Safety

Foreword

The AAA Foundation for Traffic Safety has consistently demonstrated its commitment to improve traffic safety through work such as the one presented in this report, the 13th annual *Traffic Safety Culture Index*. Results presented in this report are based on a nationally representative survey conducted in 2020 of more than 2,800 U.S. motorists.

Due to the COVID-19 pandemic, 2020 was an exceptional and unforgettable year. National/local restrictions such as stay-at-home orders and the associated economic recession had enormous impact on Americans' mobility and life. In response to these changes, the *2020 Traffic Safety Culture Index* included additional questions to probe travel changes by American motorists. Also, the analyses assessing the American traffic safety culture before and during the pandemic were conducted. With these additional insights, the *2020 Traffic Safety Culture Index* should be a useful reference for researchers, practitioners, and traffic safety advocates to gain better understanding of people's perceptions and attitudes towards risky driving behaviors, to identify relevant issues, and to develop the corresponding strategies.

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About the Sponsor

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Founded in 1947, the AAA Foundation for Traffic Safety in Washington, D.C. is a nonprofit, publicly supported charitable research and education organization dedicated to saving lives by preventing traffic crashes and reducing injuries when crashes occur. Funding for this report was provided by voluntary contributions from AAA/CAA and their affiliated motor clubs, individual members, AAA-affiliated insurance companies, and other organizations or sources.

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Introduction

In March 2020, the World Health Organization declared the disease caused by the SARS–CoV-2 virus, COVID-19, a global pandemic. In the United States, many states and localities responded by prohibiting large-scale gatherings, issuing stay-at-home orders, and closing schools, businesses, dine-in services, and recreational facilities. These measures resulted in a surge of telework and use of virtual learning/meetings, telemedicine, online shopping, and delivery services. Consequently, many people considerably changed their travel routines (e.g., transportation mode(s), trip frequencies), as studies using data from various sources have shown. For example, according to the New American Driving Survey (AAA Foundation for Traffic Safety, 2021), the average daily number of trips taken by U.S. residents decreased by 40% in April 2020 compared to the second half of 2019. The data showed a decrease in the amount of travel among people who reported traveling, as well as an increase in the percentage of people who did not leave their home on any given day, during the pandemic.

For more than a decade, the AAA Foundation for Traffic Safety has been committed to deepening our understanding of America’s traffic safety culture through the annual *Traffic Safety Culture Index* survey. Exceptional conditions were observed on roadways in 2020—an historical drop in vehicle miles traveled due to travel and other restrictions imposed by national, state, and local authorities, accompanied by a disconcerting and unexpected 7% increase in motor vehicle fatalities (National Center for Statistics and Analysis, 2021). The National Highway Traffic Safety Administration reported that unsafe driving behaviors, including non-use of seat belts, impaired driving, and speeding, have been identified as main contributors to the increase in traffic fatalities (Office of Behavioral Safety Research, 2021). Responses from the 2020 *Traffic Safety Culture Index* can provide insight on the changes in public perceptions, attitudes toward, and engagement in unsafe driving behaviors during the pandemic relative to pre-pandemic years.

As in previous years, this report details the data collection methodology and summarizes major national-level results of the 13th annual *Traffic Safety Culture Index* (TSCI). In addition, this report includes analyses of traffic safety culture before and during the COVID-19 pandemic, and responses regarding increased or decreased driving due to the pandemic.

Organization of Report

This report is organized by the following sections:

- **Introduction**
- **Summary of Major Findings**
- **Data Collection Methodology and Limitations:** Methods for data collection as well as limitations.
- **Results:**
 - **Overall Results:** perceived danger, perceived risk of apprehension, perceived social disapproval, self-reported behavior, and support for countermeasures related to various risky driving behaviors.

- **Comparisons between Drivers' Attitudes and Perceptions and Their Behaviors:** comparison of drivers' attitudes and perceptions with their self-reported engagement in risky driving behaviors.
- **Driving and Traffic Safety Culture Before and During the COVID-19 Pandemic:** results regarding how people changed their amount of driving during the pandemic and whether there were changes in their perceptions, attitudes towards, and engagements in risky driving behaviors relative to responses from pre-pandemic years.
- **Discussion**
- **Appendix A:** overall results in a table format, considering demographic factors such as age and sex.

Summary of Major Findings

Results from 2020 TSCI

Distracted Driving

- More drivers view reading (94.9%) or typing (95.5%) a text/email on a hand-held cell phone while driving as extremely or very dangerous, compared with holding and talking on a hand-held cell phone (79.7%). However, only 20% perceive using technology that allows hands-free use of their phones, such as Bluetooth or CarPlay, while driving to be extremely or very dangerous.
- More respondents believe drivers risks being caught by the police for using a hand-held cell phone for talking (42.0%) or typing a text/email (43.0%) than they do for reading a text/email (31.8%).
- Nearly all respondents believed that people who were important to them disapproved of typing or sending a text/email on a hand-held cell phone while driving.
- Nevertheless, about a quarter of drivers (22.7%) report having driven while typing or sending a text/email on a hand-held cell phone at least once in the past 30 days. More respondents report having engaged in distracted driving by talking (37.2%) and reading (33.9%) on a hand-held cell phone while driving.
- Over 80% support a law against talking on a hand-held cell phone while driving for all drivers, while less than half drivers (45.9%) support a law against using hands-free technology to read, type, or send a text or email while driving.

Aggressive Driving Behaviors

- More than half of drivers (52.3%) indicate that speeding on a freeway is extremely or very dangerous, while roughly 85% of drivers perceive driving through a red light as extremely or very dangerous.
- About 60% of respondents felt that the police would catch a driver for traveling 15 mph over the speed limit on a freeway, yet 45.2% reported having done so in the past 30 days.
- Fewer than 50% of drivers support a law for using cameras to automatically ticket drivers who drive more than 10 mph over speed limits on residential streets.

Drowsy Driving Behaviors

- Roughly 95% of drivers identify drowsy driving as very or extremely dangerous. About 33% thought drowsy drivers risked being caught by the police.
- Nearly all drivers (98.1%) socially disapprove of drowsy driving.
- Despite high rates of perceived danger and social disapproval regarding drowsy driving, 17.3% of drivers admit to having driven while being so tired that they had had a hard time keeping their eyes open, at least once in past 30 days.

Impaired Driving Behaviors

- Most drivers (94.5%) perceive driving after drinking as very or extremely dangerous. However, 6% admitted to having done so in the past 30 days.
- Nearly 70% of respondents consider driving within an hour after using marijuana to be very or extremely dangerous, while 93.7% socially disapprove of doing so.
- Most drivers (87.0%) indicate driving after using potentially impairing prescription drugs as very or extremely dangerous. Over 40% consider that people driving after using potentially impairing prescription drugs would be likely to be caught by the police.

Traffic Safety Culture Before and During the COVID-19 Pandemic

Comparing 2020 results with those from 2018 and 2019, overall:

- No significant changes in drivers' perceived danger were found for all unsafe driving behaviors examined in this survey.
- With regard to perceived risk of apprehension, however, significant changes were found among some unsafe driving behaviors such as driving while talking or reading on a hand-held cell phone.
- Additionally, respondents were more likely to socially disapprove of and less likely to engage in most unsafe driving behaviors.
- However, fewer respondents were supportive of most of the included safety countermeasures.

The following summarizes notable changes specific to some unsafe driving behaviors:

- Between 2018 and 2020, consistently more people socially disapproved of driving while talking on a hand-held cell phone from one year to the next. Additionally, there were significant reductions in engagement with all types of distracted driving (i.e., talking, reading, and manually typing on a hand-held cell phone while driving).
- Respondents are more likely to socially disapprove of speeding on a freeway in 2020 compared with 2018 and 2019; however, there has been little change in self-reported engagement in speeding on freeways.
- Consistently over the past three years, significant reductions were found in self-reported engagement in drowsy driving.

In 2020, 77% of respondents support laws making it illegal to drive with a certain amount of marijuana. This proportion, however, significantly decreased compared with 2019 (84%) and 2018 (82%).

Data Collection Methodology and Limitations

Survey Instrument

The 2020 TSCI instrument was nearly identical to that used for the 2019 survey; there were some revisions to this year's survey instrument to account for changes in driving patterns due to the COVID-19 pandemic. Specifically, respondents were asked whether they changed their amount of driving because of the COVID-19 pandemic, with the following response options: *Yes, I have reduced driving significantly; Yes, I have reduced driving a bit; No, I have driven about the same amount; Yes, I have driven a bit more; Yes, I have driven significantly more.*

Sampling

The study recruited a sample from KnowledgePanel®, a probability-based web panel maintained by Ipsos. The panel was designed to be representative of households in the United States by using standard probability-based random digit dial (RDD) and address-based sampling (ABS) methods. The sampling frame includes all U.S. households reachable by telephone or regular mail regardless of telephone or internet access or use. If a sampled household did not have an internet connection or an internet-capable computer, a web-enabled device and/or free internet service were provided. To achieve the representation of the U.S. adult population, a broad set of geodemographic indicators as well as hard-to-reach adult subgroups were used for the panel recruitment process. Individuals not sampled could not volunteer to join the panel.

For respondents ages 19 and older, eligible adults across the nine Census geographical divisions were sampled to ensure a minimum of 200 completed interviews per division. The questionnaire was sent to 4,923 panelists ages 19 and older, with 2,725 qualified respondents completing the questionnaire. For the 16- to 18-year-old sample, random households were sampled with at least one 15- to 18-year-old present from KnowledgePanel®. The survey was also sent to parents who had at least one age-eligible teen in their household. If there was more than one teen in this age range, one of the eligible teens was randomly selected. Parents were asked to provide consent for the selected teen and ask their teen to complete the remainder of the survey. Invitations were sent to 2,023 parents of teens ages 16–18, and 1,036 qualified teens completed the questionnaire. A total of 3,761 respondents ages 16 and older completed the survey. The survey was administered in English and Spanish between October 23 and November 23, 2020.

Weighting

The data were weighted to account for probability of selection for recruitment into KnowledgePanel®, probability of selection for the survey, and non-response at both stages. Further, they were weighted to align the characteristics of respondents to those of the population of residents aged 16 years or older, from which the sample was drawn with respect to gender, age, race/Hispanic ethnicity, education, census region, metropolitan/non-metro status, number of people aged 16 and older in the household, and household income using data from the U.S. Census Bureau's Current Population Survey (2020). All analyses included in this report have been conducted using weighted data.

Limitations

This survey aims to estimate the prevalence of specific attitudes and behaviors among all drivers in the United States. However, the results of this survey may differ from true population values due to sampling error and possible sources of bias.

Sampling error measures the extent to which estimates from a sample may reflect the population the sample is drawn from. In this survey, the sampling error reflects the range in which estimates from the sample of 3,168 drivers might be expected to differ from the results that would be obtained if the same data were collected from all drivers in the United States. In this particular survey, a 95% confidence level is set for the margin of error. This means that the range of estimates is expected to include the actual population values 95 times out of 100 when estimated from a sample of the same size and with the same survey design. Additionally, the margin of error varies depending on the number of responses for a survey question and the distribution of responses. The table below shows the approximate margin of error derived from the entire sample. The margin of error is larger for items asked of fewer respondents.

Table 1. Approximate margin of error (in percentage points) for selected percentages, at the 95% confidence level

Percentages near	Approx. margin of error
90 or 10	± 1.4
80 or 20	± 1.8
70 or 30	± 2.1
60 or 40	± 2.2
50	± 2.3

There is a larger margin of error in this survey than for a simple random sample of the same size because of the design of the panel and the stratification by census division and oversampling of respondents aged 16–18. The margin of error reflects only the statistical variability associated with using the survey sample to draw inferences about the entire population. It does not reflect errors due to bias. For instance, potential sources of bias in surveys include systematic non-coverage of certain segments of the population (e.g., people who cannot read in English or Spanish), non-response (i.e., eligible respondents who either cannot be contacted or refuse to participate), differences in respondents' understanding of survey questions or response options, or deliberate misreporting of information (e.g., underreporting of behaviors that may be perceived as undesirable).

Results

This report presents results of the 2020 TSCI in three sub-sections. The first sub-section includes the “overall” results regarding perceived danger, perceived risk of apprehension, social disapproval, self-reporting of behaviors, and support of safety laws related to various risky driving behaviors. The second sub-section highlights comparing drivers’ attitudes/perceptions with their behaviors. The last sub-section examines travel patterns and traffic safety culture before and during the COVID-19 pandemic.

Results are described in the context of three focus areas: 1) distracted driving, primarily with cell phone use, including talking, texting, and emailing; 2) aggressive driving, including speeding and running red lights; and 3) drowsy and impaired driving (by alcohol or other drugs).

Overall Results

Perceived Danger of Driving Behaviors

Respondents were asked how they feel about the danger of certain driving behaviors. Table 1 shows that many of the risky behaviors included are viewed as extremely or very dangerous by a majority of respondents. For instance, with respect to distracted driving, 96% of respondents felt that driving while texting or emailing on a cell phone is extremely or very dangerous. Additionally, 95% of respondents felt that reading on cellphones while driving is extremely or very dangerous, whereas 79% felt holding and talking on cell phones while driving was extremely or very dangerous. When examining how respondents felt about driving while using technology that allows hands-free use of their phone (e.g., Bluetooth, CarPlay), only 20% felt that the behavior was extremely or very dangerous, and 12% felt that the behavior was not dangerous at all.

Nearly 90% of respondents reported feeling that aggressive driving behaviors, such as switching lanes quickly or driving very closely behind another car, are extremely or very dangerous. Nearly 85% of respondents felt that driving through a red light is extremely or very dangerous. In contrast, 63% perceived speeding 10 miles per hour (mph) over the speed limit on residential streets as extremely or very dangerous.

With regard to impaired driving, 94% of respondents reported feeling that driving after drinking enough alcohol that one may be over the legal limit is extremely or very dangerous, while 69% perceived driving within an hour after using marijuana as extremely or very dangerous.

Table 2. How dangerous do you feel the following driving behaviors are?

Driving Behaviors		Extremely dangerous (%)	Very dangerous (%)	Moderately dangerous (%)	Slightly dangerous (%)	Not dangerous at all (%)
Distracted	Drivers holding and talking on cell phones	45.0	34.2	16.8	3.3	0.8
	Drivers reading on cell phones	71.4	23.5	4.6	0.3	0.2
	Drivers texting or emailing on cell phones	74.7	20.9	4.0	0.5	0.0
	Drivers using technology that allows hands-free use of their phone (Bluetooth, CarPlay, Android Auto, etc.)*	9.3	10.9	28.1	40.1	11.6
Aggressive	Drivers speeding 15 mph over the speed limit on freeways	23.2	29.2	27.5	16.9	3.3
	Drivers speeding 10 mph over the speed limit on residential streets (neighborhood)	27.7	35.3	25.5	9.8	1.7
	Driving through a light that had just turned red when they could have stopped safely	53.8	31.2	12.3	2.7	0.1
	Driving aggressively (switching lanes quickly, driving very closely behind another car)	56.3	33.2	8.7	1.5	0.4
Drowsy & Impaired	Driving when they were so tired that they had a hard time keeping your eyes open	71.4	23.5	4.7	0.1	0.2
	Driving after drinking enough alcohol that they may be over the legal limit	73.8	20.6	4.6	0.9	0.1
	Driving shortly (within an hour) after using marijuana	42.5	26.5	18.7	10.4	1.8
	Driving after using potentially impairing prescription drugs	59.6	27.4	10.8	2.1	0.2
Other	Driving without wearing a seatbelt	51.7	27.2	15.2	3.8	2.1

* The survey did not specify talking or typing using hands-free technology to ask how dangerous people feel distracted driving is. The following is the actual question prompted to respondents: “Drivers driving using technology that allows hands-free use of their phone (Bluetooth, CarPlay, Android Auto, etc.).”

Perceived Risk of Apprehension

Respondents were asked how likely a driver is to be caught by the police for certain behaviors. Table 2 illustrates differences for each driving behavior. For each of the included distracted driving behaviors, fewer than half of respondents reported that a driver would be somewhat or very likely to be apprehended by the police. For instance, 32% of respondents perceived that a driver reading a text or an email on a cell phone would likely be caught by the police.

For most aggressive driving behaviors examined in the survey, more than half of respondents reported that a driver would somewhat or very likely be caught by the police. For example, 60% of respondents thought that driving 15 mph over the posted speed limit on a freeway would likely result in apprehension. Likewise, 55% believed that driving through a red light would likely result in the same.

People's perceptions towards risk of apprehension also varied by the source of a driver's impairment. Nearly seven-in-ten respondents (66%) indicated that a driver who has consumed enough alcohol to be over the legal limit would somewhat or very likely be caught by the police, while only 29% indicated the same regarding driving within an hour after using marijuana.

Table 3. How likely is a driver to be caught by the police for the following behaviors?

Driving Behaviors		Very likely (%)	Somewhat likely (%)	Somewhat unlikely (%)	Very unlikely (%)
Distracted	Driving while holding and talking on a cell phone	10.3	31.7	33.0	25.1
	Driving while reading a text or an email on a cell phone	8.6	23.2	46.4	21.8
	Driving while typing or sending a text message or email on a cell phone	11.2	31.8	34.6	22.4
Aggressive	Driving 15 mph over the speed limit on a freeway	18.5	41.6	25.9	14.1
	Driving 10 mph over the speed limit on a residential street	11.5	34.2	35.9	18.3
	Driving through a red light	15.7	39.0	28.7	16.6
	Driving aggressively	16.1	37.0	29.4	17.5
Drowsy & Impaired	Driving while being so tired that they had a hard time keeping their eyes open	7.3	25.5	40.4	26.9
	Driving after drinking enough alcohol to be over the legal limit	18.6	47.6	23.1	10.8
	Driving within an hour after using marijuana	6.6	22.7	40.4	30.3
	Driving while using potentially impairing prescription drugs	8.6	32.8	39.8	18.9
Other	Driving without wearing a seatbelt	11.7	33.4	31.0	23.9

Social Disapproval

Table 3 presents the results for the question, “How much do you believe people who are important to you would approve of each of the following behaviors?” For each of the risky driving behaviors examined in the survey, a majority of respondents reported that they believe people who are important to them somewhat or completely disapprove of the behavior.

Only 5% of respondents reported believing that people who are important to them would approve of driving while typing or sending a text message or email on a cell phone. Likewise, only 4% believed that people who are important to them would approve of running a red light. Nearly two-in-ten respondents (16%), however, believed people who are important to them would somewhat or completely approve of driving 15 mph over the speed limit on a freeway.

When examining impaired driving, only 2% of respondents reported believing that people important to them would somewhat or completely approve of riding in a car driven by someone who had too much alcohol. Similarly, only 3% of respondents believed people important to them would somewhat or completely approve of driving while using potentially impairing prescription drugs.

Table 4. How much do you believe people who are important to you would approve of each of the following behaviors?

Driving Behaviors		Completely approve (%)	Somewhat approve (%)	Somewhat disapprove (%)	Completely disapprove (%)
Distracted	Driving while holding and talking on a cell phone	0.8	6.6	44.3	48.3
	Driving while reading a text or an email on a cell phone	1.3	4.7	33.5	60.5
	Driving while typing or sending a text message or email on a cell phone	0.9	3.6	24.3	71.2
Aggressive	Driving 15 mph over the speed limit on a freeway	2.1	14.3	42.0	41.5
	Driving 10 mph over the speed limit on a residential street	2.0	6.9	39.9	51.1
	Driving through a red light	0.7	3.4	33.7	62.1
	Driving aggressively	0.6	3.4	27.0	69.1
Drowsy & Impaired	Driving while being so tired that they had a hard time keeping their eyes open	0.6	1.4	19.1	78.9
	Driving after drinking enough alcohol to be over the legal limit	1.6	1.3	9.2	87.9
	Riding in a car driven by someone who has had too much alcohol	0.5	1.0	8.8	89.7
	Driving within an hour after using marijuana	1.3	5.0	14.9	78.8
	Driving while using potentially impairing prescription drugs	1.4	2.1	17.6	79.0
Other	Driving without wearing a seatbelt	1.2	2.3	19.1	77.4

Driving Behaviors in Past 30 Days

Drivers were asked to report how often they engaged in risky driving behaviors in the 30 days prior to the survey. Despite high rates of perceived social disapproval, respondents reported having engaged in each of the behaviors to varying degrees, as shown in Table 4.

In regards to distracted driving, 37% of respondents reported holding and talking on a cell phone, 34% to reading a text or an email on a cell phone, and 23% to manually typing or sending a text message or an email while driving in the past 30 days. In contrast, 56% respondents reported talking/texting/emailing on a cell phone using hands-free technology in the past 30 days.

Almost half of respondents (45%) reported having driven 15 mph over the speed limit on a freeway, and 23% of drivers admitted to driving through a red light in the past 30 days. Additionally, 21% of respondents reported switching lanes quickly or following very closely behind another car.

The prevalence of engaging in impaired driving varied by the source of impairment. For instance, 7% reported riding in a car driven by someone who had too much alcohol, whereas 4% reported driving within an hour after using marijuana. Similarly, 3% reported driving when using potentially impairing prescription drugs in the past 30 days.

Table 5. In the past 30 days, how often have you...?

Driving Behaviors		Regularly (%)	Fairly often (%)	A few times (%)	Just once (%)	Never (%)
Distracted	Driven while holding and talking on a cell phone	1.6	3.4	22.4	9.8	62.8
	Driven while reading a text or an email on a cell phone	0.8	2.8	21.2	9.1	66.1
	Driven while manually typing or sending a text message or an email	0.7	1.6	13.0	7.4	77.3
	Talked/texted/emailed on a cell phone using hands-free technology (Bluetooth, CarPlay etc.)	7.6	10.1	32.6	5.3	44.5
Aggressive	Driven 15 mph over the speed limit on a freeway	3.3	8.0	26.3	7.5	54.9
	Driven 10 mph over the speed limit on a residential street	1.6	5.4	21.8	6.6	64.7
	Driven through a light that had just turned red when you could have stopped safely	0.3	0.6	9.0	15.7	74.4
	Driven aggressively by switching lanes quickly and/or very close behind another car	0.4	1.3	10.7	8.9	78.7
Drowsy & Impaired	Driven when you were so tired that you had a hard time keeping your eyes open	0.2	0.4	7.5	9.2	82.7
	Driven when you had enough alcohol that you thought you might be over the legal limit	0.0	0.3	3.0	2.6	94.1
	Ridden in a car driven by someone who has had too much alcohol	0.2	0.2	3.6	2.9	93.1
	Driven shortly (within an hour) after using marijuana	0.5	0.9	2.3	0.8	95.6
	Driven when using potentially impairing prescription drugs	0.3	0.4	1.6	1.2	96.6
Other	Driven without wearing a seatbelt	1.7	1.5	6.6	2.6	87.7

Support for Safety Countermeasures

Table 5 shows drivers' responses regarding how strongly they support or oppose traffic safety countermeasures. A large majority of respondents supported several of the countermeasures included in the survey, while opinions were more evenly split for some of the countermeasures, and two countermeasures were opposed by a slight majority of respondents. For example, 82% of drivers somewhat or strongly supported a law against holding and talking on a cell phone while driving. However, fewer than half of respondents (44%) somewhat or strongly supported using cameras to automatically ticket drivers who travel more than 10 mph over the speed limit on residential streets.

With respect to policies regarding impaired driving, 70% of respondents somewhat or strongly supported a law requiring all new cars to have a built-in technology that would not let the car start if the driver's alcohol level is over the legal limit. Slightly more than half of respondents (53%) somewhat or strongly supported a law lowering the legal limit for a driver's blood alcohol concentration from 0.08% to 0.05%. Meanwhile, 77% supported making it illegal to drive with more than a certain amount of marijuana in one's system, and 73% supported making it illegal to drive with any drug not legally prescribed in one's system.

Table 6. How strongly do you support or oppose...?

Driving Behaviors		Support strongly (%)	Support somewhat (%)	Oppose somewhat (%)	Oppose strongly (%)
Distracted	Having a law against holding and talking on a cell phone while driving, for all drivers regardless of their age	53.4	28.4	13.0	5.2
	Having a law against using hands-free technology to read, type, or send a text message/email while driving	20.6	25.2	30.3	23.9
Aggressive	Using cameras to automatically ticket drivers who drive more than 10 mph over speed limit on residential streets	15.4	29.0	26.0	29.6
Impaired	Requiring all new cars to have a built-in technology that won't let the car start if the driver's alcohol level is over the legal limit	40.0	30.4	16.4	13.2
	Having a law lowering the legal limit for a driver's blood alcohol concentration from 0.08 to 0.05	23.9	28.9	24.2	23.0
	Lowering the legal limit for a driver's blood alcohol concentration to 0.05 for people transporting young children	41.7	24.8	14.3	19.3
	Making it illegal to drive with more than a certain amount of marijuana in your system	48.3	28.7	12.3	10.8
	Making it illegal to drive with any drug (not legally prescribed) in your system	44.5	28.0	17.1	10.4
Other	Requiring all new drivers under the age of 21 years to go through training, practice time, and a restriction period	37.9	40.4	14.4	7.4
	Require developers of self-driving car technologies to share safety information and testing results with the public before the vehicles are allowed on public roads	66.9	21.6	6.0	5.5

Comparisons between Drivers' Attitudes and Perceptions and Their Behaviors

This section examines the prevalence of discordance between drivers' attitudes/perceptions and their behaviors. For example, more than 90% of drivers viewed driving while reading a text or an email on a hand-held cell phone as extremely or very dangerous, but about a third of drivers admitted to having done so at least once in the past 30 days prior to the survey (see Table 6). When examining drowsy driving, nearly all drivers (95%) viewed driving when they were so tired that they had a hard time keeping their eyes open as extremely or very dangerous. Despite this high rate of perceived danger, 17% of participants admitted to having done so in the past 30 days.

While each unsafe driving behavior demonstrated a different level of discordance between drivers' attitudes/perceptions and their engagements, results for the alcohol-impaired driving were relatively consistent across these measurements. That is, nearly all drivers viewed driving when they had enough alcohol that they thought they might be over the legal limit, as very or extremely dangerous and socially disapproved of engaging in this driving behavior. Also, more people thought that the police would apprehend drivers engaging in this behavior than engaging in any other unsafe driving behaviors. These high rates of perceived danger, social disapproval, and risk of apprehension regarding alcohol-impaired driving were aligned with drivers' behaviors: a low proportion (6%) reported having done so in the past 30 days.

In contrast, driving 15 mph over the speed limit on a freeway was more socially approved, and people were less likely to perceive this driving behavior as extremely or very dangerous relative to other unsafe driving behaviors. Despite high perceived risk of apprehension for engaging in this behavior, nearly half of drivers admitted to having engaged in speeding on a freeway at least once in the past 30 days.

Table 7. Drivers' perceptions compared with their behaviors

Driving Behaviors		Very or extremely dangerous (%)	Police will apprehend the driver (%)	Socially disapproved (%)	Engaged in at least once (%)
Distracted	Driven while holding and talking on a cell phone	79.2	42.0	92.6	37.2
	Driven while reading a text or an email on a cell phone	94.9	31.8	94.0	33.9
	Driven while manually typing or sending a text message or an email	95.5	43.0	95.5	22.7
	Driven while talking/texting/emailing on a cell phone using hands-free technology (Bluetooth, CarPlay, etc.)*	20.2	NA	NA	55.5
Aggressive	Driven 15 miles per hour over the speed limit on a freeway	52.4	60.0	83.6	45.1
	Driven 10 miles per hour over the speed limit on a residential street	63.0	45.8	91.1	35.3
	Driven through a light that had just turned red when you could have stopped safely	84.9	54.7	95.9	25.6
	Driven aggressively by switching lanes quickly and/or very close behind another car	89.5	53.1	96.1	21.3
Drowsy & Impaired	Driven when you were so tired that you had a hard time keeping your eyes open	94.9	32.7	98.1	17.3
	Driven when you had enough alcohol that you thought you might be over the legal limit	94.5	66.1	97.1	5.9
	Ridden in a car driven by someone who has had too much alcohol	NA	NA	98.5	6.9
	Driven shortly (within an hour) after using marijuana	69.1	29.3	93.8	4.4
	Driven when using potentially impairing prescription drugs	87.0	41.4	96.6	3.4
Other	Driven without wearing a seatbelt	78.8	45.1	96.5	12.3

* The survey did not specify talking or typing using hands-free technology to ask how dangerous people feel distracted driving is. The following is the actual question prompted to respondents: "Drivers driving using technology that allows hands-free use of their phone (Bluetooth, CarPlay, Android Auto, etc.)".

Driving and Traffic Safety Culture Before and During the COVID-19 Pandemic

In March 2020, the World Health Organization declared the disease caused by the SARS CoV2 virus (COVID-19) to be a pandemic, and this resulted in considerable changes in people's travel routines (e.g., transportation mode(s), trip frequencies). In response to these changes, the 2020 TSCI survey included a question to explore the extent to which people changed their driving. Additionally, analyses were conducted to assess whether attitudes, perceptions towards, and engagement in risky driving behaviors have changed during the pandemic, by comparing the 2020 results with those from 2018 and 2019. This section summarizes those results.

Changes in Driving During the COVID-19 Pandemic

Respondents were asked whether they have changed their amount of driving due to the COVID-19 pandemic. Table 7 shows that overall, 60% of respondents reported having reduced driving, while 36% reported driving about the same amount, and 4% of respondents reported driving more during the pandemic.

The results varied in relation to some socio-demographic variables. More females than males reduced their driving (66% vs. 54%). A greater proportion of people in older age groups (60 years or older) reduced their driving compared with those in younger age groups. Fewer than half of respondents aged 16–18 reported having reduced their driving.

As educational attainment increased, respondents were more likely to report having reduced their driving. Likewise, those with household incomes of \$100,000 or higher were somewhat more likely to have reduced their driving than those with lower household incomes. Additionally, people living in metropolitan areas were more likely to reduce their driving during the pandemic than those living in non-metropolitan areas.

Table 8. Have you changed the amount of driving because of the COVID-19 pandemic?

Demographic Factors (row %)		Reduced	About the same	Driven more
Total		59.4	36.4	4.2
Sex	Male	53.7	40.8	5.6
	Female	66.2	30.9	2.9
Age	16–18	45.1	46.7	8.2
	19–24	55.6	40.0	4.4
	25–39	59.0	34.5	6.5
	40–59	58.6	37.2	4.2
	60–74	64.8	33.1	2.1
	≥75	65.5	33.7	0.8
Education	Less than high school	49.2	46.9	3.9
	High school	49.8	45.3	4.9
	Some college	59.9	37.3	2.9
	Bachelor’s or higher	69.7	25.4	5.0
Income	<\$25K	54.6	43.0	2.3
	\$25K to <\$50K	54.6	38.5	7.0
	\$50K to <\$75K	60.5	36.0	3.6
	\$75K to <\$100K	60.5	34.7	4.9
	≥\$100K	63.1	33.3	3.6
Living area	Non-metropolitan	46.9	50.2	2.9
	Metropolitan	62.2	33.4	4.4

Public Attitudes, Perceptions, and Engagements in Risky Driving Behaviors Before and During the COVID-19 Pandemic

The results from the 2020 TSCI survey were compared with those from 2018 and 2019 to examine whether public attitudes, perceptions, and behaviors changed during the COVID-19 pandemic. A logistic regression model was performed to test whether the results were significantly different across the past three years (2018, 2019, and 2020) after controlling for major socio-demographic variables (sex, age, race, education, income, Census region, living area [metropolitan or non-metropolitan areas]) as well as frequency of driving. Statistical significance was set at 0.05.

Perceived danger of driving behaviors

As presented in Table 8, there were no significant changes over the past three years in the proportions of respondents who reported feeling that each behavior is extremely or very dangerous. In general, a majority of respondents viewed most unsafe driving behaviors as extremely or very dangerous. However, compared with most other unsafe driving behaviors, people were consistently less likely to view driving 15 mph over the speed limit on freeways is extremely or very dangerous.

Table 9. How dangerous do you feel the following driving behaviors are? (very/extremely)

Driving Behaviors		2018 (%)	2019 (%)	2020 (%)
Distracted	Drivers holding and talking on cell phones	79.8	79.7	79.2
	Drivers reading on cell phones	95.9	94.3	94.9
	Drivers texting or emailing on cell phones	96.7	96.2	95.5
	Drivers using technology that allows hands-free use of their phone (Bluetooth, CarPlay, Android Auto etc.)	NA	22.5	20.2
Aggressive	Drivers speeding 15 miles per hour over the speed limit on freeways	54.2	55.1	52.4
	Drivers speeding 10 miles per hour over the speed limit on residential streets (neighborhood)	64.0	63.6	63.0
	Driving through a light that had just turned red when they could have stopped safely	85.4	86.4	84.9
	Driving aggressively (switching lanes quickly, driving very closely behind another car)	90.7	91.8	89.5
Drowsy & Impaired	Driving when they were so tired that they had a hard time keeping your eyes open	96.2	96.1	94.9
	Driving after drinking enough alcohol that they may be over the legal limit	95.1	94.0	94.5
	Driving shortly (within an hour) after using marijuana	70.0	68.6	69.1
	Driving after using potentially impairing prescription drugs	87.3	88.3	87.0
Other	Driving without wearing a seatbelt	NA	NA	78.8

Perceived risk of apprehension

Table 9 shows that notable changes were found with respect to people's perceptions on how likely a driver was to be caught by the police for engaging in certain driving behaviors. For example, in 2018 and 2019, about 40% of respondents perceived that a person reading a text or email on a cell phone while driving would be somewhat or very likely caught by the police. In 2020, however, this proportion decreased to 32%. Nearly 60% of respondents believed that the police would somewhat or very likely catch drivers for engaging in aggressive behavior in 2018, compared with 50% in 2019 and 53% in 2020.

Table 10. How likely is a driver to be caught by the police for the following behaviors?
(Somewhat/very likely)

Driving Behaviors		2018 (%)	2019 (%)	2020 (%)
Distracted	Driving while holding and talking on a cell phone	47.3 ^b	40.6 ^a	42.0 ^a
	Driving while reading a text or an email on a cell phone	43.3 ^b	43.7 ^b	31.8 ^a
	Driving while typing or sending a text message or email on a cell phone	46.3	42.7	43.0
Aggressive	Driving 15 miles per hour over the speed limit on a freeway	65.8	65.1	60.0
	Driving 10 miles per hour over the speed limit on a residential street	53.7	50.7	45.8
	Driving through a red light	54.9	52.0	54.7
	Driving aggressively	58.7 ^b	50.4 ^a	53.1 ^{a,b}
Drowsy & Impaired	Driving while being so tired that they had a hard time keeping their eyes open	37.5 ^a	29.0 ^b	32.7 ^a
	Driving after drinking enough alcohol to be over the legal limit	67.6	67.9	66.1
	Driving within an hour after using marijuana	31.9	27.2	29.3
	Driving while using potentially impairing prescription drugs	45.4	46.6	41.4
Other	Driving without wearing a seatbelt	48.6	46.5	45.1

Note: Each year proportion with the same superscript letter denotes a non-significant difference. When the superscript letter is different, then the proportions of years are significantly different from each other at the 0.05 level. For example, in the first row (“Driving while holding and talking on a cell phone”), the results from 2019 and 2020 are significantly different from 2018, but are not significantly different from one another.

Social disapproval

The results show that in 2020, perceived social disapproval for each risky driving behavior was as high as or higher than in 2018 and 2019 (see Table 10). Consistently over the past three years, almost all respondents (>97%) have reported that people who are important to them would disapprove of drowsy driving and riding in a car driven by someone who has had too much alcohol. In terms of distracted driving, the proportion of respondents who perceived that people who are important to them would completely or somewhat disapprove of driving while holding and talking on a cell phone increased consistently from one year to the next—79% in 2018, 87% in 2019, and 93% in 2020. Meanwhile, perceptions regarding social disapproval for driving while reading or typing a text or email have remained consistently high (93% to 96%).

Table 11. How much do you believe people who are important to you would disapprove of each of the following behaviors? (Somewhat/completely disapprove)

Driving Behaviors		2018 (%)	2019 (%)	2020 (%)
Distracted	Driving while holding and talking on a cell phone	79.3 ^c	86.7 ^b	92.6 ^a
	Driving while reading a text or an email on a cell phone	93.8	93.2	94.0
	Driving while typing or sending a text message or email on a cell phone	93.9	94.6	95.5
Aggressive	Driving 15 miles per hour over the speed limit on a freeway	78.0 ^b	80.7 ^{a,b}	83.6 ^a
	Driving 10 miles per hour over the speed limit on a residential street	90.2 ^a	87.3 ^b	91.1 ^a
	Driving through a red light	92.0 ^b	94.0 ^{a,b}	95.9 ^a
	Driving aggressively	93.7	93.7	96.1
Drowsy & Impaired	Driving while being so tired that they had a hard time keeping their eyes open	96.7	97.4	98.1
	Driving after drinking enough alcohol to be over the legal limit	98.3 ^b	94.5 ^a	97.1 ^{a,b}
	Riding in a car driven by someone who has had too much alcohol	98.2	96.7	98.5
	Driving within an hour after using marijuana	91.4	91.0	93.8
	Driving while using potentially impairing prescription drugs	96.4 ^b	95.1 ^a	96.6 ^{a,b}
Other	Driving without wearing a seatbelt	93.9	95.6	96.5

Note: Each year proportion with the same superscript letter denotes a non-significant difference. When the superscript letter is different, then the proportions of years are significantly different from each other at the 0.05 level.

Driving behaviors in past 30 days

Overall, respondents were less likely to report having engaged in most of the unsafe driving behaviors in 2020 compared with 2018 and 2019 (see Table 11). There were significant reductions in reported engagement in distracted driving (talking, reading, and manually typing on a hand-held cell phone while driving) over the past three years. Reductions were also found in reported engagement in drowsy driving, and alcohol- and drug-impaired driving. Although the proportion of respondents who reported having driven 15 mph over the speed limit on a freeway decreased slightly from 49% in 2018 to 45% in 2020, the decrease was not statistically significant after controlling for other co-variates. Likewise, in 2018, 17% of respondents reported having driven without wearing a seatbelt, and in 2020, this proportion decreased to 12%, albeit not significantly.

Table 12. In the past 30 days, how often have you done any of the following behaviors? (At least once)

Driving Behaviors		2018 (%)	2019 (%)	2020 (%)
Distracted	Driven while holding and talking on a cell phone	52.1 ^b	43.2 ^a	37.2 ^a
	Driven while reading a text or an email on a cell phone	41.3 ^b	38.6 ^a	33.9 ^a
	Driven while manually typing or sending a text message or an email	32.1 ^c	29.3 ^b	22.7 ^a
	Talked/texted/emailed on a cell phone using hands-free technology (Bluetooth, CarPlay etc.)	NA	NA	55.5
Aggressive	Driven 15 miles per hour over the speed limit on a freeway	48.9	48.2	45.1
	Driven 10 miles per hour over the speed limit on a residential street	40.1 ^b	41.5 ^b	35.3 ^a
	Driven through a light that had just turned red when you could have stopped safely	31.4 ^b	31.1 ^b	25.6 ^a
	Driven aggressively by switching lanes quickly and/or very close behind another car	24.8 ^{a,b}	26.5 ^b	21.3 ^a
Drowsy & Impaired	Driven when you were so tired that you had a hard time keeping your eyes open	27.0 ^c	23.6 ^b	17.3 ^a
	Driven when you had enough alcohol that you thought you might be over the legal limit	10.9 ^b	9.8 ^b	5.9 ^a
	Ridden in a car driven by someone who has had too much alcohol	13.1 ^c	10.3 ^b	6.9 ^a
	Driven shortly (within an hour) after using marijuana	6.6 ^b	6.5 ^b	4.4 ^a
	Driven when using potentially impairing prescription drugs	5.6 ^b	5.9 ^b	3.4 ^a
Other	Driven without wearing a seatbelt	16.8	15.2	12.3

Note: Each year proportion with the same superscript letter denotes a non-significant difference. When the superscript letter is different, then the proportions of years are significantly different from each other at the 0.05 level.

Support for safety countermeasures

In 2020, compared with 2018 and 2019, respondents were less likely to support most of the included safety countermeasures, as shown in Table 12. For example, a significantly lower proportion of respondents supported making it illegal to drive with more than a certain amount of marijuana in a one's system in 2020 (77%) compared to 2019 (84%) and 2018 (82%). Similarly, people were significantly less likely to support making it illegal to drive with any drug (not legally prescribed) in 2020, compared with the previous two years. In contrast, more people have supported having a law against talking on a hand-held cell phone while driving, regardless of a driver's age, from one year to the next.

Table 13. How strongly do you support or oppose...? (Somewhat/strongly support)

Policies		2018 (%)	2019 (%)	2020 (%)
Distracted	Having a law against holding and talking on a cell phone while driving, for all drivers regardless of their age	74.9 ^b	76.1 ^b	81.8 ^a
	Having a law against using hands-free technology to read, type, or send a text message/email	NA	44.0	45.9
Aggressive	Using cameras to automatically ticket drivers who drive more than 10 mph over speed limit on residential streets	46.8	45.0	44.4
Impaired	Requiring all new cars to have a built-in technology that won't let the car start if the driver's alcohol level is over the legal limit	74.3	72.6	70.4
	Having a law lowering the legal limit for a driver's blood alcohol concentration from 0.08 to 0.05	52.8	52.4	52.8
	Lowering the legal limit for a driver's blood alcohol concentration to 0.05 for people transporting young children	NA	NA	66.5
	Making it illegal to drive with more than a certain amount of marijuana in your system	81.5 ^b	84.3 ^b	77.0 ^a
	Making it illegal to drive with any drug (not legally prescribed) in your system	77.3 ^b	75.4 ^{a,b}	72.5 ^a
Other	Requiring all new drivers under the age of 21 to go through training, practice time, and a restriction period	80.2	79.6	78.2
	Require developers of self-driving car technologies to share safety information and testing results with the public before the vehicles are allowed on public roads	NA	NA	88.5

Note: Each year proportion with the same superscript letter denotes a non-significant difference. When the superscript letter is different, then the proportions of years are significantly different from each other at the 0.05 level.

Discussion

Current and past TSCI surveys highlight the discordance between self-reported driving behavior and perceived danger, likelihood of apprehension, and social support.

In order to gain insight into impacts of the COVID-19 pandemic on transportation, the AAA Foundation for Traffic Safety queried respondents about their extent of driving relative to before the pandemic and compared attitudes, perceptions, and driving behavior reported during the pandemic with those reported before the pandemic. In general, about 60% of respondents reported reducing driving, with variation related to some socio-demographic factors (e.g., age and sex). There were no significant changes in the degree of danger respondents perceived attributed to unsafe driving behaviors from 2018 to 2020—a majority of respondents viewed most unsafe driving behaviors as extremely or very dangerous. Significant reductions were observed in the proportions of drivers who reported engaging in each of several risky driving behaviors (e.g., distracted, drowsy, alcohol-impaired, and drug-impaired driving). However, no significant changes were found in drivers' reported speeding on freeways and non-use of seatbelts from 2018 to 2020.

These findings may provide some insight into factors contributing to the increase in traffic fatalities in 2020. The National Highway Traffic Safety Administration reported that in 2020, crashes resulting in occupant ejections increased by 20% and speeding-related crashes increased by 11%, compared with 2019 (Office of Behavioral Safety Research, 2021). They also stressed that risky behaviors including failure to wear a seatbelt, speeding, and drunk driving were major contributing factors to the nationwide increase of traffic fatalities in 2020.

As Americans are charting a course of recovery from the pandemic, the AAA Foundation for Traffic Safety will continue to monitor changes in the amount people drive. Future reports will continue to examine public attitudes, beliefs, and behaviors as well as other characteristics (e.g., crash involvement, driving frequency, and driving experience) and offer insights into traffic safety challenges.

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Appendix A: Drivers' attitudes, perceptions, and behaviors in relation to age and sex

Table A1. Proportion of drivers who perceived distracted driving as very or extremely dangerous.

		Holding and talking on cell phone (%)	Reading on cell phone (%)	Texting or emailing on cell phone (%)	Using technology that allows hands-free use of their phone (Bluetooth, CarPlay) (%)
All drivers		79.7	94.9	95.5	20.0
Age group	16–18	71.4	85.6	90.8	24.2
	19–24	79.0	89.2	97.4	13.6
	25–39	68.8	93.3	93.1	12.3
	40–59	78.6	95.2	95.6	24.1
	60–74	89.0	96.7	97.7	18.4
	75+	95.5	100.0	97.4	36.9
Sex	Male	76.8	93.0	95.0	18.9
	Female	81.5	96.5	95.9	21.0

Table A2. Proportion of drivers who perceived distracted driving somewhat or very likely to be caught by the police.

		Holding and talking on cell phone (%)	Reading a text or an email on cell phone (%)	Typing or sending a text message or email on cell phone (%)
All drivers		42.0	31.8	43.1
Age group	16–18	51.4	38.9	54.1
	19–24	53.1	39.9	46.9
	25–39	38.4	31.1	46.0
	40–59	38.1	29.4	40.4
	60–74	46.5	30.7	42.0
	75+	47.6	41.9	41.8
Sex	Male	39.1	28.4	41.6
	Female	45.3	34.7	44.6

Table A3. Proportion of drivers who believed people who were important to them would approve of distracted driving somewhat or completely.

		Holding and talking on cell phone (%)	Reading a text or an email on cell phone (%)	Typing or sending a text message or email on cell phone (%)
All drivers		7.4	5.9	4.4
Age group	16–18	9.6	8.0	1.9
	19–24	6.6	9.2	3.6
	25–39	12.0	8.1	7.1
	40–59	6.3	5.2	3.1
	60–74	4.6	5.1	4.1
	75+	2.3	1.4	3.7
Sex	Male	6.7	6.2	2.8
	Female	8.1	5.7	6.0

Table A4. Proportion of drivers who reported distracted driving behaviors at least once in the past 30 days.

		Holding and talking on cell phone (%)	Reading a text or an email on cell phone (%)	Manually texting or sending a text message or email (%)
All drivers		37.4	34.0	22.7
Age group	16–18	46.5	45.8	30.0
	19–24	37.6	42.7	32.1
	25–39	43.3	46.1	36.4
	40–59	38.1	33.7	23.1
	60–74	31.8	22.7	9.0
	75+	25.4	13.0	2.2
Sex	Male	39.0	36.6	24.2
	Female	35.9	31.5	21.4

Table A5: Proportion of drivers who perceived aggressive driving as very or extremely dangerous.

		Driving 15 mph over the speed limit on freeway (%)	Driving 10 mph over the speed limit on a residential street (neighborhood) (%)	Speeding through a red light (%)	Aggressive driving (%)
All drivers		52.3	63.1	84.7	89.4
Age group	16–18	51.9	51.5	75.3	88.8
	19–24	41.0	36.7	79.4	93.2
	25–39	47.3	55.6	76.3	83.9
	40–59	53.4	70.5	86.5	89.8
	60–74	55.6	66.8	92.0	91.9
	75+	71.5	63.9	93.2	98.5
Sex	Male	43.6	55.8	80.3	87.4
	Female	61.7	69.2	89.0	91.4

Table A6: Proportion of drivers who perceived aggressive driving as somewhat or very likely to be caught by the police.

		Driving 15 mph over the speed limit on freeway (%)	Driving 10 mph over the speed limit on a residential street (neighborhood) (%)	Speeding through a red light (%)	Aggressive driving (%)	Driving without wearing a seatbelt (%)
All drivers		59.9	45.7	54.4	53.1	44.9
Age group	16–18	65.0	50.5	54.6	66.6	44.0
	19–24	74.3	54.3	63.1	52.3	44.5
	25–39	66.0	49.0	60.2	59.2	46.2
	40–59	55.2	45.0	53.1	47.1	45.9
	60–74	57.5	42.5	50.6	56.2	44.8
	75+	48.2	41.3	42.2	42.3	37.0
Sex	Male	59.7	39.3	53.1	52.3	44.9
	Female	60.2	51.2	55.5	53.9	45.0

Table A7: Proportion of drivers who believed people who were important to them would approve of aggressive driving somewhat or completely.

		Driving 15 mph over the speed limit on freeway (%)	Driving 10 mph over the speed limit on a residential street (neighborhood) (%)	Speeding through a red light (%)	Aggressive driving (%)	Driving without wearing a seatbelt (%)
All drivers		16.4	9.0	4.2	3.9	3.5
Age group	16–18	9.2	7.2	3.9	5.0	3.2
	19–24	29.1	14.8	3.2	6.8	0.0
	25–39	19.0	8.5	8.2	5.2	6.3
	40–59	14.4	9.3	2.4	4.0	2.3
	60–74	14.2	7.7	2.4	2.0	3.1
	75+	11.5	9.9	4.8	0.0	3.7
Sex	Male	15.3	8.9	3.6	2.7	3.5
	Female	17.5	9.0	4.8	5.2	3.5

Table A8: Proportion of drivers who reported aggressive driving behaviors at least once in the past 30 days.

		Driving 15 mph over the speed limit on freeway (%)	Driving 10 mph over the speed limit on a residential street (neighborhood) (%)	Speeding through a red light (%)	Aggressive driving (%)	Driving without wearing a seatbelt (%)
All drivers		45.2	35.4	25.6	21.4	12.4
Age group	16–18	40.5	45.0	26.2	29.3	12.9
	19–24	64.0	56.0	32.2	33.7	17.0
	25–39	49.3	37.1	29.5	29.1	15.4
	40–59	44.9	33.1	25.4	19.9	10.8
	60–74	38.9	30.8	20.9	13.6	10.5
	75+	36.0	33.3	21.0	10.7	10.3
Sex	Male	50.6	39.7	27.7	25.7	13.1
	Female	39.9	31.1	23.6	17.2	11.7

Table A9. Proportion of drivers who reported drowsy, alcohol-impaired, or drug-impaired driving as very or extremely dangerous.

		Driving while being so tired that they had had a hard time keeping their eyes open (%)	Drinking enough alcohol that they may be over the legal limit (%)	Driving shortly (within an hour) after using marijuana (%)	Driving after using potentially impairing prescription drugs (%)
All drivers		94.9	94.5	69.0	87.0
Age Group	16–18	92.3	93.6	78.4	87.4
	19–24	95.3	96.5	69.9	88.1
	25–39	94.6	94.4	58.0	84.4
	40–59	93.9	93.5	73.2	90.3
	60–74	95.6	95.6	67.7	83.8
	75+	100.0	94.9	89.2	91.7
Sex	Male	94.0	91.3	68.3	84.7
	Female	95.8	97.2	69.7	88.9

Table A10. Proportion of drivers who perceived drowsy, alcohol-impaired, or drug-impaired driving somewhat or very likely to be caught by the police.

		Driving while being so tired that they had had a hard time keeping their eyes open (%)	Drinking enough alcohol that they may be over the legal limit (%)	Driving shortly (within an hour) after using marijuana (%)	Driving after using potentially impairing prescription drugs (%)
All drivers		32.9	66.2	29.0	41.5
Age Group	16–18	45.2	68.3	49.0	52.4
	19–24	37.1	91.4	26.3	64.0
	25–39	26.8	67.0	26.6	42.9
	40–59	28.7	66.3	29.8	38.9
	60–74	45.0	60.7	31.5	38.2
	75+	28.0	63.8	21.0	41.5
Sex	Male	31.0	61.7	27.4	39.1
	Female	35.0	69.9	30.5	43.6

Table A11. Proportion of drivers who believed people who were important to them would approve of engaging in drowsy, alcohol-impaired, or drug-impaired driving somewhat or completely.

		Driving while being so tired that they had had a hard time keeping their eyes open (%)	Drinking enough alcohol that they may be over the legal limit (%)	Ridden in a car driven by someone who has had too much alcohol (%)	Driving shortly (within an hour) after using marijuana (%)	Driving after using potentially impairing prescription drugs (%)
All drivers		2.0	2.9	1.6	6.3	3.5
Age Group	16–18	5.2	2.2	1.2	1.4	3.9
	19–24	0.0	2.6	0.0	3.7	0.0
	25–39	4.5	3.2	3.0	10.6	4.0
	40–59	1.0	3.8	0.9	4.4	4.3
	60–74	1.1	2.4	1.6	6.5	2.6
	75+	0.0	0.0	0.0	3.7	3.2
Sex	Male	2.6	3.9	1.7	5.0	4.3
	Female	1.3	2.1	1.4	7.6	2.7

Table A12. Proportion of drivers who reported engaging in drowsy, alcohol-impaired, or drug-impaired driving in the past 30 days.

		Driving while being so tired that they had had a hard time keeping their eyes open (%)	Drinking enough alcohol that they may be over the legal limit (%)	Ridden in a car driven by someone who has had too much alcohol (%)	Driving shortly (within an hour) after using marijuana (%)	Driving after using potentially impairing prescription drugs (%)
All drivers		17.3	6.0	6.9	4.4	3.4
Age Group	16–18	21.5	4.3	7.0	6.9	3.1
	19–24	30.0	2.4	5.7	6.8	4.7
	25–39	22.3	7.4	8.1	7.2	4.7
	40–59	13.9	6.1	5.4	2.5	3.0
	60–74	14.7	5.2	7.5	4.1	2.7
	75+	10.5	6.6	9.3	0.5	2.0
Sex	Male	18.3	8.0	6.8	5.7	3.5
	Female	16.3	4.0	7.0	3.2	3.4