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American Driving Survey 2014–2015

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Title

American Driving Survey: 2014 – 2015
(September 2016)

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About the Sponsor

AAA Foundation for Traffic Safety
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Founded in 1947, the AAA Foundation in Washington, D.C. is a not-for-profit, 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, from individual members, from AAA-affiliated insurance companies, as well as from other organizations or sources.

Executive Summary

The AAA Foundation for Traffic Safety is dedicated to saving lives through research and education. Fundamental to the research that we perform is the ability to quantify traffic risks. Quantifying traffic risks requires data regarding not only the motor vehicle crashes that occur and the number of people who are involved, injured, and killed in crashes, but also data regarding to people's exposure to risk, such as the number of miles that they travel.

To address the need for current data regarding driving exposure in relation to driver, vehicle, and trip characteristics, the AAA Foundation commissioned researchers at the Urban Institute to perform a develop and implement a data collection system to collect national-level data on the driving of the American public. The data collection system, the *American Driving Survey*, consists of daily telephone interviews of a representative sample of the United States population, conducted in both English and Spanish by both landline and cellular phone, in which respondents aged 16 years or older are asked to report all of the driving that they did over a 24-hour period the day before the interview. By aggregating results from interviews conducted each day, the data are used to estimate the average and total amount that Americans drive each year and to describe the driving that they do.

This data collection system—the *American Driving Survey*—was launched in May of 2013, and results of the first full one-year period of data collection were published by the AAA Foundation in the report *American Driving Survey: Methodology and Year 1 Results, May 2013 – May 2014* (AAA Foundation, 2015). This report presents survey results regarding the driving of the American public in calendar years 2014 and 2015. Across these two calendar years, interviews were completed with representatives of 7,576 households, and detailed information about daily driving trips was collected from a sample of 5,774 drivers. Year-over-year changes are shown for aggregate national statistics only, because the survey sample is not large enough to produce statistically reliable estimates of year-over-year changes in driving for most subgroups. Results for specific demographic groups are shown for both years combined to improve the stability and precision of the estimates.

In 2014 and 2015, an average of 87.5% of US residents aged 16 and older reported that they drove at least occasionally. These drivers reported spending an average of 47.1 minutes driving and drive an average of 29.8 miles daily, or 294 hours and 10,874 miles annually. However, on any given day, roughly one-third of drivers did not do any driving. Drivers reported spending an average of 68.4 minutes driving and driving an average of 43.2 miles on days when they drove.

On average, men were slightly more likely than women to drive at all, and men reported driving longer distances on average than women, but women reported a greater average daily number of driving trips than did men. People aged 30-49 were the most likely to be

drivers, and drivers aged 30-49 made more trips and drove longer distances, on average, than did younger or older drivers. College graduates were more likely to be drivers than were respondents with lower levels of education, and college graduates made more driving trips and drove longer distances on average than did drivers with lower levels of education. Drivers who described the area where they live as a town or city reported making more driving trips each day than did drivers who reported that they live in the country; however, drivers who lived in the country reported driving more miles daily than did drivers who lived in towns or cities.

Fewer drivers drove on weekends than on weekdays; however, drivers who did drive on the weekend drove more miles, on average, than drivers who drove on weekdays, with the net result being that similar numbers of total miles were driven on an average weekend day and on an average weekday. Fewer drivers drove on any given day in the winter than in the spring, summer, or fall; and drivers tended to drive fewer miles on days when they drove in the winter than in other seasons. Differences between driving in the spring, summer, and fall were minimal.

The majority of all driving (66.2% of total trips and 61.9% of total miles driven) is done by solo drivers with no passengers. While both men and women did more of their driving alone than with passengers, a larger share of women's driving than men's driving included passengers. Drivers aged 65 and older did a greater share of their driving with passengers compared with younger drivers.

At the household-level, the average number of drivers per household was 1.8, and the average number of vehicles per household was 2.1. Most households (58.0%) reported having the same number of vehicles as drivers, 14.0% reported having fewer vehicles than drivers, and 27.9% reported having more vehicles than drivers. Households in the Northeast were the most likely to have fewer vehicles than drivers and the least likely to have more vehicles than drivers. Households self-described by respondents as being in the country were more likely than households in towns or cities to have more vehicles than drivers; households described as being in cities were more likely than households in towns or in the country to have fewer vehicles than drivers.

Approximately 7.4% of households reported that they had no vehicles. While the overwhelming majority of drivers live in households with at least one vehicle and most households with no vehicles also have no drivers, nearly 1 in 5 people who live in zero-vehicle households reported that they drive at least occasionally, and roughly 1 in 7 drivers living in a zero-vehicle households (or roughly 2.8% of all people in zero-vehicle households) reported driving on any given day.

All metrics of driving increased slightly from 2014 to 2015. This survey estimates that the percentage of the population that drives increased from 87.3% in 2014 to 87.8% in 2015. In

addition, data from the US Census Bureau indicates that the driving-aged population of the United States increased by approximately 1.0% from 2014 to 2015. As a result, the number of drivers in the United States increased by approximately 3.3 million, or 1.5%, from 2014 to 2015. Furthermore, the amount that drivers reported driving each day increased very slightly, from 29.7 miles per day in 2014 to 29.9 miles per day in 2015. This survey estimates that the total number of miles driven by Americans increased by approximately 2.4%, from approximately 2.40 trillion miles in 2014 to 2.45 trillion miles in 2015.

The remainder of this report explores the findings summarized above in more detail, and also provides a comprehensive description of the survey methodology.

Overview of Methods

The AAA Foundation for Traffic Safety, in collaboration with the Urban Institute, began data collection for the American Driving Survey on May 21, 2013; interviews have been continuously conducted on almost every day of the year since then. This report includes data collected between January 1, 2014 and December 31, 2015. This section of the report provides a high-level overview of the overall design and approach of the survey; comprehensive methodological details are provided in the final section of this report.

The American Driving Survey is based on data collected in telephone interviews, which are conducted in English and Spanish via both landline and cellular telephone with a sample of respondents selected using standard random-digit-dial telephone survey methods. The survey instrument begins with a *Household Roster* which is administered to an adult household member aged 18 years or older. The respondent who completes the roster is asked to report the number of people aged 16 years and older who live in the same household as the respondent, and then report the age, sex, race, ethnicity, marital status, level of education, and frequency of driving for each person. Regarding driving, the respondent completing the roster is asked whether each person drives *almost every day*, *sometimes*, *rarely*, or *never*. Household members are classified as drivers if they are reported to drive at all, and as non-drivers if they are reported to never drive.

After the roster is completed, a driver from the household is selected and is asked a series of questions regarding all of the driving that they did over a 24-hour period beginning the day before the interview (hereafter referred to as a *Trip Interview*). If the household includes multiple drivers, one or more drivers is selected at random using an algorithm that oversamples teenage drivers, drivers aged 75 years and older, and drivers who report driving more frequently. In the remainder of the interview, drivers were asked to report where they began the previous day at 3 AM, whether they stayed at that same location all day or whether they went to any other location, and if they went to any other location, they were asked whether they drove to that location, and if so, what type of vehicle they drove, how many passengers they had, and the distance and duration of the trip. This procedure was repeated for as many trips as the driver took until their arrival at the place where they were located at 3 AM the day of the interview. The full questionnaire is provided in the Appendix.

The data were weighted to adjust for the probability of a household being sampled, the probability of a driver within a household being selected for a Trip Interview, and post-stratification adjustment such that the demographics of the survey respondents matched those of the general population with respect to estimates from the US Census Bureau's American Community Survey (U.S. Census Bureau, 2016) with respect to key variables. All statistics presented in this report other than sample sizes are based on weighted data unless otherwise noted.

The Driving Population

Table 1 shows the estimated proportion of people in the United States who drive, overall and in relation to selected demographic characteristics. Overall, approximately 7 out of 8 U.S. residents aged 16 and older reported that they drove at least rarely, whereas 1 in 8 reported that they never drive.

The proportion of the population that drives was highest for ages 30-49 and 50-64; more than 90% of drivers in both of these age groups reported driving. The youngest and oldest age groups were the least likely to report driving. Men were more likely than women to report driving (89.5% vs 85.8%). White non-Hispanic residents were substantially more likely than other races to report driving. Among adults aged 24 and older[1], those who had a college degree or had attended some college were more likely to be drivers than were high school graduates, who in turn were much more likely to be drivers than were adults aged 24 and older who had not completed high school—adults who had not completed high school were by far the least likely to drive of all demographic groups examined. Among adults aged 18 and older, those who are married were significantly more likely to be drivers than were those who were never married or widowed; these differences persisted even after adjusting for the relationship between marital status and age.

People in the Midwest and South Census regions were the most likely to be drivers; people in the Northeast were the least likely to be drivers. Approximately 1 in 6 residents of states in the Northeast reported that they never drive. People who describe the area where they live as a city were much less likely to report driving than people who describe the area where they live as a town or in the country.

At the household level, the average number of drivers per household was 1.8, and the average number of vehicles per household was 2.1 (Table 2). Although the average number of vehicles per household was greater than the average number of drivers per household, most households (58.0%) reported having the same number of vehicles as drivers (not in table). Of remaining households, 14.0% reported having fewer vehicles than drivers, and 27.9% reported having more vehicles than drivers.

The average number of drivers per household and average number of vehicles per household were both positively correlated with household size. Single-person households were substantially more likely than households with more than one person to have zero drivers and to have zero vehicles (e.g., Only 3.2% of 2-person households but 18% of single-person households had zero drivers).

[1] Relationships between driving and levels of education were only examined for adults aged 24 and older to minimize confounding of education by age due to large numbers of teens and young adults who had not yet completed their education.

The number of vehicles and number of drivers per household were also strongly associated with the highest level of education completed by any household member. Approximately 30% of households in which no adult had graduated from high school had no drivers and no vehicles. In contrast, only about 2% of households with at least one household member who had graduated from college had no drivers or no vehicles. These associations remained large and statistically significant even after adjustment for household size.

Households with at least one teenager aged 16-19 had more vehicles and more drivers, on average, than households without teenagers, and were much less likely to have zero vehicles. However, all of these were largely a function of household size. After accounting for household size, households with teens no longer had more vehicles than households without teens, and had significantly fewer drivers rather than significantly more.

Households in the Northeast tended to have fewer vehicles and fewer drivers than households in other regions, and were also substantially more likely than households in other regions to have zero vehicles and zero drivers. Households self-described by respondents as being in cities had fewer vehicles and fewer drivers than households in towns or in the country, and were also substantially more likely to have zero vehicles and zero drivers. Households in the country had the greatest average number of vehicles and were the least likely to have no vehicles. Although unsurprisingly households with zero vehicles had far fewer drivers on average than households with vehicles and were much more likely to have zero drivers, nearly one in four zero-vehicle households had at least one driver.

Table 1. Proportion of the population that drives, weighted to reflect all United States residents aged 16 years and older, American Driving Survey, 2014 – 2015.

	% Drivers[a]	Sample Size
All	87.5	15,469
Age (years)		
16-19	73.4*	1,087
20-29	88.6	2,416
30-49	91.1*	4,186
50-64	90.9*	4,074
65-74	87.2	1,953
75+	74.0*	1,741
Sex		
Male	89.5*	7,492
Female	85.8*	7,970
Race & ethnicity		
White non-Hispanic	91.1*	10,183
Black/African American non-Hispanic	79.6*	2,130
Hispanic	79.7*	2,095
Other	86.3	860
Education[b]		
Less than high school	68.3*	1,039
High school or GED	87.2*	4,099
Some college	93.0*	2,804
College graduate	94.8*	5,096
Marital status[c]		
Married	93.7*	7,629
Living with partner	89.9	992
Widowed	70.5*	1,098
Divorced/separated	87.5	1,555
Never married	82.3*	3,532
Census region		
Northeast	83.2*	3,117
Midwest	90.3*	3,432
South	88.9*	5,815
West	86.3	3,105
Place of residence[d]		
Country	91.3*	2,217
Town	89.5*	6,142
City	84.9*	6,876

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons who did not report driver status are excluded from table; persons with missing value for row variable are excluded from calculation of percent for that variable but are included for all other variables.

a. Respondents were asked whether they drove almost every day, sometimes, rarely, or never, and were classified as drivers if they reported driving almost every day, sometimes, or rarely.
b. Education shown only for respondents aged 24+.
c. Marital status shown only for respondents aged 18+.
d. As characterized by respondent (“How would you describe the area where you live?”)

Table 2. Number of drivers and vehicles in households, weighted to reflect all households in the United States, American Driving Survey, 2014 – 2015.

	Number of drivers in household		Number of vehicles in household		
	Mean	% with no drivers	Mean	% with no vehicles	Sample Size
All households	1.8	7.7	2.1	7.4	7,576
Number of household members aged 16+ years					
1	0.8*	18.0*	1.3*	16.9*	2,192
2	1.8*	3.2*	2.1*	3.7*	3,460
3	2.4*	4.5*	2.6*	3.3*	1,199
4	3.2*	2.0*	3.3*	1.7*	528
5+	3.9*	4.0*	3.7*	1.6*	197
Highest level of education of any household member					
Less than high school	0.9*	30.8*	1.3*	29.2*	367
High school or GED	1.6*	10.9*	1.8*	11.3*	1,749
Some college	1.8	5.9*	2.2*	6.5	1,729
College graduate	2.0*	3.3*	2.3*	3.6*	3,550
Household includes					
Married couple	2.3*	1.3*	2.5*	1.5*	3,580
At least one person aged 16-19	2.5*	6.8	2.8*	2.5*	953
At least one person aged 75+	1.5*	14.4*	1.6*	12.6*	1,401
Zero vehicles	0.3*	77.5*	N/A	N/A	518
Census region					
Northeast	1.7*	11.2*	1.8*	12.2*	1,501
Midwest	1.8	5.7*	2.2*	5.5*	1,709
South	1.8	6.8*	2.1	6.1*	2,882
West	1.8	8.5	2.1	7.5	1,484
Place of residence[a]					
Country	1.8	5.4*	2.5*	4.5*	1,102
Small or medium-sized town	1.8*	6.1*	2.1*	5.7*	3,000
City	1.7*	9.4*	1.9*	9.4*	3,347

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons who did not report driver status are excluded from table; persons with missing value for row variable are excluded from calculation of percent for that variable but are included for all other variables.

a. As characterized by respondent (“How would you describe the area where you live?”)

Daily Driving: Trips, Distance, and Duration

Overall, drivers reported making approximately 2.1 driving trips on any given day (Table 3), driving an average of 29.8 miles (Table 4) and spending an average of 48.4 minutes driving (Table 5). Table 6 shows corresponding annualized estimates of the amount of driving done by an average driver in a one-year period.

Approximately 31% of all drivers did not drive at all on any given day. Excluding these drivers, drivers who did any driving on any given day made an average of 3.1 driving trips, drove an average of 43.2 miles and spent an average of 70.2 minutes driving.

The most common number of driving trips made on any given day (other than zero) was 2: 29.4% of all drivers and 42.6% of drivers who drove on any given day reported that they made two driving trips. Relatively few drivers (7.5% of all drivers and 10.9% of those who drove on any given day) reported only taking 1 trip. (Most drivers both began and ended the day at home, thus any trip from home to another location would have been associated with a return trip as well.)

Drivers aged 30-49 reported the greatest average number of daily driving trips (Table 3), greatest number of miles driven (Table 4), and greatest amount of time spent driving (Table 5) on any given day; this was true for both averages across all drivers and for only drivers who drove on any given day. Drivers aged 75 years and older were the most likely not to drive on any given day. Teenage drivers and drivers aged 75 and older drove similar numbers of trips, miles, and minutes on average on days when they drove, and these two groups drove less than drivers of all other ages by all measures.

Women reported taking slightly more driving trips per day than men did on average; however, men reported driving longer distances than women and spending more time driving. This was true both overall and when only drivers who drove on any given day were considered.

White non-Hispanic drivers reported the largest numbers of average daily driving trips, miles of driving, and minutes of driving. However, the greatest differences between the driving in relation to race were in the proportion of drivers who drove on any given day. White non-Hispanic drivers were much more likely than drivers of other races to drive on any given day; however, when comparing numbers of driving trips, miles, and minutes only among people who drove on any given day, differences between races were reduced substantially in size and were not statistically significant.

Drivers aged 24 years and older who had a college degree or had attended some college reported the most driving by all measures examined, and drivers who had not completed high school report the least driving by all measures examined. When comparing numbers of

driving trips, miles, and minutes only among people who drove on any given day, drivers who had attended at least some college drove a larger number of trips than drivers who had not attended college and drove a larger number of miles than drivers who had not completed high school. However, differences in the average numbers of minutes and miles of driving between drivers who had attended college versus high school graduates were no longer statistically significant when considering only those who drove on any given day.

Drivers in the West region reported more daily trips on average than drivers in other regions. Drivers in the Northeast reported driving significantly fewer miles than drivers in other regions, both overall and on the days when they drove. Regional differences in amount of time spent driving were not statistically significant.

Drivers who described the area where they live as in the country reported fewer daily driving trips than drivers who lived in towns or cities, and also were the most likely to do no driving on any given day. However, drivers who reported living in the country drove slightly more miles per day on average overall, and substantially more miles on days when they drove, compared with drivers who lived in towns or cities. Interestingly, despite drivers who live in the country driving many more miles daily than drivers who live in cities, both reported spending similar amounts of time driving; this is likely attributable to slower speeds and possibly greater congestion in cities than in the country. Drivers who reported that they lived in towns spent the least amount of time driving.

Table 3. Number of trips on which respondents reported driving in a 24-hour period, weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Number of driving trips					Mean		Sample
	0	1	2	3	4+	All	If Drove[a]	Size
			Row %					
All	31.0	7.5	29.4	11.0	21.1	2.1	3.0	5,774
Age (years)								
16-19	35.0	7.3	30.6	9.1	18.1	1.8*	2.7*	345
20-29	28.9	8.7	30.7	11.3	20.4	2.1	2.9*	775
30-49	25.8	9.0	31.1	11.2	22.9	2.3*	3.1	1,491
50-64	29.4	8.2	28.3	11.2	22.9	2.2*	3.1	1,580
65-74	32.0	5.0	27.5	13.1	22.4	2.1	3.1	787
75+	46.7	2.9	25.9	9.1	15.5	1.6*	3.0	796
Sex								
Male	30.1	8.4	30.9	10.8	19.9	2.0*	2.9*	2,802
Female	32.0	6.6	27.7	11.2	22.5	2.2*	3.2*	2,972
Race & ethnicity								
White non-Hispanic	28.3	7.3	29.9	11.6	22.9	2.2*	3.1*	4,040
Black/African American non-Hispanic	38.6	7.5	25.0	10.7	18.2	1.8*	3.0	770
Hispanic	36.9	9.2	28.2	10.0	15.7	1.8*	2.8*	594
Other	31.6	7.0	34.4	7.7	19.3	2.0	2.9	299
Education[b]								
Less than high school	45.7	6.5	25.0	11.2	11.6	1.5*	2.8*	348
High school or GED	37.6	7.8	28.6	9.4	16.6	1.8*	2.8*	1,579
Some college	29.0	7.0	28.3	11.0	24.7	2.3*	3.2*	1,427
College graduate	23.9	7.6	30.3	12.1	26.2	2.4*	3.2*	2,200
Marital status[c]								
Married	28.3	8.4	30.0	11.0	22.4	2.2*	3.1	2,561
Living with partner	30.8	8.7	30.7	8.6	21.2	2.0	2.9	340
Widowed	43.1	3.4	25.2	10.6	17.6	1.8*	3.1	591
Divorced/separated	30.0	6.9	28.6	11.2	23.4	2.3*	3.2*	825
Never married	30.1	7.4	29.7	12.3	20.5	2.1	3.0	1,230
Census region								
Northeast	33.9	7.4	29.6	9.4	19.7	2.0	3.0	1,081
Midwest	28.7	7.8	31.6	11.9	20.1	2.1	2.9*	1,347
South	31.7	7.9	28.4	11.1	20.9	2.0	3.0	2,225
West	30.2	6.6	28.5	10.9	23.8	2.3*	3.2*	1,121
Place of residence[d]								
Country	35.1	7.5	31.3	11.0	15.1	1.8*	2.7*	866
Town	30.3	7.6	29.1	11.1	22.0	2.1	3.0	2,340
City	30.2	7.5	29.0	10.8	22.6	2.2*	3.1*	2,489

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons with missing values for row variables are excluded from calculation of statistics for that variable but are included for all other variables.

a. Excludes drivers who reported that they did not drive at all during the 24-hour period examined.
b. Education shown only for respondents aged 24+.
c. Marital status shown only for respondents aged 18+.
d. As characterized by respondent (“How would you describe the area where you live?”)

Table 4. Total number of miles of driving reported in a 24-hour period, weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Number of Miles Driven							Mean		
	0	1-10	11-20	21-30	31-40	41-50	>50	All	If Drove[a]	N
				Row %						
All	31.0	17.9	12.9	10.4	7.0	4.4	16.3	29.8	43.2	5,774
Age (years)										
16-19	35.0	22.4	14.4	8.0	7.8	3.5	8.9	20.7*	31.8*	345
20-29	28.9	18.4	13.4	10.8	7.4	4.2	17.0	31.0	43.5	775
30-49	25.8	16.9	11.9	10.7	8.2	5.7	20.9	37.0*	49.9*	1,491
50-64	29.4	17.1	13.1	11.0	7.0	4.6	17.7	30.4	43.1	1,580
65-74	32.0	17.3	12.2	12.9	5.2	4.1	16.5	30.4	44.7	787
75+	46.7	18.4	13.5	7.5	4.4	2.3	7.2	16.0*	30.0*	796
Sex										
Male	30.1	17.3	12.8	9.9	6.7	4.6	18.6	32.9*	47.1*	2,802
Female	32.0	18.6	13.0	11.0	7.3	4.2	13.9	26.6*	39.1*	2,972
Race & ethnicity										
White non-Hispanic	28.3	18.8	13.0	10.5	7.6	4.4	17.6	31.5*	44.0	4,040
Black/African American non-Hispanic	38.6	13.8	12.8	11.1	5.4	4.5	13.6	25.5*	41.5	770
Hispanic	36.9	17.4	12.0	9.6	7.3	4.6	12.2	26.1	41.3	594
Other	31.6	18.3	14.3	9.9	3.7	3.6	18.6	28.1	41.0	299
Education[b]										
Less than high school	45.7	17.7	9.9	8.0	4.0	2.8	11.9	18.5*	34.1*	348
High school or GED	37.6	18.2	10.4	10.5	5.8	4.2	13.3	26.2*	42.0	1,579
Some college	29.0	17.0	12.3	11.3	7.3	4.4	18.7	32.5	45.7	1,427
College graduate	23.9	16.9	15.0	11.0	7.9	5.3	20.0	35.7*	46.9	2,200
Marital status[c]										
Married	28.3	15.8	13.6	10.8	7.6	4.5	19.5	34.5*	48.0*	2,561
Living with partner	30.8	16.1	15.4	11.5	6.3	4.3	15.7	31.9	46.1	340
Widowed	43.1	19.0	9.2	11.3	4.1	3.9	9.3	18.4*	32.3*	591
Divorced/separated	30.0	18.8	12.5	8.9	7.8	5.2	16.9	30.8	44.0	825
Never married	30.1	19.4	12.0	10.5	6.9	4.6	16.5	29.1	41.6	1,230
Census region										
Northeast	33.9	17.3	12.9	9.0	6.2	4.5	16.2	25.6*	38.7*	1,081
Midwest	28.7	19.9	13.6	10.8	7.2	3.5	16.4	30.9	43.3	1,347
South	31.7	15.7	12.4	11.0	7.6	4.7	16.8	31.0	45.4	2,225
West	30.2	20.2	12.9	10.0	6.4	4.8	15.6	29.9	42.8	1,121
Place of residence[c]										
Country	35.1	12.8	11.1	7.6	7.2	5.2	21.0	35.7*	55.0*	866
Town	30.3	19.0	12.7	10.2	7.4	3.9	16.6	29.2	41.9	2,340
City	30.2	18.7	13.5	11.5	6.6	4.7	14.9	28.7	41.1	2,489

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons who reported driving but did not report the distance or duration of any trips are excluded from table. Persons with missing value for row variable are excluded from calculation of statistics for that variable but are included for all other variables.

a. Excludes drivers who reported that they did not drive at all during the 24-hour period examined.
b. Education shown only for respondents aged 24+.
c. Marital status shown only for respondents aged 18+.
d. As characterized by respondent (“How would you describe the area where you live?”)

Table 5. Total number of minutes of driving reported in a 24-hour period, weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Number of Minutes Spent Driving							Mean		Sample
	0	1-15	16-30	31-45	46-60	61-90	>90	All	If Drove[a]	Size
				Row %						
All	31.0	9.7	15.0	10.4	9.9	10.1	14.0	48.4	70.2	5,774
Age (years)										
16-19	35.0	12.3	17.9	9.0	9.4	9.1	7.4	34.2*	52.6*	345
20-29	28.9	9.4	16.2	11.8	9.3	11.0	13.5	51.2	71.9	775
30-49	25.8	10.1	13.9	10.2	11.0	10.6	18.5	59.7*	80.5*	1,491
50-64	29.4	9.0	14.9	11.3	9.9	11.0	14.5	48.3	68.5	1,580
65-74	32.0	9.3	14.8	9.8	10.1	9.9	14.3	47.9	70.4	787
75+	46.7	8.7	13.8	9.0	8.2	6.3	7.4	29.0*	54.4*	796
Sex										
Male	30.1	9.6	14.5	10.1	9.9	10.6	15.2	52.4*	74.9*	2,802
Female	32.0	9.8	15.5	10.7	9.8	9.5	12.7	44.3*	65.1*	2,972
Race & ethnicity										
White non-Hispanic	28.3	10.7	15.1	11.0	9.8	10.5	14.5	50.6*	70.6	4,040
Black/African American non-Hispanic	38.6	7.9	13.1	9.6	10.3	8.7	11.8	41.6*	67.8	770
Hispanic	36.9	7.6	14.7	7.5	11.6	9.7	12.1	44.3	70.2	594
Other	31.6	7.0	18.5	11.2	6.5	7.9	17.3	46.6	68.1	299
Education[b]										
Less than high school	45.7	6.6	14.9	6.7	7.6	8.0	10.5	34.2*	63.0	348
High school or GED	37.6	10.4	14.2	8.6	9.3	8.6	11.3	44.2*	70.8	1,579
Some college	29.0	10.1	13.9	11.3	10.0	9.4	16.4	51.5	72.5	1,427
College graduate	23.9	8.5	14.9	12.0	10.9	12.2	17.6	56.5*	74.2	2,200
Marital status[c]										
Married	28.3	9.2	14.4	10.4	10.7	10.6	16.5	54.4*	75.9*	2,561
Living with partner	30.8	10.8	13.9	9.6	12.9	10.5	11.6	52.4	75.6	340
Widowed	43.1	8.4	14.0	8.6	8.7	7.1	10.1	33.3*	58.5*	591
Divorced/separated	30.0	9.9	15.3	10.4	8.5	10.6	15.3	49.7	70.9	825
Never married	30.1	9.1	15.5	11.2	9.8	10.3	14.0	47.9	68.6	1,230
Census region										
Northeast	33.9	8.4	15.4	9.0	8.4	10.2	14.8	44.2	66.9	1,081
Midwest	28.7	12.3	15.2	11.0	10.6	9.6	12.6	47.9	67.2	1,347
South	31.7	8.7	14.6	10.4	10.3	10.1	14.1	49.3	72.2	2,225
West	30.2	9.7	15.0	10.8	9.6	10.4	14.4	50.6	72.4	1,121
Place of residence[d]										
Country	35.1	9.7	11.5	6.7	11.2	10.6	15.4	51.6	79.5	866
Town	30.3	10.5	16.5	10.1	9.5	10.4	12.8	45.5*	65.3*	2,340
City	30.2	9.0	14.6	11.9	9.7	9.7	14.9	50.5	72.3	2,489

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons who reported driving but did not report the distance or duration of any trips are excluded from table. Persons with missing value for row variable are excluded from calculation of statistics for that variable but are included for all other variables.

a. Excludes drivers who reported that they did not drive at all during the 24-hour period examined.
b. Education shown only for respondents aged 24+.
c. Marital status shown only for respondents aged 18+.
d. As characterized by respondent (“How would you describe the area where you live?”)

Table 6. Estimated annual average number of driving trips, miles driven, and hours spent driving, weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Trips	Miles	Hours	Sample Size
All	763	10,874	294	5,774
Age (years)				
16-19	646*	7,551*	208*	345
20-29	748	11,299	311	775
30-49	842*	13,506*	363*	1,491
50-64	802*	11,099	294	1,580
65-74	779	11,092	291	787
75+	587*	5,840*	177*	796
Sex				
Male	730*	12,013*	319*	2,802
Female	798*	9,699*	269*	2,972
Race & ethnicity				
White non-Hispanic	810*	11,515*	308*	4,040
Black/African American non-Hispanic	665*	9,294*	253*	770
Hispanic	645*	9,521	270	594
Other	713	10,242	283	299
Education[a]				
Less than high school	553*	6,763*	208*	348
High school or GED	643*	9,569*	269*	1,579
Some college	834*	11,849	313	1,427
College graduate	891*	13,022*	344*	2,200
Marital status[b]				
Married	800*	12,578*	331*	2,561
Living with partner	735	11,637	319	340
Widowed	640*	6,714*	202*	591
Divorced/separated	824*	11,244	302	825
Never married	762	10,624	292	1,230
Census region				
Northeast	723	9,328*	269	1,081
Midwest	761	11,264	291	1,347
South	748	11,314	300	2,225
West	823*	10,906	308	1,121
Place of residence[c]				
Country	648*	13,029*	314	866
Town	774	10,675	277*	2,340
City	795*	10,476	307	2,489

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons with missing values for row variables are excluded from calculation of statistics for that variable but are included for all other variables.

a. Education shown only for respondents aged 24+.
b. Marital status shown only for respondents aged 18+.
c. As characterized by respondent ("How would you describe the area where you live?")

Driving with Passengers vs. Alone

Drivers reported that they drove approximately 66.2% of all of their driving trips (61.9% of total miles) alone, and drove 33.8% of their trips (38.1% of total miles) with passengers present in the vehicle (Table 7).

Women drove a significantly greater proportion of all of their trips and miles with passengers than men did. Interestingly, men and women drove similar absolute numbers of miles with passengers, but men drove significantly more miles alone, thus accounting for their lower percentage of miles driven with passengers.

Although drivers who lived in cities, towns, and in the country reported driving similar proportions of their trips with passengers, drivers who lived in the country drove a substantially greater proportion of their total miles of driving alone.

Driving trips and miles on the weekend were much more likely to include passengers than were trips driven on weekdays (44.3% vs. 30.0%) and the share of miles driven with passengers was correspondingly greater on weekends than on weekdays (54.9% vs. 31.6%).

Table 7. Proportion of daily trips and miles that are driven with passengers, weighted to reflect all driving done by drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Mean daily trips	% with passengers	Mean daily miles	% with passengers	Sample Size
All	2.1	33.8	29.8	38.1	5,774
Age (years)					
16-19	1.8	37.3	20.7	39.9	345
20-29	2.1	33.0	31.0	37.4	775
30-49	2.3	39.1*	37.0	38.6	1,491
50-64	2.2	29.4*	30.4	33.3	1,580
65-74	2.1	29.9*	30.4	45.7	787
75+	1.6	30.4	16.0	42.1	796
Sex					
Male	2.0	30.1*	32.9	33.8*	2,802
Female	2.2	37.2*	26.6	43.7*	2,972
Race & ethnicity					
White non-Hispanic	2.2	33.3	31.5	37.5	4,040
Black/African American non-Hispanic	1.8	31.0	25.5	38.0	770
Hispanic	1.8	38.7*	26.1	38.9	594
Other	2.0	37.1	28.1	44.4	299
Education					
Less than high school	1.5	40.7	18.5	45.7	348
High school or GED	1.8	31.2	26.2	33.5	1,579
Some college	2.3	34.5	32.5	42.5	1,427
College graduate	2.4	33.3	35.7	36.1	2,200
Marital status[b]					
Married	2.2	40.3*	34.5	46.4*	2,561
Living with partner	2.0	41.5*	31.9	46.0	340
Widowed	1.8	22.9*	18.4	31.1	591
Divorced/separated	2.3	29.3*	30.8	27.3*	825
Never married	2.1	25.9*	29.1	28.1*	1,230
Census region					
Northeast	2.0	35.8	25.6	37.7	1,081
Midwest	2.1	32.7	30.9	34.3	1,347
South	2.0	32.9	31.0	36.5	2,225
West	2.3	34.7	29.9	45.4	1,121
Place of residence[c]					
Country	1.8	33.7	35.7	30.0*	866
Town	2.1	34.3	29.2	43.0*	2,340
City	2.2	33.4	28.7	36.4	2,489
Day of week					
Monday-Friday	2.1	30.0*	29.7	31.6*	4,077
Saturday-Sunday	2.0	44.3*	29.9	54.9*	1,697

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

Persons who reported driving but did not report the distance or duration of any trips are excluded from table. Persons with missing value for row variable are excluded from calculation of statistics for that variable but are included for all other variables.

a. Education shown only for respondents aged 24+.

b. Marital status shown only for respondents aged 18+.

c. As characterized by respondent (“How would you describe the area where you live?”

Types of Vehicles Driven

Slightly over half of all driving trips and approximately half of all miles driven in light vehicles in the United States in 2014 – 2015 were driven in cars (Table 8). Approximately one-fifth of all trips and miles were driven in SUVs, and slightly fewer were driven in pickup trucks. Vans and minivans, motorcycles, and other vehicle accounted for a total of 7-8% of all driving trips and miles nationwide.

The youngest and the oldest drivers did the greatest shares of their driving in cars; middle-aged drivers did a larger proportion of their total driving in cars than in other types of vehicles but did more of their driving in SUVs, pickup trucks, vans, and minivans than younger and older drivers did. A much greater share of all driving by men than by women was done in pickup trucks; slightly greater shares driving by women than by men were done in cars and in SUVs. The proportion of driving that was done in cars and in SUVs generally increased and the proportion done in pickup trucks decreased as drivers' level of education increased. Drivers who were married did more of their driving in SUVs, vans, and minivans than drivers who were not married.

Drivers in the Midwest and South did greater shares of their driving in pickup trucks than did drivers who lived in other regions; drivers who lived in the country did greater shares of their driving in pickup trucks than did drives who lived in towns or cities. Drivers in cities did much greater shares of their driving in cars than did drivers in towns or in the country.

Table 8. Proportion of all driving trips and miles driven by vehicle type, sample of drivers weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Driving Trips					Miles Driven					
	Car	SUV	Pickup	Van/ Minivan	Other	Car	SUV	Pickup	Van/ Minivan	Other	Sample Size
	% of Trips (Row %)					*% of Miles Driven (Row %)*					
All	55.6	21.1	14.2	7.4	1.6	50.7	20.3	17.3	7.9	3.7	5,774
Age (years)											
16-19	61.7	15.6	13.9	6.5	2.3	65.4	10.6	11.7	6.5	5.8	345
20-29	65.9	18.2	11.1	3.1	1.6	59.0	19.1	13.4	5.3	3.1	775
30-49	47.7	25.0	15.8	10.1	1.4	41.2	22.5	22.2	10.4	3.6	1,491
50-64	52.9	21.2	16.2	7.8	2.0	49.9	19.5	18.0	8.6	3.9	1,580
65-74	56.0	23.6	13.1	6.2	1.1	53.9	25.6	14.7	4.6	1.2	787
75+	68.7	13.6	9.7	6.8	1.2	65.0	15.5	6.9	5.6	6.9	796
Sex											
Male	51.8	17.6	22.2	6.3	2.1	47.6	17.9	23.3	7.4	3.8	2,802
Female	59.3	24.4	6.7	8.5	1.1	54.7	23.5	9.6	8.6	3.6	2,972
Race & ethnicity											
White non-Hispanic	52.7	22.0	15.9	7.7	1.7	47.7	20.8	18.8	8.4	4.3	4,040
Black/African American	60.5	23.8	8.9	5.3	1.5	59.9	23.1	8.7	7.0	1.2	770
Hispanic	66.2	12.0	12.7	8.1	1.1	54.2	16.4	20.1	6.7	2.7	594
Other	60.1	23.9	7.0	7.8	1.2	60.1	19.4	9.8	6.9	3.9	299
Education[a]											
Less than high school	45.5	12.7	34.0	6.6	1.2	37.7	12.7	41.4	5.8	2.5	348
High school or GED	52.2	18.1	19.3	8.2	2.3	42.6	15.4	24.6	10.4	7.1	1,579
Some college	54.3	22.6	13.6	8.3	1.3	48.0	21.4	17.8	9.5	3.3	1,427
College graduate	56.5	24.9	9.5	7.6	1.5	55.4	24.4	11.6	6.8	1.9	2,200
Marital status[b]											
Married	46.6	25.3	15.8	10.7	1.7	43.8	24.8	16.3	12.0	3.1	2,561
Living with partner	57.2	15.8	18.0	6.0	3.0	53.8	16.8	20.5	3.8	5.1	340
Widowed	63.4	20.7	9.3	5.8	0.8	56.6	22.5	13.4	5.2	2.4	591
Divorced/separated	56.1	21.3	15.9	5.8	1.0	46.6	18.3	27.3	4.5	3.2	825
Never married	68.7	15.1	10.8	3.6	1.7	65.0	13.3	12.6	3.8	5.3	1,230
Census region											
Northeast	57.8	23.4	11.2	6.0	1.6	56.7	25.0	11.0	5.3	2.0	1,081
Midwest	53.6	21.9	13.8	9.4	1.3	48.1	17.8	18.1	11.0	5.0	1,347
South	54.8	20.4	16.5	6.8	1.5	48.9	20.8	21.1	6.4	2.7	2,225
West	57.6	19.7	13.2	7.5	2.0	52.7	19.2	13.9	9.0	5.2	1,121
Place of residence[c]											
Country	44.1	22.0	25.4	7.0	1.4	43.6	17.1	30.0	6.5	2.8	866
Small or medium-sized town	54.1	21.1	15.7	7.7	1.4	48.7	21.5	18.2	7.8	3.8	2,340
City	59.6	21.0	10.2	7.4	1.8	55.0	20.7	11.5	8.7	4.1	2,489

a. Education shown only for respondents aged 24+.
b. Marital status shown only for respondents aged 18+.
c. As characterized by respondent ("How would you describe the area where you live?")

Daily, Seasonal, and Annual Variation in Driving

Table 9 shows variation in daily driving in relation to year, month/quarter, and day of week.

The mean number of daily trips did not change from 2014 to 2015; the mean number of miles driven and minutes spent driving daily both increased very slightly from 2014 to 2015, though neither change was statistically significant.

Drivers reported the greatest average number of daily driving trips in the second quarter of the year (April – June) and the lowest number in the first quarter (January – March). The average daily number of miles driven and minutes spent driving were both much lower in the first quarter than in the rest of the year. The proportion of drivers who drove on any given day was also significantly lower in the first quarter than in the rest of the year. When individual months were examined, the mean daily number of miles driven and minutes spent driving were both by far the lowest in February; this was true both among all drivers and among those who drove on any given day. The mean daily number of miles driven and minutes spent driving were both greatest in December; however, the amount of driving in December was not significantly different from the overall average (only February was significantly different).

The proportion of all drivers who drove on any given weekday was significantly greater than on weekend days, and the mean daily number of trips was correspondingly greater on weekdays than on the weekend. At the level of the individual day, the proportion of drivers who drove was lowest on Sundays and highest on Fridays; both were significantly different from the overall average. Similarly, the average daily number of driving trips was the smallest on Sundays and the largest on Fridays.

Table 9. Variation in daily driving by year, month, and day of week, sample of drivers weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	Mean daily driving (all drivers)			% that drove	Mean daily driving (if drove)[a]			Sample Size
	Trips	Miles	Minutes		Trips	Miles	Minutes	
All	2.1	29.8	48.4	69.0	3.0	43.2	70.2	5,774
Year								
2014	2.1	29.7	48.1	68.0	3.1	43.6	70.7	2,902
2015	2.1	29.9	48.7	69.9	3.0	42.8	69.6	2,872
Quarter								
Jan-Mar	2.0*	26.2*	42.2*	65.1*	3.0	40.2	64.8	1,495
Apr-Jun	2.2*	30.7	50.5	70.8	3.2	43.4	71.4	1,348
Jul-Sep	2.1	31.0	49.9	70.5	3.0	44.0	70.8	1,483
Oct-Dec	2.1	31.5	51.4	69.8	3.0	45.1	73.7	1,448
Month								
January	1.9	26.6	38.6	63.5	3.0	41.8	60.8	503
February	2.0	21.8*	37.5*	66.0	3.1	33.1*	56.7*	480
March	1.9	29.7	49.8	65.8	2.9	45.1	75.7	512
April	2.3	30.4	49.0	70.3	3.3	43.3	69.7	440
May	2.3	32.6	52.9	73.1	3.1	44.6	72.3	430
June	2.1	29.3	49.9	69.2	3.1	42.4	72.2	478
July	2.1	31.0	48.3	68.9	3.0	45.1	70.1	484
August	2.0	31.8	53.1	71.0	2.9	44.7	74.8	491
September	2.2	30.2	48.1	71.4	3.0	42.3	67.4	508
October	2.2	29.0	49.6	70.1	3.1	41.4	70.8	505
November	2.0	32.3	51.3	68.9	2.9	46.9	74.5	464
December	2.1	33.4	53.6	70.3	3.0	47.5	76.2	479
Weekday vs Weekend								
Mon-Fri	2.1*	29.7	49.0	70.5*	3.0	42.2	69.5	4,077
Sat-Sun	2.0*	29.9	46.8	65.0*	3.0	46.0	72.0	1,697
Day of Week								
Sunday	1.9*	30.5	46.3	63.9*	2.9	47.8	72.5	914
Monday	2.1	29.7	46.2	69.6	3.0	42.6	66.4	850
Tuesday	2.0	30.5	49.3	68.9	2.9	44.3	71.6	799
Wednesday	2.1	28.0	47.0	70.0	3.0	40.0	67.0	789
Thursday	2.1	29.7	49.0	70.9	2.9*	41.8	69.1	806
Friday	2.4*	30.9	53.5	72.9*	3.3*	42.3	73.3	833
Saturday	2.1	29.3	47.3	66.2	3.1	44.3	71.5	783

* Indicates that difference between statistic shown and overall mean is statistically significant at 95% confidence level.

a. Excludes drivers who reported that they did not drive at all during the 24-hour period examined.

Total Drivers, Trips, Miles, and Hours: 2015 vs. 2014

Although the sample size of the American Driving Survey is not large enough to produce reliable estimates of year-to-year changes in the number of miles driven by subgroups, the survey can provide some insights into major changes in driving at the national level.

Table 10 shows the estimated numbers of drivers, driving trips, and minutes and miles of driving at the national level in 2015 compared with 2014. The data show that the driving population of the United States increased by an estimated 1.5%, or approximately 3.3 million drivers, from 2014 to 2015, which came about as the result of a 1.0% increase in the size of the US population aged 16 years and older in conjunction with an estimated 0.5% increase in the proportion of people aged 16+ who drive. While the change in the estimated proportion of the population that drives was not statistically significant, the increase in the total number of drivers was statistically significant given the substantial increase in the size of the driving-aged population as reported by the U.S. Census Bureau (2016b).

The average number of driving trips that drivers reported taking each day declined very slightly from 2014 to 2015; however, the size of the decline was well within the sampling error of the survey and is consistent with the average daily number of daily trips remaining the same from 2014 to 2015.

There were small increases in the average daily and total annual amount of time spent driving and number of miles driven. While neither was statistically significant given the sample size and the substantial variability in estimates of driving time and distance, the data generally suggest that drivers drove about the same amount or possibly very slightly more (an estimated 34 seconds and ¼ mile more per day) in 2015 than in 2014, but suggest that the total amount of driving by all drivers increased from 2014 to 2015 driven largely by the increases in the driving-aged population and thus total number of drivers in the population.

Table 10. Daily and annual estimates of the driving population, driving trips, driving duration, and distance driven, weighted to reflect all drivers aged 16 years and older nationwide, American Driving Survey, 2014 – 2015.

	2014	2015	Average (2014-2015)	% Change (2014 to 2015)
Population aged 16+ (millions)[a]	253.7	256.2	254.9	+1.0%
Drivers				
% of population aged 16+ that drives	87.3%	87.8%	0.9	+0.5%
Total number of drivers aged 16+ (millions)	221.5	224.8	223.2	+1.5%*
Driving trips				
Daily average driving trips per driver	2.12	2.06	2.09	-2.8%
Annual average driving trips per driver	774	752	763	-2.8%
Total annual driving trips by all drivers (billions)	171.4	169.1	170.2	-1.4%
Time spent driving				
Daily average time spent driving per driver (minutes)	48.1	48.7	48.4	+1.2%
Annual average time spent driving per driver (hours)	293	296	294	+1.2%
Total annual time spent driving by all drivers (billions of hours)	64.8	66.6	65.7	+2.7%
Distance driven				
Daily average miles driven per driver	29.7	29.9	29.8	+0.8%
Annual average miles driven per driver	10,830	10,919	10,874	+0.8%
Total annual miles driven by all drivers (trillions)	2.40	2.45	2.43	+2.4%

* Indicates that difference shown is statistically significant at 95% confidence level.

a. Source: U.S. Census Bureau. *Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, April 1, 2010 to July 1, 2015.* U.S. Census Bureau, Population Division. June 2016.

Survey Methodology

Sample Design

The American Driving Survey comprised an overlapping dual-frame (landline/cell phone) Random Digit Dial (RDD) telephone survey sample design to maximize the proportion of the entire population that would be covered in a cost-effective manner.

The landline sample was generated through Marketing Systems Group's (MSG's) GENESYS sampling system. MSG is one of the survey research industry's largest statistical sampling companies and is the supplier for social science researchers and government organizations. The standard GENESYS methodology produces a strict single-stage, Equal Probability Selection Method (epsem) sample of telephone numbers. The sample for this survey was generated using MSG's proprietary GENESYS ID-plus procedure, which limits sample to telephone banks that contain at least one valid telephone number and also identifies and eliminates non-working and business numbers and ported cell phones to the extent feasible. A large portion of the sample was generated shortly before the beginning of data collection. This provided the most up-to-date sample possible, maximizing the number of valid telephone extensions.

Similar to the landline sample, MSG generated a random sample of cell phone telephone numbers. The cell sample was run through the Cell-WINS process. Cell-WINS (Cellular Working Identification Number Service) is a real-time non-intrusive screening process that identifies inactive telephone numbers in a cellular RDD sample.

Respondent Selection

The survey instrument (provided in the Appendix) consisted of a *Household Roster* and a *Trip Interview*. The Household Roster was administered to any household member aged 18 years or older who answered the telephone. If a minor answered the telephone, interviewers asked to speak with an adult and administered the roster to the adult. The adult who completed the roster was asked to report the number of people aged 16 years and older who live in the same household as the respondent, and then report the age, sex, race, ethnicity, marital status, level of education, and frequency of driving for each person. Regarding driving, the respondent completing the roster was asked whether each person drives *almost every day*, *sometimes*, *rarely*, or *never*. Household members were classified as drivers if they were reported to drive at all, and as non-drivers if they are reported to never drive.

After the roster was completed, if any household members were reported to be drivers, a driver from the household was selected and is asked a series of questions regarding all of the driving that they did over a 24-hour period beginning the day before the interview

(hereafter referred to as a *Trip Interview*). Sampling of drivers from within households for the Trip Interview proceeded as follows:

Driver selection in the landline telephone sample:

- If one driver in the household was aged 16-19, that driver was selected.
- If two or more drivers in the household were aged 16-19, the program randomly selected one driver aged 16-19, giving twice the selection probability to drivers who drive almost every day.
- If one driver in the household was aged 20-74, that driver was selected.
- If two or more drivers in the household were aged 20-74, the program randomly selected one driver aged 20-74, giving twice the selection probability to drivers who drive almost every day.
- If one driver in the household was aged 75 or older, that driver was selected.
- If two or more drivers in the household were aged 75+, the program randomly selected one driver aged 75+, giving twice the selection probability to drivers who drive almost every day.
- If fewer than three drivers had been selected per the above steps, and there we additional drivers aged 16-19 in the household, the program randomly selected additional drivers aged 16-19, until a total of up to three household drivers had been interviewed.

Driver selection in cell phone sample:

- If the respondent was a driver, the respondent was selected.
- If one driver in the household was aged 16-19 and was not the respondent, that driver was selected.
- If two or more drivers in the household were aged 16-19 and neither was the respondent, the program randomly selected one driver aged 16-19, giving twice the selection probability to drivers who drive almost every day.
- If one driver in the household was aged 20-74 and was not the respondent, that driver was selected.
- If two or more drivers in the household were aged 20-74 and neither was the respondent, the program randomly selected one driver aged 20-74, giving twice the selection probability to drivers who drive almost every day.
- If one driver in the household was aged 75+ and was not the respondent, that driver was selected.
- If two or more drivers in the household were aged 75 or older and neither was the respondent, the program randomly selected one driver aged 75+, giving twice the selection probability to drivers who drive almost every day.
- If fewer than three drivers had been selected per the above steps, and there we additional drivers aged 16-19 in the household, the program randomly selected additional drivers aged 16-19, until a total of up to three household drivers had been interviewed.

In the Trip Interview, drivers were asked to report where they began the previous day at 3 AM, whether they stayed at that same location all day or whether they went to any other location, and if they went to any other location, they were asked whether they drove to that location, and if so, what type of vehicle they drove, how many passengers they had, and the distance and duration of the trip. This procedure was repeated for as many trips as the driver took until their arrival at the place where they were located at 3 AM the day of the interview. The complete questionnaire for the Trip Interview is provided in the Appendix.

Survey Administration

The questionnaire was administered by SSRS, a full-service survey research firm located in Media, Pennsylvania. SSRS programmed the study using CfMC computer assisted telephone interviewing (CATI) software. The program was extensively checked to assure that skip patterns followed the design of the questionnaire.

The field period for the data used in this report ran from January 1, 2014 – December 31, 2015. The interviews were conducted by SSRS, and all interviews were conducted through the CATI system, which ensured that questions followed logical skip patterns and dispositions of all call attempts were recorded.

Interviewers received both formal training and written materials about the survey. The written materials, which were provided prior to the beginning of the field period, included an annotated questionnaire containing information about the goals of the study as well as detailed explanations about why questions were being asked, the meaning and pronunciation of key terms, potential obstacles to be overcome to get good answers to questions, respondent problems that could be anticipated ahead of time, and strategies for addressing unforeseen potential problems.

Interviewer training was conducted immediately before the survey was fully launched. Call center supervisors and interviewers were walked through each question on the questionnaire. Interviewers were given instructions to help them maximize response rates and ensure accurate data collection. Interviewers were monitored throughout the field period and were given feedback, when appropriate, to improve their interview technique and to clarify survey questions.

In order to maximize survey response and ensure respondent safety, SSRS enacted the following procedures during the field period:

- Following the initial call, on average, eleven follow-up attempts were made to both reach non-responsive household telephone numbers (no answer, busy, answering machine) and set up callbacks to complete trip interviews.

- The program is set up so that pieces of sample released on odd-numbered days of the Julian calendar year are dialed on 'odd' days and sample released on even-numbered days of the Julian calendar year are dialed on 'even' days. This allows for the sample to be regularly called (and rested) through the entire period of time that the sample is active. Of course, specific callbacks override this schedule.
- Each non-responsive telephone number was dialed multiple times – at different times of day and varying the days of the week on which callbacks were placed – using a programmed differential call rule.
- Respondents were offered the option of setting a schedule for a callback for themselves.
- Respondents were also offered the option of setting a schedule for a callback for others in the household who were selected to complete the Trip Interview, if they were not available at the time of the original household roster interview.
- In an attempt to convert refusals to completed interviews, specially trained interviewers contacted households where the initial call had resulted in a refusal.
- Bilingual interviewers made callbacks to Spanish-speaking households.
- Each adult respondent was offered a $5 incentive for completing the household roster portion of the interview, and each sampled driver was offered an additional $5 incentive to complete the Trip Interview.
- Respondents in the cell phone sampling frame were immediately asked if they were currently driving, and the call was discontinued if the respondent was driving in the interest of safety.

Response Rate and Characteristics of the Sample

Over the two-year data collection period, interviews were completed with representatives of 7,576 households, and detailed information about daily driving trips was collected from a sample of 5,774 drivers. The estimated household-level response rate was 24.5%; that is the number of households completing the screener divided by the number of households contacted that were eligible for the survey. The cooperation rate for drivers within these households who were sampled and asked to complete a Trip Interview was 72.4%. Thus, the overall response rate at the level of the Trip Interview was 17.7%. The mean completion time for the Household Roster Interview was 5 minutes and 27 seconds; the mean completion time for the Trip Interview was 4 minutes and 49 seconds. Thus, a driver who completed the Household Roster Interview, was selected for the Trip Interview, and completed the Trip Interview would have taken an average of 10 minutes and 16 seconds to complete the entire survey. Table 11 shows raw (unweighted) data related to the administration of the survey, and Table 12 shows the raw (unweighted) characteristics of people living in sampled households.

Table 11. Sample size, response rate, and interview length, American Driving Survey, 2014 – 2015.

	2014	2015	All
Sample Size		N (unweighted)	
Households rostered	3,792	3,784	7,576
Number of persons aged 16+ in rostered households	8,007	7,883	15,890
Number of drivers in rostered households	6,823	6,653	13,476
Number of drivers sampled for Trip Interview	4,000	3,973	7,973
Number of drivers who completed Trip Interview	2,902	2,872	5,774
Response Rate		%	
Household-level Response Rate	25.4	23.6	24.5
Driver-level Trip Interview Cooperation Rate	72.6	72.3	72.4
Overall Response Rate for Trip Interview	18.4	17.1	17.7
Interview Length		Minutes: seconds	
Household roster (mean)	5:25	5:29	5:27
Trip Interview (mean)	4:44	4:53	4:49

Table 12. Characteristics of people aged 16+ residing in households represented in the American Driving Survey, 2014 – 2015.

	2014	2015	All
Number of persons rostered	8,007	7,883	15,890
Age (years)	*Column %* (Unweighted)		
16-19	7.0	7.1	7.0
20-29	16.4	14.8	15.6
30-49	26.9	27.2	27.1
50-64	26.0	26.7	26.4
65-74	12.2	13.0	12.6
75+	11.5	11.2	11.3
Sex			
Male	48.5	48.5	48.5
Female	51.5	51.5	51.5
Race & ethnicity			
White non-Hispanic	68.0	65.3	66.7
Black/African American non-Hispanic	13.9	14.1	14.0
Hispanic	12.7	14.8	13.7
Other	5.5	5.8	5.6
Education[a]			
Less than high school	8.1	7.9	8.0
High school or GED	31.8	31.1	31.4
Some college	22.0	21.0	21.5
College graduate	38.1	40.0	39.1
Marital status[b]			
Married	51.3	51.7	51.5
Living with partner	6.9	6.5	6.7
Widowed	7.4	7.5	7.4
Divorced/separated	10.2	10.8	10.5
Never married	24.2	23.5	23.9
Census region			
Northeast	20.1	20.0	20.0
Midwest	21.6	22.9	22.2
South	37.6	37.6	37.6
West	20.8	19.5	20.2
Place of residence[c]			
Country	14.4	14.5	14.4
Town	41.7	39.1	40.4
City	43.9	46.4	45.1
Frequency of driving			
Drives almost every day	68.7	68.5	68.6
Drives sometimes or rarely	18.9	18.1	18.5
Never drives	12.3	13.5	12.9

Persons with missing data for any row variable are excluded from calculation of statistics for that variable but are included for all others.

a. Education shown only for respondents aged 24+.
b. Marital status shown only for respondents aged 18+.
c. As characterized by respondent (“How would you describe the area where you live?”)

Data Weighting

The data were weighted to reflect each respondent's probability of being selected to participate in the survey and to adjust for non-response, so that the analysis of responses from the final sample of respondents, when weighted, was representative of the population of the United States to the greatest degree possible, and thus analysis of data from the respondents could be used to draw inferences about the driving of all drivers nationwide.

The weighting procedure involved computation of four weights:

1. Household-level weight,
2. Person-level weight,
3. Driver-level weight, and
4. Trip-level weight.

Household-level weight[2]: Because the survey was conducted by landline and cellular telephone, the population of which the sample was designed to represent is all households in the United States that can be reached by landline or cellular telephone. The following four steps were used to create a household-level weight (also referred to in some places in this report as the *base weight*).

1. Weighting down households in the landline sampling frame that report more than one landline telephone number that could be used to complete the survey (question H6). At most, landlines would be weighted down to 0.5.

2. Merging the landline and cellular sampling frames and creating the dual frame adjustment. To correct for differences in likelihood of selection for households whose members use both landlines and cell phones compared with households who used only landline telephones or only cellular phones (but not both), households were assigned weights so that the distribution of households by mode (landline only; cell only; both landline and cell) would reflect the national distribution of households as reported by Blumberg & Luke (2015).

3. A simple non-response adjustment by Census region (Northeast, Midwest, South, and West) raking the household to match estimates of households with telephones

[2] The household or base weight is assigned to each person in the household who has a record in the final data file. All the other survey weights are calculated at the individual or person level. It is possible that a household could have driving interviews that occur in different calendar years. When this occurs, the household and associated household weights will be included in more than one calendar year. However, individual weights will only be included in the time period for which the interview took place.

by region.

4. Normalizing the final household weight back to the household sample size and reviewing the range of the household weights.

Person-level weight: Since the Household Roster portion of the interview collected demographic information about everyone in the household 16 years of age or older, including non-drivers and drivers not selected to complete a Trip Interview, a person-level weight was created to enable person-level national estimates based on all people captured in the roster. This weight is also the key starting point in creating the driver level weight. There are two basic steps needed to create the person-level weight.

1. The base weight from the household level was assigned to each household member aged 16 years or older who was recorded in the Household Roster. An iterative post-stratification balancing ("raking") was performed to make the sample nationally representative sample with respect to key demographic characteristics. Specifically, the post-stratification adjusted the sample such that the weighted sample matched as nearly as possible the population distribution based on the most recent U.S. Census Bureau's American Community Survey data (U.S. Census Bureau, 2016) with respect to:

    - Age (16-19; 20-29; 30-49; 50-64; 65+),
    - Race and ethnicity (non-Hispanic white; non-Hispanic black/African American; Hispanic; Other);
    - Education (no high school diploma nor GED; high school graduate or GED; some college; and college degree); gender;
    - Phone usage (cell phone only; landline only; both landline and cell; as reported in Blumberg & Luke [2015]).

2. The final person level weight was normalized back to the sample size.

Driver-level weight: Building on the person-level weight, a separate weight was created for persons who were drivers (regardless of whether they completed a Trip Interview). The driver-level weight was created as follows:

1. The person-level weight from above was assigned to each of the drivers as their starting weight. For all persons who do not drive, their driver-level weight was set equal to zero.

2. The final driver-level weight was normalized back to the sample size for drivers (i.e., total number of drivers 16 or older).

Trip-level weight: Because drivers within households had different probabilities of being selected to complete a Trip Interview (depending on their age, the number of drivers in their household, and their frequency of driving), a trip-level weight was needed for drivers who completed the Trip Interview. This is the weight used to estimate the amount of driving that people do (i.e., number of trips, minutes, or miles driven). The trip-level weight was computed as follows:

1. The driver level weight from above was assigned to each of the drivers who completed a Trip Interview. The trip-level weight was set to zero for non-drivers and for drivers who did not complete a Trip Interview.

2. The driver-level weights for drivers who completed Trip Interviews were raked so to approximate the full population of drivers (including those who did not complete the Trip Interview) as estimated from the survey using the above-described driver-level weight. This raking was conducted using the same variables used in the person-level raking and also the day of week of the interview (so that trips on each day of the week would be represented equally).

3. The trip-level weight was normalized back to the sample size (total number of drivers in sampled households).

Data Processing

Data file preparation began soon after the study entered the field. CATI range and logic checks were used to check the data during the data collection process. Additional data checks were implemented as part of the data file development work, checking for consistency across variables for both households and drivers.

Overall, item non-response was rare among the household roster questions. For most questions, data are missing (i.e., refused) for only one or two household members. For race, marital status, and education, data are missing for multiple household members, but overall, fewer than 2% of all persons rostered had missing values for data collected in the household roster.

Data were missing for a very small number of trips in the Trip Interview, mainly due to drivers inability to recall the distance or duration of all trips. Approximately 3-4% of all trips had missing distance or duration. The following procedures were used to edit or impute trip-level data.

- Distances less than 1 mile were rounded to 1 mile; durations less than 1 minute were rounded to 1 minute.
- If duration of the trip was reported but distance was not, then the formula 1 minute = .527 miles was used to estimate trip distance.

- If trip distance was reported but duration was not, then the formula 1 mile= 113.8 seconds was used to estimate trip duration.
- If both duration and distance were unknown for a trip, but the driver reported other trips of known distance and duration, then distance and duration were imputed as the average distance and duration of the driver's other trips.
- If the respondent reported driving trips, but did not provide distances or durations for any of the trips, the respondent's trip-level data was deemed not usable and the respondent was given a trip-level weight of zero.
- If the respondent remembered and reported additional driving trips after having already completed the trip-by-trip reporting portion of the interview, these trips and their associated minutes and miles were added to the respondent's record.
- If vehicle type was missing for any trips, the trip and associated minutes and miles were assigned to the same vehicle that the respondent reported driving for other trips if the respondent drove the same vehicle for all other trips, and to the first vehicle that the respondent reported driving if the respondent reported driving multiple vehicles throughout the day.
- If passenger presence was missing for trips, the trip and associated distance and duration were assigned to the driver's most frequent passenger configuration (i.e., with or without passengers), and to the passenger configuration of the first trip if the respondent reported equal numbers of trips with and without passengers.

Statistical Analysis

Estimates of the daily driving done by drivers were obtained by computing the mean number of driving trips, mean number of minutes spent driving, and mean number of miles of driving reported by all respondents in the Trip Interview, weighted using the Trip-level weight. Estimates of drivers' annual average number of trips, minutes, and miles of driving are obtained by multiplying the daily averages by 365. Note that these annual estimates are aggregate national estimates, not individual-level estimates. It is assumed that the Trip Interviews performed each day represent a random sample of the driving done by all drivers on that day, and thus that multiplying the average amount of driving reported each day by 365 yields an estimate of the average amount of driving done by all drivers in a year. (It is not assumed that each individual driver's reported amount of driving in one day multiplied by 365 estimates that individual driver's annual amount of driving.) Estimates of the total number of trips, minutes, and miles driven nationwide by all drivers (or a subgroup, e.g., drivers in the Northeast region; drivers aged 30-49; drivers with a high school education) are obtained by multiplying the respective daily or annual averages by the corresponding number of drivers to which the estimate applies, which is estimated by multiplying this survey's estimate of the proportion of the population that drives by the size of the population as reported by the U.S. Census Bureau. Estimated standard errors accounted for the design of the sample, survey weights, and correlations between data from multiple drivers from the same household where applicable.

References

U.S. Census Bureau. 2016. *American Community Survey 2010-2014 5-Year Public Use Microdata Sample (PUMS) Files* [data file]. U.S. Census Bureau.

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Blumberg SJ, Luke JV. 2015. *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January–June 2015.* National Center for Health Statistics, Centers for Disease Control and Prevention. Available from: http://www.cdc.gov/nchs/nhis.htm.

Appendix: Questionnaire

The following questionnaire is a reader friendly interpretation of the American Driving Survey Computer Assisted Telephone Interview (CATI) instrument.

Introduction1:

Hello, I am _____ calling on behalf of Triple A (AAA) Foundation for Traffic Safety. We're doing research that will help make cars and roads safer.

Cell phone sample only
And we will pay you $10 as a token of appreciation for you taking time to complete this survey.

Landline sample only - random 1/2 of landline sample get following additional text
And we will pay you $5 as a token of appreciation for you taking time to complete this survey.)

(IF NECESSARY: All of your answers are strictly confidential and will not be connected with your name or telephone number.)

(READ IF NECESSARY ONLY IF RESPONDENT IS CONCERNED ABOUT THE VALIDITY OF THE SURVEY: If you have any questions or concerns about the survey please call Kathy Langdale at 1-800-633-1986 ext. 4449 Monday through Friday between 8:30 and 5:00PM EST)

{Ask Cell1 and Cell2 only for the cellphone sample}
Cell1. Could you please tell me if you are 16 or older?

1 Yes - continue to Cell2
2 No (*thank respondent and terminate interview*)
R Refused (terminate, record reason as Cell1R)

Cell2. Before we continue, are you driving right now? (OPTIONAL: and unable to complete the survey)?

1 No, (*continue interview starting will question H2*)
2 Respondent is driving (*cannot continue- will call back*)
R Refused (terminate, record reason as Cell2R)

{Ask LL1 only for the landline sample}
LL1. Just to confirm, are you 18 years of age or older?

1 Yes, qualified respondent 18 or older is on the phone (continue with H2)
2 Qualified respondent18 or older is available (*repeat intro and continue with H2*)
3 Qualified respondent 18 or older is not available (*set up call back*)
4 Not a household (*thank respondent and terminate interview –record as LL1R)*
5 No one in household 18+ (*thank respondent and terminate interview –record as LL15)*
9 Refusal (*record reason for refusing)*

H2. This interview is part of a research project being conducted to make cars and roads safer. Your participation is voluntary but vital to the success of the research. We'd like to include your household in our research by completing a brief interview that takes less than 10 minutes.

Thinking about everyone who is currently living in your household, how many people age 16 or older live in your household including yourself? Please do not include college students living away from home or military who are deployed and living somewhere else.

_____ (1-9)

10 10 or more

RR Refused THANK AND TERMINATE, RECORD AS H2R

Roster: {Record information on all current household members who are 16 or older}

Note: For cell phone interviews conducted directly with a 16 or 17 year old respondent – the roster information is only asked of the respondent and not anyone else in the household

Rostera1: {Ask if H2=1} - Could you please tell how old you are?
Rostera2: {Ask if H2>1} - Could you please tell me the age of the oldest person in the household?
Rostera3: {if more household members 16 or older} – How old is the next oldest person in your household? {Record age in grid}

Rosterb1: *{only ask if necessary}* *[Are you/*Is this person] a male or female?

Rosterc1: [Are you/Is this person] of Hispanic, Latino, or Spanish origin?

Rosterc2: [Are you/Is this person] {Read list: Enter one only, include mixed race under something else}

1 White
2 Black
3 Asian
4 Or something else – What is that? _____

Rosterd1: What is [this person's/your] marital status? {Read list: Enter one only}

1 Now married
2 Widowed
3 Divorced
4 Separated
5 Or never married

Rostere1: What is the highest degree or level of school [this person/you] have completed? {Read list: Enter one only}

1 Less than high school (0-11)
2 High school or GED (12)
3 Some College
4 College Degree

5 Advance College Degree (Masters, PhD)

Rosterf1: [Does/Do] [this person/you] drive almost every day, sometimes, rarely, or never?

Rosterg1 *{ask for person ages 16 to 19}* - [Does/Do] [this person/you] have a driver's license, learners permit, or neither?

[Repeat A through D, for additional household members 16 or older – starting with question rostera3]

	Age	Gender (M or F)	Race / Ethnicity	Marital Status	Education	Does this person drive; (1) almost every day; (2) sometimes (3) rarely (4) or never?	(Ages16 to 19) driver's license, learners permit, or neither?
Person 1: Oldest person							
Person 2: Next oldest							
Person 3: Next oldest							
Person 4: Next oldest							
Person 5: Next oldest							
Person 6: Next oldest							
Person 7: Next oldest							
Person 8: Next oldest							
Person 9: Next oldest							
Person 10: Next oldest							

H3. How would you describe the area where you live? Is it out in the country, a small town, a medium-sized town, a small city, or a large city?

1 Out in the country
2 Small town
3 Medium-sized town
4 Small City
5 Large City

(Skip H4: if there are no drivers in the household, i.e., if all persons 16 years old or older "never drive")

H4. Counting cars, vans, minivans, SUV's, pickup trucks, and motorcycles, (IF H2 or H2c>1; how many vehicles are available for use by residents of your household?) (IF H2 or H2c=1; how many vehicles do you own or are otherwise available for your use?)

_____ (0-9)

10 10 or more

H5. Is the phone number I have reached you on a cell phone number?

1 Yes
2 No

H6. Excluding cell phone numbers or phone numbers that are strictly used for business purposes how many household landline or voice over internet phone numbers can be used to contact your household.

(*IF NECESSARY: These questions are designed to find out if it is possible that your household could be contacted more than once for the study.)*

_____ (0-3)
4 four or more

H7. And how many working cell phones do you and other people 16 or older in your household use.

_____ (0-9)
10 10 or more

NOTE: The computer will now select a driver from within the household – the algorithm for picking the respondent will be:

a. Cell phone
    i. If the cell phone is answered by a 16 or 17 year person who is a driver than this will be the only person interviewed in this household
    ii. If the cell phone household was rostered and there are drivers in the household between 16 to 19 years of age: Attempt to interview one driver between the ages of 16 and 19. If there is more than one 16 to 19 year old driver then interview the cell phone respondent. If the cell phone respondent is not between the ages 16 and 19 or not a driver, then interview a driver selected at random given twice the selection probability to any drivers that reported drive almost every day.
    iii. If there are drivers in the household between 20 to 74 years of age: Attempt to interview one driver between the ages of 20 and 74. If there is more than one 20 to 74 year old driver then interview the cell phone respondent. If the cell phone respondent is not between the ages 20 and 74 or not a driver, then interview a driver selected at random given twice the selection probability to any drivers that reported drive almost every day.
    iv. If there are drivers 75 or older: Attempt to interview one driver 75 or older. If there is more than one driver 75 or older then interview the cell phone respondent. If the cell phone respondent is not 75 or older or not a driver, then interview a driver selected at random given twice the selection probability to any drivers that reported drive almost every day.

b. Landline
    i. If there are drivers in the household between 16 to 19 years of age: Attempt to interview one driver between the ages of 16 and 19. If there is more than one 16 to 19 year old driver then interview a driver selected at random given twice the selection probability to any drivers that reportedly drive almost every day.
    ii. If there are drivers in the household between 20 to 74 years of age: Attempt to interview one driver between the ages of 20 and 74. If there is more than one 20 to 74 year old driver then interview a driver selected at random given twice the selection probability to any drivers that reportedly drive almost every day.
    iii. If there are drivers 75 or older: Attempt to interview one driver 75 or older. If there is more than driver 75 or older then interview a driver selected at random given twice the selection probability to any drivers that reportedly drive almost every day.

{If there are no drivers in this household: skip to question “Pend” to get address for sending incentive}

{If the current respondent is selected for answering about trips taken yesterday simply skip to question P1 and continue interview}

{If a different respondent is selected to answer about trips take yesterday: read introduction 2a}

Introduction2a:
Thank you, this completes your part of our study. For the next part of this study I need to speak with the [xx year old male/female] about any trips they made yesterday. May I speak with that person now?

- *If person is not available – setup a call back getting first name if possible and get an alternative phone number if this a personal cell phone*
- *If refusal – record reason for refusing*
- *If person is available continue below:*

Hello, I am _____ calling on behalf of _____. We're conducting a voluntary survey for a non-profit organization that studies driving. Your responses will be used for research that will help make cars and roads safer. Your name will not be recorded and all answers are strictly confidential. And we will pay you $5 as a token of appreciation for you taking time to complete this survey.

{If selected respondent is 16 or 17 years old and the parent/guardian does not give permission to speak with or the child refuses, or there has already been 5 attempted call backs – then attempt to obtain interview via proxy report – starting with introduction 2c}

Introduction2b: *(proxy)*
For the next part of this study I need to speak with someone who can answer a few questions on behalf of the [xx year old male/female] living in this household about any trips they made yesterday. May I speak with that person now?

- *If person is not available – setup a call back getting first name if possible and get an alternative phone number if necessary*
- *If refusal – record reason for refusing*
- *If person is available continue below:*

Hello, I am _____ calling on behalf of _____. We're conducting a voluntary survey for a non-profit organization that studies driving. Your responses will be used for research that will help make cars and roads safer. Your name will not be recorded and all answers are strictly confidential. The study involves simply answering a few questions about travel trips that [xx year old male/female] made yesterday. And we will pay you $5 as a token of appreciation for you taking time to complete this survey.

Note: For teenage proxy interviews the computer will replace “you” or “your” with age/gender of proxy

P1. The following questions concern trips you made yesterday. For each trip, I will be asking you about when and where you went. When possible it would be helpful if you could provide us with an address or nearest road intersection to the places you went to. So starting at 3am yesterday

morning, were you:

1 At Home:
2 Or Someplace else: Where was that: _____

P2. Now, I am now going to ask a few specific questions about trips that you took yesterday.
{Repeat questions A. through J. for each trip taken from 3:00 a.m. yesterday to 3:00 a.m. today}

A. {Skip P2a, if not at home and last end time is before midnight} Were you at [P1/last location] [all day/the rest of the day] yesterday, that is through 3am today?
   a. If yes (skip to question P3)
B. What time did you leave [P1/last location] to go somewhere else? {record start time in grid}
C. {record [P1/last location] in grid}
D. Where did you go next? {record location: home, work, store, restaurant, school, or other place recorded specified in the grid}
E. How long did it take you to get there [location given in P2D]? {record minutes in grid}
F. Did you yourself drive to get to [location given in P2D]? {if no, skip to next trip question P2A}
G. About how many miles did you drive going from [P1/last location] to [location given in P2D]? {record miles in grid}
H. Were you driving a; (1) car; (2) pick-up truck; (3) van; (4) minivan; (5) SUV; (6) motorcycle, or (7) something else? {record vehicle type in grid and have respondent specify something else}
I. Did you have any passengers? {if no, record "0" in the grid and skip to next trip question P2A}
J. How many passengers did you have? {record # in the grid and go to next trip question P2A}

	Start Time	Starting – location	Ending – location	Travel duration	Miles Driven	Vehicle Type	# of passengers
Trip #1							
Trip #2							
Trip #3							
Trip #4							
Trip #5							
Trip #6							
Trip #7							
Trip #8							
Trip #9							
Trip #10							
Trip #11							
Trip #12							
…							
Trip #N							

(Skip to GENDERCHECK, if person did not report more than one driving trip yesterday)

Drivea. Besides the driving trips you just told me about taking yesterday, did (you/he/she) do any additional driving yesterday?

1 Yes
2 No - skip to GENDERCHECK
D (DO NOT READ) Don't know
R (DO NOT READ) Refused

Driveb About how many miles did (you/he/she) drive for this additional driving trip or trips? (IF NECESSARY: Your best estimate is fine.)

NOTE: Always round up miles estimates if the respondent gives an estimate that includes a decimal or partial amount. Example 3.3 miles or 3 and a half miles should be recorded as 4 miles.

_____ENTER NUMBER OF MILES (1-500 Miles)
LL (DO NOT READ) Less than one mile
DD (DO NOT READ) Don't know
RR (DO NOT READ) Refused

Drivec. About how long did it take? (IF NECESSARY: Your best estimate is fine.)

INTERVIEWER NOTE: IF TIME GIVEN IN HOURS AND MINUTES ENTER CODE 1 AND 2 AT THIS SCREEN

1 Time Given in Minutes
2 Time Given in Hours
3 Less than 1 minute
D (DO NOT READ) Don't Know
R (DO NOT READ) Refused

(ASK GENDERCHECK AND AGECHECK IF RESPONDENT ON PHONE IS DIFFERENT THAN THE ORIGINAL RESPONDENT WHO COMPLETED THE ROSTER QUESTIONS AND RESPONDENT IS NOT PROXY REPORTING)

GENDERCHECK. (INTERVIEWER NOTE: ASK Gender IF NECESSARY, OTHERWISE RECORD GENDER OF RESPONDENT)

1 Male
2 Female

AGECHECK. Could you please tell me how old (you/they) are?

NOTE: If proxy interview verify age of the 16 or 17 year old, not the respondent.

_____ (RANGE 16-97)

(ASK GENDERCHECKA, AGECHECKA AND RELATIONCHECK IF RESPONDENT ON PHONE IS THE PROXY (PROXY=1) FOR 16 /17 YEAR OLD DRIVER.)

GENDERCHECKA. (INTERVIEWER NOTE: ASK Gender IF NECESSARY, OTHERWISE RECORD GENDER OF RESPONDENT

1 Male
2 Female

AGECHECKA. And just to verify could you please tell me how old you are?

_____ (RANGE 18-97)

RELATIONCHECK. Can you please tell me what your relationship is to this teen driver? (DO NOT READ LIST)

1 Mother/step mother/foster mother
2 Father/ step father/foster father
3 Grandmother
4 Grandfather
5 Guardian
6 Aunt/Uncle
7 Other (SPECIFY)_____
R Refused

(ASK PEND# IF CELL PHONE SAMPLE OR IF LL SAMPLE THAT IS OFFERED $5)

(PN: ADD IN VERIFICATION SCREEN FOR ZIP CODE – SO INTERVIEWER CAN CONFIRM

FOR SELF THAT HE/SHE TYPED IN CORRECT NUMBERS)

Pend#. Now I just need your name and address to send the (IF CELL PHONE SAMPLE: the $10 thank you check; IF LL SAMPLE AND PART OF THE RANDOM HALF SELECTED TO RECEIVE AN INCENTIVE: $5 thank you check we have for you for completing our study.

May I please have your name?
(VERIFY SPELLING)

1 Answer given (SPECIFY) _____
R (DO NOT READ) Refused

May I please have your address?

(VERIFY SPELLING)

1 Street: _____
2 City: _____
3 State: _____

4 Zip code: _____

Done. Thank you so much for your time and cooperation. Have a pleasant day.