U.S. Department of Transportation
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TRAFFIC SAFETY FACTS
Research Note

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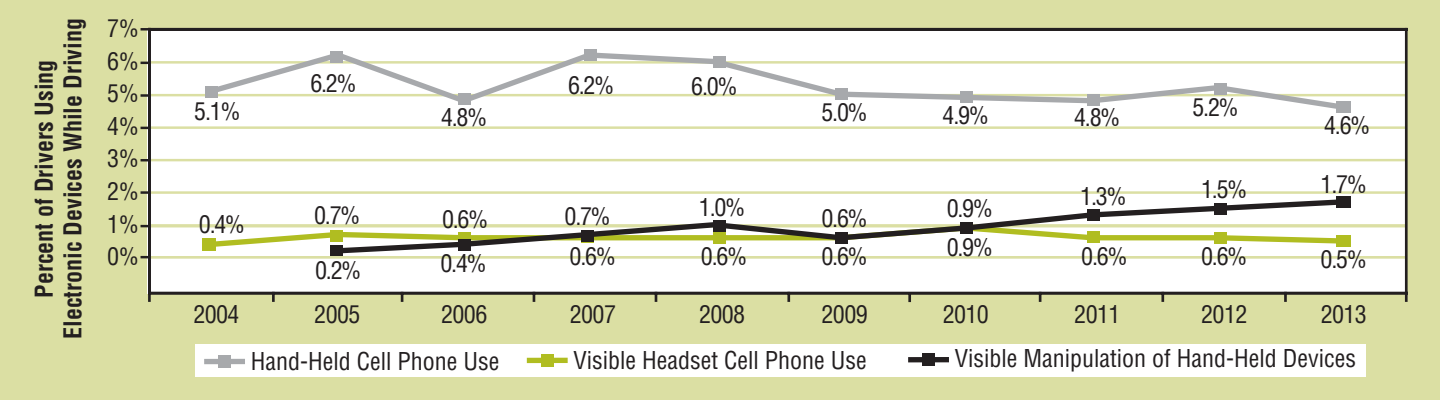
Driver Electronic Device Use in 2013

The percentage of drivers text-messaging or visibly manipulating hand-held devices increased from 1.5 percent in 2012 to 1.7 percent in 2013; however, this was not a statistically significant increase. Driver hand-held cell phone use decreased from 5.2 percent in 2012 to 4.6 percent in 2013 (Figure 1); this was a statistically significant decrease.

These results are from the National Occupant Protection Use Survey (NOPUS), which provides the only nationwide probability-based observed data on driver electronic device use in the United States. The NOPUS is conducted annually by the National Center for Statistics and Analysis of the National Highway Traffic Safety Administration.

Figure 1
Driver Use of Electronic Devices, 2004–2013



Driver Holding Phones to Their Ears While Driving

The percentage of drivers holding cell phones to their ears while driving decreased from 5.2 percent in 2012 to 4.6 percent in 2013 (Table 1). This rate translates into an estimated 620,000 vehicles driven by people using hand-held cell phones at a typical daylight moment in 2013. It also translates into an estimated 8.36 percent of the vehicles whose drivers were using some type of phone (either hand-held or hands-free) at a typical daylight moment in 2013. Please refer to the section "Estimating Drivers on the Road and Hands-Free Cell Phone Users" for more details on these two estimates. Please note that the level of reporting precision of the previous and current estimates has been increased to provide a better understanding of how driver electronic device use has changed over time.

The 2013 NOPUS found that hand-held cell phone use continued to be higher among female drivers than male drivers (Figure 2). It also found that hand-held cell phone use continued to be highest among 16- to 24-year-old drivers and lowest among drivers 70 and older (Figure 3).

Drivers Speaking With Visible Headsets on While Driving

Table 2 shows the percentages of drivers speaking with visible headsets on while driving in 2012 and 2013, by major characteristics.

The percentage of drivers speaking with visible headsets on while driving decreased from 0.6 percent in 2012 to 0.5 percent in 2013, as shown in Figure 1 and Table 2.

Figure 4 shows that there was no change in visible headset use by age group from 2012 to 2013.

Drivers Visibly Manipulating Hand-Held Devices While Driving

The percentage of drivers visibly manipulating hand-held devices while driving increased from 1.5 percent in 2012 to 1.7 percent in 2013 (Figure 1 and Table 3), but the increase was not statistically significant. Table 3 presents the percentages of drivers visibly manipulating hand-held devices in 2012 and 2013 by major characteristics.

Figure 2
Driver Hand-Held Cell Phone Use by Gender, 2004–2013

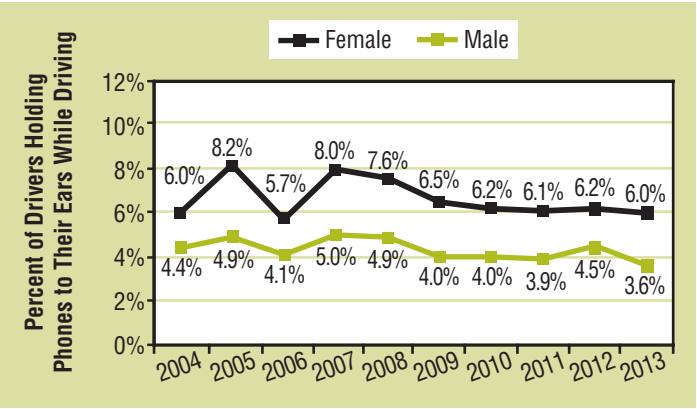
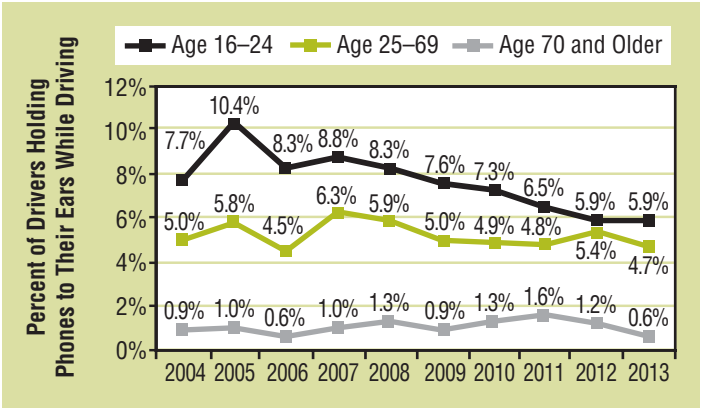


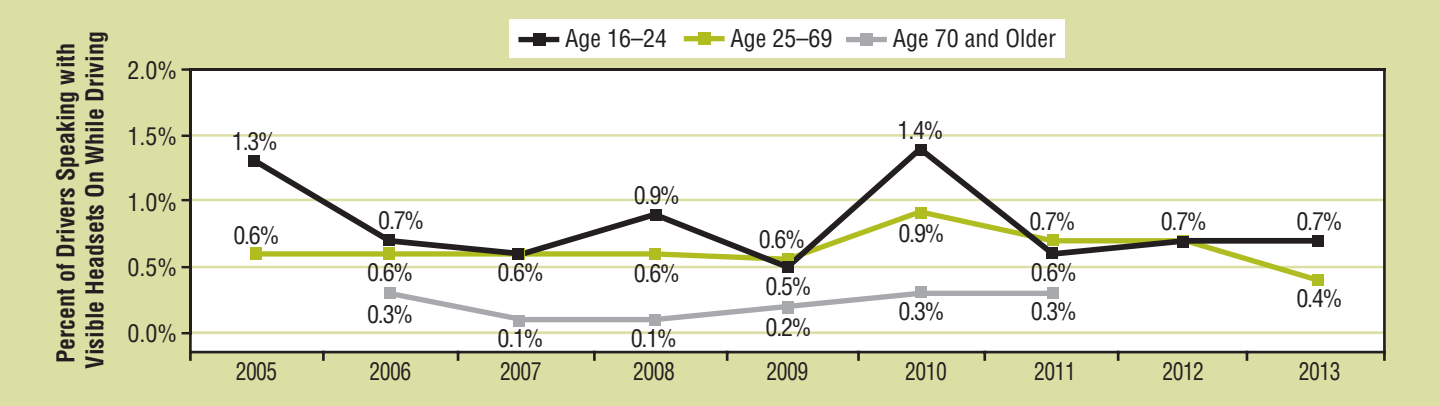
Figure 3
Driver Hand-Held Cell Phone Use by Age, 2004–2013



The 2013 NOPUS observed increased visible manipulation of hand-held devices in the following categories: Black drivers, drivers of vans or SUVs, and drivers in the Northeast and South.

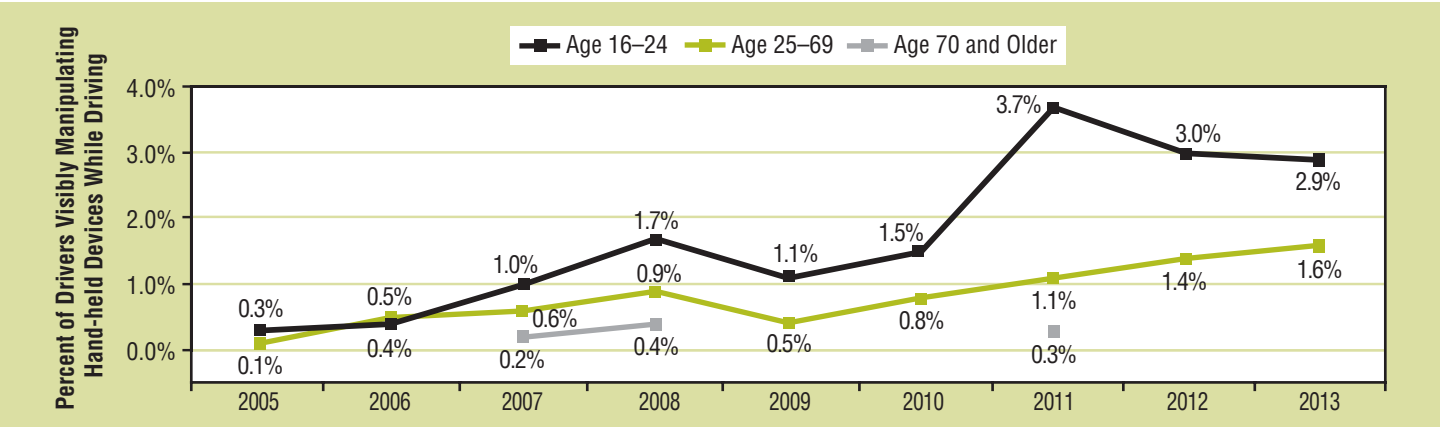
Figure 5 shows that since 2007, the percentages of drivers visibly manipulating hand-held devices while driving have been significantly higher among drivers age 16 to 24 than those of other age groups.

Figure 4
Drivers Speaking With Visible Headsets on by Age, 2005–2013



Note: Data not sufficient to produce a reliable estimate in 2005, 2012, and 2013 for age 70 and older.

Figure 5
Drivers Visibly Manipulating Hand-Held Devices by Age, 2005–2013



Note: Except in 2007, 2008, and 2011, data not sufficient to produce a reliable estimate for age 70 and older.

Table 1
The Percent of Drivers Holding Phones to Their Ears While Driving, by Major Characteristics

Driver Group[1]	2012		2013		2012–2013 Change	
	% of Drivers Holding Phone to Ears[2]	Confidence That Use Is High or Low in Group[3]	% of Drivers Holding Phone to Ears[2]	Confidence That Use Is High or Low in Group[3]	Difference in Percentage Points	Confidence in a Change in % of Drivers Holding Phone to Ear[4]
All Drivers[6]	5.2%		4.6%		-0.6	96%
Males	4.5%	**100%**	3.6%	**100%**	-0.9	99%
Females	6.2%	**100%**	6.0%	**100%**	-0.2	28%
Drivers by Age Group[6]						
Age 16-24	5.9%	**83%**	5.9%	**98%**	0.0	7%
Age 25-69	5.4%	97%	4.7%	78%	-0.7	97%
Age 70 and Older	1.2%	**100%**	0.6%	**100%**	-0.6	92%
Drivers by Race[6]						
White	5.0%	94%	4.5%	78%	-0.5	95%
Black	8.3%	100%	8.0%	100%	-0.3	16%
Other Races	4.0%	**97%**	3.0%	**100%**	-1.0	86%
Drivers on						
Expressway Exit Ramps	4.6%	**97%**	4.3%	**86%**	-0.3	56%
Other Surface Streets	5.6%	**97%**	4.8%	**86%**	-0.8	96%
Drivers Traveling Through						
Light Precipitation	5.2%	50%	5.6%	91%	0.4	34%
Fog	NA	**NA**	2.7%	99%	NA	NA
Clear Weather Conditions	5.3%	78%	4.5%	81%	-0.8	97%
Drivers of						
Passenger Cars	4.8%	**98%**	4.4%	**91%**	-0.4	74%
Vans & SUVs	5.7%	**96%**	5.1%	**100%**	-0.6	85%
Pickup Trucks	5.3%	66%	4.3%	82%	-1.0	93%
Drivers in the						
Northeast	4.3%	95%	4.0%	**84%**	-0.3	45%
Midwest	5.2%	54%	5.3%	90%	0.1	4%
South	7.1%	**100%**	6.2%	**100%**	-0.9	72%
West	4.1%	92%	3.2%	98%	-0.9	100%
Drivers in						
Urban Areas	6.2%	91%	4.4%	**69%**	-1.8	98%
Suburban Areas	5.3%	66%	4.9%	**88%**	-0.4	64%
Rural Areas	4.5%	93%	4.3%	**88%**	-0.2	41%
Drivers Traveling During						
Weekdays	5.9%	**100%**	5.0%	**99%**	-0.9	99%
Rush Hours	6.1%	88%	5.2%	**80%**	-0.9	100%
Nonrush Hours	5.6%	88%	4.8%	**80%**	-0.8	83%
Weekends	3.4%	**100%**	3.6%	**99%**	0.2	41%
Drivers With[5]						
No Passengers	6.7%	**100%**	5.8%	**100%**	-0.9	99%
At Least One Passenger	2.3%	**100%**	2.4%	**100%**	0.1	6%
Drivers With[5]						
No Passengers	6.7%	**100%**	5.8%	**100%**	-0.9	99%
Passengers All Under Age 8	5.6%	64%	5.2%	**67%**	-0.4	17%
Passengers All 8 and Older	2.2%	**100%**	2.1%	**100%**	-0.1	22%
Some Passengers Under 8 and Some 8 or Older	0.8%	**100%**	2.3%	**100%**	1.5	99%

[1] Drivers of passenger vehicles with no commercial or government markings stopped at a stop sign or stoplight between the hours of 7 a.m. and 6 p.m.
[2] The percentage of drivers holding a phone to their ears, based on the subjective assessments of roadside observers.
[3] The statistical confidence that use in the driver group (e.g., white drivers) is higher or lower than use in the corresponding complementary driver group (e.g., combined black or other drivers). Confidences that meet or exceed 90 percent are formatted in boldface type. Confidences are rounded to the nearest percentage point, and so confidences reported as "100 percent" are between 99.5 percent and 100.0 percent.
[4] The degree of statistical confidence that the 2013 use rate is different from the 2012 rate. Confidences that meet or exceed 90 percent are formatted in boldface type.
[5] Among passengers observed in the right-front seat and the second row of seats (but NOPUS only counts up to two passengers in the second row and none in the third row and beyond).
[6] Age, gender, and racial classifications are based on the subjective assessments of roadside observers.

Data Source: NOPUS, NHTSA's National Center for Statistics and Analysis

Table 2
The Percent of Drivers Speaking With Visible Headsets on While Driving, by Major Characteristics

Driver Group[1]	2012		2013		2012–2013 Change	
	% of Drivers Speaking with Headsets[2]	Confidence That Use Is High or Low in Group[3]	% of Drivers Speaking with Headsets[2]	Confidence That Use Is High or Low in Group[3]	Difference in Percentage Point Tenths	Confidence in a Change in % of Drivers Speaking With Headsets[4]
All Drivers[6]	0.6%		0.5%		-0.1	78%
Males	0.6%	**73%**	0.4%	76%	-0.2	66%
Females	0.7%	**73%**	0.5%	76%	-0.2	**76%**
Drivers by Age Group[6]						
Age 16-24	0.7%	**59%**	0.7%	96%	0.0	**19%**
Age 25-69	0.7%	89%	0.4%	77%	-0.3	86%
Age 70 and Older	NA	**NA**	NA	**NA**	NA	NA
Drivers by Race[6]						
White	0.6%	**99%**	0.3%	99%	-0.3	92%
Black	1.3%	95%	0.7%	83%	-0.6	82%
Other Races	0.8%	**78%**	1.2%	95%	0.4	**47%**
Drivers on						
Expressway Exit Ramps	0.9%	98%	0.5%	**80%**	-0.4	86%
Other Surface Streets	0.5%	98%	0.4%	**80%**	-0.1	**41%**
Drivers Traveling Through						
Light Precipitation	0.6%	**54%**	0.4%	78%	-0.2	76%
Fog	NA	NA	NA	NA	NA	NA
Clear Weather Conditions	0.6%	**56%**	0.5%	**91%**	-0.1	**68%**
Drivers of						
Passenger Cars	0.5%	94%	0.6%	99%	0.1	14%
Vans and SUVs	0.9%	99%	0.5%	63%	-0.4	91%
Pickup Trucks	0.4%	**99%**	0.1%	**100%**	-0.3	**96%**
Drivers in the						
Northeast	0.5%	73%	0.5%	66%	0.0	6%
Midwest	0.2%	100%	0.2%	**100%**	0.0	12%
South	0.6%	62%	0.3%	**91%**	-0.3	80%
West	1.2%	**97%**	0.7%	**97%**	-0.5	68%
Drivers in						
Urban Areas	0.7%	55%	0.7%	**89%**	0.0	8%
Suburban Areas	0.8%	**94%**	0.5%	80%	-0.3	86%
Rural Areas	0.4%	**99%**	0.2%	**100%**	-0.2	**88%**
Drivers Traveling During						
Weekdays	0.7%	**99%**	0.5%	99%	-0.2	**62%**
Rush Hours	0.7%	57%	0.5%	**94%**	-0.2	87%
Nonrush Hours	0.7%	57%	0.6%	**94%**	-0.1	**23%**
Weekends	0.5%	**99%**	0.2%	99%	-0.3	94%
Drivers With[5]						
No Passengers	0.8%	**100%**	0.6%	**100%**	-0.2	**70%**
At Least One Passenger	0.3%	**100%**	0.1%	**100%**	-0.2	88%
Drivers With[5]						
No Passengers	0.8%	**100%**	0.6%	**100%**	-0.2	**70%**
Passengers All Under Age 8	0.8%	71%	0.9%	80%	0.1	6%
Passengers All 8 and Older	0.3%	**100%**	0.0%	**100%**	-0.3	94%
Some Passengers Under 8 and Some 8 or Older	NA	NA	NA	NA	NA	NA

[1] Drivers of passenger vehicles with no commercial or government markings stopped at a stop sign or stoplight between the hours of 7 a.m. and 6 p.m.
[2] The percent of drivers wearing a headset with a microphone and speaking, based on the subjective assessments of roadside observers.
[3] The statistical confidence that use in the driver group (e.g., white drivers) is higher or lower than use in the corresponding complementary driver group (e.g., combined black or other drivers). Confidences that meet or exceed 90 percent are formatted in boldface type. Confidences are rounded to the nearest percentage point, and so confidences reported as "100 percent" are between 99.5 percent and 100.0 percent.
[4] The degree of statistical confidence that the 2013 use rate is different from the 2012 rate. Confidences that meet or exceed 90 percent are formatted in boldface type.
[5] Among passengers observed in the right front seat and the second row of seats (but NOPUS only counts up to two passengers in the second row and none in the third row and beyond).
[6] Age, gender, and racial classifications are based on the subjective assessments of roadside observers.

NA: Data not sufficient to produce a reliable estimate. **Data Source:** NOPUS, NHTSA's National Center for Statistics and Analysis

Table 3
The Percent of Drivers Visibly Manipulating Hand-Held Devices While Driving, by Major Characteristics

Driver Group[1]	2012		2013		2012–2013 Change	
	% of Drivers Manipulating Hand-Held Devices[2]	Confidence That Use Is High or Low in Group[3]	% of Drivers Manipulating Hand-Held Devices[2]	Confidence That Use Is High or Low in Group[3]	Difference in Percentage Point Tenths	Confidence in a Change in % of Drivers Manipulating Hand-Held Devices[4]
All Drivers[6]	1.5%		1.7%		0.2	**59%**
Males	1.1%	**100%**	1.3%	**100%**	0.2	57%
Females	2.0%	**100%**	2.2%	**100%**	0.2	**54%**
Drivers by Age Group[6]						
Age 16-24	3.0%	**100%**	2.9%	**100%**	-0.1	**11%**
Age 25-69	1.4%	**96%**	1.6%	**95%**	0.2	73%
Age 70 and Older	NA	NA	NA	**NA**	NA	NA
Drivers by Race[6]						
White	1.4%	93%	1.5%	**100%**	0.1	50%
Black	2.0%	86%	3.2%	100%	1.2	97%
Other Races	2.0%	91%	1.7%	**52%**	-0.3	40%
Drivers on						
Expressway Exit Ramps	1.4%	**67%**	1.5%	**91%**	0.1	**14%**
Other Surface Streets	1.5%	**67%**	1.8%	**91%**	0.3	73%
Drivers Traveling Through						
Light Precipitation	1.3%	72%	1.5%	**67%**	0.2	**37%**
Fog	NA	NA	NA	NA	NA	NA
Clear Weather Conditions	1.5%	57%	1.7%	**81%**	0.2	71%
Drivers of						
Passenger Cars	1.7%	**100%**	1.6%	**66%**	-0.1	**18%**
Vans and SUVs	1.4%	80%	1.9%	**90%**	0.5	**92%**
Pickup Trucks	1.0%	**100%**	1.4%	**86%**	0.4	65%
Drivers in the						
Northeast	1.2%	**81%**	1.9%	75%	0.7	97%
Midwest	0.8%	**99%**	0.7%	**100%**	-0.1	28%
South	1.2%	83%	2.0%	75%	0.8	98%
West	2.6%	**98%**	2.0%	**78%**	-0.6	57%
Drivers in						
Urban Areas	2.3%	88%	2.5%	**95%**	0.2	**23%**
Suburban Areas	1.5%	**71%**	2.0%	100%	0.5	84%
Rural Areas	0.9%	99%	0.5%	**100%**	-0.4	98%
Drivers Traveling During						
Weekdays	1.7%	100%	1.8%	92%	0.1	41%
Rush Hours	1.7%	51%	2.0%	88%	0.3	72%
Nonrush Hours	1.7%	51%	1.6%	88%	-0.1	11%
Weekends	1.0%	100%	1.3%	92%	0.3	79%
Drivers With[5]						
No Passengers	2.0%	**100%**	2.2%	**100%**	0.2	40%
At Least One Passenger	0.5%	**100%**	0.7%	**100%**	0.2	**77%**
Drivers With[5]						
No Passengers	2.0%	**100%**	2.2%	**100%**	0.2	40%
Passengers All Under Age 8	1.5%	56%	1.8%	**66%**	0.3	38%
Passengers All 8 and Older	0.4%	**100%**	0.5%	**100%**	0.1	**56%**
Some Passengers Under 8 and Some 8 or Older	NA	**NA**	1.1%	84%	NA	NA

[1] Drivers of passenger vehicles with no commercial or government markings stopped at a stop sign or stoplight between the hours of 7 a.m. and 6 p.m.
[2] The percent of drivers manipulating hand-held devices, based on the subjective assessments of roadside observers.
[3] The statistical confidence that use in the driver group (e.g., white drivers) is higher or lower than use in the corresponding complementary driver group (e.g., combined black or other drivers). Confidences that meet or exceed 90 percent are formatted in boldface type. Confidences are rounded to the nearest percentage point, and so confidences reported as "100 percent" are between 99.5 percent and 100.0 percent.
[4] The degree of statistical confidence that the 2011 use rate is different from the 2010 rate. Confidences that meet or exceed 90 percent are formatted in boldface type.
[5] Among passengers observed in the right front seat and the second row of seats (but NOPUS only counts up to two passengers in the second row and none in the third row and beyond).
[6] Age, gender, and racial classifications are based on the subjective assessments of roadside observers.

NA: Data not sufficient to produce a reliable estimate. **Data Source:** NOPUS, NHTSA's National Center for Statistics and Analysis

NOPUS Data Collection and Estimation

NOPUS is the only nationwide probability-based observational survey of driver electronic device use in the United States. The survey observes usage as it actually occurs at randomly selected roadway sites and thus provides the best tracking of the extent to which people in the United States use cell phones and other electronic devices while driving.

The survey data is collected by trained data collectors at probabilistically sampled intersections controlled by stop signs or stoplights, where data collectors observe, from the roadside, drivers and other occupants of passenger vehicles having no commercial or government markings. Data is collected from 7 a.m. to 6 p.m. Only stopped vehicles are observed to allow time to collect the variety of information required by the survey, including subjective assessments of occupants' age and race. Observers collect data on the driver, right-front passenger, and up to two passengers in the second row of seats. Observers do not interview occupants, so that NOPUS can capture the untainted behavior of occupants. The 2013 NOPUS data was collected from June 3 to June 13, while the 2012 data was collected from June 4 to June 17.

Statistically significant increases in the use of hand-held phones, headset use, and manipulation of hand-held devices between 2012 and 2013 are shown, respectively, in Table 1, Table 2, and Table 3 by having a result that is 90 percent or greater in column 7. Statistical confidences that hand-held cell phone use, headset use, or the manipulation of hand-held devices in a given driver group, e.g., drivers in the Northeast, is higher or lower than in the complementary driver group, e.g., combined drivers in the Midwest, in the South and in the West, are provided in columns 3 and 5. Such comparisons are made within categories delineated by changes in row shading in the tables. The exception to this is the grouping "Drivers Traveling During …," in which weekdays are compared to weekends, and weekday rush hour to weekday non-rush hour.

Table 4 shows the observed sample sizes of the 2013 NOPUS. A total of 37,428 vehicles were observed at the 1,382 data collection sites. Due to ineligibility, construction, danger in the area, or road closure, the observations could not be completed at some of the sampled observation sites.

Table 4
Sites and Vehicles Observed in the 2013 NOPUS

Number of	2012	2013	Percentage Change
Sites Observed	1,366	1,382	1.17%
Vehicles Observed	37,813	37,428	-1.02%

NOPUS uses a complex multistage probability sample, statistical data editing, imputation of unknown values, and complex variance estimation procedures. Data collection, estimation, and variance estimation for NOPUS are conducted by Westat, Inc., under the direction of NHTSA's National Center for Statistics and Analysis under Federal contract number DTNH22-13-D-00284.

NOPUS Categories and Definitions

NOPUS observes three types of driver electronic device use while driving: "holding phones to their ears," "speaking with visible headsets on," and "visibly manipulating hand-held devices."

Drivers are counted as "holding phones to their ears" if they are holding to their ears what appear to the data collectors to be phones. This would include behaviors such as drivers engaging in conversation, listening to messages, or conducting voice-activated dialing while holding phones to their ears. However, a data collector may not have knowledge of various types of wireless phones. Thus, the device that has been identified as a "phone" may only reflect his/her conception of what constitutes a "phone." Also, the corded car phones and satellite phones may or may not have been identified as "phones." With the increasing popularity of PDAs and smart phones, BlackBerry phones and iPhones would most likely be identified as phones.

Drivers are counted as "speaking with visible headsets on" if they appear to be speaking and wearing a headset with a microphone. This would include behaviors such as talking, engaging in conversation, or conducting voice-activated dialing via a wireless earpiece on the driver's right ear or via an ear bud connected by wire to a cell phone. Talking via a visible Bluetooth headset (usually on the driver's right ear) would also be included in this category. However, it would not include drivers using headsets that do not involve cell phones (e.g., iPods), since these headsets do not involve microphones. Note that the wireless earpieces that are obscured by hair or clothing or are on the driver's left ear would not be included because they would not be visible to the roadside observer. In addition, some wireless ear buds would not be included as they are too small to be observed from the roadside. The drivers with headsets who are not speaking at the time of observation are not included because they might have recently completed a call or be waiting for an expected call. Each driver in the survey is observed for about 10 seconds before the data collector decides whether or not the driver is speaking. Also, note that the drivers counted as speaking through a visible headset might have been talking to a passenger or using voice-activated computer software rather than using a phone.

Drivers are counted as "visibly manipulating hand-held devices" if they appear to be manipulating some type of electronic device such as a cell phone, a smart phone, PDA, video game, or some other device. This would include behaviors such as text messaging, using a Web-capable smart phone (e.g., an iPhone) or a PDA (e.g., a BlackBerry phone) to view travel directions, check e-mails or calendar appointments, or surf the Internet, manual dialing, playing hand-held games, and holding phones in front of their faces to converse or check messages via speakerphone or use voice-activated dialing. Manipulation of the non-hand-held devices (adjusting volume on stereos, pressing buttons on a dashboard GPS unit, etc.) is not included in this category. Also, note that a driver characterized by the survey as "manipulating hand-held device" may or may not have been speaking.

There are means by which the drivers can use cell phones that would neither be recorded as "holding phones to their ears" nor as "speaking with visible headsets on" or as "visibly manipulating hand-held devices" in the NOPUS. These would include: (1) a driver using a cell phone headset but is not speaking during the approximately 10-second period when he/she is being observed, and (2) a driver using technologies that cannot be observed from the roadside. The unobservable technologies would include: a wireless earpiece obscured by hair or clothing or on the left ear, a driver conversing via a speakerphone with the phone on the passenger seat or in a cell phone holder on the vehicle dashboard, a driver using a phone that is built into the vehicle (e.g., OnStar), and a driver using the cell phone hands-free via a Bluetooth car kit or via a Bluetooth system that is built into the vehicle (e.g., Sync). It is possible that at some point in the future, NOPUS may be able to capture such behaviors by directing a device that can detect cell phones in-use in the passing vehicles.

The racial categories "Black," "White," and "Members of Other Races" appearing in the tables reflect subjective characterizations by roadside observers regarding the race of occupants. Likewise observers record the age group (8-15; 16-24; 25-69; and 70 or older) that best fits their visual assessment of each observed occupant.

"Expressway Exit Ramps" are defined as the access roads from roadways with limited access, while "Other Surface Streets" comprise all other roadways.

"Weekday Rush Hours" are defined to be from 7 a.m. to 9:30 a.m. and from 3:30 p.m. to 5 p.m. on weekdays, while "Weekday Nonrush Hours" comprise all other weekday hours (9:30 a.m. to 3:30 p.m. and 5 p.m. to 6 p.m.).

Since NOPUS is not a census and is based on a probability sample, it is impossible to produce State-by-State driver electronic device use results. However NOPUS produces regional estimates of the use rates based on the following categories.

- **Northeast:** ME, VT, NH, MA, RI, CT, NY, PA, NJ
- **Midwest:** MI, OH, IN, IL, WI, MN, IA, MO, KS, NE, SD, ND
- **South:** WV, MD, DE, VA, KY, TN, NC, SC, GA, FL, AL, MS, AR, LA, OK, TX, DC
- **West:** AK, WA, OR, CA, NV, ID, UT, AZ, NM, CO, WY, MT, HI

Estimating Drivers on Road and Hands-Free Cell Phone Users

NHTSA used the 2009 National Household Travel Survey (NHTS) data to derive the total number of vehicles (drivers) on the road at a typical daylight moment in the United States in 2009. Since the NHTS was not conducted in 2010 - 2013, the following estimate based on the published 2009 NHTS estimate was used to derive the total number of drivers on the road at a typical daylight moment in 2013.

The published 2009 estimate: 13,399,139 drivers on road at a given daylight moment.

2013 VMT: The data source for the 2013 VMT used here is the Traffic Volume Trends reports by the Federal Highway Administration. The December 2013 version of the "Traffic Volume Trends" (available at www.fhwa.dot.gov/policyinformation/travel_monitoring/13dectvt/13dectvt.pdf) shows that the year to date VMT (preliminary number, for all vehicles) in 2013 is 2,972,287 million miles as compared to 2,956,762 million miles in 2009. NHTSA's calculations assume that this all-vehicle VMT is an acceptable estimate for passenger vehicle VMT, especially when using a ratio estimate. Therefore, the number of drivers in 2013 at a given daylight moment = 2009 Driver # × (2013 VMT / 2009 VMT) = 13,399,139 × (2,972,287 / 2,956,762) = 13,469,494. Given the hand-held cell phone use rate for 2013 is 4.6 percent, the numbers of drivers of privately owned vehicles on the road at a typical daylight moment who were holding cell phones to their ear in 2013: 13,469,494 × .046 ≃ 620,000. NHTSA's 2007 Motor Vehicle Occupant Safety Survey (MVOSS) estimated that, for drivers using cell phones while driving, 55 percent tended to use hand-held cell phones and 45 percent tended to use hands-free phones. Applying the proportion 0.8182 (= 45/55) of these percentages to the 4.6 percent estimate of drivers using hand-held cell phones in 2013 from NOPUS shows an estimated 3.76 percent of drivers using hands-free cell phones. Thus, 8.36 percent of drivers are estimated to be using either a hand-held or a hands-free cell phone while driving at a typical daylight moment in the United States in 2013. Please note that MVOSS cell phone use pattern

(hand-held versus hands-free) reflects general times (daytime and nighttime) whereas the NOPUS estimates reflect daytime use only.

State Laws on Driver Electronic Device Use (Enacted As of August 2014)

Many States restrict cell phone use by drivers. As of August 2014, no State completely bans all forms of cell phone use by drivers. However, a ban on driving while talking on a hand-held cell phone was in place in 14 States (California, Connecticut, Delaware, Hawaii, Illinois, Maryland, Nevada, New Jersey, New Hampshire, New York, Oregon, Washington, Vermont, and West Virginia), the District of Columbia, Guam, and the Virgin Islands (Table 5). All of these laws are primary enforcement—an officer may cite a driver for using a handheld cell phone without any other traffic offense taking place.

Table 5
States and U.S. Territories With Laws Banning Hand-Held Cell Phone Use While Driving

California	Connecticut	Delaware	Hawaii	Illinois
Maryland	Nevada	New Hampshire	New Jersey	New York
Oregon	Vermont	Washington	West Virginia	District of Columbia
Virgin Islands	Guam			

Forty-four States, the District of Columbia, Guam, and the Virgin Islands ban text messaging for all drivers (Table 6). In 39 States, the District of Columbia, Guam, and the Virgin Islands texting laws are primary enforcement, and the other States have secondary enforcement of texting for drivers. Many States also ban cell phone use and/or texting by novice drivers or school bus drivers.

Some States such as New Hampshire and Utah treat cell phone use and texting as part of a larger distracted driving issue. In Utah, cell phone use is an offense only if a driver is also committing some other moving violation (other than speeding).

Table 6
States and U.S. Territories With Laws Banning Text-Messaging While Driving

Alabama	Alaska	Arkansas	California	Colorado
Connecticut	Delaware	Florida	Georgia	Hawaii
Idaho	Illinois	Indiana	Iowa	Kansas
Kentucky	Louisiana	Maine	Maryland	Massachusetts
Michigan	Minnesota	Nebraska	Nevada	New Hampshire
New Jersey	New Mexico	New York	North Carolina	North Dakota
Ohio	Oregon	Pennsylvania	Rhode Island	South Carolina
South Dakota	Tennessee	Utah	Vermont	Virginia
Virgin Islands	Washington	West Virginia	Wisconsin	Wyoming
District of Columbia	Guam			

For More Information

This Research Note was written by Timothy M. Pickrell, a mathematical statistician in the Mathematical Analysis Division, National Center for Statistics and Analysis, NHTSA. For questions regarding the information presented in this document, please contact timothy.pickrell@dot.gov.

Additional data and information on the survey design and analysis procedures will be available in upcoming publications to be posted on the Web site www.nhtsa.gov/NCSA.

For more information on NHTSA's policy on distracted driving, please visit www.nhtsa.gov or www.distraction.gov.

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This research note and other general information on highway traffic safety may be accessed by Internet users at: www-nrd.nhtsa.dot.gov/CATS/index.aspx