

# Traffic Safety Facts

2013 Data

December 2014

DOT HS 812 102



## Key Findings

- There were 10,076 fatalities in 2013 in crashes involving a driver with a BAC of .08 or higher; this was 31 percent of total traffic fatalities for the year.
- An average of one alcohol-impaired-driving fatality occurred every 52 minutes in 2013.
- The estimated economic cost of alcohol-impaired-driving crashes in the United States in 2010 (the most recent year for which cost data is available) was \$49.8 billion.
- Of the traffic fatalities among children 14 and younger in 2013, about 17 percent occurred in alcohol-impaired-driving crashes.
- In 2013, the 21- to 24-year-old age group had the highest percentage of drivers in fatal crashes, with BAC levels of .08 or higher (33%).
- The percentage of drivers with BACs of .08 or above in fatal crashes in 2013 was highest for motorcycle riders (27%).
- The rate of alcohol impairment among drivers involved in fatal crashes in 2013 was nearly four times higher at night than during the day.
- Among the 10,076 alcohol-impaired-driving fatalities in 2013, 68 percent (6,860) were in crashes in which at least one driver in the crash had a BAC of .15 g/dL or higher.



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**National Highway Traffic Safety Administration**

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## Alcohol-Impaired Driving

Drivers are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. Thus, any fatal crash involving a driver with a BAC of .08 or higher is considered to be an alcohol-impaired-driving crash, and fatalities occurring in those crashes are considered to be alcohol-impaired-driving fatalities. The term “driver” refers to the operator of any motor vehicle, including a motorcycle.

Estimates of alcohol-impaired driving are generated using BAC values reported to the Fatality Analysis Reporting System (FARS) and BAC values imputed when they are not reported. The term “alcohol-impaired” does not indicate that a crash or a fatality was *caused* by alcohol impairment, only that an alcohol-impaired driver was involved in the crash.

In this fact sheet, the 2013 alcohol-impaired-driving information is presented in the following order:

- Overview
- Economic Cost
- Children
- Time of Day and Day of Week
- Drivers
- Fatalities by State

### Overview

All 50 States, the District of Columbia, and Puerto Rico have by law set a threshold making it illegal per se to drive with a BAC of .08 or higher. In 2013, 10,076 people were killed in alcohol-impaired-driving crashes, an average of one alcohol-impaired-driving fatality occurred every 52 minutes. These alcohol-impaired-driving fatalities accounted for 31 percent of the total motor vehicle traffic fatalities in the United States.

Of the 10,076 people who died in alcohol-impaired-driving crashes in 2013, 6,515 (65%) were drivers with BACs of .08 or higher. The remaining fatalities consisted of 2,724 motor vehicle occupants (27%) and 837 nonoccupants (8%). The distribution of fatalities in these crashes by role is shown in Table 1.

Table 1  
**Fatalities, by Role, in Crashes Involving at Least One Driver With a BAC of .08 or Higher, 2013**

Role	Number	Percent of Total Fatalities
Driver With BAC=.08+	6,515	65%
Passenger Riding w/Driver With BAC=.08+	1,567	16%
<b>Subtotal</b>	<b>8,082</b>	<b>80%</b>
Occupants of Other Vehicles	1,157	11%
Nonoccupants	837	8%
<b>Total Fatalities</b>	<b>10,076</b>	<b>100%</b>

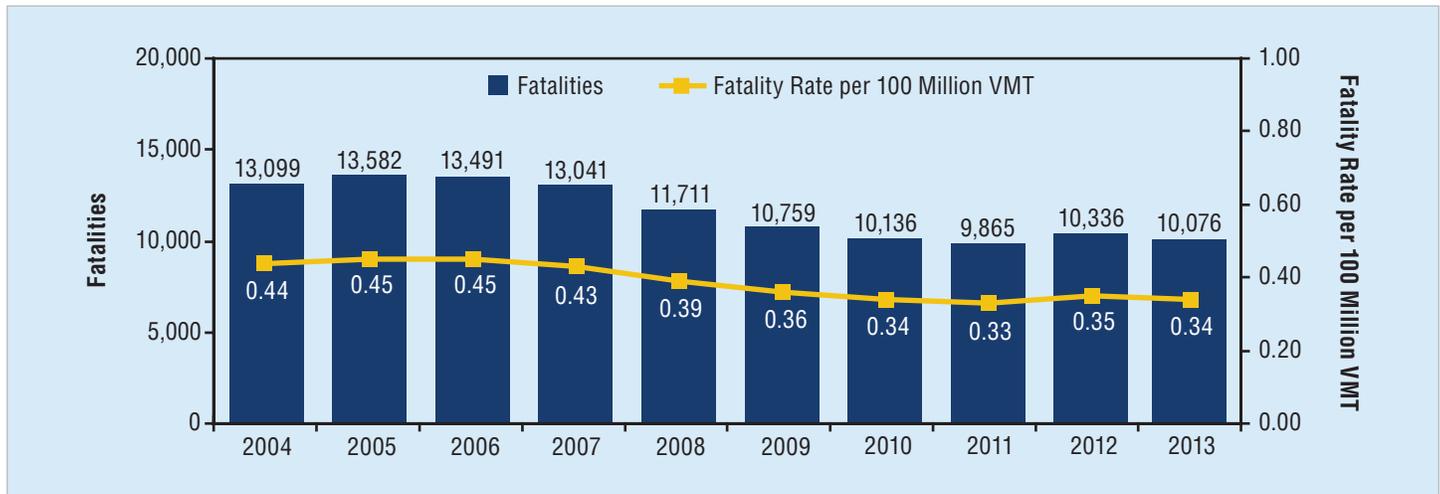
Source: Fatality Analysis Reporting System 2013 Annual Report File (ARF).

From 2012 to 2013, fatalities in alcohol-impaired-driving crashes decreased by 2.5 percent (10,336 to 10,076 fatalities). Alcohol-impaired-driving fatalities in the past 10 years have declined by 23 percent, from 13,099 in 2004 to 10,076 in 2013. The national rate of alcohol-impaired-driving fatalities in motor vehicle crashes in 2013

was 0.34 per 100 million vehicle miles traveled (VMT), a decline from 0.35 in 2012. The alcohol-impaired-driving fatality rate in the past 10 years has declined by 23 percent, from 0.44 in 2004 to 0.34 in 2013. Figure 1 presents the fatality numbers and rates for the past decade.

Figure 1

### Fatalities and Fatality Rate per 100 Million VMT in Alcohol-Impaired-Driving Crashes, 2004–2013



Source: Fatalities – FARS 2004–2012 (Final File) and 2013 (ARF); 2004–2012 VMT – Federal Highway Administration's (FHWA) Annual Highway Statistics; 2013 VMT – FHWA's Traffic Volume Trends (September 2014)

## Economic Cost

The estimated economic cost of all motor vehicle traffic crashes in the United States in 2010 (the most recent year for which cost data is available) was \$277 billion, of which \$49.8 billion resulted from alcohol-impaired-driving crashes. Included in the economic costs are:

- lost productivity
- workplace losses
- legal and court expenses
- medical costs
- emergency medical services (EMS)
- insurance administration
- congestion
- property damage

These costs represent the tangible losses that result from motor vehicle crashes. However, in cases of serious injury or death, such costs fail to capture the relatively intangible value of lost quality-of-life that results from these injuries. When quality of life valuations are considered, the total value of societal harm from motor vehicle crashes in the United States in 2010 was an estimated \$870.8 billion, of which \$206.9 billion resulted from alcohol-impaired-driving

crashes. For further information on cost estimates, see *The Economic and Societal Impact of Motor Vehicle Crashes, 2010*.<sup>1</sup>

## Children

In 2013, a total of 1,149 children 14 and younger were killed in motor vehicle traffic crashes. Of those 1,149 fatalities, 200 (17%) occurred in alcohol-impaired-driving crashes. Out of those 200 deaths, 121 (61%) were occupants of vehicles with drivers who had BACs of .08 or higher, and another 29 children (15%) were pedestrians or pedalcyclists struck by drivers with BACs of .08 or higher.

## Time of Day and Day of Week

The rate of alcohol impairment among drivers involved in fatal crashes in 2013 was nearly 4 times higher at night than during the day (35% versus 9%). In 2013, 15 percent of all drivers involved in fatal crashes during the week were alcohol-impaired, compared to 30 percent on weekends. Table 2 presents information on drivers involved in fatal crashes in 2004 and 2013 by time of day and day of week, as well as single-vehicle and multi-vehicle crash data.

<sup>1</sup> Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2014, May). *The economic and societal impact of motor vehicle crashes, 2010*. (DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration. Available at [www.nrd.nhtsa.dot.gov/pubs/812013.pdf](http://www.nrd.nhtsa.dot.gov/pubs/812013.pdf)

Table 2

### Drivers Involved in Fatal Crashes With BACs of .08 or Higher, by Crash Type, Time of Day and Day of Week, 2004 and 2013

Drivers Involved in Fatal Crashes	2004			2013			Change in Percentage With BAC=.08+ 2004-2013
	Total Number of Drivers	BAC=.08+		Total Number of Drivers	BAC=.08+		
		Number	Percent of Total		Number	Percent of Total	
<i>Total</i>	58,395	12,057	21%	44,574	9,461	21%	0
<b>Drivers by Crash Type and Time of Day</b>							
Single-Vehicle Crash							
<i>Total*</i>	21,744	7,878	36%	17,983	6,296	35%	-1
Daytime	8,553	1,427	17%	7,186	1,229	17%	0
Nighttime	12,862	6,273	49%	10,593	4,962	47%	-2
Multiple-Vehicle Crash							
<i>Total*</i>	36,651	4,179	11%	26,591	3,164	12%	+1
Daytime	23,133	1,173	5%	16,591	878	5%	0
Nighttime	13,498	3,004	22%	9,973	2,280	23%	+1
<b>Drivers by Time of Day</b>							
Daytime	31,686	2,600	8%	23,777	2,107	9%	+1
Nighttime	26,360	9,277	35%	20,566	7,242	35%	0
<b>Drivers by Day of Week and Time of Day</b>							
<i>Weekday*</i>	35,159	5,205	15%	27,126	4,142	15%	0
Daytime	23,014	1,487	6%	17,337	1,242	7%	+1
Nighttime	12,039	3,677	31%	9,715	2,875	30%	-1
<i>Weekend*</i>	23,136	6,801	29%	17,388	5,284	30%	+1
Daytime	8,672	1,113	13%	6,440	865	13%	0
Nighttime	14,321	5,600	39%	10,851	4,366	40%	+1

Source: FARS 2004 Final File and 2013 ARF.

Daytime – 6 a.m. to 5:59 p.m. Weekday – Monday 6 a.m. to Friday 5:59 p.m.

Nighttime – 6 p.m. to 5:59 a.m. Weekend – Friday 6 p.m. to Monday 5:59 a.m.

\*Includes drivers involved in fatal crashes when time of day was unknown.

## Drivers

In fatal crashes in 2013 the highest percentage of drivers with BACs of .08 or higher was for drivers 21 to 24 years old (33%), followed by ages 25 to 34 (29%). The proportion of drivers involved in fatal crashes with BACs of .08 or higher was 23 percent among males

and 15 percent among females. Table 3 provides information on impaired-driving crashes by the age of the driver as well as gender and vehicle type.

Table 3

**Drivers With BACs of .08 or Higher Involved in Fatal Crashes, by Age, Gender, and Vehicle Type, 2004 and 2013**

Drivers Involved in Fatal Crashes	2004			2013			Change in Percentage With BAC=.08+ 2004-2013
	Total Number of Drivers	BAC=.08+		Total Number of Drivers	BAC=.08+		
		Number	Percent of Total		Number	Percent of Total	
<i>Total</i>	58,395	12,057	21%	44,574	9,461	21%	0
<b>Drivers by Age Group (Years)</b>							
16-20	7,755	1,397	18%	3,883	666	17%	-1
21-24	6,413	2,116	33%	4,609	1,500	33%	0
25-34	11,242	3,055	27%	8,762	2,583	29%	+2
35-44	10,743	2,500	23%	7,183	1,733	24%	+1
45-54	9,148	1,704	19%	7,343	1,501	20%	+1
55-64	5,612	701	12%	5,911	827	14%	+2
65-74	3,070	233	8%	3,357	278	8%	0
75+	3,169	151	5%	2,567	128	5%	0
<b>Drivers by Gender</b>							
Male	42,250	10,049	24%	32,442	7,583	23%	-1
Female	15,384	1,875	12%	11,364	1,657	15%	+3
<b>Drivers by Vehicle Type</b>							
Passenger Cars	25,568	5,852	23%	17,731	4,062	23%	0
Light Trucks	22,367	4,808	21%	16,738	3,584	21%	0
Large Trucks	4,837	53	1%	3,858	92	2%	+1
Motorcycles	4,116	1,116	27%	4,769	1,295	27%	0

Source: FARS 2004 Final File and 2013 ARF.

Numbers shown for groups of drivers do not add to the total number of drivers due to unknown/not reported or other data not included.

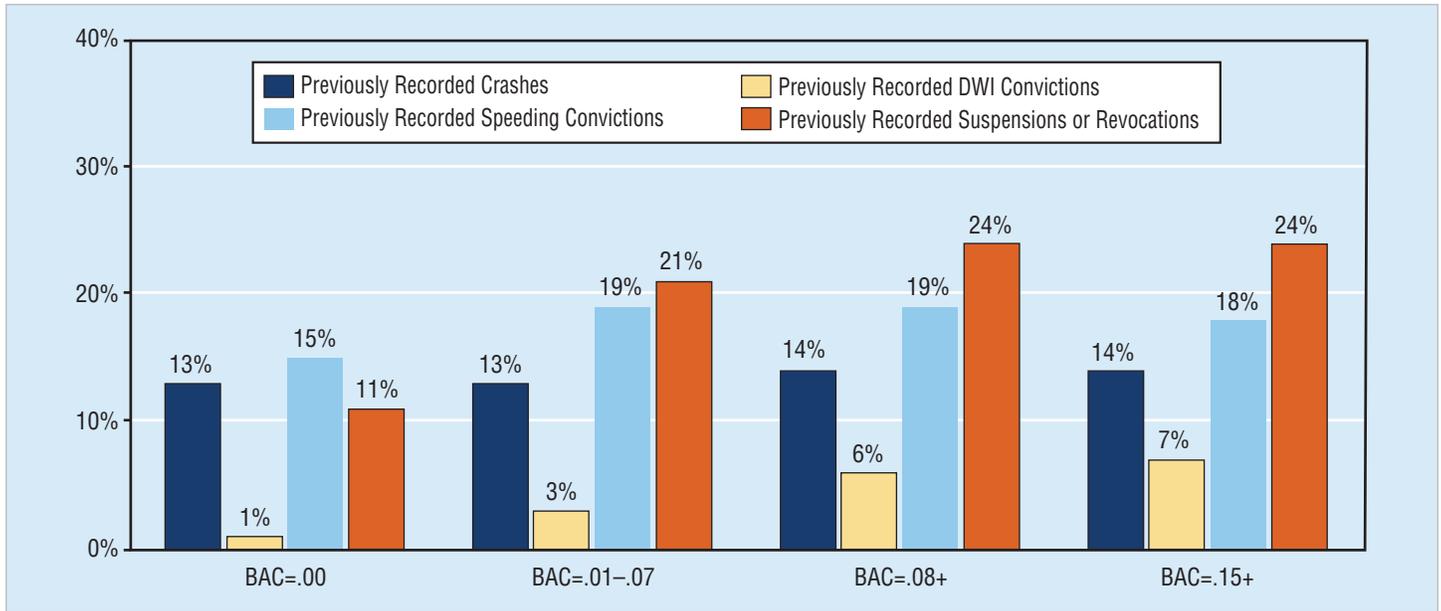
The percentages of drivers involved in fatal crashes with BACs of .08 or higher in 2013 by vehicle type were 27 percent for motorcycles, 23 percent for passenger cars, and 21 percent for light trucks. The percentage of drivers with BACs of .08 or higher in fatal crashes was the lowest for drivers of large trucks (2%).

In 2013, 5,080 passenger vehicle drivers killed had BACs of .08 or higher (“passenger vehicles” includes cars as well as light trucks, vans, SUVs, and pickups). Out of those driver fatalities for which restraint use was known, 68 percent were unrestrained. Among passenger vehicle drivers killed who had BACs of .01 to .07 g/dL the percentage of unrestrained was 53 percent, and for passenger

vehicle drivers killed who had no alcohol (BAC=.00) the percentage of unrestrained was 39 percent.

Figure 2 shows information on the driving record for drivers in fatal crashes in 2013, at different alcohol levels. There was little difference by alcohol level in the percentage of drivers with previously recorded crashes. Drivers with BACs of .08 or higher involved in fatal crashes were six times more likely to have prior convictions for driving while impaired (DWI) than were drivers with no alcohol (6% and 1%, respectively). Note: FARS records drivers’ previous crashes, suspensions/revocations, and convictions that occurred up to three years prior to the date of the crash.

Figure 2  
**Previous Driving Records of Drivers Involved in Fatal Crashes, by BAC, 2013**

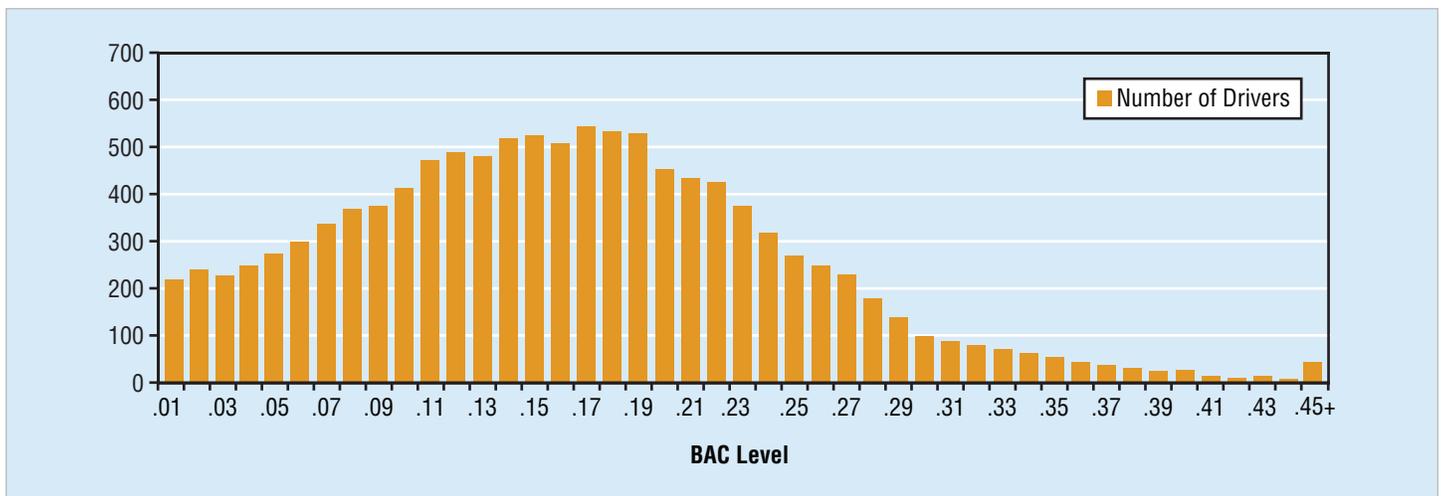


Source: FARS 2013 ARF.

While .08 BAC is considered to be impaired in all States, the large majority of drivers in fatal crashes with any measurable alcohol had levels far higher. In 2013, 84 percent (9,461) of the 11,307 drivers with BACs of .01 or higher who were involved in fatal crashes had BAC levels at or above .08, and 56 percent (6,341) had BACs at or above .15. Among the 10,076 alcohol-impaired-driving fatalities in

2013, 68 percent (6,860) were in crashes in which at least one driver in the crash had a BAC of .15 g/dL or higher. The most frequently recorded BAC among drinking drivers in fatal crashes was .17 (see Figure 3). Figure 3 presents the distribution of BACs for those drivers with any alcohol in their systems.

Figure 3  
**Distribution of BACs for Drivers With BACs of .01 or Higher Involved in Fatal Crashes, 2013**



Source: FARS 2013 ARF.

## Fatalities by State

Table 4 shows traffic fatalities by State and the highest driver BAC in the crashes in 2013. Among all States, fatalities in motor vehicle traffic crashes in 2013 ranged from 20 to 3,382, depending on the size and population of the State. Alcohol-impaired-driving fatalities were highest in Texas (1,337), followed by California (867), and Florida (676), and lowest in the District of Columbia (6). The proportion

of alcohol-impaired-driving fatalities among total fatalities in States ranged from a high of 44 percent (South Carolina) to a low of 17 percent (Utah). The proportion of fatalities in crashes involving a driver with a BAC of .15 g/dL or higher ranged from a high of 36 percent (North Dakota) to a low of 12 percent (Utah).

The suggested APA formation citation for this document is:

National Center for Statistics and Analysis. (2014, December). *Alcohol-impaired driving: 2013 data*. (Traffic Safety Facts. DOT HS 812 102). Washington, DC: National Highway Traffic Safety Administration.

### For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at [ncsaweb@dot.gov](mailto:ncsaweb@dot.gov). General information on highway traffic safety can be found at [www.nhtsa.gov/NCSA](http://www.nhtsa.gov/NCSA). To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Bicyclists and Other Cyclists*, *Children*, *Large Trucks*, *Motorcycles*, *Occupant Protection*, *Older Population*, *Overview*, *Passenger Vehicles*, *Pedestrians*, *Race and Ethnicity*, *Rural/Urban Comparisons*, *School Transportation-Related Crashes*, *Speeding*, *State Alcohol Estimates*, *State Traffic Data*, and *Young Drivers*. Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. The fact sheets and annual Traffic Safety Facts report can be accessed online at [www-nrd.nhtsa.dot.gov/CATS/index.aspx](http://www-nrd.nhtsa.dot.gov/CATS/index.aspx).

Table 4

## Traffic Fatalities by State and Highest Driver BAC in the Crash, 2013

State	Total Fatalities*	BAC=.00		BAC=.01-.07		BAC=.08+		BAC=0.15+		BAC=.01+	
	Number	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	852	543	64%	48	6%	260	31%	175	21%	308	36%
Alaska	51	34	66%	1	3%	15	30%	12	24%	16	32%
Arizona	849	574	68%	43	5%	219	26%	158	19%	262	31%
Arkansas	483	324	67%	34	7%	123	25%	89	18%	156	32%
California	3,000	1,963	65%	158	5%	867	29%	583	19%	1,025	34%
Colorado	481	309	64%	28	6%	142	30%	105	22%	170	35%
Connecticut	276	145	52%	17	6%	114	41%	74	27%	132	48%
Delaware	99	57	57%	4	4%	38	39%	27	27%	43	43%
Dist of Columbia	20	13	67%	0	2%	6	31%	4	19%	7	33%
Florida	2,407	1,607	67%	115	5%	676	28%	480	20%	790	33%
Georgia	1,179	824	70%	52	4%	297	25%	182	15%	349	30%
Hawaii	102	57	56%	12	12%	33	33%	21	20%	45	44%
Idaho	214	138	64%	15	7%	58	27%	41	19%	73	34%
Illinois	991	601	61%	67	7%	322	32%	227	23%	389	39%
Indiana	783	541	69%	43	6%	198	25%	143	18%	241	31%
Iowa	317	204	64%	10	3%	103	32%	75	24%	113	36%
Kansas	350	230	66%	18	5%	102	29%	74	21%	119	34%
Kentucky	638	444	70%	26	4%	167	26%	113	18%	193	30%
Louisiana	703	427	61%	39	5%	234	33%	148	21%	272	39%
Maine	145	91	63%	12	8%	42	29%	25	17%	54	37%
Maryland	465	289	62%	34	7%	141	30%	95	20%	175	38%
Massachusetts	326	179	55%	24	7%	118	36%	67	20%	142	44%
Michigan	947	638	67%	54	6%	255	27%	168	18%	309	33%
Minnesota	387	272	70%	20	5%	95	25%	74	19%	115	30%
Mississippi	613	372	61%	30	5%	210	34%	129	21%	240	39%
Missouri	757	468	62%	39	5%	248	33%	169	22%	287	38%
Montana	229	125	55%	12	5%	92	40%	67	29%	104	45%
Nebraska	211	136	65%	10	5%	60	28%	44	21%	70	33%
Nevada	262	168	64%	15	6%	79	30%	57	22%	94	36%
New Hampshire	135	83	61%	7	5%	46	34%	34	25%	52	39%
New Jersey	542	358	66%	38	7%	146	27%	93	17%	184	34%
New Mexico	310	192	62%	25	8%	93	30%	65	21%	118	38%
New York	1,199	756	63%	78	6%	364	30%	235	20%	442	37%
North Carolina	1,289	858	67%	57	4%	371	29%	247	19%	428	33%
North Dakota	148	73	49%	12	8%	62	42%	54	36%	73	49%
Ohio	989	664	67%	51	5%	271	27%	170	17%	322	33%
Oklahoma	678	472	70%	37	5%	170	25%	123	18%	206	30%
Oregon	313	189	61%	17	5%	105	33%	80	25%	122	39%
Pennsylvania	1,208	774	64%	64	5%	368	30%	258	21%	431	36%
Rhode Island	65	37	57%	4	6%	24	38%	18	28%	28	43%
South Carolina	767	379	49%	49	6%	335	44%	225	29%	384	50%
South Dakota	135	85	63%	7	5%	41	31%	34	25%	48	36%
Tennessee	995	666	67%	51	5%	277	28%	190	19%	327	33%
Texas	3,382	1,829	54%	213	6%	1,337	40%	896	26%	1,550	46%
Utah	220	175	79%	6	3%	38	17%	25	12%	44	20%
Vermont	69	45	66%	5	8%	18	27%	14	20%	24	34%
Virginia	740	435	59%	48	6%	254	34%	177	24%	302	41%
Washington	436	267	61%	20	4%	149	34%	94	21%	169	39%
West Virginia	332	220	66%	21	6%	91	27%	62	19%	112	34%
Wisconsin	543	329	61%	32	6%	178	33%	129	24%	210	39%
Wyoming	87	58	67%	4	5%	25	29%	18	21%	29	33%
<b>National</b>	<b>32,719</b>	<b>20,713</b>	<b>63%</b>	<b>1,820</b>	<b>6%</b>	<b>10,076</b>	<b>31%</b>	<b>6,860</b>	<b>21%</b>	<b>11,896</b>	<b>36%</b>
Puerto Rico	344	185	54%	31	9%	127	37%	75	22%	158	46%

Source: FARS 2013 ARF.

\*Total includes fatalities in crashes in which there was no driver present.