

Traffic Safety Facts

2015 Data

April 2017

DOT HS 812 393



Key Findings

- Of the 35,092 motor vehicle traffic fatalities in 2015 there were 17,114 (49%) that occurred in rural areas, 15,362 (44%) that occurred in urban areas, and 2,616 (7%) that occurred in unknown areas.
- According to the 2015 American Community Survey from the U.S. Census Bureau, an estimated 19 percent of the U.S. population lived in rural areas. However, rural fatalities accounted for 49 percent of all traffic fatalities in 2015.
- Rural traffic fatalities decreased by 28 percent from 23,646 in 2006 to 17,114 in 2015. Urban traffic fatalities decreased by 18 percent from 18,791 in 2006 to 15,362 in 2015.
- In 2015 the fatality rate per 100 million vehicle miles traveled was 2.6 times higher in rural areas than in urban areas (1.84 and 0.71, respectively).
- Of the 17,114 rural traffic fatalities in 2015 there were 4,758 people (28%) killed in speeding-related crashes. Of the 15,362 urban traffic fatalities in 2015 there were 4,171 people (27%) killed in speeding-related crashes.
- Rural alcohol-impaired-driving fatalities decreased by 34 percent from 7,493 in 2006 to 4,915 in 2015. Urban alcohol-impaired-driving fatalities decreased by 24 percent from 5,921 in 2006 to 4,474 in 2015.
- The 2015 National Occupant Protection Use Survey (NOPS) observed that the seat belt use rate among front seat passenger vehicle occupants in urban areas was 89.4 percent, and rural occupants were observed to have a use rate of 86.8 percent.
- Based on known restraint use in fatal crashes, 50 percent of rural passenger vehicle occupants killed in 2015 were unrestrained as compared to 46 percent of urban passenger vehicle occupants killed.



U.S. Department of Transportation
National Highway Traffic Safety Administration

1200 New Jersey Avenue SE.
Washington, DC 20590

Rural/Urban Comparison of Traffic Fatalities

For this fact sheet, rural and urban boundaries are determined by the State highway departments and approved by the Federal Highway Administration. The State highway departments use the U.S. Census Bureau's rural and urban boundaries.¹

In this fact sheet for 2015 the rural and urban information is presented as follows:

- Overview
- Time of Day
- Speeding
- Alcohol
- Restraint Use
- Rollover Crashes
- Driver Characteristics
- Nonoccupants
- Fatalities by State

This fact sheet contains information on fatal motor vehicle crashes and fatalities based on data from the Fatality Analysis Reporting System (FARS). FARS is a census of fatal crashes in the 50 States, the District of Columbia, and Puerto Rico (Puerto Rico is not included in U.S. totals).

Overview

In 2015:

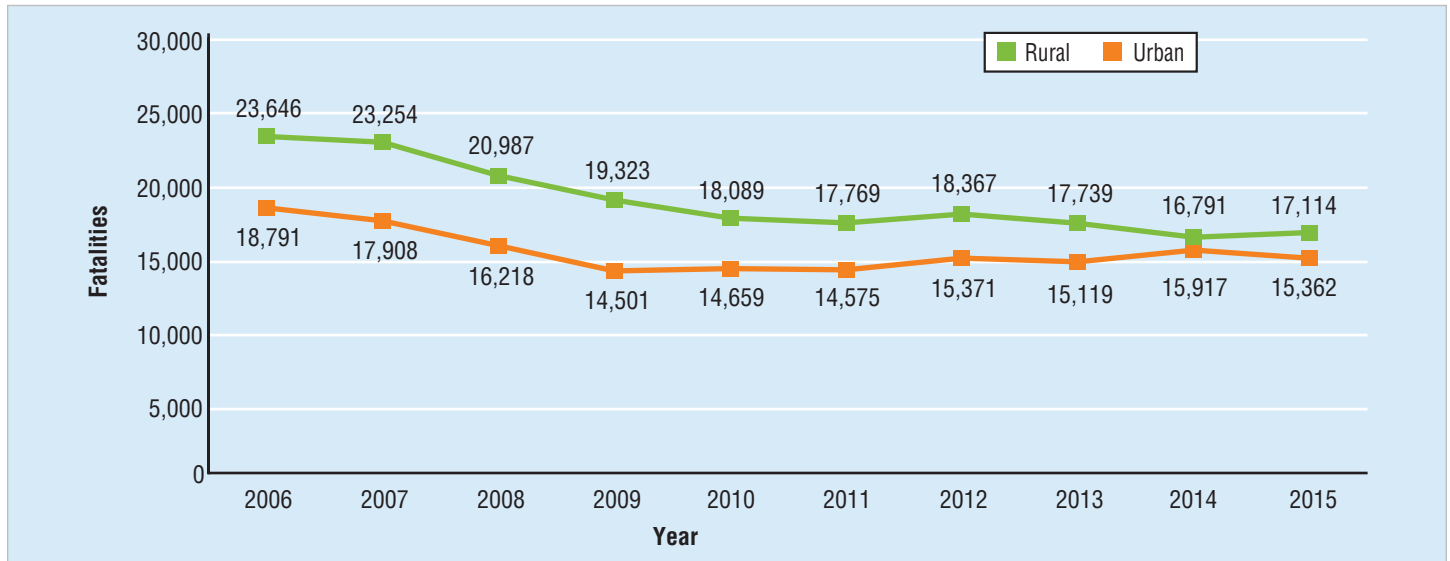
- There were 32,166 fatal motor vehicle traffic crashes resulting in 35,092 fatalities.
- Of these 32,166 fatal traffic crashes, there were 15,293 (48%) that occurred in rural areas, 14,414 (45%) that occurred in urban areas, and 2,459 (8%) that occurred in unknown areas (not enough information to determine if the crashes were inside the rural or urban boundaries).
- Of these 35,092 traffic fatalities, there were 17,114 (49%) that occurred in rural areas, 15,362 (44%) that occurred in urban areas, and 2,616 (7%) that occurred in unknown areas.
- According to the 2015 American Community Survey from the U.S. Census Bureau, an estimated 19 percent of the U.S. population lived in rural areas. However, rural fatalities accounted for 49 percent of all traffic fatalities in 2015.

Figure 1 presents the motor vehicle traffic fatality trends in the most recent 10-year period for which data is available by location (rural and urban):

- Rural fatalities decreased by 28 percent from 23,646 in 2006 to 17,114 in 2015.
- Urban fatalities decreased by 18 percent from 18,791 in 2006 to 15,362 in 2015.

¹ See the U.S. Census Bureau link to define urban and rural areas: www.census.gov/geo/reference/ua/urban-rural-2010.html

Figure 1
Motor Vehicle Traffic Fatalities, by Year and Location, 2006–2015

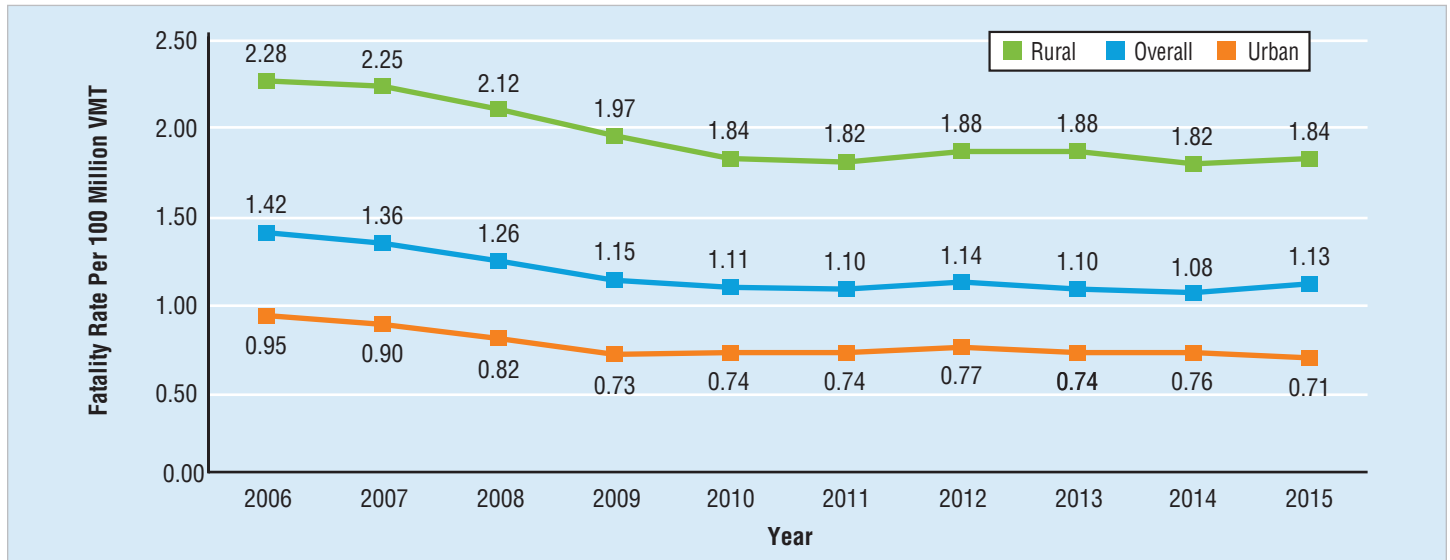


Source: FARS 2006-2014 Final File, 2015 Annual Report File (ARF)

Figure 2 presents the fatality rates per 100 million vehicle miles traveled (VMT) by location (rural, urban, and overall) in the most recent 10-year period for which data are available:

- The fatality rate in rural areas decreased by 19 percent from 2.28 in 2006 to 1.84 in 2015.
- The fatality rate in urban areas decreased by 25 percent from 0.95 in 2006 to 0.71 in 2015.
- In 2015 the fatality rate was 2.6 times higher in rural areas than in urban areas (1.84 and 0.71, respectively).

Figure 2
Fatality Rates per 100 Million Vehicle Miles Traveled, by Year and Location, 2006–2015



Sources: FARS 2006-2014 Final File, 2015 ARF; VMT – Federal Highway Administration

Time of Day

Of the 17,114 rural traffic fatalities in 2015, there were 9,263 (54%) that occurred during the day (6 a.m. to 5:59 p.m.), 7,670 (45%) that occurred during the night (6 p.m. to 5:59 a.m.), and 181 (1%) were unknowns. Of the 15,362 urban traffic fatalities in 2015, there were 6,564 (43%) that occurred during the day, 8,723 (57%) that occurred during the night, and 75 (<1%) were unknowns. In short, more rural traffic fatalities occurred during the day and more urban traffic fatalities occurred during the night.

Speeding

The National Highway Traffic Safety Administration considers a crash to be speeding-related if the driver was charged with a speeding-related offense or if an officer indicated that racing, driving too fast for conditions, or exceeding the posted speed limit was a contributing factor in the crash.

In 2015:

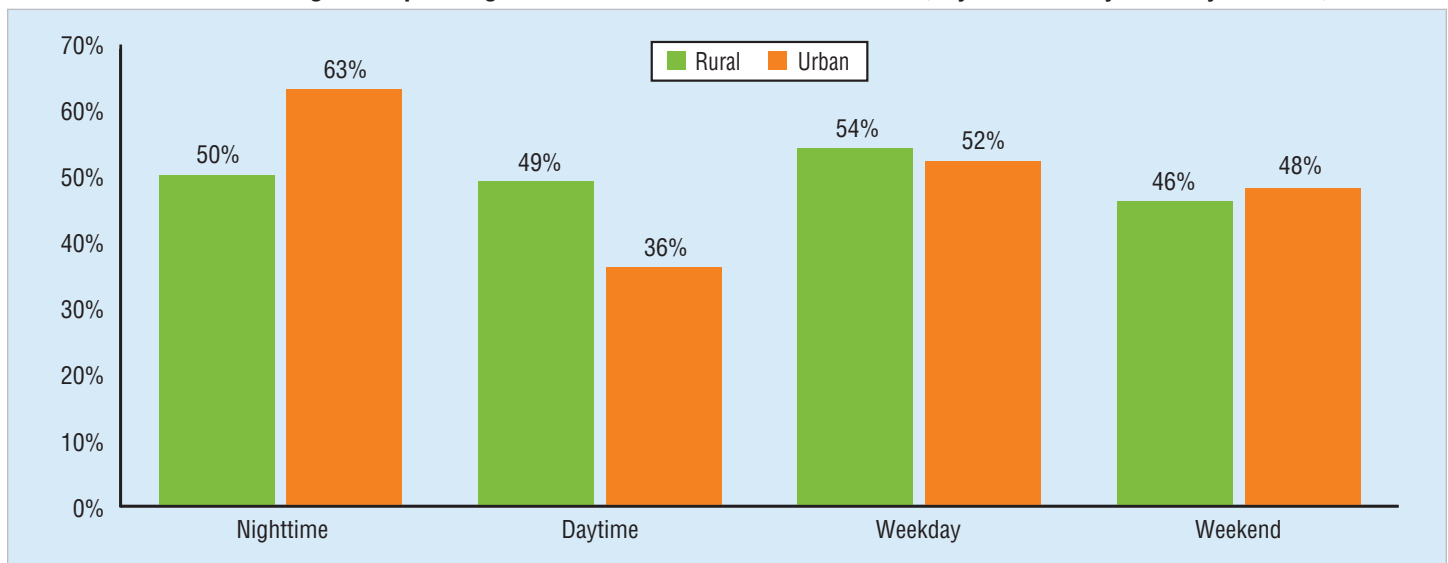
- Of the 35,092 traffic fatalities, there were 9,557 (27%) who were killed in speeding-related crashes.
- Of the 17,114 rural traffic fatalities, there were 4,758 (28%) who were killed in speeding-related crashes.
- Of the 15,362 urban traffic fatalities, there were 4,171 (27%) who were killed in speeding-related crashes.

Figure 3 shows the rural and urban percentages of speeding-related fatalities in traffic crashes in 2015 by time of day (nighttime – 6 p.m. to 5:59 a.m./daytime – 6 a.m. to 5:59 p.m.) and day of week (weekday – Monday 6 a.m. to Friday 5:59 p.m./weekend – Friday 6 p.m. to Monday 5:59 a.m.):

- Half (50%) of rural area speeding-related fatalities occurred at night and 46 percent occurred over the weekend.
- Nearly two-thirds (63%) of urban area speeding-related fatalities occurred at night and 48 percent occurred over the weekend.

Figure 3

Rural and Urban Percentages of Speeding-Related Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2015



Source: FARS 2015 ARF

Note: Nighttime – 6 p.m. to 5:59 a.m.; daytime – 6 a.m. to 5:59 p.m.; weekday – Monday 6 a.m. to Friday 5:59 p.m.; weekend – Friday 6 p.m. to Monday 5:59 a.m.

Sixty-three percent of drivers involved in urban fatal crashes in 2015 were on roadways where the posted speed limits were 50 miles per hour (mph) or less. In rural fatal crashes, 74 percent of drivers involved were on roadways where the posted speed limit was 55 mph or higher.

Alcohol

Drivers are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. Thus, any fatality occurring in a crash involving a driver with a BAC of .08 or higher is considered to be an alcohol-impaired-driving fatality.

Table 1 presents the number of traffic fatalities and alcohol-impaired-driving fatalities by location (rural/urban).

- In 2015 the proportions of alcohol-impaired-driving fatalities were the same between rural and urban areas at 29 percent.

- Of the 10,265 alcohol-impaired-driving fatalities in 2015, there were 4,915 (48%) that occurred in rural areas, 4,474 (44%) that occurred in urban areas, and 876 (9%) were unknowns.
- Alcohol-impaired-driving fatalities decreased by 24 percent from 13,491 in 2006 to 10,265 in 2015.
 - Rural alcohol-impaired-driving fatalities decreased by 34 percent from 7,493 in 2006 to 4,915 in 2015.
 - Urban alcohol-impaired-driving fatalities decreased by 24 percent from 5,921 in 2006 to 4,474 in 2015.

Table 1

Traffic Fatalities and Alcohol-Impaired-Driving Fatalities, by Location, 2006 and 2015

Location	2006			2015		
	Total Fatalities	Alcohol-Impaired-Driving Fatalities BAC=.08+		Total Fatalities	Alcohol-Impaired-Driving Fatalities BAC=.08+	
		Number	Percent		Number	Percent
Rural	23,646	7,493	32%	17,114	4,915	29%
Urban	18,791	5,921	32%	15,362	4,474	29%
Total**	42,708	13,491	32%	35,092	10,265	29%

Source: FARS 2006 Final File, 2015 ARF

*Includes motorcycle riders.

**Includes fatalities where location was unknown.

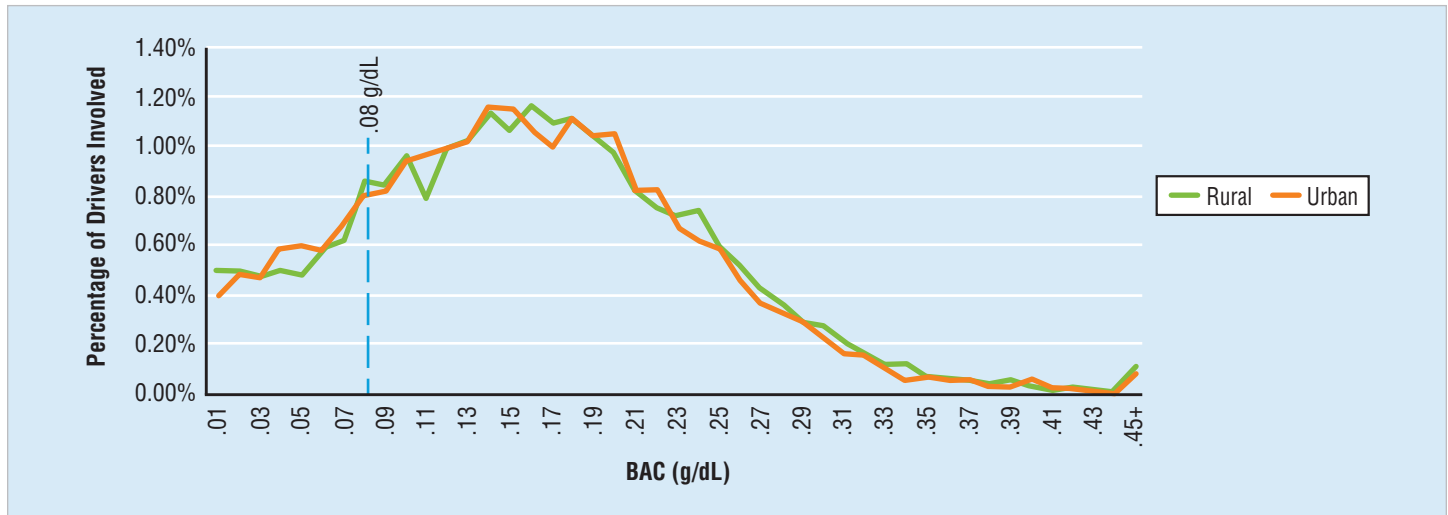
Of the 48,613 drivers involved in fatal traffic crashes in 2015, there were 9,649 (20%) who were alcohol-impaired. Of these alcohol-impaired drivers, there were 4,520 (47%) who were driving in rural areas at the time of the crash and 4,298 (45%) who were driving in urban areas.

The highest percentages of alcohol-impaired drivers involved in fatal crashes among all age groups in 2015 were drivers 21 to 24 years old (28%), followed by drivers 25 to 34 years old (27%) and 35 to 44 years old (23%). Rural and urban alcohol-impaired drivers followed this trend with 21- to 24-year-olds (29% and 27%, respectively), followed by 25- to 34-year-olds (both 26%) and 35- to 44-year-olds (23% and 21%, respectively).

In cases where drivers involved in fatal crashes in 2015 had one or more previous convictions for driving while intoxicated (DWI), 53 percent of rural drivers were alcohol-impaired and 45 percent of urban drivers were alcohol-impaired.

As shown in Figure 4, the most frequently recorded BAC among drinking drivers involved in fatal crashes in rural areas was .16 g/dL. For urban areas, it was .14 g/dL.

Figure 4
Distribution of Blood Alcohol Concentration (BAC) of Drivers Involved in Fatal Crashes, by Location, 2015



Source: FARS 2015 ARF

Restraint Use

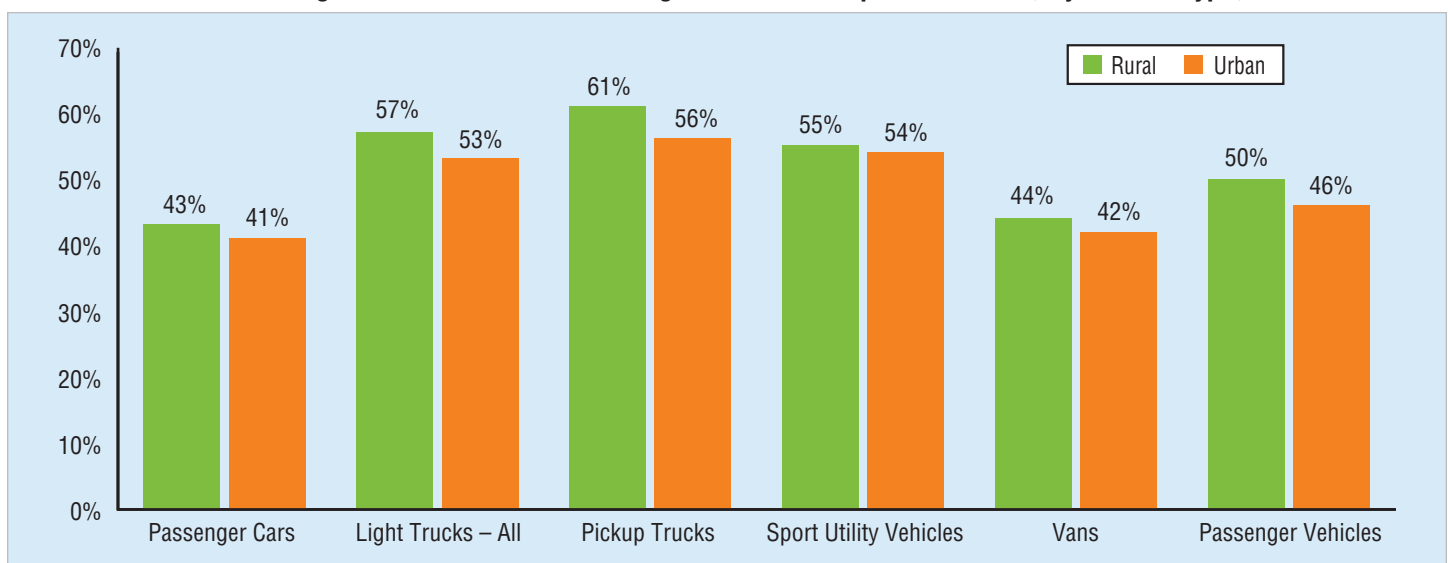
The 2015 NOPUS observed that the seat belt use rate among front seat passenger vehicle (defined as passenger cars and light trucks) occupants in urban areas was 89.4 percent, and rural occupants were observed to have a use rate of 86.8 percent (see NHTSA Research Note *Seat Belt Use in 2015 – Overall Results*, Report No. DOT HS 812 243).

Of the 22,441 passenger vehicle occupants killed in 2015, there were 12,797 (57%) who were killed in rural areas and 8,262 (37%) who were killed in urban areas.

Figure 5 presents the 2015 rural and urban percentages (based on known restraint use) of unrestrained passenger vehicle occupant fatalities by vehicle type (passenger cars and light trucks including pickup trucks, SUVs, and vans). In 2015 (based on known restraint use):

- Fifty percent of rural passenger vehicle occupants killed were unrestrained as compared to 46 percent of urban passenger vehicle occupants killed.
- Under two-thirds (61%) of rural pickup truck occupants killed were unrestrained – the highest percentage of any passenger vehicle occupants killed among both rural and urban areas.

Figure 5
Rural and Urban Percentages of Unrestrained* Passenger Vehicle Occupant Fatalities, by Vehicle Type, 2015



Source: FARS 2015 ARF

*Based on known restraint use.

Rollover Crashes

Of the 12,797 rural passenger vehicle occupants killed in 2015, there were 4,829 (38%) who were in vehicles that rolled over; of the 8,262 urban passenger vehicle occupants killed, there were 1,963 (24%) who were in vehicles that rolled over. Data further shows that 66 percent of rural and 63 percent of urban passenger vehicle occupants killed were unrestrained in rollover vehicles (based on known restraint use).

SUVs involved in rural fatal crashes in 2015 experienced the highest rollover percentage at 36 percent. Other rural rollover percentages were 30 percent for pickup trucks, 20 percent for passenger cars, 22 percent for vans, and 16 percent for large trucks. In urban areas, vehicles experienced lower rollover percentages: 18 percent for SUVs, 15 percent for pickup trucks, 9 percent for passenger cars, 8 percent for vans, and 8 percent for large trucks.

Driver Characteristics

Rural drivers involved in fatal crashes in 2015 were found to have a higher percentage of valid driver's licenses than urban drivers (87% and 84%, respectively).

There were 22,150 drivers killed in motor vehicle traffic crashes in 2015. Sixty-one percent of rural drivers died at the scenes of the crashes, compared to 33 percent of urban drivers. Data also shows that 40 percent of all drivers killed were transported to hospitals and 3 percent of these drivers died en route. Rural drivers represented 57 percent of drivers who died en route to hospitals compared to 42 percent for urban drivers.

Nonoccupants

Nonoccupants are defined as pedestrians, pedalcyclists, or other nonoccupants. In 2015:

- Of the 5,376 pedestrians killed in motor vehicle traffic crashes, 1,160 (22%) occurred in rural areas, 3,704 (69%) occurred in urban areas, and 512 (10%) were unknowns.
- Of the 818 pedalcyclists killed in motor vehicle traffic crashes, 214 (26%) occurred in rural areas, 492 (60%) occurred in urban areas, and 112 (14%) were unknowns.

Fatalities by State

For each State and the District of Columbia in 2015, Table 2 presents the number and percentage of rural and urban traffic fatalities. Puerto Rico is included in this table, but not included in the overall U.S. total.

In 2015, the total number of unknowns was unusually higher compared to previous years because of six States: Florida (1,248), Texas (804), Maryland (307), Alabama (120), New Jersey (47), and Idaho (20).

Additional State/county-level data is available at NHTSA's State Traffic Safety Information website: <https://cdan.nhtsa.gov/stsi.htm>.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2017, April). *Rural/urban comparison of traffic fatalities: 2015 data*. (Traffic Safety Facts. Report No. DOT HS 812 393). Washington, DC: National Highway Traffic Safety Administration.

For More Information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NSA-230, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at ncsarequests@dot.gov. General information on highway traffic safety can be found at 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 *Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Motorcycles, Occupant Protection, Older Population, Passenger Vehicles, Pedestrians, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, Summary of Motor Vehicle Crashes* 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 found at <https://crashstats.nhtsa.dot.gov/>.



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Table 2
Rural and Urban Traffic Fatalities, by State, 2015

State	Location						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	480	57%	249	29%	120	14%	849	100%
Alaska	33	51%	31	48%	1	2%	65	100%
Arizona	335	38%	554	62%	4	0%	893	100%
Arkansas	376	71%	155	29%	0	0%	531	100%
California	1,366	43%	1,802	57%	8	0%	3,176	100%
Colorado	260	48%	284	52%	2	0%	546	100%
Connecticut	46	17%	217	82%	3	1%	266	100%
Delaware	66	52%	60	48%	0	0%	126	100%
District of Columbia	0	0%	23	100%	0	0%	23	100%
Florida	453	15%	1,238	42%	1,248	42%	2,939	100%
Georgia	564	39%	866	61%	0	0%	1,430	100%
Hawaii	13	14%	81	86%	0	0%	94	100%
Idaho	162	75%	34	16%	20	9%	216	100%
Illinois	419	42%	579	58%	0	0%	998	100%
Indiana	523	64%	298	36%	0	0%	821	100%
Iowa	230	72%	90	28%	0	0%	320	100%
Kansas	276	78%	79	22%	0	0%	355	100%
Kentucky	593	78%	168	22%	0	0%	761	100%
Louisiana	354	49%	365	50%	7	1%	726	100%
Maine	130	83%	26	17%	0	0%	156	100%
Maryland	42	8%	164	32%	307	60%	513	100%
Massachusetts	19	6%	287	94%	0	0%	306	100%
Michigan	576	60%	382	40%	5	1%	963	100%
Minnesota	274	67%	135	33%	2	0%	411	100%
Mississippi	559	83%	118	17%	0	0%	677	100%
Missouri	497	57%	371	43%	1	0%	869	100%
Montana	200	89%	24	11%	0	0%	224	100%
Nebraska	173	70%	73	30%	0	0%	246	100%
Nevada	107	33%	214	66%	4	1%	325	100%
New Hampshire	66	58%	48	42%	0	0%	114	100%
New Jersey	64	11%	451	80%	47	8%	562	100%
New Mexico	176	59%	120	40%	2	1%	298	100%
New York	450	40%	671	60%	0	0%	1,121	100%
North Carolina	910	66%	468	34%	1	0%	1,379	100%
North Dakota	122	93%	9	7%	0	0%	131	100%
Ohio	492	44%	610	55%	8	1%	1,110	100%
Oklahoma	391	61%	252	39%	0	0%	643	100%
Oregon	313	70%	133	30%	1	0%	447	100%
Pennsylvania	616	51%	581	48%	3	0%	1,200	100%
Rhode Island	7	16%	38	84%	0	0%	45	100%
South Carolina	699	72%	278	28%	0	0%	977	100%
South Dakota	113	85%	20	15%	0	0%	133	100%
Tennessee	479	50%	477	50%	2	0%	958	100%
Texas	1,493	42%	1,219	35%	804	23%	3,516	100%
Utah	107	39%	159	58%	10	4%	276	100%
Vermont	48	84%	9	16%	0	0%	57	100%
Virginia	485	64%	268	36%	0	0%	753	100%
Washington	288	51%	277	49%	3	1%	568	100%
West Virginia	190	71%	78	29%	0	0%	268	100%
Wisconsin	360	64%	205	36%	1	0%	566	100%
Wyoming	119	82%	24	17%	2	1%	145	100%
U.S. Total	17,114	49%	15,362	44%	2,616	7%	35,092	100%
Puerto Rico	189	61%	120	39%	0	0%	309	100%

Source: FARS 2015 ARF