Traffic Safety Facts
2013 Data
July 2015
DOT HS 812 181

NHTSA
www.nhtsa.gov

Rural/Urban Comparison

Key Findings

- Of the 32,719 motor vehicle traffic fatalities in 2013, there were 17,696 (54%) that occurred in rural areas, 14,987 (46%) that occurred in urban areas, and 36 (<0.5%) that occurred in unknown areas.
- According to the 2013 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 54 percent of all traffic fatalities in 2013.
- Rural traffic fatalities decreased 30 percent from 25,179 in 2004 to 17,696 in 2013. Urban traffic fatalities decreased 15 percent from 17,581 in 2004 to 14,987 in 2013.
- In 2013, the fatality rate per 100 million vehicle miles traveled was 2.6 times higher in rural areas than in urban areas (1.88 and 0.73, respectively).
- Of the 17,696 rural traffic fatalities in 2013, there were 5,346 people (30%) killed in speeding-related crashes. Of the 14,987 urban traffic fatalities in 2013, there were 4,258 people (28%) killed in speeding-related crashes.
- Rural alcohol-impaired-driving fatalities decreased by 29 percent from 7,661 in 2004 to 5,473 in 2013. Urban alcohol-impaired-driving fatalities decreased by 15 percent from 5,415 in 2004 to 4,590 in 2013.
- The 2013 National Occupant Protection Use Survey observed that the seat belt use rate among front seat passenger vehicle occupants in urban areas was 87 percent, and rural occupants were observed to have a use rate of 85 percent.
- Based on known restraint use in 2013 fatal crashes, 51 percent of rural passenger vehicle occupants killed 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

For the purpose of 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, the 2013 rural and urban information is presented in the following order:

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

Overview

In 2013:

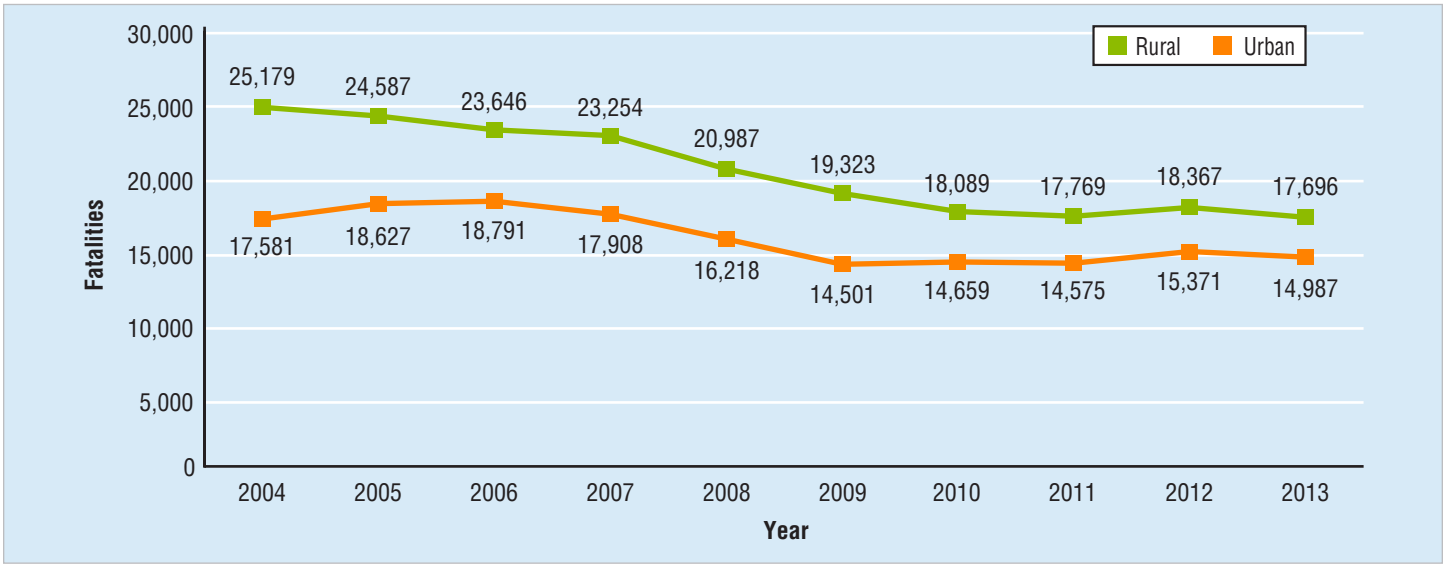
- There were 30,057 fatal motor vehicle traffic crashes resulting in 32,719 fatalities.
- Of these 30,057 fatal traffic crashes, there were 15,998 (53%) that occurred in rural areas, 14,026 (47%) that occurred in urban areas, and 33 (<0.5%) that occurred in unknown areas.
- Of these 32,719 traffic fatalities, there were 17,696 (54%) that occurred in rural areas, 14,987 (46%) that occurred in urban areas, and 36 (<0.5%) that occurred in unknown areas.
- According to the 2013 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 54 percent of all traffic fatalities in 2013.

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

- Rural fatalities decreased 30 percent from 25,179 in 2004 to 17,696 in 2013.
- Urban fatalities decreased 15 percent from 17,581 in 2004 to 14,987 in 2013 with some increases between 2004 and 2008.

[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, 2004–2013

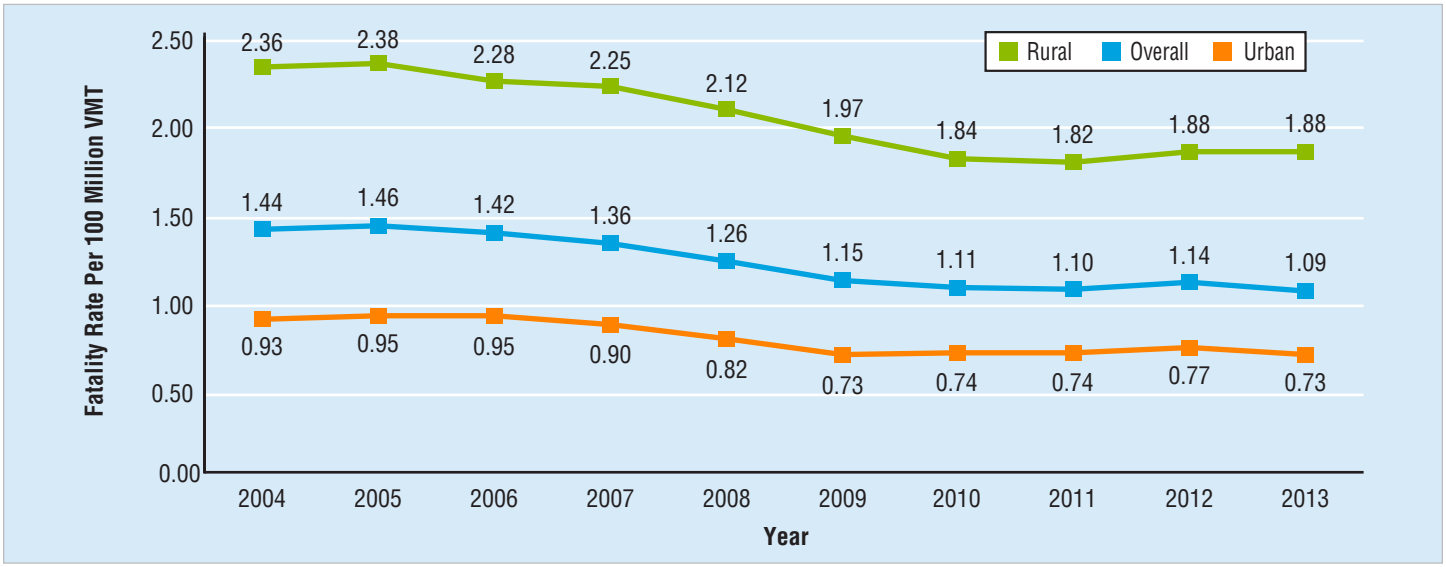


Source: Fatality Analysis Reporting System (FARS) 2004-2012 Final File, 2013 Annual Report File (ARF)

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 is available:

- The fatality rate in rural areas decreased 20 percent from 2.36 in 2004 to 1.88 in 2013.
- The fatality rate in urban areas decreased 22 percent from 0.93 in 2004 to 0.73 in 2013.
- In 2013, the fatality rate was 2.6 times higher in rural areas than in urban areas (1.88 and 0.73, respectively).

Figure 2
Fatality Rates per 100 Million Vehicle Miles Traveled, by Year and Location, 2004–2013



Sources: FARS 2004-2012 Final File, 2013 ARF; VMT – Federal Highway Administration

Time of Day

Of the 15,998 rural fatal crashes, there were 8,393 (52%) that occurred during the day (6 a.m. to 5:59 p.m.) and 7,439 (46%) that occurred during the night (6 p.m. to 5:59 a.m.). Of the 14,026 urban fatal crashes, there were 7,784 (55%) that occurred during the day and 6,187 (44%) that 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.

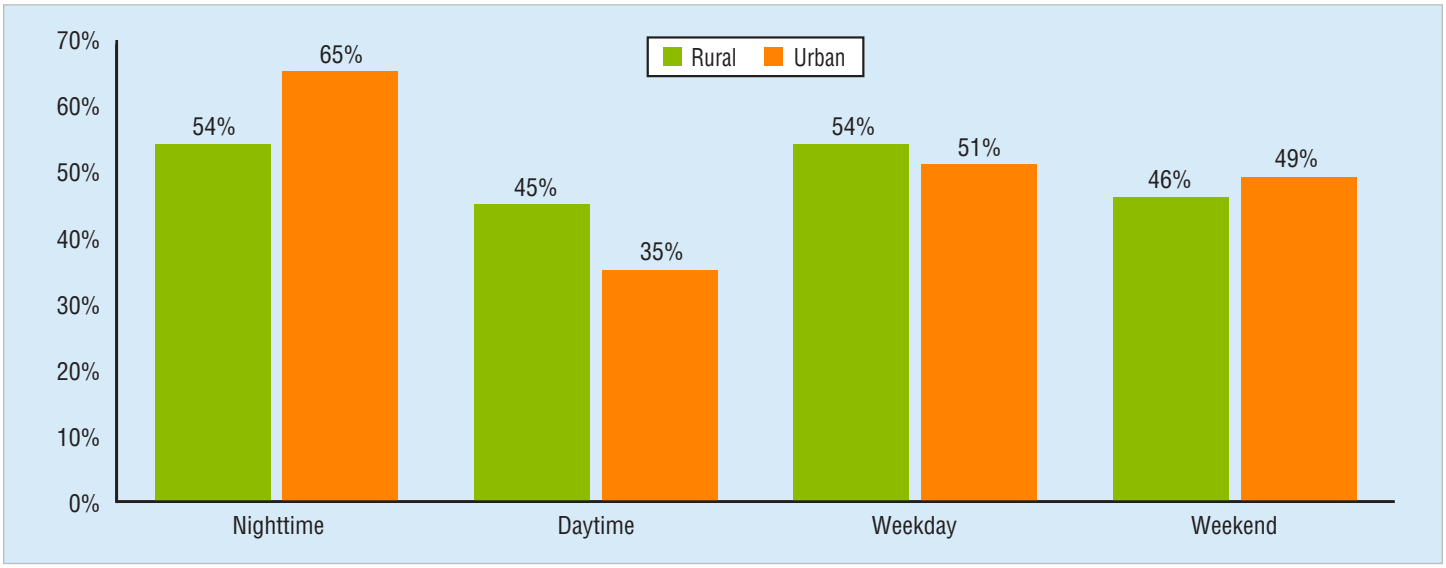
In 2013:

- Of the 32,719 traffic fatalities, there were 9,613 (29%) who were killed in speeding-related crashes.
- Of the 17,696 rural traffic fatalities, there were 5,346 (30%) who were killed in speeding-related crashes.
- Of the 14,987 urban traffic fatalities, there were 4,258 (28%) who were killed in speeding-related crashes.

Figure 3 shows the rural and urban percentages of speeding-related fatalities in traffic crashes in 2013, 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.):

- Over half (54%) of rural area speeding-related fatalities occurred at night and 46 percent occurred over the weekend.
- Nearly two-thirds (65%) of urban area speeding-related fatalities occurred at night and 49 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 the Week, 2013



Source: FARS 2013 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.

In 2013, 66 percent of drivers involved in urban fatal crashes were on roadways where the posted speed limit was 50 miles per hour (mph) or less. In rural fatal crashes, 69 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 and percentage of traffic fatalities by location (rural/urban) and the highest driver BAC in the crash if one or more drivers were alcohol-impaired.

- Of the 10,076 alcohol-impaired-driving fatalities in 2013, there were 5,473 (54%) that occurred in rural areas and 4,590 (46%) that occurred in urban areas.
- Alcohol-impaired-driving fatalities decreased by 23 percent from 13,099 in 2004 to 10,076 in 2013.
  - Rural alcohol-impaired-driving fatalities decreased by 29 percent from 7,661 in 2004 to 5,473 in 2013.
  - Urban alcohol-impaired-driving fatalities decreased by 15 percent from 5,415 in 2004 to 4,590 in 2013.

Table 1
Traffic Fatalities, by Location and the Highest Driver* BAC in the Crash, 2004 and 2013

	2004			2013		
		Alcohol-Impaired-Driving Fatalities BAC=.08+			Alcohol-Impaired-Driving Fatalities BAC=.08+	
Location	Total Fatalities	Number	Percent	Total Fatalities	Number	Percent
Rural	25,179	7,661	30%	17,696	5,473	31%
Urban	17,581	5,415	31%	14,987	4,590	31%
Total**	**42,836**	**13,099**	**31%**	**32,719**	**10,076**	**31%**

Source: FARS 2004 Final File, 2013 ARF
* Includes motorcycle riders.
** Includes fatalities where location was unknown.

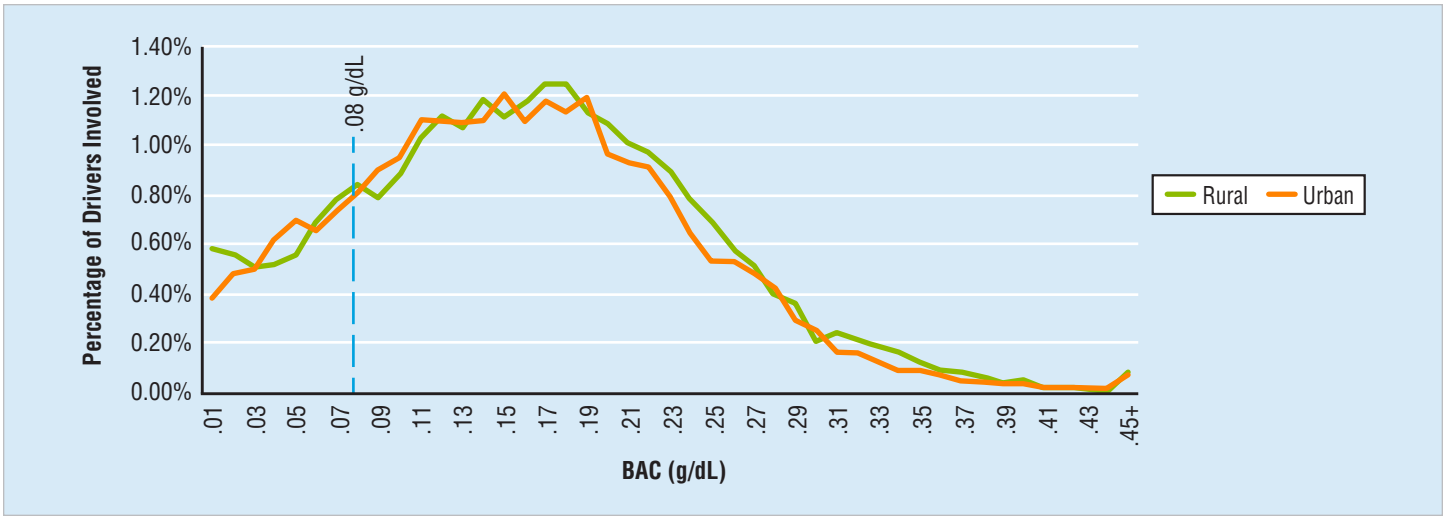
Of the 44,574 drivers involved in fatal traffic crashes in 2013, there were 9,461 (21%) who were alcohol-impaired. Of these alcohol-impaired drivers, there were 5,048 (53%) who were driving in rural areas at the time of the crash and 4,401 (47%) who were driving in urban areas.

The highest percentages of alcohol-impaired drivers involved in fatal crashes among all age groups in 2013 were drivers 21 to 24 years old (33%), followed by drivers 25 to 34 years old (29%) and 35 to 44 years old (24%). Rural and urban alcohol-impaired drivers followed this trend with 21- to 24-year-olds (35% and 31%, respectively), followed by 25-to 34-year-olds (30% and 29%, respectively) and 35- to 44-year-olds (26% and 22%, respectively).

In cases where drivers involved in fatal crashes in 2013 had one or more previous convictions for driving while intoxicated (DWI), 59 percent of rural drivers were alcohol-impaired and 52 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 .17 g/dL. For urban areas, it was .15 g/dL.

Figure 4
Distribution of Blood Alcohol Concentration (BAC) of Drivers Involved in Fatal Crashes, by Location, 2013



Source: FARS 2013 ARF

Restraint Use

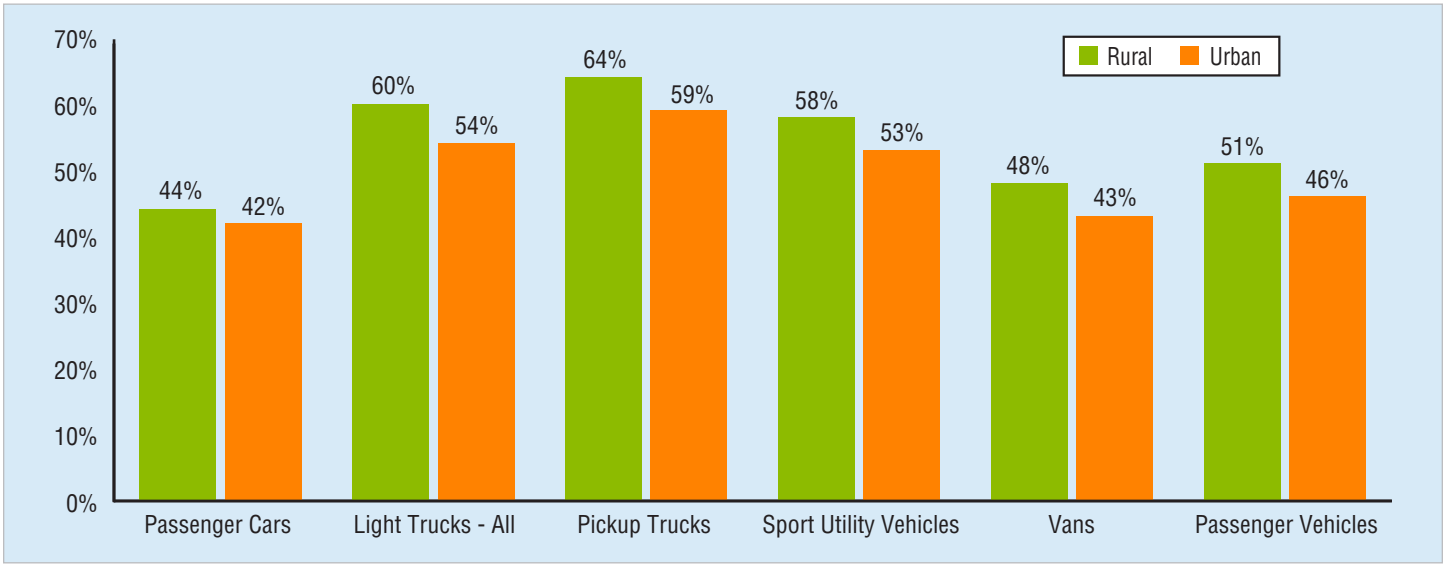
The 2013 National Occupant Protection Use Survey (NOPUS) observed that the seat belt use rate among front seat passenger vehicle (defined as passenger cars and light trucks) occupants in urban areas was 87 percent, and rural occupants were observed to have a use rate of 85 percent (see NHTSA Research Note *Seat Belt Use in 2013 – Overall Results*, Report No. DOT HS 811 875).

Of the 21,132 passenger vehicle occupants killed in 2013, there were 13,038 (62%) who were killed in rural areas and 8,079 (38%) who were killed in urban areas.

Figure 5 presents the 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 2013:

- Fifty-one percent of rural passenger vehicle occupants killed were unrestrained based on known restraint use as compared to 46 percent of urban passenger vehicle occupants killed.
- Nearly two-thirds (64%) of rural pickup truck occupants killed were unrestrained based on known restraint use – the highest percentage of any passenger vehicle occupants killed among both rural and urban areas.

Figure 5
Urban and Rural Percentages of Unrestrained* Passenger Vehicle Occupant Fatalities, by Vehicle Type, 2013



Source: FARS 2013 ARF
*Based on known restraint use.

Rollover Crashes

Of the 13,038 rural passenger vehicle occupants killed, there were 5,057 (39%) who were in vehicles that rolled over; of the 8,079 urban passenger vehicles occupants killed, there were 1,956 (24%) who were in vehicles that rolled over. Data further shows that 69 percent of rural and 63 percent of urban passenger vehicle occupants killed were unrestrained in rollover vehicles (based on known restraint use).

In 2013, SUVs involved in rural fatal crashes experienced the highest rollover percentage at 38 percent. Other rural rollover percentages were 32 percent for pickup trucks, 21 percent for passenger cars, 20 percent for vans, and 16 percent for large trucks. In urban areas, vehicles experienced lower rollover percentages: 18 percent for SUVs, 14 percent for pickup trucks, 10 percent for vans, 9 percent for passenger cars, and 8 percent for large trucks.

Driver Characteristics

In 2013, rural drivers involved in fatal crashes were found to have a higher percentage of valid driver's licenses than urban drivers (87% and 84%, respectively).

There were 20,871 drivers killed in motor vehicle traffic crashes in 2013. Sixty-four percent of rural drivers died at the scenes of the crashes, compared to 49 percent of urban drivers. Data also shows that 42 percent of all drivers killed were transported to hospitals and 4 percent of these drivers died en route. Rural drivers represented 65 percent of drivers who died en route to hospitals compared to 35 percent for urban drivers.

Fatalities by State

For each State and the District of Columbia in 2013, 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.

Table 2

Rural and Urban Traffic Fatalities, by State, 2013

State	Location						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	562	66%	284	33%	6	1%	852	100%
Alaska	33	65%	18	35%	0	0%	51	100%
Arizona	340	40%	506	60%	3	0%	849	100%
Arkansas	358	74%	125	26%	0	0%	483	100%
California	1,166	39%	1,834	61%	0	0%	3,000	100%
Colorado	244	51%	237	49%	0	0%	481	100%
Connecticut	132	48%	142	51%	2	1%	276	100%
Delaware	51	52%	48	48%	0	0%	99	100%
Dist of Columbia	0	0%	20	100%	0	0%	20	100%
Florida	970	40%	1,437	60%	0	0%	2,407	100%
Georgia	556	47%	621	53%	2	0%	1,179	100%
Hawaii	40	39%	62	61%	0	0%	102	100%
Idaho	175	82%	39	18%	0	0%	214	100%
Illinois	411	41%	580	59%	0	0%	991	100%
Indiana	535	68%	248	32%	0	0%	783	100%
Iowa	256	81%	61	19%	0	0%	317	100%
Kansas	271	77%	79	23%	0	0%	350	100%
Kentucky	494	77%	144	23%	0	0%	638	100%
Louisiana	342	49%	361	51%	0	0%	703	100%
Maine	141	97%	4	3%	0	0%	145	100%
Maryland	167	36%	295	63%	3	1%	465	100%
Massachusetts	48	15%	278	85%	0	0%	326	100%
Michigan	429	45%	516	54%	2	0%	947	100%
Minnesota	256	66%	131	34%	0	0%	387	100%
Mississippi	519	85%	94	15%	0	0%	613	100%
Missouri	459	61%	298	39%	0	0%	757	100%
Montana	224	98%	5	2%	0	0%	229	100%
Nebraska	170	81%	41	19%	0	0%	211	100%
Nevada	82	31%	180	69%	0	0%	262	100%
New Hampshire	87	64%	48	36%	0	0%	135	100%
New Jersey	79	15%	463	85%	0	0%	542	100%
New Mexico	215	69%	95	31%	0	0%	310	100%
New York	630	53%	569	47%	0	0%	1,199	100%
North Carolina	860	67%	426	33%	3	0%	1,289	100%
North Dakota	136	92%	12	8%	0	0%	148	100%
Ohio	513	52%	471	48%	5	1%	989	100%
Oklahoma	449	66%	229	34%	0	0%	678	100%
Oregon	202	65%	111	35%	0	0%	313	100%
Pennsylvania	629	52%	579	48%	0	0%	1,208	100%
Rhode Island	5	8%	60	92%	0	0%	65	100%
South Carolina	614	80%	153	20%	0	0%	767	100%
South Dakota	118	87%	17	13%	0	0%	135	100%
Tennessee	530	53%	465	47%	0	0%	995	100%
Texas	1,665	49%	1,717	51%	0	0%	3,382	100%
Utah	107	49%	113	51%	0	0%	220	100%
Vermont	58	84%	11	16%	0	0%	69	100%
Virginia	473	64%	260	35%	7	1%	740	100%
Washington	223	51%	213	49%	0	0%	436	100%
West Virginia	241	73%	91	27%	0	0%	332	100%
Wisconsin	359	66%	181	33%	3	1%	543	100%
Wyoming	72	83%	15	17%	0	0%	87	100%
U.S. Total	**17,696**	**54%**	**14,987**	**46%**	**36**	**0%**	**32,719**	**100%**
Puerto Rico	210	61%	134	39%	0	0%	344	100%

Source: FARS 2013 ARF

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

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2015, July). *Rural/urban comparison: 2013 data.* (Traffic Safety Facts. Report No. DOT HS 812 181). 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. General information on highway traffic safety is online 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,* 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.

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