



DOT HS 811 821

August 2013

# Rural/Urban Comparison

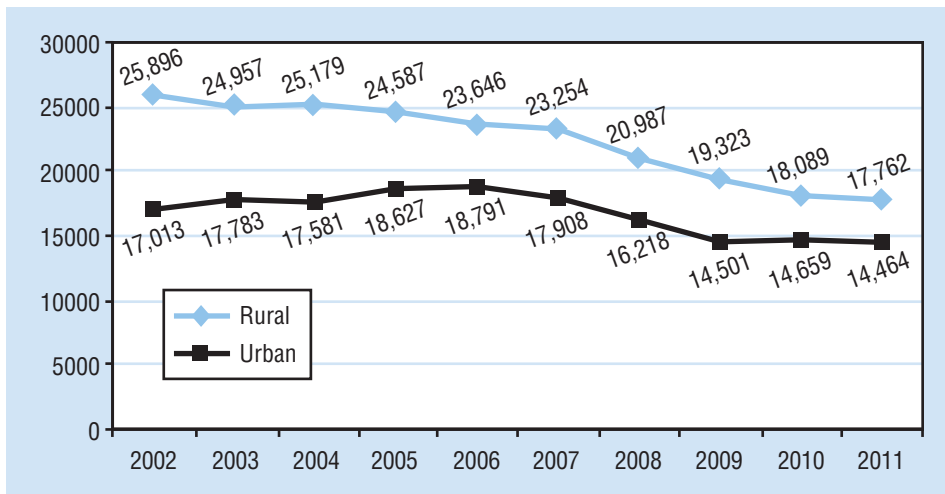
## Overview

This fact sheet contains statistics on motor vehicle 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 the national totals). Rural and urban boundaries are determined by the State highway departments and approved by the Federal Highway Administration.

In 2011, there were 29,757 fatal crashes resulting in 32,367 fatalities. Rural areas accounted for 54 percent (16,053) of the fatal crashes and 55 percent (17,762) of the fatalities as compared to urban areas that accounted for 46 percent (13,578) of the fatal crashes and 45 percent (14,464) of the fatalities. Additionally, 126 fatal crashes resulting in 141 fatalities occurred in areas where land use was unknown. According to the latest rural and urban population data from the Census Bureau, 19 percent of the U.S. population lived in rural areas, however, rural fatalities accounted for 55 percent of all traffic fatalities in 2011.

*Although 19 percent of the U.S. population lived in rural areas, rural fatalities accounted for 55 percent of all traffic fatalities in 2011. From 2002 to 2011, rural fatalities decreased 31 percent, whereas urban fatalities decreased by 15 percent.*

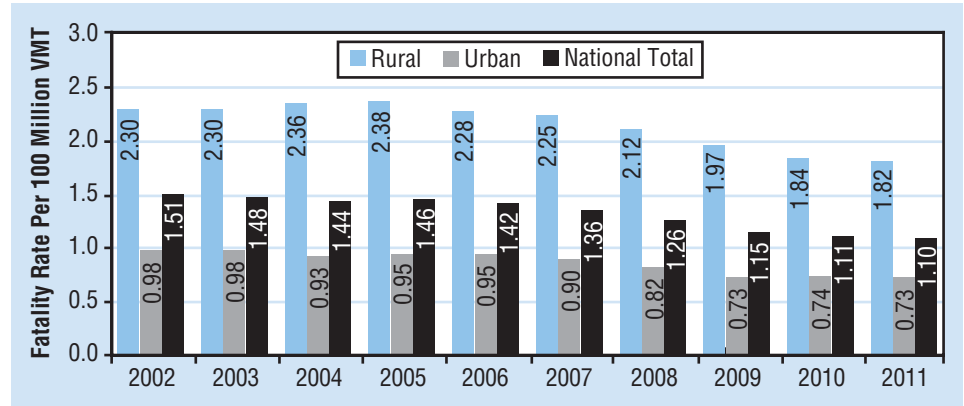
Figure 1  
**Motor Vehicle Traffic Fatalities, by Year and Location, 2002–2011**



## Trends

From 2002 to 2011, rural fatalities decreased 31 percent from 25,896 in 2002 to 17,762 in 2011 whereas urban fatalities decreased by 15 percent from 17,013 in 2002 to 14,464 in 2011 (Figure 1). The fatality rate per 100 million vehicle miles traveled in rural areas declined by 21 percent from 2.30 in 2002 to 1.82 in 2011. During the same time period the fatality rate per 100 million vehicle miles traveled in urban areas declined by 26 percent from 0.98 in 2002 to 0.73 in 2011 (Figure 2).

Figure 2  
**Fatalities per 100 Million Vehicle Miles Traveled, by Year and Location, 2002–2011**



Source: Vehicle Miles Traveled – Federal Highway Administration

In 2011, the fatality rate per 100 million vehicle miles traveled was 2.5 times higher in rural areas than in urban areas (1.82 and 0.73, respectively).

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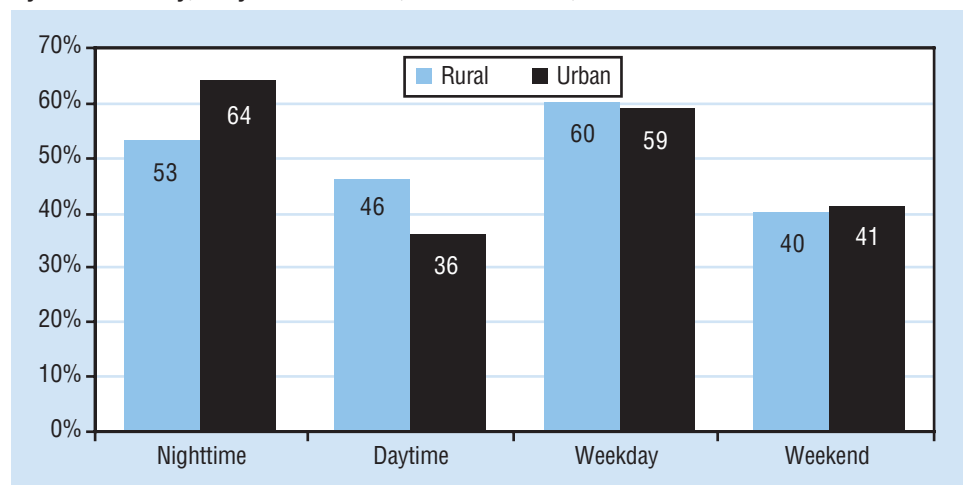
### Speeding

According to 2011 National Highway Traffic Safety Administration data, people killed in speeding-related crashes represented almost one-third (9,944) of the fatalities in motor vehicle traffic crashes. NHTSA 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 rural areas, 31 percent (5,572) of the fatalities occurred in speeding-related crashes as compared to 30 percent (4,327) in urban areas.

Data also showed that in 2011, over half (53%) of rural area speeding-related fatalities occurred at night (6 p.m. to 5:59 a.m.) and 40 percent occurred over the weekend, whereas in urban areas, nearly two-thirds (64%) of speeding-related fatalities occurred at night and 41 percent took place over the weekend (Figure 3).

Figure 3  
**Percentages of Speeding-Related Fatalities in Motor Vehicle Traffic Crashes, by Time of Day, Day of the Week, and Location, 2011**



## Time of Day

In rural areas, 53 percent of the fatal crashes occurred during the day, while 46 percent occurred at night. In urban areas, 55 percent of the fatal crashes occurred at night (6 p.m. to 5:59 a.m.) and 44 percent occurred during the day (6 a.m. to 5:59 p.m.).

In 2011, 67 percent of all urban fatal crashes occurred on roadways where the posted speed limit was 50 mph or less. On rural roadways, 67 percent of fatal crashes occurred when the posted speed limit was 55 mph or higher.

## Alcohol

In 2011, 9,878 people were killed in alcohol-impaired driving crashes. Rural areas accounted for 54 percent (5,376) of these fatalities as compared to 45 percent (4,465) in urban areas. Data has also shown that over the 10 years from 2002 to 2011, alcohol-impaired-driving fatalities decreased by 27 percent nationwide. In rural areas alcohol-impaired-driving fatalities decreased by 35 percent while urban areas showed a 15-percent decrease.

Table 1

### Fatalities in Motor Vehicle Traffic Crashes, by Location and the Highest Driver\* BAC in the Crash, 2002 and 2011

Location	2002			2011		
	Total Fatalities	Alcohol-Impaired Driving Fatalities BAC=.08+		Total Fatalities	Alcohol-Impaired Driving Fatalities BAC=.08+	
		Number	Percent		Number	Percent
Rural	25,896	8,218	32	17,762	5,376	30
Urban	17,013	5,231	31	14,464	4,465	31
<b>Total**</b>	<b>43,005</b>	<b>13,472</b>	<b>31</b>	<b>32,367</b>	<b>9,878</b>	<b>31</b>

\* Includes motorcycle riders.

\*\* Includes fatalities where location was unknown.

In 2011, 43,668 drivers were involved in fatal motor vehicle traffic crashes. Of those drivers, 21 percent (9,296) were found to be driving with a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher. Drivers in rural areas accounted for 54 percent of the alcohol-impaired drivers versus 46 percent in urban areas.

In fatal crashes, the highest percentages of drivers with BACs of .08 g/dL or higher were recorded for drivers 21 to 24 years old (32%), followed by ages 25 to 34 (30%) and 35 to 44 (24%). Rural and urban drivers followed this trend with 21- to 24-year-olds (33% and 32%) having the highest percentage followed by 25- to 34-year-olds (30% and 30%) and 35- to 44-year-olds (25% and 23%).

In cases where drivers had one or more previous DWI convictions, data shows that in rural areas 57 percent of drivers involved in fatal crashes were alcohol-impaired as compared to 52 percent in urban areas.

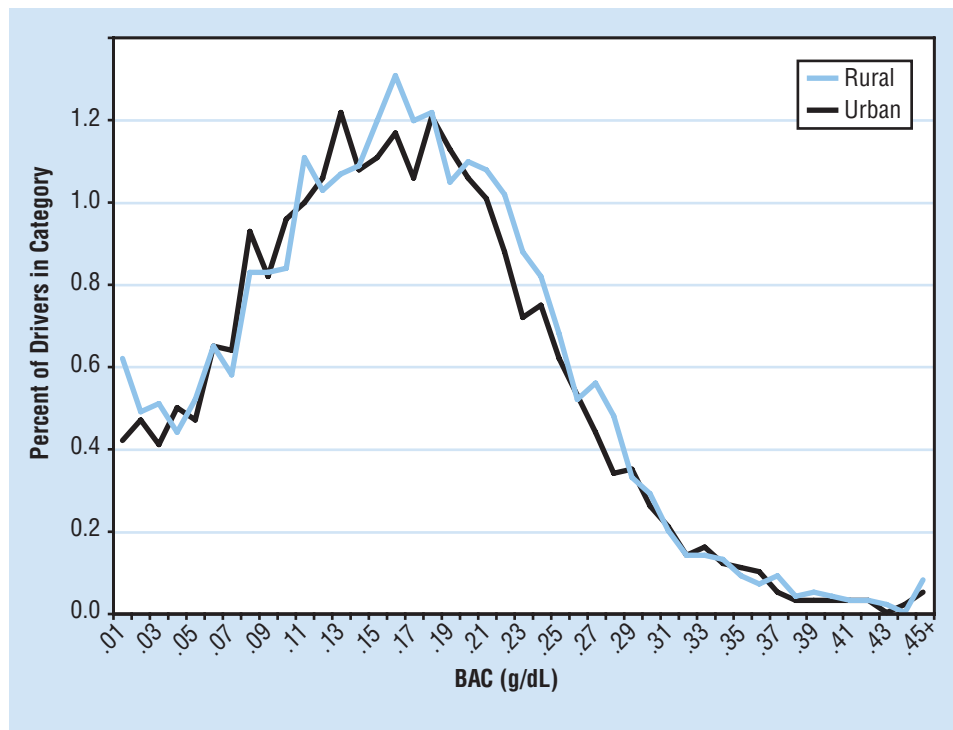
The most frequently recorded BAC among drinking drivers involved in fatal crashes in rural areas was .16 g/dL, and in urban areas was 0.13 g/dL (Figure 4).

*From 2002 to 2011, alcohol-impaired-driving fatalities in rural areas decreased by 35 percent, while urban areas showed a 15-percent decrease.*

*In 2011, the seat belt use rate among occupants of vehicles in urban areas was 85 percent and rural occupants were observed to have a use rate of 81 percent (2011 NOPUS).*

*In 2011, 54 percent of the passenger vehicle occupants killed in rural areas were unrestrained compared to 49 percent of urban passenger vehicle occupants killed.*

Figure 4  
Distribution of Blood Alcohol Concentration (BAC) of Drivers Involved in Fatal Crashes, by Location, 2011



## Restraint Use

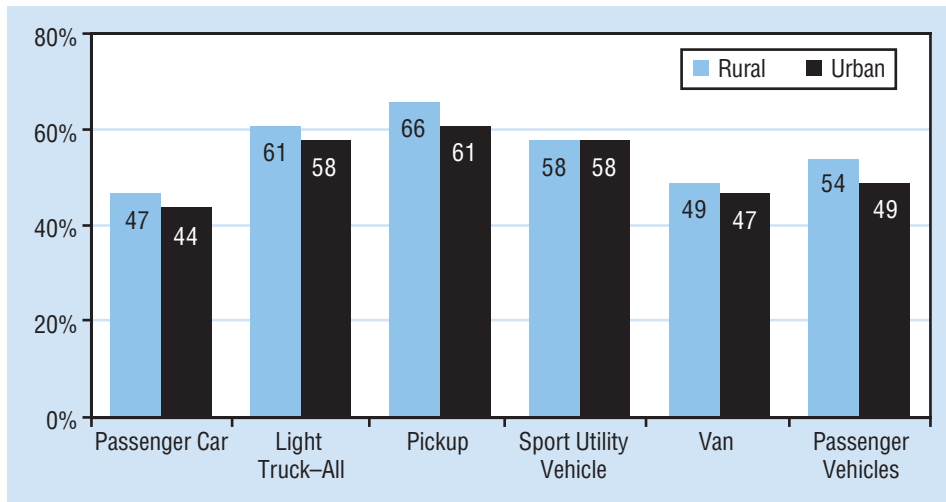
The 2011 National Occupant Protection Use Survey (NOPUS) shows that the seat belt use rate among occupants of vehicles in urban areas was 85 percent, and rural occupants were observed to have a use rate of 81 percent (see NHTSA Research Note Seat Belt Use in 2011—Overall Results (NOPUS), DOT HS 811 544).

In fatal crashes in 2011, 21,253 passenger vehicle occupants were killed. Rural areas accounted for 62 percent of these deaths. As shown in Figure 4, 54 percent of rural passenger vehicle occupants killed were unrestrained as compared to 49 percent of urban passenger vehicle occupants killed. Two-thirds (66%) 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).

Of the passenger vehicle occupants killed in rural areas, 40 percent were in vehicles that rolled over versus 26 percent in urban areas. Data further shows that 69 percent of rural and 67 percent of urban passenger vehicle occupants killed were unrestrained in rollover vehicles (based on known restraint use).

In 2011, sport utility vehicles (SUVs) involved in rural fatal crashes experienced the highest rollover percentage at 42 percent. Other vehicle rollover percentages included: 32 percent for pickups, 24 percent for vans, 22 percent for passenger cars, and 17 percent for large trucks. In urban areas, vehicles experienced a much lower percentage that included: 20 percent for SUVs, 16 percent for pickups, 10 percent for vans and passenger cars, and 8 percent for large trucks.

Figure 5  
**Percentages of Unrestrained Passenger Vehicle Occupant Fatalities, by Vehicle Type and Location, 2011**



Restraint use percentages based on known use.

When license status was known, rural drivers involved in fatal crashes were found to have a slightly higher percentage of drivers with valid driver's licenses than urban drivers, (88% versus 85%, respectively).

In 2011, 20,753 drivers were killed in motor vehicle traffic crashes. Of those, 64 percent of rural and 48 percent of urban drivers died at the scene of the crash. Data also shows that 42 percent of all drivers killed were transported to the hospital and 4 percent of these drivers died en route. Rural drivers represented 75 percent of drivers who died en route to the hospital compared to only 25 percent for urban drivers.

Table 2 shows fatalities in motor vehicle traffic crashes in 2011 by State and location.

### 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 on 800-934-8517 or via the following e-mail address: [ncsaweb@dot.gov](mailto:ncsaweb@dot.gov). General information on highway traffic safety can be accessed by Internet users at [www.nhtsa.gov/nca](http://www.nhtsa.gov/nca). 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*, *Older Population*, *Occupant Protection*, *Overview*, *Passenger Vehicles*, *Pedestrians*, *Race and Ethnicity*, *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).



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

Table 2  
**Total Fatalities by State and Location, 2011**

State	Location						Total	
	Rural		Urban		Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	514	57	378	42	2	0	894	100
Alaska	46	64	26	36	0	0	72	100
Arizona	383	46	439	53	3	0	825	100
Arkansas	424	77	125	23	0	0	549	100
California	1,186	42	1,605	58	0	0	2,791	100
Colorado	227	51	220	49	0	0	447	100
Connecticut	38	17	178	81	4	2	220	100
Delaware	58	59	41	41	0	0	99	100
Dist of Columbia	0	0	27	100	0	0	27	100
Florida	969	40	1,417	59	12	1	2,398	100
Georgia	625	51	578	47	20	2	1,223	100
Hawaii	42	42	58	58	0	0	100	100
Idaho	136	81	31	19	0	0	167	100
Illinois	398	43	520	57	0	0	918	100
Indiana	477	64	273	36	0	0	750	100
Iowa	300	83	60	17	0	0	360	100
Kansas	314	81	72	19	0	0	386	100
Kentucky	560	78	161	22	0	0	721	100
Louisiana	348	52	327	48	0	0	675	100
Maine	135	99	1	1	0	0	136	100
Maryland	170	35	311	64	4	1	485	100
Massachusetts	45	13	290	86	2	1	337	100
Michigan	396	45	493	55	0	0	889	100
Minnesota	247	67	121	33	0	0	368	100
Mississippi	508	81	122	19	0	0	630	100
Missouri	494	63	290	37	0	0	784	100
Montana	179	86	29	14	1	0	209	100
Nebraska	138	76	43	24	0	0	181	100
Nevada	108	44	137	56	1	0	246	100
New Hampshire	64	71	26	29	0	0	90	100
New Jersey	89	14	537	86	1	0	627	100
New Mexico	274	78	79	22	0	0	353	100
New York	532	46	637	54	0	0	1,169	100
North Carolina	835	68	391	32	1	0	1,227	100
North Dakota	132	89	16	11	0	0	148	100
Ohio	660	65	356	35	0	0	1,016	100
Oklahoma	497	71	199	29	0	0	696	100
Oregon	217	66	114	34	0	0	331	100
Pennsylvania	640	50	646	50	0	0	1,286	100
Rhode Island	7	11	59	89	0	0	66	100
South Carolina	694	84	134	16	0	0	828	100
South Dakota	96	86	15	14	0	0	111	100
Tennessee	548	58	398	42	0	0	946	100
Texas	1,461	48	1,547	51	8	0	3,016	100
Utah	116	48	124	52	0	0	240	100
Vermont	42	76	13	24	0	0	55	100
Virginia	405	53	279	37	80	10	764	100
Washington	276	60	179	39	2	0	457	100
West Virginia	238	71	99	29	0	0	337	100
Wisconsin	377	65	205	35	0	0	582	100
Wyoming	97	72	38	28	0	0	135	100
<b>National</b>	<b>17,762</b>	<b>55</b>	<b>14,464</b>	<b>45</b>	<b>141</b>	<b>0</b>	<b>32,367</b>	<b>100</b>
Puerto Rico	192	53	167	47	0	0	359	100