U.S. Departmentof Transportation
National HighwayTraffic
SafetyAdministration

DOT-HS-809-739

Traffic Safety Facts 2002

Rural/Urban Comparison

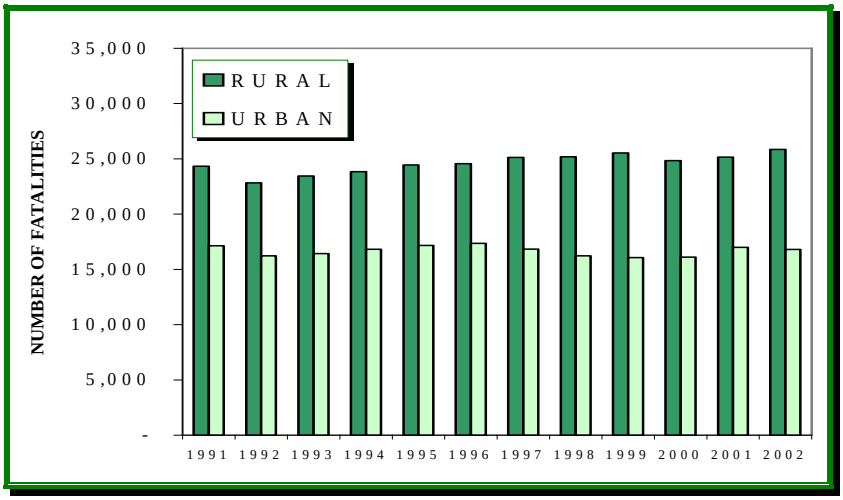
In 2002, rural fatal crashes accounted for 60 percent of all traffic fatalities, 39 percent of the vehicle miles traveled and 21 percent of the population. Since 1992, the number of urban fatalities has been relatively constant. However, the number of rural fatalities has been increasing.

The rural (urban) fatality rate has declined from 2.8 (1.3) fatalities per 100 millions of Vehicle Miles Traveled (m VMT) in 1991 to 2.3 (1.0) fatalities per 100 (m VMT) in 2002, a decrease of 18 (23) percent.

OVERVIEW/TRENDS

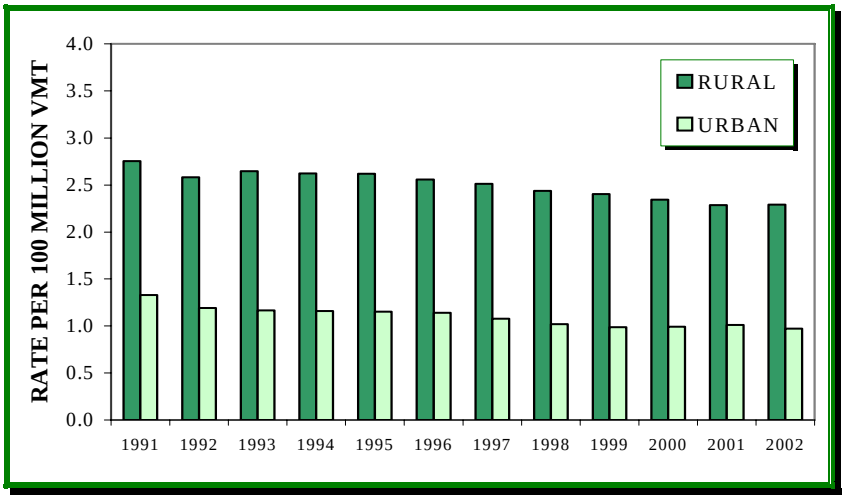
The 2002 crash data show that there were 22,716 fatal crashes involving 33,655 vehicles and 58,472 individuals, resulting in 25,849 fatalities in rural areas. Urban areas accounted for 15,440 fatal crashes involving 24,223 vehicles and 42,340 individuals resulting in 16,792 fatalities.

Figure 1. Number of Traffic Fatalities By Year and Location, 1991-2002



Source: NCSA, NHTSA, FARS 1991-2002
Note: 2000 Unknowns distributed between Rural and Urban

Figure 2. Fatalities per 100 Million Vehicle Miles Traveled By Year and Location, 1991-2002



Source: NCSA, NHTSA, FARS 1991-2002 and FHWA, VMT data
Note: 2000 Unknowns distributed between Rural and Urban

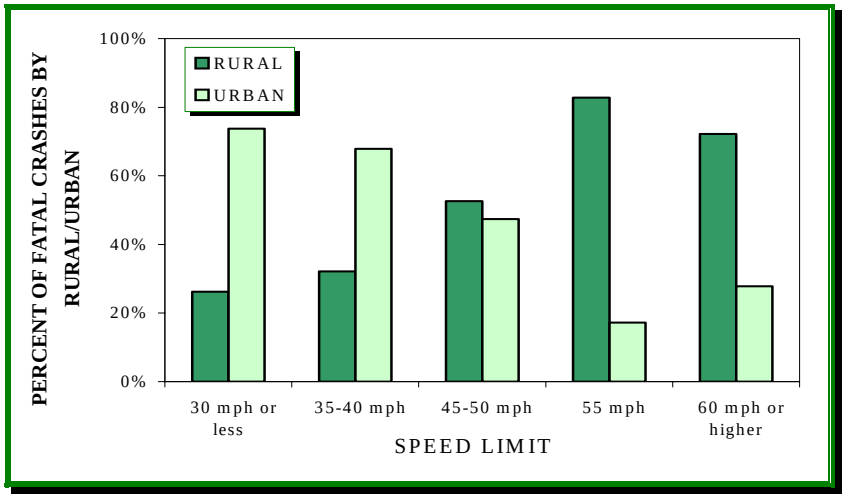
From 1991 to 2002 there were approximately 25,000 rural fatalities. However, the number of urban fatalities has decreased from 17,126 in 1991to 16,792 in 2002.

CRASHES

In 2002, there were 22,716 fatal crashes (60 percent) in rural areas and 15,440 fatal crashes (40 percent) in urban areas.

Approximately 70 percent of all fatal crashes on roadways with speed limits of 40 MPH or less are in urban areas. Fatal crashes occurring on roadways with speed limits between 45 MPH and 50 MPH are evenly split. Over 70 percent of the fatal crashes on roadways of 55 MPH or higher occur in rural areas.

Figure 3. Fatal Crashes By Speed Limit and Location, 2002



Source: NCSA, NHTSA, FARS 2002

In rural areas, 53 percent of the crashes occur in daylight, while 47 percent are at night. In urban areas the situation is reversed with 45 percent of the crashes occurring in daylight and 55 percent of the crashes at night.

Approximately 90 percent of rural fatal crashes at night occur on dark roadways and 10 percent occur on dark but lighted roadways. In urban areas, 35 percent of fatal night crashes occur on dark roadways and 65 percent occur on dark but lighted roadways.

Less than 2 percent of fatal rural crashes are classified as hit-and-run, compared to 7 percent of urban fatal crashes.

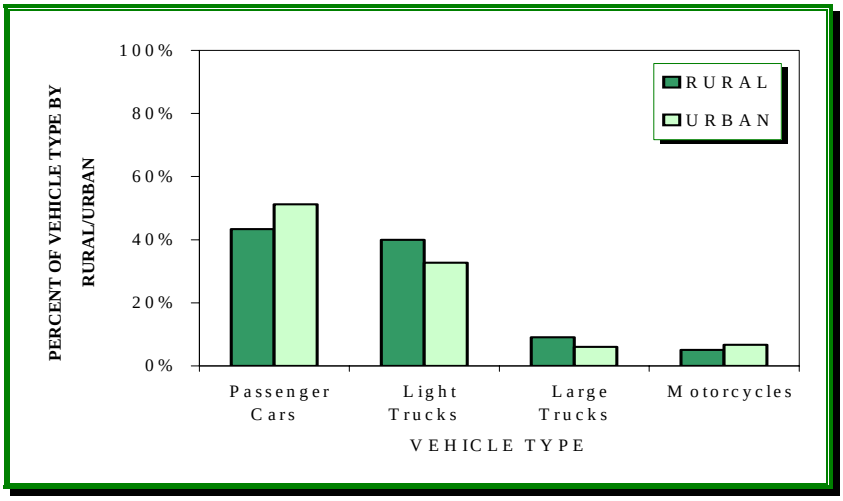
Approximately 68 percent of fatal rural crashes occur on straight roads, whereas 82 percent of fatal urban crashes are on straight roads.

Head-on crashes are more prevalent in rural areas making up 12 percent of all rural fatal crashes. In urban areas, head-on crashes are responsible for less than 7 percent of all urban fatal crashes.

VEHICLES

In 2002, 33,655 vehicles were involved in fatal rural crashes compared to 24,223 in fatal urban crashes.

Figure 4. Fatal Crashes By Vehicle Type and Location, 2002



Source: NCSA, NHTSA, FARS 2002

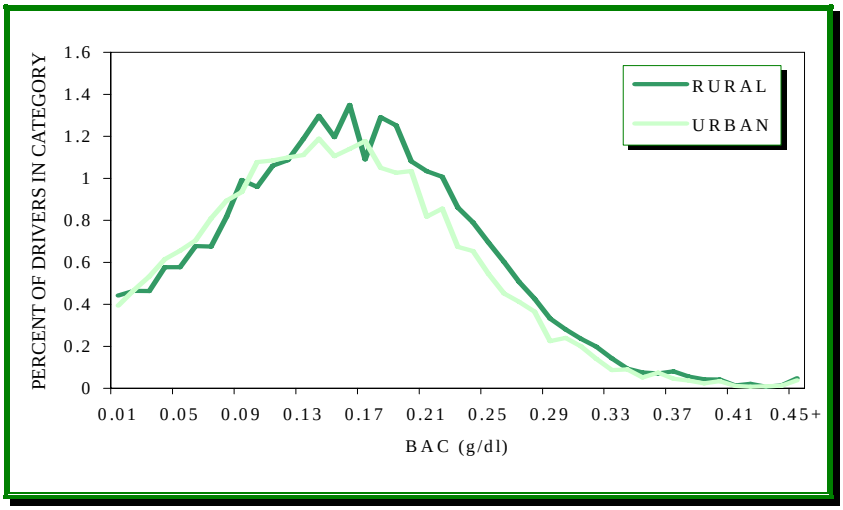
Passenger cars had the highest involvement rate for both rural and urban fatal crashes (43 percent and 51 percent respectively). Light trucks (pickups, vans and utility vehicles) accounted for 40 percent of vehicles involved in rural fatal crashes and 33 percent in urban fatal crashes.

The damage to vehicles involved in rural fatal crashes is more severe than the damage to vehicles involved in urban fatal crashes as measured by the percent of disabling deformation. Almost 81 percent of vehicles involved in rural fatal crashes are disabled, whereas 66 percent of vehicles involved in urban fatal crashes are disabled.

DRIVERS

Rural drivers involved in fatal crashes are slightly more likely to have a valid drivers license 82 percent, compared to urban drivers, 80 percent.

Figure 5. Distribution of Blood Alcohol Concentration (BAC) of Drivers Involved in Fatal Crashes by Location, 2002



Source: NCSA, NHTSA, FARS 2002

A larger percentage of rural drivers involved in fatal crashes have a blood alcohol concentration (BAC) of 0.13 or greater

Vehicle occupants involved in rural fatal crashes are ejected 16 percent of the time, while 8 percent of urban vehicle occupants are ejected.

Of all persons involved in fatal rural crashes, 52 percent are transported to a hospital compared to 50 percent in fatal urban crashes.

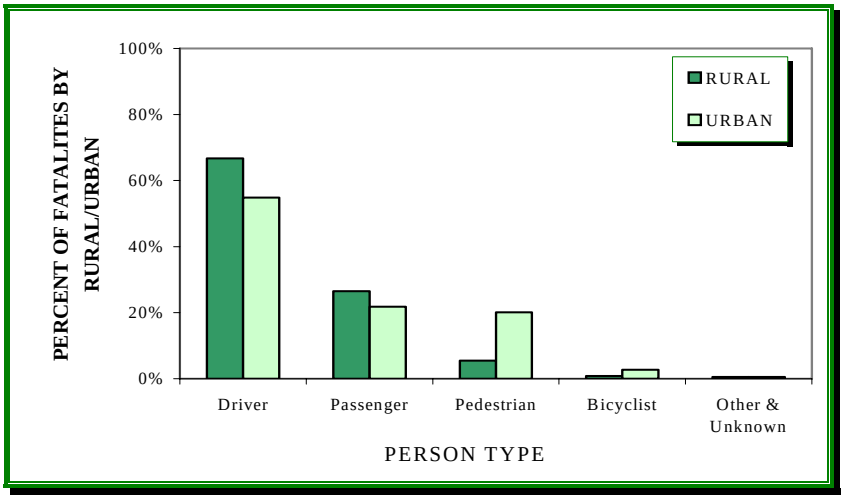
Rural areas have a larger portion of fatally injured individuals, 44 percent compared to 40 percent in urban fatal crashes.

FATALITIES

Vehicle occupant fatalities occurring in rural fatal crashes are more likely to have been ejected (27 percent) compared to occupant fatalities occurring in fatal urban crashes (15 percent).

Driver fatalities are the most common fatalities in both rural and urban fatal crashes accounting for 67 percent and 55 percent of all crash fatalities in their respective areas. Most of the pedestrian and pedalcyclist fatalities occur in urban areas.

Figure 6. Fatalities By Person Type and Location, 2002



Source: NCSA, NHTSA, FARS 2002

"Driver fatalities are the most common fatalities in both rural and urban fatal crashes areas accounting for 67 percent and 55 percent of all crash fatalities in their respective areas."

Approximately 36 percent of rural fatalities are transported to a hospital. In urban areas, 54 percent of the fatalities are transported to a hospital.

PERSONS

For more information:

Information on rural and urban traffic fatalities is available from the National Center for Statistics and Analysis, NPO-121, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at http://www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.