

# SPEEDING COUNTS

... on all roads!

Almost one of every three traffic fatalities is related to speeding, and speeding is a safety concern on all roads, regardless of their speed limits. However, much of the public concern about speeding has been focused on high-speed Interstates. The Interstate System actually has the best safety record of all roads and the lowest fatality rate per mile traveled. As Figure 1 below illustrates, almost 50 percent of speeding-related fatalities occur on lower speed collector and local roads, which carry only 28.1 percent of the total vehicle miles traveled in the United States.\* Collectors usually have legal speed limits of 55 mi/h or less. Speed limits on local roads are often 35 mi/h or lower.

## Collecting the Numbers

The U.S. Department of Transportation's (DOT's) National Highway Traffic Safety Administration (NHTSA) maintains the Fatality Analysis Reporting System (FARS), a database of all fatal crashes on public roads in the U.S. In 1999, the last year for which we have complete data, more than 41,600 people — family members, friends, and colleagues — died in motor vehicle crashes. Speeding was reported to be a factor in 32 percent of these fatalities, claiming the lives of 13,357 motorists, pedestrians, highway workers, and other road users.\*\*

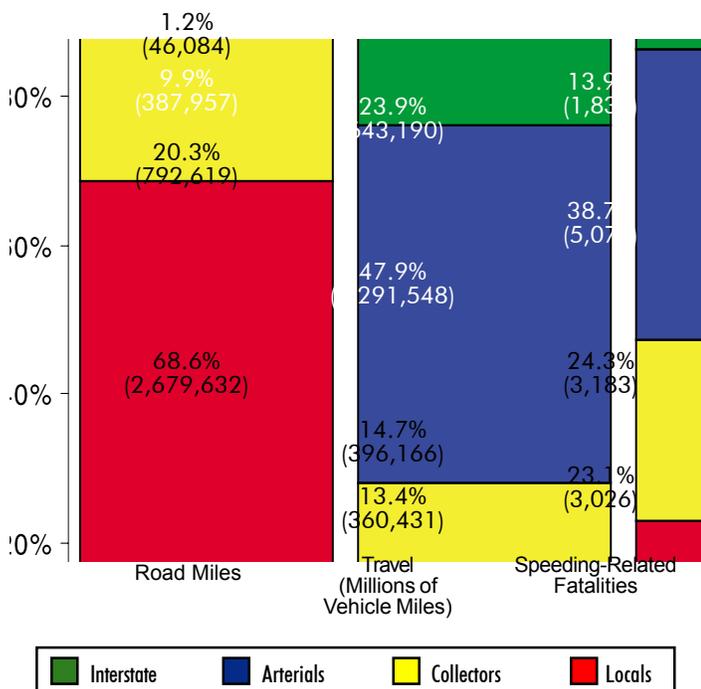


Figure 1. Total Road Miles, Travel, and Speeding-Related Fatalities by Road Function (1999)

To be designated as a speeding-related crash by the Federal Highway Administration (FHWA), the FARS analyst had to indicate that at least one of the following three criteria was met:

- Driver-related factor of driving too fast for conditions or exceeding the legal speed limit, or
- Driver charged with a speeding-related violation (other than driving too slowly), or
- Vehicle speed was at least 10 mi/h over the legal speed limit.

The U.S. DOT's FHWA and the Federal Motor Carrier Safety Administration use this definition of *speeding-related* in statistical analysis. It is tied to information on the police accident report form.

## Speeding Statistics Vary By Road Class

A relatively low percent of speeding-related fatalities — about 14 percent — occurs on Interstate highways. The lower speed roads — collectors and locals — account for almost half of all speeding-related fatalities. Yet, numbers of fatalities are only part of the picture.

When we look at the **rates** of speeding-related fatalities (calculated as fatalities per 100 million vehicle miles traveled — 100 M VMT), the deadly consequences of speeding on local and collector roads becomes even more dramatic. The speeding fatality rate for local roads is three times that for Interstates (see Figure 2).

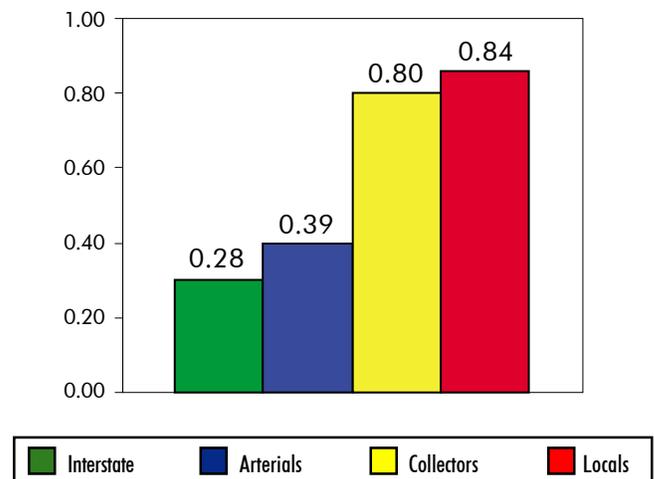


Figure 2. Speeding-Related Fatality Rate by Road Classification (1999) (Fatalities per 100 M VMT)

The difference in fatality rates by road classification reflects the difference in road design and use. The Interstate System is designed for high speeds, efficient movement of people and goods over long distances, with no at-grade intersections. Drivers have a clear view of the road, traffic, and signs. Collectors and local roads, however, are designed to provide more land access and lesser mobility. They may have sharp curves, steeper grades, and sight restrictions. The local road may also be shared by a high concentration of children and adult pedestrians, bicyclists, and an older user population.

## Road Functional Classification System

The DOT's FHWA classifies our Nation's roadways by *road function*. Each function is based on the type of service the road provides to the motoring public, and the designation is used for data and transportation planning purposes. The following information illustrates the four major road function classifications.\*\*\*

**The Interstate System** is the highest classification of roadways in the United States. These arterial roads provide the highest level of mobility and the highest speeds over the longest uninterrupted distance. Interstates nationwide usually have posted speeds between 55 and 75 mi/h.\*\*\*\* Interstate highways represent:

- 46,084 miles of public road.
- 1.2 percent of total public road mileage.
- 23.9 percent of the annual vehicle-miles traveled.
- 13.9 percent of speeding-related fatalities.
- 0.28 persons killed in speeding-related crashes per 100 M VMT.

**Other Arterials** include freeways, multilane highways, and other important roadways that supplement the Interstate System. They connect, as directly as practicable, the Nation's principal urbanized areas, cities, and industrial centers. Posted speed limits on arterials usually range between 50 and 70 mi/h. Arterial highways, not including the Interstate, represent:

- 387,957 miles of public road.
- 9.9 percent of total public road mileage.
- 47.9 percent of the annual vehicle-miles traveled.
- 38.7 percent of speeding-related fatalities.
- 0.39 persons killed in speeding-related crashes per 100 M VMT.

**Collectors** are major and minor roads that connect local roads and streets with arterials. Collectors provide less mobility than arterials at lower speeds and for shorter distances. The posted speed limit on collectors is usually between 35 and 55 mi/h. Collector roads represent:

- 792,619 miles of public road.
- 20.3 percent of total public road mileage.
- 14.7 percent of the annual vehicle-miles traveled.
- 24.3 percent of speeding-related fatalities.
- 0.80 persons killed in speeding-related crashes per 100 M VMT.

**Local** roads provide limited mobility and are the primary access to residential areas, businesses, farms, and other local areas. Local roads, with posted speed limits usually between 20 and 45 mi/h, constitute the majority of roads in the U.S. Local roads represent:

- 2,679,632 miles of public road.
- 68.6 percent of total public road mileage.
- 13.4 percent of the annual vehicle-miles traveled.
- 23.1 percent of speeding-related fatalities.
- 0.84 persons killed in speeding-related crashes per 100 M VMT.

SPEEDING COUNTS . . . on all roads. Inappropriate and dangerous speeds are not confined to high-speed roads. Crash risk increases when travel speed exceeds the roadway design, road user population, weather, and travel conditions.

\* Information excludes speeding-related fatalities where the road classification was unknown. There were 245 speeding-related fatalities in 1999 for which no road class was known.

\*\* Discussion is confined to speeding-related *fatalities* by road class because *injury* data for speeding-related crashes is not available nationally by road class.

\*\*\* Fatality data are from NHTSA's *Traffic Safety Facts, 1999*, and from special speeding-related data runs using FARS data. Public road mileage and VMT are found in FHWA's *Highway Statistics, 1999*.

\*\*\*\* Hawaii and the District of Columbia have posted speeds of 50 mi/h on Interstate highways.