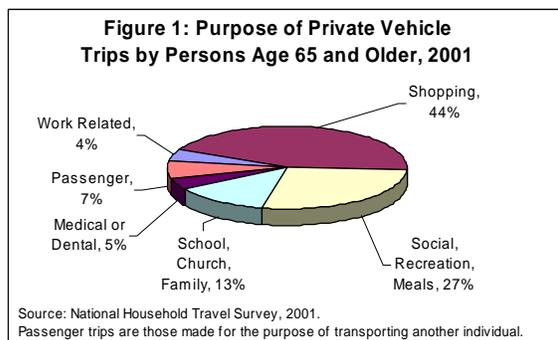


OLDER DRIVERS AND AUTOMOBILE SAFETY

The Importance of Driving

As with members of other age groups, older individuals use private vehicles more than any other mode of transportation. Persons over age 65 make close to 90 percent of their trips in a private vehicle, either as a passenger or driver. They make these daily trips for a variety of purposes (see Figure 1). The private vehicle connects them to the goods, services, and activities they need to maintain a high level of independence.



The ability to drive has many benefits for older individuals: older drivers spend more time away from home, are more engaged in their communities, and score much higher on measures of successful aging than nondrivers.¹

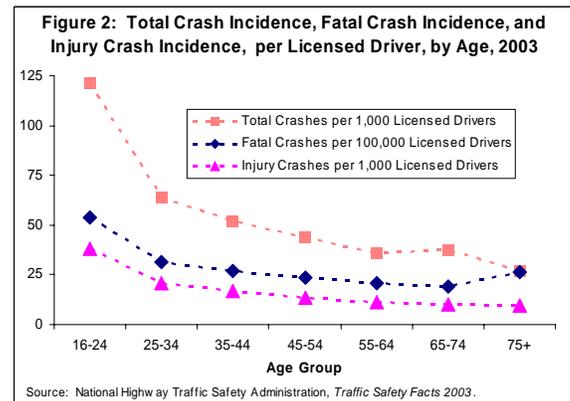
Drivers Are Getting Older

Not only is the elderly population growing, but the proportion of drivers in that population is growing rapidly as well. The percentage of persons age 65 and older who are licensed drivers has increased from 61% in 1980 to 72% in 1990 and 80% in 2003. In 2003, about 1 in 7 licensed drivers was 65 or older. By 2029, when the last of the boomers turn 65, the proportion will be close to 1 in 4.²

Older Drivers and Safety

As a group, older individuals are relatively safe drivers. Persons age 65 and older have lower rates of *crashes* and *crashes involving injury per licensed driver* than younger drivers (see Figure 2), the lowest percentage of *crashes involving alcohol*,³ and the highest rate of *seatbelt use* of any age group.⁴

The increased incidence of fatal crashes involving drivers age 75 and older can be attributed mostly to the increased fragility of older drivers and their passengers (who also tend to be older), which makes them more likely to be killed or injured in a crash. Older drivers are not overinvolved in crashes in which pedestrians, cyclists, or drivers and passengers in other vehicles are killed.⁵



Older drivers drive less frequently than other age groups. However, when measured not by number of crashes per licensed driver, but by crashes per mile driven, the data show a substantial rise in crash incidence after age 70.⁶

What Puts Older Drivers at Risk?

The Aging Process

Fragility increases with age. Older drivers and passengers are more likely to be killed than younger drivers in crashes of similar severity. In addition, as one ages, specific functions related to driving skills may decline; these functions include vision, hearing, reaction time, and cognitive and motor abilities. While many older persons are able to compensate because of years of driving experience and safe behaviors, the aging process affects people in different ways and on different timetables; thus some older people experience a decline in their driving skills.

Environmental Factors

The driving environment impacts the safety of older persons when they drive. Signs and road markings may be difficult to see at night; small lettering may be difficult to read even during the

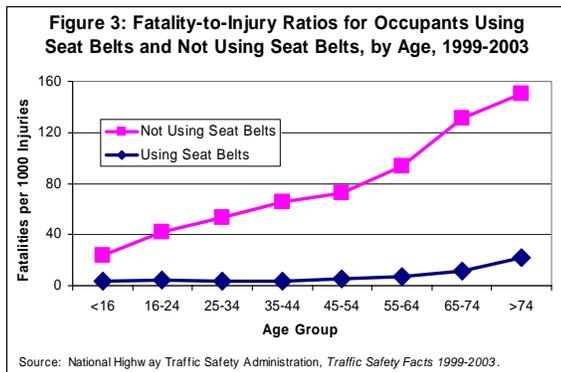
day; and large intersections with multiple access roads can be complex and confusing.

Furthermore, the vehicles that older persons use may also impede safe driving. Older drivers tend to drive older vehicles, which may lack modern safety features. In newer vehicles, instrument panels with many features may be confusing. Airbags and seatbelts may require fine-tuning so that they are less likely to break older persons' more fragile bones.

Reducing the Risk for Older Drivers

Improving Driving Behavior and Skills

Seatbelts are especially important for older persons because of their increased risk of death in crashes (see Figure 3). Seatbelt use is highest among the oldest drivers and passengers, but nearly 1 in 5 still do not use a seatbelt.



Many older persons self-regulate their driving behavior. Individuals will stop or limit driving, or adopt different travel patterns—driving shorter distances, only during the day, and avoiding rush hours, major highways, and bad weather conditions—to compensate for declining capabilities. Some states offer “graduated driving licenses” that impose restrictions tailored to compensate for particular impairments for drivers of any age.

Driver refresher courses for older adults are available. The AARP Driver Safety Program serves more than 700,000 drivers each year.

In addition, keeping fit and healthy affects driving ability. Persons age 75 or older with poor health and disability status (HDS) drive less often than persons with excellent HDS, and report more problems when they do drive.⁷ Certain medications can interfere with driving skills, especially for persons taking multiple medications, or combining medications with

alcohol. Drivers should carefully monitor their reactions to alcohol and all medications.

Improving the Vehicle and Driving Environment

Safety experts are working to enhance the safety of vehicles for older drivers. For example, automobiles are being adapted to make driving easier, including the use of features like wide-angle mirrors and increasing the readability of the instrument panel. Force-limiting airbags and seatbelts are in development.

The driving environment can also be modified. The Federal Highway Administration has developed a handbook for state officials on road design and management that improves the safety of the driving environment for older persons and all other road users.⁸ The lettering, brightness and contrast, size, and location of traffic signs can be changed to improve visibility. And finally, traffic and road design can enhance driver safety by including left-turn lanes, protected turn signals, and traffic-calming measures such as speed bumps.

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¹ AARP Public Policy Institute, *Beyond 50.05: A Report to the Nation on People Working Together for a Livable Community* (2005).

² AARP Public Policy Institute, analysis of data from Federal Highway Administration (FHWA) and U.S. Census Bureau, *Statistical Abstract of the United States: 2004-2005*.

³ National Highway Traffic Safety Administration (NHTSA), *Traffic Safety Facts 2002*.

⁴ NHTSA, *Safety Belt Use in 2003 – Demographic Characteristics*.

⁵ Braver and Trepel, “Are older drivers actually at higher risk of involvement in collisions resulting in deaths or nonfatal injuries among their passengers and other road users?” *Injury Prevention* 10:27-32 (2004).

⁶ Lyman et al., “Older driver involvements in police reported crashes and fatal crashes: trends and projections” *Injury Prevention* 8:116-120 (2002).

⁷ Ritter, Straight, and Evans, *Understanding Senior Transportation*, AARP Public Policy Institute (2002).

⁸ FHWA, *Older Driver Highway Design Handbook*, FHWA-RD-97-135 (1998).