

April 2007

OLDER DRIVER SAFETY

Knowledge Sharing Should Help States Prepare for Increase in Older Driver Population



G A O

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Highlights of [GAO-07-413](#), a report to the Special Committee on Aging, U.S. Senate

Why GAO Did This Study

As people age, their physical, visual, and cognitive abilities may decline, making it more difficult for them to drive safely. Older drivers are also more likely to suffer injuries or die in crashes than drivers in other age groups (see fig.). These safety issues will increase in significance because older adults represent the fastest-growing U.S. population segment.

GAO examined (1) what the federal government has done to promote practices to make roads safer for older drivers and the extent to which states have implemented those practices, (2) the extent to which states assess the fitness of older drivers and what support the federal government has provided, and (3) what initiatives selected states have implemented to improve the safety of older drivers. To conduct this study, GAO surveyed 51 state departments of transportation (DOT), visited six states, and interviewed federal transportation officials.

What GAO Recommends

GAO is recommending that the Secretary of Transportation direct the FHWA and NHTSA Administrators to implement a mechanism to allow states to share information on older driver safety practices. The Department of Health and Human Services agreed with the report. The Department of Transportation provided technical corrections but did not offer overall comments on the report.

www.gao.gov/cgi-bin/getrpt?GAO-07-413.

To view the full product, including the scope and methodology, click on the link above. To view the e-supplement online, click on www.gao.gov/cgi-bin/getrpt?GAO-07-517SP. For more information, contact Katherine Siggerud at (202) 512-6570 or siggerudk@gao.gov.

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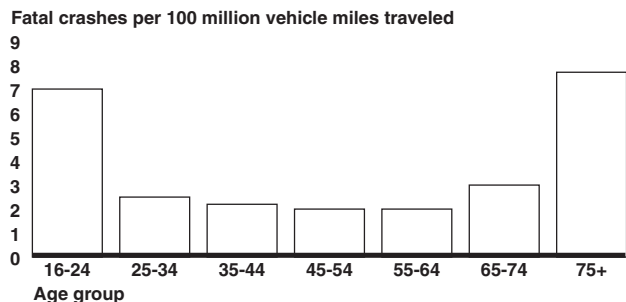
What GAO Found

The Federal Highway Administration (FHWA) has recommended practices—such as using larger letters on signs—targeted to making roadways easier for older drivers to navigate. FHWA also provides funding that states may use for projects that address older driver safety. States have, to varying degrees, adopted FHWA’s recommended practices. For example, 24 states reported including about half or more of FHWA’s practices in state design guides, while the majority of states reported implementing certain FHWA practices in roadway construction, operations, and maintenance activities. States generally do not place high priority on projects that specifically address older driver safety but try to include practices that benefit older drivers in all projects.

More than half of the states have implemented licensing requirements for older drivers that are more stringent than requirements for younger drivers, but states’ assessment practices are not comprehensive. For example, these practices primarily involve more frequent or in-person renewals and mandatory vision screening but do not generally include assessments of physical and cognitive functions. While requirements for in-person license renewals generally appear to correspond with lower crash rates for drivers over age 85, the validity of other assessment tools is less clear. The National Highway Traffic Safety Administration (NHTSA) is sponsoring research and other initiatives to develop and assist states in implementing more comprehensive driver fitness assessment practices.

Five of the six states GAO visited have implemented coordination groups to assemble a broad range of stakeholders to develop strategies and foster efforts to improve older driver safety in areas of strategic planning, education and awareness, licensing and driver fitness assessment, roadway engineering, and data analysis. However, knowledge sharing among states on older driver safety initiatives is limited, and officials said states could benefit from knowledge of other states’ initiatives.

Fatal Crashes by Driver Age Group per 100 Million Vehicle Miles Traveled (2001)



Sources: GAO analysis of NHTSA and USDOT data.

Contents

Letter

Results in Brief	1
Background	2
FHWA Has Recommended Practices and Made Funding Available to Make Roads Safer for Older Drivers, but States Generally Give Higher Priority to Other Safety Issues	5
More than Half of States Have Implemented Some Assessment Practices for Older Drivers, and NHTSA Is Sponsoring Research to Develop More Comprehensive Assessments	12
Selected States Have Implemented Coordinating Groups and Other Initiatives to Promote Older Driver Safety	28
Conclusion	35
Recommendation for Executive Action	44
Agency Comments and Our Evaluation	44

Appendixes

Appendix I: Objectives, Scope, and Methodology	46
Appendix II: States' Licensing Requirements for Older Drivers	49
Appendix III: Comments from Department of Health and Human Services	52
Appendix IV: GAO Contact and Staff Acknowledgments	54

Tables

Table 1: Most Widely Implemented Practices Recommended by FHWA for Improving Older Driver Safety	24
Table 2: Methods Reported by States for Working with Local Governments to Improve Older Driver Safety	25
Table 3: Types of Safety Projects in Which States Report Investing Resources to a Great or Very Great Extent	28
Table 4: Older Driver Safety Coordination Groups' Organizations and Functions	36
Table 5: States with Vision Testing Requirements for Older Drivers	49
Table 6: States with Accelerated Renewal Cycles for Older Drivers	50
Table 7: States Requiring In-Person Renewals	51

Figures

Figure 1: Drivers in Fatal Crashes per 100,000 Licensed Drivers (1995 to 2005)	7
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Figure 2: Fatal Crashes by Driver Age Group per 100 Million Vehicle Miles Traveled (2001)	8
Figure 3: Population Growth of Adults Aged 65 and Older	9
Figure 4: Fatal Crashes at Intersections by Driver Age (2004)	10
Figure 5: Older Driver Improvements at an Intersection	14
Figure 6: Examples of Improved Signs and Ability to See Oncoming Traffic	15
Figure 7: Older Driver Improvements at an Intersection with Traffic Signals	16
Figure 8: Examples of Improved Signals and Median Markings	17
Figure 9: Older Driver Improvements at an Interchange	19
Figure 10: Older Driver Improvements on Curves	20
Figure 11: Older Driver Improvements at Railroad Crossings	21
Figure 12: State Licensing Practices Related to Older Driver Safety	31

Abbreviations

AAMVA	American Association of Motor Vehicle Administrators
AASHTO	American Association of State and Highway Transportation Officials
AOA	Administration on Aging
CTRE	Center for Transportation Research and Education
DHSMV	Department of Highway Safety and Motor Vehicles
DOT	Department of Transportation
FADC	Florida At-Risk Driver Council
FHWA	Federal Highway Administration
GHSA	Governors Highway Safety Association
HSIP	Highway Safety Improvement Program
IDOT	Iowa Department of Transportation
LTAP	Local Technical Assistance Program
MAB	Medical Advisory Board
MDDDB	Mature Driver Database
MPO	Metropolitan Planning Organization
MUTCD	<i>Manual on Uniform Traffic Control Devices</i>
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NIA	National Institute on Aging
OCTS	Older Californian Traffic Safety Task Force
ODMVS	Oregon Driver and Motor Vehicle Services
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEMCOG	Southeast Michigan Council of Governments
SHSP	Strategic Highway Safety Plan
STIP	Statewide Transportation Improvement Program

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United States Government Accountability Office
Washington, D.C. 20548

April 11, 2007

The Honorable Herb Kohl
Chairman
The Honorable Gordon H. Smith
Ranking Minority Member
Special Committee on Aging
United States Senate

As people age, their physical, visual, and cognitive abilities may deteriorate, making it more difficult for them to drive safely. Furthermore, older drivers are more likely to suffer injuries or die in accidents than drivers in most other age groups, in part because of the greater frailty that comes with age. Older driver safety issues will become increasingly significant in the future because older adults represent the fastest-growing segment of the U.S. population—by 2030 the number of licensed drivers aged 65 and older is expected to nearly double to about 57 million. Consequently, efforts to build safer roads and develop better methods of assessing driver fitness are keys to helping older people continue to drive safely and maintain their mobility, independence, and health.

Concerned about the safety of older drivers, you requested that we review steps being taken by both the federal and state governments to support older driver safety initiatives. Accordingly, this report addresses (1) what the federal government has done to promote practices to make roads safer for older drivers and the extent to which states have implemented those practices, (2) the extent to which states assess the fitness of older drivers and what support the federal government has provided, and (3) what initiatives selected states have implemented to improve the safety of older drivers.

To determine what the federal government has done to promote practices to make roads safer for older drivers, we reviewed documents and interviewed officials from the Federal Highway Administration (FHWA) within the U.S. Department of Transportation (DOT). To obtain information on the extent to which states are implementing these practices, we surveyed and received responses from DOTs in each of the 50 states and the District of Columbia.¹ This report does not contain all the results from

¹This report generally refers to survey responses from the 50 states and the District of Columbia as “states’ responses.”

the survey. The survey and a more complete tabulation of the results can be viewed at www.gao.gov/cgi-bin/getrpt?GAO-07-517SP. To determine the extent to which states assess the fitness of older drivers and what support the federal government has provided, we reviewed documents and interviewed officials from the National Highway Traffic Safety Administration (NHTSA) within the U.S. DOT, the National Institute on Aging (NIA) and the Administration on Aging (AOA) within the U.S. Department of Health and Human Services (HHS), and the American Association of Motor Vehicle Administrators (AAMVA)—a nongovernmental organization that represents state driver licensing agencies. To obtain information on initiatives that selected states have implemented, we conducted case studies in six states—California, Florida, Iowa, Maryland, Michigan, and Oregon—that transportation experts identified as progressive in their efforts to improve older driver safety. The scope of our work focused on older driver safety. Prior GAO work addressed the associated issue of senior mobility for those who do not drive.² We conducted our work from April 2006 through April 2007 in accordance with generally accepted government auditing standards. (For details of our objectives, scope, and methodology, see app. I.)

Results in Brief

To make roads safer for older drivers, FHWA has recommended practices—such as using larger letters on signs, placing advance street name signs before intersections, and improving intersection layouts—for the design and operation of roadways that make them easier for older drivers to navigate. FHWA is also continuing research to demonstrate the effectiveness of these practices. While these practices are designed to address older drivers' needs, their implementation can make roads safer for all drivers. States have, to varying degrees, incorporated FHWA's older driver safety practices into their design standards, implemented the practices in roadway operation and maintenance activities, trained technical staff in applying the practices, and coordinated with local agencies to promote the use of the practices. Following are the actions taken by the 51 DOTs we surveyed in the states and District of Columbia:

- 24 states reported including about half, most, almost all, or all of FHWA's practices in their state design guides.

²GAO, *Transportation Disadvantaged Seniors: Efforts to Enhance Senior Mobility Could Benefit from Additional Guidance and Information*, [GAO-04-971](http://www.gao.gov/products/GAO-04-971) (Washington, D.C.: Aug. 30, 2004).

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- 51 states reported implementing advance traffic control warning signage on approaches to intersections.
 - 12 states reported they had trained about half, most, almost all, or all of their technical staff.
 - 38 states reported they had held sessions on older driver issues with local governments.

FHWA also provides federal highway funding that states may use to implement projects that address older driver safety. While older driver safety projects are eligible for federal highway funding, state DOTs generally place a higher priority on and commit more of their limited resources to other projects—such as railway/highway intersection safety projects, roadside hazard elimination or mitigation projects, road intersection safety projects, and roadway departure projects—that more broadly affect all drivers. Although older driver safety is not the primary focus of these projects, the projects may incorporate FHWA’s recommended practices to improve older driver safety.

More than half of the states have implemented assessment practices to support licensing requirements for older drivers that are more stringent than requirements for younger drivers. These requirements generally involve more frequent renewals (16 states), mandatory vision screening (10 states), in-person renewals (5 states), and mandatory road tests (2 states) for older drivers. In addition, all states accept physician reports and third-party referrals of concerns about drivers, while 36 states use medical advisory boards to assist licensing agencies in assessing driver fitness. However, assessment of driver fitness in all states is not comprehensive because cognitive and physical functions are generally not evaluated to the same extent as visual functions. Furthermore, the effectiveness of assessment practices used by states is largely unknown. For example, research indicates that in-person license renewal is associated with lower accident rates for older drivers—particularly for those aged 85 and older—but vision screening, road tests, and more frequent license renewal cycles are not always associated with lower older driver fatality rates. Because there is insufficient evidence on the validity and reliability of driver fitness assessments, states may have difficulty discerning which assessments to implement. Recognizing the need for better assessment tools, NHTSA is developing more comprehensive practices to assess driver fitness and intends to provide technical assistance to states in implementing these practices.

A key initiative implemented in five of the six states we visited was their use of coordination groups to assemble a broad range of stakeholders—including public agencies, academic institutions, medical professionals, and partner nongovernmental organizations—to develop strategies and implement efforts to improve older driver safety. Specific efforts under way in the states we visited were generally in areas of strategic planning, education and awareness, licensing and driver fitness assessment, engineering, and data analysis. Following are examples:

- Florida promotes education and public awareness through the Florida GrandDriver® Program that reaches out to older drivers by providing Web-based information related to driver safety courses and alternative transportation; provides training to medical, social service, and transportation professionals on older driver issues; sponsors safety talks at senior centers; and holds events to help older drivers determine if they need to make adjustments to better fit in their cars.
- Michigan conducted a demonstration program, funded jointly by state, county, and local government agencies, along with AAA Michigan, that made low-cost improvements at over 300 high-risk, signal-controlled intersections in the Detroit area; an evaluation of 30 of these intersections indicated that the injury rate for older drivers was reduced by more than twice as much as for drivers aged 25 to 64 years.

However, according to officials we spoke with in these six states, knowledge sharing among states on older driver safety practices is limited, and the general consensus of these officials is that states could benefit from knowledge of other states' initiatives to address older driver safety issues. According to these officials, sharing this information could help them make decisions about whether to implement new practices and identifying the research basis for practices could assist them in assessing the benefits to be derived from implementing a particular practice. To facilitate this transfer of knowledge between stakeholders in all states, we are recommending that the Secretary of Transportation implement a mechanism that would allow states to share information on leading practices for enhancing the safety of older drivers. This mechanism could also include information on other initiatives and guidance, such as FHWA's research on the effectiveness of road design practices and NHTSA's research on more effective driver assessment practices.

We provided a draft of this report to the Department of Health and Human Services and to the Department of Transportation for review and comment.

The Department of Health and Human Services agreed with the report and offered technical suggestions which we have incorporated, as appropriate. (See app. III for the Department of Health and Human Services' written comments.) The Department of Transportation did not offer overall comments on the report or its recommendation. The department did offer several technical comments, which we incorporated where appropriate.

Background

Driving is a complex task that depends on visual, cognitive, and physical functions that enable a person to

- see traffic and road conditions;
- recognize what is seen, process the information, and decide how to react; and
- physically act to control the vehicle.

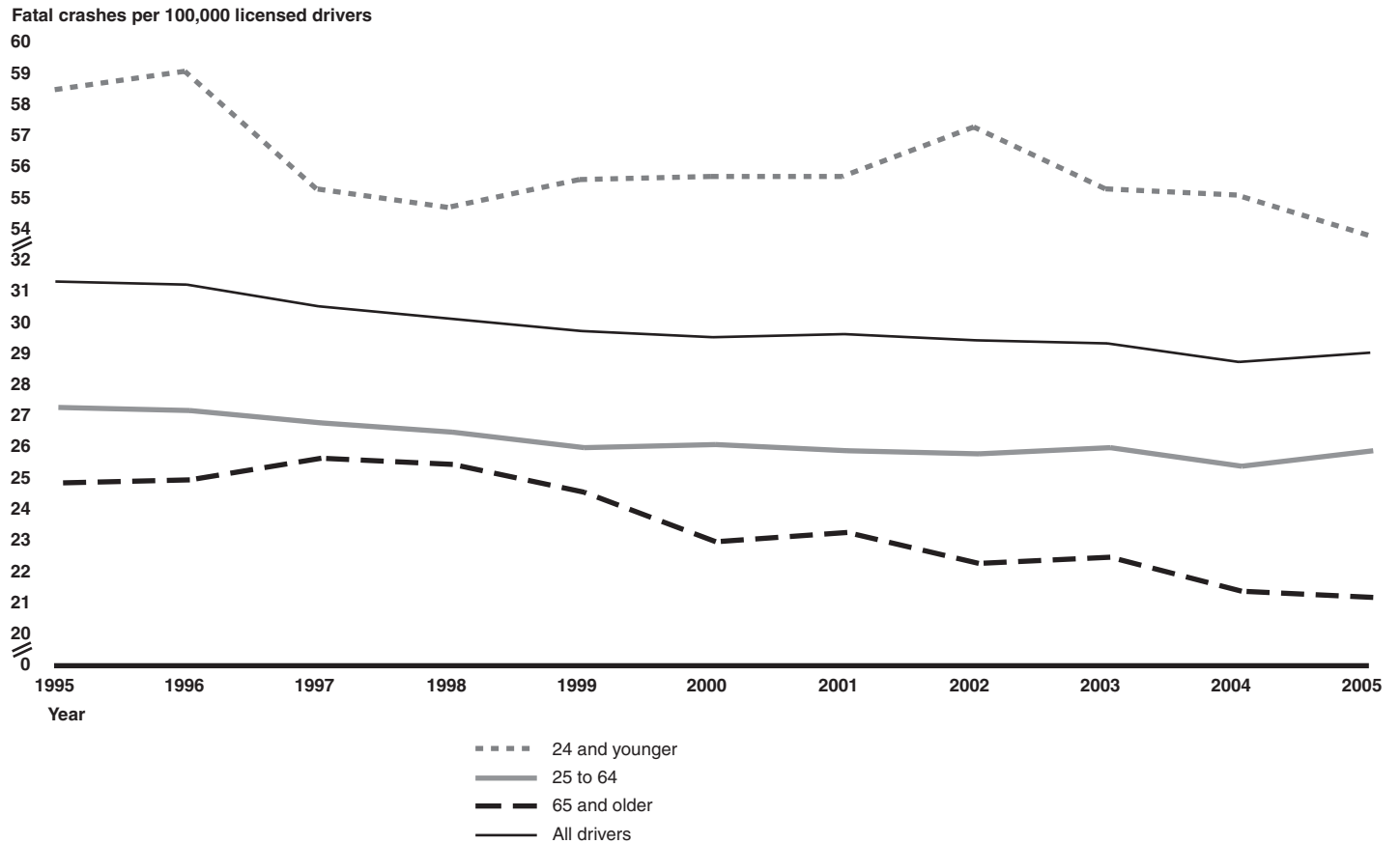
Although the aging process affects people at different rates and in different ways, functional declines associated with aging can affect driving ability. For example, vision declines may reduce the ability to see other vehicles, traffic signals, signs, lane markings, and pedestrians; cognitive declines may reduce the ability to recognize traffic conditions, remember destinations, and make appropriate decisions in operating the vehicle; and physical declines may reduce the ability to perform movements required to control the vehicle.

A particular concern is older drivers with dementia, often as a result of illnesses such as Alzheimer's disease. Dementia impairs cognitive and sensory functions causing disorientation, potentially leading to dangerous driving practices. Age is the most significant risk factor for developing dementia—approximately 12 percent of those aged 65 to 84 are likely to develop the condition while over 47 percent of those aged 85 and older are likely to be afflicted. For drivers with the condition, the risk of being involved in a crash is two to eight times greater than for those with no cognitive impairment. However, some drivers with dementia, particularly in the early stages, may still be capable of driving safely.

Older drivers experience fewer fatal crashes per licensed driver compared with drivers in younger age groups; however, on the basis of miles driven, older drivers have a comparatively higher involvement in fatal crashes. Over the past decade, the rate of older driver involvement in fatal crashes,

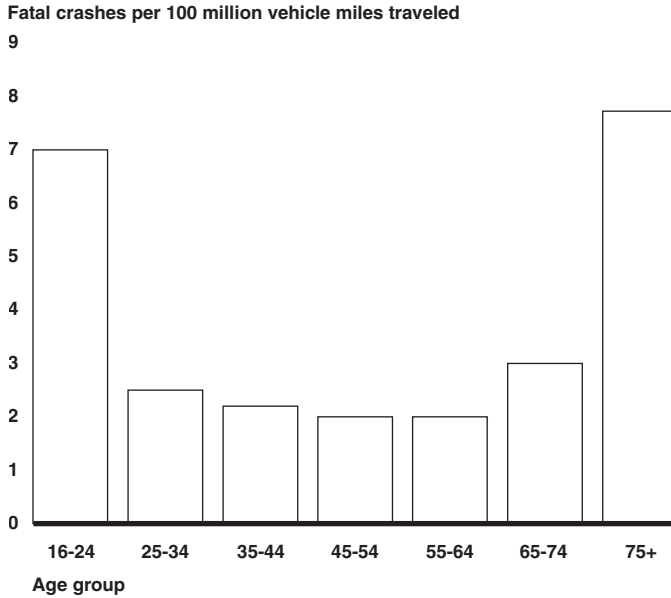
measured on the basis of licensed drivers, has decreased and, overall, older drivers have a lower rate of fatal crashes than drivers in younger age groups (see fig. 1). Older drivers' fatal crash rate per licensed driver is lower than corresponding rates for drivers in younger age groups, in part, because older drivers drive fewer miles per year than younger drivers, may hold licenses even though they no longer drive, and may avoid driving during times and under conditions when crashes tend to occur, such as during rush hour or at night. However, on the basis of miles traveled, older drivers who are involved in a crash are more likely to suffer fatal injuries than are drivers in younger age groups who are involved in crashes. As shown in figure 2, drivers aged 65 to 74 are more likely to be involved in a fatal crash than all but the youngest drivers (aged 16 to 24), and drivers aged 75 and older are more likely than drivers in all other age groups to be involved in a fatal crash.

Figure 1: Drivers in Fatal Crashes per 100,000 Licensed Drivers (1995 to 2005)



Sources: GAO analysis of NHTSA and FHWA data.

Figure 2: Fatal Crashes by Driver Age Group per 100 Million Vehicle Miles Traveled (2001)

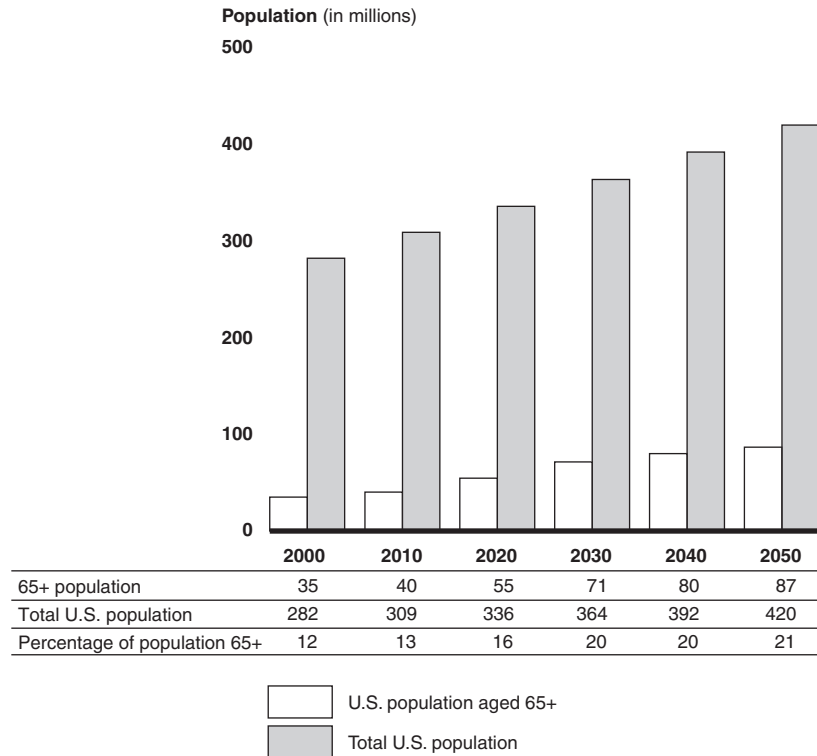


Sources: GAO analysis of NHTSA and USDOT data.

Note: 2001 is the most recent year for which age based data on vehicle miles traveled is available.

Older drivers will be increasingly exposed to crash risks because older adults are the fastest-growing segment of the U.S. population, and future generations of older drivers are expected to drive more miles per year and at older ages compared with the current older-driver cohort. The U.S. Census Bureau projects that the population of adults aged 65 and older will more than double, from 35.1 million people (12.4 percent of total population) in 2000 to 86.7 million people (20.7 percent of total population) in 2050 (see fig. 3).

Figure 3: Population Growth of Adults Aged 65 and Older

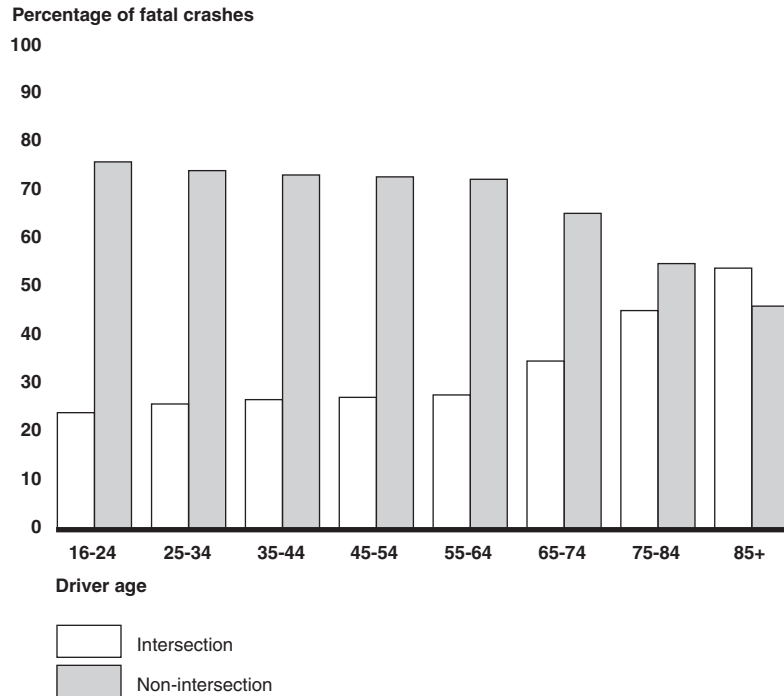


Source: GAO presentation of U.S. Census Bureau data.

Intersections pose a particular safety problem for older drivers. Navigating through intersections requires the ability to make rapid decisions, react quickly, and accurately judge speed and distance. As these abilities can diminish through aging, older drivers have more difficulties at intersections and are more likely to be involved in a fatal crash at these locations. Research shows that 37 percent of traffic-related fatalities involving drivers aged 65 and older occur at intersections compared with 18 percent for drivers aged 26 to 64.³ Figure 4 illustrates how fatalities at intersections represent an increasing proportion of all traffic fatalities as drivers age.

³Hauer, E., "The Safety of Older Persons at Intersections." *Transportation in an Aging Society*, vols. 1 and 2, Special Reports 218. Transportation Research Board. (Washington, D.C.: 1988).

Figure 4: Fatal Crashes at Intersections by Driver Age (2004)



Source: GAO analysis of NHTSA data.

DOT—through FHWA and NHTSA—has a role in promoting older driver safety, although states are directly responsible for operating their roadways and establishing driver licensing requirements. FHWA focuses on roadway engineering and has established guidelines for designers to use in developing engineering enhancements to roadways to accommodate the declining functional capabilities of older drivers. NHTSA focuses on reducing traffic-related injuries and fatalities among older people by promoting, in conjunction with nongovernmental organizations, research, education, and programs aimed at identifying older drivers with functional limitations that impair driving performance. NHTSA has developed several guides, brochures, and booklets for use by the medical community, law enforcement officials, older drivers’ family members, and older drivers themselves that provide guidance on what actions can be taken to improve older drivers’ capabilities or to compensate for lost capabilities. Additionally, NIA supports research related to older driver safety through administering grants designed to examine, among other issues, how impairments in sensory and cognitive functions impact driving ability.

These federal initiatives support state efforts to make roads safer for older drivers and establish assessment practices to evaluate the fitness of older drivers.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU),⁴ signed into law in August 2005, establishes a framework for federal investment in transportation and has specific provisions for older driver safety. SAFETEA-LU authorizes \$193.1 billion in Federal-Aid Highway Program funds to be distributed through FHWA for states to implement road preservation, improvement, and construction projects, some of which may include improvements for older drivers. SAFETEA-LU also directs DOT to carry out a program to improve traffic signs and pavement markings to accommodate older drivers. To fulfill these requirements, FHWA has updated or plans to update its guidebooks on highway design for older drivers, plans to conduct workshops on designing roads for older drivers that will be available to state practitioners, and has added a senior mobility series to its bimonthly magazine that highlights advances and innovations in highway/traffic research and technology. Additionally, SAFTEA-LU authorizes NHTSA to spend \$1.7 million per year (during fiscal years 2006 through 2009) in establishing a comprehensive research and demonstration program to improve traffic safety for older drivers.⁵

⁴Pub. L. No. 109-59, 119 Stat. 1144 (2005).

⁵Section 1405 of SAFETEA-LU directs DOT to carry out a program to improve traffic signs and pavement markings to accommodate older drivers and authorizes to be appropriated such sum as may be necessary to carry out this section for the fiscal years 2005 through 2009. No funds have been specifically appropriated for this purpose, and FHWA officials indicated that they are using limited available program funds to satisfy the intent of the legislation. Section 2017 of SAFETEA-LU authorizes NHTSA's research and demonstration program.

FHWA Has Recommended Practices and Made Funding Available to Make Roads Safer for Older Drivers, but States Generally Give Higher Priority to Other Safety Issues

FHWA has recommended practices for designing and operating roadways to make them safer for older drivers and administers SAFETEA-LU funds that states—which own and operate most roadways under state or local government authority—may use for road maintenance or construction projects to improve roads for older drivers. To varying degrees, states are implementing FHWA's older driver practices and developing plans and programs that consider older drivers' needs. However, responses to our survey indicated that other safety issues—such as railway and highway intersections and roadside hazard elimination—are of greater concern to states, and states generally place a higher priority on projects that address these issues rather than projects targeted only towards older drivers.

FHWA Has Recommended Road Design and Operating Practices and Funds Programs to Improve Older Driver Safety

FHWA has issued guidelines and recommendations to states on practices that are intended to make roads safer for older drivers, such as the *Highway Design Handbook for Older Drivers and Pedestrians*.⁶ The practices emphasize cost-effective construction and maintenance measures involving both the physical layout of the roadway and use of traffic control devices such as signs, pavement markings, and traffic

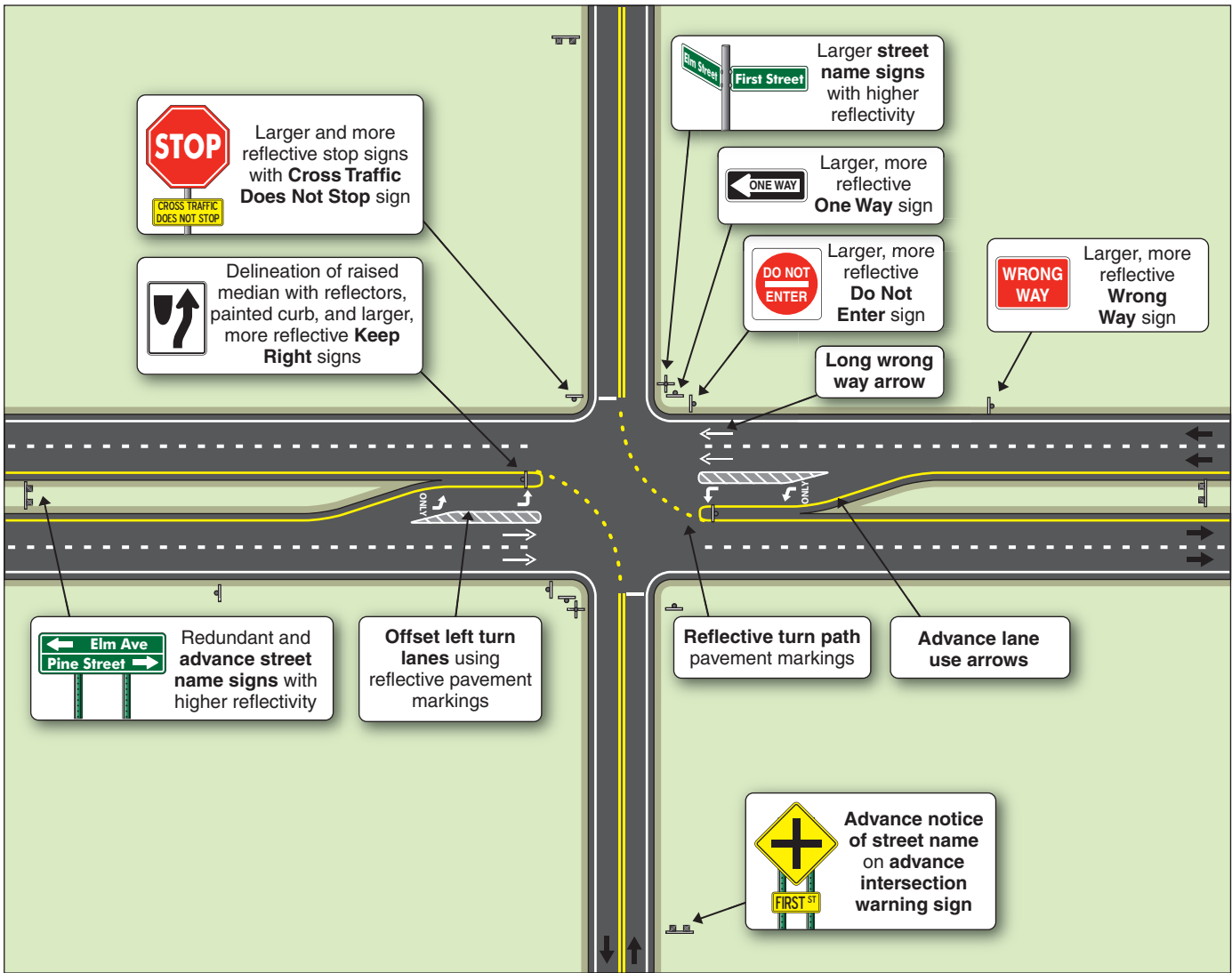
⁶Practices are based on guidelines and recommendations published in three FHWA documents: *Highway Design Handbook for Older Drivers and Pedestrians* (2001); *Guidelines and Recommendations to Accommodate Older Drivers and Pedestrians* (2001); and *Travel Better, Travel Longer: A Pocket Guide to Improve Traffic Control and Mobility for Our Older Population* (2003). FHWA researched and developed its guidelines and recommendations in collaboration with highway engineering experts from the American Association of State Highway and Transportation Officials—a nonprofit association representing highway and transportation departments in the United States and Puerto Rico; the National Committee on Uniform Traffic Control Devices—a group that makes recommendations to FHWA on standards codified in the Manual on Uniform Traffic Control Devices; and the Transportation Research Board—a division of the National Research Council which serves as an independent adviser to the federal government to promote innovation and progress in transportation through research.

signals.⁷ The practices are specifically designed to improve conditions at sites—intersections, interchanges, curved roads, construction work zones, and railroad crossings—known to be unsafe for older drivers. While these practices are designed to address older drivers' needs, implementation of these practices can make roads safer for all drivers.

- *Intersections*—Recognizing that intersections are particularly problematic for older drivers, FHWA's top priority in its *Highway Design Handbook for Older Drivers and Pedestrians* is intersection improvements. Practices to improve older drivers' ability to navigate intersections include using bigger signs with larger lettering to identify street names, consistent placement of lane use signs and arrow pavement markings, aligning lanes to improve drivers' ability to see oncoming traffic, and using reflective markers on medians and island curbs at intersections to make them easier to see at night. See figures 5 through 8 for these and additional intersection improvement practices.


⁷FHWA issues national standards for traffic control devices in its *Manual on Uniform Traffic Control Devices* (MUTCD). States are required by federal code to adopt the federal MUTCD or adopt a state MUTCD that is in substantial compliance with FHWA's MUTCD within 2 years of FHWA issuing a new edition or revision. Of the 136 recommendations in FHWA's *Highway Design Handbook for Older Drivers and Pedestrians* (2001), 43 relate to traffic control devices and are included in the current edition (2003) of the federal MUTCD. FHWA does not issue geometric road design standards for the layout of roads. Rather, FHWA works with states and other transportation industry groups to establish national geometric road design standards, and state transportation officials then rely on those standards in developing their own road design standards.

Figure 5: Older Driver Improvements at an Intersection



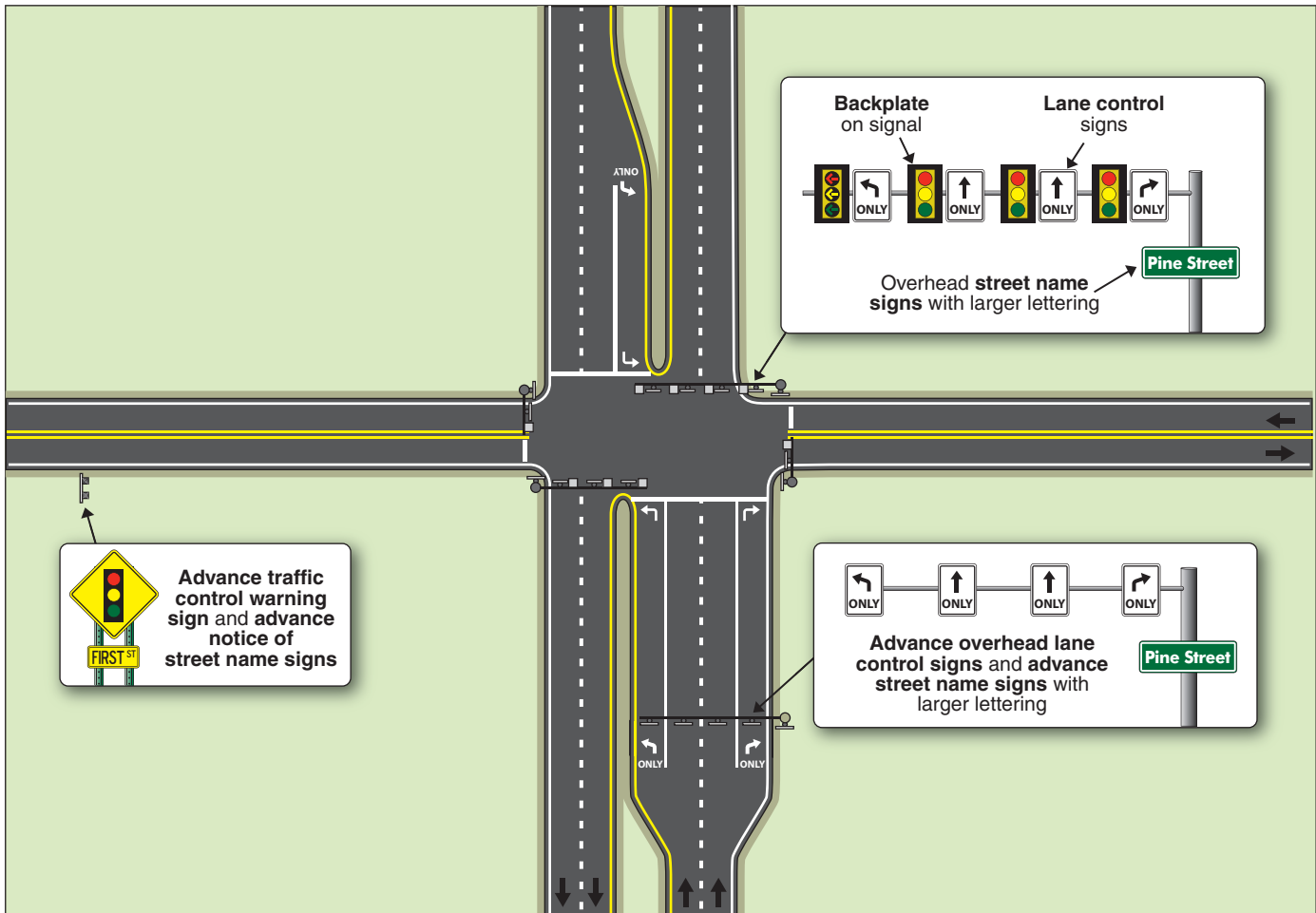
Source: GAO.

Figure 6: Examples of Improved Signs and Ability to See Oncoming Traffic

<p>Larger street name signs</p>  <p>Larger street name signs are easier to see and allow older drivers to avoid slowing down or stopping to read and respond to them.</p>	<p>Larger stop signs</p>  <p>Larger stop signs with higher reflectivity are more visible to older drivers.</p>	<p>Offset left-turn lanes</p>  <p>The use of a positive offset left-turn lane improves an older driver's ability to see past a vehicle in the opposite direction when making a left turn.</p>
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Sources: Michigan DOT, FHWA, and GAO.

Figure 7: Older Driver Improvements at an Intersection with Traffic Signals



Source: GAO.

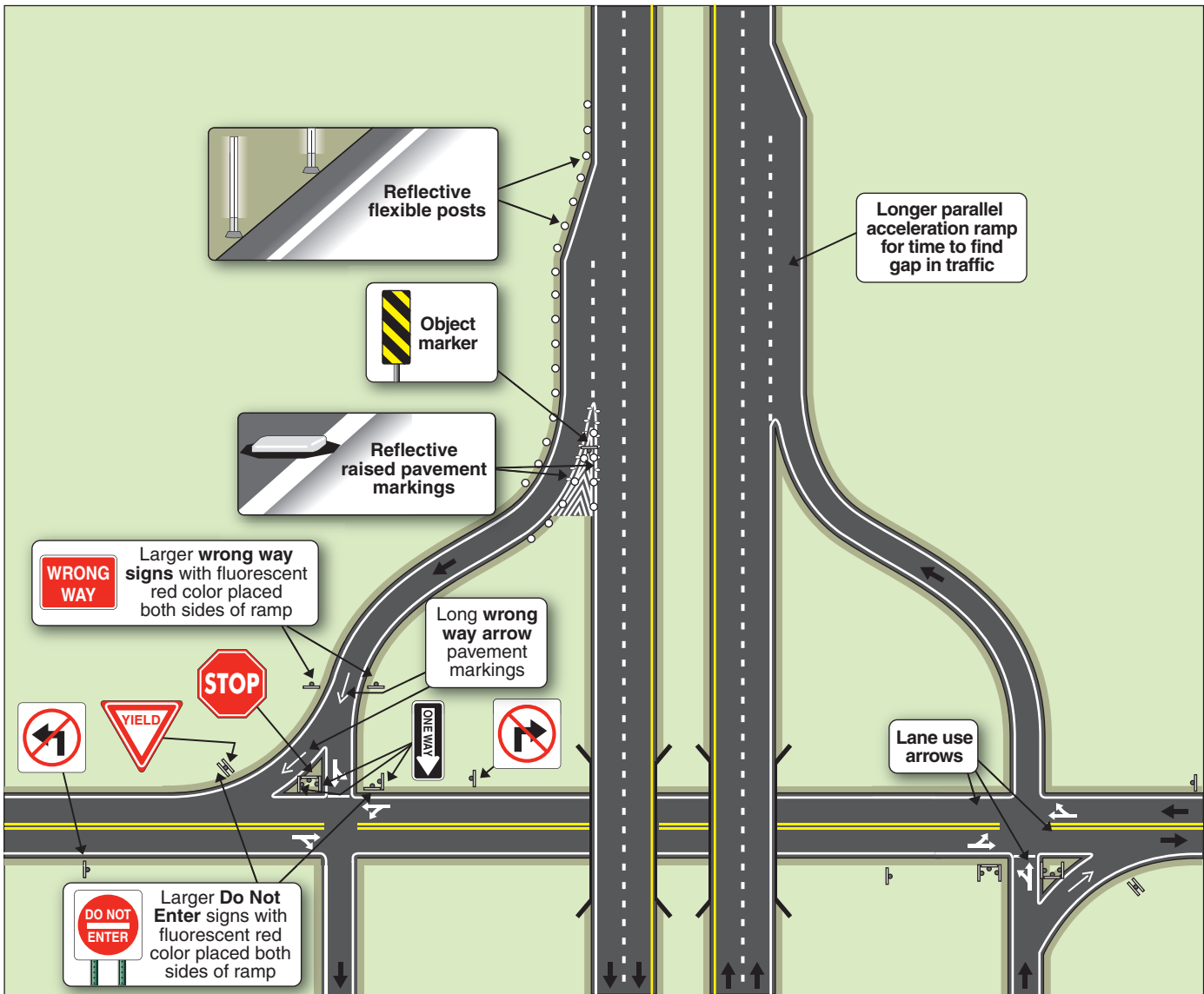
Figure 8: Examples of Improved Signals and Median Markings

<p>Backplates on signals</p>  <p>The use of a backplate on a traffic control signal (top picture)—compared to not having a backplate (bottom picture)—improves its visibility by making the signal head stand out from distracting background features. Backplates also help reduce sun glare.</p>	<p>Delineation of the median</p>  <p>Painting the vertical faces of curbs, installing signs at the beginning of medians, or adding reflective raised pavement markers on top of curbs decreases the chance that an older driver—who may have diminished vision—will hit the curb, especially at night or in inclement weather.</p>
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Sources: Iowa DOT, FHWA, and GAO.

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- *Interchanges*—Practices to aid older drivers at interchanges include using signs and pavement markings to better identify right and wrong directions of travel and configuring on-ramps to provide a longer distance for accelerating and merging into traffic. See figure 9 for these and additional interchange improvement practices.

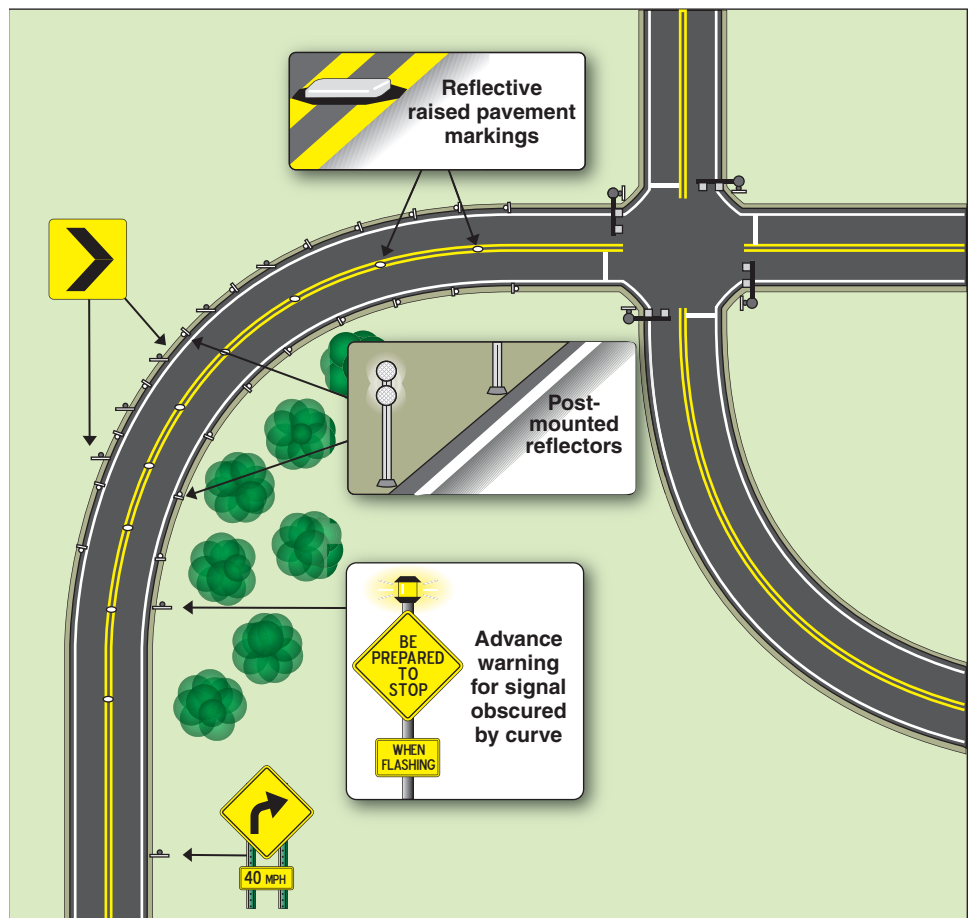
Figure 9: Older Driver Improvements at an Interchange



Source: GAO.

- *Road curves*—Practices to assist older drivers on curves include using signs and reflective markers—especially on tight curves—to clearly delineate the path of the road. See figure 10 for these and additional curve improvement practices.

Figure 10: Older Driver Improvements on Curves



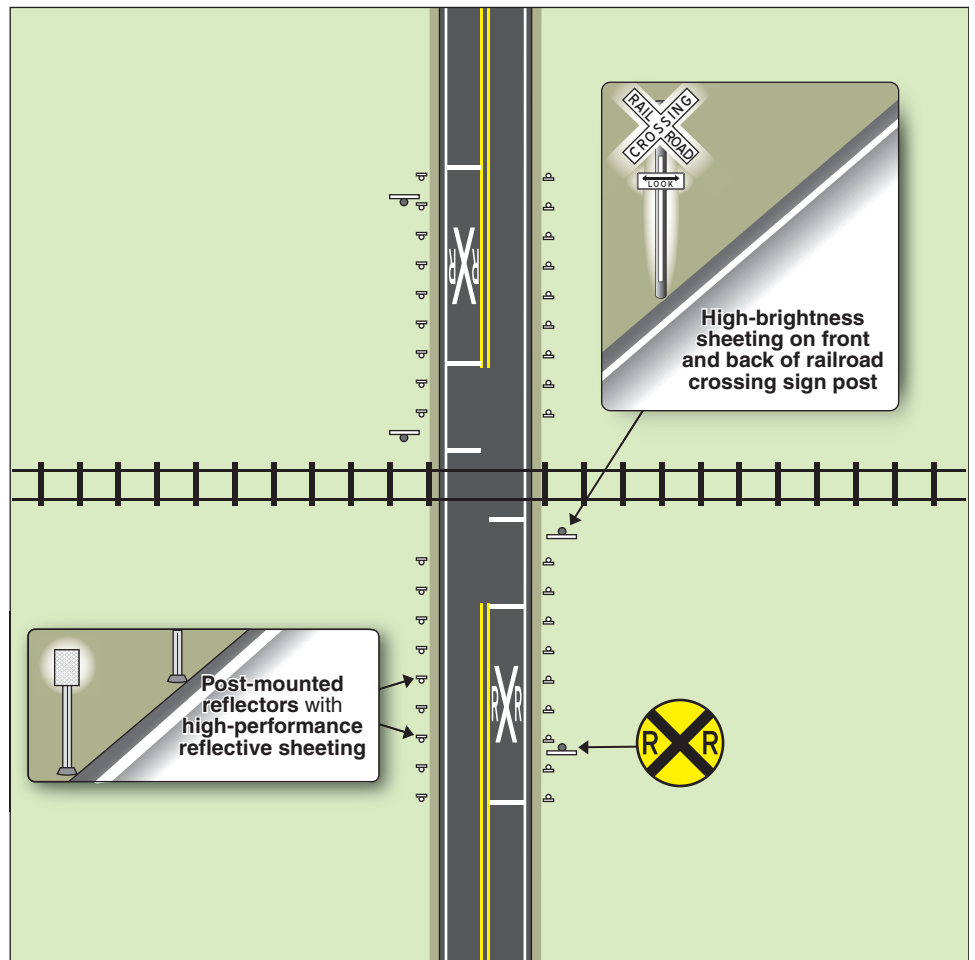
Source: GAO.

- *Construction work zones*—Practices to improve older driver safety in construction work zones include increasing the length of time messages are visible on changeable message signs; providing easily discernable barriers between opposing traffic lanes in crossovers; using properly sized devices (cones and drums) to delineate temporary lanes; and

installing temporary reflective pavement markers to make lanes easier to navigate at night.

- *Railroad crossings*—Practices to help older drivers are aimed at making the railroad crossing more conspicuous by using reflective materials on the front and back of railroad crossing signs and delineating the approach to the crossing with reflective posts. See figure 11 for these and additional railroad crossing improvement practices.

Figure 11: Older Driver Improvements at Railroad Crossings



Source: GAO.

FHWA is continuing to research and develop practices to make roads safer for older drivers. FHWA also promotes the implementation of these practices by sponsoring studies and demonstration projects, updating its *Highway Design Handbook for Older Drivers and Pedestrians*, and training state and local transportation officials. For example, FHWA is supporting a research study—to be conducted over the next 3 to 5 years—on the effectiveness of selected low-cost road improvements in reducing the number and severity of crashes for all drivers.⁸ With the findings of this and other studies, FHWA plans to update its guidelines to refine existing or recommend new practices in improving older driver safety. In addition, FHWA is considering changes to its MUTCD—to be published in 2009—that will enhance older driver safety by updating standards related to sign legibility and traffic signal visibility.

Under SAFETEA-LU, FHWA provides funding that states may use to implement highway maintenance or construction projects that can enhance older driver safety.⁹ However, because projects to enhance older driver safety can be developed under several different SAFETEA-LU programs, it is difficult to determine the amount of federal funding dedicated to highway improvements for older drivers. While older driver safety is generally not the primary focus of projects funded through SAFETEA-LU programs, improvements made to roads may incorporate elements of FHWA's older driver safety practices. For example, under SAFETEA-LU's Highway Safety Improvement Program (HSIP), states submit a Strategic

⁸The study is being supported by funds “pooled” from multiple sources to investigate 20 selected strategies described in the National Cooperative Highway Research Program (NCHRP) Report 500 guidebooks. The NCHRP Report 500 is a series of guides being developed by the Transportation Research Board to assist state and local agencies in reducing injuries and fatalities in targeted areas, such as older drivers. Each guide includes a general description of the problem, strategies and countermeasures to address the problem, and a model implementation process; however, not all strategies in the guides have been proven through properly designed evaluations. Most roadway and engineering strategies highlighted in the NCHRP Report 500 (*Volume 9: A Guide for Reducing Collisions Involving Older Drivers*) also appear in FHWA's *Highway Design Handbook for Older Drivers and Pedestrians*. The goal of the research is to develop reliable estimates of the effectiveness of safety improvements identified in the NCHRP Report 500 guidebooks in locations where these strategies are being implemented.

⁹SAFETEA-LU provides funding for many types of projects under programs such as the Interstate Maintenance Program, the Surface Transportation Program, and the National Highway System Program. These programs have set requirements as to the types of roads that are eligible for project funding and the purposes for which the funds can be used.

Highway Safety Plan (SHSP)¹⁰ after reviewing crash and other data and determining what areas need to be emphasized when making safety improvements. If older driver safety is found to be an area of emphasis, a state may develop projects to be funded under the HSIP that provide, for example, improved traffic signs, pavement markings, and road layouts consistent with practices listed in FHWA's *Highway Design Handbook for Older Drivers and Pedestrians*.

Some States Have Implemented FHWA's Recommended Practices and Considered Older Drivers in Highway Safety Plans and Programs, but Other Safety Issues Generally Receive Greater Priority

State DOTs have, to varying degrees, incorporated FHWA's older driver safety practices into their design standards; implemented the practices in construction, operations, and maintenance activities; trained technical staff in applying the practices; and coordinated with local agencies to promote the use of the practices. The states' responses to our survey indicate the range in states' efforts.

Design standards. Nearly half of the states have incorporated about half or more of FHWA's practices into their design standards, as follows:¹¹

- 24 state DOTs reported including about half, most, almost all, or all of the recommendations.
- 20 reported including some of the recommendations.
- 6 reported including few or none of the recommendations.

Construction, operations, and maintenance activities. Even though most state DOTs have not incorporated all FHWA practices into their design standards, the majority of states have implemented some FHWA practices in construction, operations, and maintenance activities, particularly in the areas of intersections and work zones (see table 1).

¹⁰SAFETEA-LU requires each state receiving funds under the HSIP to develop a SHSP that identifies safety problems and analyzes opportunities for corrective action. SHSPs are to be based on a system that collects crash data, identifies problems, and analyzes countermeasures that can be implemented. By October 1, 2006, each state was to have a strategic highway safety plan and, as of January 8, 2007, FHWA reports having received SHSPs from 28 states.

¹¹Fifty states and the District of Columbia responded to the survey. One state did not respond to this question.

Table 1: Most Widely Implemented Practices Recommended by FHWA for Improving Older Driver Safety

FHWA practice	Number of states that have implemented the practice
Advance "STOP AHEAD," "YIELD AHEAD," and "SIGNAL AHEAD" signs on approaches to intersections when existing signs or signals are not visible soon enough for drivers to respond appropriately	51
Channelizing devices such as traffic cones, tubular markers, striped panel signs, drums, or temporary barriers to separate opposing traffic in construction zones to provide conspicuous and unambiguous traffic control	48
Dashed turn path pavement markings in intersections where evidence suggests that older drivers may have difficulty negotiating turns	41
Overhead lane control signs at intersections with traffic signals where drivers may have trouble positioning themselves in the correct lane	40
Reflective devices on medians and island curbs at intersections to make them more obvious	39

Source: State DOT responses to GAO survey.

Note: In our questionnaire, we asked state officials whether they had implemented 14 specific recommendations. Six of those recommendations were selected from the 136 recommendations found in FHWA's *Highway Design Handbook for Older Drivers and Pedestrians* (2001). The 8 remaining recommendations were chosen from the 35 similar recommendations cited in *FHWA's Travel Better, Travel Longer: A Pocket Guide to Improve Traffic Control and Mobility for Our Older Population* (2003).

Training. Nearly one-fourth of state DOTs have provided training on FHWA practices to half or more of their technical staff, as follows:

- 12 state DOTs reported having trained about half, most, almost all, or all of their technical staff.
- 32 have trained some of their technical staff.
- 7 have trained few or none of their technical staff.

Coordination with local agencies. Because state transportation agencies do not own local roads—which may account for the majority of roads in a state¹²—coordination with local governments is important in promoting older driver safety in the design, operation, and maintenance of local roads. The states reported using a variety of methods in their work with local governments to improve older driver safety (see table 2).

Table 2: Methods Reported by States for Working with Local Governments to Improve Older Driver Safety

Method used	Number of states using method
Holding sessions at statewide conferences	38
Offering training in road design and traffic control	32
Developing programs with the Local Technical Assistance Program ^a (LTAP)	29
Developing programs with Metropolitan Planning Organizations ^b (MPO)	21

Source: State DOT responses to GAO survey.

^aLTAP is an FHWA program that enables local highway agencies to access technology designed to help them meet growing demands placed on local roads, bridges, and public transportation systems. Through LTAP, a nationwide system of technology transfer centers—placed in locations such as universities and state highway agencies—has been established to facilitate information sharing. Sources of funding for LTAP include FHWA, state DOTs, local agencies, and universities.

^bAn MPO is a transportation policy-making organization made up of representatives from local government and transportation authorities. Federal highway and transit statutes require, as a condition for spending federal highway or transit funds in urbanized areas, the designation of MPOs that are responsible for planning, programming, and coordinating federal highway and transit investments.

States also varied in their efforts to consult stakeholders on older driver issues in developing highway safety plans (defined in the state SHSP) and lists of projects in their Statewide Transportation Improvement Programs

¹²According to FHWA Highway Statistics (2005), states own, on average, 19 percent of public roads, while local agencies own 76 percent of public roads nationwide. However, ownership varies considerably by state. For example, Iowa owns 7.8 percent of the public roads in the state, while West Virginia owns 91.8 percent.

(STIP).¹³ According to our survey, 27 of the 51 state DOTs have established older driver safety as a component of their SHSPs, and our survey indicated that, in developing their SHSPs, these states were more likely to consult with stakeholders concerned about older driver safety than were states that did not include an older driver component in their plans. Obtaining input from stakeholders concerned about older driver safety—from both governmental and nongovernmental organizations—is important because they can contribute additional information, and can sometimes provide resources, to address older driver safety issues. For example, elderly mobility was identified by the Michigan State Safety Commission to be an emerging issue and, in February 1998, funded the Southeast Michigan Council of Governments (SEMCOG) to convene a statewide, interdisciplinary Elderly Mobility and Safety Task Force. SEMCOG coordinated with various stakeholder groups—Michigan DOT, Michigan Department of State, Michigan Office of Highway Safety Planning, Michigan Department of Community Health, Office of Services to the Aging, University of Michigan Transportation Research Institute, agencies on aging, and AAA Michigan among others—in developing a statewide plan to address older driver safety and mobility issues.¹⁴ This plan—which outlines recommendations in the areas of traffic engineering, alternative transportation, housing and land use, health and medicine, licensing, and education and awareness—forms the basis for the strategy defined in Michigan’s SHSP to address older drivers’ mobility and safety.

Even though 27 state DOTs have reported establishing older driver safety as a component of their SHSPs, only 4 state DOTs reported including older driver safety improvement projects in their fiscal year 2007 STIPs. However, state STIPs may contain projects that will benefit older drivers. For example, 49 state DOTs reported including funding for intersection improvements in their STIPs. Because drivers are increasingly more likely to be involved in an intersection crash as they age, older drivers, in

¹³In cooperation with other units of government, each state produces a STIP that describes those projects that will be implemented over (at least) the following 4 years. The STIP includes all projects or phases of transportation project development that will use federal transportation funds and includes all regionally significant transportation projects requiring federal approval or permits (even if no federal funds are to be used in the construction). The type of information provided for each project in the STIP includes the project description, estimated cost, amount and category of federal funds to be used, amount and source of nonfederal funds to be used, and the agency responsible for project implementation.

¹⁴See J.T. Bruff and J. Evans, *Elderly Mobility and Safety—The Michigan Approach, Final Plan of Action*. SEMCOG. (Detroit: 1999).

particular, should benefit from states' investments in intersection safety projects,¹⁵ which generally provide improved signage, traffic signals, turning lanes, and other features consistent with FHWA's older driver safety practices.

Although older driver safety could become a more pressing need in the future as the population of older drivers increases, states are applying their resources to areas that pose greater safety concerns. In response to a question in our survey about the extent to which resources—defined to include staff hours and funds spent on research, professional services, and construction contracts—were invested in different types of safety projects, many state DOTs indicated that they apply resources to a great or very great extent to safety projects other than those concerning older driver safety (see table 3).¹⁶ Survey responses indicated that resource constraints are a significant contributing factor to limiting states' implementation of FHWA's older driver safety practices and development of strategic plans and programs that consider older driver concerns.

¹⁵FHWA safety analysts have recently analyzed the results of several studies on intersection improvements implemented in Iowa, Michigan, and overseas in France. In general, FHWA found that intersection improvements have an even greater benefit, in terms of reduced crashes, for older drivers than for younger drivers.

¹⁶Under the HSIP in SAFETEA-LU, 21 types of projects can be funded, including safety projects for high-risk rural roads, railway/highway crossings, work zones, collection and analysis of crash data, roadside obstacle elimination, pedestrian, bicycle intersections and others. Our survey asked to what extent state DOTs had invested resources in a selection of safety projects (from the HSIP), older driver safety projects (from the Roadway Safety Improvements for Older Drivers and Pedestrians program), and projects to create safe routes to schools (from the Safe Routes to School program).

Table 3: Types of Safety Projects in Which States Report Investing Resources to a Great or Very Great Extent

Type of safety project	Number of states investing to a great or very great extent
Roadside hazard elimination or mitigation projects	36
Road intersection safety projects	36
Safety projects at railway/highway intersections	35
Roadway departure projects	35
Older driver safety projects	2

Source: State DOT responses to GAO survey.

More than Half of States Have Implemented Some Assessment Practices for Older Drivers, and NHTSA Is Sponsoring Research to Develop More Comprehensive Assessments

More than half of state licensing agencies have implemented assessment practices to support licensing requirements for older drivers that are more stringent than requirements for younger drivers.¹⁷ These requirements—established under state licensing procedures—generally involve more frequent renewals (16 states), mandatory vision screening (10 states), in-person renewals (5 states) and mandatory road tests (2 states). However, assessment of driver fitness in all states is not comprehensive because cognitive and physical functions are generally not evaluated to the same extent as visual function. Furthermore, the effectiveness of assessment practices used by states is largely unknown. Recognizing the need for better assessment tools, NHTSA is developing more comprehensive practices to assess driver fitness and intends to provide technical assistance to states in implementing these practices.

Over Half of the States Have More Stringent Licensing Requirements for Older Drivers, but Assessment Practices Are Not Comprehensive

Over half of the states have procedures that establish licensing requirements for older drivers that are more stringent than requirements for younger drivers. These requirements generally include more frequent license renewal, mandatory vision screening, in-person renewals, and mandatory road tests. In addition, states may also consider input from medical advisory boards, physician reports, and third-party referrals in

¹⁷To obtain information on states' licensing requirements, we reviewed federal, state, and nongovernmental Web sites that contained information on states' older driver licensing laws and analyzed their content so that we could compare practices across states.

assessing driver fitness and making licensing decisions. (See fig. 12 and app. II for additional details.)

- *Accelerated renewal*—Sixteen states have accelerated renewal cycles for older drivers that require drivers older than a specific age to renew their licenses more frequently. Colorado, for example, normally requires drivers to renew their licenses every 10 years, but drivers aged 61 and older must renew their licenses every 5 years.
- *Vision screening*—Ten states require older drivers to undergo vision assessments, conducted by either the Department of Motor Vehicles or their doctor, as part of the license renewal process. These assessments generally test for visual acuity or sharpness of vision.¹⁸ For example, the average age for mandatory vision screening is 62, with some states beginning this screening as early as age 40 (Maine and Maryland) and other states beginning as late as age 80 (Florida and Virginia).
- *In-person renewal*—Five states—Alaska, Arizona, California, Colorado, and Louisiana—that otherwise allow license renewal by mail require older drivers to renew their licenses in person. Arizona, California, and Louisiana do not permit mail renewal for drivers aged 70 and older. Alaska does not allow mail renewal for drivers aged 69 and older, while Colorado requires in-person renewal for those over age 61.
- *Road test*—Two states, New Hampshire and Illinois, require older drivers to pass road examinations upon reaching 75 years and at all subsequent renewals.

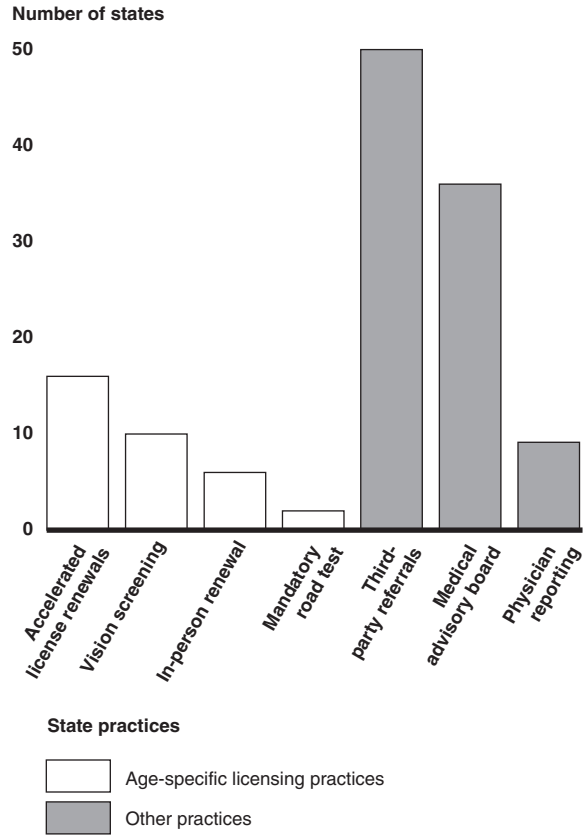
In addition, states have adopted other practices to assist licensing agencies in assessing driver fitness and identifying older drivers whose driving fitness may need to be reevaluated.

¹⁸Visual acuity measures the clarity or sharpness of vision. The test for visual acuity measures how clearly a person can see from a distance, and results are expressed in a fraction such as 20/20. The top number refers to the distance the person being tested stands from the chart—usually 20 feet. The bottom number indicates the distance at which a person with normal eyesight could read the same line that the person being tested correctly read. For example, 20/20 is considered normal, and a 20/40 measure indicates that the line the person being tested correctly read at 20 feet can be read by a person with normal vision from 40 feet away.

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- *Medical Advisory Boards*—Thirty-five states and the District of Columbia rely on Medical Advisory Boards (MAB) to assist licensing agencies in evaluating people with medical conditions or functional limitations that may affect their ability to drive. A MAB may be organizationally placed within a state’s transportation, public safety, or motor vehicle department. Board members—practicing physicians or health care professionals—are typically nominated or appointed by the state medical association, motor vehicle administrator, or governor’s office. Some MABs review individual cases typically compiled by case workers who collect and review medical and other evidence such as accident reports that is used to make a determination about a person’s fitness to drive. The volume of cases reviewed by MABs varies greatly across states. For example, seven state MABs review more than 1,000 cases annually, while another seven MABs review fewer than 10 cases annually.
 - *Physician reports*—While all states accept reports of potentially unsafe drivers from physicians, nine states require physicians to report physical conditions that might impair driving skills. For example, California specifically requires doctors to report a diagnosis of Alzheimer’s disease or related disorders, including dementia, while Delaware, New Jersey, and Nevada require physicians to report cases of epilepsy and those involving a person’s loss of consciousness. However, not all states assure physicians that such reports will be kept confidential, so physicians may choose not to report patients if they fear retribution in the form of a lawsuit or loss of the patient’s business.
 - *Third-party referrals*—In addition to reports from physicians, all states accept third-party referrals of concerns about drivers of any age. Upon receipt of the referral, the licensing agency may choose to contact the driver in question to assess the person’s fitness to drive. A recent survey of state licensing agencies found that nearly three-fourths of all referrals came from law enforcement officials (37 percent) and physicians or other medical professionals (35 percent). About 13 percent of all referrals came from drivers’ families or friends, and 15 percent came from crash and violation record checks, courts, self-reports, and other sources.¹⁹

¹⁹Stutts, J.C., *Improving the Safety of Older Road Users*. National Cooperative Highway Research Program Synthesis Project 20-5, Synthesis Topic 35-10. (Washington, D.C.: Transportation Research Board, 2005).

Figure 12: State Licensing Practices Related to Older Driver Safety



Source: GAO analysis of state licensing procedures.

However, the assessment practices that state licensing agencies use to evaluate driver fitness are not comprehensive. For example, our review of state assessment practices indicates that all states screen for vision, but we did not find a state with screening tools to evaluate physical and cognitive functions.²⁰ Furthermore, the validity of assessment practices used by states is largely unknown. While research indicates that in-person license renewal is associated with lower crash rates—particularly for those aged 85 and older—other assessment practices, such as vision screening, road tests, and more frequent license renewal cycles, are not always associated

²⁰All states require vision testing, and visual acuity of 20/40 or better (corrected or uncorrected) in one eye alone is typically needed in order to obtain a license.

with lower older driver fatality rates.²¹ According to NHTSA, there is insufficient evidence on the validity and reliability of any driving assessment or screening tool. Thus, states may have difficulty discerning which tools to implement.

NHTSA Is Developing More Comprehensive Practices to Assess Driver Fitness

NHTSA, supported by the NIA and by partner nongovernmental organizations, has promoted research and development of mechanisms to assist licensing agencies and other stakeholders—medical providers, law enforcement officers, social service providers, family members—in better identifying medically at-risk individuals; assessing their driving fitness through a comprehensive evaluation of visual, physical, and cognitive functions; and enabling their driving for as long as safely possible. In the case of older drivers, NHTSA recognizes that only a fraction of older drivers are at increased risk of being involved in an accident and focuses its efforts on providing appropriate research-based materials and information to the broad range of stakeholders who can identify and influence the behavior of at-risk drivers.²² Initiatives undertaken by NHTSA and its partner organizations include:

- *Model Driver Screening and Evaluation Program.* Initially developed by NHTSA in partnership with AAMVA and supported with researchers funded by NIA—the program provides a framework for driver referral, screening assessment, counseling, and licensing actions. The guidance is based on research that relates an individual’s functional abilities to driving performance and reflects the results of a comprehensive research project carried out in cooperation with the Maryland Motor Vehicle Administration. Recent research supported under this program and with NIA grants evaluated a range of screenings related to visual,

²¹See David Grabowski, Christine Campbell, and Michael Morrissey, “Elderly Licensure Laws and Motor Vehicle Fatalities,” *Journal of the American Medical Association* 291 (2004): 2,840-2,846.

²²While outside the purview of this report, NHTSA is also conducting vehicle-related research efforts on older driver safety, including crashworthiness research to develop more effective restraints for older occupants.

physical, and cognitive functions that could be completed at a licensing agency and may effectively identify drivers at an increased risk of being involved in a crash.²³

- *Physician's Guide to Assessing and Counseling Older Drivers*. Developed by the American Medical Association to raise awareness among physicians, the guide cites relevant literature and expert views (as of May 2003) to assist physicians in judging patients' fitness to drive. The guide is based on NHTSA's earlier work with the Association for the Advancement of Automotive Medicine. This work—a detailed literature review—summarized knowledge about various categories of medical conditions, their prevalence, and their potential impact on driving ability.
- *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*. Developed with the Governors Highway Safety Association, this publication describes current initiatives in the areas of communications and outreach, licensing, and law enforcement—and the associated effectiveness, use, cost, and time required for implementation—that state agencies might consider for improving older driver safety.²⁴
- *NHTSA Web site*. NHTSA maintains an older driver Web site with content for drivers, caregivers, licensing administrators, and other stakeholders to help older drivers remain safe.

²³Karlene K. Ball et al., "Can High-Risk Older Drivers Be Identified through Performance-Based Measures in a Department of Motor Vehicles Setting?" *Journal of the American Geriatrics Society* 54 (2006): 77-84.

²⁴The Governors Highway Safety Association (GHSA) is a nonprofit association representing state highway safety offices that promotes the development of policy and programs to improve traffic safety. GHSA members are appointed by their governors to administer federal and state highway safety funds and implement state highway safety plans.

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- *NIA research.* NIA is supporting research on several fronts in studying risk factors for older drivers and in developing new tools for driver training and driver fitness assessment.
 - A computer-based training tool is being developed to help older drivers improve the speed with which they process visual information.²⁵ This tool is a self-administered interactive variation of validated training techniques that have been shown to improve visual processing speed. The tool is being designed as a cost-effective mechanism that can be broadly implemented, at social service organizations, for example, and made accessible to older drivers.
 - Driving simulators are being studied as a means of testing driving ability and retraining drivers in a manner that is more reliable and consistent than on-road testing. Virtual reality driving simulation is a potentially viable means of testing that could more accurately identify cognitive and motor impairments than could on-road tests that are comparatively less safe and more subjective.
 - Research is ongoing to evaluate the impacts of hearing loss on cognitive functions in situations, such as driving, that require multitasking.²⁶ Results of the research may provide insights into what level of auditory processing is needed for safe driving and may lead to development of future auditory screening tools.
 - Studies that combine a battery of cognitive function and road/driving simulator tests are being conducted to learn how age-related changes lead to hazardous driving. Results of these studies may prove useful in developing screening tests to identify functionally-impaired drivers—particularly those with dementia—who are at risk of being involved in a crash and may be unfit to drive.

²⁵As people age, their speed of visual processing, or ability to recognize what they see, diminishes. Previous NIA-sponsored research shows that reduced visual processing speed—determined through a measure termed “useful field of view”—increases the crash risk for older drivers. (See Owsley, C. et al., “Visual Processing Impairment and Risk of Motor Vehicle Crash Among Older Adults,” *Journal of the American Medical Association* 279, vol. 14 [1998].)

²⁶Hearing impairment, common among older adults, compromises cognitive functions in that attention is diverted away from other tasks to focus on auditory processing.

NHTSA is also developing guidelines to assist states in implementing assessment practices. To date, NHTSA's research and model programs have had limited impact on state licensing practices. For example, according to NHTSA, no state has implemented the guidelines outlined in its *Model Driver Screening and Evaluation Program*. Furthermore, there is insufficient evidence on the validity and reliability of driving assessments, so states may have difficulty discerning which assessments to implement. To assist states in implementing assessment practices, NHTSA, as authorized under SAFETEA-LU section 2017, developed a plan to, among other things, (1) provide information and guidelines to people (medical providers, licensing personnel, law enforcement officers) who can influence older drivers and (2) improve the scientific basis for licensing decisions. In its plan NHTSA notes that the most important work on older driver safety that needs to occur in the next 5 years is refining screening and assessment tools and getting them into the hands of the users who need them. As an element of its plan, NHTSA is cooperating with AAMVA to create a Medical Review Task Force that will identify areas where standards of practice to assess the driving of at-risk individuals are possible and develop strategies for implementing guidelines that states can use in choosing which practices to adopt. The task force will—in areas such as vision and cognition—define existing practices used by states and identify gaps in research to encourage consensus on standards. NHTSA officials said that work is currently under way to develop neurological guidelines—which will cover issues related to cognitive assessments—and anticipate that the task force will report its findings in 2008.

Selected States Have Implemented Coordinating Groups and Other Initiatives to Promote Older Driver Safety

Of the six states we visited, five—California, Florida, Iowa, Maryland, and Michigan— have active multidisciplinary coordination groups that may include government, medical, academic, and social service representatives, among others, to develop strategies and implement efforts to improve older driver safety.²⁷ Each of these states identified its coordination group as a key initiative in improving older driver safety. As shown in table 4, the coordinating groups originated in different ways and vary in size and structure. For example, Florida's At-Risk Driver Council was formally established under state legislation while Maryland's group functions on an

²⁷Oregon, the remaining state we visited, previously had an At-Risk Driver Public Education Consortium to coordinate a public education initiative addressing older driver safety among other issues. Consortium members represented state agencies, public transit districts, senior service providers, and other stakeholders. The consortium was disbanded in 2003.

ad hoc basis with no statutory authority. The approaches taken by these groups in addressing older driver safety issues vary as well. For example, California’s large task force broadly reaches several state agencies and partner organizations, and the task force leaders oversee the activity of eight work groups in implementing multiple action items to improve older driver safety. In contrast, Iowa’s Older Driver Target Area Team is a smaller group that operates through informal partnerships among member agencies and is currently providing consulting services to the Iowa Department of Transportation on the implementation of older driver strategies identified in Iowa’s Comprehensive Highway Safety Plan.

Table 4: Older Driver Safety Coordination Groups’ Organizations and Functions

Coordinating group	Organization and function	Membership
Older Californian Traffic Safety (OCTS) Task Force	<ul style="list-style-type: none"> Established in 2003 under the California Highway Patrol. Supported by grants from California Office of Traffic Safety. Consists of 8 work groups—(1) aging services, (2) health services, (3) law enforcement, (4) licensing, (5) mobility, (6) policy/legislation, (7) public information, (8) transportation safety—of interested stakeholders who develop and promote implementation of action items through the government agency or nongovernmental organization that they represent. Work groups provide progress reports at quarterly OCTS Task Force meetings. 	43 members that represent <ul style="list-style-type: none"> state agencies, federal agencies, higher education institutions, medical professional organizations, and senior advocacy groups and service providers.
Florida At-Risk Driver Council (FADC)	<ul style="list-style-type: none"> Established by state statute in 2003 and administratively supported by Department of Highway Safety and Motor Vehicles. Chairperson elected by council members. FADC members rank issues and establish action items in four areas: (1) prevention, early recognition, and education of at-risk drivers; (2) assessments; (3) remediation, rehabilitation, and adaptation—community and environment; (4) alternatives and accommodations for transportation. Stakeholders implement action items through the government agency or nongovernmental organization that they represent. 	33 members that represent <ul style="list-style-type: none"> state agencies, state legislators, higher education institutions, medical professional organizations, and senior advocacy groups and service providers.

(Continued From Previous Page)

Coordinating group	Organization and function	Membership
Iowa Older Driver Target Area Team	<ul style="list-style-type: none"> Established in 1999 and operated in various forms since then to (1) coordinate public education and outreach, (2) promote research and analysis efforts, (3) provide guidance for policy and legislative considerations, and (4) promote implementation of low cost engineering safety improvements. Team is currently reorganizing under the Iowa Traffic Safety Alliance to assist in implementing the Iowa Comprehensive Highway Safety Plan.^a 	25 members that represent <ul style="list-style-type: none"> state agencies, FHWA, higher education institutions, and senior advocacy groups and service providers.
Maryland Research Consortium	<ul style="list-style-type: none"> Developed in 1996 under the Motor Vehicle Administration to support the <i>Maryland Pilot Older Driver Study</i>.^b Established working groups in four areas—(1) identification and assessment, (2) remediation and counseling, (3) mobility options, (4) public information and education—that set goals for members to meet using resources of their respective organizations. Currently operates as ad hoc group to promote collaboration among interested stakeholders. Quarterly meetings feature expert presentations on issues such as medical care for older trauma patients and transportation alternatives for older adults. 	250 members (approximate) that represent <ul style="list-style-type: none"> state agencies, federal agencies, higher education institutions, senior advocacy groups and service providers, private businesses, and interested individuals.
Michigan Senior Mobility Work Group	<ul style="list-style-type: none"> Established in 1998 by SEMCOG to conduct an elderly mobility and safety assessment and develop a statewide plan of action designed to guide state policy. Used U.S. DOT and state funds to develop its plan, <i>Elderly Mobility & Safety—The Michigan Approach</i> (1999), which outlines recommendations in the areas of (1) traffic engineering, (2) alternative transportation, (3) housing and land use, (4) health and medicine, (5) licensing, and (6) education and awareness. Senior Mobility Work Group has continued to update this plan—that forms the basis for strategy defined in Michigan’s SHSP to address older drivers’ mobility and safety—in an advisory capacity to the Governor’s Traffic Safety Advisory Commission. 	23 members that represent <ul style="list-style-type: none"> FHWA, state agencies, local agencies, and senior advocacy groups and service providers.

Source: GAO.

^aThe Iowa Comprehensive Highway Safety Plan is the state’s SHSP.

^bThis study was conducted under NHTSA’s *Model Driver Screening and Evaluation Program*.

Members of the coordination groups we spoke with said that their state could benefit from information about other states’ practices. For example, coordinating group members told us that sharing information about leading road design and licensing practices, legislative initiatives, research efforts, and model training programs that affect older drivers could support decisions about whether to implement new practices. Furthermore, group

members said that identifying the research basis for practices could help them assess the benefits to be derived from implementing a particular practice. While some mechanisms exist to facilitate information exchanges on some topics, such as driver fitness assessment and licensing through AAMVA's Web site, there is no mechanism for states to share information on the broad range of efforts related to older driver safety.

In addition to coordinating groups, the six states have ongoing efforts to improve older driver safety in the areas of strategic planning, education and awareness, licensing and driver fitness assessment, engineering, and data analysis. The following examples highlight specific initiatives and leading practices in each of these categories.

Strategic planning—Planning documents establish recommended actions and provide guidance to stakeholders on ways to improve older driver safety.

- The *Michigan Senior Mobility Action Plan*, issued in November 2006, builds upon the state's 1999 plan (*Elderly Mobility & Safety—The Michigan Approach*) and outlines additional strategies, discusses accomplishments, and sets action plans in the areas of planning, research, education and awareness, engineering countermeasures, alternative transportation, housing and land use, and licensing designed to (1) reduce the number and severity of crashes involving older drivers and pedestrians, (2) increase the scope and effectiveness of alternative transportation options available to older people, (3) assist older people in maintaining mobility safely for as long as possible, and (4) plan for a day when driving may no longer be possible. In implementing this plan, officials are exploring the development of a community-based resource center that seniors can use to find information on mobility at a local level.
- *Traffic Safety among Older Adults: Recommendations for California*—developed through a grant from California's Office of Traffic Safety and published in August 2002—offers a comprehensive set of recommendations and provides guidance to help agencies and communities reduce traffic-related injuries and fatalities to older adults. The Older Californian Traffic Safety Task Force was subsequently established to coordinate the implementation of the report's recommendations.

Education/awareness—Education and public awareness initiatives enable outreach to stakeholders interested in promoting older driver safety.

- Florida GrandDriver®—based on a program developed by AAMVA—takes a multifaceted approach to public outreach through actions such as providing Web-based information related to driver safety courses and alternative transportation; training medical, social service and transportation professionals; offering safety talks at senior centers; and sponsoring CarFit events.²⁸ According to the Florida Department of Highway Safety and Motor Vehicles, a total of 75 training programs and outreach events were conducted under the GrandDriver program between 2000 and 2006.
- California—through its Older Californian Traffic Safety Task Force—annually holds a “Senior Safe Mobility Summit” that brings subject-matter experts and recognized leaders together to discuss issues and heighten public understanding of long-term commitments needed to help older adults drive safely longer.

Assessment/licensing—Assessment and licensing initiatives are concerned with developing better means for stakeholders—license administrators, medical professionals, law enforcement officers, family members—to determine driver fitness and provide remedial assistance to help older people remain safe while driving.

- California’s Department of Motor Vehicles is continuing to develop a progressive “three-tier” system for determining drivers’ wellness—through nondriving assessments in the first two tiers—and estimating driving fitness in a third-tier road test designed to assess the driver’s ability to compensate for driving-relevant functional limitations

²⁸The CarFit program is designed to help mature drivers find out how well they currently fit their cars and what actions they might take to improve their fit. The program is a joint venture by the American Occupational Therapy Association, the American Society on Aging, AAA Auto Club, and AARP.

identified in the first two tiers.²⁹ The system, currently being tested at limited locations, is being developed to keep people driving safely for as long as possible by providing a basis for a conditional licensing program that can aid drivers in improving their driving-relevant functioning and in adequately compensating for their limitations.

- Oregon requires physicians and other designated medical providers to report drivers with severe and uncontrollable cognitive or functional impairments that affect the person's ability to drive safely. Oregon Driver and Motor Vehicle Services (ODMVS) evaluates each report and determines if immediate suspension of driving privileges is necessary. A person whose driving privileges have been suspended needs to obtain medical clearance and pass ODMVS vision, knowledge, and road tests in order to have his or her driving privileges reinstated. In cases where driving privileges are not immediately suspended, people will normally be given between 30 and 60 days to pass ODMVS tests or provide medical evidence indicating that the reported condition does not present a risk to their safe driving.
- Maryland was the first state to establish a Medical Advisory Board (MAB)—created by state legislation in 1947—which is currently one of the most active boards in the United States. Maryland's MAB manages approximately 6000 cases per year—most involving older drivers. Drivers are referred from a number of sources—including physicians, law enforcement officers, friends, and relatives—and the MAB reviews screening results, physician reports, and driving records among other information to determine driving fitness. The MAB's opinion is then considered by Maryland's Motor Vehicle Administration in making licensing decisions.
- The Iowa Department of Motor Vehicles can issue older drivers restricted licenses that limit driving to daylight hours, specific geographic areas, or low-speed roads. Restricted licensing, also referred

²⁹The three-tier system addresses the driving-related medical problems and functional limitations that occur most often among older drivers but also occur among younger drivers. A driving wellness assessment that includes evaluation of a person's functional health relevant for driving, understanding of driving practices, and knowledge of laws and rules of the road is the focus of the first two tiers. The tiers are progressive in that a person who successfully passes the first-tier assessment and knowledge test will not be assessed further. A driving fitness assessment that evaluates how a driver actually drives with his/her functional limitations is the focus of the third tier.

to as “graduated de-licensing,” seeks to preserve the driver’s mobility while protecting the health of the driver, passengers, and others on the road by limiting driving to low risk situations. About 9,000 older drivers in Iowa have restricted licenses. Iowa license examiners may travel to test older drivers in their home towns, where they feel most comfortable driving.

Engineering—Road design elements such as those recommended by FHWA are implemented to provide a driving environment that accommodates older drivers’ needs.

- A demonstration program in Michigan, funded through state, county, and local government agencies, along with AAA Michigan, made low-cost improvements at over 300 high-risk, urban, signalized intersections in the Detroit area. An evaluation of 30 of these intersections indicated that the injury rate for older drivers was reduced by more than twice as much as for drivers aged 25 to 64 years.³⁰ The next phase of the program is development of a municipal tool kit for intersection safety, for use by municipal leaders and planners, to provide a template for implementing needed changes within their jurisdictions.
- The Iowa Department of Transportation (IDOT) has undertaken several initiatives in road operations, maintenance, and new construction to enhance the driving environment for older drivers. Among its several initiatives, IDOT is
 - using more durable pavement markings on selected roads and servicing all pavement markings on a performance-based schedule to maintain their brightness,³¹
 - adding paved shoulders with the edge line painted in a shoulder rumble strip to increase visibility and alert drivers when their vehicles stray from the travel lane,

³⁰AAA, *Intersection Improvements Reduce Senior Driver Injuries at a Rate Much Higher Than Other Age Groups, According to AAA Study* (Washington, D.C.: 6/27/2005).

³¹Iowa based its strategy to improve pavement marking visibility on research conducted by the University of Iowa Center for Computer Aided Design, Operator Performance Laboratory. The research report “Enhancing Pavement Marking Visibility for Older Drivers” was prepared for IDOT in March 2003.

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- converting 4-lane undivided roads to 3-lane roads with a dedicated left-turn lane to simplify turning movements,³²
 - encouraging the use of more dedicated left turn indications (arrows) on traffic signals on high-speed roads,
 - installing larger street name signs,
 - replacing warning signs with ones that have a fluorescent yellow background to increase visibility,
 - converting to Clearview fonts³³ on Interstate signs for increased sign readability,
 - demonstrating older driver and pedestrian-friendly enhancements on a roadway corridor in Des Moines, and
 - promoting local implementation of roadway improvements to benefit older drivers by providing training to city and county engineers and planners.
- The Transportation Safety Work Group of the Older Californian Traffic Safety Task Force provided engineering support in updating California's highway design and traffic control manuals to incorporate FHWA's recommended practices for making travel safer and easier for older drivers. Technical experts from the work group coordinated with the Caltrans design office in reviewing the Caltrans *Highway Design Manual* and updating elements related to older driver safety. Additionally, the work group managed an expedited process to have the California Traffic Control Devices Committee consider and approve modifications to signing and pavement marking standards in the California *Manual on Uniform Traffic Control Devices* that benefit older drivers.

³²Having a dedicated left-turn lane simplifies left-turn movements onto and off of the mainline. Iowa State University researchers studied 14 of these converted corridors and documented a 24 percent reduction in the crash rate for all drivers and a 28 percent reduction in the crash rate for drivers aged 65 and older.

³³FHWA has given interim approval for states to use Clearview font legends (lettering) on guide signs. Clearview fonts were designed to make highway signs easier for older drivers to read without having to increase letter height or sign size.

Data analysis—Developing tools to accurately capture accident data enables trends to be identified and resources to be directed to remediating problems.

- Iowa has a comprehensive data system that connects information from multiple sources, including law enforcement records (crash reports, traffic citations, truck inspection records) and driver license and registration databases, and can be easily accessed. For example, the system allows law enforcement officers to electronically access a person’s driving record and license information at a crash scene and enter their crash reports into the data system on-scene. Data captured through this process—including the location of all crashes—is less prone to error and can be geographically referenced to identify safety issues. In the case of older driver safety, several universities are utilizing Iowa crash data in research efforts. For example, University of Northern Iowa researchers utilized crash data and geospatial analysis to demonstrate how older driver crash locations could be identified and how roadway elements could be subsequently modified to improve safety for older drivers.³⁴ University of Iowa researchers have used the data in behavioral research to study actions of older drivers and learn where changes in roadway geometrics, signing, or other roadway elements could assist older drivers with their driving tasks. Also, Iowa State University’s Center for Transportation Research and Education (CTRE) has used the data to study a number of older driver crash characteristics and supports other older driver data analysis research projects with the Iowa Traffic Safety Data Service.³⁵
- Florida is developing a Mature Driver Database (MDDDB) that will collect several types of data—vision renewal data, crash data, medical review data—to be accessible through the Department of Highway Safety and Motor Vehicles (DHSMV) Web site. According to DHSMV officials, this database is intended to be used across agencies to facilitate strategic planning. DHSMV may use the database, for example, to track driver

³⁴Strauss, Tim and Elder, Jess, “Crash Patterns of Older Drivers in Iowa: A Systematic Spatial Analysis,” University of Northern Iowa, July 2004. This report was funded by the Iowa Department of Transportation.

³⁵The Iowa Traffic Safety Data Service is a program of the CTRE that produces crash data analyses for use by traffic engineers, researchers, law enforcement officials, and others who need the information for purposes such as making funding decisions, developing road improvement projects, and implementing enforcement actions.

performance on screenings and analyze the effectiveness of screening methods. Planned MDDDB enhancements include providing links to additional data sources such as census and insurance databases.

Conclusion

Older driver safety is not a high-priority issue in most states and, therefore, receives fewer resources than other safety concerns. However, the aging of the American population suggests that older driver safety issues will become more prominent in the future. Some states—with federal support—have adopted practices to improve the driving environment for older road users and have implemented assessment practices to support licensing requirements for older drivers that are more stringent than requirements for younger drivers. However, information on the effectiveness of these practices is limited, and states have been reluctant to commit resources to initiatives whose effectiveness has not been clearly demonstrated. Some states have also implemented additional initiatives to improve older driver safety, such as establishing coordination groups involving a broad range of stakeholders and developing initiatives in the areas of strategic planning, education and outreach, assessment and licensing practices, engineering, and data analysis. NHTSA and FHWA also have important roles to play in promoting older driver safety, including conducting and supporting research on standards for the driving environment and on driver fitness assessment. While states hold differing views on the importance of older driver safety and have adopted varying practices to address older driver safety issues, it is clear that there are steps that states can take to prepare for the anticipated increase in the older driver population and simultaneously improve safety for all drivers. However, state resources are limited, so information on other states' initiatives or federal efforts to develop standards for the driving environment and on driver fitness assessment practices could assist states in implementing improvements for older driver safety.

Recommendation for Executive Action

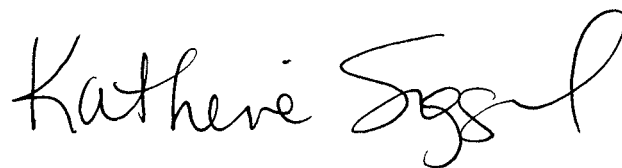
To help states prepare for the substantial increase in the number of older drivers in the coming years, we recommend that the Secretary of Transportation direct the FHWA and NHTSA Administrators to implement a mechanism that would allow states to share information on leading practices for enhancing the safety of older drivers. This mechanism could also include information on other initiatives and guidance, such as FHWA's research on the effectiveness of road design practices and NHTSA's research on the effectiveness of driver fitness assessment practices.

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of Health and Human Services and to the Department of Transportation for review and comment. The Department of Health and Human Services agreed with the report and offered technical suggestions which we have incorporated, as appropriate. (See app. III for the Department of Health and Human Services' written comments.) The Department of Transportation did not offer overall comments on the report or its recommendation. The department did offer several technical comments, which we incorporated where appropriate.

We are sending copies of this report to interested congressional committees. We are also sending copies of this report to the Secretary of Transportation and the Secretary of Health and Human Services. We also will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or siggerudk@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IV.



Katherine Siggerud
Director, Physical Infrastructure Issues

Objectives, Scope, and Methodology

This report addresses (1) what the federal government has done to promote practices to make roads safer for older drivers and the extent to which states have implemented those practices, (2) the extent to which states assess the fitness of older drivers and what support the federal government has provided, and (3) what initiatives selected states have implemented to improve the safety of older drivers.

To determine what the federal government has done to promote practices to make roads safer for older drivers, we interviewed officials from the Federal Highway Administration (FHWA) within the U.S. Department of Transportation (DOT) and the American Association of State and Highway Transportation Officials (AASHTO) and reviewed manuals and other documentation to determine what road design standards and guidelines have been established, the basis for their establishment, and how they have been promoted. We also reviewed research and interviewed a representative of the National Cooperative Highway Research Program (NCHRP) to gain perspective on federal initiatives to improve the driving environment for older drivers. Finally, to determine trends in accidents involving older drivers, we reviewed and analyzed crash data from the U.S. DOT's Fatality Analysis Reporting System database and General Estimates System database.

To obtain information on the extent to which states are implementing these practices, we surveyed and received responses from DOTs in each of the 50 states and the District of Columbia. We consulted with NCHRP, FHWA, and AASHTO in developing the survey. The survey was conducted from the end of September 2006 through mid-January 2007. During this time period, we sent two waves of follow-up questionnaires to nonrespondents in addition to the initial mailing. We also made phone calls and sent e-mails to a few states to remind them to return the questionnaire. We surveyed state DOTs to learn the extent to which they have incorporated federal government recommendations on road design elements into their own design guides and implemented selected recommendations in their construction, operations, and maintenance activities. We also identified reasons for state DOTs rejecting recommendations and determined the proportion of practitioners that were trained in each state to implement recommendations. In addition, we asked state DOTs to evaluate the extent to which they have developed plans (defined in Strategic Highway Safety Plans) and programmed projects (listed in Statewide Transportation Improvement Programs) for older driver safety as provided for by SAFETEA-LU legislation.

Before fielding the questionnaire, we reviewed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and prior highway legislation to identify the framework for states to develop and implement older driver safety programs. Additionally, we conducted separate in-person pretests with officials from three state DOTs and revised our instrument as a result of the information obtained during those pretests. We took steps in developing the questionnaire and in collecting and analyzing the data to minimize errors that could occur during those stages of the survey process. A copy of the questionnaire and detailed survey results are available at www.gao.gov/cgi-bin/getrpt?GAO-07-517SP.

To determine the extent to which states assess the fitness of older drivers and what support the federal government has provided, we interviewed officials and reviewed relevant documents from the National Highway Traffic Safety Administration within the U.S. DOT, the National Institute on Aging and the Administration on Aging within the U.S. Department of Health and Human Services, and the American Association of Motor Vehicle Administrators—a nongovernmental organization that represents state driver licensing agencies. We determined the extent to which the guidelines and model programs of these agencies addressed the visual, physical, and cognitive deficits that may afflict older drivers. We also reviewed federal, state, and nongovernmental Web sites that contained information on states' older driver licensing practices and analyzed their content so that we could compare practices across states. To obtain information on the activities of partner nongovernmental organizations in researching and promoting practices to assess older driver fitness, among other initiatives, we interviewed officials from AAA, AARP, the Insurance Institute for Highway Safety, and the Governors Highway Safety Association. To learn of states' legislative initiatives concerning driver fitness assessment and licensing, we interviewed a representative of the National Conference of State Legislatures. We also interviewed officials from departments of motor vehicles in select states to report on their efforts in developing, implementing, and evaluating older driver screening and licensing programs.

To obtain information on initiatives that selected states have implemented, we conducted case studies in six states—California, Florida, Iowa, Maryland, Michigan, and Oregon—that transportation experts identified as progressive in their efforts to improve older driver safety. We chose our case study states based on input from an NCHRP report highlighting states with leading practices in the areas of: education/awareness,

assessment/licensing, engineering, agency coordination, strategic planning and data analysis. We compared practices across the six states to identify common themes. We also identified and determined, to the extent possible, key practices based on our analysis.

The scope of our work focused on older driver safety. Prior GAO work addressed the associated issue of senior mobility for those who do not drive.¹ We conducted our review from April 2006 through April 2007 in accordance with generally accepted government auditing standards. We requested official comments on this report from the U.S. Department of Transportation and the U.S. Department of Health and Human Services.

¹[GAO-04-971](#).

States' Licensing Requirements for Older Drivers

Tables 5 through 7 list older driver licensing requirements in effect in certain states.

Table 5: States with Vision Testing Requirements for Older Drivers

State	Vision test and age requirement	Additional requirements
Arizona	65 and over	None
District of Columbia	70 and over	At age 70, or nearest renewal date thereafter, a vision test is required and a reaction test may be required. Applicant must provide a statement from a practicing physician certifying the applicant to be physically and mentally competent to drive. At 75 years, or nearest renewal date thereafter, and on each subsequent renewal date, the applicant may be required to also complete the written and road tests.
Florida	80 and over	Renewal applicants 80 and older must pass a vision test administered at any driver's license office or if applying for an extension by mail must pass a vision test administered by a licensed physician or optometrist.
Georgia	64 and over	None
Maine	40 and over	Vision test required at first renewal after driver reaches age 40 and at every second renewal until age 62; thereafter, at every renewal.
Maryland	40 and over	Vision test required at every renewal from age 40.
Oregon	50 and over	None
South Carolina	65 and over	None
Utah	65 and over	None
Virginia	80 and over	None

Source: GAO analysis of data contained in federal, state, and nongovernmental organizations' Web sites on states' older driver licensing practices.

**Appendix II
States' Licensing Requirements for Older
Drivers**

Table 6: States with Accelerated Renewal Cycles for Older Drivers

State	Standard renewal cycle	Accelerated renewal for older drivers with relevant ages
Arizona	Expires at age 65	5 years (65 and over)
Colorado	10 years	5 years (61 and over)
Georgia	5 or 10 years (driver option)	5 years (60 and over)
Hawaii	6 years	2 years (72 and over)
Idaho	4 years or 8 years (age 21-62)	4 years (63 and over)
Illinois	4 years	2 years (81 to 86); 1 year (87 and over)
Indiana	4 years	3 years (75 and older)
Iowa	5 years	2 years (70 and older)
Kansas	6 years	4 years (65 and older)
Maine	6 years	4 years (65 and older)
Missouri	6 years	3 years (70 and older)
Montana	8 years	4 years (75 and older)
New Mexico	4 years or 8 years (driver option)	4 years (for drivers who would turn 75 in last half of an 8-year cycle)
North Carolina	8 years	5 years (54 and older)
Rhode Island	5 years	2 years (70 and older)
South Carolina	10 years	5 years (65 and older)

Source: GAO analysis of data contained in federal, state, and nongovernmental organizations' Web sites on states' older driver licensing practices.

**Appendix II
States' Licensing Requirements for Older
Drivers**

Table 7: States Requiring In-Person Renewals

State	Age for in-person renewals	Additional requirements
Alaska	69 and over	Mail renewal not available to people 69 and older and to people whose prior renewal was by mail.
Arizona	70 and over	It cannot be renewed by mail.
California	70 and over	At age 70, mail renewal is prohibited. No more than two sequential mail renewals are permitted, regardless of age.
Colorado	61 and over	Mail or electronic renewal not available to people 61 and older and to people whose prior renewal was electronic or by mail.
Louisiana	70 and over	Mail renewal not available to people 70 and older and to people whose prior renewal was by mail.

Source: GAO analysis of data contained in federal, state, and nongovernmental organizations' Web sites on states' older driver licensing practices.

Comments from Department of Health and Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Assistant Secretary
for Legislation

Washington, D.C. 20201

MAR 16 2007


Ms. Katherine Siggerud
Director, Physical Infrastructure Issues
U.S. Government Accountability Office
Washington, DC 20548

Dear Ms. Siggerud:

Enclosed are the Department's comments on the U.S. Government Accountability Office's (GAO) draft report entitled, "Older Driver Safety: Knowledge Sharing Should Help States Prepare for Increase in Older Driver Population" (GAO-07-413), before its publication.

The department appreciates the opportunity to comment on this draft report.

Sincerely,


for Vincent J. Ventimiglia
Assistant Secretary for Legislation

GENERAL COMMENTS ON THE DEPARTMENT OF HEALTH AND HUMAN SERVICES ON THE GOVERNMENT ACCOUNTABILITY OFFICE DRAFT REPORT ENTITLED: OLDER DRIVER SAFETY: KNOWLEDGE SHARING SHOULD HELP STATES PREPARE OR INCREASE IN OLDER DRIVER POPULATION (GAO 07-413)

HHS COMMENTS

As indicated in this report, older driver safety is important now, since based on miles driven older drivers have a comparatively higher involvement in fatal crashes; and it is important for planning for the future, since by 2030 the number of licensed drivers 65 and older is estimated to nearly double.

This report provides a focus on two critical priority issues: what the states need to do to improve highway safety and adoption of screening practices for older drivers. The report covers what the federal government has done to promote older driver safety through practices related to road construction and highway signage, especially relating to intersections; and what the states have done to implement these practices and what initiatives they have undertaken either specifically targeted at older drivers or as a byproduct of safety measures for drivers of all ages. The report also provides much useful information about older driver assessment practices across a number of states.

There is a recommendation for executive action by the Secretary of Transportation to implement a mechanism to allow states to share information on leading practices for enhancing the safety of older drivers. We would also suggest that other issues to be addressed are the transition out of driving by assisting older adults with the decision to stop driving; and how communities can best provide viable alternative forms of transportation enabling older adults to maintain optimal autonomy.

This a well conceptualized and executed report on current state practices and federal initiatives which will provide a sound foundation for identifying and implementing measures that will enhance the safety of older drivers.

GAO Contact and Staff Acknowledgments

GAO Contact

Katherine Siggerud, (202) 512-2834, or siggerudk@gao.gov

Staff Acknowledgments

In addition to the individual named above, Sara Vermillion, Assistant Director; Michael Armes; Sandra DePaulis; Elizabeth Eisenstadt; Joel Grossman; Bert Japikse; Leslie Locke; Megan Millenky; Joshua Ormond; and Beverly Ross made key contributions to this report.

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