

US Department of Transportation: Infrastructure Safety

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Lead Agency:

US (US) Department of Transportation (DOT), Federal Highway Administration (FHWA)

Agency Mission:

FHWA is charged with the broad responsibility of ensuring that America's roads and highways continue to be the safest and most technologically up-to-date.

Principal Investigators:

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Partner Agencies:

Federal Highway Administration
Florida Metropolitan Planning Organization Advisory Council
Missouri Department of Transportation
Texas Transportation Institute
University of North Carolina Highway Safety Research Center
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General Description:

In March 2008, a team of nine transportation safety, traffic engineering, and human factors experts from the US visited Australia and Japan to evaluate infrastructure improvements designed to aid older road users. The scan tour members sought policy options and initiatives regarding transportation system planning, operations, and design as they relate to older road users. The group met with state and federal government transportation officials, University research centers, and staff from motorist's clubs and other non-governmental organizations interested in the mobility of older people. Although the primary focus of the scan was on infrastructure improvements, the team also learned about policies for older road user training, assessment, and licensing. In addition, general road safety programs were discussed with all agencies visited. The majority of these programs provided a benefit to older road users although they may not have been designed specifically with this user-group in mind. The converse of this is true as well; programs and policies developed for older road user safety and mobility will improve transportation for all users. The information obtained during the trip identified several planning, design, and operational changes which could be implemented in the US to improve the mobility and safety of older road users.

Major issues of interest included the following:

- Infrastructure-based international best practices that improve safety and mobility for older road users that could be applied in the near term on US roadways.
- Policy approaches to improving infrastructure to better meet the needs and capabilities of older road users.
- Transportation planning policy initiatives to address mobility of older citizens in terms of land-use, transit, and other alternatives to driving. Policy approaches to improving older driver assessment, licensing, and training.
- Safety research collaboration opportunities between international and U. transportation research centers.
- Ways to improve US and international practices for long-term transportation planning for older road users.

Excellence: What makes this project exceptional?

This effort is part of a national program that allows transportation experts in the US the opportunity to meet with and discuss the major roadway infrastructure design and operational issues that are particularly related to the older road user. It further provides a sound basis for evaluating the potential effectiveness of the foreign best practices and lessons learned in regard to the application of those findings to older road users in the US.

Significance: How is this research relevant to older persons, populations, and/or aging society?

FHWA has a multitude of programs that are devoted to the integration of older road user needs involving the full spectrum of transportation systems. However, the focus of this project was primarily on the implementation of infrastructure improvements for older road users. Many countries, including the US and Australia, have published documents detailing how the physical, perceptual, and cognitive changes associated with aging affect a person's ability to use the existing transportation system. These documents include recommendations for improvements to infrastructure and operations to address the needs of older road users, but few have reported on the successful implementation of these recommendations. This project also investigated policy initiatives regarding transportation system planning, operations, and design as they relate to older road users. The role of older road users in road safety programming, funding, prioritization and evaluation were also discussed with all of the governmental agencies.

As a recent GAO report notes, knowledge sharing between the US and other countries can help the US prepare for the coming increase in the proportion of older road users as the baby boom population moves toward retirement in the coming years.

Effectiveness: What is the impact and/or application of this research to older persons?

The success of this international scan can be measured by the number of ideas brought back to the U.S. and translated into strategies that will improve safety and mobility for older road users. The following is a tentative list of items that will be further studied for implementation in the US.

Enhancement of U.S. Roadway Design and Operations Practice

Integrate the knowledge of infrastructure improvements from Australia and Japan into relevant U.S. documents and training programs.

Outreach to Non-Government Organizations

Further the development of partnerships between government agencies, such as departments of transportation and health, and between government and non-government organizations to address the needs of older road users.

Targeted Research Program

Develop a research program on policies and interventions targeted at older road users. The scope of program should cover evaluation of specific interventions aimed at improving safety and mobility for older road users, development of new procedures and tools to aid practitioners in making decisions, and sharing of information on best practices through synthesis documents and professional conferences.

Establish Development Guidelines

Develop planning and land development guidelines for congregate housing and related transportation facilities and services that are intended to meet the growing needs older populations and older road users. The guidelines would be developed to assist local governments and the development community in the planning and retrofitting of existing facilities, as well as to assist local governments in their evaluation of land development

proposals as it relates to older populations and older road users. The proposal could become a joint venture research project to be cooperatively developed by national transportation and land development organizations.

Innovativeness: Why is this research exciting or newsworthy?

Application of innovative and successful ideas used in Australia and Japan
Establish a dialogue between older road user experts in the US and Australia and Japan
Sharing of findings with transportation experts and practitioners in state DOTs, academia, industry, and transportation associations.