

# Building the Road Safety Profession in the Public Sector

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More than 40,000 people die each year in motor vehicle crashes in the United States, and many more people are seriously injured. With continued growth in motor vehicle travel, more dramatic improvements in crash rates are needed to reduce this tragic toll. Government leadership and actions are vital to bringing about safety gains.

Federal, state, and local agencies plan, finance, build, operate, and maintain the nation's highway system. They regulate motor vehicle safety requirements and educate and license drivers. They set and enforce traffic laws and provide emergency response and medical services. They collect safety data and conduct and support safety-related research. Collectively, governments have a deep and far-reaching impact on the safety of the nation's roadways.

The thousands of federal, state, and local agencies that have road safety responsibilities employ hundreds of thousands of workers who influence safety performance on a regular basis. These workers have expertise in fields such as engineering, education, law enforcement, emergency response, public health, psychology, communications, statistics, and planning. Collectively, they have had a central role in bringing about a dramatic reduction in crash rates over the past 40 years, even as motor vehicle travel has grown relentlessly.

In recent years, crash rates have leveled off, and finding and taking advantage of opportunities for safety improvements are becoming increasingly difficult. The marked gains in safety performance that are needed to outpace traffic growth will require careful scientific and systems approaches to safety management. A talented and highly skilled professional workforce must be in place to lead this effort.

## Study Origin and Aims

The Federal Highway Administration, the Federal Motor Carrier Safety Administration, and the Transportation Research Board (TRB) sponsored a study to examine the future supply of and demand for road safety professionals in the public sector. Through the



PHOTO: OREGON DOT AND FHWA

A team of transportation professionals confers during a road safety audit on a segment of US-97, Oregon.

National Research Council of the National Academies, TRB assembled a special committee to conduct the study under the leadership of Kam K. Movassaghi, President of C. H. Fenstermaker and Associates, Inc., and former Secretary of Transportation for Louisiana (see box, page 29). Over a one-year period, the 11-member committee studied how safety professionals are educated, trained, recruited, and hired.

In Special Report 289, *Building the Road Safety Profession in the Public Sector*, the committee describes the history and current state of the road safety profession, observing how the profession has evolved in the past 50 years to encompass experts from many disciplines. Informed by interviews with road safety professionals, educators, trainers, and agency executives, the report explains how workers have found their way into the road safety field, how they received their safety-related education and training, and the kinds of safety-related knowledge and skills they possess. The report further explains how a dedicated cadre of experts within the road safety profession has advocated the use of scientific methods and empirical evidence for understanding road safety problems and for finding and implementing mitigations.

## Scarcity of Education and Training

Looking to the future, the committee expresses concern that development of the road safety profession remains a mostly ad hoc and unstructured process, as workers

obtain road safety knowledge and skills piecemeal, seldom through comprehensive education and training programs. Few universities offer a road safety curriculum, and public agencies have few places for recruiting trained safety professionals. Without such professional development capacity, the ability of government agencies to build the needed analytical and multidisciplinary safety workforce is questionable.

Much evidence suggests that the demand for road safety professionals is growing. Skilled professionals, for example, are needed to apply new safety-related tools and technologies and to meet legislative mandates for data-driven safety programs. This desirable trend reflects the recognition that safety gains are not random occurrences but the consequence of well-informed and well-implemented decisions. The challenge, therefore, is in building a pool of safety professionals who can provide this information and expertise for public agencies with road safety responsibilities.

## Alliance to Champion the Safety Profession

To meet this challenge, the committee urges the American Association of State Highway and Transportation Officials and the Governors Highway Safety Association to forge a broad-based alliance of safety-related organizations to build the road safety profession. These state-oriented, national associations are in a good position to lead the endeavor, because states have a prominent role in road safety.

The states plan, design, build, operate, and maintain large portions of the highway infrastructure; pass and enforce traffic safety laws; regulate driver instruction and licensing; and administer statewide programs that encourage safe driving. Because they employ thousands of road safety professionals, state governments must play a central role in any effort to build the profession.

The alliance must extend beyond these state-oriented associations, however, and include the many other public agencies and associations that have a strong interest in road safety and that encompass many relevant disciplines—such as engineering, enforcement, education, and emergency management—as well as jurisdictional levels: federal, state, regional, and local. The alliance likewise should seek the involvement and support of private-sector organizations, universities, and professional associations that share an interest in developing the road safety workforce.

The committee envisions a broad-based alliance that champions the road safety profession by

- ◆ Promoting a multidisciplinary safety workforce that recognizes the importance of applying a science-based and systems-level approach to safety management and is capable of implementing that approach;

## Committee for a Study of Supply and Demand for Highway Safety Professionals in the Public Sector

**Kam K. Movassaghi**, C. H. Fenstermaker and Associates, Inc., Lafayette, Louisiana, *Chair*

**John H. Daly**, Genesee County Road Commission, Flint, Michigan

**T. Bella Dinh-Zarr**, North America Make Roads Safe Campaign, Washington, D.C.

**Susan B. Herbel**, Cambridge Systematics, Inc, Heathrow, Florida

**Paul P. Jovanis**, Pennsylvania State University, University Park

**Lowell M. Porter**, Washington Traffic Safety Commission, Olympia

**H. Douglas Robertson**, University of North Carolina, Chapel Hill (retired)

**Thomas J. Songer**, University of Pittsburgh, Pennsylvania

**Peter F. Sweatman**, University of Michigan Transportation Research Institute, Ann Arbor

**Richard Tay**, University of Calgary, Alberta, Canada

**Thomas M. Welch**, Iowa Department of Transportation, Ames

- ◆ Commending and publicizing agencies that are recruiting, developing, and building a professional road safety workforce within their organizations;

- ◆ Encouraging the continued development and wider use of core competency definitions to guide the education, training, and promotion of road safety professionals who are skilled in scientific methods and in pursuing safety solutions from a systems level;

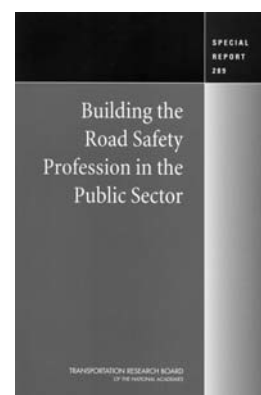
- ◆ Promoting road safety management as a distinct profession and a desirable career path;

- ◆ Convincing public agencies, industry, and universities of the value of forming road safety education and training partnerships, to foster demand for road safety training and education and to expose road safety professionals to the methods and results of science-based safety research; and

- ◆ Advocating support for science-based safety research to inform road safety professionals and to attract top faculty and students from many disciplines into the field of road safety—for example, through scholarships, internships, training grants, endowed university chairs, and research centers—across the many disciplines that contribute to road safety.

The study committee is convinced that road safety organizations can and must do more than call attention to workforce needs—they must make a lasting commitment to meeting those needs.

Nearly 40 years have passed since concern about the environment prompted a dedication of resources to developing the nation's environmental expertise, spawning educational programs, certification activities, and professional societies devoted to a now well-recognized profession. The road safety profession is on the cusp of a similar opportunity for gaining similar attention and recognition.



TRB Special Report 289, *Building the Road Safety Profession in the Public Sector*, is available from the TRB online bookstore, [www.TRB.org/bookstore](http://www.TRB.org/bookstore); to view the book online, go to <http://onlinepubs.trb.org/onlinepubs/sr/sr289.pdf>.