

# Improving Road Safety in Developing Countries

## Opportunities for U.S. Cooperation and Engagement

JOSEPH R. MORRIS

*The author, Senior Program Officer, TRB Division of Studies and Special Programs, served as rapporteur for the workshop.*

**W**ith the rapid expansion of motor vehicle use in developing nations, road traffic-related deaths and injuries are rising sharply. More than 1 million people died from road traffic crashes in low- and middle-income nations in 2000. According to the World Health Organization (WHO), that number could nearly double by 2020. Children are particularly vulnerable—WHO calculates that in 2002, road traffic injuries were the second-leading cause of death worldwide among those 5 to 29 years old; of those who were killed, 96 percent lived in low- and middle-income countries.

The rate of serious injuries is estimated to be 20 times that of road deaths. In addition to the human toll, road traffic injuries impair the growth and development of low- and middle-income countries by draining at least 1 percent of their gross domestic product, or \$65 billion, annually.

### Effects and Prospects

In January 2006, the Transportation Research Board, with the Policy and Global Affairs Division and the Institute of Medicine of the National Academies, convened a workshop, “Improving Road Safety in Developing Countries: Opportunities for U.S. Coop-



PHOTO: SUSAN GALLAGHER

A crowded bus negotiates a street in Usulután, El Salvador.

eration and Engagement.” The event brought together administrators and professionals from U.S. government agencies, nongovernmental organizations, international organizations, and academic research institutions to discuss the effects of the worldwide problem of road traffic injuries on U.S. interests, as well as the prospects for further U.S. action to address the problem. The National Highway Traffic Safety Administration and the Centers for Disease Control and Prevention sponsored the workshop.

The goal was to provide a view of the diversity of U.S. interests affected by the global problem of road traffic deaths and injuries, the scope of the activities by U.S. agencies addressing the problem, and the prospects for further U.S. engagement. The discussions were intended to help government agencies gauge whether the U.S. response is in proportion to the interests at stake and to identify the next steps in a more effective response.

## Key Observations

Highlights of the presentations and discussions included key observations about the problem and about the U.S. role in helping developing countries to cope with it:

- ◆ The scale of the road safety problem is large—1.2 million deaths annually—and is growing rapidly as motorization increases in the developing world. According to projections, road traffic injuries will cause nearly 3 percent of all deaths worldwide in 2030, up from 2 percent in 2002. Experience indicates that certain interventions to reduce road injuries have the potential to be highly cost-effective, compared with other large-scale international public health programs.

- ◆ The United States can assist developing countries in addressing the problem. Through decades of motorization, the United States has developed professional and institutional strengths across many sectors: data systems, road and vehicle standards, emergency medical care, intervention programs, and enforcement and adjudication.

- ◆ Despite the efforts of government agencies and nongovernmental organizations, U.S. engagement is not sufficient to have a significant effect on the problem. In some agencies, activities aim to protect U.S. citizens traveling as workers or tourists. Other government activities address aspects that affect trade and commerce, such as vehicle safety standards and cross-border trucking. Developing nations have received some assistance for research, data systems, and professional exchanges. U.S. agencies participate in the road safety programs of the United



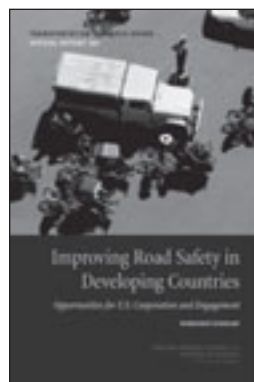
PHOTO: MARK ROSENBERG

Nations and the World Health Organization; but again, the scale of these multilateral efforts has been modest. U.S. nongovernmental organizations are participating in technical exchanges and public communication programs in developing countries.

- ◆ According to many of the government participants, stronger and more systematic collaboration among U.S. agencies and between government and private entities would increase the effectiveness of U.S. efforts. Collaboration is important because the most effective actions would involve several sectors, including transportation, health care, emergency services, law enforcement, and education.

- ◆ If the United States increases its engagement, it should be guided by the experience of other nations and international organizations. This experience indicates that the most effective interventions focus on institutional capacity building in the transportation, health, enforcement, and public administration sectors; entail long-term commitments by all parties; and incorporate monitoring and evaluation of outcomes.

A broken bicycle lies among shattered glass after a collision between a bus and a cyclist in Huangshan, China. Cyclists are among the most vulnerable road users when they must share the roads with cars, trucks, and buses.



*TRB Special Report 287, Improving Road Safety in Developing Countries: Opportunities for U.S. Cooperation and Engagement, is available from the TRB online bookstore, [www.TRB.org/bookstore/](http://www.TRB.org/bookstore/); to view the book online, [www.TRB.org/publications/sr/sr287.pdf](http://www.TRB.org/publications/sr/sr287.pdf).*



Open-bed trucks are typical modes of transport in El Salvador.

◆ U.S. programs also could derive lessons from the response to other global health crises, including the HIV-AIDS epidemic. The lag between recognition of the epidemic and the scaling up of a response resulted in enormous numbers of deaths and illnesses, as well as increases in the costs of prevention and treatment. Mounting a large-scale response required scientific evidence of the magnitude of the threat and of the effectiveness of interventions, the political will to commit resources, and a social strategy for organizing effective interventions.

◆ Increasing the effectiveness of the U.S. response to the global road safety problem would require coordinated planning by all the relevant government agencies.

### Inventory of Activities

Appointed by the National Research Council of the National Academies, the workshop planning committee (see box, below) arranged the agenda and identified program participants. In preparation for the workshop, representatives of 27 U.S. government

agencies were interviewed, and an inventory of the agencies' activities and interests related to road safety in developing countries was compiled from the responses.

Susan Gallagher of Education Development Center, Inc., conducted the inventory and presented the results at the workshop. Other speakers included John Flaherty, Chief of Staff of the U.S. Department of Transportation; Maryvonne Plessis-Fraissard, Director, Transport and Urban Development, the World Bank; and Harvey Fineberg, President of the Institute of Medicine. A panel of speakers from India, Australia, the Netherlands, and Norway described cooperative traffic safety programs linking high-income and developing countries. TRB has published a summary of the presentations and workshop discussions as Special Report 287, *Improving Road Safety in Developing Countries: Opportunities for U.S. Cooperation and Engagement*.

### Next Steps

Several participants suggested immediate next steps that U.S. government agencies could take in developing a more effective response to the global problem of road traffic safety. Creation of a permanent interagency body to coordinate U.S. government efforts could be a first step. Several immediate actions were suggested as part of the initial agenda of the interagency body:

◆ Complete the task of defining and documenting the U.S. interest in the problem of international road safety and of identifying the agencies and programs already involved.

◆ Engage U.S. nongovernmental organizations, determine their relevant interests and resources, and establish communications.

◆ Conduct case studies of recent significant international road safety initiatives.

◆ Coordinate a process of practical, governmentwide planning along two tracks: first, identify opportunities for more effective U.S. contributions using current resources; and second, determine the initial elements of a U.S. program if new funds became available. Plans would demonstrate that U.S. participation could support cost-effective interventions, including interventions with immediate short-term payoffs, and that the benefits would contribute to achieving overall development-related policy objectives. Specific activities that could be elements of these plans include establishing data systems, road and vehicle standards, emergency medical care, intervention programs, and enforcement and adjudication.

## Planning Committee for a Workshop on Traffic Safety in Developing Nations

Mark L. Rosenberg, Task Force for Child Survival and Development, Decatur, Georgia, *Chair*

Anthony Bliss, World Bank, Washington, D.C.

T. Bella Dinh-Zarr, AAA, Washington, D.C.

J. Michael McGinnis, Institute of Medicine, Washington, D.C.

V. Setty Pendakur, Pacific Policy and Planning Associates, Vancouver, Canada