

# TR NEWS

NUMBER 318

**NOVEMBER-DECEMBER 2018** 

## 3 NASEM STUDY

#### **Eliminating Alcohol-Impaired Driving Fatalities**

Amy Geller and Yamrot Negussie

To combat the deadliest, costliest danger on U.S. roads—alcohol-impaired driving—a study committee of the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine identified evidence-based interventions to reduce fatalities caused by alcohol-impaired driving in the United States. The study also examined alcohol-impaired driving interventions—both potential and in use—and their promise and effectiveness.

### 11 U.S. DOT's Disadvantaged Business Enterprise Program: Key Components and Issues

Colette Holt and Joanne Lubart

The United States Department of Transportation's (DOT's) Disadvantaged Business Enterprise (DBE) program has endured for nearly 40 years. The national program helps to correct a historic imbalance in opportunities for minority- and women-owned small businesses in DOT-assisted contracting and applies to recipients of U.S. DOT transportation funds. This article explores the DBE program's background and goals as well as related legal and programmatic complexities.

## 18 Advancing Core Values: TRB's Inclusion and Diversity Initiative Karen Febev

The Transportation Research Board's (TRB's) support of inclusion and diversity has focused on increasing diversity in the selection of committees and project panels. To broaden and fortify this effort, Executive Director Neil Pedersen has sought to integrate diversity and inclusion into TRB's organizational culture. This article outlines TRB's work formalizing and building on best practices, developing a task force, and identifying other actions by staff and volunteers to ensure that TRB represents as many perspectives and opinions as possible.

## 22 TRB SPECIAL REPORT

#### **Designing Safety Regulations for High-Hazard Industries**

Thomas R. Menzies, Jr.

Presented in TRB Special Report 324, *Designing Safety Regulations for High-Hazard Industries*, is a framework for the design of safety regulations for industries engaged in hazardous activities. Different regulatory designs offer different advantages depending on how they are applied; to make smart decisions, regulators must have a clear conceptual framework for design options and under which circumstances a given design would be most effective.

## 24 NCHRP RESEARCH REPORTS 882 & 886 Research Offers Insights on Highway Noise

Ann M. Hartell, Ken Kaliski, Darlene Reiter, Bill Bowlby, Roger Wayson, and Judy Rochat Traffic noise from highways can affect human health and quality of life negatively; since 1970 federal legislation has required state DOTs to anticipate and mitigate noise effects of proposed new highways and expansion projects. State DOTs continue to hear complaints about traffic noise, however. Two recent National Cooperative Highway Research Program research reports offer new insights for noise specialists, project designers, and policy makers.



3



18



29



COVER: A vehicle that had been crashed by an intoxicated driver is towed from a pond. A study from the National Academies of Sciences, Engineering, and Medicine explored research on interventions to reduce alcohol-impaired driving crashes. (Photo: Mark Taylor, Flickr)

## TR NEWS

features articles on innovative and timely research and development activities in all modes of transportation. Brief news items of interest to the transportation community are also included, along with profiles of transportation professionals, meeting announcements, summaries of new publications, and news of Transportation Research Board activities.

TR News is produced by Transportation Research Board Publications Staff

Eileen Delaney, Director of Publications Lea Camarda, Editor Heidi Willis, Associate Editor Jennifer G. Correro, Proofreader

TR News Editorial Board Christine L. Gerencher, Chair Camille Crichton-Sumners Waseem Dekelbab Karen S. Febey Nelson H. Gibson Edward T. Harrigan Micah Himmel Katherine Kortum

Transportation Research Board
Neil J. Pedersen, Executive Director

Russell W. Houston, Associate Executive Director Ann M. Brach, Director, Technical Activities

Thomas R. Menzies, Jr., Director, Consensus and Advisory Studies Gary J. Walker, Director, Administration and Finance Christopher J. Hedges Director

Christopher J. Hedges, Director, Cooperative Research Programs

TR News (ISSN 0738-6826) is issued bimonthly by the Transportation Research Board, 500 Fifth Street, NW, Washington, DC 20001. Internet address: www. TRB.org.

Editorial Correspondence: By mail to the Publications Office, Transportation Research Board, 500 Fifth Street, NW, Washington, DC 20001, by telephone 202-334-2986, by fax 202-334-3495, or by e-mail lcamarda@nas.edu.

Subscriptions: North America: 1 year \$75; single issue \$19. Overseas: 1 year \$100; single issue \$19 plus shipping. Inquiries or communications concerning new subscriptions, subscription problems, or single-copy sales should be addressed to the Business Office at the address below, or telephone 202-334-3216, fax 202-334-2519. Periodicals postage paid at Washington, D.C.

**Postmaster:** Send changes of address to *TR News*, Transportation Research Board, 500 Fifth Street, NW, Washington, DC 20001.

**Notice:** The opinions expressed in articles appearing in *TR News* are those of the authors and do not necessarily reflect the views of the Transportation Research Board. The Transportation Research Board and *TR News* do not endorse products or manufacturers. Trade and manufacturers' names appear in an article only because they are considered essential.

Printed in the United States of America.

Copyright © 2018 National Academy of Sciences. All rights reserved. For permissions, contact TRB.

Graphic design: Michelle Wandres, Publishing Solutions

#### 29 Preparing for Shared Mobility and Automated Vehicles: Symposium and TRB Forum Chart a Course for Research

Katherine A. Kortum

To facilitate needed evidence-based research on automated vehicles, shared mobility services, and other transformational transportation technologies—and on how and when the technologies can meet long-term goals—TRB launched the Forum on Preparing for Automated Vehicles and Shared Mobility in early 2018. This article reviews the Forum's activities to date and reports on the 2018 Automated Vehicle Symposium in San Francisco in July.

## 34 Bilateral Automation Research: 6th EU–U.S. Transportation Research Symposium

Katherine A. Kortum

Since 2013, TRB, the U.S. DOT Office of the Secretary of Transportation—Research, and the European Commission have joined forces for bilateral transportation research: sharing experiences, identifying potential next steps and research needs, and uncovering opportunities for joint efforts. In June, European and U.S. researchers convened in Brussels, Belgium, to examine the impacts of connected and automated vehicles on the workforce, economy, community land use, and transportation equity.

## 37 RESEARCH PAYS OFF Streamlining Survey in Reno's Spaghetti Bowl

Emily Pettis, Sebastian Renfield, and Alexis Thomas

#### ALSO IN THIS ISSUE:

- 40 Calendar
- 41 Profile

New Jersey Department of Transportation planner Veronica M. Murphy

42 TRB Highlights

Cooperative Research Programs News

43 Bookshelf

#### COMING NEXT ISSUE



Completed bat gate at an abandoned railway tunnel in Harrison County, Ohio. The 2018 state partnership visits of state transportation agencies by TRB senior program officers, the topic of a feature article in the January–February 2019 issue of *TR News*, showcase emerging trends, applied research, research needs, and innovative solutions to challenges across all transportation modes and

functions. Other articles explore obesity solutions through investments in the built environment, the Ohio Department of Transportation's work protecting historic railroad tunnels as artificial bat hibernacula, and a transportation test bed corridor in Atlanta, Georgia.