

TR NEWS

Deploying Transportation Research *TRB 92nd Annual Meeting Highlights*



Also Inside:

**Testing Connected Vehicle Technology
Curbing Construction Costs and Time
Transportation High School's Winning Course
Worldwide Needs for Rural Roads**

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The **Transportation Research Board** is one of six major divisions of the National Research Council, which serves as an independent adviser to the federal government and others on scientific and technical questions of national importance, and which is jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The mission of the Transportation Research Board is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied activities annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

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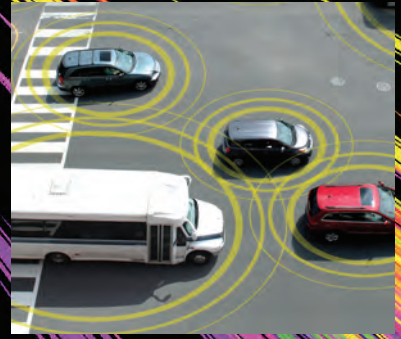
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* Membership as of April 2013.

TR NEWS

NUMBER 285

MARCH–APRIL 2013



3



10



27



**3 Keeping the Promise of Connected Vehicle Technology:
Toward an Era of Unprecedented Roadway Safety and Efficiency**
Kenneth Leonard

Research has shown that vehicles connected via data transmissions with other vehicles and the roadway infrastructure can transform the way Americans travel, by creating a safe, interoperable, wireless communications network of cars, buses, trucks, trains, traffic signals, cell phones, and other devices. The author reviews the status and the expected benefits of the U.S. Department of Transportation's efforts to make the vision a reality.

**10 Construction Manager–General Contractor Project Delivery:
A Better, Faster, Smarter Way of Building Transportation Infrastructure**
Douglas D. Gransberg

Construction manager–general contractor is an alternative method for delivering highway projects that can reduce the growth of cost and of time during construction. Under this arrangement, the construction manager provides input during project design and is at risk for meeting the project's budget and deadline. Brief case studies illustrate how the arrangement works and the best contexts to gain its advantages.

**15 2013 ANNUAL MEETING HIGHLIGHTS
Deploying Transportation Research: Doing Things Smarter, Better, Faster**

A photographic roundup of events, sessions, meetings, awards, exhibits, and interactions conveys the multifaceted exchange of information to advance transportation through research at TRB's 92nd Annual Meeting in Washington, D.C., January 13–17.

**27 Hands-On Learning for Transportation's Tomorrow:
TransTech Academy in Washington, D.C.**
Shirley McCall

Established in 1991, TransTech Academy at Francis L. Cardozo Senior High School, Washington, D.C., offers training in preengineering, aviation and aeronautics, technology, and electromechanical technology and has graduated more than 500 students. The program's longtime coordinator reflects on the development of the curriculum, innovative approaches, productive partnerships, and notable successes.

**32 Rural Roads: Harbingers of Opportunity, Prosperity,
and Livability in Developing Countries**
Asif Faiz

Empirical evidence shows a positive relationship between public spending on rural roads and the reduction of poverty—roads are the foundation of rural development, notes the author, who forecasts continued growth in rural roads worldwide and identifies related issues, such as accessibility, emergency preparedness and disaster management, and the need for engineering and technical guidelines and context-sensitive solutions.

**36 NEW COOPERATIVE RESEARCH PROGRAMS REPORT
Practical Approaches for Involving Traditionally Underserved Populations in
Transportation Decision Making**
David Aimen and Anne Morris

The National Cooperative Highway Research Program has published a toolkit of practical approaches for agencies and practitioners to foster the meaningful involvement of traditionally underserved populations—particularly minority, low-income, limited-English-proficiency, and low-literacy groups—in transportation decision making. Effective practices, tools, techniques, and data sources are presented.

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.

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46 A Chronicle of Research and TRB Turns 50: Highlighting the Fifth Decade of TR News *Javy Awan*

The 50th anniversary of TRB's magazine provides an occasion to look back at recent highlights and emerging themes, including climate change, the environment, security, technology applications, international research collaboration, lessons from transportation history, and more.

ALSO IN THIS ISSUE:

- 41 Research Pays Off
Partnering to Fill the Research Needs of an Underrepresented Highway System: Alaska and Washington State Advance Design of Ferry Berthing Structures
Andrew Metzger
- 44 Profiles
Transportation systems planner and modeler Ram Pendyala; and international transportation and sustainable development consultant Maryvonne Plessis-Fraissard
- 51 News Briefs
- 52 TRB Highlights
Learning and Networking at a Virtual Conference, 52
Stephanie Camay
TRB's Webinar Program Nets Success, 53
Lisa Berardi Marflak
Second Strategic Highway Research Program News, 54
Cooperative Research Programs News, 55
- 56 Bookshelf
- 60 Calendar

COMING NEXT ISSUE

The role of science and technology in advancing the rail industry is the theme of feature articles in the next issue of *TR News*, highlighting the benefits from research investments that anticipate and meet industry needs. Research and demonstration projects on crash energy management; the design of tank cars to reduce the risk of transporting hazardous materials by rail; track support to improve track safety, efficiency, and the competitiveness of the industry; improvements in safety culture; reducing highway-rail grade crossing incidents; and positive train control are among the subjects to be covered.



Full-scale tank car impact test setup for evaluating safety improvements under the Next-Generation Railroad Tank Car project at the Transportation Technology Center near Pueblo, Colorado.