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**NOVEMBER-DECEMBER 2013** 

#### **SHRP 2 IMPACTS AND IMPLEMENTATION**

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#### Research Designed for Implementation and Historic Impact

Ann M. Brach

The second Strategic Highway Research Program is releasing products and procedures for drastically reducing the numbers of injuries and fatalities on highways; expediting the delivery of highway projects; and minimizing the negative impacts of congestion.

#### 5 Imagining the Second Strategic Highway Research Program in Action: A Product Showcase Scenario

Neil Hawks

Late in 2011, SHRP 2 staff and researchers negotiated the initial turn from research to implementation and developed a scenario featuring an imaginary highway corridor to illustrate real-world applications of various SHRP 2 products and how they might work together to meet an agency's needs.

#### 11 SHRP 2 RENEWAL FOCUS AREA

# Lasting Renewal with Minimal Disruption: Building a Highway Network into the Future Catherine Nelson and Steven DeWitt

The SHRP 2 Renewal focus area has developed a suite of products across five project areas: pavements, bridges, utilities and railroads, nondestructive testing, and project delivery. The products are designed to minimize traffic disruptions, promote traffic and worker safety, and accelerate project delivery for long-lasting facilities.

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- 19 Building Green with Precast and Composite Pavements: Illinois Tollway's Experience Steven Gillen

#### 21 SHRP 2 CAPACITY FOCUS AREA

## Maximizing Highway Capacity: Strategic Initiatives Address Collaboration, the Environment, the Economy, and Travel Needs

Mark Van Port Fleet

To meet the needs for highway expansion, the SHRP 2 Capacity focus area has developed tools and resources for collaborative decision making, ecological approaches to integrating environmental protection and transportation planning, understanding the economic impacts of highway investments, and the analysis of travel demand.

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#### 29 SHRP 2 RELIABILITY FOCUS AREA

#### **Providing Reliable Travel Times on the Highway System**

Carlos Braceras

The Reliability projects aim to provide highway users with reliable travel times by preventing and reducing the impacts of nonrecurring congestion. Initiatives assist agencies in organizing to address travel time reliability, analyze data, and incorporate reliability into planning, programming, and design; the focus area also fosters innovations.



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COVER: Accelerated bridge construction at Keg Creek, Iowa. SHRP 2 products and procedures are beginning to make a lasting, beneficial impact on the renewal, congestion relief, reliability, and safety of the nation's roadways. (Photo: FHWA)

# 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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This Ain't Your Grandma's Safety Research: Naturalistic Driving Study Yields Long-Sought Data

Forrest M. Council

The SHRP 2 Naturalistic Driving Study has combined technologies to gather objective, scientific information about what happens before a crash, when drivers experience a near-crash, and when drivers drive without incident. These data will help scientists, engineers, policy makers, and educators make significant improvements in highway safety.

39 Ensuring the Long-Term Stewardship of the Safety Data Joseph L. Schofer

#### 40 SHRP 2 IN TRANSITION

#### **Moving Research Results into Implementation**

Kirk Steudle

To achieve the routine use of SHRP 2 products by state departments of transportation and other agencies, the Federal Highway Administration and the American Association of State Highway and Transportation Officials are working to enlist a critical mass of early adopters to use the products and to establish a model for others to follow.

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The Clear Roads pooled-fund study included research to identify high-risk drivers typically involved in winter-related crashes and developed a targeted educational campaign.

A boom in the domestic energy industry is having an impact on transportation infrastructure—a feature in the January-February 2014 issue of TR News examines the effects on low-volume roadways in Texas, and sidebars present reports from Iowa and Pennsylvania. Other features offer practical findings from a 26-state pooled-fund study on winter maintenance challenges; the megaproject under way to replace the Gerald Desmond Bridge in the Port of Long Beach, California; and implementation of SHRP 2 accelerated bridge construction pilot projects in New York and Iowa. Also included is the annual roundup of innovative approaches and trends gathered from the 2013 state partnership visits by TRB senior program officers—and more.