### CONCRETE CONNECTIONS

Concrete Connections is an annotated list of websites where information is available about concrete bridges. Fast links to the websites are provided at www.aspirebridge.org.

#### IN THIS ISSUE

## www.michiganhighways.org/indepth/zilwaukee. html#history

This website contains the history of the Zilwaukee Bridge described on pages 12 to 14.

#### www.wsdot.gov/projects/us97/satuscreekbridge/

Visit this Washington State Department of Transportation website for additional information about the Satus Creek Bridge discussed on pages 24 to 26.

#### www.iowadot.gov/MassenaBridge/index.html

Visit this Iowa Department of Transportation website for information about the Massena Bridge lateral bridge slide described on pages 33 to 35. The site includes a photo and video gallery, contract documents, contractor's submittals, and a post-construction review.

## www.fhwa.dot.gov/research/tfhrc/programs/infrastructure/structures/ltbp/

This website provides more information about the FHWA Long-Term Bridge Performance Program summarized in the FHWA article on pages 36 and 37.

#### www.pcine.org/index.cfm/projects/bridges

This PCI Northeast website has additional information and photographs about the Fairmount Bridges described on pages 20 to 22.

#### **Sustainability**

#### www.sustainableinfrastructure.org

Information about Envision, $^{TM}$  a rating system system for sustainable infrastructure, is available at this website.

#### **Bridge Technology**

#### www.aspirebridge.org

Previous issues of ASPIRETM are available as pdf files and may be downloaded as a full issue or individual articles. Information is available about subscriptions, advertising, and sponsors.

#### www.nationalconcretebridge.org

The National Concrete Bridge Council (NCBC) website provides information to promote quality in concrete bridge construction as well as links to the publications of its members.

#### www.concretebridgeviews.com

This website contains 73 issues of *Concrete Bridge Views* (formerly *HPC Bridge Views*), an electronic newsletter published jointly by the FHWA and the NCBC to provide relevant, reliable information on all aspects of concrete in bridges.

## **NEW** www.fhwa.dot.gov/publications/research/infrastructure/structures/ltbp/13051/

The FHWA technical report titled *LTBP Bridge Performance Primer* is available at this website. The report is intended to provide a comprehensive definition of bridge performance that will be the foundation for carefully designed research studies in the LTBP Program. The report describes the barriers and complications that hinder the understanding of bridge performance and identifies the measures by which bridge

performance is currently defined. The report divides bridge performance into specific issues, identifies the most critical issues, and describes the types of data necessary to analyze these issues.

# NEW www.trb.org/main/blurbs/170201.aspx or http://onlinepubs.trb.org/onlinepubs/shrp2/SHRP2prepubR19B.pdf

TRB's second Strategic Highway Research Program (SHRP 2) Reliability Project R19B has released a prepublication, non-edited version of a report titled *Bridges for Service Life Beyond 100 Years: Service Limit State Design* that explores design codes critical for bridges to reach a service live of beyond 100 years. The report also addresses performance measures and design procedures that utilize criteria to maximize the actual life of a bridge system.

#### NEW http://vimeo.com/83863944

The video on this website highlights the benefits of SHRP 2 ABC Toolkit for using accelerated bridge construction techniques on standard bridges. It features the replacement of the I-84 bridge over Dingle Road in New York State.

#### www.fhwa.dot.gov/research/resources/uhpc.cfm

This FHWA website is the location of considerable information about ultra-high-performance concrete including both research and applications.

#### www.fhwa.dot.gov/publications/research/infrastructure/ structures/hpc/13060

A new report titled *Ultra-High Performance Concrete: A State-of-the-Art Report for the Bridge Community* (Pub. No. FHWA-HRT-13-060) is available at this website. The report includes information on materials and production, mechanical properties, and structural design and testing. An extensive list of references is provided.

## www.abc.fiu.edu/wp-content/uploads/2013/07/ABC-User-Guide-for-posting1.pdf

This Florida International University website contains a users' guide to the National ABC Project Exchange, which is a nationwide repository of projects that have incorporated Prefabricated Bridge Elements and Systems (PBES) with other innovative strategies to accomplish the objects of accelerated bridge construction.

#### **Bridge Research**

#### www.trb.org/shrp2/researchreports

Are you looking for a research report from the second Strategic Highway Research Program (SHRP2)? Nearly 90 reports organized by focus area and topic are now available as free downloads from this website.

## http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\_rpt\_733.pdf

NCHRP Report 733, *High-Performance/High-Strength Lightweight Concrete for Bridge Girders and Decks* presents proposed changes to the AASHTO LRFD bridge design and construction specifications to address the use of lightweight concrete in bridge girders and decks.