

update

News about transportation research and the work of the Minnesota Local Road Research Board

Making a difference.



2015 Engineer of the Year Awards

- The Minnesota County Engineers Association (MCEA) has named **John Brunkhorst** (McLeod County) its 2015 County Engineer of the Year. Congratulations, John!
- The City Engineers Association of Minnesota (CEAM) has named **John Maczko** (City of Saint Paul) its 2015 City Engineer of the Year. Congratulations, John!

FY2017 LRRB Research Projects Approved

In December, the LRRB approved the following [research projects](#):

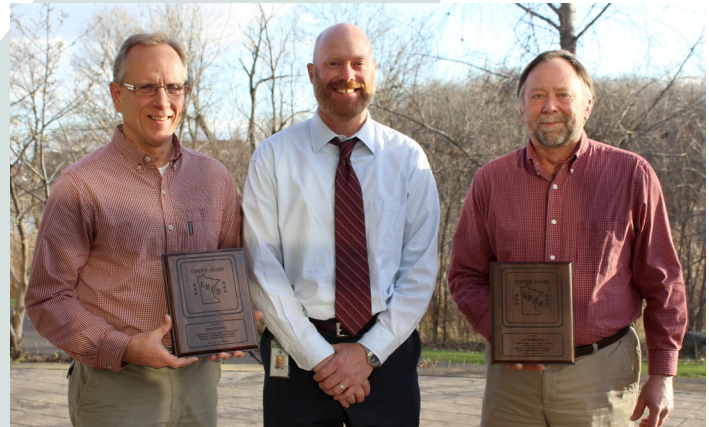
- Development and Demonstration of a Cost Effective In-Vehicle Lane Departure and Advanced Curve Speed Warning System
- In-vehicle Dynamic Curve Speed Warnings at High Risk Rural Curves
- Regional Optimization of Roadside Turfgrass Seed Mixtures
- Minnesota Culvert Manual to Accommodate Aquatic Species Passage
- Effective Social Media Engagement Options for Minnesota's Diversifying Population
- Field Investigation of Bridge Deck Reinforced with GFRP Rebar
- Signing for Effective Roundabout Approach Speed Reduction
- Work Zone Intrusion Report Interface Design
- Investigating the Necessity and Prioritizing Pavement Markings on Low Volume Roads
- Comparison of Performances of Structural Fibers and Development of a Specification for using Structural Fibers in Thin Concrete Overlays
- Transportation Investment and Job Creation in Minnesota Counties
- Optimized Taconite-Based Pavement Repair Compound and Deployment System
- Permeable Pavement for Road Salt Reduction
- Iron-Enhanced Swale Ditch Checks for Phosphorus Removal



Doug Fischer (Anoka County, right) presents the 2015 County Engineer of the Year Award to John Brunkhorst (McLeod County, left).



Jeff Johnson (City of Mankato, left) presents the 2015 City Engineer of the Year Award to John Maczko (City of Saint Paul, right).



Ted Schoenecker (MnDOT State Aid, center) presents service awards to outgoing RIC members Dave Robley (Douglas County, left) and Jeff Hulsether (City of Brainerd, right).



Mitch Rasmussen (MnDOT State Aid, right) presents a service award to outgoing LRRB member and chair Bruce Hasbargen (Beltrami County, left).

2016 Calendar of Events

May 11-13: American Public Works Association – Minnesota Chapter (APWA-MN) Spring Conference

Grand View Lodge, Nisswa, MN

<http://www.apwa-mn.org/>

May 19 : Minnesota Roadway Maintenance Training and Demo Day

Camp Ripley Education Center, Little Falls, MN

<http://www.mnltap.umn.edu/training/roadway/>

Highlighted LRRB Projects

Innovative Inspection Devices Help Extend Timber Bridge Life Spans



Common in rural areas, timber bridges are an important component of the U.S. highway system. Although praised as environmentally friendly in comparison with other bridge types, wooden bridges are prone to deterioration caused by moisture in the wood, as well as by fungi, insects, and mechanical damage. This damage often occurs within the wood, not on the surface, making the deterioration difficult to detect.

Traditional inspection techniques – such as visual inspection, sounding with a hammer, and coring – often miss early-stage or internal damage in timber bridges. The November/December 2015 issue of *TR News* highlights a recently completed LRRB project, “[Development and Integration of Advanced Timber Bridge Inspection Techniques for NBIS](#),” which identifies inspection techniques that enable local engineers to address deterioration and extend timber bridge life, saving agencies the costs of detours and bridge replacements. The [full article](http://onlinepubs.trb.org/onlinepubs/trnews/trnews300rpo.pdf) is available at <http://onlinepubs.trb.org/onlinepubs/trnews/trnews300rpo.pdf>.

Highlighted RIC Projects

TZD Toolkit: Getting the Message to Younger Drivers

A [new Toward Zero Death \(TZD\) toolkit](#) helps city and county engineering staff communicate with and improve safety for Minnesota’s highest-risk driving population – younger drivers ages 15-29. The toolkit explores the causes of younger driver severe crashes while featuring ideas and resources to help educate and promote community engagement to reduce younger driver traffic deaths and injuries.



Temporary Traffic Control

The LRRB has developed two documents to help local agencies identify the appropriate work zone layout to use for low-volume urban and rural roadways based on the maintenance activity that will be performed. The documents are intended to supplement the Temporary Traffic Control Zone Layouts Field Manual. The final documents are available at <http://www.dot.state.mn.us/research/TS/2016/2016RIC09.pdf>.

Member Updates

LRRB Updates

- **Jim Foldesi** (St. Louis County) has replaced Bruce Hasbargen (Beltrami County) on the LRRB board.

RIC Updates

- **Steve Bot** (City of St. Michael) has replaced Jeff Hulsether (City of Brainerd) on the RIC board.
- **John Brunkhorst** (McLeod County) has replaced Dave Robley (Douglas County) on the RIC board.



Jim Foldesi



Steve Bot



John Brunkhorst

Additional Announcements

2015 LRRB At-A-Glance Available Online

The [FY2015 Local Road Research Board At-A-Glance](#) is now available online. In addition to serving as a quick reference guide to our research program, this document also contains research highlights, budget summaries, and videos. Please contact [Sandy McCully](#) for printed copies.

FY2015 Local Road Research Board At-A-Glance
July 1, 2014, through June 30, 2015

We explored state-of-the-art inspection techniques for timber bridges to safely extend their life spans. Report 2015-01

We investigated various rumble strip designs to find those that are loud enough to be heard by drivers without annoying nearby landowners. Report 2015-07

We created a toolkit of resources to help local agencies promote safer driving among young people. Report 2015RIC04

We collected data correlating nighttime crash rates at rural intersections with lighting levels to help us design safer intersections. Report 2015-05