September 2016 www.lrrb.org
update
News about transportation research and the work of the Minnesota Local Road Research Board

Making a difference.

LRRB LOCAL ROAD RESEARCH BOARD

Member Updates

Andrew Witter Named NACE Project Manager of the Year

The National Association of County Engineers (NACE) recently named **Andrew Witter** (Sherburne County, formerly Anoka County) the 2015 Program/Project Manager of the Year during its 2016 Annual Conference in Tacoma, Washington.

Andrew Witter (left) receives the Project Manager of the Year award from National Association of County Engineers President Duane Ratermann

While serving as the Assistant County Engineer for Anoka County, Witter oversaw the $42 million Armstrong Boulevard/TH 10 interchange project – the first grade separation through the cities of Anoka and Ramsey. In addition to addressing safety concerns along a busy corridor, the complex transportation improvement project helps relieve bottleneck congestion for almost 40,000 vehicles per weekday.

Witter, whose project involvement began in 2005 and spans more than a decade, has been recognized for resolving multiple design and construction issues to ensure the project remained on schedule. The multiagency project also included regular meetings with area landowners and business owners as well as ongoing communication with BNSF Railway, MnDOT, the City of Ramsey, U.S. Corps of Engineers, the Department of Natural Resources, and others to ensure stakeholder interests and concerns were addressed.

For more information, including a link to the video of construction aerials, please visit http://www.countyengineers.org/news/16Apr/Pages/16Apr_5.aspx.

Highlighted LRRB Projects

Alternatives to Seal Coats

Seal coats are one of many techniques commonly used for asphalt pavement preservation, and chip seals are the most commonly used in Minnesota. In some situations (cul-de-sacs or intersections), chip seals are not the best surface treatment alternative due to frequent or high stress turning movements. This project summarizes current seal coat practices and identifies alternatives that provide pavement protection, extend pavement life similar to chip seals, and avoid the identified problems. For more information, please visit http://www.dot.state.mn.us/research/TRS/2016/TRS1602.pdf

Member Updates (continued)

Rich Sanders Named NACE Secretary/Treasurer

Congratulations to **Rich Sanders** (Polk County) on being named Secretary/Treasurer of the National Association of County Engineers (NACE).

Rich Sanders (second from left) begins his term as Secretary/Treasurer of the National Association of County Engineers

2016-2017 Calendar of Events

October 5-6: Minnesota Fall Maintenance Expo
St. Cloud Public Works Facility, St. Cloud, MN
http://www.mnfallexpo.com/

November 16-17: Minnesota Toward Zero Deaths (TZD) Conference
Duluth Entertainment Convention Center, Duluth, MN
http://www.minnesotatzd.org/events/conference/2016/

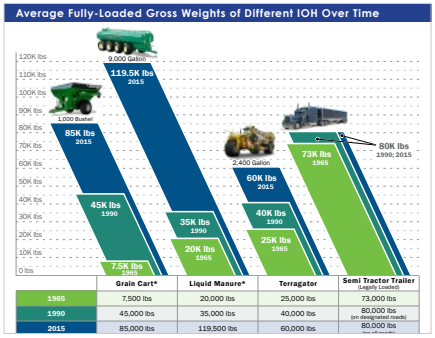
November 17-18: American Public Works Association – Minnesota Chapter (APWA-MN) Fall Workshop and Conference
Earle Brown Heritage Center, Brooklyn Center, MN
https://www.apwa-mn.org/events-education/Fall-Conference/2016

January 17-20: Minnesota County Engineers Association (MCEA) Annual Conference
Cragun's Resort and Hotel, Brainerd, MN
http://www.mncountyengineers.org/calendar/

January 25-27: City Engineers Association of Minnesota (CEAM) Annual Conference
Earle Brown Heritage Center, Brooklyn Center, MN
http://www.ceam.org/

March 1-2: Minnesota's Transportation Conference
Saint Paul RiverCentre, St. Paul, MN
http://mntransportationconference.org/index.html

Highlighted RIC Projects (Please click on image for a link to each flyer.)

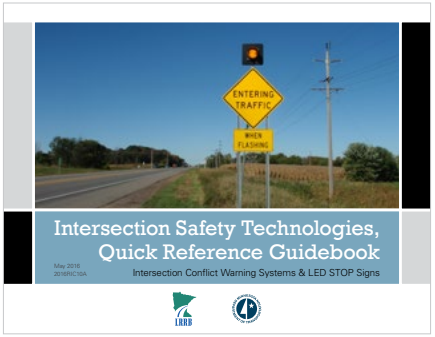


Implements of Husbandry

As Implements of Husbandry (IOH) continue to increase in size and weight, there is serious concern about how these IOH are damaging local roads. This brochure provides background information on the history of IOH, summarizes IOH weight restrictions in surrounding states, and provides links to recent research that details the damaging effects IOH have on pavements.

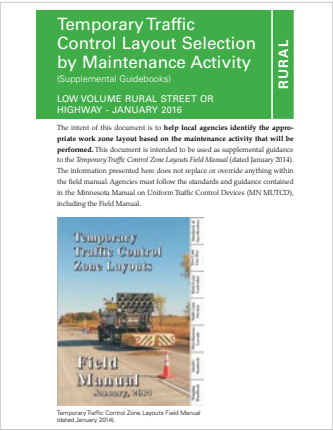
Snow and Ice Control Guidebook

Minnesota agencies perform winter maintenance to keep roads clear for the traveling public. However, agencies must balance public safety, cost, and environmental concerns to effectively manage their winter maintenance. This guidebook summarizes common snow and ice control tools and serves as an introduction to the field of winter maintenance for operators and managers.



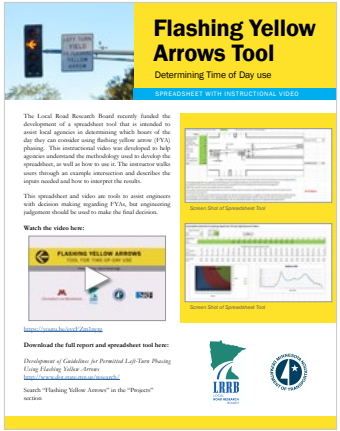
Rural Intersections Safety Technology

Although intersection safety technologies can help improve intersection safety, these tools can be confusing and intimidating for agencies that have not used them in the past. This guidebook contains basic information about alternative solutions to traffic safety concerns at side-street STOP controlled intersections and provides information to aid in the consideration, selection, and deployment of Intersection Conflict Warning Systems (ICWS) and LED STOP signs at these intersections.



Temporary Traffic Control for Low Volume Roads

Two new guidebooks help local agencies identify appropriate work zone layouts on low-volume roads based on the maintenance activity that will be performed. The full report also includes a summary of work zone resources and training opportunities.



Flashing Yellow Arrow Training and Video

A new spreadsheet helps assist local agencies determine which hours of the day they can consider using flashing yellow arrow (FYA) phasing. A video walks users through an example intersection, describing the inputs needed and how to interpret the results.

Recycled Asphalt Pavement

Recycled Asphalt Pavement (RAP) helps reduce cost and environmental impacts of road construction by reusing existing asphalt pavement. This document serves as a reference for local agencies that have minimal knowledge of incorporating RAP material into new asphalt and includes basic information on Minnesota specifications, national trends, and links to additional information.

Multi-Lane Roundabouts

Multi-lane roundabouts can be an effective intersection control and reduce injury crashes if the design and layout are carefully considered. Past experience has indicated that failure to yield and improper lane use violations can be over represented at multi-lane roundabouts, leading to a higher number of property damage crashes. This brochure summarizes two LRRB funded studies that were been to attempt to address these violations.