



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

National Recognition for LRRB

Gravel Roads Management Project Highlighted in Texas Lone Star LTAP Newsletter

The Lone Star Local Technical Assistance Program (LTAP) has highlighted the LRRB's *Management Tools for Gravel Roads* project in its current issue of *Lone Star Roads*. As the state of Texas grows, Texans are opting for an increasingly rural lifestyle, creating new traffic demands. Oil and gas production have also resulted in increased heavy truck traffic, which presents major challenges for local areas.

According to the newsletter article, local experts believe that gravel road management tools may help Texas better meet these new roadway challenges despite severe budget limitations by allowing agencies to:

- · Set realistic budgets
- · Make timely repairs
- Implement more cost-effective procedures
- · Plan for future needs

To read the full article, please visit http://www.teex.com/PRT/documents/LSR 3_2014.pdf.

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Gravel road management tools may help Texas agencies meet new roadway challenges.

ALERT System Featured in Washington State's LTAP Newsletter

Rural, two-way, stop-controlled intersections pose a significant threat to traffic safety, accounting for 76 percent of fatal and serious-injury intersection crashes. The LRRB has funded a new research project to design and implement a low-cost conflict warning system called the ALERT System (Advanced LED Warning System for Rural Intersections) to help improve driver safety at rural intersections.

This quarter's edition of *Washington State LTAP News* (published by the Washington State Department of Transportation) highlights the new technology in an article titled *Development and Evaluation of the ALERT System*. To view the full article, please visit http://www.wsdot.wa.gov/NR/rdonlyres/817D2E58-53D7-4753-8F16-19852C868EFB/0/Quarter2 2014.pdf.

The full research report can be accessed from the Minnesota LRRB website at www.lrrb.org. A video summarizing this research project is available at http://www.mntransportationresearch.org.

Two RIC Projects Highlighted in National Association of County Engineers Newsletter

The National Association of County Engineers (NACE) has highlighted two RIC projects in the August issue of *NACE News*.

• Traffic Sign Maintenance and Management Online Training Course

Funded by the LRRB, a new online distance-learning course has been created to provide a concise, cohesive set of sign maintenance and management materials to employees of counties, cities, and municipalities. For more information, please visit http://www.countyengineers.org/news/2014Aug/Pages/14Aug_6.aspx.

Management Tools for Gravel Roads

This newsletter article highlights several benefits of gravel road maintenance management programs (see left). The full article is available at http://www.countyengineers.org/news/2014Aug/Pages/14Aug/9.aspx.

55-Year Anniversary Interviews

It is often said we live in interesting times. Did you know that in the last 55 years, for example, the Interstate System was envisioned and built – totaling over 47,714 miles and costing more than \$425 billion (in 2006 dollars)? On a local level, the LRRB was created and has funded approximately 1,000 research projects to assist cities and counties in building better transportation systems. In celebration of the LRRB's 55th year, we will be hosting events at both the City Engineers Association of Minnesota (CEAM) and Minnesota County Engineers Association (MCEA) annual conferences. We are also contacting LRRB alumni to help highlight past projects, successes, and memorable impacts. Stay tuned for details!

LRRB and RIC Member Updates

RIC Updates:

• Ted Schoenecker (MnDOT State Aid) has replaced Rick Kjonaas (MnDOT State Aid) on the RIC board.



Ted Schoenecker



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Highlighted LRRB Projects

Traffic Sign Life Expectancy Project

While local organizations have always been encouraged to maintain their traffic signs, public agencies are now required to implement a sign maintenance/replacement program. But how long do traffic signs really last? To answer this question, the LRRB has funded a new research project to develop expected sign life values, enabling local agencies to better manage their traffic sign assets. As part of the research project, MnDOT researchers have installed a test deck of sample signs at the MnROAD Research Center. A research team will use this test deck to study retroreflectivity (visibility) and color readings over time to eventually determine the life of sign sheeting material.



Researchers will use a test deck of sample signs from around the state to study retroreflectivity and color readings to determine the life of sign sheeting material.

For more information regarding traffic sign life expectancy (including recommendations and best policy practices), please visit the following resources:

- MnDOT Project Site http://www.dot.state.mn.us/materials/signretroreflectivity.html
- LRRB Full Report http://www.lrrb.org/media/reports/201420.pdf
- YouTube Video <u>http://youtu.be/f7cDEOu6RMQ</u>

Pedestrian Crossings: Uncontrolled Locations

A new guidebook has been developed to help local transportation agencies evaluate their uncontrolled pedestrian crossings and determine appropriate treatment options. Using an 11-step evaluation process, practitioners can identify an appropriate level of treatment for their location, ranging from in-street crossing signs to overhead flashing beacons. For each potential treatment option, the guidebook includes additional information including advantages, disadvantages, recommended locations, and cost. A worksheet based on the methodology presented in the 2010 Highway Capacity Manual was also developed to evaluate the pedestrian level of service (LOS) at uncontrolled crossing locations. For more information and to access the guidebook and worksheets, please visit http://www.mnltap.umn.edu/publications/handbooks/pedcrossingguide/ or http://www.lrrb.org/media/reports/201421.pdf.

2014 - 2015 Calendar of Events

October 8-9: Minnesota Fall Maintenance Expo

St. Cloud Public Works Facility, St. Cloud, MN http://mnfallexpo.com/

November 13-14: Minnesota Toward Zero Deaths (TZD) Conference

Duluth Entertainment Convention Center, Duluth, MN

http://www.minnesotatzd.org/events/conference/2014/index.html

November 19-21: American Public Works Association (APWA) MN Chapter Fall Workshop and Conference

Earle Brown Heritage Center, Brooklyn Center, MN

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

January 20-23: Minnesota County Engineers Association (MCEA) Annual Conference

Cragun's Resort and Hotel, Brainerd, MN

http://www.mncountyengineers.org/

January 28-30: City Engineers Association of Minnesota (CEAM) Annual Conference

Earle Brown Heritage Center, Brooklyn Center, MN

February (TBD): Transportation Engineering and Road Research Alliance (TERRA) Pavement Conference

University of Minnesota, Saint Paul, MN

http://www.terraroadalliance.org/

March 4-5: Minnesota's Transportation Conference

DoubleTree by Hilton, Bloomington, MN http://mntransportationconference.org/