

**Local Road Research Board
Meeting Minutes
September 25, 2008
Shoreview Community Center
Shoreview, Minnesota**

Meeting Materials Distributed

Materials for the meeting were distributed to the members prior and during the meeting. Materials distributed are described in the meeting minutes and are available upon request from the Board's Secretary. They are listed here for the readers information, and organized according to the agenda.

Handouts and Presentations

TYPE	Topic
Handout	Mn/DOT Research Services section staff support for LRRB.
Handout	LRRB conferences approved for 2007 final.
Handout	LRRB conferences approved for 2008.
DRAFT DOCUMENT	Strategic Plan and Operating Procedures, 2008 LRRB Local Road Research Board, making a difference.
Presentation	FY 10 RFP Calendar, 2009-2010 RIC Planning, December 2006 Survey Results.
Presentation	LRRB Pavement Roadmap. Past, Present, Future projects supporting allowable axle load system product.
Presentation	LRRB Pavement Roadmap. Past, Present, future projects Supporting ME Design tool project.
Presentation	LRRB Pavement Roadmap. Past, Present, future projects Supporting Pavement Management best practices product.
Presentation	LRRB – Stormwater Roadmap Analysis.
Handout	Pedestrian and Bicycle Safety Issues Within a Traffic Safety Framework.
Handout	FY 2009 RFP Traffic Safety (FY 2009 Problem Statements.)
Presentation	Mn/DOT Cadastral and Right of Way Data Sharing Pilot project. Next Steps.
Handout	2008 - 2009 LRRB meeting dates and locations.
DRAFT	Local Road Research Board 3/6/08 meeting minutes (draft.)
Handout	FY2008 LRRB Administration Update – Investigation 999.
Handout	Update on CTS activities.

NOTE: Boxed items are board actions/motions

I. Call To Order and Opening Remarks

Julie Skallman called for election of a new Chairperson. Mitch Anderson made a motion to nominate Deb Bloom of the City of Roseville, Minnesota, seconded by Sue Miller, no discussion, Motion Carried.

Julie Skallman has asked Bruce Hasbargen of Lake of the Woods County to participate on the Board, however, due to prior commitments he could not attend today. He will replace Marcus Hall and serve the remaining term of his position. Deb Bloom and Sue Miller were asked and accepted another 3 year term on the board.

Julie Skallman asked Deb Bloom and Sue Miller to another 3 year term, and they accepted.

II. Chairman's Report

A. Attendance:

LRRB Members Present:

Mitch Anderson, County Engineer, Stearns County
Deb Bloom, City Engineer, City of Roseville
Sue Lodahl, Research Services Section Director, Mn/DOT and LRRB Secretary
Sue Miller, County Engineer, Freeborn County
Ken Saffert, City Engineer, City of Mankato
Julie Skallman, State Aid Division Director, Mn/DOT
Rick West, County Engineer, Ottertail County, and Board RIC Representative
Keith Shannon, Materials Director, Mn/DOT
Robert Johns, Center for Transportation Studies Director, University of Minnesota

LRRB Members Absent:

Marcus Hall, County Engineer, St. Louis County (resigned)
Bruce Harsbargen, County Engineer, Lake of the Woods County

Others Present:

Linda Preisen, University of Minnesota Department of Transportation
(representative for Bob Johns CTS)
Alan Rindels, Research Development Engineer, Mn/DOT
Maureen Jensen Research Engineer, Maplewood Labatory

B. Meeting Purpose:

The fall meeting focuses on the status of active and ongoing LRRB projects. An update on the research RFP is provided and any information relevant to the upcoming programming meeting is distributed.

C. Agenda Review:

Chairperson Deb Bloom reviewed the meeting purpose and requested any agenda changes, Keith Shannon made a motion to approve, Sue Miller seconded, Motion carried.

D. Meeting Minutes and LRRB Strategic Operating Plan

1. Distribution:
 - Approved Meeting Minutes from March 6, 2008
 - Draft Meeting Minutes from June 26-27, 2008
 - Strategic Plan and Operating Procedures 2008
2. Board Comments with regard to Draft Meeting Minutes of June 26-27 2008
 - No substantive changes, typographical errors noted
 - Board approved meeting minutes by consensus
3. Discussion on Action Items Listed on Page 6 of Meeting Minutes
 - Alan Rindels reported to the board that the letters discussed were being sent out, and that RSS is working on setting up a discussion and meeting on snow plow cutting edge cost benefit analysis. Additionally, RSS was under the board's direction to approach the RIC on the topic of motorcycle safety, however the RIC did not desire to tackle this task.
 - Rick West reported the RIC does not appear to be interested in developing a best Motorcycle Safety practices guide at this time. The board discussed that there appears to be some obvious best practices, however, no action by the RIC at this time. No further RSS action required at this time.
4. Other
 - The board would like the draft meeting minutes and agenda made available on the website, just send a link. Not necessary to distribute all of the paper, the board would like to read online.

III. Administration

A. Review 2008 & 2009 LRRB meeting dates & locations

- Sue Miller still seeking a place for the summer meeting, the board suggested Red Wing, she will be working with Ann McLellen to explore this site.
- November 20, 2008 video conference, Keith Shannon offered to move to the Maplewood Laboratory, board approved the move by consensus.

B. LRRB Program Financial Update

- Sue Lodahl discussed the financial picture of the LRRB. She noted INV 822 did not use all of the funding allocated for the project, \$10,000 will be available to rebudget. INV 846 and INV 874 had a budget increase as approved in the June meeting. INV 846 could see a budget savings. Keith Shannon reported on INV 846, the Maplewood Laboratory decided to purchase the equipment for other purposes. Sue Lodahl will explore the funding approved in the summer by the board for this project and report at the next meeting.

- Still do not know for certain what the funding will be next year because it is based on the gas tax. INV 885, Test Section Tracking Database development being discussed in detail. Finally, she suggested if the board desired the LRRB could still program roughly \$40,000 for FY 2009, and the board will have roughly \$200,000 to program for FY 2010.
- She distributed a handout describing the expenses for the administration INV 999, she noted budget for the new INV 997 where outreach was specifically addressed, and the handout describing board expenses for attendance to conferences.

C. Conferences (2008 Update & 2009 Review)

- i. National LTAP Conference – Breckenridge, CO Deb Bloom/Ken Saffert
 - Highlights:
 - a. The conference emphasis was on tech transfer, Ken explored retroreflectivity training and reported that a simple LED pen light is an excellent testing device. This could be an outreach product.
 - b. Session on prairie restoration efforts and the competing approaches to this problem were interesting. No standard procedures to accomplish this task have been established.
 - c. Minnesota Counties ability to purchase off of the state approved negotiated purchase price is an excellent resource. This is a benefit that most states do not have.
 - d. Sessions on Disaster Management were very interesting. Ohio has a Disaster Management Manual which might be applicable to Minnesota counties. Hawaii is way ahead of the curve on this topic as well.
- ii. International Conference on Pavement Systems Keith Shannon
 - Highlights
 - a. Mn/DOT's program stands out as ahead of the curve.
 - b. Asset Management is continuing to be a cutting edge methodology. Many states have developed Office of Asset Management, and recently Canada passed a law requiring Asset Management,
 - c. Mn/DOT and Alberta are very similar with regard to infrastructure preservation. Alberta is asking the question "how do we stop the bleeding". They need \$500 million to upgrade their roads.
- iii. National Rural ITS Conference – Alaska Deb Bloom/Marcus Hall
 - Highlights
 - a. 5-6 Mn/DOT employees attended, SRF and SEH presented
 - b. A lot of focus on climate change, what is going to happen to the oil infrastructure if the oceans water levels rise.
 - c. Max Donath's rural intersection support project received a lot of attention. However the cost is roughly \$200,000 an intersection.
 - d. A lot of presentations on RWIS utilization

D. TRB Conference – Register Early Julie Skallman

- i. Julie Skallman discussed the TRB meeting registration process. She reminded board members to register early and do not forget to register as a state member, Bruce Harsbarger will be attending.
- ii. Tom Colbert and Mike Sheehan will be attending from the RIC.

- iii. Bob Johns will be attending sponsored by the TRB. He suggests RSS suggest a person to attend.

IV. FY 2010 RFP To-Date Progress

- Reviewed two handouts, the RFP Funding process and calendar and a handout describing the Minnesota researchers intending to respond to the RFP. He noted the correct date for the video conference to review proposals which is to be held on November 20. He asked if there were any concerns with the researcher's intent to respond handout. The board did not have any concerns.

V. LRRB INV Project Status

Cory Johnson noted a series of handouts which describes the management techniques he is using to manage the LRRB's research projects, and provided a LRRB Research Management Report.

The following questions are answered for the board in this series of Handouts.

1. Who is doing the work, and where are they doing it?
2. What kind of work is being done?
3. When did the work begin?
4. When the work is scheduled to be completed?
5. Which projects are the highest cost? (Top ten projects)

He observed that the Technical Liaisons (TLs) and Administrative Liaisons (ALs) are the key to a successful project. Some projects for example the project with Rhonda Rae, Sediment Size Distribution for Storm Water have gone through more than one TL already. And Rhonda Rae moved to Red Wing so it is difficult for her to provide the TL support. The board recommended considering a co-TL arrangement and asking Marilyn Jordahl Larson to assume a Co-TL position for this project.

He also described the color coding of the projects. The document is continually changing and in a mode of flux because projects get completed, and projects with delays get addressed. The minimum extension RSS provides is a 6 month extension. Two contracts tend to be the maximum a PI can handle, Roger Olson of the Materials Laboratory has the greatest number of contracts. However, he has inherited a number of projects and is a noted national expert. He does a good job of staying on top of these projects. Keith Shannon is very worried about his discussions regarding retiring.

Deb Bloom requested a start date be added to this handout. She is pleased because it provides simple stable management process for the board's administration of the funds. Cory added to this by explaining the administrative liaison's role of continually working with the PI's to get the projects completed on time is helping a lot.

The last table provided a summary of the Active LRRB projects and additional administrative information to the board.

Sue Miller observed this information gives the board the best frame of mind to evaluate the principal investigators. For example, where are they with existing projects? And Keith Shannon observed this

information gives the board the best opportunity to evaluate a PI's performance, and this information will be available to at the time of the evaluations.

VI. LRRB RIC Program Status

Rick West updated the board on the following RIC projects:

He noted:

- Roadside Vegetation Manual has been updated and is being rolled out to Cities and Counties
- Crash Tool 3 is being rolled out as well.
- On line Bridge Management Tool is in the works.

The RIC is working to start taking responsibility for the outreach and marketing. They keep a list of running ideas for the three years, they have a budget of \$645,000. \$45,000 transfer for the remaining outreach activities.

They do not want to program all of the funds, and the program likes to hold back some for some ideas latter on in the year. Jim Wilde gave a presentation on Pavement projects he is working on.

Intelligent compaction is a very innovative and useful technology. He discussed how a seasoned veteran construction employee who said he knew how to run the compactor was surprised by the manner in which he compacted the road bed. Intelligent compaction both helps to monitor the contractor and helps the contractor do a better job, it has been used successfully in Kandiyohi and Isanti County.

Winter road maintenance, anti-icing, sanding calibration, different for each county, and the RIC is tackling this project.

He is pleased to report the 07-08 RIC contractor is on track with their projects.

VII. Bike and Pedestrian Counting Technology

Prof. Nikos Papanikolopoulos gave a presentation of a summary of bicycle and pedestrian counting technology. He is convinced the technology exists for any city or county to count bicycle and pedestrian traffic using a video tape technology.

VIII. LRRB Research Direction FY 2011 Research

Cory Johnson led a discussion revisiting the Strategic Plan Goals and Strategies. RSS desires from the board a clear vision for next years research efforts for Minnesota Cities and Counties, to focus their efforts for next years problem statement development. He desires economic efficiency in the effort, efficient product delivery, and products which summarize the best solutions.

There were three items to his presentation:

1. He distributed a Survey for the board to complete, which outlines their focus areas.
2. He revisited the LRRB Survey of Cities and Counties and the effectiveness of this effort.

There was a discussion of which Appendix A is included as notes from this discussion. A major theme of this discussion was “ Cities and Counties Infrastructure is aging. Aging causes a deterioration of the infrastructure, and in many situations the current infrastructure is not meeting demand. The Cities and Counties will continue to preserve what we have as long as possible, with an eye on the environment.” Speaker unknown.

The conclusion of these discussions led to the following direction:

RSS should follow this direction for FY 2011 research project development.

The major areas to spend research funds on are:

- Preserve infrastructure with shrinking public works budgets. Faster, cheaper, better with reduced funds.
- Safety – Work Zones and Roadways – Toward Zero Deaths
- Practices and designs which are environmentally friendly and reduce impacts to the environment Warm Asphalt.

IX. Project Updates:

A. Toolkit for a Career in Civil Engineering,

Sue Lodahl observed that toolkit is already dated (VCR Tape):

- Should the board update this material.
- should the LRRB develop some alternative materials such as Transportation Planners material.

General discussion:

- Sue Lodahl commented that people do not think of going into Civil Engineering, not very glamorous, how do we get the word out, that there is a need? Mitch Anderson suggested more advertisement of jobs opportunities online, and observed growing problem with large population of engineers retiring in the next 4 years.
- To address these concerns, Linda Preisen reported that the UMN has been developing some day camps to get the word out. Deb Bloom urged the board to consider alternative venues, such as Utube. Put the materials on line, distribution on the web is the best way to go. Ken Saffert said he would handout any of the toolkits to students involved with the math counts program, however, they need to get to him. SL RSS will send thme out.

B. TPF – 5(187) Updating US Precipitation Frequency Estimates

Sue Lodahl reported the project is proceeding. Minor hiccups in the financial end trying to get all of the committed funds into the Federal lock box.

C. INV 877: Advanced Dynamic LED Warning Signs for Rural Intersections Powered by Renewable Energy

The administrative liaison for this project, Alan Rindels, reported the project is proceeding along nicely. The project has identified an intersection to mount the equipment. St. Louis County Engineering is providing all of the technical traffic safety and engineering for this project.

D. INV 880 St. Louis County Snow Plow Optimization Marcus Hall

The administrative liaison for this project, Alan Rindels, reported the project is proceeding along nicely, and the project has developed a simple spreadsheet solution to routing which could be used by any county. The spreadsheet developed imports the RWIS data for use in the route planning purpose.

One result typical for snow plow route optimization projects, is the project demonstrates for efficient operation alternative loading depots should be developed. The acting St. Louis County Public Works Director will replace Marcus Hall as the TL for the short term until a new Public Works Director has been hired.

X. Round Robin

Ken Saffert commented that he would like to see more involvement by Mark Flygare from Mn/DOT District 7. Mark has a lot of creative ideas and it is Ken's opinions that his input would be excellent.

Keith Shannon reported Mn/ROAD is moving along nicely. Warm asphalt project was a little challenging to construct, different construction practices necessary. During the winter the MnROAD Staff will be fine tuning their operation, so that next summer the data collection will occur smoothly.

Sue Miller would like to see greater efforts into the development of contractor pre-qualification program for State Aid jobs. Every year she has a construction project which suffers from a contractor who is untrained and not knowledgeable in a construction practice, however was low bid.

Sue Lodahl reported RSS is working on the Annual report for the LRRB. RSS was pleased with the research at a glance pamphlet, and got a lot of positive feedbacks from the bar chart presentation of project status.

Linda Preisen reported the CTS recently gave a seminar on Intelligent Compaction, they have been doing more and more webcasts of their presentations. Check on line at the CTS website for these webcasts.

Julie Skallman reported the Danish Road User Association has joined TERRA, and the board is please by their participation in this program. And she also reported that next summer the board needs to update the LRRB Knowledge Building priorities. The current priorities are dated.

Mitch Anderson reflected on his roll as the Stearns County Engineer and reflected on how much county project management he performs, he practices very little engineering in his day to day activities
Deb Bloom ITS Institute (missed the info....)

Meeting adjourned at 2:10 P.M.

Appendix A – Misc. Discussion Notes- Research Direction:

Some notes on the board's suggested research topic areas for FY 2011 are discussed below.

Ken Saffert suggested the following topics for research:

- Preserve Investment – Infrastructure Preservation Practices
- Green environments – what does this mean for Cities and Counties
- Surface runoff – Practical handle, general lack of knowledge
- Road user fees, how can the Cities and Counties use this to fund their infrastructure.

Keith Shannon suggested the following topics:

- Intelligent compaction for bituminous pavements – Standard development
- Get the word out, more advertising and education of benefits
- Life cycle costs
 - alternative bidding practices,
 - streamlining the processes
 - partnerships with commercial vendors
- Environmental compatibility – paving, recycling, low temperature asphalt – very impressive early conclusions, wave of the future.

Sue Miller suggested the following topics:

- Maintenance and Operations – Load limits, level of service to the public
- Counties response to Hear Every Voice
- Safety Litigation – there continues to be challenges to discretionary immunity

Deb Bloom reported:

- Cities are struggling with maintenance budgets, budgets remain the same and yet costs continue to rise.

Sue Lodahl suggested the following:

- Mainline arterials are congested, can the local arterials play a factor.
- Cities and County response to UPA – Bus only shoulders.
- Subgrade stabilization – GPR and different ways to investigate structural integrity.

Rick West suggested the following general goals:

- Preserve investment
- Safety/Safety during operations
- Environmental compatibility
- Hear Every Voice
- Road User Fees
- Public less and less respectful of signage
- Speed limits, pedestrian crossings

Julie Skallman suggested the following:

- Infrastructure preservation

- How do we choose where to put our investments
- Economic environment
- Mitigating environmental effects
- Contractor pre-quals at the county level
- Sue Miller reported the difficulty with low bid programs, how difficult it is to eliminate a company which does not have the experience to perform the work.

Mitch Anderson suggested the following topics:

- Safety, mobility, maintenance, and traffic operations – Potential methods which cities and counties can use with training.
- Road user fees
- Economic environment
- Level of service – truck traffic, 10 Ton CSAH, # of overweight permits is growing impact to our roads.
- 20 Year projections by the state, Counties will build extra capacity. Capacity because of ROW costs cost significantly more than strength.

Deb Bloom suggested exploring the following topics for Metro cities:

- 35 W is not an expansion corridor, no way to monitor congestion impact to local streets.
- Sustainability – use green and save money.
- Integrating bicycles into the traffic system and funding for this integration
- Subsurface drainage