



LRRB/RIC Summer Meeting

June 22-23, 2016

Downtown Holiday Inn Hotel & Suites

200 West 1st Street

Duluth, Minnesota 55802

LRRB Members Present:

Lyndon Robjent (Chair), Carver County
Kaye Bieniek, Olmsted County
Jim Foldesi, Saint Louis County
Paul Oehme, City of Chanhassen
Steve Koehler, City of New Ulm
Laurie McGinnis, U of M - CTS
Mitch Rasmussen, MnDOT State Aid
Linda Taylor, MnDOT Research Services (RS)
Tom Ravn, MnDOT Office of Construction &
Innovative Contracting
Tim Stahl, Jackson County

RIC Members Present

Mike Flaagan (Chair), Pennington County
Steve Bot, City of Saint Michael
John Brunkhorst, McLeod County
Kelvin Howieson, MnDOT District 3
Guy Kohlnhofer, Dodge County
Klayton Eckles, City of Woodbury
Hafiz Munir, MnDOT RS
Jim Grothaus, U of M CTS
Jeff Brunner, MnDOT OMRR

Others Present:

Debbie Sinclair, MnDOT RS
Becky Lein, MnDOT RS
Bruce Holdhusen, MnDOT RS
Dan Sullivan, MnDOT RS
Brenda Thomas, U of M CTS
Joel Ulring, MnDOT State Aid
Mike Marti, SRF
Rena Kuehl, SRF

LRRB Meeting Minutes

Day 1

JUNE 22, 2016

1. LRRB Separate Session

Chair Lyndon Robjent called the LRRB separate session to order.

The Agenda for the session was approved. Motion to approve was made by Jim Foldesi and seconded by Paul Oehme; motion carried.

Minutes of last meeting, held March 16, 2016, were approved. Motion to approve was made by Steve Koehler and seconded by Kaye Bieniek; motion carried.

Pending March Action Items

Linda Taylor reviewed pending LRRB action items. Action items not listed below were completed or included in the agenda.

March Action Item No. 3: *Mitch Rasmussen will send out a note on the MAASTO Annual Meeting in Minneapolis letting the Board members know of the eligibility requirements.*

Mitch stated that this hasn't been sent out yet as the registration site has only been open for a week. He wants to make sure it is up and running properly before he follows up so this needs to be carried forward as an action item. A golf outing option is available as an add-on to the meeting on Monday, August 8th from 8:00 a.m. to 4:00 pm. More information is available at:
<http://www.dot.state.mn.us/maasto2016/registration.html>

Action Item No. 1: Mitch Rasmussen will send out a note on the MAASTO Annual Meeting in Minneapolis letting the Board members know of the eligibility requirements. Board members are encouraged to sign up for the golf outing using the link provided.

March Action Item No. 6: *Mitch Rasmussen and Lyndon Robjent will come up with recommendations on who is eligible to attend the upcoming conferences where that has not yet been identified.*

MnDOT has changed the process for Out-of-State (OST) Travel and there is a lot more scrutiny being placed on who will be attending. We want to make sure we are sending the right people to the right conferences. The list should include trips that people are actually taking and not include the potential trips. They are working within the existing rules while still attempting to maintain as much flexibility.

Action Item No. 2: Mitch Rasmussen and Lyndon Robjent will come up with recommendations on who is eligible to attend the upcoming conferences where that has not yet been identified.

March Action Item No. 8: *Linda Taylor suggested that the Alternative Intersection Design video be placed on the agenda for the next TRIG meeting to discuss a possible cost-sharing opportunity.*

Mitch Rasmussen stated that this is on hold until we receive an updated scope. TRIG has not done videos before. This video would be geared toward business owners and local units of government. Where RCUT intersections have been successful, business owners have changed their opinions on them from negative to positive. The Outreach Committee also felt that a short/condensed video "trailer" (1-2 minutes) could be developed as part of a project's wrap-up. This would be available as a marketing piece to supplement the Technical Summaries that are developed on our research projects.

Action Item No. 3: The Alternative Intersection Design video will be placed on the agenda for the next TRIG meeting to discuss a possible cost-sharing opportunity.

March Action Item No. 10: *Tim Stahl will check and see what level ADT for Low*

Volume roads will allow them to be included in the Minnesota MUTCD (RIC Contract Task 9).

Tim Stahl stated that he has not had a chance to do this and sent himself a note as a reminder. Several Board members had different values, but the data available shows that ADT to be somewhere between 300 and 450 vpd.

Action Item No. 4: Tim Stahl will check and see what level ADT for Low Volume roads will allow them to be included in the Minnesota MUTCD (RIC Contract Task No. 9).

March Action Item No. 16: Debbie Sinclair will send out the updated pre-trip and post-trip processes to the Board Members when they are finalized.

Mitch Rasmussen stated that this is still a work in progress as they continue to map the process. Kathy Kostohryz pointed out some inconsistencies. Further work was put on hold because there are no longer support staff for Tim Henkel's or Mitch Rasmussen's groups. They are currently going through the interviews for a new position.

Action Item No. 5: Debbie Sinclair will send out the updated pre-trip and post-trip processes to the Board Members when they are finalized.

LRRB Budget

Debbie Sinclair updated the group on several projects.

INV 645 RIC:

- FY12-16: There is an unused balance of \$23,196. Debbie inquired if those funds can be carried forward to the FY17-19 budget or should it be released back to LRRB budget. The Board stated that this should be left in the RIC budget.
- FY17-19: The 3 year contract with SRF for \$378,284.72 has been executed.
- There is a 1 year contract for outreach work in the amount of \$20,000 with SRF.

INV 668: FY17 LTAP contract is going through the contracting process but not yet fully executed.

INV 668-CTAP trainer, INV 675-FY17 Research Services, INV 676-FY17 MnROAD Research and INV 745-FY17 Library Services will be paid after start of new fiscal year (July 1st).

INV 916: FY16 Tech Transfer – the remaining balance of \$95,943 was moved to FY17.

INV 924: YouTube videos-FY15 Ineffective Specialty Signs -- this project is still in process, FY16-FY17 remaining balance of \$134,722 for FY17.

INV 947: Investigation of Optimal Mix Design of Full Depth Reclamation Stabilization with Cement and Emulsion (Report No. 2016-09) – this project is complete and just waiting for final invoicing.

INV 955: Deployment of Portable WIM Systems at ATR Sites for Data Collection and Comparative Study (Report No. 2015-03 and No. 2016-07) -- this project is complete and just waiting for final invoicing.

INV 970: Alternate Design Methods to Renew Lightly Traveled Paved Roads (Report No. 2016-14) -- this project is complete and just waiting for approval of final task for invoicing.

INV 10XXs - the projects with 'Pending' in their expiration date are going through the contracting process.

These projects have been executed:

- 1011 Work Zone Intrusion Report Interface Design
- 1012 Investigating the Necessity and Prioritizing Pavement Markings on Low Volume Roads
- 1017 Iron-Enhanced Swale Ditch Checks for Phosphorus Removal

The 2016 Contingency of \$50,000 will be released back to the available budget. The leftover balance from FY16 is \$1,138,235 and was carried forward to FY17. The current available balance for FY17 is \$1,462,057.

The two pie charts were updated with FY17 amounts; the Ongoing Programs amount includes encumbrances from prior year's budgets.

Lyndon Robjant asked Debbie if it was possible to list the consultant or contractor doing the work, and to rename the Outreach Website to the LRRB website, in her spreadsheets.

Action Item No. 6: Debbie Sinclair will add a column to the budget spreadsheet for the consultant or contractor doing the work.

Action Item No. 7: Debbie Sinclair will rename INV 927 Outreach Website (done by HNTB) to the LRRB website in the budget spreadsheet.

INV 999 Status Update

Meetings: \$12,910.24 was encumbered for the Summer meeting in Duluth.

Supplies: The amount of \$4,929.23 includes booth rental and displays and promotional items.

Shannon Fiecke discussed producing a new LRRB display/booth. In the past this has been taken out of Supplies, but it could be taken out of Contingency if necessary. It was mentioned that this would be brought up during the Outreach Committee Update, and it could be revisited at the Round Robin if necessary.

Debbie Sinclair encouraged Board members to get their travel expense reimbursement requests in as soon as possible.

Amendment Analysis

There were a total of eight amendments since the prior report was run on 02/23/16. Six were for time extensions, two were letters to the file and one was for a scope and funding change. Four of those were listed on that report as pending so there were only four new ones this quarter.

LRRB Meeting Dates and Locations

The LRRB members should be thinking about the 2017 Summer Meeting date and location.

2. LRRB/RIC General Session

Chair Lyndon Robjent called the LRRB/RIC General Session to order, welcoming all to Duluth and thanking Jim Foldesi for hosting.

The Chair asked for any changes or additions to the agenda, and hearing none, asked for a motion to approve the agenda.

The Agenda for the session was approved. Motion to approve was made by Steve Koehler and seconded by Kaye Bieniek; motion carried.

3. Outreach Committee Update

The LRRB Outreach Committee met on the evening of June 21, 2016. Mitch Rasmussen provided an update on their meeting which has been added to these minutes as 'Attachment 1'.

Action Item No. 8: Shannon Fiecke will add the idea to load data for the “hottest” or “latest” research topics onto marketing trinkets (i.e., pen drives), as was done for the Young Driver’s Tool Kit, to the next Outreach Committee meeting’s agenda.

4. LRRB Website Overview

Linda Taylor gave an overview of the LRRB website and her presentation was included with the meeting materials. Lyndon Robjent suggested that new members go out to the website. Some of the members wanted to know what expense report they should be using for this meeting.

Action Item No. 9: Shannon Fiecke will e-mail an example expense report to the LRRB, RIC and MnDOT board members. [*THIS ACTION ITEM IS COMPLETE***]**

5. Out of State Travel Process and Plan

Mitch Rasmussen explained that they are trying to simplify the overall process for identifying which members and staff would like to attend which conferences. He requested everyone to indicate their preferences for which conferences they are interested in attending as part of the Round Robin.

Ted Schoenecker wanted to know that if there was a conference opening available and no LRRB members indicated interest, could an RIC member attend in their place. Linda explained that the international trips are only open to LRRB members. However, any trips within the United States are open to RIC members to attend.

6. Focus Group Results

Brenda Thomas gave an update on the focus groups that were held in District 3 on March 31, 2016. A copy of her presentation, the report developed by CTS and the results of the pre-Focus Group Survey were included in the meeting materials. There were 40 participants total; fourteen county engineers and staff, four city engineers and staff, three consultants, eleven MnDOT (RS, State Aid, and Materials) and eight from CTS.

Of the 73 ideas that were generated, 13 were deemed high priority and Need Statements were developed for them. Several ideas not developed into Need Statements were also summarized in the CTS report for development as a TRS, Implementation/Consultant or as Outreach projects.

7. Next Steps for Focus Group Ideas and Previously Funded TRSs

The Board discussed some of the additional ideas summarized in the CTS report, but Lyndon Robjent stated he believed there was not enough time to get into the list in any detail. An idea for a TRS that came out of the Focus Groups (Synthesis of Bridge Removal and Polices) was presented by Kelvin Howieson, who agreed to the Technical Liaison (TL). The project would be brought up again during funding decisions.

8. FY 2018 Research Program

Hafiz Munir explained to the group how the documents in the next portion of their meeting materials were organized. The first was the research funding program schedule. The second was a PowerPoint summary of the research program and timeline. This summary explained that some of the ideas generated already had research done on them or were more appropriately addressed by forwarding them to the Outreach Committee. This summary also listed the ideas from the Focus Groups (LRRB) and IdeaScale (TRIG) by research category or topic area. The third document was a copy of the spreadsheet which was used to vote on, showing where they came from, who sponsored them and sorted by the ideas receiving the highest number of votes from the LRRB members.

The meeting participants had been preassigned to one of three teams for the afternoon exercise as shown in the document in the next section of the meeting materials. The teams took turns in round-robin fashion to select five or six ideas to develop into Need Statements.

9. Research Need Statements Development

The three teams met at separate locations to develop recommendations for research Need Statement development or other actions for the topics they had selected. The table on the following page is a summary of the teams and the ideas they selected.

9. Research Need Statements Development (continued)

Team 1 (Red)

Captain: Steve Koehler

Coach: Bruce Holdhusen

Number from Ideascale and Potential Research Ideas:

6 Pedestrian Crossing Safety Evaluation

8 Examining Optimal Sight Distances at Intersections

12 Cost-Benefit Analysis of the Effectiveness of Crack Sealing Techniques

13 Is Seal Coating Counterproductive or Not?

10 Stormwater Contaminant Data Collection & Cost-Effective Treatments Low-Volume Roads

Team Members: Klayton Eckles, Paul Oehme, Steve Bot, Hafiz Munir, Kelvin Howieson and Joel Ulring

Team 2 (Blue)

Captain: Lyndon Robjent

Coach: Dan Sullivan

Number from Ideascale and Potential Research Ideas:

9 How to Remediate Steep Shoulder Angles That Result from Full-Depth Reclamation (FDR)

14 How Can GPS Technology Improve Snowplow Operations?

19 How Locals Need To Prepare for the Future of V2V/V2I, Connected Vehicles

31 Modernizing Construction Plans Phase 2 - CIM/3D Standards

36 High Density Hot Mix Asphalt (HMA)

43 Remaining Service Life Asset Measure

Team Members: Mitch Rasmussen, Tim Stahl, Jim Foldesi, Laurie McGinnis, Guy Kohlhofer and Jeff Brunner

Team 3 (Yellow)

Captain: Mike Flaagan

Coach: Brenda Thomas

Number from Ideascale and Potential Research Ideas:

18 Transportation Workforce Recruitment and Retention Strategies

21 How Stop Lines Affect Vehicle Position, Approach Speed, and Driver Attentiveness

25 Ability to Use Mineral Filled Plastic Composite Lumber

37 Pavement Thickness Evaluation using 3D Ground Penetrating Radar

40 Assess Infiltration Performance of Swales Compared to MN Swales Calculator Estimates

47 Pavement Markings - Wet Retroreflectivity Standards

Team Members:, Kaye Bieniek, Jim Grothaus, Linda Taylor, John Brunkhorst, Ted Schoenecker and Tom Ravn

10. Need Statement Teams Report Back to Group

Team Color/ Number	Ideascale Number	Project Title	RFP or Other	Comments
Red (1)	6	Pedestrian Crossing Safety Evaluation	RFP	
Red (1)	8	Examining Optimal Sight Distances at Intersections	RFP	
Red (1)	12	Cost-Benefit Analysis of the Effectiveness of Crack Sealing Techniques	RFP	
Red (1)	13	Is Seal Coating Counterproductive or Not?	RFP	
Red (1)	16	Stormwater Contaminant Data Collection & Cost-Effective Treatments Low-Volume Roads	RFP	Moving forward in parallel with Ideascale No. 40
Blue (2)	9	How to Remediate Steep Shoulder Angles That Result from Full-Depth Reclamation (FDR)	RFP	
Blue (2)	14	How Can GPS Technology Improve Snowplow Operations?	No RFP	On hold until we can determine what Clear Roads project will show
Blue (2)	19	How Locals Need To Prepare for the Future of V2V/V2I, Connected Vehicles	RFP	
Blue (2)	31	Modernizing Construction Plans Phase 2 - CIM/3D Standards	No RFP	Moving forward with a consultant
Blue (2)	36	High Density Hot Mix Asphalt (HMA)	RFP	
Blue (2)	43	Remaining Service Life Asset Measure	RFP	
Yellow (3)	18	Transportation Workforce Recruitment and Retention Strategies	RFP	
Yellow (3)	21	How Stop Lines Affect Vehicle Position, Approach Speed, and Driver Attentiveness	RFP	
Yellow (3)	25	Pavement Thickness Evaluation using 3D Ground Penetrating Radar	RFP	
Yellow (3)	37	Use of Mineral Filled Plastic Composite Lumber	No RFP	
Yellow (3)	40	Assess Infiltration Performance of Swales Compared to MN Swales Calculator Estimates	RFP	Moving forward in parallel with Ideascale No. 16
Yellow (3)	47	Pavement Markings - Wet Retroreflectivity Standards	RFP	
LRRB Focus Group	15	Synthesis of Bridge Removal Programs and Policies	TRS	Literature Search, State of Practice or a combination of both
LRRB Focus Group	17	Environmental Impacts of Chloride from Winter and Summer Operations	No RFP	This idea was removed following the group discussion and was not drafted by any of the teams

 Move forward with Need Statement for FY18 RFP

 RIC, TRS or not moved forward

LRRB Meeting Minutes

Day 2

JUNE 22, 2016

1. LRRB Separate Session

Chair Lyndon Robjent called the LRRB Separate Session to order.

2. LRRB Strategic Plan Update

Lyndon Robjent stated that they are moving forward with an update on the Strategic Plan to make it align with the Board's current vision. RS attached a copy of the Plan to the e-mail with the Agenda that included a request for Board members to review it and "be prepared to provide input on tasks that should be included in the work scope." The TAP met on June 13, 2016. Lyndon Robjent said the group could send their comments right up until the time that the TAP held their next scoping meeting. Some members wondered if there would be value in adding Mark Vizecky (for his knowledge of Traffic) and Joel Uring (for his knowledge of bituminous and concrete) to the RIC membership.

Action Item No. 10: Tim Stahl will bring the idea of having Mark Vizecky (Traffic) and Joel Uring (Bituminous and Concrete) become official RIC members to the RIC for discussion and bring back a recommendation.

Some RIC members thought the Plan could include somewhere for researchers to have a starting point so they could benefit from the knowledge of the practitioners. Jim Foldesi thought information from Hafiz's overview presentation of the research cycle should be part of the operating procedures. Mitch Rasmussen added that he thought the presentation that Linda Taylor gave at the March meeting was also very helpful.

3. Multiple Proposal/University Voting Process

The University Master Contract has been expanded to include several more universities that can submit proposals published in the RFP. Linda Taylor included some suggested materials with a proposal for a change to process: With some work done up-front, only the proposals that had been prescreened by the project champion would move forward. This would eliminate inundating the Board with multiple proposals for a single research idea. After some thoughtful discussion and consideration, several members still thought it should be the Board's responsibility to decide what proposals move forward for presentations.

Action Item No. 11: Mitch Rasmussen requested that RS/Dan Sullivan put together guidance for the Project Champions reviewing multiple proposals and bring it back to the Board via e-mail for their comments.

4. Toward Zero Chlorides Initiative

Over the past couple months CTS has had the opportunity to meet with Mike Barnes, Mitch Rasmussen, Steve Lund, and reps from RS (Shannon Fiecke and Hafiz Munir) on this issue.

MnDOT wants to be a part of, or help support, existing groups in this initiative. The purpose is to gain a better understanding of what others are doing to reduce chloride with an interest in working together and leveraging partnerships. There's a "preliminary" meeting with external stakeholders in mid to late September and Brenda Thomas was asking for volunteers from the LRRB (i.e. one city and one county) to participate. Jim Foldesi committed Pete Eakman (also from Saint Louis County) to attend in his place and Paul Oehme (City of Chanhassen) volunteered to serve on the peer exchange.

5. Knowledge Building Priorities

Brenda Thomas gave an update on the LRRB's Knowledge Building priorities. These are not an open solicitation that is part of the annual RFP. These are unsolicited and only with the U of M researchers. Every 4 years the LRRB does a robust review of the KB statements and the next scheduled occurrence will occur in 2017. On the "off-years" the LRRB has an opportunity to review and make small suggested edits. Brenda's handout was a list of topics sorted by the following categories: Design, Construction, Maintenance and Operations, and Environmental Compatibility.

Action Item No. 12: Brenda Thomas requested that the board review the Knowledge Building write-ups included with their meeting materials and get back to her directly with any changes or modifications.

6. Project Updates

David Levinson gave an update over the phone on The Transportation Futures Project: Planning for Technology Change, and his presentation was part of the meeting materials.

Taek Kwon gave an update on the Weigh-Pad-Based Portable Weigh-In-Motion System User Manual project, and his presentation was part of the meeting materials.

7. Trip Reports

Linda Taylor explained that even though Lois Butcher sent out a reminder asking for these to be completed not everyone was sure of what to do. Some Board members wanted to be given clearer guidance on what RS and State Aid are asking for when they prepare these. Mitch Rasmussen and Linda Taylor explained that they are looking for items that are actionable by the Board (i.e., Need Statement, outreach opportunity, etc.) but also ideas that came about that may just take some other sort of follow-up from the attendee.

Kaye Bieniek and Paul Oehme were the only two members present whose names were on this version of the trip report.

Kaye Bieniek's first item, Perspectives from Recent Entrants to the Highway Safety Workforce, could probably be addressed with the video that the Board is considering targeting to high school students discussed during the Outreach Committee Update.

Kaye Bieniek's second item, Reverting Low Volume Paved Roads to Unpaved, requires that the public be educated when making that transition.

Paul Oehme's first item, International Experiences with Low Volume Road Pavement Asset Management, would be a suggestion to develop an app for gathering low volume road pavement data to put into some software where they have limited resources for pavement management.

Paul Oehme's second item, Exploring Roundabout Operational Performance and Low Cost Designs, would be a suggestion to explore partnering a city or county with MnDOT on a low cost roundabout design project ("mini"-roundabout) using as much of the existing infrastructure as they can. Mitch Rasmussen added that some FHWA demonstration funding was used for a mini-roundabout in Shakopee, and that included a good deal of follow-up data gathering.

Dan Sullivan also had one item, Increasing Research Report Distribution, which he will forward to the Outreach Committee regarding evaluation of MnDOT policies for when press releases can be targeted to certain cities and counties on projects in their areas.

8. LRRB/RIC General Session

Chair Lyndon Robjent called the LRRB/RIC General Session to order.

9. RIC Update

Renae Keuhl from SRF went through the final products for the RIC Support Contract that expired earlier in June 2016. The documents were passed out at the meeting for the following projects:

- Effects of Implements of Husbandry on Local Roads
- Synopsis for Recycled Asphalt Pavement
- Intersection Safety Technologies
- Snow and Ice Control Handbook
(a PowerPoint to be used for training on the handbook is still under development)
- Multi-Lane Roundabouts Brochure
- Flashing Yellow Arrows Tutorial Video
- LRRB/RIC Outreach

10. 2017 Ohio Peer Exchange for Local Transportation Research

Linda Taylor explained that Ohio is trying to get Minnesota and Iowa involved and they are looking for a city or county representative for a meeting that has been tentatively scheduled for March 2017.

Action Item No. 13: Linda Taylor will come back to the Board seeking a volunteer when the dates of the Ohio Peer Exchange for Local Transportation are known.

11. Project Updates

Renae Kuehl gave an update on Temporary Traffic Control for Low Volume Roads (RIC Support Contract Task No. 9) and her presentation was part of the meeting materials.

Jim Wilde gave an update via telephone on the TRS: Developing the Right Recipe for Using Recycled Materials in Aggregate Bases and his presentation was part of the meeting materials.

12. NRRA Update

Before Jeff Brunner gave an update on the NRRA, he informed the group that Tom Wood had retired from MnDOT and was working part time with WSB. Dave Van Duesen was experiencing some serious health issues but was back to work part time.

Jeff Brunner's presentation was part of the meeting materials. In addition to Lyndon Robjent and Paul Oehme serving on the Executive Committee, these LRRB and RIC members indicated interest in serving on the following NRRA Technical Committees:

- Jim Foldesi, Flexible Pavement
- Kaye Bieniek, Rigid Pavement
- John Brunkhorst, Preventative Maintenance
- Jim Grothuas, Technology Transfer

The NRRA Pavement Management Conference was moved from February to May or June.

13. Funding Considerations and other Board Actions

LRRB Website Update

The CTC contract ended up costing a little more because _____, _____ and _____. Shannon Fiecke stated that they were requesting approximately \$29,000 for the development of a new website and another \$10,000 for contingency and future work.

The new website will be much more robust (updated photos and a more modern look) and the cost includes migrating the existing site over to the new one. Everything should be up and running by December.

There was a motion by Steve Koehler, seconded by Paul Oehme, to fund the updating of the LRRB website in the amount of \$40,000. Motion passed.

LRRB Booth Display Update

This was discussed in more detail during the Outreach Committee Update and includes a lighter-weight display frame and changeable artwork as well as registration fees and equipment.

There was a motion by Linda Taylor, seconded by Laurie McGinnis, to fund the update of the LRRB booth for display at conferences up to \$10,000. Motion passed.

There was a motion by Mitch Rasmussen, seconded by Tim Stahl, to fund the TRS: Synthesis of Bridge Removal Programs and Policies up to \$15,000. Motion passed.

14. Contracting Process Update

Becky Lein gave an update on MnDOT contracting processes. The update included the Transportation Research Assistance Program (TRAP) option, the Master Academic Program option and an overview of several other contracting options. Her presentation was part of the meeting materials.

15. Round Robin

Bruce Holdhusen

Action Item No. 14: Board members interested in serving on the TAPs for any of the projects that are part of the current RIC Support Contract should contact Bruce Holdhusen (MnDOT RS) or Renae Keuhl (SRF).

Joel Ulring

Joel appreciated the opportunity to visit NCAT in Auburn, Alabama. They are beginning to construct their test sections for cracking prevention and pavement preservation.

Conferences interested in attending:

National Pavement Preservation Conference	Nashville, TN	October 2016
NW Management Pavement Assoc Conference	Portland, OR	October 2016

Hafiz Munir

Hafiz wanted to thank everyone for their contributions to the LRRB.

Conferences interested in attending:

National Pavement Preservation Conference	Nashville, TN	October 2016
Mid-Continent Transportation Research Symposium	Madison, WI	October 2016
Transportation Research Board	Washington DC	January 2017
National Pavement Preservation Conference	To be determined	October 2017

Kelvin Howieson

Conferences interested in attending:

National Pavement Preservation Conference	Nashville, TN	October 2016
Mid-Continent Transportation Research Symposium	Madison, WI	October 2016
National LTAP Conference	Virginia Beach, VA	July 2017

Klayton Eckles

Klayton wanted to welcome the new RIC members. He would like more guidance on the Trip Reports as he was also confused by what is required. As a follow-up to TRB last January he is interested in any new guidance available on BMPs or R-O-W guidelines for pollinators and he was directed to the TRS in the meeting materials.

Conferences interested in attending:

Transportation Research Board	Washington DC	January 2017
Pavement Preservation & Recycling Summit	To be determined	February 2017

Shannon Fiecke

Shannon wanted to make everyone aware of the information in the front and back pockets/flaps of the 3-ring binders and reminded the group that she would be sending out an example expense report.

Conferences interested in attending:

National LTAP Conference	Madison, WI	July 2016
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Steve Bot

Conferences interested in attending:

National LTAP Conference	Madison, WI	July 2016
National LTAP Conference	Virginia Beach, VA	July 2017

Paul Oehme

Paul wanted to share that the NRRA is a great group of people to work with and he is glad to have Glenn Engstrom leading the effort. Paul inquired if the Summer Meetings always have to be Wednesday-Thursday and wondered if they could be changed to Thursday-Friday.

Conferences interested in attending:

National Pavement Preservation Conference	Nashville, TN	October 2016
Transportation Research Board	Washington DC	January 2017
National LTAP Conference	Virginia Beach, VA	July 2017

Tim Stahl

Tim was asked to present at the 2016 Recycling and Solid Waste Management Conference this October in Davenport, Iowa.

Conferences interested in attending:

Transportation Research Board	Washington DC	January 2017
Unpaved Roads Institute's 4 th Road Dust Best Management Practices Conference	To be determined	February 2017
International Conference on Timber Bridges	Skelleftea, Sweden	June 2017

Laurie McGinnis

Laurie stated the week of June 19th does not work for holding next year's Summer Meeting near Grand Rapids. She also wanted to notify the group that her cabin is an additional 40 minutes North of Grand Rapids.

Mitch Rasmussen

Mitch wanted to acknowledge and thank Jim Foldesi for hosting and that this was a good and productive meeting.

Conferences interested in attending:

Transportation Research Board	Washington DC	January 2017
National LTAP Conference	Virginia Beach, VA	July 2017
National Rural ITS Conference	To be determined	October 2017

Jeff Brunner

Jeff said he would be going through the list and that he and Mitch would get together and talk offline about which of his staff should attend what conferences (e.g., TRB, AAPT, etc.)

Guy Kohlhofer

Conferences interested in attending:

Transportation Research Board	Washington DC	January 2017
National LTAP Conference	Virginia Beach, VA	July 2017

Jim Foldesi*Conferences interested in attending:*

Transportation Research Board	Washington DC	January 2017
National Pavement Preservation Conference	To be determined	October 2017

Becky Lein

Becky wanted to thank Jim Foldesi for hosting. Please contact her with any contracting questions.

Jim Grothaus

Jim updated the group that the RIC and MnDOT State Aid funded and conducted training for inspectors on traffic sign retro-reflectivity. 160 people came to training at 16 different sites and the workshops included both classroom instruction and fieldwork.

Linda Taylor*Conferences interested in attending:*

Transportation Research Board	Washington DC	January 2017
World Congress on Intelligent Transport Systems	Montréal, Quebec	October 2017
Pavement Test Track Conference (NCAT)	Auburn, AL	March 2018

Kaye Bieniek*Conferences interested in attending:*

Transportation Research Board	Washington DC	January 2017
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Ted Schoenecker*Conferences interested in attending:*

National LTAP Conference	Madison, WI	July 2016
National LTAP Conference	Virginia Beach, VA	July 2017

Mike Flaagan*Conferences interested in attending:*

Mid-Continent Transportation Research Symposium	Madison, WI	October 2016
National Pavement Preservation Conference	Nashville, TN	October 2016
Toward Zero Deaths Conference	Duluth, MN	November 2016
Transportation Research Board	Washington DC	January 2017

John Brunkhorst*Conferences interested in attending:*

Transportation Research Board	Washington DC	January 2017
National LTAP Conference	Virginia Beach, VA	July 2017
International Society of Concrete Pavements Conference	To be determined	August 2017

16. 2017 Summer Meeting Date and Location

The group decided on June 28-29, 2017 in Grand Rapids.

The meeting was adjourned by the Chair.

Summary of Action Items

LRRB Summer 2016 Meeting Minutes

- Action Item No. 1** Mitch Rasmussen will send out a note on the MAASTO Annual Meeting in Minneapolis letting the Board members know of the eligibility requirements. Board members are encouraged to sign up for the golf outing using the link provided.
- Action Item No. 2** Mitch Rasmussen and Lyndon Robjent will come up with recommendations on who is eligible to attend the upcoming conferences where that has not yet been identified.
- Action Item No. 3** The Alternative Intersection Design video will be placed on the agenda for the next TRIG meeting to discuss a possible cost-sharing opportunity.
- Action Item No. 4** Tim Stahl will check and see what level ADT for Low Volume roads will allow them to be included in the Minnesota MUTCD (RIC Contract Task No. 9).
- Action Item No. 5** Debbie Sinclair will send out the updated pre-trip and post-trip processes to the Board Members when they are finalized.
- Action Item No. 6** Debbie Sinclair will add a column to the budget spreadsheet for the consultant or contractor doing the work.
- Action Item No. 7** Debbie Sinclair will rename INV 927 Outreach Website (done by HNTB) to the LRRB website in the budget spreadsheet.
- Action Item No. 8** Shannon Fiecke will continue to load data for the “hottest” or “latest” research topics onto marketing trinkets (i.e., pen drives), as was done for the Young Driver’s Tool Kit.
- Action Item No. 9** Shannon Fiecke will e-mail an example expense report to the LRRB, RIC and MnDOT board members. [***THIS ACTION ITEM IS COMPLETE***]
- Action Item No. 10** Tim Stahl will bring the idea of having Mark Vizecky (Traffic) and Joel Uring (Bituminous and Concrete) become official RIC members to the RIC for discussion and bring back a recommendation.
- Action Item No. 11** Mitch Rasmussen requested that RS/Dan Sullivan put together guidance for the Project Champions reviewing multiple proposals and bring it back to the Board via e-mail for their comments.
- Action Item No. 12** Brenda Thomas requested that the board review the Knowledge Building write-ups included with their meeting materials and get back directly to her with any changes or modifications.
- Action Item No. 13** Linda Taylor will come back to the Board seeking a volunteer when the dates of the Ohio Peer Exchange for Local Transportation are known.
- Action Item No. 14** Board members interested in serving on the TAPs for any of the projects that are part of the current RIC Support Contract should contact Bruce Holdhusen (MnDOT RS) or Renae Keuhl (SRF).

Attachment 1

Outreach Committee Update

LRRB Summary 2016 Meeting Minutes

Mitch Rasmussen, MnDOT State Aid Director, and Shannon Fiecke, MnDOT Research Services, provided an update on the work of the LRRB Outreach Committee, which met the evening of June 21 and again at lunch on June 23:

Outreach Videos

- A tutorial video produced by SRF Consulting on how to use the **Flashing Yellow Arrows** decision tool is nearly complete.
- The **Ineffective Specialty Signs** video – which provides guidance to local officials on sign reduction – is nearly complete. It is based on RIC project “Best Practices for Sign Reduction on the Local System.”
- A contract is being processed for a two-part **Civil Engineering careers video** aimed at middle and/or high school students. The intention is a creative, animated production that illustrates why civil engineering is cool and what roles civil engineers play. Crash and Sues, a women-owned award-winning local media company, will produce the video in conjunction with SRF Consulting. This video, and an accompanying toolkit, would replace an outdated video/toolkit produced several years ago. The project will be more costly than the average LRRB video project, but MnDOT State Aid is contributing 50 percent to its production. Jim Grothaus discussed the possibility of using this video as part of the curriculum for a summer middle school transportation camp run by the Center for Transportation Studies.
- An educational video on **alternative intersections** (like the R-cut) is still being planned, with a possible contribution from MnDOT being sought. The production will be aimed at local elected officials and businesses, and highlight situations (with potential business owner testimonials) where alternative intersections have been tried successfully.
- **A Truck Weight Compliance** educational video, which could support Greg Hayes’ curriculum, is also in the early planning stages. Mitch wants to explore a potential sponsorship by Dakota County Technical College, which offers training in this area.
- The Outreach Committee also discussed creating trailer videos for a few key research projects per year, as an alternative to just technical summaries. This idea was received positively by the LRRB board.
- There has been no activity yet on video that was planned to occur about the cost of rough roads.
- There is approximately \$80,000 remaining for videos (\$134,000 presently in FY2017 fund) after the Civil Engineering Careers project is complete. The Outreach Committee plans to re-evaluate which videos are planned for the remaining funds. LRRB members should submit any ideas they have to Mitch.

Laurie McGinnis, director of the Center for Transportation Studies, also reported that a video on the value of research will be forthcoming from CTS.

ACTION ITEMS: The Outreach Committee should proceed with re-prioritizing future video projects and selecting 1-2 research projects within the next 6-9 months for creating video trailers.

Outreach Support Contract

- A one-year outreach support contract (\$20,000 per year) was approved with SRF Consulting. SRF previously performed outreach activities as part of a contract for RIC support. The Outreach Committee discussed what the priority of outreach activities from SRF should be, including national versus state work, and will continue to discuss long-term priorities.
- A draft work plan for SRF was developed:
 - Develop new LRRB booth display, which can be used at the APWA Expo in August.
 - Present on the Young Drivers Toolkit at the National LTAP (discussed creating a possible short video on the toolkit, with testimonials)
 - National publication article on System Preservation
 - Discussed tapping LTAP mailing list for certain communication activities
- SRF was also directed by the Outreach Committee to enable tracking of open rates on LRRB products from the LRRB electronic newsletter. Web analytics are also desired from the future LRRB website to inform Outreach activities.

LRRB board members asked that the LRRB flash-drive giveaways contain products or videos, similar to what Research Services did with the flash-drives (containing the Young Drivers Toolkit) at the last Minnesota Transportation Conference.

ACTION ITEMS: SRF and MnDOT Research Services should arrange for web analytics to be available from electronic communication and the new LRRB website. They should also continue the new practice of putting videos or LRRB products on LRRB flash-drives as hand-outs at events.

APWA Expo

- The Local Road Research Board will be given a complimentary booth, thanks to a contribution from State Aid to the APWA annual conference in Minneapolis.
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LRRB Booth Display

- The LRRB Board previously recommended creating a new, more portable booth display for conferences and events. The Outreach Committee ran out of time to discuss this at its June 21 meeting, but directed Shannon Fiecke, MnDOT Research Services, to bring a cost estimate to the LRRB board on June 23.
- Fiecke reported that a portable display, with retractable banners, and possibly renting or purchasing an interactive display screen, would cost less than \$5,000. Research Services Director Linda Taylor suggested adding \$5,000 to that amount in a fund for booth costs, which could also cover entry fees and other future costs.
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ACTION ITEM: In follow-up discussion by the LRRB Board on June 23, the board approved setting aside \$10,000 for a fund for events and conferences that would cover the costs of booth displays, entry fees and associated costs.

LRRB Focus Group

- The Outreach Committee reviewed ideas from recent District 3 area focus group. It re-assigned a number of implementation ideas to the RIC, which had been tagged outreach. Some other ideas weren't applicable to the LRRB or wouldn't be very effective, committee members thought. The committee will add a suggested Safe Multimodal Navigation of Roundabouts Video to the list of video ideas for prioritization.

ACTION ITEM: The Outreach Committee should provide ideas from the LRRB focus group to RIC Chair Mike Flaagan for consideration. It should also add the Safe Multimodal Navigation of Roundabouts Video to the list of video ideas for prioritization by the LRRB board.

LRRB Website Redesign

- The Outreach Committee discussed a \$29,066 proposal from CTC & Associates to redesign the LRRB website; develop a web script to allow automatic porting of project information from MnDOT's research database to the LRRB website; and provide maintenance and hosting of the LRRB website for two years. The proposal includes creating an interim "bare-bones" site until the new website is complete, and additional hours for web design or web editing work, if desired or needed. The LRRB website, which is currently managed by HNTB Corporation for \$20,000 per year, would be managed on a daily basis by Research Services staff in the future. An interim website is needed because HNTB's contract expires Aug. 31, and its website host provider was bought out by another company that will not agree to transfer the hosting contract to MnDOT.

ACTION ITEM: The LRRB Board on June 23 adopted the Outreach Committee's recommendation to hire CTC to redesign and host the LRRB website for two years. CTC should also develop an interim "bare-bones" site, once the current HNTB contract expires, until the new site is launched. The LRRB Board also directed that an additional \$10,000 be added to the contract for future web work that may be desired.

Transportation Research Assistance Program (TRAP) Certified Five-Year List

- MnDOT has selected 19 consultants that can perform marketing and outreach activities for transportation research program activities, without requiring a formal bid process. This pre-certified list, called the Transportation Research Assistance Program, is expected to become effective July 1. Only one applicant wasn't approved. A couple existing contractors (AET and HNTB) that have been hired off the TRAP either did not reapply or missed the deadline. The five-year program can be opened for new applicants once per year.

Ohio Peer Exchange

- Ohio is planning a Peer Exchange on implementing local research projects, which tentatively planned for March 2017. Ohio would like LRRB participation. More information will be forthcoming.

ACTION ITEM: The LRRB Board is interested in participating in the Ohio Peer Exchange. Once the details are set, MnDOT Research Services should ask the LRRB for participants.

MAASTO CONFERENCE

- LRRB invited to present on the Traffic Sign Life Expectancy Project at the MAASTO Conference, which will take place Aug. 8-11 in Minneapolis. Howard Preston (CH2M), which was the consultant on that project, has agreed to speak.
- The MnDOT Materials Lab has also been asked present at the conference on the Asphalt Cracking Prediction Test (this has been a big effort at MnROAD, which the LRRB supports).
- The National Road Research Alliance (which LRRB is a member of) will also make a presentation.