



LRRB/RIC Summer Meeting Minutes
June 28-29, 2017
Sawmill Inn
2301 Pokegama Ave S
Grand Rapids, MN 55744

LRRB Members Present:

Lyndon Robjert (Chair), Carver County
Jim Foldesi, Saint Louis County
Tim Stahl, Jackson County
Paul Oehme, City of Chanhassen
Steve Koehler, City of New Ulm
Kaye Bieniek, Olmsted County
Laurie McGinnis, U of M - CTS
Linda Taylor, MnDOT - Research
Mitch Rasmussen, MnDOT – State Aid
Kevin Western, MnDOT – Bridge

Others Present:

Joel Uring, MnDOT – State Aid
Debbie Sinclair, MnDOT – Research
Shannon Fiecke, MnDOT – Research
Marcus Bekele, MnDOT – Research
Becky Lein, MnDOT – Research
Bruce Holdhusen, MnDOT - Research
Mitch Bartelt, MnDOT – Research
Mike Marti, SRF
Rena Kuehl, SRF

RIC Members Present:

Mike Flaagan (Chair), Pennington County
Steve Bot, City of Saint Michael
Kelvin Howieson, MnDOT District 3
Guy Kohlnhofer, Dodge County
Klayton Eckles, City of Woodbury
Hafiz Munir, MnDOT RS
Jim Grothaus, U of M CTS
Ted Schoenecker, MnDOT – State Aid
Ben Worel, MnDOT OMRR

RIC Members Absent:

John Brunkhorst, McLeod County

LRRB Minutes prepared by Mitch Bartelt, MnDOT Research

RIC Minutes prepared by Bruce Holdhusen, MnDOT Research

At this meeting, the LRRB and RIC met both separately and together. The schedule for those meetings was:

Day 1 - June 28, 2017

Separate Sessions: LRRB or RIC

8:30 AM – 9:30 AM

Joint Session: LRRB and RIC

9:30 AM – 3:30 PM

Day 2 – June 29, 2017

Separate Sessions: LRRB or RIC

8:00 AM – 10:00 AM

Joint Session: LRRB and RIC

10:15 AM – 2:30 PM

LRRB Meeting Minutes

Day 1
JUNE 28, 2017

1. LRRB Separate Session

Chair Lyndon Robjant called the LRRB separate session to order. Lyndon welcomed the attendees and gave time for a new staff member to introduce himself. Marcus Bekele was recently hired to the MnDOT Graduate Engineer Trainee program. Marcus's first rotation is with Research Services. He is "home-based" in RS, meaning he will work there full time when his two-year rotation program ends.

The group then reviewed both the Agenda and the March 2017 LRRB Meeting Minutes. ***A motion to approve both was made by Jim Foldesi and seconded by Mitch Rasmussen. The motion passed unanimously.***

Review March 2017 LRRB Meeting Action Items

Linda Taylor led the discussion and focused mostly on the outstanding items.

Action Items from the March 2017 LRRB Meeting:

Action Item 1: *Debbie Sinclair will send updated meeting notices on Outlook for meetings that have changed location.*

Status: This is **resolved**.

Action Item 2: *Debbie Sinclair will send out an e-mail message informing LRRB and RIC members to let her know soon if they would like to attend any upcoming conferences.*

Status: Mitch B sent out an e-mail covering this item on April 10. This is **resolved**.

Action Item 3: *Shannon Fiecke will examine making the Trip Report fillable in both mobile format and web formats.*

Status: This item remains **outstanding**.

Lyndon noted that it would be nice if the reports contained drop down menus instead.

Action Item 4: *Mitch Rasmussen and/or Ted Schoenecker will talk to City Engineers Association of Minnesota Executive Committee and Minnesota County Engineers Association Board of Directors to establish subgroups on employee retention and recruitment.*

Status: Mitch R talked to the presidents of city and county engineer associations about the possibility of creating employee retention committees, and both said they would consider it. This item is **resolved**.

Action Item 5: *Shannon Fiecke will work with RS to extend the Outreach Committee contract, and will work with the Outreach Committee to develop the scope for a new contract.*

Status: Shannon says there was no need to extend the previous Outreach Committee contract, as a new contract has already been executed prior to the current one expiring. This item is **resolved**.

Action Item 6: *Mitch Bartelt will follow up to check the status of Kristi Sebastian's research idea submission.*

Status: Bruce Holdhusen submitted the idea into IdeaScale. Mitch B confirmed this to Kristi in a March 30 e-mail. This item is **resolved**.

Action Item 7: *Glenn Engstrom or someone else from Materials will bring these materials research ideas to the Focus Group on April 6 for discussion.*

Status: Dave Van Deusen and Jeff Brunner from the MnDOT Materials Office attended the Focus Group. This item is **resolved**.

Action Item 8: *Mitch Bartelt will add language to the bottom of the LRRB Multiple Proposal Evaluation Form noting that one or more projects could be selected as the favorite if they approach the projects in different but equally valuable methods.*

Status: Mitch B added the language to the bottom of the form. This is **resolved**.

Action Item 9: *Tim Stahl will request that Joel Ulring present the Research Test Track Database report at the Minnesota County Engineers Association summer meeting to raise more awareness of it.*

Status: Neither Tim nor Joel was able to attend the entire conference. However, Joel will carry this forward and promote this report as part of his work. This item is **resolved**.

Action Item 10: *Bruce Holdhusen will work with Nelson Cruz and the Materials Lab to amend the Research Test Track Database contract.*

Status: This was **resolved**, though not in the way recommended at the March LRRB meeting. The decision was made to spend the remaining \$5,000 balance on marketing, but then let the contract lapse on December 31, 2017. State Aid will then enter information that cities and counties submit in the future; Joel Ulring will be the point person for this effort.

Unresolved Action Items from prior meetings:

June 2016 Action Item 5: *Debbie Sinclair will send out the updated pre-trip and post-trip processes to the Board Members when they are finalized.*

Status: This is still **outstanding**.

Mitch R recommended Debbie check with Nancy Stone as she completes these processes.

October 2016 Action Item 7: *Going forward, trip report action items will be sent to the indicated committee first, then to Mitch Rasmussen to identify a champion. If no champion is found, Mitch Rasmussen will bring to LRRB to discuss if there is value to the state for the investment.*

Status: This item ended up being **resolved** during and after the meeting. Trip reports submitted by those in attendance were discussed on Day 2. Mitch R and Mitch B met to cover rest of the trip reports and determine any action items and push them to the appropriate committees.

Mitch R would like to carve out time at future meetings to review trip reports.

October 2016 Action Item 9: *Lyndon Robjent will develop a proposal for the next phase of Modernizing Construction Plans for the board to consider for funding at a future meeting.*

Status: This is still **outstanding**.

Lyndon says he is getting help developing the proposal. A draft proposal will be ready to present at the next LRRB meeting.

Budget and Administration

Debbie led the discussion of budget and administration.

LRRB Budget Report

INV922: Systems Preservation Guide – A Planning Process for Local Government Management of Transportation Networks, is complete. The original contract was \$698,876. After the audit was complete, additional overhead costs of \$9,296 were owed due to audit findings.

Status updates on current projects:

- INV924: YouTube Videos
 - FY15 Ineffective Specialty Signs-In process
 - FY17 Professional Services for Careers in Civil Engineering Video is in progress
 - Balance of \$85,209 will carry forward to FY18
- INV 943: Traffic Sign Life Expectancy

- INV 948*: Flagger Operations: Investigating Their Effectiveness in Capturing Driver Attention
- INV 1021: TRS: State DOT Bridge Removal Programs and Policies

Status of New Projects:

INV 1023	Experimental and Computational Investigations of High Density Asphalt Mixtures	In Contracting Process
INV 1027	Characterization of Runoff Quality from Paved Low Volume Roads and Optimization of Treatment Methods	Final Scope Approved
INV 1028	Is Seal Coating Counterproductive or Not?	In Contracting Process
INV 1029	Cost/Benefit Analysis of the Effectiveness of Crack Sealing Techniques	Contractor Signed Contract
INV 1030	Examining Optimal Sight Distances at Rural Intersections	Contractor Signed Contract
INV 1031	Investigating Inductive Loop Signature Technology for Statewide Vehicle Classification Counts	In Contracting Process
INV 1032	Personal Warning Sensor for Road Construction Workers	In Contracting Process
INV 1034	Adaptive Management to Improve Deicing Operations	Fully Executed

Other items of note:

- INV668 LTAP program – federal funds have been authorized but FHWA still needs to get the funds processed before the contract can proceed.
- The FY17 Program LRRB Contingency Account remaining balance is \$50,000. This will be released back into the budget.
- Balance for FY17 carried forward to FY18 is \$2,166,976.
- Available balance in FY18 is \$1,802,039.
- Pie charts in the binder are updated with FY18 amounts.

INV 999 Administration Budget

FY2017 Summer meeting expenses will be reflected on the next budget.

Amendment Analysis

A total of 8 amendments were noted; 5 of them are new, and 3 that were listed as pending on the March report but have now been completed. Of these 8 amendments, 7 extended the end date, and one of these had additional work and costs.

LRRB Meeting Dates and Locations

Debbie tabled this for now, and covered it later in the joint session.

New Action Item 1: Kevin Western will provide a summary of the bridge research to Shannon Fiecke to be posted on the LRRB website.

2. LRRB/RIC Joint Session

Chair Lyndon Robjert called the LRRB/RIC Joint Session to order. The Chair asked the board for any changes or additions to the agenda

Steve Koehler moved to approve the Agenda; Jim Foldesi seconded the motion. The motion was unanimously approved.

3. Conferences and Meetings

Debbie Sinclair led the discussion.

2017 Conferences

Debbie was looking to confirm attendees for the remaining 2017 conferences. The LRRB is still looking for people to attend the following two domestic conferences

- Mid-Continent Transportation Research Symposium in Ames, Iowa in August
- Northwest Management Pavement Association Conference in Vancouver, Washington in October

2018 International Conferences

Debbie noted that international conference attendance needs to be requested soon. The next LRRB or RIC meeting will be too late. The World Congress on Intelligent Transportation Systems in October in Montreal, Quebec needs to be put in for immediately.

Debbie noted that **airfare for LRRB Travel must be purchased through MnDOT Aeronautics.**

LRRB Meeting Dates and Locations

Debbie asked where next summer's joint meeting should be. Members of the board expressed a desire to have a place with working air conditioning in the guest rooms. There was discussion on the bidding process, and a way to incorporate quality standards (or perhaps date of construction) in the selection. Rochester and Hutchinson were floated as possible locations.

New Action Item 2: Mitch Rasmussen will talk to John Brunkhorst about next summer's meeting being in his area.

Debbie reminded the board that expenses incurred through the end of the Fiscal Year 2017 (6/30/2017) are due by Monday, July 10. Also, expenses need to be submitted within 60 days of the event; otherwise, they become taxable income and the person will receive a 1099 form. Klayton Eckles said a sheet of paper describing the expense and reimbursement process economically and clearly would help.

New Action Item 3: Debbie Sinclair will send out an updated one page document on the expense and reimbursement process.

Ben Worel discussed a list of upcoming NRRRA events in Minnesota.

New Action Item 4: Ben Worel will send a list of Minnesota NRRRA events to MnDOT Research Services for them to distribute.

Note: Mitch B sent this list out to the LRRB and RIC members via e-mail on July 17. This item is **resolved**.

Other attendees brought up other conferences that are in the state:

- Jim F noted there is a Transportation Research Board meeting in Duluth July 19-20
- The Toward Zero Deaths conference will be held October 26-27 at the Saint Paul RiverCentre.

4. Outreach Committee Update

Mitch R led the discussion on a new process for developing LRRB research ideas. This new process is due in large part to a desire to increase local agency participation throughout the state. Another reason to have simpler, better ways to market our products. The plan is to use the spring pre-screening board meeting to market research to our customers. The October screening board meeting is when funding for the LRRB is voted on, and the goal is to make this more than a perfunctory vote.

Going forward, there will be four outreach meetings per year to align with RIC and LRRB meetings.

Renae Kuehl gave an update on various items from the Outreach Committee:

- New work plan – Renae talked about system preservation article that was published in the Pavement Preservation Journal. The Outreach Committee places an article in a national publication every year.
- ADA Training is coming up and was advertised in the State Aid Newsletter.
- Under the new research idea process, prescreening board meetings will also be used to generate a new video idea list.
- Video updates – the Outreach Committee is working on a video titled “Careers in Civil Engineering.” It should be completed in August or September.

- Renae talked about changes being made so that the motion of the animated characters is more natural. There will also be a different narrator and different background music.

The draft version of the “Careers in Civil Engineering” video was shown to the LRRB/RIC meeting participants, and it received generally positive feedback.

Mitch R talked about MnDOT STEM Outreach Coordinator Nicole Bartelt’s work with *Bridge Up!* – a curriculum to attract students to the civil engineering profession. She is looking for local agency partners to implement this curriculum. Anyone interested can coordinate through either Mitch R or Nicole Bartelt.

Mitch R also noted that Ineffective Specialty Signs contract was extended, as the TAP was not satisfied with how the video turned out. The goal will be to make this more in plain language.

Jim Grothaus gave an update on the North Dakota Upper Plains learning platform. Jim G’s LTAP group will examine how practical it is for Minnesota local agencies.

New Action Item 5: Jim Grothaus will work with the Minnesota Local Technical Assistance Program to determine if the North Dakota Upper Plains learning platform is practical for Minnesota local agency use.

Ted will talk to Jim Grothaus and/or Greg Hayes to work on the Truck Weight Compliance video.

Shannon gave updates on the LRRB website, the MnDOT Research Services website, and the Crossroads blog.

Shannon also noted that the Outreach Committee is considering ways to thank Technical Liaisons for their participation on projects for the Local Road Research Board. They settled on a thank you letter from LRRB Chair Lyndon Robjent and a tumbler with the LRRB logo. (For MnDOT projects, there will be a letter from MnDOT Commissioner Charlie Zelle and a tumbler or notebook with a MnDOT logo.)

Hafiz announced MnDOT RS will sponsor travel to the TRB Annual Meeting for the technical liaison for research projects selected for the AASHTO-RAC Sweet 16 award.

Focus Groups

Focus Groups will be replaced with the new proposed process. Lyndon noted that this might cause a gap where cities and counties don’t link together. Mitch R said the new process might have to run through one cycle, and then they’ll get feedback at the CEAM and/or MCEA annual meetings.

As part of the new research idea generation process, there will be more time to submit and vote on ideas in IdeaScale.

Klayton expressed concerns that adding time to the pre-screening board for research ideas might make these meetings longer and drive down attendance, as participants may not have a desire to grind out Need Statements at this meeting. Jim G said they were targeting two extra hours of the prescreening board meeting as part of this process, and Mitch R said this might be more useful for attendees who are far away from the screening board location and already have to make a day out of attending it.

Jim G noted that there was a pre-event survey for people who couldn’t attend to submit ideas. He also said that CTS can grind through Need Statements in January or February under the new process.

5. Focus Group Results

Jim G gave a PowerPoint presentation summarizing the April 6, 2017 Focus Group. The Focus Group began in 2012. The average number of attendees has been 26, of which 16 were city and county representatives. He estimates the number of proposed ideas is hopefully four times that amount.

A pre-event survey generated 29 unique responses this past year. Jim G noted the need statements and topics identified at Focus Groups.

One of the lessons learned was to hold the research idea generation process in conjunction with an existing meeting. There was a lot of discussion on how to engage more people to participate in research idea generation activities. Kaye B suggested the Joint Board of Directors screening board meeting in the fall.

Jim G stated there will be a TAP guiding this process forward, and that it will be important to have both city and county representation.

6. LRRB Knowledge Building Priorities

Jim G led the discussion. Jim described how Knowledge Building was covered at the March 2017 LRRB meeting, and is covered on a four-year schedule. In order to spur discussion and generate ideas, four researchers from the University of Minnesota gave presentations for each knowledge building bucket at the March 2017 LRRB meeting.

He noted that a Draft update version is in the binder, and that he welcomes feedback from anyone attending the meeting. Added text from the previous version is highlighted in yellow.

7. FY 2019 Research Program

Hafiz led the discussion, noting some important dates in the research program annual general calendar for research and implementation projects. Then he noted two main sources of ideas for our process, which are the Focus Groups (LRRB) and IdeaScale (TRIG). Hafiz said that in 2017, there were 14 focus group / LRRB ideas and 31 MnDOT/TRIG ideas. Hafiz said this number was a typical number for the average year. Finally, Hafiz summarized the LRRB and RIC voting and described the spreadsheet, showing which ideas received the highest number of votes. He stated if there is a double asterisk (**) next to an idea, it is also moving forward with the TRIG voting process. For those, Need Statements are already developed.

8. Research Need Statements Development

The meeting participants split amongst three separate teams to develop and edit Need Statements. The teams took turns selecting ideas in an S-curve draft format. The team members and final actions for each Need Statement are described below.

Team 1 (Red)

Captain: Steve Koehler

Coach: Bruce Holdhusen

Team Members: Klayton Eckles, Paul Oehme, Steve Bot, Hafiz Munir, Kelvin Howieson, and Marcus Bekele

Number from Ideascale and Potential Research Ideas:

92 Pavement Management Guide for Local Agencies

This was good as is. No changes were made.

95 Guidance for Protected/Buffered Bike Lanes with Delineators

This was good as is. No changes were made.

100 Minnesota Roads: Assessment of Risk of Local, Regional, and State Funding Options

The group tweaked this a little bit and changed the title.

101 Guide for Local Agency Officials: How to Communicate with the Public, Media, and Elected Officials

The group feels this is a great idea, but wasn't sure it would work in this RFP process. This should be a training curriculum and not just a guide. Red team chose to pull this from the RFP process and send this to the Outreach Committee, with the goal of making it a training curriculum.

New Action Item 6: Mitch Rasmussen and the Outreach Committee will pursue development of a guide and training curriculum to help local agency officials communicate with the public, media, and elected officials.

****112 Reducing Fuel Used by MnDOT Plows**

The title of the project was changed to make it more inclusive of local agencies, and some of the text was edited.

Team 2 (Blue)

Captain: Lyndon Robjent

Coach: Mitch Bartelt

Team Members: Mitch Rasmussen, Jim Foldesi, Laurie McGinnis, Guy Kohlnhofer, Kevin Western, and Joel Ulring

Number from Ideascale and Potential Research Ideas:

82 A Guide to Successfully Convert Severely Distressed Paved Roads to Unpaved Roads

The group felt the information looked good as entered into IdeaScale. There were no changes, other than to transpose this information onto a Need Statement.

93 Salt applications and alternatives for snow and ice control by local agencies

This was revised extensively, in order to capture the environmental and economic consequences with respect to level of service. Because of the extensive revisions, the group felt it was Jim Foldesi volunteered to be the new project champion.

96 Criteria and design guidelines for three-lane roads

Minor changes were made to the text of the Need Statement. The group and/or Project Champion should still add more members to the TAP, however.

97 Design standards for unobstructed sight lines at left-turn lanes

This statement was unchanged. At the request of Kevin Western, Mitch B forwarded this Need Statement to MnDOT State Traffic Engineer Jay Hietpas, as he feels it would be a good project for TRIG to fund, even though it didn't rate highly during TRIG voting.

****98 Transportation Workforce Recruitment and Retention Strategies**

Substantial changes were made to this Need Statement. The scope was narrowed to focus on technical public sector employees and agencies.

99 The economic impacts of local public infrastructure investments

Modest changes were made. Notes were made to list other two LRRB projects that were done that cover this topic in the blank *How does this project build upon previous research?* Also, corridor evaluations for Access Management on I-394, as well as MN 371 in Brainerd, should be included in that blank.

Team 3 (Yellow)

Captain: Mike Flaagan

Coach: Jim Grothaus

Team Members: Kaye Bieniek, Linda Taylor, Tim Stahl, Ted Schoenecker, and Ben Worel

Number from Ideascale and Potential Research Ideas:

83 High Friction Surface Treatments

The group decided this should be a TRS.

New Action Item 7: Ted Schoenecker will talk to Mark Vizecky in State Aid, test high-friction surface treatments in the field.

87 The Value of a County Surveyor Located with the Public Works Department

The group felt this was not research. This will not be pursued.

****94 Vegetation Management Practices to Increase and Enhance Roadside Pollinator and Wildlife Habitat**

The group added to the title, and TAP members from northwest (Mike F) and southwest (Tim) Minnesota.

120 Compaction Optimization Moisture Performance Test (COMPTest)

Ben will have John Garrity from the MnDOT Materials Lab fill out a Need Statement for this one. The group feels locals will have an interest as well.

139 Performance-based Tack Coat Specification

Ben will work with the lab to fill out a Need Statement and make it more complete. Joel and Guy and Jill Thomas will be on the TAP.

140 The Real Value of Toward Zero Death

This will be sent back to MCEA and TZD members for clarification.

11. Closing Comments and Adjournment for the day

After the teams reported their results in front of the entire group, Chair Lyndon Robjert thanked members for their work on the Need Statements, then adjourned for the day.

LRRB Meeting Minutes

Day 2

JUNE 29, 2017

1. LRRB Separate Session

Chair Lyndon Robjent called the LRRB Separate Session to order.

2. LRRB Strategic Plan Update

Lyndon gave a short description and background in preparation for the rest of the day's session. He talked about the kickoff meeting on May 25 and activities performed by the TAP. (They are described in the summary compiled by the consultant dated June 9 that was included in the binder.) The ultimate goal of the Strategic Plan Update is to update the plan, update operating procedures, and provide a new member orientation guide.

3. Funding Requests

Pavement Markings - Wet Retroreflectivity Standards

This is a project that was selected for funding in December 2016, for \$96,062 total, with \$48,031 of LRRB funding (TRIG funded the other half). The TAP had a pre-contract meeting in May, and determined that this project would not be as useful without a human factors piece to determine appropriate reflectivity levels in dark and wet conditions. Ken Johnson, the project Technical Liaison, presented his case via phone.

The request is for additional funding. Ken noted that 3M is offering use of its facilities at no charge to conduct human factors field experiments. There were three options presented for the board's consideration:

- A TAP Opinion Study for \$31,000
- A Full-Scale Human Factors Study for \$63,000
- A combination of both, for \$75,000

Jim F asked who was on the TAP and if the entire TAP would be present for the TAP opinion study. Ken responded that there is a wide range of representation from MnDOT Traffic and Maintenance at statewide and district levels, as well as county engineer and industry (both 3M and Potters) representation, and that all of them would be present for the TAP opinion study.

Minnesota Pavement Selection Tool (MNPST)

This is a project that was initiated by Derek Tompkins in 2014 when he was a Research Associate at the University of Minnesota. It has been partially completed. The original contract paid \$54,682, and the remaining balance of \$54,597 was returned to the LRRB fund. Derek now works for AET, and requested for funding in the amount of \$68,972 to complete project. He gave a PowerPoint presentation via phone.

Use of Structural Concrete Fibers in High Production Concrete Paving Operations

Kaye presented this project Supplemental Agreement funding request on behalf of Cottonwood County. The proposal is to test thinner concrete pavements with these structural concrete fibers, and the proposal was made by a county commissioner.

The work done would be to add fibers to one mile within a larger concrete overlay project. The requested amount of \$60,000 would be to cover the added cost of construction to add the fibers. The work would be done this summer 2017.

The board questioned where the research cost is accounted for in the budget request, and what is the research deliverable. This needs to generate a product.

4. Materials Lab funding requests

Five projects with NRRRA Cost-Sharing Opportunities

Ben showed a fantastic short movie-trailer style video regarding the NRRRA. Ben then discussed and promoted the research ability of the NRRRA, and noted that many states and associated members have contributed funding, including the LRRB.

This is looked as a long-term partnership that can help guide MnRoad.

Ben asked for the LRRB to contribute to cost-share opportunities. They were included in detail on page 3 of the NRRRA handout in the binder. Ben noted that if LRRB adds funding, it would free up money to pursue other projects.

LRRB is a full member of the NRRRA, for \$500,000 per year.

5. Other Funding Considerations and Board Actions

Operational Research Program for Local Transportation Groups (OPERA)

Jim G gave an update on OPERA. He handed out a spreadsheet shows that \$90,000 has been encumbered. Lyndon noted the pickle brine de-icing project in Carver County. (There is a Gedney pickle plant nearby.)

Jim G also described the "Build a Better Mousetrap" competition, in which ideas are submitted by people at maintenance shops. CTS will award a prize of \$350 gift card to the best idea.

Focus Group Work Plan / Contract

Jim G provided a Work Plan for this request. A one-year contract for \$27,000 was proposed.

Board members asked some questions. They included, is CTS ready for four times as many Focus Group participants next year for the change in process, and will the twelve Need Statements that are provided in the contract will enough? Jim G said the proposed request is assumed to cover both.

6. LRRB/RIC Joint Session

Chair Lyndon Robjert called the LRRB/RIC joint session to order. Lyndon noted that the stakeholder involvement for the Strategic Plan is for LRRB, RIC, and Outreach committee members.

7. RIC Update

RIC Chair Mike Flaagan distributed a handout that noted the Consultant Contract Update Summary and led discussion of it.

Jim G discussed appropriate the PPE usage project for various situations and the ADA training. There will be 27 ADA class sessions delivered between now and the end of next year, and it is projected that thirty people per class will attend. Klay noted that while ADA training is somewhat expensive, it is something that local agency personnel wants and needs.

Mike F said that there is 10% of the budget left for the three year term. He noted that due to the tight budget, there may be a request for more funding in the future.

8. Trip Reports

Mitch R led the discussion. The goal is to pare down the trip report process to turn trip reports into ideas for research or action items. Each person in attendance described his or her own trip report. (Mitch R and Mitch B met offline to review trip reports for people not in attendance and determine best course of action for those items.)

The following reports described below generated action items or were otherwise noteworthy:

- **Kaye** went to a presentation titled “So You Want to Buy a Drone?” at TRB. She would like a summary for agencies to determine their practices and to guide them. The preferred outcome would be a guide to ensure compliance with state and federal laws (FAA rules, liability safeguards, etc.). Mitch R wants to bring this to the new Focus Group process at the October pre-screening meeting. It should be a subject on the agenda and mailed out ahead of time, to see if this develops into a problem statement.

New Action Item 8: Jim Grothaus will add drone guidance for local agencies as a topic for the October pre-screening board meeting through the Focus Group process.

- **Kaye** also went to a presentation titled “To App or not to App” at TRB. Kaye noted that a process to develop an App can be difficult and isn’t often a good use of research money.

New Action Item 9: Shannon Fiecke will take the topic of whether making mobile applications is right for local agencies to the Outreach Committee for discussion.

- **Bruce** went to a presentation on Access Management at TRB, and is working half time on this on mobility at MnDOT. Mike F noted that some agencies use MnDOT standards and some don’t (but should), and that it would be good for them to get some information from MnDOT on this topic.
- **Hafiz** went to TRB and came away with the idea of doing more research on the people side of the workforce, including socioeconomic pieces. He also noted that it would be better to provide more research opportunities to have it all in one place. Mitch R feels LRRB Strategic planning activities should help address some of these challenges.
- **Hafiz** also went to a session on low-volume roadway management. He feels guidance on this could help local agencies. He was impressed with the presenter Dr. David Jones from the University of California Pavement Research Center. Tim also went to this and seconded Hafiz’s comments.

New Action Item 10: Jim Grothaus will add low-volume roadway management for local agencies as a topic for the October pre-screening board meeting through the Focus Group process.

- **Paul** went to a TRB presentation covering nanotechnology in concrete mix design. This topic could save money on thickness of concrete design, determine whether epoxy coated bars need to be used, and sealing possibilities.

New Action Item 11: Jim Grothaus will add nanotechnology in concrete mix design as a topic for the October pre-screening board meeting through the Focus Group process.

- **Paul** also went to a presentation on pervious pavement. Research paper #17-01193 was presented from Benjamin Nantasai at Washington State University, and had a lot of good useful information for our research. Mitch Rasmussen felt this information should go to the Technical Liaison for INV 1016.

New Action Item 12: Paul Oehme will distribute Research paper #17-01193 from Benjamin Nantasai at Washington State University to John Gulliver at the University of Minnesota to aid in his project titled *Permeable Pavement for Road Salt Reduction*.

- Finally, **Paul** went to a presentation titled Addressing Concerns about LED Street Lighting. This covered potential health concerns resulting from their use. Paul gets citizen calls from where they have been installed in Chanhassen.

New Action Item 13: Jim Grothaus will add addressing concerns about LED street lighting as a topic for the October pre-screening board meeting through the Focus Group process.

- **Lyndon** went to TRB and noted that California is going away from Level of Service to Vehicle Miles Traveled as the primary measure of effectiveness. It is measured on a county-wide basis, and the goal is to reduce VMT. He said this grabbed the attention of the Met Council. Lyndon also went to a presentation where train information at unprotected crossings was analyzed to predict motor vehicle delay. This isn't covered by Google, but was well received. There was no recommended follow-up on either item.
- In addition to the aforementioned session on low-volume roadway management at TRB, **Tim** also engaged in a discussion regarding converting roadways from paved to gravel. The proposed Idea 82 Need Statement titled *A Guide to Successfully Convert Severely Distressed Paved Roads to Unpaved Roads* will help in this regard.
- **Joel** attended a subcommittee meeting for Pavement Management Systems for Local Government. Street Saver PM is developing a calculator that analyzes life cycle costs for street pavement, trying to take local costs associated with pavement management strategies to track that. It is under development, but has some potential.

New Action Item 14: Joel Ullring will share the information regarding the Street Saver PM life cycle cost analysis calculator with the MCEA pavement committee and RIC.

In the future, Mitch R would like to have people run through their trip reports quickly as was done at this meeting. Mitch R and Mitch B will meet afterward to discuss other reports. (This resolves **October 2016 Action Item 7.**)

9. LRRB Strategic Plan – Stakeholder Involvement

Lyndon split the attendees into five teams, and assigned the teams. Anne Carroll from Carroll, Franck, and Associates led the exercise, with support from Anna Schwartz of ACS Tech Insights.

The consultants prepared a summary of the LRRB Strategic Plan Activities. It is attached to these minutes.

10. Round Robin

Everyone other attendee not listed below chose to pass.

Klayton Eckles learned at this meeting that the RIC is a small percentage of the LRRB budget, and wondered if this an issue the LRRB wishes to reconsider in the future.

Ben Worel and **Joel Ullring** are working with University of New Hampshire on flooded roads. They can report back to the next meeting to determine if the boards want to customize it.

Linda Taylor noted that MnDOT Research Services is working on training videos for Project Coordinators, Project Advisors, and Principal Investigators. (Principal Investigators are usually professors and researchers at universities). She said the goal is to clarify the process to everyone involved in carrying out the research projects, and she wants to share it as widely as possible to the appropriate audience.

Guy Kohlnhofer said he is looking forward to attending the National LTAP conference in Virginia in July.

Mitch Bartelt thanked Marcus for his help in getting ready for this meeting.

Marcus Bekele thanked everyone for welcoming him.

Kevin Western invited people to attend the 2017 Midwest Bridge Preservation Partnership Meeting. It is November 6-8 at the Minneapolis Marriott City Center. Sara Sondag with MnDOT is considered a leader in bridge maintenance. Kevin encouraged local agencies to send people to the conference.

New Action Item 15: Mitch Bartelt will distribute the 2017 Midwest Bridge Preservation Partnership Meeting notice to LRRB and RIC meeting attendees.

Kevin also noted work on the Bridge Resource Information Management (BRIM) product. David Hedeem from the MnDOT Bridge Office is completing the software work and Dave Conkel is providing coordination support with counties involved and another consultant. Kevin hopes local agencies can use this and it is of value to them, and that it will help provide some research ideas.

Shannon Fiecke informed the group that Andrea Hendrickson with MnDOT Bridge Hydraulics just wrapped up the creation of a manual on enhanced culvert inspection. A webinar will be scheduled in July. State Aid will notify local agencies of this.

Lyndon Robjent presented a service award to **Tim Stahl** as the liaison between the LRRB and RIC from 2011 to 2016.

Chair Lyndon Robjent adjourned the meeting for RIC and Outreach Committee members, while stating the LRRB needs to stay to discuss funding decisions.

11. Funding Decisions – LRRB only

Pavement Markings funding request

The board had some questions regarding this project for Mitch B, who is the Project Coordinator and Advisor for this project. Questions included:

- Would this research potentially help inform agencies in the face of federal requirements for pavement marking retroreflectivity? (Yes)
- Without this extra funding, is the project too flawed to continue? (Probably)

The consensus of the board was to approve both proposed tasks, for both the TAP opinion and statistically significant human factors studies.

Tim Stahl moved to approve the “combination” method for an additional \$75,000. Jim Foldesi seconded. The motion was unanimously approved.

AET proposal (\$68,792)

The original intent of this project was to provide city/county engineers a basis for defending why they selected bituminous or concrete. Board members wondered if this tool would be obsolete as soon as it was complete, and felt that the new proposal has deviated from the original intent of the project.

The board voted to pull back and advise the requestor to resubmit this, reworking the problem statement. The request for additional funding was denied.

Concrete fibers (\$60,000)

The board wanted more clarification on this request. The question it had was what exactly would the \$60,000 cover? Would it cover only one mile of concrete fibers, or would there be another end product? Kaye said she will get more information from Cottonwood County.

The highest amount the LRRB can approve over e-mail is \$50,000.

One member suggested providing funding half of the funding if the county matches the other half.

Mitch R made a motion to hold off on a vote for now, let Kaye B work with the county to get a scope and deliverables – one of which must be inspection and/or monitoring plan with a document put into a report for a product – and hold a future vote via e-mail for up to \$50,000 if this is all provided in a timely fashion. Kevin W seconded the motion. The motion carried.

New Action Item 16: Kaye Bieniek will work with Cottonwood County to provide more information on the concrete fibers request. A future LRRB vote will take place via e-mail if this is all provided in a timely fashion.

NRRA request (Various amounts)

Members noted that the LRRB already pays \$500,000 per year to support the NRRA. It was proposed that perhaps the LRRB should just increase its annual contribution. Annual requests are made each spring meeting.

There was reluctance for the board to kick in more money for specific projects. Do they do this for other states?

At this time, the board chose not to increase funding to NRRA.

Focus Group (\$27,000)

Steve Koehler moved to approve the requested amount. Paul Oehme seconded the motion. The motion passed, with Laurie McGinnis abstaining.

Adjournment

Steve Koehler moved to adjourn the meeting. Jim Foldesi seconded the motion. The motion to adjourn passed by unanimous vote.

Summary of Action Items

Action Items from June 2017 LRRB Meeting:

Action Item 1: Kevin Western will provide a summary of the bridge research and provide a link to Shannon Fiecke to be posted on the LRRB website.

Action Item 2: Mitch Rasmussen will talk to John Brunkhorst about next summer's meeting being in his area.

Action Item 3: Debbie Sinclair will send something out an update one page document on the expense and reimbursement process.

Action Item 4: Ben Worel will send a list of Minnesota NRRA events to MnDOT Research Services for them to distribute.

Action Item 5: Jim Grothaus will work with the Minnesota Local Technical Assistance Program to determine if the North Dakota Upper Plains learning platform is practical for Minnesota local agency use.

Action Item 6: Mitch Rasmussen and the Outreach Committee will pursue development of a guide and training curriculum to help local agency officials communicate with the public, media, and elected officials.

Action Item 7: Ted Schoenecker will talk to Mark Vizecky in State Aid, test high-friction surface treatments in the field.

Action Item 8: Jim Grothaus will add drone guidance for local agencies as a topic for the October pre-screening board meeting through the Focus Group process.

Action Item 9: Shannon Fiecke will take the topic of whether making mobile applications is right for local agencies to the Outreach Committee for discussion.

Action Item 10: Jim Grothaus will add low-volume roadway management for local agencies as a topic for the October pre-screening board meeting through the Focus Group process.

Action Item 11: Jim Grothaus will add nanotechnology in concrete mix design as a topic for the October pre-screening board meeting through the Focus Group process.

Action Item 12: Paul Oehme will distribute Research paper #17-01193 from Benjamin Nantasai at Washington State University to John Gulliver at the University of Minnesota to aid in his project titled Permeable Pavement for Road Salt Reduction.

Action Item 13: Jim Grothaus will add addressing concerns about LED street lighting as a topic for the October pre-screening board meeting through the Focus Group process.

Action Item 14: Joel Ulring will share the information regarding the Street Saver PM life cycle cost analysis calculator with the MCEA pavement committee and RIC.

Action Item 15: Mitch Bartelt will distribute the 2017 Midwest Bridge Preservation Partnership Meeting notice to LRRB and RIC meeting attendees.

Action Item 16: Kaye Bieniek will work with Cottonwood County to provide more information on the concrete fibers request. A future LRRB vote will take place via e-mail if this is all provided in a timely fashion.

Unresolved Action Items from prior meetings:

March 2017 Action Item 3: Shannon Fiecke will examine making the Trip Report fillable in both mobile format and web formats.

October 2016 Action Item 9: Lyndon Robjent will develop a proposal for the next phase of Modernizing Construction Plans for the board to consider for funding at a future meeting.

June 2016 Action Item 5: Debbie Sinclair will send out the updated pre-trip and post-trip processes to the Board Members when they are finalized.