Meeting Minutes
June 20-21, 2018
Kahler Grand Hotel
20 2nd Ave SW
Rochester, MN 55902

LRRB Members Present:
Lyndon Robjent (Chair), Carver County
Jim Foldesi, Saint Louis County
Tim Stahl, Jackson County
Paul Oehme, City of Chanhassen
Kent Exner, City of Hutchinson
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:
Ben Worel, MnDOT OMRR
Joel Ulring, MnDOT – State Aid
Mitch Bartelt, MnDOT – Research
Bruce Holdhusen, MnDOT - Research
Debbie Sinclair, MnDOT – Research
Shannon Fiecke, MnDOT – Research (Day 1)
Mark Gieseke, MnDOT – OTSM (Day 1)
Mindy Carlson, U of M – CTS
Kristina Nesse, U of M – CTS (Day 2)
Ginny Crowson, U of M – CTS (Day 2)
Mike Marti, SRF
Renae Kuehl, SRF
Vivek Sakhrani, CPCS Solutions
Anne Carroll, Carroll, Franck & Assoc (Day 1)

RIC Members Present:
Mike Flaagan (Chair), Pennington County
Steve Bot, City of Saint Michael
Kelvin Howieson, MnDOT District 3
Guy Kohlnhofer, Dodge County
Klay Eckles, City of Woodbury
Hafiz Munir, MnDOT RS
Stephanie Malinoff, U of M - CTS
Kristine Elwood, MnDOT – State Aid
John Brunkhorst, McLeod County
At this meeting, the LRRB and RIC met both separately and together. The schedule for those meetings was:

Day 1 - June 20, 2018
Joint Session: LRRB and RIC  8:30 AM – 10:15 AM
Separate Sessions: LRRB or RIC  10:30 AM – 12:00 PM
Joint Session: LRRB and RIC  12:45 PM – 4:00 PM

Day 2 – June 21, 2018
Separate Sessions: LRRB or RIC  8:00 AM – 9:45 AM
Joint Session: LRRB and RIC  10:00 AM – 12:00 PM

LRRB Meeting Minutes
Day 1
JUNE 20, 2018

LRRB/RIC Joint Session – Heritage III

1. Call to Order
Chair Lyndon Robjent welcomed everyone to the meeting and called the joint session to order. He described the purpose of the summer meeting, and was interested to see how things will change with the new Need Statement development process adopted this year.

Klay Eckles announced this would be his last LRRB/RIC meeting. July 27 is his last day with the City of Woodbury.

A few people were attending LRRB meetings for the first time. They included:

- Kristine Elwood, Deputy State Aid Engineer
- Stephanie Malinoff, CTS Engagement and Technical Assistance Senior Director
- Mark Gieseke, Manager, MnDOT Office of Transportation System Management
- Vivek Sakhrani, CPCS Transcom Limited

2. Budget and Administration
Debbie Sinclair led the discussion.

LRRB Budget
For the LRRB Budget spreadsheet, page 1 covers the ongoing programs & subcommittees. Projects highlighted in green are completed. Projects highlighted in yellow are future year projects, not yet under contract.

Funding for FY19 LTAP has been submitted. MnDOT Research Services is waiting for FHWA approval on the federal funds, so the current contract will be amended for an additional two months.

On the spreadsheet, projects start on page 2. Recently completed projects include:

- INV 974*  Bio-Fog Seal Evaluation
- INV 980*  Pothole Prevention and Innovative Repair
- INV 1008*  Effective Social Media Engagement Options for Minnesota’s Diversifying Population
- INV 1011*  Work Zone Intrusion Report Interface Design
- INV 1036  TRS: High Friction Surface Treatments

On pages 4 and 5 of the spreadsheet, projects highlighted in yellow were approved in December 2017 for a July 1 start. All but 3 have been submitted and are in the contracting process.

The FY18 unobligated balance is $2,106,393; this amount will carry forward to FY19. FY19 uncommitted funding amount is $2,456,620. Set-asides for INV 675 Research Services and INV936 Need Statement development/Focus groups were discussed later in the meeting.
LRRB/RIC 2018 Summer Meeting Minutes

The pie charts on page 4 are a final snapshot of FY18. At the next meeting, Debbie will show the FY19 pie charts when new projects are finalized and FY18 has been closed out. The box on the right shows future fiscal year commitments, FY20-22 of $2,780,778.

Mitch Rasmussen asked why the future unobligated budget changed from a surplus of around $400,000 in April to a deficit of $600,000 as of the meeting. This is a difference of $1 million.

**New Action Item 1:** Debbie Sinclair will provide a summary of changes in financial status from the April and June 2018 meetings and send it out to the group via e-mail.

Mitch R clarified that the vote for the FY19 budget was authorized at the screening board meeting this past October. However, that does not show up in the budget until FY19 begins on July 1. That explains why the balance appears as negative now.

Board members expressed some confusion at the layout of the chart and the meaning of the numbers. They requested a brief description of how it works.

**New Action Item 2:** Debbie Sinclair will provide a one-page guide showing how the financial figures are calculated to the group via e-mail.

Debbie reminded the board that expenses incurred through the end of the Fiscal Year 2018 (6/30/2018) are due by July 6.

**INV 999 Update**
The current unused balance of $59,490 is deceptively high because the $35,000 set aside for updating materials was not used (but was included in FY19 budget). The balance will drop a little after final summer meeting expenses.

**Amendment Report**
Thirteen amendment requests have been processed since March 8; 10 of these included time extensions, 2 were just adjustments of task dates and processed as Letters to the File. The LRRB Strategic Plan amendment was approved by Board, and is being processed, but not included on the list handed out at the meeting due to it not having been processed on time.

**RIC Budget**
The first part of the document is the SRF contract which runs through July 31, 2019. The total contract is for $387,184; $273,779 of that amount has been invoiced through April 30, 2018. The middle portion is other contracts, including the three requests funded by LRRB for $150,000 at the April 2018 meeting.

The current RIC unobligated balance is $40,563.17

**New Action Item 3:** Debbie Sinclair will update the RIC budget spreadsheet to account for replacement personnel due to staff changes and retirements.

3. **Conferences and Meetings**
Debbie led the discussion.

She noted two conferences that are coming up in October:
- National Rural ITS conference in Arizona
- NW Pavement Management Association conference in Kennewick, Washington
  - Joel Ulring will attend this one.

Debbie also advised everyone to start thinking about TRB in January 2019, as registration information will be coming out before the next meeting.

The International Conference on Low Volume Roads will be January 17-18, 2019 in Rome, Italy. People interested in attending should inform Debbie Sinclair as soon as possible.

Mitch R noted that if RIC slots are not taken up for conferences, then he offers them to people on the steering committee. That is why Rich Sanders is going to the National LTAP conference in New Orleans in July 2018.
An RIC member asked if travel rules will be changed as part of the LRRB Strategic Plan Update. Mitch R said that we are always reevaluating our travel rules. Mitch R advised RIC members that if they want to go on a trip with an open slot, they should just ask. He said there is latitude to swap trips. Mitch R noted this should be included in the new onboarding materials as part of the LRRB Strategic Plan Update.

Lyndon noted that other than TRB, many of the travel slots are not being filled up. He encouraged people to use them.

Another RIC member asked if the list with locations could be shown further in advance. Mitch R said the established meeting calendar was decided by board action in the past. International trips are open to LRRB only because they’re geared primarily toward research.

Debbie cleared up some confusion regarding conflicting low-volume roads conferences. One is a TRB conference (which is in Montana), while the other is an international conference (which is in Italy).

Guy Kohlnhofer asked if no LRRB members want to go to an international conference, could an RIC member go instead? Mitch R responded that an RIC member can go, if approved by the LRRB. Guy formally requested to attend the international conference in Italy.

**New Action Item 4: Mitch Rasmussen will connect with Guy Kohlnhofer on his request to attend the Low Volume Roads Conference in Rome, Italy from January 17-18, 2019.**

**Other attendees discussed various conferences:**
- Ben said the NCAT meeting is September 25-27 somewhere in the Twin Cities area. The agenda will be coming out shortly.
- Stephanie had updates on the following conferences:
  - Minnesota Transportation Conference will be March 12-14, 2019 in Saint Paul.
  - Minnesota Maintenance Expo will be October 3-4 in Saint Cloud.
  - Toward Zero Death will take place in Mankato from October 23-24.

**New Action Item 5: Debbie Sinclair will send an updated conference calendar to all joint LRRB-RIC meeting attendees.**

**General Travel**
Employee expenses reimbursements must be submitted to Payroll by 07/06/18. Also, Debbie reminded everyone that expenses need to be submitted within 60 days of the event; otherwise, they become taxable income and the person will receive a 1099 form.

**2019 LRRB/RIC Summer Meeting Location**
Lyndon led a discussion on the location and dates for next year’s summer meeting.
Kelvin was volunteered to host somewhere in the Brainerd Lakes area. June 19-20, 2019 were the dates that were set for the meeting.

**New Action Item 6: Debbie Sinclair will send an Outlook calendar event with the dates of the joint 2019 LRRB-RIC meeting to prospective attendees.**

**4. LRRB Strategic Plan Update**
Vivek Sakhrani led the first part of the discussion. He covered two items: the Phase 2 Engagement Summary, and Overall Project Progress to Date.

Vivek noted that action will be needed on this at this meeting. Vivek noted that the literature in the binder has a lot of detail on the work done so far.

Vivek led a discussion via PowerPoint. As part of the LRRB Strategic Plan Update, CPCS Transcom Solutions will ultimately deliver:
- Strategic Plan
- Implementation Recommendations
- Operating Procedures
- Member Orientation Guide
Development of the updated plan identified key opportunities for:

- Better engaging stakeholders
- Enhancing focus on longer-term outcomes
- Assessing and communicating program value

The large question as part of this process: how can the Local Road Research Board move from well-functioning to excellent?

Vivek summarized the results of the engagement survey. The survey was sent out to a wide range of stakeholders involved with the LRRB. There were 92 responses to survey.

CPCS suggested changes to our vision statements, some more substantial than other. Mitch R noted that changing the name of the LRRB would also require legislative changes.

An RIC member expressed his feeling that, in so many words, the relationship between RIC and LRRB needs to be better and more responsive. It takes too long for projects that originate in the RIC to get into motion. There currently is too much of an artificial division between research vs implementation as the LRRB is currently governed. It is not always sequential that research occurs, then is implemented. The boundaries can be less clear than that.

Anne Carroll led a popcorn style discussion, seeking answers to two key questions, which were:

Who needs to hear our key messages about the value of LRRB’s work? and What are our key messages?

5. LRRB Separate Session

Chair Lyndon Robjent called the LRRB separate session to order.

Mitch Rasmussen made a motion to approve the agenda. Kaye Bieniek seconded the motion. The motion passed unanimously.

Review April 2018 LRRB Meeting Action Items

Linda Taylor led the discussion. (Note: indented language is the exact same as was in the meeting handout. Text in the left margin is from a discussion at the meeting.)

Action Items from the April 2018 LRRB Meeting:

**Action Item 1:** Kaye Bieniek will determine an event for the attendees on the first night of the summer LRRB/RIC meeting.

*Status:* This item is resolved.

**Action Item 2:** Shannon Fiecke will determine a location for the Outreach Committee meeting on Tuesday, June 19.

*Status:* The meeting took place at Victoria’s Ristorante in Rochester. This is resolved.

**Action Item 3:** Kaye Bieniek will announce changes to conference registration for Local Road Research Board-sponsored travel to the Research Implementation Committee.

*Status:* Kaye Bieniek sent a short e-mail summarizing these changes to the RIC members. This item is resolved.

**Action Item 4:** Paul Oehme will work with MnDOT RS Finance to attend the World Congress on Intelligent Transport Systems in Copenhagen, Denmark from September 17-21, 2018.

*Status:* Paul will be attending the conference and is working with MnDOT RS Finance and MnDOT Aeronautics on logistics. This items is resolved.

**New Action 5:** Mitch Rasmussen and Laurie McGinnis will discuss moving the Need Statement development process back to CTS for next year.

*Status:* This item is on the Agenda for Day 2 of the meeting, in the LRRB Separate Session. This item remains outstanding for now.

Mitch R and Laurie met prior to this meeting to discuss this. Mitch R declared this item resolved at the conclusion of Laurie’s presentation on Day 2 of the conference.
**New Action 6:** Mitch Rasmussen will work with Linda Taylor on the INV645 Research Support funding request for the LRRB Summer meeting.

Status: This discussion will take place on Day 1 during the LRRB Separate Session. This is **resolved**.

**Action Item 7:** Mitch Rasmussen will send out an invitation to local agencies to have the thermal profiling truck on one of their projects on Glenn Engstrom’s behalf.

*Status:* Glenn provided some language, and Joel Ulring sent out an invitation to city and county engineers via their mass mailing list. This item is **resolved**.

**Action Item 8:** RS will send Kevin Western a revised scope for the NPDES Stormwater Post-Construction Design Guidebook project.

*Status:* This item is **resolved**.

**Action Item 9:** Kevin Western will provide a shortlist of consultants from MnDOT Bridge Hydraulics section to the Technical Advisory Panel of the NPDES Stormwater Post-Construction Design Guidebook project.

*Status:* The MnDOT Bridge Hydraulics unit worked with Bruce Holdhusen on this. This is **resolved**.

**Action Item 10:** RS will obtain Jean-Louis Tindren’s contact information for Mitch Rasmussen.

*Status:* Scott Taylor e-mailed it to me on 5/11, and I passed it along to Mitch R via e-mail later that day. This item is **resolved**.

**Action Item 11:** Mitch Rasmussen will add discussion of the MnDOT Library to his prescreening board talking points.

*Status:* This is **resolved**.

**Action Item 12:** RS will give Mike Flaagan notification to recommence the NPDES Stormwater Post-Construction Design Guidebook project.

*Status:* Mitch Bartelt informed Mike Flaagan of this via e-mail. This is **resolved**.

**Action Item 13:** RS will inform James Bahr that his request for funding was denied, and that the Board recommends he submit his idea to IdeaScale as part of the FY19 RFP.

*Status:* Mitch Bartelt informed James Bahr of this via e-mail. This is **resolved**.

Unresolved Action Item from prior meetings:

**December 2017 Action Item 8:** RS and Jim Foldesi will collaborate on a possible solution to get the winter maintenance materials accessible to local agencies and report back to the Board.

*Status:* This item remains **outstanding**. Jim would like to discuss at the LRRB 2018 Summer meeting whether the Snow and Ice Control Handbook should be reprinted, or if the Board feels it would be desirable to update the guidebook before printing and distributing it again.

Jim noted that there have been some advances since the manual originally came out. However, he also feels the original manual contains a lot of good information that is still relevant today. His question for the LRRB was, should there be a project to update the manual before reprinting it, or should it just be reprinted now? Mitch R deferred discussion of this to the Outreach Committee update in the afternoon, in front of the entire group.

Note: later in the meeting, it was determined that the Snow and Ice Handbook will be updated with additional information, with the possibility of LTAP providing training classes. Future steps with this will go to the Outreach Committee. This item is now **resolved**.

**LRRB Strategic Plan Update**

There was a short discussion on this, consisting only of the board members.
Overall, the Board feels the Strategic Plan Update is on the right track. However, members expressed concern about the “comparative words” in the recommended changed statements, such as “better than”, “enhance.” The Board felt that comparative words shouldn’t be in the updated strategic plan, as these words are too ambiguous. Also, the Board felt that goals of the LRRB shouldn’t simply be relative to how it has been done in the past.

This feedback was brought to the LRRB Strategic Plan Update TAP meeting on the afternoon of June 21, after the rest of the LRRB-RIC meeting ended.

6. FY19 INV 675 Research Support Funding Request
Linda Taylor gave a PowerPoint presentation that included detailed information on how much the LRRB has funded RS in past years. She noted that RS has been running a deficit as a result of that arrangement. She said that this arrangement is simply not sustainable in the future. Trunk highway funding cannot be used to support activities for local agencies, as that would violate statute.

She went into detail on a workload planning study that RS performed, estimating the number of hours dedicated to administering the LRRB each year. By these estimates, RS dedicates more hours to the LRRB than are accounted for in funding.

Linda noted that RS has increased staffing in FY19 relative to previous years to meet the demands of more projects. FY19 will be a “transformational year” for both RS and the LRRB, primarily due to LRRB Strategic Plan Update.

The workload planning showed a likely understaffing in RS in the project management area. The estimates shows that time spent by financing and marketing is likely in line with our staffing levels.

As part of her presentation, Linda provided comparisons versus consulting this out. She pointed out that overhead is minimal to keep the LRRB program administration within MnDOT RS compared to consulting. The LRRB is currently charged hour-for-hour for its work by RS. Common practice for a consultant is to charge a 1.6 multiplier for each hour.

A board member asked if RS currently charges it’s time to individual projects. It doesn’t occur now, but Mitch R said it should be charged that way in the future.

Lyndon noted that project management is important. He feels it should always be an option to consult some of this out, or have a consultant on retainer to be able to help bridge the gap when necessary.

One other proposed change would be for LRRB funding to be held in State Aid in the future. This would ensure that unspent funding for local research can roll over to ensuing fiscal years.

On behalf of MnDOT RS, Linda requested $26,000 to close the funding gap for remainder of FY2018 (which ends on June 30, 2018), and $445,000 for FY19.

Jim Foldesi moved to approve $26,000 in additional funding for MnDOT Research Services the remainder of FY18. Tim Stahl seconded the motion. Motion passed unanimously.

Mitch Rasmussen moved to approve a funding level of $445,000 for MnDOT Research Services for FY19. Tim Stahl seconded the motion.

There was a long discussion regarding the motion to fund RS at $445,000 for FY19. It would be a $137,000 difference from last year, after factoring in the $26,000 increase in FY18 funding.

Jim expressed that he feels the LRRB is getting a good deal due to synergies and lack of overhead in comparison to contracting this out.

Mitch R noted that he supports the $445,000 funding request because it goes hand-in-hand with a new structure for charging time. The new structure will provide better data in the future to make better estimates and tracking. The $445,000 figure for FY19 is an educated estimate. In the future, the expectation is that time charged to LRRB work will be tracked the same way this
figure was estimated.

There was a long discussion about whether RS should add staff. Mitch R expressed a reservation for RS to add permanent staff this year based on an increase in funding this year. Linda feels that adding staff is something that needs to be considered due to the increased number of projects funded in recent years, and to provide a desired level of service to the LRRB.

Kaye B requested a quarterly report in the upcoming year to see how much of the allocation has been spent. Linda responded that this is already being reported during the budget update.

Tim Stahl noted that he seconded the motion due to trust in the people involved in the process.

**The motion to fund MnDOT Research Services for $445,000 for FY19 passed with no objection.**

**New Action Item 7: Linda Taylor and Mitch Rasmussen will work together to update the MnDOT RS activity codes for time charged to the Local Road Research Board.**

7. Materials Lab Update

Ben Worel led the discussion, and gave his and the Materials office’s thoughts on what to do with various proposals that were part of this cycle. Ben said NRRA could partner on some of these so that the LRRB knows prior to voting in October.

Lyndon expressed a desire for more cold in-place recycling (CIR) and full-depth reclamation research, as these methods are becoming more common, particularly for county projects.

8. AASHTO Standing Committee on Research rep

Lyndon Robjent led the discussion.

On behalf of the National Association of County Engineers, Rich Sanders is looking for a County Engineer to volunteer to be the NACE Liaison to the AASHTO Standing Committee on Research. Rich felt that since the Minnesota LRRB is a national leader in research, he felt an LRRB board member would be a good choice to fill the position.

Brian Keierleber, Buchanan (IA) County Engineer, is vacating the spot that will need to be filled on this committee. He said the AASHTO Standing Committee on Research meets twice a year. The meetings typically occur on the west coast in the fall and in Washington, DC in March.

**New Action Item 8: Mitch Rasmussen will follow up on a possible county engineer’s representative for the National Association of County Engineers Liaison to the AASHTO Standing Committee on Research.**

9. Outreach Committee Update

Shannon gave an update on recently completed videos. These include:

- Ineffective Specialty Signs.
  - This is undergoing revisions at the request of the TAP, and required an amendment for video contract.

- Reduced Conflict Intersections
  - The LRRB Outreach Committee had identified a need for a public educational video on RCIs or J-Cuts. However, MnDOT is developing a video and related outreach materials for RCIs, so the LRRB may not need to do anything on this.

Mitch R then discussed the revised idea generation process, of which 16 LRRB ideas have Need Statements developed, and 3 implementation ideas went to the RIC. Feedback they’ve received from city and county engineers on the new process was unanimously positive.

Mitch R said that they managed over 200 research ideas over the past year in the process. One lesson learned is that they might have conflated disparate ideas into one in some cases where it would have been better not to do so.
The Outreach Committee met the night before the LRRB meeting. One point discussed was, how do we more regularly get completed research out to people who would be interested in it? The suggestion was to quickly generate interest with a short e-mail, video, or pictures, with links to further resources. State Aid maintains a listserv for city and county engineers; Mindy said she can contact a wide range of people through LTAP.

There was further discussion as to what to do with the Snow and Ice Control Handbook, which ended up being resolved later in the meeting.

**New Action Item 9: The LRRB Outreach Committee will determine if it wants to have a new task added to work plan that requires researchers to submit project videos and photos.**

10. Research Process Changes
Hafiz Munir led the discussion with a PowerPoint presentation. He said there have been issues and uncertainties to the research process in general resulting from three items:
- Unsolicited Proposals
- Knowledge Building Proposals
- Multiple Proposal Review

LRRB ideas have been going up in number, and the number of proposals received is has gone up over the past 3 years. He has no reason to believe the number of proposals will be any fewer in 2018. Need Statements receiving multiple proposals have gone up a great deal over the past three years as well.

He suggested numerous process changes that would reduce the amount of time spent by MnDOT RS. Refer to Hafiz's handout for details.

RIC members say they have looked at fewer ad hoc projects recently, as they don’t have time or funding to address them. Other members expressed a reluctance to make the changes as proposed above.

Mitch R said there have been discussions about unsolicited and multiple proposals, but that this was the first he has heard about Knowledge Building being this type of issue. Mitch R felt that some items require a lot of work, but provide a lot of benefit. With the new budget for RS approved earlier in the meeting, as well as the change in tracking, the Board will have time to examine this in better detail over the upcoming cycle.

11. Research Process Changes
Hafiz led the discussion. He pointed out the research calendar that we go through for this cycle.

He noted that in 2018, there were 19 ideas generated for the LRRB through both the new Need Statement Development process and IdeaScale, and 26 MnDOT/TRIG ideas, which were entirely generated through IdeaScale.

He stated if there is an asterisk (*) next to an idea, a Need Statement has already been developed for it as part of the new process. The top 18 ideas were chosen for the next round.

12. 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:** Mike Flaagan                      **Coach:** Bruce Holdhusen
Team Members: Tim Stahl, Kevin Western, Kristine Elwood, Paul Oehme, Laurie McGinnis, Stephanie Malinoff

Number from Ideaseale and Potential Research Ideas:

185 Winter Maintenance – Plow Routing Optimization
One goal would be to eliminate deadheading, and provide guidance for GIS person. The team felt that this needs to be an implementation project, as no further research was needed. This will be an RIC project.

190 Construction Incentives – Are They Working? The Impact of Deferred Maintenance in Minnesota
The team felt this was a pretty complete Need Statement and should be included in the academic RFP.

Mike Flaagan wants to be on the TAP for this project, if it is funded. Other names suggested for the TAP were Mike Pretel and Rollin Larson from State Aid Construction.

192 Construction Inspection Training/Documentation
The team felt this would not be a good project for a university. The goal would be to share the knowledge of a small group of experts to create an online expert system. Utilizing the RT Vision One office was one idea considered.

197 Base Stabilization Additives - Effect on GE
The team felt this Need Statement was well written, and should be included in the academic RFP.

207 The Impact of Deferred Maintenance in Minnesota
No Need Statement is currently written; it will have to be drafted based on notes. The team feels this should be academic research and be included in the RFP.

The question to be answered is, what is the appropriate sustainable level of maintenance effort, and how much funding does that require, and how do agencies ensure that level of funding remains stable?

The team feels this project, if funded, should have co-Technical Liaisons, with one city and one county engineer. Paul Oehme and Kaye Bieniek were recommended.

223 Evaluation of Curing Effects on Cold In-Place Recycling (CIR)
This was submitted by Shongtao Dai of the MnDOT Office of Materials and Road Research. The decision was made that Dai should write the Need Statement to refine the scope. This should be part of the academic RFP.

Team 2 (Blue)

Captain: Lyndon Robjent  Coach: Mitch Bartelt
Team Members: Jim Foldesi, Kristina Nesse, Guy Kohlnhofer, Steve Bot, Joel Ulring, and Shannon Fiecke

Number from Ideascale and Potential Research Ideas:

186 Aggregate Base – Is Class 5 Still the best on local roads?
No changes were made to the Need Statement, other than adding members to the TAP. This will be a TRS, as established in the large group.

187 Modify MPCA Permit Process – Current focus is point/site; make it more applicable to linear corridors
No changes were made to the Need Statement, other than adding members to the TAP. The group felt this would be better sent to stormwater permitting specialty consulting firms than academic researchers.

189 Managing Utility Congestion within the Right of Way
The team added some information to ensure that private utilities are not able to demand access to the right of way due to unclear processes. The team feels this should go to the RIC.

Lyndon also came up with a new idea as an offshoot of 189: How to effectively and authoritatively ensure utility relocation is performed as part of construction projects?

191 Cost/Benefits of Geogrids; Determine a GE Factor
The team wondered if this needs to be broken up into multiple ideas. It would be nice to incorporate geotextile fabrics, too – this change was made to the Need Statement. Some changes were made to the title and suggested TAP members were added, too. The team thought an academic RFP was most appropriate for this idea.

194 Best Practices for Preventing Settling/Heaving at Catch Basins/Manholes
Steve is the Project Champion, and is on this review team. Steve feels this should be a best practices manual. The team decided this should either go to the RIC as a best practices manual with a research summary as part of this, or as a TRS first. The team would prefer a consultant and not an academic researcher for this idea.

198 Best Mix Designs for Low Volume Roads
The group expressed a desire for a consistent specification for low volume roads, not a tweaked MnDOT specification. The team feels this needs to be part of the academic RFP.

Team 3 (Yellow)

Captain: Klay Eckles  Coach: Kaye Bieniek

Team Members: Hafiz Munir, John Brunkhorst, Ben Worel, Mitch Rasmussen, Mindy Carlson, Kelvin Howieson, Kent Exner, Mark Gieseke

Number from Ideascale and Potential Research Ideas:
170 Understanding Pedestrian Travel Behavior and Safety in Rural Settings
The LRRB would prefer not to move forward with this at this time. The idea was selected by TRIG. The team would prefer to see if this idea is funded by TRIG and then potentially cost share.

184 GIS Tools and Apps - Integration w/ Asset Management
The team felt this should go to the RIC as an implementation project. The team also felt the suggested TAP is county-heavy as it is written and more members should be added.

188 Best Management Practices of Bicycle Pedestrian Facilities
The team felt this Need Statement was written too broadly. Kent Exner will go back to project champion to narrow the focus. The team felt this should be an RIC project.

New Action Item 10: Kent Exner will work with Project Champion for the research idea titled Best Management Practices of Bicycle Pedestrian Facilities to narrow its scope.

193 Winter Maintenance - Deicing Products (AMP)
The team felt this was a chapter component to the Snow and Ice handbook, and that it should just be part of the update. Mitch R proposed rolling it into the Outreach Committee responsibility to determine next steps for Snow and Ice Handbook; the large group agreed with that decision.

New Action Item 11: The Outreach Committee will reconvene the Technical Advisory Panel for the Snow and Ice Control Guidebook to consider updates to the guidebook and related slide presentation, the Minnesota Snow and Ice Control Field Handbook and/or possibly the development of a course through LTAP.

195 Pedestrian Crosswalk Policy
The team felt this should be an RIC project. They thought it made sense to perform a TRS, then a best practices guide. The team felt this was more appropriate for a consultant than an academic researcher.

196 Transverse Cracks - Cupping, how to best repair?
A few insubstantial changes were made to the Need Statement. The team felt this should be a TRS.

Jim Foldesi moved to approve all research ideas that were identified to be included in the academic RFP for this calendar year. Laurie McGinnis seconded. The motion passed unanimously.

The Board decided that all ideas that were identified for a TRS be funded now. However, the Board decided to wait until the December meeting to determine how to fund implementation and research projects. The Board felt that the implementation and research ideas should move forward together to compete for funding. Members felt it would be best to wait until it receives proposals, instead of just ideas, to determine whether or not they should be funded.

There was discussion that this could go out for bid, or that the TRAP list could be utilized. LTAP also has resources to take on some of these projects.

The group agreed the RIC would discuss what to do with these ideas during its separate session the next morning. After that, the RIC can advance these ideas and filter out which ideas will be presented at the December LRRB meeting, where it will be decided if it will be funded.

13. Closing Comments and Adjournment for the day
After the teams reported their results in front of the entire group. Chair Lyndon Robjent thanked members for their work on the Need Statements. RIC decided to move its start time the next morning from 8 to 7:30 a.m. to evaluate all of the implementation ideas. Lyndon then adjourned for the day.
LRRB/RIC 2018 Summer Meeting Minutes

Mitch B sent a summary of the idea decisions to the group later that evening.

LRRB Meeting Minutes
Day 2
JUNE 21, 2018

1. LRRB Separate Session – Call to Order
Chair Lyndon Robjent called the LRRB Separate Session to order.

2. Research Idea Generation Process for FY20
Mitch R and Laurie led the discussion.

Mitch R and Laurie met with SRF to determine if and how they want to adjust the process for idea generation. They discussed what to do with the rest of the ideas generated over the past year. They decided the next group of 20 ideas would move forward into next year’s process.

There was also a discussion of unsolicited proposals and IdeaScale, which are not as vetted as the ideas that came through the pre-screening board process. These could be included in the 20 ideas from last year. The goal would be to create two separate deadlines in IdeaScale next year, so that these ideas could be run separately through both TRIG and the LRRB priority process. The plan would be to cut down to 16 Need Statements again next year.

Laurie then discussed the transition to CTS being involved in the process for the upcoming year. The process will look very similar to last year, as far as calendar. CTS would like to join the process in October and attend a selective number of the screening board meetings, which will still be run by SRF this year.

CTS would not write all Need Statements. CTS will attend some of the prescreening meetings; they will be selective and strategic about which meetings they attend.

Mitch R observed that this year, the Need Statements turned out to be implementation-heavy. It doesn’t mean that will be the case next year.

Linda asked if CTS will provide a proposal for its involvement. If so, will it go through the Outreach Committee, or would it be a research contract to provide project management? Laurie, Mitch R, and Linda discussed some ideas: possibly a contract to write 6-10 Need Statements, possibly with an estimated cost per Need Statement.

Laurie expressed that CTS’s attendance at the October screening board meeting might just be as observers this year.

**New Action Item 12: At the October LRRB Meeting, Laurie McGinnis will present a proposal for CTS to be involved in the Need Statement development process for the 2019 calendar year.**

Mitch R and Laurie agreed that they will make slight tweaks to the idea generation process each year to ensure that it remains fresh for all involved. This will work best if participants continue to be engaged.

Jim suggested that a list of ideas from the previous year that didn’t advance to the Need Statement development process be sent out in advance of prescreening board meetings for attendees to review.
New Action Item 13: SRF will send out a list of research ideas from the previous year to prescreening board meeting attendees in advance of the meetings.

3. Project Updates
   • David Veneziano from Iowa State University gave a remote presentation on his nearly-completed project **INV 1012: Investigating the Necessity and Prioritizing Pavement Markings on Low Volume Roads**.
     In response to the request of the board, the pavement marking selection tool can be found here: [http://www.mndot.gov/research/reports/2018/201821s.xlsx](http://www.mndot.gov/research/reports/2018/201821s.xlsx).
   • Ed Johnson from the MnDOT Office of Materials and Road Research gave an update on **INV 974: Nontraditional Fog Seal for Asphalt Pavement: Performance on Shoulder Sections in Minnesota**. This project is complete.
     Ed noted that there is no Approved Products List for this category. He felt MnDOT adopting one would make it so that local agencies are not so aggressively marketed. Ed also expressed that he prefers furnish and install pay item instead of a bulk pay item for this type of product.
     Ed did say he is not sure if other DOTs have approved this type of product yet.
   • Ingrid Schneider from the University of Minnesota gave a remote presentation on her recently completed project **INV 1008: Effective Social Media Engagement Options for Minnesota’s Diversifying Population**.

4. LRRB/RIC Joint Session
   Chair Lyndon Robjent called the LRRB/RIC joint session to order.

5. RIC Update
   RIC Chair Mike Flaagan led the discussion.

   SRF RIC Contract
   He gave an update on the SRF RIC contract. He said nearly everything is either complete or nearly complete.

   CY2018 Ideas Identified as Implementation
   For the ideas identified as implementation during yesterday’s session, the RIC decided to utilize the TRAP list for implementation projects in most cases. Contracts can be up to $100,000 when the TRAP list is utilized.

   However, there were a few ideas for which the RIC felt it was appropriate to solicit competing proposals from selected consultants on the TRAP list. These proposals would have a 3-page limit, and would only cover the approach to addressing the idea, and would include no discussion of cost or funding. The RIC felt this would be a more timely process than picking one consultant and not liking it. The short page limit would also respect the time and effort of a consultant that doesn’t get selected, and even ones that do if LRRB doesn’t approve of it.

New Action Item 14: RS will work with Consultant Services to determine the rules relating to the use of the TRAP list with respect to soliciting idea proposals from more than one consultant on the list.

RIC Budget
Mike attended the April 2018 LRRB meeting to discuss the RIC budget. The RIC is funded at $200,000 annually; 2/3 of that amount is used for RIC consultant and the balance is discretionary funding for projects. The last increase was in 2004; the annual budget was $150,000 prior to that. RIC members hope this level of funding gets reconsidered as part of the LRRB Strategic Plan Update. Limited funding remaining over a 3 year cycle makes it difficult to know what to do with good funding requests.

Mitch R stated that off-cycle proposals should be redirected through the process so that good ideas naturally rise to the top. LRRB can send money to the RIC at any time to augment their
budget. If RIC thinks there is a good idea that should be funded, LRRB recommends they bring this to the LRRB for funding request. Or, they use their allotted budget for the project and then ask for more funding.

Vivek pointed out that the appropriate funding level for the RIC is a critical part of the LRRB Strategic Plan Update. He also noted that learning the business of the LRRB takes time; the goal is to improve that process and flatten the learning curve.

**RIC Input Concerns**
There were some concerns expressed by RIC members that only LRRB members are allowed to be in the room when the LRRB makes funding decisions. Mitch R noted that conversely, the LRRB doesn’t get to sit in on RIC selection of proposals and projects. Also, in order for the RIC to select funded research proposals, they would have to go to October and December LRRB meetings to listen to all in-person proposals, and also participate in the Multiple Proposal Review process.

Vivek deferred some questions to the LRRB Strategic Plan Update recap portion of the meeting.

Lyndon also noted that the LRRB Strategic Plan Update is likely to change some LRRB operations in response to these RIC concerns. Jim noted there is an RIC liaison (Kaye Bieniek) who is a member of both committees.

### 6. LRRB Strategic Plan Update
Vivek led the discussion.

Vivek had a fruitful discussion with the RIC separate session yesterday. He got some material that will be reported back to the group as part of future tasks. There was discussion of developing a feedback loop. When an implementation project is completed, what are good ways to link the idea generation to the result of the implementation? Vivek also said more work will be done to simplify certain issues related to the relationship with the LRRB and the timeline for ideas ultimately being funded and contracted.

### 7. Trip Reports
Mitch R led the discussion.

Mitch R reiterated that a) trip reports remain required, and b) that the onus will be put onto the traveler to submit ideas into the new “focus group” / Need Statement development process in the future. He said that travelers can put whatever they want in their report in order to comply with DOT guidelines, and they should include whatever information they feel is valuable.

Mitch R advised travelers to highlight what they feel LRRB or other agencies would find important. He said to break out nuggets which are discussion worthy, and highlight them your trip report, and break out potential ideas. One objective of the trip reports is to share knowledge learned from the travel.

Mitch R and Mitch B will work together to pare this information down to a 15-20 minute discussion at each future LRRB meeting.

### 8. LRRB Knowledge Building Priorities
Ginny Crowson and Kristina Nesse from CTS led the knowledge building priorities discussion and solicited feedback from the group, based on the handout in the binder.

Feedback included:
- Water quality is going to be an even more emerging issue going forward. (KB03)
- Stormwater is also an emerging concern. Environmental costs also factor into this. (KB01)
- Future Workforce (KB09) is a huge concern, particularly outside of the Twin Cities Metro Area. This is an issue at both the engineer and technician classifications. How do we get more kids interested in the field of engineering? Lyndon said he was having difficulty finding traffic engineers and surveyors. Others noted that pay bands and grades are the issues, and aren’t always responsive to the market.
• Flooding issues have become chronic. Agencies are dealing with both conveyance issues and potential failures on system. (KB01) MPCA standards are difficult to meet.
• Traffic flow and congestion relief are of growing importance. (KB05) Many engineers work under the assumption that the highway system will not be expanded.
• Education of policy makers is an ongoing concern. (Indirectly related to KB04 and KB12.)

Ben said that Mihai is coming to the MnDOT Materials office to discuss Knowledge Building. (KB08)

**New Action Item 15:** Kristina Nesse will send out Knowledge Building materials to both the LRRB and RIC. She will request responses in early July.

**9. Round Robin**

Every attendee not listed below chose to pass.

**Mitch Bartelt** noted that there is an LRRB Strategic Plan Update TAP meeting after lunch.

**Kevin Western** noted that there is currently no Knowledge Building category for bridges. Kevin and other MnDOT Bridge Office personnel met with U of M, UMD, St Thomas, and have been talking about other opportunities. Some of these items were funded at the March 2017 meeting.

He discussed the Bridge Replacement and Improvement Management system (BRIM). The larger goal is how to modify this to extend life structures via maintenance most effectively. For moving freight and heavy equipment (KB06), the Bridge Office would like resources that are more globally based. There can be issues crossing state boundaries, as well as city and county relative to other adjacent agencies. Some things shippers are trying to do are not friendly to bridges, and the software they have doesn’t function well.

Kevin also discussed a unified permitting process (UPP). He said a shared vision can be more cost effective. It would be nice to give shippers one total point of contact. Mitch R responded that the LRRB funded point of concept on this, and that it is currently in Phase 2. The concept is that it is a communication system, not a permitting system. Mike says there if there is a load going over a bridge in his county, he contacts State Aid Bridge and they run it through VRTIS.

**Mike Flaagan** noted that District 2 State Aid Engineer Lu Tasa is always interested in performing a cost/benefit analysis of the Toward Zero Death program in Minnesota. He would like to analyze not only fatalities but severe injury crashes as well.

Linda’s recollection was that it went to TRIG, and that it didn’t get funded as it is difficult to isolate these factors, primarily due to there being no control section. Stephanie thought SRF got some money for this a while ago.

**New Action Item 16:** Mike Flaagan will follow up with SRF to determine if they did any work on a cost/benefit analysis of the Toward Zero Death.

**Kaye Bieniek** thanked everyone for coming down to Rochester.

**Steve Bot** thanked Klay Eckles for his service, and thanked him for helping to steer him to become a member of the RIC.

**Mitch Rasmussen** thanked Klay Eckles for his service on the RIC and gave him a temporary plaque.

**Klay Eckles** thanked everyone for the experience of working on the RIC, and expressed pride at the work done by the committee. He wants to stay in touch with everyone after he retires from the City of Woodbury.

**Kelvin Howieson** looks forward to hosting the summer LRRB/RIC meeting next year.

**10. Adjournment**

Chair Lyndon Robjent adjourned the meeting at noon.
Summary of Action Items

Action Items from June 2018 LRRB Meeting:

**Action Item 1:** Debbie Sinclair will provide a summary of changes in financial status from the April and June 2018 meetings and send it out to the group via e-mail.

**Action Item 2:** Debbie Sinclair will provide a one-page guide showing how the financial figures are calculated to the group via e-mail.

**Action Item 3:** Debbie Sinclair will update the RIC budget spreadsheet to account for replacement personnel due to staff changes and retirements.

**Action Item 4:** Mitch Rasmussen will connect with Guy Kohlnhofer on his request to attend the Low Volume Roads Conference in Rome, Italy from January 17-18, 2019.

**Action Item 5:** Debbie Sinclair will send an updated conference calendar to all joint LRRB-RIC meeting attendees.

**Action Item 6:** Debbie Sinclair will send an Outlook calendar event with the dates of the joint 2019 LRRB-RIC meeting to prospective attendees.

**Action Item 7:** Linda Taylor and Mitch Rasmussen will work together to update the MnDOT RS activity codes for time charged to the Local Road Research Board.

**Action Item 8:** Mitch Rasmussen will follow up on a possible county engineer’s representative for the National Association of County Engineers Liaison to the AASHTO Standing Committee on Research.

**Action Item 9:** The LRRB Outreach Committee will determine if it wants to have a new task added to project work plan that requires researchers to submit project videos and photos.

**Action Item 10:** Kent Exner will work with Project Champion for the research idea titled Best Management Practices of Bicycle Pedestrian Facilities to narrow its scope.

**Action Item 11:** The Outreach Committee will reconvene the Technical Advisory Panel for the Snow and Ice Control Guidebook to consider updates to the guidebook and related slide presentation, the Minnesota Snow and Ice Control Field Handbook and/or possibly the development of a course through LTAP.

**Action Item 12:** At the October LRRB Meeting, Laurie McGinnis will present a proposal for CTS to be involved in the Need Statement development process for the 2019 calendar year.

**Action Item 13:** SRF will send out a list of research ideas from the previous year to prescreening board meeting attendees in advance of the meetings.

**Action Item 14:** RS will work with Consultant Services to determine the rules relating to the use of the TRAP list with respect to soliciting idea proposals from more than one consultant on the list.

**Action Item 15:** Kristina Nesse will send out Knowledge Building materials to both the LRRB and RIC. She will request responses in early July.

**Action Item 16:** Mike Flaagan will follow up with Mike Marti from SRF to determine if they did any work on a cost/benefit analysis of the Toward Zero Death.

Unresolved Action Items from prior meetings:
None