



LRRB FINAL Meeting Minutes  
December 6-7, 2017

*University of Minnesota  
President's Room - Coffman Memorial Union  
300 Washington Ave SE  
Minneapolis, MN 55455*

**LRRB Members Present:**

Lyndon Robjent (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  
Linda Taylor, MnDOT Research  
Kevin Western, MnDOT Bridge  
Laurie McGinnis, U of M - CTS

**Others Present:**

Kent Exner, City of Hutchinson  
Ben Worel, MnDOT OMRR  
Debbie Sinclair, MnDOT Research  
Hafiz Munir, MnDOT Research  
Shannon Fiecke, MnDOT Research  
Kristina Nesse, U of M – CTS  
Mitch Bartelt, MnDOT Research  
Beth Klemann, MnDOT Research

**LRRB Members Absent:**

Mitch Rasmussen, MnDOT State Aid

Minutes prepared by Mitch Bartelt, MnDOT – Research

**1. Call to Order**

Lyndon Robjent called the meeting to order. The meet purpose is to decide which research projects to fund beginning in the 2019 fiscal year.

Lyndon welcomed Kent Exner from the City of Hutchinson to the meeting, as an observer. Steve Koehler's term on the Local Road Research Board expires at the end of 2017, and Kent will replace him beginning next year.

The board then reviewed the agenda.

***A motion to approve the agenda was made by Jim Foldesi and seconded by Steve Koehler. The motion passed unanimously.***

The board then reviewed the final meeting minutes from the Fall 2017 LRRB meeting.

***Paul Oehme moved to approve the Fall 2017 Local Road Research Board meeting minutes. Steve Koehler seconded the motion. The motion passed unanimously.***

**Action Items**

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

(Note: text that appears in the left-most margin is from discussions that occurred at the meeting. Indented items contain the exact same text as the Action Items handout in the meeting binder.)

**Action Items from October 2017 LRRB Meeting:**

**Action Item 1:** Mitch Rasmussen and Jim Grothaus will work together to discuss potential replacements for Kent Exner on the LTAP Steering Committee at the October 23 meeting.

*Status:* This item remains **outstanding**. LTAP is waiting for a recommendation from the City Engineers Executive team.

**Action Item 2:** Prior to the voting at both TRIG and LRRB, Hafiz Munir will report on principal investigators that are problematic and include their other committed research obligations.

*Status:* Hafiz led discussion of this at the TRIG meeting. Time constraints prevented him from doing so at the LRRB meeting. However, this will go on the agenda for the December 2018 LRRB meeting, just before the voting. (Refer to Linda Taylor's comment during the Round Robin portion of these minutes.) This item is **resolved**.

**Action Item 3:** For future meetings, Debbie Sinclair will rearrange the financial spreadsheet information and pie charts to more accurately reflect the true uncommitted balance and account for future fiscal year commitments.

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

**Action Item 4:** Debbie Sinclair will provide Mitch Rasmussen a more simplified financial document representing current LRRB finances that can be shared at upcoming pre-screening board meetings.

*Status:* This item remains **outstanding**, but is nearly complete.

**Action Item 5:** Debbie Sinclair will explore available bidding processes to ensure a better venue for the 2018 LRRB Summer Meeting (e.g. she will determine if direct selection an option).

*Status:* This item is **outstanding**. MnDOT Research Services has looked at options regarding ways to write to bid and will work with purchasing to do as part of the bid process. Direct select isn't an option.

**Action Item 6:** Mitch Rasmussen will invite Kent Exner to the December 2017 LRRB meeting and ask him if he is interested in going to the Transportation Research Board Annual Meeting in Washington DC in January.

*Status:* Kent was invited to this meeting. However, the timeline was too late to include him to TRB. This item is **resolved**.

**Action Item 7:** Lyndon Robjert will send Debbie Sinclair the dates for the European Transport Conference in 2018.

*Status:* This item is **resolved**. The 2018 European Transport Conference will be held from October 10-12 in Dublin, Ireland.

**Action Item 8:** Mitch Bartelt will work with others in Research Services to sort out why/how NS-489a and b went to TRIG. It looks like it was labeled as a primary LRRB project, and it shouldn't have been.

*Status:* Mitch B followed up on this item after the 10/18/2017 LRRB meeting. In checking with others in the research office, he was told this project was labeled to both TRIG users as being both MnDOT and LRRB. For TRIG voting, however, their members only see the proposals recommended by the Project Champion, and the others are left off the spreadsheet. Thus, this is why only 489b was pushed forward to TRIG voters. This item is **resolved**.

**Action Item 9:** Mitch Bartelt will advise Jerry Zhao from the University of Minnesota to adjust his presentation to the Local Road Research Board for Proposal 501b so that is not as specific to cities.

*Status:* This item is **resolved**. Mitch Bartelt and Bruce Holdhusen had a discussion with Jerry on this after he gave his presentation to TRIG. Bruce also discussed concerns that local agencies have regarding the trend toward more local funding being spent on trunk highway projects within their boundaries.

**Action Item 10:** Mitch Bartelt will advise Will Northrop from the University of Minnesota to adjust his presentation to the Local Road Research Board for Proposal 489b so that it better addresses the local roadway network.

*Status:* This item is **resolved**. Mitch Bartelt and Bruce Holdhusen had a discussion with Will on this after he gave his presentation to TRIG.

**Action Item 11:** Lyndon Robjent and Mitch Bartelt will examine the scope of the Strategic Plan Update to ensure that cost to administer the program is considered.

*Status:* This item remains **outstanding**. The TAP will meet and discuss modification to strategic plan to ensure that cost to administer the LRRB program has been incorporated into the work plan.

**Action Item 12:** Mitch Bartelt will work with David Saftner to get an early version of the “bird book” for the *INV 979: Slope Stabilization and Repair Solutions for Local Government Engineers* project to distribute to both Mitch Rasmussen and Tim Stahl.

*Status:* Shannon Fiecke sent this information to Mitch Bartelt, Mitch Rasmussen, and Tim Stahl. This item is **resolved**.

**Action Item 13:** Ben Worel will send Mitch Bartelt his spreadsheet tracking Trip Reports for inclusion in the meeting minutes. Mitch B will evaluate it. If it is checked for LRRB, it will be talked about at future meetings.

*Status:* Ben sent this spreadsheet to Mitch B shortly after the meeting. Due to time constraints and the fact there are few if any recent trips to cover, Trip Reports will not be on the agenda until the Spring 2018 LRRB meeting. This items remains **outstanding**.

**Action Item 14:** Bruce Holdhusen will work with the Research Implementation Committee to ensure they come back to the Local Road Research Board with a funding request for a Guide for Local Agency Officials: How to Communicate with the Public, Media, and Elected Officials.

*Status:* The RIC decided to resubmit this idea back into the idea generation process for next year. Bruce Holdhusen said that Renae Kuehl from SRF has been notified of this. This item is **resolved**.

Kaye Bieniek said the RIC had a lot of questions about it, and was uncomfortable moving forward with the direction given by the LRRB. That’s why they felt more comfortable putting it back in the process for next year.

**Action Item 15:** Lyndon Robjent will send an update of the High-level observations on Phase 1 from the LRRB Strategic Plan Update to the board.

*Status:* This item is **resolved**. Mitch Bartelt sent this out ahead of this meeting.

**Action Item 16:** Wayne Stevens will develop a proposal, to have this heard at the April 2018 LRRB meeting, as an off-cycle funding request.

*Status:* This item remains **outstanding**.

**Action Item 17:** Lyndon Robjent will work with potential consultants to prepare a proposal for modernizing construction plans to be heard in December.

*Status:* This item is **resolved**. Mike Marti from SRF will present a proposal for this on Day 2 of the December 2017 LRRB meeting.

**Action Item 18:** Hafiz Munir will work with Mark Vizecky and Tracey von Bargen on next steps to get the High Friction Surface Treatments Project under contract, including consultant selection.

*Status:* Dan Warzala worked to get this under contract, and CTC is already the selected consultant for it. This item is **resolved**.

Unresolved Action Items from prior meetings:

**June 2017 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.

*Status:* This item is actually **resolved**. Kevin Western and Shannon Fiecke discussed this item after the meeting and found the data are already in the LRRB search engine.

**June 2017 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.

*Status:* This item was discussed in detail at the last RIC meeting. The RIC decided they would like to present this topic to the LRRB committee at the summer meeting for further discussion and perhaps invite Tim Horner (from the Transportation Learning Network) or Dale Heglund (the North Dakota LTAP Director) to attend. This item remains **outstanding**.

The RIC had many questions about how beneficial and cost-effective it would be. There was also concern whether this would benefit the users as much as it would the TLN. That's why pushing this to the summer 2018 meeting was the decision they made.

Linda suggested inviting someone to present this at the June 2018 LRRB/RIC joint meeting. The board felt it was important to make sure that what the board is looking for during this presentation is well-defined so that it doesn't end up being just a sales pitch. Mindy Carlson from CTS was identified as the person who should pursue this.

**New Action Item 1: Mindy Carlson will invite Tim Horner from the Transportation Learning Network and/or North Dakota LTAP Director Dale Heglund to give a presentation at the Summer 2018 LRRB/RIC joint meeting on the North Dakota Upper Plains learning platform and its potential to be used by Minnesota local agencies.**

**June 2017 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.

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

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

*Status:* This item remains **outstanding**.

Shannon discussed that there are two portions related to the Trip Report: 1) making this into an online form; and 2) section that would shoot to LRRB, and another that would fulfill MnDOT requirements for its Out of State Travel form.

**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 item is **resolved**. Mike Marti from SRF will present a proposal at the December 2017 LRRB meeting.

## 2. Budget and Administration

Debbie led the discussion of budget and administration.

### LRRB Budget Update

Per request at last meeting (October 2017 Action Item 3), Debbie added another color to indicate uncommitted balances in projects.

- Beige/tan is uncommitted.
- Yellow is not yet under contract.

INV 645B Outreach has been separated out of the RIC budget; it is now shown as INV645B. It is also separated under ongoing programs at the bottom.

**Completed projects:**

- 972 Minnesota Local Agency Pavement Marking: Mining Existing Data
- 979\* Slope Stabilization and Repair Solutions for Local Government Engineers

**Contracts Pending:**

- 1026 Prepare Local Agencies for Future of V2V/V2I and Connected Vehicle Technologies: final work plan submitted 12/4, in contracting process
- 1035 3<sup>rd</sup> contract: Debonded prestressed strand in prestressed beams: Requisition submitted
- 1036 TRS: High Friction Surface Treatments: Requisition submitted

**Changed labels to make clearer:**

- *Less Total Commitments* became *Less Total Fiscal Year Commitments* and moved up.
- *Amount Available* became *Balance Available in Fiscal Year*
- *Total Available After On-going Program Commitments* became *Total Uncommitted in Current Fiscal Year*
- *After On-going Program Commitments*
  - Current year's pie chart has Uncommitted Balance of \$2,159,528 split into *Future FY Commitments* (\$1,463,262) and *Uncommitted* (\$696,266)

The board complimented Debbie on clarifying the uncommitted balance in accordance with October Action Item 3. There were still some questions from the board in terms of how all of the figures tie together. Some of the questions and comments included:

- Should Chart D be shown to the prescreening board?
- Should there be a performance target?
- The orange section is confusing, particularly for FY18. It's an issue if we don't get money.
  - It was noted that this chart is time dependent.
- Should the word "uncommitted" be changed to "reserved" instead? How much money does the LRRB need in reserve?

**New Action Item 2: Debbie Sinclair will come up with a new version of the Local Road Research Board budget information to submit to both Lyndon Robjent and Mitch Rasmussen.**

Research Services Budget Status

Debbie was asked to provide this at the last meeting. A small spreadsheet showing the amount from July 1 to November 14, 2017 was shown.

- \$104,513 was spent thru pay period ending 11/14/17, which covers 37.31% of FY18
- Projected spending for FY18 is \$328,501 based on fact that at this time last year MnDOT RS was at 32% of the expenditures for the year.

Lyndon noted that MnDOT RS could ask for additional funding at the 2018 spring LRRB meeting, if it is needed.

2018 Conferences and LRRB Meetings

Mike Flaagan would like to know if he can attend the AAPT conference. No LRRB members have expressed interest so far. The AAPT (Association of Asphalt Paving Technologies Conference) is being held in Jacksonville, Florida from March 18-21, 2018. There are slots for 1 LRRB member and 2 MnDOT Staff. Ben Worel noted he would also like to go, but MnDOT slots are already taken up by Dave Van Deusen and John Garrity.

There were questions regarding if the LRRB has rules based on who gets next dibs on trips if LRRB members don't fill up the travel slots.

**New Action Item 3: Debbie Sinclair will apprise board members of the Local Road Research Board Travel Rules.**

Ben noted that he, Dave Van Deusen, Chelsea Hanson, and Jerry Geib will be attending the upcoming NCAT meeting. Their travel will be paid by NCAT.

Debbie needs to know desired attendees for conferences through March.

The following International Travel opportunities are available:

Transport Research Arena- Vienna, Austria- April 16-19, 2018 – Debbie needs to know ASAP.

Debbie will need to know who is interested in these other international meetings by March 2018:

- World Congress on Intelligent Transport Systems – Copenhagen, Denmark- September 17-21, 2018
- European Transport Conference – Dublin, Ireland-October 10-12, 2018

Lyndon encourages members to give these meetings a hard look, to ensure on the board can take advantage of these opportunities.

Debbie noted a correction from the chart provided at the meeting: the March RIC meeting will be at Fort Snelling and not MnROAD.

### **3. Research Proposal Presentations for FY19 Funding – Day 1**

Eleven university presentations were given on Day 1. All of the presenters were given instructions that they had fifteen minutes to present, with five minutes afterward for questions.

#### **Modernizing Construction Plans – Phase 2**

Chris Trbojevich, Rick Lovel, and Curtis Sohn from SRF gave a presentation the work plan for the modernizing construction plans project. Chris would be the project manager, Rick the chief technologist, and Curtis would be in charge of project controls. (Project information and their presentation are included in the meeting binder.) The proposal is for \$98,206 and would go on for 17 months.

Prior to the presentation, Lyndon gave some background on it to the board. He noted Phase 1 of the Moderning Construction Plans effort was complete, and that Iowa State had done that work. The recommended next steps from that project were to pick a sample plan, and create standards and best practices.

SRF was chosen as the consultant. Carver County already has SRF under contract to design a project under traditional two-dimensional guidelines – a gravel road in Victoria. This project was chosen as the site in which to provide a comparison between the 2-D and modern processes.

SRF said it conducted a SWOT analysis on most current info on Civil Information Management today. SRF and Carver County would like to perform a pilot study on a smaller project, earlier in the project life cycle. The road plan documents would be 4-dimensional - also considering the impacts of time.

Lyndon noted that a lot of initial work is already complete, including surveying. Thus, SRF doesn't have to start from scratch. Lyndon said that if this were funded, there would probably be a desire to start this work earlier than July 1.

Board members had questions regarding what the final end product would be. Would the contractor construct from the 3-D model, and would it be able to use this information for machine control? Chris Trbojevich is focused on preliminary design at this time.

#### 4. Adjournment

At around 4:30 p, and after some informal discussion regarding the proposals given that day, Chair Lyndon Robjert adjourned the first day of the meeting.

#### 5. Call to Order – Day 2

Chair Lyndon Robjert called the meeting to order.

#### 6. Research Proposal Presentations for FY19 Funding – Day 2

Ten university presentations were given on Day 2. All of the presenters were given the same instructions as the day before: fifteen minutes to present, with five minutes afterward for questions.

#### RIC Update

Kaye Bieniek provided the following update from the November 20<sup>th</sup> RIC meeting:

- LTAP meeting with the North Dakota Upper Plains Transportation Learning Network
  - This is covered above June 2017 Action Item 5 on page 4.
- Mindy Carlson discussed the CTS contest for PPE posters and web site. A contract for this is in process.
- ADA Training has started.
  - The first phase has started. Construction and Design phases are forthcoming.
- Ted Schoenecker brought up the Heavy Commercial Vehicle Unified Permitting Process.
  - Some bugs are being worked out.
- Mike Leegard showed up and brought up the Knowledge Book.
  - Mike was at TRB a few years ago and heard about a Knowledge Book, and it sparked this idea.
  - The first idea was to capture the Concrete Paving Repair knowledge of Gordy Bruhn of MnDOT.
  - Tapped into Gordy Bruhn, with a series of interviews. Interviewer captured this info over a series of roughly 8 interviews. Three interviews remain.

#### **New Action Item 4: A short presentation on the Knowledge Book will be added to the April 2018 LRRB meeting.**

- MnDOT has funded 3 other knowledge books, on the topics of:
  - Construction Office Management
  - Asphalt Mix Design
  - Steel Bridge Fabrication and Erection
- Renae Kuehl from SRF talked about all of their ongoing tasks. The *Addressing Citizen Requests* book is done and being distributed.
- Ted S informed the RIC about how the new prescreening board process is working.
- The RIC sent the *Guide for Local Agency Officials: How to Communicate with the Public, Media, and Elected Officials* into the pool of prescreening board ideas for consideration as a part of the 2018 research process.
  - It is covered above on page 3 in October 2017 Action Item 14.
- The Outreach Committee recently completed the Careers in Civil Engineering video. As such, all videos are now complete.

Kevin Western requested that Nicole Bartelt receive a hard copy of this video, to aid in her work as a STEM Coordinator.

#### **New Action Item 5: Shannon Fiecke will give a hard DVD copy of the Careers in Civil Engineering Video to Nicole Bartelt to aid in her work as STEM coordinator.**

Field Testing and Optimization of Soy Based Dust Control Agent

Kaye brought up this funding request (that was included in the meeting binder). The proposal is titled *Field Testing and Optimization of Soy Based Dust Control Agent*, and was developed by James Bahr from North Dakota State University. The proposal cost is \$134,419.

This was originally submitted via Joel Ullring. Bruce Holdhusen and Mitch B discussed it, and agreed to send this to the RIC first. McLeod County Engineer John Brunkhorst is the Project Champion.

RIC members noted that the dollar amount of this proposal is substantial, particularly for the RIC. (The RIC currently only has \$40,000 in budget that is unaccounted.) Their members felt this proposal should go through more of a formal process to request funding, and sent it back to the LRRB.

**New Action Item 6: Mitch Bartelt will invite James Bahr from NDSU to the April 2018 Local Road Research Board meeting to present his proposal titled *Field Testing and Optimization of Soy Based Dust Control Agent* as an off-cycle funding request.**

LRRB Strategic Plan

The RIC discussed its thoughts on the LRRB Strategic Plan. Members felt that updating the Strategic Plan presents a great opportunity to evaluate many different aspects – organizational structure, budgets, definition of roles, et cetera.

They felt that due to budgetary limitations, so many of their items have to come back to the LRRB for funding. Sending items back and forth can be cumbersome, and creates time delays in responding to requests. Hafiz notes that often the RIC will feel it has a good implementation project, but they are low on money and usually has to go to the LRRB to get this funding.

LRRB members noted that there has been a lot of turnover lately on the RIC, resulting in a loss of experience and knowledge on the committee. Getting members up-to-speed and oriented on processes can be challenging. Lyndon feels the LRRB Strategic Plan will address these issues.

Linda noted that the 3 year phase for project Work Plans can be an issue for the RIC, particularly with the amount of turnover. The initiatives are generally good, but there is questions about whether they are the right ones to roll out.

Board members noted that percentage funding targets for implementation should be considered as part of the LRRB Strategic Plan. Lyndon noted that this might necessitate an amendment to the LRRB Strategic Plan contract. Linda noted that a New Member Orientation guide for both new LRRB and RIC members is a deliverable under the LRRB Strategic Plan contract.

## 7. Funding decisions and discussion

A table summarizing the funding decisions of the board for university proposals can be found at the end of these minutes in Attachment 1. At this time, none of the projects heard and selected in 2017 by either the LRRB or TRIG were selected for joint funding.

For Brad Wentz's proposal 522u, titled *Development of Pavement Condition Forecasting for Web-Based Asset Management for County Governments*, the board agreed to add a pilot city to the four pilot counties that are in the proposal.

***Paul Oehme made a motion to increase the budget for Brad Wentz's proposal by \$10,000 from \$82,109 to \$92,109 to add a pilot city. Tim seconded the motion. The motion passed.***



Modernizing Construction Plans – Phase 2

The board felt SRF’s proposal was clear and well done, but had some questions about what the next step would be after this, if this project were funded. The board feels the industry is “lacking a roadmap on where we go from here, and is concerned that spending roughly \$100,000 on this project would lead to finding out the next steps are far more costly. The consensus of the board was for Lyndon to negotiate with SRF to provide the roadmap information at no additional cost to the LRRB.

**New Action Item 7: Lyndon Robjent will work with SRF to negotiate adding roadmap information for the Civil Information Management - Modernizing Construction Plans project at no additional cost.**

Proposal 504a was not funded. However, the need statement still reflects a problem that is not being met. Linda felt that the work scope could be completed under the existing Technology Transfer contract. The possibility was also raised to simply re-tool the need statement. RS will work with Jim F on possible next steps.

**New 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.**

There were some proposals that were considered by the LRRB in October to be heard at the December meeting due to receiving a marginal number of votes; however, the board decided to wait and see if they were funded by TRIG, after which the board would consider a cost share. The following five projects chosen for funding by TRIG meet this criterion:

491c	Review and Assessment of Past MnDOT Bridge Barrier Types	William Williams	Texas A&M
494a	Quantifying Benefits of Improved Compaction	Christopher Williams	Iowa State
495b	Test Methods for Verification of Low-Temperature Cracking Resistance of Asphalt Binders and Mixtures	David Newcomb	Texas A&M
498b	Assessment of Bridge Decks with Glass Fiber Reinforced Polymer (GFRP) Reinforcement	Behrouz Shafei	Iowa State
512a	Use of J Band to Improve the Performance of the HMA Longitudinal Joint	Christopher Williams	Iowa State

**New Action Item 9: Mitch Rasmussen will work with TRIG to determine if the LRRB is interested in providing a cost share on proposals 491c, 494a, 495b, 498b, and 512a.**

8. Round Robin

**Lyndon Robjent** thanked Steve for his service, and welcomed Kent to the board.

**Laurie McGinnis** noted the University of Minnesota reception at TRB in Washington. It will be held on Sunday, January 7 from 5:30 to 7:00 p.m. in the Anthem Restaurant at the Marriott Marquis.

**Ben Worel** suggested that it would be a good idea for Joel Uring from State Aid to join the MnDOT Material Engineers committee. This would help forge a link with MnDOT Materials personnel to both State Aid and the RIC.

**Linda Taylor** said that during next year's Fall meeting, a discussion regarding chronically late/problematic Principal Investigators will be added to the agenda. Other PI obligations will be added to work plan process. This will help ensure that the workload of the researchers is taken into consideration when decisions are made whether to fund certain projects, so that projects are delivered within the timeframe shown in the proposal.

**Shannon Fiecke** will mail out the Careers in Civil Engineering DVD to all board members who have yet to receive them.

**Hafiz Munir** noted that the process for research and implementation idea solicitation will begin in January, and Ideascale will be open for local agency personnel to submit ideas. Hafiz will be sending out a solicitation in mid-January.

**Debbie Sinclair** noted that the LRRB funded a total of \$2.263 million in projects at this meeting.

**Kristina Nesse** thanked everyone for welcoming her to her first LRRB meeting.

## 9. Adjournment

At around 4:00 p, Chair Lyndon Robjent adjourned the meeting.

## Summary of Action Items

### Action Items from December 2017 LRRB Meeting:

**Action Item 1:** Mindy Carlson will invite Tim Horner from the Transportation Learning Network and/or North Dakota LTAP Director Dale Heglund to give a presentation at the Summer 2018 LRRB/RIC joint meeting on the North Dakota Upper Plains learning platform and its potential to be used by Minnesota local agencies.

**Action Item 2:** Debbie Sinclair will come up with a new version of the Local Road Research Board budget information to submit to both Lyndon Robjent and Mitch Rasmussen.

**Action Item 3:** Debbie Sinclair will apprise board members of the Local Road Research Board Travel Rules.

**Action Item 4:** Mitch Bartelt will include a short presentation on the Knowledge Book at the April 2018 meeting.

**Action Item 5:** Shannon Fiecke will give a hard DVD copy of the Careers in Civil Engineering Video to Mitch Bartelt to give to Nicole Bartelt to aid in her work as STEM coordinator.

**Action Item 6:** Mitch Bartelt will invite James Bahr from NDSU to the April 2018 Local Road Research Board meeting to present his proposal titled *Field Testing and Optimization of Soy Based Dust Control Agent* as an off-cycle funding request.

**Action Item 7:** Lyndon Robjent will work with SRF to negotiate adding roadmap information for the Civil Information Management - Modernizing Construction Plans project at no additional cost.

**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.

**Action Item 9:** Mitch Rasmussen will work with TRIG to determine if the LRRB is interested in providing a cost share on proposals 491c, 494a, 495b, 498b, and 512a.

### Unresolved Action Items from prior meetings:

**October 2017 Action Item 1:** Mitch Rasmussen and ~~Jim Grothaus~~ Mindy Carlson will work together to discuss potential replacements for Kent Exner on the LTAP Steering Committee at the October 23 meeting.

**October 2017 Action Item 4:** Debbie Sinclair will provide Mitch Rasmussen a more simplified financial document representing current LRRB finances that can be shared at upcoming pre-screening board meetings.

**October 2017 Action Item 5:** Debbie Sinclair will explore available bidding processes to ensure a better venue for the 2018 LRRB Summer Meeting (e.g. she will determine if direct select an option).

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**October 2017 Action Item 13:** Ben Worel will send Mitch Bartelt his spreadsheet tracking Trip Reports for inclusion in the meeting minutes. Mitch B will evaluate it. If it is checked for LRRB, it will be talked about at future meetings.

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

<b>Research Proposals for FY2019 - LRRB Funding Decisions</b>						
<b>NS #</b>	<b>Project Title</b>	<b>Principal Investigator</b>	<b>University</b>	<b>Total Budget</b>	<b>LRRB Funded</b>	<b>Notes</b>
489b	Reducing Winter Maintenance Equipment Fuel Consumption Using Advanced Vehicle Data Analytics	Will Northrop	Minnesota	\$212,919	No	100% TRIG
499b	Develop Pavement Management Guide for Local Agencies	Omar Smadi	Iowa State	\$65,876	No	Heard, but not funded by TRIG
500a	Guidance for Separated/Buffered Bike Lanes With Delineators	John Hourdos	Minnesota	\$90,578	Yes	100% LRRB
501b	Evaluating the Impact of Local Expenditures on State and Regional Transportation Facilities	Jerry Zhao	Minnesota	\$102,684	Yes	Heard, but not funded by TRIG
503c	A Guide to Successfully Convert Severely Distressed Paved Roads to Unpaved Roads	Laura Fay	Montana State	\$100,115	Yes	100% LRRB
504a	Identifying and Evaluating Snow and Ice Control Methods that Reduce or Eliminate Salt Usage, Minimize Cost, Provide the Appropriate Level of Service, and Protect the Environment	Mihai Marasteanu	Minnesota	\$61,782	No	Heard, but not funded by TRIG
506c	Criteria and Guidelines for Three-Lane Road Design and Operation	Gary A. Davis	Minnesota	\$155,559	Yes	Heard, but not funded by TRIG
507a	Design Standards for Unobstructed Sight Lines at Left-turn Lanes	David Noyce	Wisconsin	\$50,000	Yes	100% LRRB
508c	Transportation Workforce Recruitment and Retention Strategies for Minnesota Transportation Public Agencies	Natalie Villwock-Witte	Montana State	\$175,277	No	508d was the preferred option
508d	Workforce Planning and Human Resource Development Strategies for Minnesota's Public Transportation Agencies	Kenneth Bartlett	Minnesota	\$137,287	Yes	100% LRRB
509b	Evidence for Municipal and County Decision-Making: The Demand For and Value of Non-motorized Transport Infrastructure	Jason Cao	Minnesota	\$94,295	No	
511c	Evaluation of Taconite Byproducts as Alternative Sanding Materials for Chloride Reduction in Northeastern Minnesota Watersheds	Lan Chun	Minnesota-Duluth	\$100,500	No	
522u	Development of Pavement Condition Forecasting for Web-based Asset Management for County Governments	Brad Wentz	North Dakota State	\$92,109	Yes	100% LRRB; Board added \$10,000 to original proposal to add a pilot city

<b>Research Proposals for FY2019 - LRRB Funding Decisions - Knowledge Building</b>						
<b>NS #</b>	<b>Project Title</b>	<b>Principal Investigator</b>	<b>University</b>	<b>Total Budget</b>	<b>LRRB Funded</b>	<b>Notes</b>
KB01-2	Regional Optimization of Roadside Turfgrass Seed Mixtures Phase 2: Regional Field Trials and Economic Analysis	Eric Watkins	Minnesota	\$467,139	Yes	100% LRRB
KB02-1	Techno-Economic Analysis of Implementing Hybrid Electric Utility Vehicles in Municipal Fleets	Will Northrop	Minnesota	\$100,767	Yes	100% LRRB
KB03-3	Design and Construction of Infiltration Facilities	John Gulliver	Minnesota	\$238,572	Yes	100% LRRB
KB03-4	Assessing Culverts in Minnesota: Fish Passage and Storm Vulnerability	Jessica Kozarek	Minnesota	\$154,374	Yes	100% LRRB
KB04-2	Quantifying the Impacts of Complete Streets: The Case of Richfield	Jerry Zhao	Minnesota	\$103,834	Yes	100% LRRB
KB07-1	Development and Demonstration of an In-Vehicle Lane Departure Warning System using DSRC Based V2V Communication	Imran Hayee	Minnesota-Duluth	\$125,660	Yes	100% LRRB
KB08-1	Innovative Materials and Advanced Technologies for a Sustainable Pavement Infrastructure	Jia-Liang Le	Minnesota	\$151,514	Yes	Heard, but not funded by TRIG
KB10-1	Effectiveness of Teenage Driver Support System (TDSS) on Reducing Traffic Violation Behaviors for Teenage Drivers at the Early Time of Licensure	Nichole Morris	Minnesota	\$93,929	Yes	100% LRRB