



LRRB March Meeting Minutes

March 23, 2017

Minnesota Department of Transportation

Golden Valley Office

2055 North Lilac Drive

Golden Valley, MN 55422

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
Laurie McGinnis, U of M - CTS
Mitch Rasmussen, MnDOT – State Aid
Kevin Western, MnDOT – Bridge
Hafiz Munir, MnDOT – Research

Others Present:

Glenn Engstrom, MnDOT – OMRR
Debbie Sinclair, MnDOT – Research
Shannon Fiecke, MnDOT – Research
Omar Fateh, MnDOT – Research
Mitch Bartelt, MnDOT – Research
Jim Grothaus, U of M – CTS

Absent:

Linda Taylor, MnDOT – Research
Ben Worel, MnDOT - OMRR

Minutes prepared by Mitch Bartelt, MnDOT Research

1. Call to Order

Chair Lyndon Robjent called the meeting to order. Lyndon welcomed the attendees and discussed the purpose of the meeting. The spring meeting functions as a second programming meeting and strategy identification meeting, with specific emphasis placed on identifying research topics for the subsequent year. This year the spring meeting also covers knowledge building, which falls on a four-year cycle.

Following introductions, Hafiz Munir introduced new RS staff. Omar Fateh is a new hire in MnDOT Research Services as a Project Coordinator, and was attending his first Local Road Research Board meeting. Hafiz acted in Linda Taylor's role, as she was unable to attend the meeting. Also, Glenn Engstrom represented the Office of Materials and Road Research in place of Ben Worel.

Next, the board reviewed the agenda. No additions were made.

Lyndon then brought the minutes from the previous LRRB meeting for approval. **Laurie McGinnis made a motion to approve the December 2016 LRRB minutes. Jim Foldesi seconded the motion. The motion was approved.**

Action Items

Hafiz led the discussion of the pending LRRB action items.

Action Items from the December 2016 LRRB Meeting:

Action Item 1: Laurie McGinnis, Lyndon Robjent, Mitch Rasmussen, and Linda Taylor will meet prior to the March 23 LRRB Meeting (in an effort to define and clarify the multiple proposal evaluation process) and develop a recommendation to present at that meeting.

Status: Mitch R, Laurie, and Hafiz developed a new form that is more of a true review form, with more statements and fewer questions.

Future Steps: This item was up for discussion later in the meeting, and it was ultimately **resolved**.

Action Item 2: Jim Foldesi will bring an update to the LRRB on the cost associated with printing an updated Snow and Ice Handbook at the March 23, 2017 meeting.

Status: This was resolved later in the meeting. According to the meeting minutes from the 12/6/2016 RIC meeting, it was decided that the Snow and Ice Handbook should be updated before being reprinted. The minutes also stated that Jim said he would bring an updated schedule and cost to reprint the manual to the next RIC meeting.

Future Steps: Later in the meeting, Shannon Fiecke brought a request to set aside some budget for reprinting updated handbooks and manuals, with the Snow and Ice Handbook being included in that request. This led to the action item being **resolved**.

Action Item 3: Make the Trip Report Form into a fillable pdf.

Status: This item is **resolved**. Debbie Sinclair took care of it and people had the option to fill a fillable trip report form for TRB.

Action Item 4: Debbie Sinclair will send out a message to make sure the conference slots are filled appropriately.

Status: This is **resolved**. Ben Worel and John Garrity will go to the March meeting in Newport Beach. The meetings in Sweden and Greece will not be attended by anyone from the LRRB/RIC because nobody spoke up in time.

Action Item 5: Linda will bring the Transportation Workforce Recruitment and Retention Strategies project back to TRIG to see if they are willing to fund 50% of the project so that it can be fully-funded as presented.

Status: This was **resolved** prior to the final meeting minutes going out. There was no will to fund this to meet the 100% threshold.

Action Item 6: Linda will work with Dan Erickson, Metro State Aid Engineer, to try and secure a focus group meeting date that aligns with State Aid prescreening meeting.

Status: **Resolved**. The LRRB Strategic Plan TAP will hold its next Focus Group meeting on Thursday, April 6 from 11:00 – 2:00 at the University of Minnesota Urban Research and Outreach-Engagement Center (UROC).

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**.

October 2016 Action Item 1: Debbie Sinclair will check into use of Northrup Building for December 2017 meeting.

Status: This item has been **resolved**. The December 2017 meeting will be held in the President's Room at Coffman Memorial Union.

October 2016 Action Item 3: Debbie Sinclair, Becky Lein and Laurie McGinnis will have a follow up discussion regarding the new MnDOT closeout process of tying final payment to the evaluation process and who at the University should receive the closeout reviews. Is this allowed under the master agreement?

Status: **Resolved**. This issue was worked out with the Contracts Management unit. Yes, it is allowed under the master agreement.

Debbie added that the process has been streamlined, and reimbursement will take less time than it has in the past.

October 2016 Action Item 5: Alternatives to Seal Coats (TRS 16-02) – Bruce Holdhusen will follow up with the TL, Jeff Hulsether, to see if it answered or solved the problem and to see if there is a next step.

Status: This is **resolved**. Mitch B talked to Jeff Hulsether. Jeff felt it answered some of the issue, but that there were some issues with the inability to test certain proprietary products to determine their effectiveness.

Future steps: According to Jeff, the biggest potential next step, if there was a will to take it, would be to test those products as part of another project. There could be some issues with the proprietary nature of some of these projects, though.

October 2016 Action Item 6: Snow and Ice Handbook and Asphalt Maintenance Field Guide was sent to RIC to determine if they should be updated or just reprinted. *This is not complete, but will be covered in part by New Action Item 2.*

Status: **Resolved**. Bruce said the RIC voted to update the Snow and Ice Handbook. The meeting minutes from the 12/6/2016 RIC meeting indicated that the group feels the Asphalt Maintenance Field Guide should be updated, but no action was yet taken to do so.

Shannon F noted that there will be a survey sent out to see which manuals/handbooks might need to be updated and printed. Shannon had a printing request for \$35,000 later in the meeting.

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 remains **outstanding**. Mitch B met with Lori Sobczak, and she noted that the only meeting in 2017 that has occurred is TRB, and Lori said she has received all of the reports from all of the attendees for that conference.

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 remains **outstanding**.

2. Budget and Administration

Budget Status Report

Debbie led the discussion of budget and administration.

She went through the spreadsheets that are in the binder. INV 922 and 967 are complete. She noted that Page 3 of the budget report shows projects that are not under contract yet.

The FY18 allotment is \$3,643,700. A balance of \$1.9 million is still available.

One issue is that there is a large carryover balance and the LRRB needs to make sure it takes the opportunity to utilize it.

INV 999 Status Update

Debbie said the remaining meetings and conference travel in this fiscal year will be covered by the unobligated funding balance.

Amendment report

Thirteen amendments were noted. Of the thirteen, seven were done as letters to the file. (A letter to the file is where the contract end date doesn't change, just the end date of earlier tasks.) Most letters to the file were simply no-cost time extensions.

Debbie noted that Research Services has been more aggressive in ensuring Principal Investigators give realistic timelines for their projects when developing work plans.

2017 LRRB Meetings

Debbie noted the LRRB Outreach meeting is tentatively set on June 27 from 4-6 p.m. at the Sawmill Inn in Grand Rapids.

For the summer LRRB meeting, Laurie noted there is a cabin at Bowstring, which is a 40 minute drive from the meeting site. There will likely be a nominal fee to cover costs will provide.

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

Upcoming Conferences and Out-of-State Travel

Debbie led the discussion and pointed out two conferences that are coming up quickly.

- NCAT in Auburn, Alabama from May 16-17, 2017
- National LTAP Conference in Norfolk, VA from July 17-20, 2017

Debbie asked anyone interested in attending either of these conferences to let her know by April 15.

She also pointed out two other conferences involving international travel. Debbie needs to know immediately if anyone is interested.

- European Transportation Conference in Barcelona, Spain from October 4-6, 2017
- World Congress on Intelligent Transportation Systems in Montreal, Quebec, Canada from October 29 to November 2, 2017

On behalf of Ben Worel, Glenn asked if the regional meeting for the Pavement Preservation meetings could be reimbursed. The national meeting for the National Center for Pavement Preservation isn't happening in 2017. Glenn wondered, could people go to the regional one instead? Ben has been instrumental in recruiting 30 groups to join the NRRRA as associate members. Glenn would like to get Ben to most of these conferences.

Four people are normally approved to go to the national conference. The board was amenable to sending people to the one in Traverse City, Michigan from August 28-30. Jim F and Hafiz are interested in attending. This will be open to LRRB or RIC members. Lyndon asked if anyone else was interested, and no one at the meeting responded.

The group discussed some upcoming local conferences:

- The 2017 National Road Research Alliance Conference will be held from May 23-24 in Minnesota. Glenn said people can now sign up for it online.
 - On Day 1, there is a workshop at the MnRoad facility in Albertville.
 - Day 2 is at the U of M in St Paul.
- Laurie noted that the CTS Research conference will take place in November 2 in Minneapolis.
- In 2017, Glenn said the reclaiming recycling conference will be in Minnesota.
- Kaye stated the Toward Zero Deaths conference will be in October at the St Paul RiverCentre.

Lyndon pointed out that requests to attend these conferences should come in soon.

New 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.

Out of State Trip Report

Debbie noted that the checked boxes on the form changed so that it made more sense at which committee each should end up. Debbie asked how the fillable pdf worked for those who went to TRB. People said it worked. One issue can be if there are too many notes. Lyndon noted that it would be helpful if it worked in the mobile format.

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

3. LRRB Outreach Committee

LRRB Outreach Committee Meeting Summary

The LRRB Outreach Committee had a special meeting on March 20 to discuss the next Outreach contract and hear updates on other items. Mitch Rasmussen and Shannon Fiecke provided a summary of the meeting:

Nicole Bartelt from the MnDOT Bridge Office attended the meeting and gave an update on the work she is doing to promote STEM education (science, technology, engineering, and mathematics) with an emphasis on bridges. Nicole works in the bridge hydraulics unit in Oakdale, and is currently on a part-time mobility to promote the bridge office curriculum of STEM education. She noted the iPad Bridge Up! interactive application, and how popular that already has been. Nicole is looking for local champions who want to participate in this educational effort.

The Outreach Committee is developing a video to attract youth to the field of civil engineering, but it is more general than bridges. The Outreach Committee would like its video to be part of MnDOT's curriculum.

Nicole showed a map with a number of major bridge projects around the state, where MnDOT people (if invited) will go into the schools and possibly host a field trip. However, there are gaps across the state (central in particular), and the goal is to fill in the gaps, possibly with local agency-led projects. Jim F said that the Duluth chapter of the American Society of Civil Engineers leads students in a toothpick bridge building contest. Mitch R noted that Duluth is not involved in Nicole's program, but that would be a great way to fill a gap.

Nicole was invited to attend the county engineers' board of directors meeting to try to "fill in the map" better. She is targeting fall 2017 to get the "Bridge Up!" curriculum into the schools.

Kevin discussed some background on Nicole's work. As part of the Saint Croix Crossing bridge project in Stillwater, there was a STEM education component. He said Nicole has taken this forward a long way in the past two months. Even with that, Kevin wants input to this to make this effective. He also wants people to act as mentors. He asked that people please let Mitch R and/or Nancy Daubenberger know, as Nicole is only signed up to do this part-time for one year.

Mitch R noted that the "Bridge Up!" curriculum meets state requirements for a lesson plan. However, it can be hard to fit in, as most teachers' plans are full, and there is about a week's worth of material. Lyndon suggested this being presented at after school activities. Laurie recommended bringing this to Boys and Girls Clubs. This would also help attract people to the profession who are underrepresented. Mitch R noted the "bridge in a bag," and how well-received always that is.

The Outreach Committee is developing a script and story board for a video titled Careers in Civil Engineering. It is estimated to be completed around July. The board reviewed storyboard concepts for the animated video.

Lyndon suggested that the LRRB create an education committee subgroup of the city and county engineers to focus on the topic of employee retention and recruitment, as he knows of people who are interested right now.

New 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.

Shannon discussed that the TAP for the Ineffective Specialty Signs project was unhappy with how the draft video for that project turned out. It will be reshot. The video is being re-scripted and will incorporate part of an old LRRB video on Traffic Control that was narrated former WCCO weather personality Mike Fairbourne.

LRRB Web Page

The new website for LRRB is live, at the URL www.lrrb.org. Research marketing staff can control it from the website internally. Each research project now has its own webpage. It is dynamic; for example, if the Technical Liaison changes, the project page is updated automatically. Shannon asked that anyone who has feedback on the web site please let her know.

Lyndon suggested a subscription option that allows people to get an update when a project finishes. Shannon said these updates could be made available for specific projects, or by topic. She said they're working with a developer to make this happen.

Outreach Committee Contract

The Outreach Committee Contract expires June 30, 2017. Mitch R feels the Outreach Committee needs to meet more often. The meetings generate too much content relative to the time they have to cover it. He also feels the LRRB doesn't do enough to circle back to the cities and counties to let them know what they received for their money for research.

All of the counties and cities are together two times per year, at the pre-screening board meetings. Mitch R feels this would be a logical place to talk about LRRB and RIC. At the October pre-screening board meetings, Mitch R proposes getting feedback about problems that can be converted into research ideas that turn into problem statements. At the May (or spring) pre-screening board meetings, the LRRB would let local agency personnel know which projects were selected, highlight one or two, and solicit TAP members. Mitch R would like State Aid and LRRB board members to assist with providing LRRB updates and information gathering at the pre-screening meetings.

The Outreach Committee is putting together a scope for the next outreach contract. The current contract expires June 30, 2017. The choice is either to scope these changes into a new contract, or extend current one by 6 months. The consensus of the board was to extend the current contract 6 months. A new contract could still begin prior to the end of that extension.

Mitch R made a motion to extend the contract for six months. Steve seconded the motion. Motion passed unanimously.

New 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.

4. Research Implementation Committee Update

Kaye Bieniek led the discussion on this topic. She gave a summary of the March 13 meeting.

Eight projects either had presentations that were given at the meeting, or they were discussed at

length by the committee. A few highlights were:

- Performance based specifications: Dave Eschen spoke at the last meeting on this research.
- John Hourdos presented on his project, which covers methods on how to attract attention of drivers
 - LED lights on signs were ineffective at capturing the attention of drivers.
 - Dynamic speed display units were tested, which honked an obnoxious horn sound when drivers were over the speed limit.
 - These were very effective at capturing drivers' attention.
 - Portable rumble strips were found to be more hassle than they were worth.
- Dave Saftner presented on slope stability and repair.
 - He is looking at developing a pocket guidebook by June, covering eight common cases.
- Paul Stine discussed a tool to project potential slope failures.
 - This was brought up later as a request to extend the contract and add tasks, with more money requested as well.
- Fleet management project
 - This biggest concern is to ensure that big counties don't swallow up small ones, and that the research is geared toward all of them.
- Base stabilization
- Template for local agencies to address traffic and safety concerns.
 - Shannon noted that Mike Spack charges for a traffic and safety book that might be considered similar to his project. Spack was invited to meet with the TAP but declined. He did express concern regarding intellectual property. His book will not be referenced in the research at all.
- SRF will be lining up ADA training for transition plans. This training is probably a bit late, as transition plans are due by end of the year, training is in the fall, but inventorying would be done by summer workers.

Kaye said that anyone interested in attending the NRRRA national conference should contact Ben Worel. Coming up on May 16-17, there is an Asset Management Peer Exchange that will be held in St. Cloud. Anyone interested in attending should contact Joel Uling from State Aid.

5. FY 18 Annual Program Funding Requests

INV 999 Project Administration

The Proposed Budget spreadsheet that can be found in the binder was discussed by Debbie.

Shannon made a request about adding \$35,000 for printing manuals that the LRRB and/or RIC determine are in need of updating. It would be a placeholder request, as the exact amount needed cannot be determined at this point. There was some discussion as to whether this printing placeholder should come from this budget. Hafiz suggested that it be a separate line item in this proposed budget. Mitch R noted that administrative costs increasing are fair, as costs and level of service have risen with them.

Paul made a general comment, suggesting more line items in the spreadsheet to describe and account for costs.

Tim moved to approve the budget as presented for \$154,000, with \$35,000 for printing as a separate line item. The motion was seconded by Kaye. The motion passed unanimously.

Debbie then asked if the \$50,000 contingency should still be included. Board members felt yes. Mitch R said that unspent money is money dedicated to projects. This would be for special cases, such as sending someone to present work, or do outreach.

A motion to approve \$50,000 in contingency funding was made by Steve. Laurie seconded the motion. The motion was approved unanimously.

6. Program Support Contract Requests & Updates

INV 916 Technology Transfer (CTC) Update

Shannon led the discussion of this topic. MnDOT Research Services is for \$100,000 in additional funding to pay for work performed by CTC and Associates. One thing CTC does for the LRRB is produce the annual At-A-Glance. Shannon noted that she feels CTC is doing a good job.

As part of this funding request, Shannon proposed a change to the scope of work. Marketing would like to have CTC do more work on LRRB videos.

Kaye moved to grant increased funding for the \$100,000 amount requested, and Mitch R seconded the motion. It passed unanimously.

The board made the decision to wait to the afternoon agenda item titled "Funding Decisions" to decide on remaining funding requests.

INV 936 FY 18/19 Focus Group

Hafiz led this discussion.

There is a focus group meeting coming up on April 6, and it will take place in the Twin Cities Metro Area. The focus group site alternate between the Metro Area and Greater Minnesota.

The amount being requesting for the FY 18/19 Focus Group is \$15,000 for each year, for a total of \$30,000. Laurie notes that CTS writes out the material for each meeting, and it is a task in the contract for them to do so.

As part of the contract, an appropriate outstate location has to be determined during this contract. A couple of ideas were proposed; ultimately, the committee said the timing for those would not work. This meeting should be held in March or April.

Kevin asked who is invited to attend these meetings. The response was everyone, not just city and county engineers. Lower staff can attend as well.

Mitch R made a motion to approve the \$30,000 funding request for the FY 18/19 Focus Group meetings. Paul seconded the motion. The motion was approved, with Laurie abstaining.

7. Other funding requests and Updates

While funding requests were made as described below, funding decisions were made later in the meeting.

Adaptive Management to Improve Deicing Operations Additional Funding Request

Dr. Larry Baker arrived early and made the first funding request. At the December 2016 LRRB Meeting, Dr. Baker presented his project with a funding request of \$262,000. The LRRB agreed to fund the project, but only up to \$200,000. He was presenting today in hopes of receiving \$62,000 in additional funding to get to the originally requested amount of \$262,000.

He gave a 15-minute presentation, then answered questions for 10 minutes. Some questions included how results from samples will be used to determine water quality and how this research would be different from the minimum salt tables that were developed?

Lyndon asked if Dr. Baker has asked the City of Edina for funding. Dr. Baker responded their time commitment alone will be significant.

Dr. Baker then requested that LRRB would lobby for this project to the Legislative-Citizen Commission on Minnesota Resources (LCCMR) on their behalf. He says the City of Edina will not.

Research Implementation Committee

Kaye brought up the request for additional funding for the Slope Stability Assessment project. This project was borne out of the State Aid disaster account. Barr Engineering would like to amend the current contract to add the following tasks:

1. Broader outreach and presentation of project results, for \$5,000
2. Model review by academic and agency experts, for \$15,000
3. Model refinements, for \$25,000
4. Comparative development of process for on-the-ground utilization of the model is a request that would be long-term, for \$50,000. (The Technical Liaison for the project would prefer any or all of the initial three tasks be added to this one.)

Kaye's recommendation is to approve three of the first four tasks, for a total of \$45,000.

Steve asked what the initial budget for the project was. The research tracking system shows a value of \$78,124.

Outreach Committee

Mitch R said he was not ready to quantify additional contract amount. Mitch R wants to reserve the right to come back when he has a better number.

Printing and Updating Handbooks/Manuals

Shannon led the discussion previously, and this request for \$35,000 was already approved.

Bridge Office

Kevin led the discussion. He gave out a blue handout to each meeting attendee. There were six small projects listed that were developed by Paul Rowekamp. The bridge office hoped that two to four small projects with a total budget of approximately \$65,000 - \$75,000. Because of the small amounts of funding, the projects would likely be pursued as one or more sole-source requests.

The requests were well-received by the board.

Materials Office

Glenn led the discussion. The MnDOT Materials Office submitted numerous projects for potential funding. They were included in the meeting binder. There wasn't time to go through all of them, but the total cost range is around \$150,000. However, Materials/NRRA would do the research.

Lyndon was receptive to the request, noting that cold in-place recycling is important to local agencies.

Mitch R suggested running all of these ideas through the Focus Group process. Laurie M agreed with that notion. Glenn accepted that, as he felt the projects were ideas more in need of development, and that the Materials Office would like more input from local agencies before proceeding.

In response to a question from Hafiz, Mitch R noted that while these requests would go into the "Research" bucket, and would not require an RFP as the Materials/NRRA would to the research.

New Action Item 6: Glenn Engstrom or someone else from Materials will bring these materials

research ideas to the Focus Group on April 6 for discussion.

Note: Dave Van Deusen, Chelsea Hanson and Jeff Brunner from the MnDOT Materials Office will attend the Focus Group. This item is **resolved**.

Research Services Support

Hafiz and Debbie led the discussion together. They showed a PowerPoint presentation describing time expended by Research Services staff with respect to budget.

From 2008 to 2017, the annual budget has increased 53%. Time reported for LRRB duties has gone up in that time, but not all of it is being tracked. In FY17, 5631 is the number of hours projected. In FY13, the number of hours charged to LRRB was 4155.

Hafiz noted that Research Management staff members are a lot more involved than in the past. RS engineers are spending a lot more time with local agencies conducting more TAP meetings and managing projects. Hafiz shared a list of additional work items being provided to the LRRB.

Research Services is requesting a \$25,000 base adjustment increase in extra funding. Hafiz wants this money to “close the gap” for FY18. Members spoke generally in support of this, but waited to vote until later in the meeting, when “Funding Decisions” came up on the agenda.

8. Research Test Track Database Status Update

Jeff Brunner submitted a handout ahead of time that was included in the binder. This update is released annually. The question was, is this something that is worth producing every year? It costs \$5,000 per year.

Tim expressed disappointment that this hasn't been utilized more by the counties. He did feel the outreach could be better, though. Board members generally felt this was a good document, but it just isn't getting much use.

At times, when one clicks on a project, there isn't a lot of information. How much information is included does depend on who inputs it, though.

Glenn proposed trying this one more year, and then re-evaluating after that. Joel Ulring was pointed out as someone else should help spread the word on this. One potential location would be the June MCEA meeting.

Hafiz pointed out that this project is behind schedule and will require an amendment. The Task covering this has expired. He did confirm that a balance of \$5,000 remains in the contract through Dec 31, 2017.

9. Metro Focus Group Update

Jim Grothaus led the discussion of this topic. As of the meeting, eleven people signed up. That total rises to twenty-nine when adding other people who are required to go. Jim G verified that the Focus Group will meet on April 6 at UROC.

There is a conference call at 10:00 a.m. on Friday, March 24 to discuss this further. Mitch R noted that he sent out a recent e-mail blast, and expects more people to sign up. Paul said he will send out another e-mail to the city list.

10. Additional Need Statements

Hafiz led this discussion.

Employee Recruitment and Retention – Re-Scope

Neither project that was presented at the December 2016 was selected for funding. The most common complaint was that while the proposals did a good job of covering employee retention, each

proposal fell short in attracting people to the field of civil engineering. This will need to be re-scoped to emphasize the recruitment piece better, via the Focus Group process.

Modernization of Construction Plans

This was tabled.

Trip Reports

Hafiz led discussion of this topic. Hafiz noted that in the past, summaries and spreadsheets were developed to cover trips taken as part of the LRRB. Hafiz said that only key items should be covered, but the reports are often elaborate.

Mitch R advised that each person should share takeaways, and will have some time to discuss his or her own trip report. Ultimately, Hafiz said updating the Trip Report process should be deferred to the June meeting.

Other ideas?

Kaye was copied on an e-mail to MnDOT Research. It was an idea submitted by Kristi Sebastian from Dakota County regarding high-friction surface treatment. Kaye was wondering if it was resolved. Kristi sent the e-mail February 22.

New Action Item 7: Mitch Bartelt will follow up to check the status of Kristi Sebastian's research idea submission.

Note: Bruce Holdhusen submitted the idea into IdeaScale. Mitch B informed Kristi how everything went forward in a March 30 e-mail. This item is **resolved**.

11. Multiple Proposal Evaluation Form Recommendation

Mitch R led the discussion on this topic. Since the last meeting, Laurie, Lyndon, Hafiz, Linda, and Mitch R worked together to develop this form. The form was brought before the board to determine if what was developed will be acceptable as a final version of it.

Laurie noted that the form is being changed so that the local technical champion will show which proposal is preferred. Ultimately, however, the decision on which project to select rests with the LRRB. The question is, how does the board picture this form being used?

There was some question and discussion on how this process works at TRIG. Their Project Champion eliminates some of the ones not preferred. However, Hafiz pointed out that multiple proposal form was originally a MnDOT form.

There was some question and discussion on how the research selection process interacts with TRIG on projects where funding is sought from both TRIG and LRRB. Mitch R is newly appointed to the membership of TRIG. He will go to the meetings as a liaison between LRRB and TRIG. In some cases, certain proposals fit locals better than TRIG. Or, in some cases the LRRB can live with what gets chosen if the scope is changed slightly. In any case, he is hopeful that his involvement on TRIG will help bridge the gap. His goal is to ensure that both groups will not play one against the other.

Kevin and Jim F wondered about a scenario where two proposals address the need statement from different perspectives, and perhaps both should be funded. That should be considered a possibility on the form. The rest of the board agreed by consensus.

Laurie gave a big thanks to MnDOT Research Services to helping them update this form. She feels this will help everyone evaluate proposals.

Steve moved to adopt this form for the 2017 LRRB proposal evaluation process, with added language allowing more than one proposal to be listed as the preferred alternative. Laurie seconded it. The motion was unanimously approved.

New 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.

12. Ohio Peer Exchange Update

Mitch R attended a peer exchange in Ohio, and gave the board an update on his trip.

When he was at the conference, Mitch R did two presentations. The first was a 15 minute presentation on soliciting ideas. The second presentation was on implementation and measuring benefits of research in terms of return on investment.

In comparison to Minnesota, Ohio local agencies have a much smaller research program, but trunk highway money can be spent on non-trunk highway projects. He also noted that for the Ohio Department of Transportation, elections can change the personnel in many more offices than when the gubernatorial administration changes in Minnesota. These changes can imperil their research funding, and many other projects.

When comparing notes with other states, Mitch R appreciates the way things are set up in Minnesota. He feels the fact that there is money set aside for this program from the cities/counties tax is helpful to the success of the program. He also appreciates that ROI is looked at from a program level, and not for each project.

Mitch R also discussed the NRRA. Other states were amazed that the research board alone had equal standing to other DOTs in pooled funds. Minnesota is considered the “gold standard” for research among other state DOTs, particularly for local agencies. Minnesota are so fortunate that local agencies have “skin in the game” for research projects. In other states, there is a relationship where the locals are subordinate to the DOT. That isn’t the case in Minnesota.

There were two projects that stood out to him from other states:

- One research project at local level in Ohio where bridge rail beams were attached to fascia beams. If interested, he recommends searching “O-Rail fascia beams.”
- In Iowa, there was a project with multiple runs of box culverts. Fillets were put in upstream. The scour cleans up the middle one. Otherwise, the sediment/silt occurs just outside of it.

Shannon provided Mitch R a bunch of examples to show others. Mitch R thanked Shannon and Renae Kuehl for setting up his presentations and one-pagers. He noted how professional they looked, and said they went over well with other states.

13. State Transportation Innovation Council (STIC)

At the request of Jean Wallace, Mitch R is looking for a member from the LRRB to participate in something called the State Transportation Innovation Council. It will likely meet quarterly.

The current budget for STIC is \$100,000; however, it will also play a role in the MnDOT Strategic Plan. Meetings will likely take place in the Twin Cities area, but could properly be attended via Skype. Mitch R said he would go to the RIC and look for a volunteer if no one from the LRRB would like to be added.

Paul Oehme volunteered to be the LRRB representative on the State Transportation Innovation Council. ***Steve K moved to approve Paul as the LRRB representative on STIC, and Mitch R seconded the motion. The LRRB unanimously approved his selection.***

14. Funding Decisions

\$95,000 Request for Slope Stability Project

There was some discussion regarding this. One member wondered why this request didn’t go to the RIC instead of LRRB for more funding. It was determined this project was sent to RIC as is it more of an implementation project and not research.

Debbie S noted that, as the amount of money requested is more than half of the existing contract, it would have to be a new contract if all tasks are approved.

Ultimately, Kevin suggested just adding the proposed part 3, but not 1, 2, or 4. This will add more data collection to the project. Approving proposed part 3 will add \$25,000, which remains within the threshold for keeping this as part of the existing contract.

Kevin motioned to add only Task 3, a \$25,000 addition to the Slope Stability project. Kaye seconded the motion. It was approved unanimously.

\$20,000 Request for the Outreach Committee

Mitch R withdrew the request for now, but will come back later and make a request.

Materials Office – funding request for various projects

Materials request will go through the Focus Group Process, as described above.

Bridge Office – Various Small Projects

This was well-received by the board. Members noted a high value to cost ratio with what was proposed, and that there will be some in kind work provided by bridge staff of which the LRRB should take advantage. The consensus was to approve the proposed project number 1, 2, 3, and 5 for a total \$105,000. These projects include:

1. Debonded prestressed strand in prestressed beams
2. Use of polypropylene fibers in bridge deck concrete mixes
3. Epoxy top mat – plain bottom mat
5. Epoxy-coated adhesive anchorages

Paul moved to approve \$105,000 of funding for these small bridge projects. Jim F seconded the motion. The motion was unanimously approved.

Research Services Support request of \$25,000

Before voting, Debbie S clarified that this money is for FY 18.

Kaye motioned to approve the \$25,000 request for funding, to increase RS support from \$230,000 to \$255,000. Kevin seconded the motion. It was unanimously approved.

Dr. Baker - \$62,000 in additional funding

The board felt the already approved budget of \$200,000 was adequate.

Steve motioned to keep the budget for this project at \$200,000. Tim seconded the motion. The motion passed without a dissenting vote.

Mitch B e-mailed Dr. Baker on March 24 informing him of the board's decision.

Research Test Track database

A motion was made by Tim for \$5,000 to keep the Research Test Track Database report around for at least another year. Paul O seconded the motion. It passed unanimously.

New 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.

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

15. Knowledge Building Exercise

Every four years, the Local Road Research Board goes through a knowledge building exercise. Jim G gave every attendee a handout and set the stage for the exercise.

Jim G explained the four buckets. They are:

- KB #1: Design
- KB #2: Construction
- KB #3: Maintenance and Operations
- KB #4: Environmental Compatibility

In order to stimulate ideas and discussion, four researchers/professors from the University of Minnesota gave presentations for each bucket. Then, the meeting attendees had a short period of time to write ideas on notes that were gathered by Jim G.

These ideas will be brought to the June 2017 LRRB Meeting. The hope is that these ideas will be developed into something ready for the RFP process in July.

The question came up: what is the difference between Focus Group and Knowledge Building? Jim G responded that the Focus Group process leads to a Need Statement. Knowledge Building is about discussing an area where research can be used to increase knowledge among local agency engineers. Essentially, knowledge building is strategic thinking with long-term perspective. It is complementary to the Focus Group.

The four presenters for the Knowledge Building exercise were:

- **Nichole Morris**, Human FIRST Laboratory
- **Will Northrup**, Department of Mechanical Engineering
- **Frank Douma**, Humphrey School of Public Affairs
- **John Gulliver**, Department of Civil and Environmental Engineering

After the presentations, Jim G rounded up all of the group's suggestions.

16. Round Robin

Steve Koehler, Lyndon Robjent, Kaye Bieniek, Mitch Rasmussen, and Shannon Fiecke all chose to pass.

Paul Oehme is looking forward to seeing everyone at the LRRB Focus Group on April 6

Tim Stahl says that applications for MCEA scholarships for students are due April 17.

Hafiz Munir updated the committee on a previous item regarding Kristi Sebastian's idea that was submitted. It was entered into IdeaScale. Hafiz also noted that IdeaScale is open.

Kevin Western felt it was a great meeting, is happy to be a part of it as the MnDOT representative.

Jim Foldesi complimented CTS on doing a great job leading the knowledge building process. He feels that the next time that is covered at an LRRB meeting, that it should be done right away after the introductions, or at the least covered before lunch. Many others on the board echoed both sentiments.

Glenn Engstrom thanked everyone for letting him present his ideas for funding.

Mitch Bartelt said the LRRB Strategic Plan estimated to be under contract on April 17, 2017. (Update: it appears it will be May 1 instead.) If anyone has any issues with what CPCS put together and would prefer it to be changed in any way, please let Mitch B know, so that it will end up in the Work Plan. Mitch B e-mailed this out to the committee members on February 1, 2017.

Steve moved to adjourn; Jim F seconded the motion. The motion to adjourn passed by unanimous vote.

Summary of Action Items

Action Items from this LRRB Meeting:

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

New 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.

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

New 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.

New 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.

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

New 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. – **RESOLVED**

New Action Item 9: 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.

New 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.

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

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.

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.

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.