MINUTES

LRRB - Research Implementation Committee (RIC)
November 24, 2014
MnDOT Training Center, Room #3
Shoreview, Minnesota 55126

Attendees:

Jeff Hulsether (Chair), City of Brainerd Klayton Eckles, City of Woodbury Dave Robley, Douglas County Tim Stahl, Jackson County Mike Flaagan, Pennington County Guy Kohlnhofer, Dodge County Ted Schoenecker, MnDOT State Aid Merle Earley, MnDOT District 4 Chris Kufner, MnDOT Materials Office Jim Grothaus, U of M CTS Hafiz Munir, MnDOT Research

Staff:

Bruce Holdhusen, MnDOT Research Debbie Sinclair, MnDOT Research Joel Ulring, MnDOT State Aid

Absent:

Mitch Rasmussen, Scott County

I. Call to Order (Jeff Hulsether - Chair)

The meeting was called to order at 10:00 AM. Jeff welcomed everyone, thanked them for attending. Attendees introduced themselves. Guy Kohlnhofer from Dodge County was introduced as a new RIC member, replacing Mitch Rasmussen, who will be taking the MnDOT State Aid Division director position.

The agenda was reviewed and approved by the Chair.

Review of September 2014 RIC Meeting Minutes:

A motion to approve the September 2014 RIC meeting minutes was made by Klayton Eckles and seconded by Chris Kufner. Motion approved.

II. Budget Review and Conferences (Debbie Sinclair)

RIC Meeting dates:

The RIC spring meeting will be held in conjunction with the 2015 Minnesota Transportation Conference. The RIC meeting will be Tuesday, March 3, 2015, from 9:30am – 2:30pm, at the Edina County Public Works facility.

The summer 2015 joint LRRB/RIC meeting will be in Walker June 17 & 18. Jeff Hulsether will coordinate with Carole Wiese to make arrangements.

The RIC fall meeting will be Monday, September 14, 2015, 10am – 4pm, at the City of Golden Valley offices.

The RIC winter meeting will be Monday, November 23, 2015, at the City of Woodbury offices.

Debbie Sinclair will talk with Ted Schoenecker to get contact names for Edina, Golden Valley and Woodbury.

Conferences:

A list of 2014 and 2015 LRRB/RIC research conferences was included in the meeting materials. Upcoming conferences were discussed. The NLTAP conference in July 2015 in Savannah, Georgia, was highlighted by Jeff as a worthwhile commitment for RIC. RIC members are encouraged to bring pertinent topics from all conferences to the meeting and note the topics on their trip report.

It was requested to clarify the policy regarding eligibility of RIC members to take unused LRRB spots for conferences in the U.S. It is understood that only LRRB members are eligible international travel.

It was requested to add locations for all conferences on the list.

Budget Review:

- The RIC updated budget status spreadsheet (dated 9/16/2014) was included in the meeting materials.
- Debbie Sinclair noted there is \$134,680 unobligated balance that can be used to fund future RIC projects.

III. Future RIC Project Ideas

The group discussed needs and ideas for possible future RIC projects:

- Concrete roads for local agencies
 - Klayton new concrete construction is not a big issue or need, but reconstruction using concrete poses significant issues regarding access for residents, traffic control during construction, paving long segments; city crews generally are not equipped to do concrete pavement repair. LTAP does have a training class on concrete maintenance and spot repair.
 - Jeff a path forward to meet the need would be a survey and synthesis report on how to manage these projects, from a city perspective. The topic is not about PCC vs. HMA, but just assuming that in a particular situation PCC has been selected, what are the best practices.
 - Klayton curvilinear suburban streets/networks seem to be the most difficult with respect to maintaining local access. It would be instructive to include the recent projects in Shoreview in the report.
 - Chris New concrete pavement specifications and methods should provide a very long-lasting pavement for those applications where buried utility repair or reconstruction is not going to be needed.

Action item #1: Klayton Eckles and Joel Ulring will develop a scope of work or need statement for a TRS project on the topic of best practices for local agencies to manage concrete roadway projects, and bring it back to the RIC March meeting.

- Bridge Deck Maintenance Best Practices Sarah Sondag, MnDOT Bridge Office Sarah updated the RIC on what MnDOT has been doing on the topic research implementation, best practices and training:
 - MnDOT recently completed a research implementation project to compare performance of 12 bridge deck crack sealants on the St. Paul High Bridge. The approved products list will be updated and guidance will be published.
 2-page summary on Bridge Deck Crack Sealants project: http://www.dot.state.mn.us/research/TS/2014/201434TS.pdf

- MnDOT funded a TRS on bridge maintenance painting and is starting a new research implementation project with a coating condition assessment field guide, a flow chart to determine maintenance painting strategies, and planning to create a steel bridge maintenance painting test site.
 Bridge Painting TRS report:
 - http://www.dot.state.mn.us/research/TRS/2014/TRS1404.pdf
- The Bridge Office has hired a consultant to pull together all of the pieces of the MnDOT Bridge Maintenance Manual in a field guide format, expected to be complete in August 2015.
- Bridge Maintenance Academy (BMA) is 3 courses
 - BMA1 is a 5-day class with classroom and field trip. BMA1 will be offered in May 2015 to try to get more local agencies to attend. BMA1 is a prerequisite for BMA2 & BMA3.
 - BMA1, BMA2 & BMA3 registration on the web: http://www.dot.state.mn.us/stateaid/training.html
 - BMA2 & BMA3 will be held in February, 2015, possibly in May in following years.
 - In BMA2 & BMA3 the learners actually build and repair a minibridge and deck, build forms, finish concrete, install expansion joints and glands, etc.
 - Overview of BMA series: http://www.dot.state.mn.us/bridge/pdf/training/bridge-maint-academy.pdf
- There are e-learning video modules that will be ready August 2015 covering best practices for deck flushing, crack sealing, joint sealing, gland repair. These are intended to provide standard background for new workers or refresher, so they are not going out on first job completely cold, and can learn in the field more effectively from other experienced workers.
- Bridge Construction online tutorials: http://www.dot.state.mn.us/bridge/training.html
- MnDOT Detour Compensation Policy
 - Mitch Rasmussen, replacing Julie Skallman starting in December, seemed to support opening the policy for discussion.

Actin item #2: Tim Stahl and Guy Kohlnhofer will bring the information regarding new research results on Impacts of Heavy Loads by Professor Wilde to CEAM and request the county engineers' executive board write a letter to MnDOT State Aid about reopening the MnDOT Detour Compensation Policy.

- Government role in determining construction staging plans
 - This topic was raised by Mitch Rasmussen at a previous RIC meeting based on information he learned at TRB regarding methods to calculate RUCs, contractor time incentives, involvement of local agency in staging plans. The current discussion was that clarification is needed regarding the need from the perspective of municipalities.

Action item #3: The topic raised by Mitch Rasmussen regarding the role of government in construction staging plans will be included on the agenda of the LRRB/RIC joint meeting in June, 2015.

- Aging of Low-Binder HMA
 - Cores have been obtained from low-binder HMA pavements as part of an internal State Aid project to see how they are aging. RIC will discuss

whether this is a potential RIC project or LRRB project after cores have been evaluated.

- FWD analysis tool
 - Current FWD viewer is considered too static, the counties need a tool that can be updated with new FWD data. Joel is working on a State Aid internal project.

Action item #4: Joel Ulring will bring an update to a future RIC meeting on the FWD viewer tool and FWD data collection specifications.

- Snow Plow Traffic Signal Pre-emption
 - o Research Need Statement submitted by City of St. Cloud

Action item #5: Add the research need statement submitted by City of St. Cloud on "Snow Plow Traffic Signal Pre-emption" to the agenda of the summer joint LRRB/RIC meeting.

- Traffic Sign Retroreflectivity Training Mark Vizecky
 - Mark presented a proposal for to develop and deliver a class for hands-on training about measuring sign retroreflectivity to meet the new sign management mandate.

Motion by Klayton Eckles, seconded by Tim Stahl, to have Jim Grothaus prepare a CTS proposal for LTAP to deliver Traffic Sign Retro-reflectivity Training and bring it back to the RIC. Motion approved.

Action item #6: Jim Grothaus will prepare a CTS proposal for LTAP to deliver Traffic Sign Retro-reflectivity Training and bring it back to the RIC.

IV. SRF Contract Update

- Mike Marti and Renae Kuehl, SRF, provided an update on contract #98383
 - o TZD (Task 4 in contract 98383)
 - A TZD fact sheet was distributed for comment
 - TZD Toolkit is being developed

Action item #7: Guy Kohlnhofer will replace Mitch Rasmussen as TL for RIC Task 4 – TZD.

- Sign Management Online Training Course (Task 5.2)
 - The TAP is reviewing the final online course
 - They are recording the course narration audio tracks
 - Videos were shot using Hennepin County crew
 - The course will be online in January 2015

Motion by Hafiz Munir, seconded by Tim Stahl, to allow SRF to provide the edited sign management videos to Hennepin County for their internal use. Motion approved.

- Impacts of Heavy Loads Effects of Implements of Husbandry (Task 7)
 - Mike Marti provided a revised scope for Task 7
 - An additional budget amount of \$8,788 would be needed to produce a YouTube video of tire pavement damage from farm vehicles
- Temporary Traffic Control for Low Volume Roads (Task 9)

- Mike Marti provided a document summarizing a series of scoping meetings and listing a set of potential deliverables
- Potential liability issues had been identified with the scope that had been originally requested, and problems with updating the deliverables as originally proposed
- Mike requested additional budget for Task 9

Motion by Tim Stahl, seconded by Ted Schoenecker, to approve a revised scope for Task 9 of contract 98383, "Temporary Traffic Control for Low Volume Roads" and additional budget up to \$15,000. The amount of \$15,000 will be subtracted from Task 16 "Future Task." The six deliverables proposed in the revised Task 9 will be prioritized. The additional budget requested for a pavement damage video in Task 7 will not be approved. Motion approved.

Action item #8: Add Task 9 "Temporary Traffic Control for Low Volume Roads" to the agenda of the RIC meeting in March for further update and discussion.

V. Marketing and Communication Update

Shannon Fiecke, MnDOT Research Services Information Officer, provided a handout and presented an update of communication activities that she and Nick Busse have been doing on behalf of the LRRB and RIC. Some of these included:

- The Accelerator bi-monthly newsletter, which highlights LRRB and MnDOT transportation research: http://www.dot.state.mn.us/research/accelerator.html
- The Crossroads blog (joint effort between MnDOT and CTS): http://mntransportationresearch.org/
- Articles posted on the Crossroads blog, such as "Making Sense of Colored Concrete" about the LRRB colored concrete research project conducted by MnDOT Materials Office:
 - http://mntransportationresearch.org/2014/09/03/making-sense-of-colored-concrete/
- Tweets and emails by Research Services to drive interested parties to the blog
- Responses from news organizations such as KSTP TV with requests for further information
- TV news stories or other mainstream media coverage of projects and issues, such as the KSTP TV evening news story on colored concrete, highlighting the issues and the LRRB research
- Shannon showed several videos from the LRRB YouTube video channel: https://www.youtube.com/user/Irrbmn

VI. Pavement Management

Jeff Hulsether led a discussion on pavement management topics:

- Mike Marti gave an overview of a 2009 RIC report on the state of pavement management practices in Minnesota. The project conducted interviews and reviewed pavement management software.
- Joel Ulring gave an overview of the Northwest Pavement Management Association conference, held in Washington State in October. One takeaway was that Minnesota has better FWD data than other states, but we are not using the data to the full extent.
 - Guy Kohlnhofer commented that the pavement management software lacks training for the end-user in his county who would be entering the data and extracting the results.

- Jeff commented his city uses mostly visual ratings for making pavement decisions
- Klayton Eckles noted they have calibrated the pavement deterioration curves in the pavement management software, to incorporate the asphalt surface stripping problem.

VII. Round Robin

- Hafiz Munir: Interviews completed for the new engineer position supporting LRRB
 - MnDOT will be reopening the university master agreement list in the next year; provide any recommendations to him for institutions to be included in the solicitation.
 - He is looking for projects that are good candidates for applying a benefits quantification evaluation.
- Chris Kufner: MnRoad has been talking with NCAT regarding a partnership and planning to do two joint projects, one on pavement preservation and one on high-RAP mixes.
- Klayton Eckles: Noted the Mn2050 project has produced several good videos on need and issues related to infrastructure
 - The new LRRB project on Evaluation of Stripping Under Chip Seals is underway and should yield some results by next spring.
- Joel Ulring: MnDOT State Aid is funding a new 10-year pavement aging and preservation study in Crow Wing and Cass Counties, where they will chip seal a section of a new road every year for 5 years and evaluate the aging.
- Tim Stahl (LRRB/RIC liaison): The LRRB will be hearing research proposal presentations on December 3-4, 2014, and funding new projects that will start in 2015.

Action item: Hafiz will forward an email to RIC with links to the research proposals.

VIII. Adjournment

The meeting was adjourned by the Chair at 3:00 PM.

November 24, 2014 RIC Meeting Action Items

Action item #1: Klayton Eckles and Joel Ulring will develop a scope of work or need statement for a TRS project on the topic of best practices for local agencies to manage concrete roadway projects, and bring it back to the RIC March meeting.

Actin item #2: Tim Stahl and Guy Kohlnhofer will bring the information regarding new research results on Impacts of Heavy Loads by Professor Wilde to CEAM and request the county engineers' executive board write a letter to MnDOT State Aid about reopening the MnDOT Detour Compensation Policy.

Action item #3: The topic raised by Mitch Rasmussen regarding the role of government in construction staging plans will be included on the agenda of the LRRB/RIC joint meeting in June, 2015.

Action item #4: Joel Ulring will bring an update to a future RIC meeting on the FWD viewer tool and FWD data collection specifications.

Action item #5: Add the research need statement submitted by City of St. Cloud on "Snow Plow Traffic Signal Pre-emption" to the agenda of the summer joint LRRB/RIC meeting.

Action item #6: Jim Grothaus will prepare a CTS proposal for LTAP to deliver Traffic Sign Retro-reflectivity Training and bring it back to the RIC.

Action item #7: Guy Kohlnhofer will replace Mitch Rasmussen as TL for RIC Task 4 – TZD.

Action item #8: Add Task 9 "Temporary Traffic Control for Low Volume Roads" to the agenda of the RIC meeting in March for further update and discussion.