

Meeting minutes: NRRA Intelligent Construction Technology (ICT) team monthly meeting

Date: 06/02/22
Minutes prepared by: Rebecca Embacher, MnDOT
Location: Microsoft Teams

Attendance

Angerhofer, Paul	Lindblom, Darin J.
Baskin, Andy G	Maskey, Deepak R@DOT
Bautista, Emil (DOT)	Matthews, Donn
Chang, George	Middleton, Alex
Clark, Jason (MDOT)	Mike Gallant (Guest)
Cooper, Stephen J (FHWA)	Nazarian, Soheil
Dao, Lauren (DOT)	Podolsky, Joseph (DOT)
David Ford	Preston, Jim
De Vries, Jeff	Reddy, Supraja
Dukatz, Erv	Sabouri, Mohammad
Dunn, Curt G.	Steyn, Lynnette
Embacher, Rebecca (DOT)	Turgeon, Curt (DOT)
Haaland, Nathan A.	Varner, Jonathan C.
Hill, Brian C.	Velasquez, Raul (DOT)
Hoegh, Kyle (DOT)	Walker, Jacob
Kowalski Tim	Worel, Benjamin (DOT)
Laikram, Nars	Zegeye, Eyoab (DOT)

Decisions made

- ICT team members will present at one of the research pays offs webinars this fall. Multiple presenters to share the various things that technologies can provide to for each of the other specialty teams. Maybe 10 minutes per topic to give others a better idea of what this team does and can do for them as it overlaps with all areas.
- Present at other team NRRA meetings regarding the tools and resources that ICTs provide.

Action items

- Determine NRRRA team members to present at research pays off and rodeo of topics.
- Present at other team NRRRA meetings regarding the tools and resources that ICTs provide.

Agenda

- Minnesota Transportation Conference and Expo Hall Debriefing (All)
- MnROAD Construction (Worel)

Next meeting

Date: August 4, 2022

Time: 10:30-11:30AM CST

Location: Microsoft Teams

Agenda items: TBD

Meeting notes

Minnesota Transportation Conference and Expo Debriefing (All)

(Hoegh) DPS training – great turn out. Provided training from ! to Z to get a full density coverage map that can be trusted behind the final roller. Attendees comprised of agencies, contractors, FHWA, and vendors. Great representation. Received positive feedback.

(Embacher) Veta training – great turn out as well. Approximately 70 individuals in the room during the training. The screen was difficult to view, however, the attendees were able to follow through the training well. Received positive feedback.

(Kowalski) ISIC NA Chapter meeting – good turn out. Two new members joined chapter after meeting. Went through listing of projects that the NA chapter is working on during the past months. Discussed the upcoming international conference in Portugal. The conference will move back to the US in 2024. Still finalizing a location, but it is looking like it will be in Orlando, Florida. A lot of great ideas from members on presentations for this venue and great take aways from the presentations at the Transportation conference.

(All) Great turn out of attendees at ISIC track. Disappointed that it ran at the same time as the NRRRA meetings, as this presented some states from attending. Panel discussion at the end of the conference was still well attended even though a large number of conference attendees started leaving after lunch. A summary of the ISIC track is available on the ISIC website at: <https://www.is-ic.org/2022-mtce-isic-track-report-posted/>.

(Worel) MnROAD tour – People were tired after a long week. Expected 100 attendees, but only 35 participated. The smaller number actually made it easier to provide good tours. Tours were provided of the various test

sections and of equipment. Hoegh also demonstrated the DPS technology. Will discuss the schedule for future years with the planners. Wondering if it wouldn't make more sense to have the tour the evening before the conference starts to have more fresh and interested participation.

(Angerhofer) Was wondering if ISIC membership has been advancing and how we can better hit more areas (people) – make them aware of the tools and resources that are available through the various technologies. Concerned that we are always talking to the “same” people.

- (Kowalski) Currently have 170 members in the North America Chapter.
- (Chang) Global membership doubled during pandemic due to webinars. Webinars can be viewed at: <https://www.is-ic.org/conferences/isic-webinars/>.
- (Nazarian) The ICT team should present to other NRRRA members (teams), as most might not know what ICT can do for them. Get them more involved. “Some people have problems and are looking for solutions, while others have solutions and are looking for the problems.” Maybe joint meetings should be held every 6 months (e.g., 2 hour meeting, with 30 minute presentations per team) and the meetings for that given month are cancelled. The annual, in-person meeting, can replace one of these joint meetings.
- (Mansell) Are the universities teaching about these technologies? Maybe ISIC should start student chapters in some of the Civil Engineering Departments. It would be good to get the younger generation engaged early on.

MnROAD construction update (Worel)

McCrossan starting work next week. Caterpillar has done a great job with milling during last 2 weeks and will be done today. Working on instrumentation and coordination of different groups that will be out on the project. Some asphalt paving end of June. Specialty mixes – later in July, along with concrete paving around the 25th going for 9 days. Contract ends 9/2.

(Dunn) can NRRRA members visit the MnROAD reconstruction?

- (Worel) Yes. The following safety protocol must be followed: (1) Wear safety boots, vests, and hard hats. (2) Contact Worel (ben.worel@state.mn.us) or Tabery (jeffrey.tabery@state.mn.us) to coordinate site visit.

(Kowalski) Can the construction schedule be shared on-line with members?

- (Worel) Yes. A website exists and it will be updated next week. Just a friendly reminder that schedules can change quickly due to weather and/or other unforeseen events. The website is at: <http://www.dot.state.mn.us/mnroad/construction/index.html>.

(Embacher) What is the status of 3G networks being removed.

- (Angerhofer) AT&T 3G dropped off in February (North America). Not too much 3G left out there. 5G – a lot of investment being put into by carriers. Carriers are hoping to extend life for 4G for

longer period of time. Data cellular coverage is needed for data transfer and connection to VRS networks for high level satellite corrections (cellular corrections for RTK).

Equipment demonstrations

(Kowalski, Oman, Laikram) ARTS demonstration is occurring today in Wisconsin. Only have been paving for about 1 hour and things are looking good. First demonstration project for proof of concept was completed last year in Iowa. Again, this is to develop procedure for measuring ride behind pavers, similar to what the concrete industry did about 10-years ago. More information on this project can be found at:

<http://www.dot.state.mn.us/mnroad/nrra/structure-teams/intelligent-construction/asphalt-real-time-smoothness.html>.

(Embacher) Seismic demonstration and training will occur in mid-June. The equipment will be delivered to MnDOT staff at this time. MnDOT will bring equipment out to projects during this summer to collect pilot data.

More information on this project can be found at: <http://www.dot.state.mn.us/mnroad/nrra/structure-teams/intelligent-construction/seismic.html>.