

To: Members of the IACMI Infrastructure & Construction (I&C) Working Group
From: John Unser
Subject: Summary of I&C Working Group meeting held 4/11/23

The eleventh meeting of the Infrastructure & Construction (I&C) working group was held on April 11, 2023. This meeting was held virtually using Microsoft Teams and attracted 21 attendees. John Unser and Joe Fox co-facilitated the meeting, which lasted two hours.

This summary is accompanied by a pdf file that contains all the slides shown during the meeting. Slide 2 shows the agenda and the slide numbers for each topic. The entire slide deck can also be accessed in the folder for the I&C working group on Microsoft Teams.

[IACMI I&C working group, final \(fox, unser 04-11-23\).pdf](#)

Here is a link to the recording of the meeting:

[I&C working group mtg recording 4.11.2023.mp4](#)

Joe Fox opened the meeting by reviewing the objectives of the working group and tying them to the agenda (slides 3-5). He talked about the exciting news that DOE announced the renewal of IACMI for another 5 years. Unfortunately, it did not include infrastructure and construction as one of the topic areas.

John Unser talked about the first meeting of the funding committee (slides 6-36). Nine members of the working group have volunteered to serve on the sub-committee, which will be chaired by John Unser. The subcommittee will keep an eye on Grants.gov to keep track of opportunities. The DOT Navigator is a great tool for finding grants:

<https://www.transportation.gov/dot-navigator> There are several NOFOs that are out that or soon to be out that are applicable. Mr. Unser also presented his lessons learned from the submittal of a RAISE grant for 6 more bridges in Tennessee. The key is to work closely with State DOTs and Local agencies.

Joe Fox gave an update on Transportation Resilience and Adaption Centers of Excellence (TRACE) Grants. (Slide 22) The program is authorized by not appropriated so we continue to watch for NOFO. Joe also talked about University Technology Centers (UTCs). There are three levels: National, Regional and Tier 1. Joe described the different centers that were funded this year.: One National center, One Regional center, and four Tier 1. Several IACMI members were involved in these centers. The WG will continue to investigate how IACMI can be involved.

The next portion of the meeting (slides 38-) was devoted to updating two potential R&D projects:

- 1) *Use of Trimer's fire-resistant resin for I&C applications:* Trimer Technologies, Orenco, UDRI, WSRI, and IACMI are teaming up on a project to fabricate and test infused made with Trimer resin. Results were presented on FR tests E1354 and E84. E119 testing is still in the works. (slides 38-48)
- 2) *Use of recycled wind blades in I&C applications:* Steve Nolet gave a presentation on using recycled glass fibers in Cured In-Place Pipe (CIPP) TPI Composites is working with Textech Industries, Carbon Rivers, and Enviroliner to develop staple polyester and stable recycled glass felt for CIPP. (slides 49-55)
- 3) *Lifetime Predictions:* Joe Fox presented the development of this project. The team has met with DOT Sounding board that represents five states two times. Key take away need lifetime durability data. Based on the feedback the project has morphed to "Lifetime Predictions". New objective is to deliver data & information needed by state DOT's to inspire their confidence in lifetime assumptions for FRP composites in cost analysis for transportation infrastructure. (Slides 56-66)
- 4) *Decarbonization:* Joe Fox talked about what was happening with the Decarbonization Subcommittee. John Carson of the AltusGroup gave a presentation at the last meeting on how C-Grid can reduce the amount of concrete required and lower CO2 emissions. Joe also talked about the ACMA Composites Technology Day and the presentation he jointly gave on "Lowering CO2 Emissions with FRP Composites". (Slides 67 -88)

On the education front, Joe Fox talked about the ACMA's Construction and Infrastructure Tech Day Tuesdays which were held every Tuesday afternoon in March. Several presentations were done by active IACMI members. You can still get the presentation on demand at: <https://acma-org.my.site.com/CITechDay23/registration> (Slides 89 – 100). Joe also talked about the SAMPE Annual Meeting in Seattle where several of the IACMI members/staff presented. Specific to infrastructure, Joe presented on "Opportunities for Composites in Infrastructure: Now and in the Future" and there was a panel on "Current & Emerging Applications of Composites in Infrastructure". (Slides 102 – 107)

The next working meeting will coincide with the IACMI Members Meeting in Knoxville June 20-22, 2023. The I&C SG meeting planned for Tuesday, June 20 3:00 pm to 4:30 pm EST. (Slides 108-109)

The **action items** are summarized on slide 110 and are copied here:

- Distribute information from today's meeting Slides, recording, meeting summary
- Plan the working group meeting for the annual meeting Tuesday, June 20 3:00 pm to 4:30 pm EST.
- Continue to pursue the parallel path strategy for I&C projects
 - Members can submit ideas to John or Joe
 - Continue to monitor DOT Navigator for TRACE and other opportunities
- Funding sub-committee Monitor grants.gov for NOFOs from the DOT
- Steve Nolet present CIPP results at the annual meeting
- Contact John Unser for tips and lessons learned about applying for RAISE grants

Comments/questions/suggestions can be directed to Joe Fox (foxconsulting147@gmail.com) or John Unser (john@compositeapplicationsgroup.com).