

TRB ABC Joint Subcommittee [AFF00(2)]

2018 Annual Meeting Minutes

January 9, 2018

3:45 p.m. – 5:30 p.m., Marriott Marquis, Dogwood (Mezzanine)

Members in attendance:

Ahmad Abu-Hawash, Behrooz Far, Bill Oliva, Carmen Swanwick

Liaisons in attendance:

Atorod Azizinamini, Tim Cupples, Waseem Dekelbab, Ben Graybeal, Finn Hubbard

Friends and guests in attendance:

Upul Attanayake, David Bodowski, Patricia Bush, Eric Carleton, Reid Castrodale, Zhou Cheng, Matt Colon, Jeremiah Dixon, Michael Dopko, Richard Dunne, Jamal Elkaissi, Alisha Elmore, Gregg Freeby, Robert Gale, David Garber, Romeo Garcia, Aaron Guyette, Zach Haber, Joel Hahm, John Holt, Reggie Holt, Emilie Hudon, Lynn Iaquina, Mark Kaczinski, Ahcene Larbi, Pascual Mauricio, Tom Ostrom, Brian Pales, Daniel Reider, Paul Rowekamp, Matthias Schueller, Behrouz Shafei, Don Streeter

See attached sign-in sheet. Att_01_2018 AFF00(2) TRB ABC Subc Mtg Sign in Sheet

Agenda

See attachment: Att_02_2018 AFF00(2) TRB ABC Sub Mtg Agenda_12-31-2017_final

Welcome/Introductions

Ben Beerman, Subcommittee Chair, could not be in attendance for the meeting. Mary Lou Ralls, Vice Chair, was not able to attend either due to illness. Carmen Swanwick welcomed all to the meeting and asked participants to sign in on the sign in sheet.

2017 Meeting Minutes

Mary Lou had sent out the 2017 Subcommittee meeting minutes prior to the meeting for review. William Oliva moved, Ahmad Abu-Hawash seconded. No discussion. The minutes were approved with no changes. See attachment: Att_03_2017 AFF00(2) TRB ABC Subc Mtg Minutes_06-30-2017_approved

AASHTO T-4 ABC Update

Carmen Swanwick gave an update on T-4 activities – no presentation. The AASHTO ABC Guide Specification (created under NCHRP 12-102) is being finalized and will be published later this year. NCHRP 12-98 on PBES tolerances has been completed and will be published later this year as well. T-4 submitted a NCHRP 20-05 project related to bridge demolition that was accepted and is currently ongoing.

There are also several pooled fund studies that are either approved or ongoing: prefabricated concrete bridge rails (led by Iowa DOT), BIM for bridges and structures (led by Iowa DOT), and additional seismic research on couplers through NCHRP.

NCHRP ABC Update

Waseem Dekelbab reported on the status of NCHRP 12-98, 12-101, 12-102, 12-95A, 12-96, and 12-105. He said the two products from 12-98 (PBES Tolerances and Recommended Guidelines for Dynamic Effects of Bridge Moves) are finished, but AASHTO is deciding whether or not to publish them as AASHTO documents; state DOTs may request access to these documents now. The NCHRP Research Report 864 (for 12-101, Seismic Evaluation of Bridge Columns with Energy Dissipating Mechanisms) is available for free on the NCHRP website. He said that the research report for 12-102 (Recommended AASHTO Guide Specification for ABC Design and Construction) will be available on their website shortly, and the actual specification will be available late summer. The RFP for NCHRP 12-95A (AASHTO Guidelines for Adjacent Precast Concrete Box Beam Bridge Systems) was re-released with RFP closing on 1/22/2018; the project budget is \$400,000. NCHRP 12-96 (Simplified Full-Depth Precast Concrete Deck Panel Systems) will hopefully be completed June/July 2018.

See attachment: Att_04_2018 AFF00(2) TRB ABC Subc NCHRP Update

TRB Committee Liaisons ABC Updates

No updates from committee liaisons. Dick Dunn mentioned that General Structures will support any research ideas from this committee.

FHWA Turner-Fairbank Update

Zach Haber reported that FHWA has an active ABC program, particularly with connections and UHPC. He discussed 7 ongoing or completed projects.

1. Adjacent Box Beam Connections: UHPC joint performance compared to conventional joint performance; reports are available on FHWA website
2. UHPC Material Characterization: five different UHPC products (4 commercially available proprietary products and 1 mix design available for licensing) were evaluated and compared using standard tests and tests developed at FHWA; published articles in ASPIRE and ABC National Conference proceedings; report will be out soon
3. Connection Materials Research
 - a. Using Nanotechnology Technology to Enhance Bond in PBE Connections
 - b. Chloride Ion Transport and Corrosion Potential Within Connections (recently started)
4. AASHTO Guide Specification for UHPC: currently developing; hope to have draft document in 2019
5. UHPC Use in Superstructure Shapes: conceptually what is possible with UHPC (300 foot span)

6. Novel Deck-to-Girder Connections: simplified designs where studs don't pass through the deck; small and large-scale tests; some findings in ABC National Conference proceedings, report to come
7. UHPC for Bridge Deck Overlays: report available summarizing UHPC deck overlays used to rehabilitate deteriorating decks in Delaware and Iowa

See attachment: Att_05_2018 AFF00(2) TRB ABC Subc FHWA TFHRC Research Update

Industry Organization Updates

No industry liaisons were in attendance.

ABC University Transportation Center (ABC-UTC) Update

Atorod Azizinami reported on the activities of the ABC-UTC. The ABC National Conference was held in December 2017; over 600 people were in attendance. He then played a video highlighting the conference, which will be available on the ABC-UTC website. The next conference is scheduled for December 2019 in Miami, Florida.

See attachment: Att_06_2018 AFF00(2) TRB ABC Subc FIU ABC2017 Update Video

He mentioned that US DOT is making more of an emphasis on technology transfer. The ABC-UTC will be continuing their technology transfer efforts: monthly webinars, quarterly research seminars, annual in-depth web trainings, and bi-annual national and international conferences. The webinars, research seminars, and in-depth web trainings are all free and qualify for PDHs. These activities are all highlighted in the 2016 Annual Highlights Report, which was distributed to attendees and is available on the ABC-UTC website.

State DOTs who would like to collaborate on any research efforts related to ABC are encouraged to contact Atorod and the ABC-UTC.

Carmen highlighted the ABC-UTC website and some of the resources available on the website. Attendees were encouraged to explore the site and the available resources.

ABC-UTC Research Database

David Garber presented on ABC Research and Project Databases. He showed both databases, which are currently available on the ABC-UTC website, and highlighted the submission procedures. Attendees were encouraged to explore the databases and submit completed ABC projects and research.

See attachment: Att_07_2018 AFF00(2) TRB ABC Subc ABC-UTC Research Database

ABC Activities for 2018 TRB Annual Meeting

TRB ABC Joint Subcommittee [AFF00(2)] sponsored several different sessions at the 2018 TRB Annual Meeting:

- Longitudinal Deck Level Connections
- Recent Innovations in Bridge Construction (UHPC Overlay; Decision Tool)

ABC Activities for 2019 TRB Annual Meeting

Paper Session:

- General Call for Papers
- Updated research from ABC NCHRP
- Virtual reality, visualization, and technology

Workshop:

- SHRP2 R04 Toolkit (4 hour)
- Contractor involvement in relation to ABC / ABC Contracting Methods case studies

Poster Session

- General Call for Posters

RNS

Bill Oliva asked about incentive/disincentive project that was submitted by the construction committee last year. T-4 is currently looking at this RNS and will possibly combine it with another RNS.

Meeting minutes were kept by David Garber.