

# New England Transportation Consortium

## **NETC Advisory Committee Meeting Notes**

**DATE:** Tuesday, June 23, 2020, 11:00am - noon ET

LOCATION: GoToMeeting Link: <a href="https://global.gotomeeting.com/join/628554149">https://global.gotomeeting.com/join/628554149</a> Dial-in: 646-749-3122;

Access Code: 628-554-149

Alex Bernier, UConn	Emily Parkany, VTrans
Jim Bryce, UME	Dale Peabody, MaineDOT
Colin Franco, RIDOT	Greg Rowangould, UVM
Brian Hirt, CTC & Associates	Ann Scholz, NHDOT
Chris Jolly, FHWA	Kirsten Seeber, CTC & Associates
Andrew Mroczkowski, ConnDOT	Jo Sias, NHDOT
Matt Mann, UMass	Maina Tran, CTC & Associates
Tanya Miller, VTrans	Nicholas Zavolas, MassDOT
Deidre Nash, NHDOT	

#### 1) Andrew Mroczkowski, Research Unit, ConnDOT

- Andrew is a new Advisory Committee member.
- Andrew worked 20+ years on product evaluation and has experience reviewing NETC proposals.
- He has replaced Flavia Pereira in the Research Unit and taken over her duties.

#### 2) Open Project Review (June 2020)

Project # and Title  18-1: Development of MASH Computer Simulated Steel Bridge Rail & Transition Details	PI, Organization AC Liaison CTC Project Manager TC Chair Chuck Plaxico, Malcom Ray, Roadsafe LLC D. Peabody K. Seeber Jeff Folsum, ME	Update This project is complete.	End Date Budget 6/1/20 \$230,244
18-2: Framework of Asphalt Balanced Mix Design for NE Agencies	Walaa Mogawer, UMass Dartmouth A. Scholz M. Tran Joseph Blair, NH DOT	Tasks 3 is near completion. Tasks 4-5 are in progress. A project update status meeting was held on 6/5/20. The PI presented survey results to the group. Casey Nash (ME) replaced Derek Nener-Plante on the TC. Project is on track.	12/31/20 \$127,499
18-3: Integration of Unmanned Aircraft Systems into State DOTs	Adrienne Lindgren, WSP E. Parkany M. Tran Jeffrey DeCarlo, MA DOT	Task 3 is almost complete. Task 4 is in progress. A project update meeting was held on 5/27/20. Project is on track.	3/31/2021 \$146,632

Project # and Title	PI, Organization AC Liaison CTC Project Manager TC Chair	Update	End Date Budget
19-1: Curved Integral Abutment Bridge Design	Adam Stockin, WSP E. Parkany K. Seeber Alex Bardow, MA DOT	WSP sent a revised proposal for an additional task of instrumenting/monitoring one VT bridge on 6/22/20. CTC sent the proposal to the TC and AC DOT members with a due date for comments on 6/29/20.	6/30/2022 \$151,316
19-2: Multi-Scale Multi-Season Land-Based Erosion Modeling and Monitoring for Infrastructure Management	Aimee Mountain, GZA A. Scholz M. Tran Neil Olson, NH DOT	Task 1 is completed. Task 2 is in progress. A project update meeting was held on 5/20/20. Project is on track.	6/30/2022 \$148,035
19-3: Experimental Validation of New Improved Load Rating Procedures for Deteriorated Steel Beam Ends	TBD  N. Zavolas  K. Seeber  Alex Bardow, MA DOT	The contract should be going through ME's pre-audit in the Contracts Office soon.	TBD \$180,000
20-1: In-Service Performance Evaluation of NETC Bridge Railings	TBD D. Peabody K. Seeber Jeff Folsum, ME DOT	The TC has five members. MA does not have a representative. The SOW review meeting is scheduled for 6/23/20.	TBD \$120,000
20-2: Current Status of Transportation Data Analytics and Al Pilot Case Study Using Artificial Intelligence (AI)	TBD A. Scholz M. Tran Susan Klasen, NH DOT	This project has a full TC. The SOW review meeting is scheduled for 7/8/20.	TBD \$200,000
20-3: Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections	TBD D. Peabody M. Tran John "Sam" Maxim, ME DOT	The TC has five members. RI does not have a representative. The SOW review meeting scheduled for 6/25/20.	TBD \$175,000
20-4: New England Connected and Automated Vehicle Legal and Regulatory Assessment	TBD E. Parkany/N. Zavolas K. Seeber Daniel Sullivan, MA DOT	A second SOW review meeting was held on 6/11/20. Daniel Sullivan is revising the SOW based on additional TC comments and will send it to the TC this week. The final SOW review and approval will happen via email.	TBD \$100,000
Re-Creating NETC		Funds have been set aside should the AC want to move forward with this effort. See below for discussion	TBD \$50,000

#### Discussion:

• 19-1 – Emily spoke to Jim Lacroix about WSP's revised proposal for the additional task. Jim is frustrated that the new task would calibrate a new model on data that was collected eight years ago, and was used to calibrate an IAB model then. It seems redundant. Also, there are few details on how the task would work in terms of traffic control, how to place the sensors, what kind of live loads, etc. The proposal also glosses over the geofoam issue. (The bridge they would monitor used geofoam backfill versus traditional backfill). The TC will probably have concerns about the revised proposal.

- Emily wants the DOT members to check with their representatives to discuss the value of the proposal. Emily can work with individually with DOT members on how to talk to their TC members about this.
- Colin What are we trying to get from this project? A model for NE states (designing an FEM model) or analyzing one bridge? How can WSP generalize a model from one bridge that is not standard? Dale The TC will look at it and make suggestions to the AC. The AC should wait to hear from their TC folks first on this. He thought this proposal was dead on the vine anyway.
- Dale Do they need to talk to their TC members or wait to hear from them on this? The AC can't act until they hear from the TC members. Action item: Kirsten will get all comments from the TC, work with Alex and Emily to come up with a recommendation and get a final decision from the TC.
- 19-3 Dale Shipping the beams to UMass will cost \$40,000. This would be a direct expense at UMass, and ME would reimburse them. UMass wanted overhead added to the direct expenses, which can't be done. The budget will remain at \$180,000. If the project requires beams to be shipped, then hopefully the DOT where the beams are coming from will cover the costs. If not, then we will have to go to plan B.
- 20-2 Colin Since AI is a sophisticated topic, is there a possibility to get bring on someone to help the TC with the project, such as a university researcher or a consultant? Emily – There has been lots of discussion about data sciences at the transportation agencies. Hopefully the TC would say further expertise would be needed for the project. It may be needed at the implementation stage.
  - Colin There was an NCHRP project that focused on AI and the panel didn't have much experience or knowledge with it. He's thinking we might be in the same situation. Could we get a university person to volunteer to be on the panel? Dale if someone has someone in mind, he's open to having them be on the TC. Ann She trusts her TC member's knowledge. Colin can bring this up to the TC at their SOW review meeting. Colin Can the AC members do a little digging at their universities to find someone before the SOW meeting?
  - Andrew They are working on a problem statement from UConn-Hartford on using AI. The project is being reviewed by CT's bridge staff. She may be a person to approach.
  - Alex and Matt suggest a peer review. Greg NETC is funding this project to find people to do this work (and pay them). He sees getting a volunteer as duplicative. A peer review of the final report is more realistic. This will tell the TC if there are flaws in the project. He feels asking faculty to volunteer on the project is a big ask. Asking them to peer review (with maybe a small financial payment), is more reasonable.
  - Ann Leave the issue until the TC reviews the SOW, so they can discuss it. Emphasize that
    the results should be useful to the states. Dale Put it in the TC's lap and let them toss it
    around and see what they say.
  - Ann –NH has on-call consultants that set up AI products. Maybe someone from those companies could review the SOW. Dale – This should happen after the project is awarded to avoid conflict.
- 20-3 Matt There is a similar project that just started in MA. Is there any process to ask MA what they are doing? Dale He hopes that the MA TC member would know about this.
  - Emily TIDC is planning a competitive project related to this. She strongly suggested their project be complementary to the NETC project. There is also a similar NCHRP project. Jim This is a huge topic so there are opportunities to pursue non-conflicting research.

- Re-creating NETC Dee and Ann put together a draft SOW and sent it to the Transportation
  Agency Advisory Committee (TAAC) members to review. CTC has received this today so they
  haven't digested it yet. The funds have been set aside and the TAAC wants to get started. They
  will wait to hear from CTC if they need task clarification.
  - ~ Dale This effort is not specifically a new task in the CTC contract but added to an existing task.
  - ~ Ann The schedule was intentionally left blank for CTC to fill. This is an in-person effort but wants to hear if the group needs it to be in-person or virtual.
  - ~ Emily Anticipating this would be a literature effort to see what other consortiums are doing.
  - Colin Tom Harmon from FHWA's Office of Innovation and implementation is willing to talk to the TAAC about his findings from their implementation efforts.

#### 3) Financial update

- \$1.9M fund balance
- Question for Colin Did RI made their FFY20 transfer? Colin will ask Christos. **Action item**: Dale will send Colin a reminder email.
- The first CTC contract is complete and the final invoice is pending. CTC is on the second contract.
- Project 18-1 has been closed out.
- Total funds under contract = \$1,219,036.12. Balance = \$680,963.88 (\$1.9M \$1.2M = \$680,963.88) New contracts = \$775,000.
  - We are at negative \$94,000 but it includes years three and four of the CTC contract. Plus,
     RI's contribution is not accounted for.
  - ~ Financially, the pooled fund is actually sitting pretty well.
- Chris FHWA has released the funds from TPF-5(222). In the next week, they will transfer back
  the remaining funds to each state and the states will transfer those funds to ME. Action item:
  Chris will copy the state AC members so they know the process is starting.
  - RI and CT have two transfer requests because they are getting back travel money. Emily VT has processed the RI and CT travel amounts as separate transfers.
  - ~ Emily –Where is CT's FFY20 transfer? Dale CT did two transfers in FY19.

#### 4) NETC Newsletter – Brian Hirt (CTC & Associates)

- The group discussed sending out a monthly/bi-monthly newsletter to the NETC distribution list that would feature NETC-related activities, as well as links to research activities at the member agencies.
- Brian showed examples of news items from <u>No Boundaries</u> and <u>Clear Roads</u>. CTC has gotten
  away from the traditional type of newsletter that contain many stories, such as what TRB
  distributes. They have found folks don't have the time or interest in this. CTC pushes out
  individual news items instead, as they happen. News items are posted to the pooled funds'
  websites and Constant Contact sends emails to the mailing lists.
  - ~ The No Boundaries pooled fund members really like this style. They see immediately by the subject line if they want to keep, forward or delete the email. They don't feel like they are getting spammed and find it very helpful.
- Brian CTC can manage this for NETC. \$50/year plug-in that automates the stories being sent through Constant Contact.
- Emily, Ann and Dale Like the idea.
- Emily It's interesting that folks are annoyed by newsletters. Brian They aren't necessarily annoyed but less likely to read the entire thing.
- Ann Do you send out an announcement that new stories are on the website? Brian It goes
  out via an email that announces the item is on the website and the story would be in the email.

• Brian – CTC will put more work into this, including what it will look like. Ann – This fits in well with the website refresh.

#### 5) Implementation - Closeout webinars for closed projects

- 18-1: Development of MASH Computer Simulated Steel Bridge Rail and Transition Details
  - Webinar is scheduled for 7/16/20 from 10:00-10:45am ET. Action item: Kirsten will send invitation to the NETC distribution list this week.
- 15-4: Quick Response Project: Optimizing Quality Assurance (QA) Processes for Asphalt Pavement Construction in the Northeast
  - ~ Holdover item from 5/26/20 AC meeting. Further discussion?
  - ~ Ann If a state can implement this project, talk to a neighboring state to see if they can put it into practice.
  - Colin Would be worthwhile to get folks interested. This coming fast and furious for collaboration between states.
  - ~ Ann Keep on the agenda for next month.
- All webinar recordings/presentations can be found on the project pages or here.

#### 6) Off-cycle Projects

- Ann This topic will be rolled into the Re-creating NETC effort.
- Follow up to 15-1 (bat project) NETC might see an off-cycle problem statement from Rebecca Martin, which Ann would like the group to consider.

#### 7) NETC Website Refresh

CTC's webmaster is working on the new theme and suggested changes.

#### 8) Symposium – Check in

- Transportation Infrastructure Durability Center conference is scheduled for August 12<sup>th</sup> & 13<sup>th</sup>.
  - Are DOT folks attending this? Would this conference impact a potential NETC Symposium in 2021?
    - Dale Answering for Jim. There will be up to 20 presentations on TIDC work. They really want participants from state DOT practitioners. He doesn't feel this would impact an NETC Symposium because the NETC Symposium would focus on NETC projects.
- In-person event or virtual?
  - Planning for an in-person event will need to begin in late fall (Oct/Nov). A virtual event could be planned in early 2021.
  - Virtual Zoom offers virtual breakout rooms. Action item: CTC will check to see if GoToMeeting has a similar option.
  - Emily She is interested in a June 2021 virtual Symposium. Ann How would successful it would be as a virtual event? She would rather have it in person. Dale We should hold off as long as possible on deciding in-person or virtual. Virtually, we would miss the interaction of folks meeting in person.
  - Dale The discussion between now and the fall deadline should center on what NETC wants to accomplish with the Symposium. Ann – If we follow the same format as the 2019 Symposium, then the AC needs to choose the SME topics.
  - Emily VT is hosting a virtual poster session in September and hopes the NETC projects would be represented. She will be sending out information in the next few weeks. This is not the same as a Symposium. Dale – Would be interested in the feedback on this.

~ **Action item:** Maina will check with the Grappone Center on their availability for in-person events.

#### 9) Other Business

- NEMTEM and other potential SME meetings Would any meetings be occurring in 2020? Since folks
  would probably not be traveling, would the groups need assistance from CTC with a virtual meeting?
  - ~ Dale This is on hold for now.
  - Ann Hasn't heard anything about NEMTEM. Dale NEMTEM did have a virtual meeting in May.
- RI Peer Exchange Colin There is no update. Emily They need a virtual option because VT staff are unable to travel for the remainder of 2020.
- The NETC meeting will be extended to 90 minutes. **Action item**: Kirsten will resend the invitation.

### 10) Adjourn

Next meeting: July 28, 2020 from 11:00am – 12:30pm ET