

### **NETC Advisory Committee Meeting Minutes**

Tuesday, January 25, 2022, 11:00am – 12:30pm ET

#### **Attendees:**

Ulrich Amoussou-Guenou, MaineDOT	Emily Parkany, VTrans
James Bryce, UME	Dale Peabody, MaineDOT
Vinka Craver, URI	Ann Scholz, NHDOT
Brian Hirt, CTC & Associates	Kirsten Seeber, CTC & Associates
Matt Mann, UMass	Jo Sias, UNH
Tanya Miller, VTrans	James Sullivan, UVM
Andrew Mroczkowski, ConnDOT	Nicholas Zavolas, MassDOT
Dee Nash, NHDOT	Melanie Zimyeski, ConnDOT
Lily Oliver, MassDOT	

1) Open Project Review (January 2022)

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	The PI is submitting Task 3 (design guidelines) and draft final report (Task 4) to the TC by 1/28/22.  Kirsten will schedule a TC meeting to discuss.	3/31/2022 \$151,316
19-3: Experimental Validation of New Improved Load Rating Procedures for Deteriorated Unstiffened Steel Beam Ends	Simos Gerasimidis, UMassAmherst N. Zavolas K. Seeber Matt Weidele , MA DOT	A TC was meeting held on 12/16/21. The first beam (CT) was tested and it went well. The researchers are processing the data collected.	3/31/2023 \$179,995

Project # and Title	PI, Organization AC Liaison CTC Project Manager TC Chair	Update	End Date Budget
20-1: In-Service Performance Evaluation of NETC Bridge Railings	Christine Carrigan, RoadSafe D. Peabody K. Seeber Jeff Folsom, ME DOT	The PI provided the draft final report for review by the TC. Kirsten will schedule the next TC meeting to discuss the final report.	6/30/2022 \$119,978
20-2: Current Status of Transportation Data Analyticsand A Pilot Case Study Using Artificial Intelligence (AI)	Yuanchang Xie, UMass Lowell A. Scholz K. Seeber Susan Klasen, NH DOT	The PI will provide the final Task 1 (Review of Current Data Collection and Utilization Practices) report by the end of January. The next TC meeting is scheduled for 2/14/22.	3/31/2023 \$179,995
20-3: Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections	Kevin Ahearn, AECOM D. Peabody K. Seeber John "Sam" Maxim, ME DOT	The majority of field work for Task 2 (Field Demos) is complete with only one field day remaining. The Task 2 report will be submitted to the TC on 2/11/22.	3/31/2023 \$174,931
20-4: New England Connected and Automated Vehicle Legal and Regulatory Assessment	Greg Rodriguez, Stantec E. Parkany/N. Zavolas K. Seeber Pete Calcaterra, CT DOT	The TC meets monthly. The PI submitted a first draft final report in December. A revised draft will be submitted on 1/27/22. The TC will meet twice in February (2/3 and 2/24) to continue to work through the final products. The final report is scheduled to be submitted on 3/3/22, with the final meeting on 3/24/22.	12/31/2021 \$153,746
Re-Creating NETC	Kirsten Seeber/Chris Kline, CTC & Associates A. Scholz K. Seeber A. Scholz	CTC submitted a draft final report to the TAAC on 1/7/22. One comment was received. CTC will address the comment and finalize the report.	8/12/2021 \$50,000
21-1: Quality Review and Assessment of Pavement Condition Survey Vehicle Data Across New England	?, Wood Environment & Infrastructure Solutions A. Mroczkowski K. Seeber John Henault, CT DOT	ME is working on the signatures for the contract.	18 months \$200,000 proposed
21-2: Sustainable Biomass- Based Sealant for Service Life Extension of Concrete Structures and Pavements	TBD  U. Amoussou-Gueno  K. Seeber  Joe Stilwell, ME DOT	Joe Stilwell sent an email to the TC on 1/18/22 letting them know this project will be dropped due to NETC ending in a couple of years. He doesn't feel there is adequate time to get the project executed. Four of the TC members responded that they are fine with this action.	24 months \$210,000 proposed

Project # and Title	PI, Organization AC Liaison CTC Project Manager TC Chair	Update	End Date Budget
21-3: Initiating Seed Production for Effective Establishment of Native Plants on Roadsides in New England	TBD A. Scholz K. Seeber Arin Mills, NH DOT	ME is waiting for documents from the selected researcher.	36 months \$200,000 proposed

#### **Discussion:**

- 19-3 Kirsten will check where the research team is with testing the VT beams.
- Re-Creating NETC The Advisory Committee will decide the future of the pooled fund. If it will
  continue, then how NETC looks and acts moving forward would be finalized.
  - Once the final report is done the AC will decide if it will be posted on the NETC website.
- 21-2 The AC voted unanimously to accept the recommendation of the Technical Committee to not
  move forward with this project due to both not enough time and that there is already a soy biomass
  sealant on the market.
- 21-3
  - Ann Technical Committee needs to discuss that coordination would be needed for the last year of this project since the pooled fund will be finished. Ann would handle the QPRs.
  - Kirsten will schedule the kickoff meeting.

#### 2) Implementation

- TAAC members to report on any implementation activities for recently closed projects.
- Kirsten sent the implementation spreadsheet to the TAAC on 5/11/21. No further updates have been received.
  - NETC 18-1: Development of MASH Computer Simulated Steel Bridge Rail and Transition
     Details
  - o NETC 18-2: Framework of Asphalt Balance Mix Design for NE Agencies
  - o NETC 18-3: Integration of Unmanned Aircraft Systems into State DOTs

#### 3) Website Implementation and Tech Transfer activities on project pages

Kirsten is still finishing up this project.

#### 4) Continuing NETC/Wrapping up the pooled fund study

- Update from CT on their potential lead state status: CT is not able to take on the lead state responsibilities at this time due to staffing issues.
- Melanie wanted to determine the extent of a lead state's duties. She and Andrew met with Dale
  and Emily first to learn their experience as lead states. They also met with FHWA with follow up
  questions.
- CT's lead state questions to FHWA and the answers:
  - Does FHWA require an RFP to be done for each individual project chosen for NETC? No, FHWA does not require this. RFP requirements would be done in accordance with State laws, and State Policies and Procedures.

- Is FHWA involved in the selection of projects as part of the Advisory Board? Selection is done by the lead state with advice from the Technical Advisory group.
- O Would it be allowable for a state (other than the current lead state) to set up and take on a contract for one of the projects? (i.e. help share the administrative burden). This may involve a transfer of some of the pooled funds to another state. The current NETC model is three to four contracts per year, with the term of the lead state being four-five years. Yes, but just for one project. CT would still be responsible for making sure ALL the quarterly updates are done on time, even if another state is leading a project. Funds would be transferred using the FHWA transfer form. CT would also be responsible for the 5-year report (but could get help from other states).
  - ~ Ann Only one project over the entire five years of the pooled fund? Melanie believes so.
- For each pooled fund project, does FHWA require the lead state to complete quarterly and annual reports? Yes. Also, the Annual Report is probably on a FY basis.
- Would CT be able to hire a university or consultant as the "lead" University or Consultant (the one that would help CT administer the NETC program, if CT became the lead state), or would CT have to go through the RFP process for hiring the lead University or Consultant?
   This is not a federal requirement and this would follow state practice.
- A lot of the amount of effort depends on the policies of the lead state. CT doesn't have the support of their management to get more staff to work on this.
- Emily If a state decided to lead, would states contribute to a new NETC pooled fund?
  - VT Yes
  - NH Yes. A contribution is in their 2022 work plan but 2023 and 2024 might be an issue.
     NETC needs to do a better job of selecting projects but NH would favor the continuance of NETC.
  - CT Yes. CT can't guarantee the funding each year but would try if it was a pooled fund.
     They co have a concern about the outcome of the research projects and each state being able to implement the results. Their management might reconsider funding if there are not implementation opportunities.
  - o MA Interested in continuing in the regional research consortium. MA has concerns about the research results of projects and would like a change in the scope of NETC.
  - ME Would not participate at the \$100k level, under the current business practices. The research projects have not panned out with great results.
  - RI Not on the call.
- CTC provided MaineDOT with a contract extension SOW and the hours needed to finish out management of the pooled fund. Dale sent to the TAAC for review and comment.
  - Dale CTC prepared a SOW and took out tasks that they won't be doing for sure. ME can do
    a two-year, \$250,000 contract, which is in the SOW. The \$200,000 from the NETC 21-3 not
    going forward can cover the contract extension and the states would not need to
    contribute additional funds. RI still needs to contribute for FFY2021.
  - ~ Dale CTC needs to complete the budget sheet return to ME.
    - Dale asked if the TAAC member approve it.
      - Emily Is the Advisory Committee in-person event the one Colin proposed? Yes.
  - Ann The pooled fund doesn't end until 12/31/24 so a new NETC pooled fund study could get started before that time. If NETC closes but the group wants to start another pooled fund down the line, it will be harder to get it going. The states will need MOUs to work

together on projects outside of a pooled fund.

#### 5) Construction Symposium

- Planning committee: Emily, Dale and Matt
- See agenda on next page for topics and speakers.
- Still need one final speaker for bridge cracking topic. Dale will reach out to Mike Praul, FHWA, who can provide a level of presentation to get the topic rolling without getting into extensive details.
- Registrations as of noon on 1/24/22:
  - o Bridge Construction: 51 registrations
  - o Pavement Construction: 52 registrations
  - Both days: 33 registration
- Kirsten will send out the instructions to the speakers and confirm the facilitators.
  - o Facilitators for both days Emily, Matt, Brian, Kirsten. Bridge day only Devin Anderson
  - We will try to breakout groups of 10 or less.
- Kirsten will send the invitation email to New England LTAPs.

#### 6) Other Business

- CTC updated the fact sheet and poster templates with the current NETC logo and color scheme.
  - o CTC will revise the last section of the fact sheet to be titled "Implementation or what is the benefit?" This would be a big bucket in case a project's results can't implemented.
  - Add "NETC" to the picture in the upper left hand corner of the fact sheet. Add the website address to the fact sheet.
- In the Conclusions section of the poster template, add in language about implementation opportunities. Make the Acknowledgement section smaller. Add language regarding research benefits to the Abstract section.
  - Add the website address to the poster.
- Brian The fact sheet and poster have different audiences. The poster is more likely to have graphs and data displayed. We will let PIs know they can make changes to the poster in terms of the size and placement of the sections.

#### 7) Adjourn

Next meeting: February 22<sup>nd</sup>, 2022 from 11:00am – 12:30pm ET



### **NETC Bridge Construction Symposium**

# Tuesday, February 8, 2022 (All times Eastern)

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	Welcome, Session Logistics and Introductions
8:30 – 8:45 a.m.	Ann Scholz, NETC Advisory Committee Chair, New Hampshire DOT
	Dale Peabody, NETC Advisory Committee, Maine DOT
8:45	Session 1. EDC-6 Innovation: <u>UHPC for Bridge Preservation and Repair</u>
8:45 – 9:00	Presentation — Alexandra Hain, University of Connecticut
9:00 – 9:30	<ul> <li>Breakout Groups. Discussion topics include:</li> <li>Examples of UHPC used in New England.</li> <li>How do agencies feel about using UHPC when it's difficult to use and expensive and difficult to procure/spec?</li> </ul>
9:30 - 9:50	Session 1 Report Out and Wrap-Up
9:50 – 10:00	Break
10:00	Session 2. Concrete Durability Issues Due to High Strength and Cracking
10:00 – 10:15	Presentation — TBD
	Breakout Groups. Discussion topics include:
	<ul> <li>What are New England states experiencing related to extensive cracking in their concrete?</li> <li>What theories are there for the causes?</li> </ul>
10.15 10.45	What can be done related to production to reduce these issues? (Change admixtures, mix designs, material supplies, curing temperatures, placement preparations, etc.)
10:15 – 10:45	<ul> <li>What can be done via specifications to reduce these issues? (Upper spec limit on strength, requirements for expansive cements, lower limits on cementitious quantities, etc.)</li> <li>Are New England states moving towards weathering steel underneath bridges and more bare concrete decks with grooving? What is the experience related to cracking and salt usage?</li> </ul>
10:45 – 11:05	Session 2 Report Out and Wrap-Up
11:05 – 11:30	Break



### **NETC Bridge Construction Symposium**

## Tuesday, February 8, 2022 (All times Eastern)

11:30	Session 3. Waterproofing Membranes
11:30 – 11:45	Presentation — Devin Anderson, Maine DOT
11:45 – 12:15 p.m.	<ul> <li>Breakout Groups. Discussion topics include:</li> <li>What are the pros and cons of using high-performance roll-applied versus spray-applied membranes?</li> <li>Are there membrane systems available or being used for concrete wearing surfaces?         <ul> <li>How does glass fiber reinforced rebar relate to membrane systems?</li> </ul> </li> <li>What are New England states specifying for membranes? What are they seeing for life</li> </ul>
12:15 – 12:35	spans? Session 3 Report Out and Wrap-Up
12:35 – 12:45	Symposium Day 1 Highlights
	Kirsten Seeber, NETC Program Manager



## **NETC Pavement Construction Symposium**

# Wednesday, February 9, 2022 (All times Eastern)

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	Welcome, Session Logistics and Introductions
8:30 – 8:45 a.m.	Ann Scholz, NETC Advisory Committee Chair, New Hampshire DOT
	Emily Parkany, NETC Advisory Committee, Vermont Agency of Transportation
8:45	Session 1. EDC-6 Innovation: <u>e-Ticketing and Digital As-Builts</u> (focus on e-Ticketing)
8:45 – 9:00	Presentation — Matthew Valle, HaulHub Technologies
	Breakout Groups. Discussion topics include:
9:00 – 9:30	<ul> <li>What is the status of e-Ticketing implementation among New England states?</li> </ul>
3.00	How are the New England states using e-Ticketing?
	What are the hurdles and breakthroughs that New England states have encountered?
9:30 – 9:50	Session 1 Report Out and Wrap-Up
9:50 – 10:00	Break
10:00	Session 2. EDC-6 Innovation: <u>Targeted Overlay Pavement Solutions (TOPS)</u>
10:00 – 10:15	Presentation — Derek Nener-Plante, FHWA
	Breakout Groups. Discussion topics include:
10:15 – 10:45	• Which of the TOPS treatments have the New England states used? Why? Why not others?
	What are lessons learned from using the treatments?
10:45 – 11:05	Session 2 Report Out and Wrap-Up
11:05 – 11:30	Break
11:30	Session 3. Building Capacity with Technology
11:30 – 11:45	Presentation — Patty Leavenworth, Massachusetts DOT
11:45 – 12:15 p.m.	Breakout Groups. Discussion topics include:
	<ul> <li>What internal processes are being reviewed for efficiency?</li> </ul>
	What innovative technologies are being used to increase capacity?
	What current level of DOT oversight is used on paving projects? How will this be affected
	with increased workloads?
12:15 – 12:35	Session 3 Report Out and Wrap-Up
12:35 – 12:45	Symposium Day 2 Highlights
12.33 – 12.43	Kirsten Seeber, NETC Program Manager