

NETC Advisory Committee Meeting Minutes

Tuesday, February 27 , 2023, 11:00am –12:00pm ET

Attendees:

Ulrich Amoussou-Guenou, MaineDOT	Emily Parkany, VT AOT
Alex Bernier, UConn	Jeff Pulver, ME DOT
Matt Mann, UMTC	Kirsten Seeber, CTC & Associates
Ashlie Mercado, VT AOT	Nicolas Zavolas, MassDOT
Dee Nash, NH	

1) Open Project Review (February 2024)

	PI, Organization AC Liaison		
Project # and Title	CTC Project Manager TC Chair	Update	End Date Budget
19-3: Experimental Validation of New Improved Load Rating Procedures for Deteriorated Unstiffened Steel Beam Ends	Simos Gerasimidis, UMass Amherst N. Zavolas K. Seeber Matt Weidele, MA DOT	The project webinar is scheduled for 3/15/24 from 10:00-10:30am. Kirsten sent an invitation to the full NETC mailing list on 2/19/24. Thirty-nine registrations as of 2/26/24.	1/31/2024 \$179,995
20-2: Current Status of Transportation Data Analytics and a Pilot Case Study Using Artificial Intelligence (AI) Speed Collection on Horizontal Curves	Yuanchang Xie, UMass Lowell E. Parkany K. Seeber Susan Klasen, NH DOT	The project webinar was held on 2/20/23 from 1:00-1:30pm. Twenty seven people attended.	12/31/2023 \$200,000
21-3: Initiating Seed Production for Effective Establishment of Native Plants on Roadsides in New England	Julia Kuzovkina, UConn D. Nash K. Seeber Arin Mills, NH DOT	The research team has sent several draft deliverables to the TC for review. The TC met on 2/5/24 to discuss the deliverables. The TC provided feedback and will review revised deliverables by the next quarterly TC meeting on 3/5/24. Emily – MS sent blog post to RAC on a grass for slope erosion prevention. A UConn researcher said that that grass is invasive and New England is trying to	6/30/24 \$200,000

use native vegetation instead. This helped Emily understand the point to this NETC project to promote native plants instead of invasives.
Action item: Kirsten will check with the PI to see if they have invoiced MaineDOT.

2) Implementation/Tech Transfer

- TAAC members to report on any implementation activities for recently closed projects.
- Continue the discussion of implementation activities related to projects 20-2, 20-3, 20-4 and 21 1.
 - 20-2 Current Status of Transportation Data Analytics and Pilot Case Studies Using Artificial Intelligence (AI)
 - Dee and Nicholas haven't heard from their TAC members. They will follow up and report at the March Advisory committee meeting.
 - Jeff ME TAC member indicates the most useful thing to implement from this project is the trajectory analysis and method for speed management methods. Overall they are underwhelmed with the AI used in the study as it is not as novel and new as hoped.
 - Ashlie The project has concluded, and while overall it appears to be a success, the
 results will not result in directly actionable outcomes for Vermont. The project does
 appear to have demonstrated that AI technology can be used successfully to track
 vehicle/driver behavior, which may have future benefits for the evaluation of other
 countermeasures and roadway features.
 - Action item Kirsten to put what the TAC members who attended the project webinar said in the Implementation section on the project page..
 - 20-3 Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections
 - o Jeff the Maine TAC member presented to their engineering council in February about this project and using drones for bridge maintenance. Maine won't use the thermal imaging because they can verify by eyesight without the thermal imaging. Maine had two bridge inspections where they used drones for inspection. It worked well on the tall bridge but not well on the steel bridge because it interfered with the communications. Bridge maintenance is very interested in using drones and new ways to use them. The maintenance director doesn't want to maintain the drone pilot's license because it costs too much, and they don't have the staff for it.
 - Melanie didn't hear back from her TAC member.
 - Ashlie From the VT TAC member, "Hopefully we will be taking delivery of our UAS for bridge inspection this week (January 8, 2024). We will be looking to start some level of implementation with this soon once we finish up working on finalizing work on flood remaining issues from this summer. This drone will definitely add a tool to our toolbox to perform inspections on multiple structures to save time as well as improve areas that are not easy to access. There will be some implementation time and work on our end to make this a regular tool, but our plan is pilot one and then hopefully add to it once we figure out the best way to use it."
 - 20-4 Coordinating State Policies, Laws and Regulations for Automated Driving Systems Across New England

- o Jeff will reach out to the TAC member, who has been on maternity leave.
- Emily reached out to Eastern State Coalition and Pete Calcaterra (CT). The Coalition has shared the project and policy discussions are ongoing. They hoped to facilitate a meeting of the Northeastern states, but now all eastern states (18 of them) are in the discussion and meet quarterly. Pete Calcaterra said CT used much of the final report to develop an AV plan.
- 21-1 Quality Review and Assessment of Pavement Condition Survey Vehicle Data Across New England
 - Ashlie MA, RI, and CT are working on verification sites and there have been some vendor discussions about verification/calibration control sites for Vermont.

3) Topical Discussion Events

- A series of virtual in-depth Topical Discussions designed to bring together SMEs from the New England transportation agencies around specific topics. Topics
- Animal Vehicle Collision Avoidance
 - ~ Event held on 1/24/24. Thirty-five people attended. Most stayed for the entire event.
 - Kirsten will have all presentations and recordings posted this week.
- Advanced Air Mobility Regional Plan
 - Day 1 held on 2/13/24. Forty-one people attended. Most stayed for the entire event.
 - Kirsten will have all presentations and recordings posted this week.
 - ~ Day 2 is scheduled for 3/6/24.
 - ~ Planning Team meeting held 2/22/24 to discuss the status of speakers for Day 2.
 - ~ Day 2 Subtopics
 - o Integrating Advanced Air Mobility into State Legislation
 - o Advanced Air Mobility Technology Development and Incubation
 - Commercial Initiatives
 - New England Advanced Air Mobility Next Steps

Geotech

- ~ This event has been rescheduled to 3/21/24.
- ~ Subtopics
 - o UAS for Geotech investigations Krystle Pelham, NH
 - Geophysics Steve Madden, VT
 - Geotech asset management and data management
 — Callie Ewald, VT and Kate Macguire, ME
- ~ A few speakers have committed, and the planning team is reaching out to a few more.

e-Construction

- ~ Subtopics and volunteer leads
 - Risk-Based Inspection/Automated inspection Ryan Darling, VT
 - Materials Delivery Management System/e-Ticketing Jarret Moore, CT
 - Other topics being considered
 - Density Profiling System (ME), Paver-Mounted Thermal Profiler, Intelligent Compaction also is e-Construction/Smooth Ride System

- ~ Event format Four hours
- ~ Event timing TBD
- ~ Kirsten will schedule a planning team meeting once everyone completed the scheduling poll.

4) Other Business

- 508-compliance for final reports from this phase of the pooled fund
- CTC remediated the final reports for the following research projects.
 - 18-1 (report only), 18-2, 18-3, 19-1 (report and guidelines), 19-2, 19-3, 20-1, 20-2, 20-3, 20-4 and 21-1.
 - Action item: Kirsten will send/upload the remediated reports to TRID and Rosa-P.
- Activities if NETC website moved from CTC servers after pooled fund ends.
 - ~ Prepare site for transfer; clean up files, organization CTC time would be two hours
 - Export files and database CTC's web server company time would be 30 minutes
 - ~ New site owner would need to purchase and install licenses for two WordPress plugins
 - ~ Advanced Custom Fields Pro \$49/year
 - ~ Posts Table Pro \$69/year
 - ~ Documentation on how to use site, manage projects, etc. CTC time would be 3 hours.
 - ~ Total funds = Approximately \$800.
 - ~ Questions/answers about the website.
 - ~ Description of what is currently on the NETC site:

The site is built on WordPress.

- Total installation size: 7.72GB
- Database size: 64.70MB 35 published Pages
- 47 published Posts

- 31 published Projects (custom post type)
- 425 published Downloads (custom post type)
- Costs for CTC to host the website for three years after the pooled fund ends.
 - o There are specific monthly costs associated with the website. There are also costs spread across all of the CTC-hosted websites (some service fees and subscriptions, as well as maintenance time for our webmaster and server provider). Therefore, it isn't possible to extract the precise cost to cover NETC hosting.
 - CTC currently charges NETC \$75/month for website hosting and maintenance, which is CTC's outlay to service all aspects of the website. CTC can continue to charge \$75/month or \$900/year to maintain the website. Three years would be \$2,700.
 - If the AC approves of these costs, Maine can pay them ahead of time to avoid any additional contracting once the pooled fund ends.
- NETC Research Peer Exchange (CT, ME, NH)
 - ~ A planning meeting was held on 2/15/24.
 - ~ The peer exchange is scheduled for Tuesday, 6/25/24 (full day); Wednesday, 6/26/24 (full day); and Thursday, 6/27/24 (AM only).
 - ~ It will take place at the NHDOT in Concord, NH.
 - ~ Selected topics:

- Research Program Overviews
- Engaging Subject Matter Experts Shortage of SMEs throughout the agency, recruitment, engagement, reducing SME burnout, best practices and tools to canvass ideas from agency staff despite SME shortage.
- Optimizing the Research Budget and Staff Working effectively with a small budget and few staff.
- Technology Transfer Effective tools and processes to share research results within and beyond the agency.
- Options for NETC transportation agency members to move forward once the pooled fund ends.
- ~ Two research staff from each NETC transportation agency are invited to attend. Expenses will be paid for with NETC funds.
- How many people from the other invited states does the Advisory Committee want to pay for? Same as for a regular Research Peer exchange, which would be one per state?
- ~ CTC is creating a list of other states to consider inviting.
- Why are states beyond the NETC states being invited?
 - Jeff thought it was that the NH FHWA person who wanted more than just NETC states. It
 was the CT FHWA person who requested this. NCHRP and FHWA both have peer
 exchange guideline documents. NCHRRP recommends that attendees should come from
 outside of the peer exchange states.
 - O Dee Others beyond NE states would have more to add.
 - o Inviting at least two similar sized states is important because they would have the same issues related to tech transfer, budget and SME issues.
 - Emily At some peer exchanges, all state attendees provide their perspective on everything while others have only some participants presenting on a topic to launch the topic to lead into a discussion.
 - Emily feels it may be awkward to have two people from the NETC states and only one person from additional states. But two people from additional states may be too many.
 - Dee feels that only one person from additional states would be fine, not awkward.
 She feels attendees from beyond NETC would be good. We need to select them for the topics and of a similar size.
 - □ Jeff feel different voices would be great.
 - Dee Four of the NETC states are in the bottom half of the SPR budgets.
 - Emily doesn't feel they have much in common with medium-sized states. She wants to hear from the research offices that have two or less people. Dee agrees with this.
 - CT has only one Research staff person and much more money, but much of their money is taken from them. They give money to the T2 center. Research is left with \$1 million for new projects.
 - Dee didn't know she could use SPRII money for the T2 center. This is the type of information she wants to learn from the peer exchange. With the reduced number of SMEs at NH, she can't spend the money on traditional research projects. They might be able to send some money to their T2 center.
 - NH and ME are missing 25% of their total staff. Would love to invite other states with

similar situations to the peer exchange.

- Emily The SME topic was discussed during a recent CDOT peer exchange. There have been lots of Tech Transfer discussions at peer exchange and a recent RAC session. It doesn't hurt to revisit these topics.
- \sim The next planning team meeting is scheduled for 3/20/24.
- Colin Franco is retiring at the end of April.

5) Adjourn

Next meeting: March 26, 2024, from 11:00am-12:00pm ET