



## NETC Advisory Committee Meeting Minutes

Tuesday, November 28 , 2023, 11:00am–12:00pm ET

### Attendees:

Ulrich Amoussou-Guenou, MaineDOT	Emily Parkany, VT AOT
Alex Bernier, UConn	Kirsten Seeber, CTC & Associates
Colin Franco, RIDOT	Nicholas Zavalas, MassDOT
Matt Mann, UMass	Melanie Zimyeski, ConnDOT
Ashlie Mercado, VT AOT	

### 1) Open Project Review (November 2023)

Project # and Title	PI, Organization AC Liaison CTC Project Manager TC Chair	Update	End Date Budget
<a href="#">19-3: Experimental Validation of New Improved Load Rating Procedures for Deteriorated Unstiffened Steel Beam Ends</a>	Simos Gerasimidis, UMass Amherst N. Zavalas K. Seeber Matt Weidele, MA DOT	The research team met on 11/13/23. No more research/beam testing to share as the research team is working on the draft final report, which will be delivered on 11/30/23. The TC will meet on 12/19/23 to discuss the draft final report.	1/31/2024 \$179,995
<a href="#">20-2: Current Status of Transportation Data Analytics and a Pilot Case Study Using Artificial Intelligence (AI)</a>  Speed Collection on Horizontal Curves	Yuanchang Xie, UMass Lowell E. Parkany K. Seeber Susan Klasen, NH DOT	The TC met on 11/15/23 to review the draft final report. Written comments were due to the PI by 11/23/24. The PI will send the revised report and the Fact Sheet and Poster to the TC by 12/12/23.  Kirsten will work with the PI to schedule the project webinar in early 2024.	12/31/2023 \$200,000
<a href="#">21-3: Initiating Seed Production for Effective Establishment of Native Plants on Roadsides in New England</a>	Julia Kuzovkina, UConn D. Nash K. Seeber Arin Mills, NH DOT	The CT, MA and VT demo sites have been planted. The research team is working with the Northeast Seed Network to create an ecotype seed supply for the DOTs. The research team will continue to update the BMP manual focusing on establishment.  The next quarterly meeting is scheduled for 12/5/23.	6/30/24 \$200,000

## 2) Implementation/Tech Transfer

- TAAC members to report on any implementation activities for recently closed projects.
- Kirsten will send quarterly reminders to the TAAC to add information/activities to the implementation spreadsheet. Kirsten sent a reminder on 9/25/23.
- **Discussion of implementation activities related to projects 18-1, 20-1, 18-2, 18-3 and 19-1.**
  - [18-1: Development of MASH Computer Simulated Steel Bridge Rail and Transition Details](#)
    - ~ Emily - VTrans S-360 series standards for the NETC 2-Rail bridge rail and approach rail have been updated to reflect the findings in the study. S-361 series NETC 3-Rail bridge rail and approach rail were developed to reflect the findings in the study. We have reserved the S-362 number for the NETC 4-Rail though we do not intend to develop it at this time.
    - ~ Colin hasn't kept up with this project at all. Is the NETC guardrail approved for MASH? Yes.
    - ~ Nicholas – Doesn't know. Will reach out to Alex Bardow and get back to us.
    - ~ Ulrich thinks ME is using them.
    - ~ Find out who else is using them of the other states?
  - [20-1: In-Service Performance Evaluation of NETC Bridge Railings](#)
    - ~ Colin – Not sure RI is using the NETC bridge rail results (standards). He needs to question their bridge staff to see where they stand on this. Emily – ME and VT adopted them, and enough work has been done to show they rails are successful.
    - ~ Emily - This is why the AC needs to have these discussions. Are all six states using this and other project results?
  - [18-2: Framework of Asphalt Balanced Mix Design \(BMD\) for New England Transportation Agencies](#)
    - ~ Colin – The six states meet regularly to talk about BMD. He spoke with Mike Burn at RI. Maybe we can send a survey to see if the states are using BMD?
    - ~ Emily – From the VT SME, “As far as implementing NETC 18-2, I would say that the findings did give us an idea of where our gaps are in terms of implementing BMD principles, particularly regarding field validation. We've also used the findings to give ourselves a better understanding of where our mixtures stand as we continue benchmarking in the grand scheme of things. However, there is still a lot of work to be done in terms of implementing balanced mix design (BMD), and there really needs to be more research at the regional level for this to happen. Whether that is through NETC or through a working group that's been convened amongst the Northeastern state DOTs, I do not know.”
      - BMD has matured and changed in terms of the next steps for VT. When FHWA visited with their mobile trailer, they gave a good idea of where states should be on the BMD spectrum. Asphalt producers should do testing so get asphalt that best meets the agency's needs. Get the producers to take on some of the risk instead of the DOT doing the testing. The gist is all states are at different places with BMD. VT bought into using BMD. FHWA coming to VT to do additional training for DOT and vendors in January. Their SME says more regional research is needed. Emily thinks some of the asphalt topics might be appropriate at the NETC Peer Exchange, but it's up to the host states to decide. (Bring asphalt SMEs to the PE)
    - ~ Alex – Emily summarized it well. ME, VT and MA are using BMD. There is a BMD pooled fund study as well, [TPF-5\(478\) Demonstration to Advance New Pavement Technologies Pooled Fund](#).
    - ~ Ulrich – ME has a new research project starting on BMD and is a member of TPF-5(478).
    - ~ Melanie – Andrew has this information on implementation activities.
  - [18-3 Integration of Unmanned Aircraft Systems \(UAS\) into Operations Conducted by State Departments of Transportation](#)

- ~ Emily – Her SME is excited about UAS. VT is still trying to organize around using UAS. The researchers worked with each agency on applications of UAS (bridge inspections, traffic operations, emergency response, etc.) for a total of six different UAS use cases. The region continues to meet on this topic. Continuation of the discussion is important. VT has done a lot with UAS to fly over airports, dog sled races, etc. VT uses UAS for public outreach and engagement.
- ~ CT had a recent peer exchange on New England UAS. Working with Advanced Air Mobility is the next thing their SME is thinking about.
  - ~ Colin – Was there any discussion for accident mitigation on interstates and main roads in the project? Emily – Yes, traffic was one of the six applications. See the final report.
  - ~ Nicholas – MA is flush with using UAS for lots of things – ER response, bridge inspections, etc. He will get a full menu from Jeffry DeCarlo.
- [19-1 Curved Integral Abutment Bridge Design](#)
  - ~ Emily – VT will be fully implementing the design guidelines for curved integral abutments. It will be referenced in their Structures Design Manual. She doesn't know when the bridge manual will be finished and if other states can use it. Emily is pretty sure other states will be able to use it. VT is all in on this project.
  - How to deal with those states that didn't have information on these projects?
    - ~ Jeff has information to share.
    - ~ Emily – Talk about them again next month in December.
    - ~ Nicholas sent an email to his SMEs on these projects. He copied me Kirsten because he won't be at the December 19.
  - Hold off on discussing additional projects until January/February.

### 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:**
  - Advanced Air Mobility Regional Plan
  - Animal Vehicle Collision Avoidance
  - Asset Management for ITS
  - e-Construction for Pavements
  - Geotech
- Asset Management for ITS – Event complete
  - **Action item:** Kirsten will post the presentations and the recordings on the NETC website behind a password protected page.
- Advanced Air Mobility Regional Plan
  - Planning Team meeting held on 11/2/23.
  - Event format
    - ~ Four hours
    - ~ Day 1 – Advanced Air Mobility Overview from several perspectives.
    - ~ Day 2 – DOT AAM Plans. ME will present on their plan.
  - Event timing – February 13 and March 6, 2024.
  - A few speakers have committed, and the planning team is reaching out to a few more.
  - Next planning meeting will be scheduled for early January.

- Animal Vehicle Collision Avoidance
  - Planning Team meeting held 11/21/23.
  - Three subtopics and has volunteer leads
    - ~ Mitigating the effect of collisions on reptiles and amphibians – Chris Slesar, VT
    - ~ Implementation strategies for wildlife avoidance – Richard Bostwick, ME is too busy so we are looking for a new topic lead.
    - ~ Road mortality data collection activities – Rebecca Martin, NH
  - Event format
    - ~ Six hours
    - ~ Intro session to explain the importance of the main topic; Use cases/presentations; panel discussion and breakout groups at the end of the day to focus on highlights from the event
  - Event timing – January 25, 2024
  - A few speakers have committed, and the planning team is reaching out to a few more.
  - A save the date email will be sent in December with a draft agenda.
  - Next planning meeting will be scheduled in early December.
- Geotech
  - Planning Team meeting held 11/16/23.
  - Three subtopics and volunteer leads
    - ~ UAS for Geotech investigations – Krystle Pelham, NH
    - ~ Geophysics – Steve Madden, VT
    - ~ Geotech asset management and data management – Callie Ewald, VT and Kate Macguire, ME
  - Event format
    - ~ Four hours
    - ~ Panel and presentations/use cases
  - Event timing – February 7, 2024 from 10:00am – 2:30pm ET. A save the date email will be sent in December with a draft agenda.
  - A few speakers have committed, and the planning team is reaching out to a few more.
  - A save the date email will be sent in late December/early January with a draft agenda.
  - Next planning meeting will be scheduled for early January.
- e-Construction for Pavements
  - Planning Team meeting held on 11/22/23. Only two planning team members showed up so we will reschedule the meeting.
  - 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, Paver-Mounted Thermal Profiler, Intelligent Compaction also is e-Construction/Smooth Ride System
  - Event format
    - ~ Four hours
  - Event timing – February 28, 2024. This may be pushed out.
  - Kirsten will scheduling the next planning meeting and the event date.

## List of volunteers

Topic	Volunteer	State
Advanced Air Mobility Regional Plan	Jeffrey DeCarlo	MA
Advanced Air Mobility Regional Plan	Chris Bailey	MA
Advanced Air Mobility Regional Plan	Fred Bedard	MA
Advanced Air Mobility Regional Plan	Terrance McKenna	MA
Advanced Air Mobility Regional Plan	Scott Uebelhart	MA
Advanced Air Mobility Regional Plan	Nicholas Zavolas	MA
Advanced Air Mobility Regional Plan	Jeanne Kannegieser	ME
Advanced Air Mobility Regional Plan	Alan Lambert	ME
Advanced Air Mobility Regional Plan	Evan Robinson	VT
Animal Vehicle Collision Avoidance	Christopher Samorajczyk	CT
Animal Vehicle Collision Avoidance	Richard Bostwick	ME
Animal Vehicle Collision Avoidance	Rebecca Martin	NH
Animal Vehicle Collision Avoidance	Dee Nash	NH
Animal Vehicle Collision Avoidance	Chris Slesar	VT
Asset Management for ITS	Anthony Colangelo	CT
Asset Management for ITS	Louis Lamoureux	MA
Asset Management for ITS	Chester Osborne	MA
Asset Management for ITS	Susan Klasen	NH
Asset Management for ITS	Kody McCarthy	NH
Asset Management for ITS	Dee Nash	NH
Asset Management for ITS	Russell Holt	RI
Asset Management for ITS	Derek Lyman	VT
Asset Management for ITS	Mark Gerrish	VT
Asset Management for ITS	Ryan Knapp	VT
Asset Management for ITS	Emily Parkany	VT
e-Construction for Pavements	Jarrett Moore	CT
e-Construction for Pavements	Brian Kelleher	MA
e-Construction for Pavements	Ulrich Amoussou-Guenou	ME
e-Construction for Pavements	Pat Colburn	NH
e-Construction for Pavements	Dee Nash	NH
e-Construction for Pavements	Ryan Darling	VT
Geotech	Robert Pion	CT
Geotech	Mike Glovasky	MA
Geotech	Mike Roach	MA
Geotech	Jennifer Rauch	MA
Geotech	Kate Maguire	ME
Geotech	Dee Nash	NH
Geotech	Krystle Pelham	NH
Geotech	Callie Ewald	VT
Geotech	Steve Madden	VT
Geotech	Emily Parkany	VT

## 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 and posted them to the project pages.
    - ~ 18-1 (report only), 18-2, 18-3, 19-1 (report and guidelines), 19-2, 20-1, 20-3, 20-4 and 21-1.
    - ~ 19-3, 20-2 and 21-3 will be remediated once the final reports are received.
    - ~ **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 2 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.
  - Description of what is currently on the NETC site:
    - ~ The site is built on WordPress. ~ 47 published Posts
    - ~ Total installation size: 7.72GB ~ 31 published Projects (custom post type)
    - ~ Database size: 64.70MB ~ 425 published Downloads (custom post type)
    - ~ 35 published Pages
  - What does “manage projects” mean in the “Documentation” bullet above?
    - ~ This is the documentation on how to create/edit projects that are displayed on the Research Projects page at <https://www.newenglandtransportationconsortium.org/research-projects/>.
  - Costs for CTC to host the website for three years after the pooled fund ends.
    - ~ 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.
- Tri-State Research Peer Exchange/NETC Closeout Event
  - CT, ME and NH are checking with their FHWA Division Offices to see if they would get credit for a multi-hosted peer exchange. According to NCHRP 20-111(G) Best Practices for State DOT Peer Exchanges, “a multi-state peer exchange should include panelists beyond the representative peer exchange states, and there should be an equal or greater number of representatives from organizations other than the peer exchange states.”
    - ~ CT’s FHWA Division Office is in favor of crediting CT for this peer exchange. They will confirm after reviewing the draft agenda.
    - ~ Jeff is checking with the Maine FHWA Division Office.
    - ~ Dee has been out of the office.

- ~ Planning team the host states with CTC and driving what happens. The NETC AC would review the agenda to approve since it's their money.
  - Emily – If including all six states interested then it's okay. Colin – Agrees. Celebration! The hot button topics should satisfy the
- ~ Virtual or in-person? Not decided yet. Do we have the funds?
  - Emily, Colin, Ulrich – In-person
  - Nicholas, Alex, Matt – Hybrid
- ~ Colin – Contact Jill Stark to see what she thinks about tri-hosting? Emily – Agrees. **Action item:** Kirsten will send Jill Stark an email.
- 2024 Advisory Committee Meeting Schedule – Stick with the fourth Tuesday from 11:00am-noon ET?
  - Yes. The meetings are already on the Advisory Committee members' calendars.
- Hao Yin has taken Lily's place at MassDOT Research and Technology Transfer. **Action item:** Kirsten will send him a welcome email and the Advisory Committee calendar invitations.

## 5) Adjourn

**Next meeting:** December 19, 2023, from 2:00–3:00pm ET