



# New England Transportation Consortium

## NETC Advisory Committee Meeting Agenda

**DATE:** Tuesday, October 22, 2019, 11:00am – noon ET

**LOCATION:** Dial-in: 608-721-7576; Access Code: 1930608

Matt Mann, UMass	Greg Rowangould, UVM
Dee Nash, NHDOT	Ann Scholz, NHDOT
Elke Ochs, VTrans	Kirsten Seeber, CTC & Associates
Lily Oliver, MassDOT	Maina Tran, CTC & Associates
Emily Parkany, VTrans	Nicholas Zavalas, MassDOT
Dale Peabody, MaineDOT	Christos Xenophontos, RIDOT
Flavia Pereira, CT DOT	

### 1) Christos Xenophontos (RI) introduction –

- Christos introduced himself as the new Rhode Island DOT representative to NETC. He has been at RIDOT for more than 30 years, serving in many different capacities. The RIDOT research program has been on hiatus for the last few years. Their SPR-II program has just been approved by FHWA. RIDOT does not currently have a university partner and they are restructuring. They want to open their research beyond a single university to focus on the entire state.
  - ~ RIDOT will be conducting a regional research peer exchange and invitations will be going out soon.
  - ~ RI has made their FFY19 contribution to the pooled fund and a FFY2020 contribution is in their SPR-II program.

### Open Project Review (October 2019)

Project # and Title	PI, University <i>AC Liaison</i>	Update	End Date Budget
18-1: Development of MASH Computer Simulated Steel Bridge Rail & Transition Details	Chuck Plaxico, Malcom Ray, Roadsafe LLC D. Peabody	The AC approved adding three extra tasks and up to \$30,265 to the project. The PI sent the cost proposal to ME for processing.	6/1/20 \$199,936
18-2: Framework of Asphalt Balanced Mix Design for NE Agencies	Walaa Mogawer, UMass Dartmouth A. Scholz	Tasks 3- 5 are in progress. Research team is collecting performance data.	6/30/20 \$127,499
18-3: Integration of Unmanned Aircraft Systems into State DOTs	Jon Gustafson, WSP E. Parkany	Task 2 is in progress. Research team will be focusing on use cases (i.e., bridge inspection) specific to each NE state.	3/31/2021 \$146,632
18-4: Quick Response: ICNet Workshop	Daniel, UNH A. Scholz	UNH sent the final invoice to CTC. Jo Sias will create a project summary memo and send to CTC/NETC. <b>See memo on page 5.</b>	10/14/19 \$30,000
19-1: Curved Integral Abutment Bridge Design	TBD E. Parkany	Five proposals were received. The scoring meeting was held on 10/17/19 and WSP USA	TBD \$150,000

Project # and Title	PI, University AC Liaison	Update	End Date Budget
		was selected. ME has notified all proposers of the results and will begin contract negotiations with WSP.	
19-2: Multi-Scale Multi-Season Land-Based Erosion Modeling and Monitoring for Infrastructure Management	TBD A. Scholz	Three proposals were received. The scoring meeting is scheduled for 10/24/19.	TBD \$150,000
19-3: Experimental Validation of New Improved Load Rating Procedures for Deteriorated Steel Beam Ends	TBD N. Zavalas	SOW review meetings were held on 9/24/19 and 10/17/19. CTC make revisions and send to the TC for one final review before sending to ME for processing into an RFP.	TBD \$200,000

## 2) NETC Research Problem Statement template

- Discuss Greg Rowangould’s comments and Ann’s changes to the Research Problem Statement form.
  - ~ Ann – The most significant change she made was to remove section VII. PRELIMINARY LITERATURE SEARCH. She added language to section II. RESEARCH PROBLEM STATEMENT asking that the proposer define the problem and how it addresses the need. The statement should also discuss the research gap, which would get at the literature search.
    - Greg – Ann’s changes capture what he was thinking, which is not to get rid of the literature review. Because the literature review was separate from defining the problem statement, it encouraged folks to NOT connect the problem with the gap in the literature. C
    - Emily – The more the literature search is integrated into the problem statement the better. We don’t want a list from TRIG, but to know the proposer knows what’s out there and thus is defining that this project is addressing a need and a gap.
  - ~ The group felt it was best to keep section VI. URGENCY AND POTENTIAL PAYOFF as its own section because it articulates why the problem is urgent and should be prioritized over other needs.
  - ~ Dale – Add an Implementation section and use the language from NCHRP’s Problem Statement Outline.
  - ~ **Action item:** Kirsten will accept Ann’s edits and add a section VII. IMPLEMENTATION POTENTIAL based on NCHRP’s outline. The AC will review and send edits to Kirsten.

## 3) RFP Scoring Criteria

- NETC’s scoring criteria and ME’s do not match. Review and confirm the NETC scoring criteria and have Maine update their RFP form, if applicable.

### ME’s Technical Proposal Scoring Criteria

- a) Understanding of the Problem
- b) Research Approach
- c) Application of Results
- d) Proposer’s Qualifications

### NETC’s Technical Proposal Scoring Criteria

- a) Understanding of the Problem
- b) Research Approach
- c) Application of Result
- d) Qualifications of PI
- e) Facilities and Equipment
- f) Implementation/Technology Transfer Plan
- g) PI’s past performance

- ME can change the scoring criteria to match NETC's policies.
    - ME uses points for scoring, not a 1 to 5 scale for rating, as NETC does. They use the average of the TC's points for each category to come up with the total score for each proposal. Dale is not sure this could be changed.
  - Changes to scoring include:
    - Incorporate PI's past performance into Qualifications of PI. It will no longer be a separate category. Past performance can include a TC member's experience with a proposer on any previous and relevant project, not just a prior NETC project. A proposer would not be scored lower for not having any past NETC project experience.
    - Facilities and Equipment – Sometimes this category comes into play and sometimes it doesn't. Don't include this as scoring criteria unless the SOW articulates a need for specific equipment.
    - Implementation/Technology Transfer Plan – Most folks restate what is in the SOW. Is this valuable?
  - Weight of categories
    - ME is fine if a project's total is higher than 100. Below are suggested point totals for each category.
      - a) Understanding of the Problem = 25
      - b) Research Approach = 25
      - c) Application of Results = 15
      - d) Qualifications of PI = 35
      - e) Implementation/T2 Plan = 20
      - f) Facilities and Equipment = AC/TC will assign a point total if this category is applicable to a project.
        - ~ The group discussed if it is feasible to expect proposers to suggest an implementation plan before the project has started. Since each state may have different needs, what the proposer provides may be very general.
        - ~ We will see how the first project, 19-3, goes using these criteria and adjust the point value for Implementation/T2 Plan on future projects, if necessary.
        - ~ Nicholas offered to gather a small group of AC members to further discuss the implementation change and impact on the point/rating system. This would include what an implementation plan would look like in a proposal (addressing each state's needs individually, the states most involved in the project, or the region as a whole).
  - **Action item:** Kirsten to finalize the 20-point addition of Implementation with Dale and Kim. The new template will be sent to the AC group for approval before using it for the 19-3 proposals review meeting.
- 4) **Implementation of 15-series projects** – AC members to report on implementation activities in their state.
- All states, except MA and CT, have sent their implementation information to Kirsten. **Action item:** Once all states have reported, Kirsten will send the updated implementation worksheet to the AC.
  - **Discuss implementation of 13-, 14- and 17-series projects at November meeting.**
    - ~ 13-1: Development of High Early-Strength Concrete for Accelerated Bridge Construction Closure Pour Connections
    - ~ 13-3: Improved Regionalization of Quality Assurance (QA) Functions
    - ~ 14-1: Measuring the Effectiveness of Competency Models for Job Specific Professional Development of Engineers & Engineering Technicians

- ~ 17-1: Quick Response: New England Connected and Autonomous Vehicles
- ~ 17-2: Quick Response: Quantification of Research Benefits
- ~ Implementation of Project 13-3/Phase II

**5) June 2019 NETC Symposium – Continuing discussion on when to have the next Symposium**

- Not enough time to discuss.

**6) Website refresh ([NETC website](#))**

- CTC scheduled a meeting to review the NETC website for October 29 at 11:00am ET.

**7) Other Business**

**8) Adjourn**

**Next meeting:** November 19<sup>th</sup> from 11:00am – noon ET

## NETC QR 18-4

### Quick Response: Infrastructure and Climate Network (ICNet) Workshop

#### Summary

##### Activities

The Infrastructure and Climate Network (ICNet) was established in 2012 with support from the National Science Foundation (NSF). The mission of ICNet is to bring together academics and practitioners who are dedicated to accelerating climate science and engineering research in the northeast. The ICNet focuses on climate change and sea level rise impacts on transportation infrastructure; it addresses vulnerability and adaptation for resiliency of bridges, roads, and transportation networks.

The activities for this QR project focused on the organization and running of the 2019 ICNet workshop. A planning committee was established that met regularly by conference call to plan the workshop agenda with the following goals:

1. Strengthen the linkages among the researchers and practitioner communities with respect to addressing climate adaptation challenges for sustainable community infrastructure and differing perspective.
2. Sharing knowledge-access and network development to improve information transfer to accelerate research and impact engineering practice.
3. Develop Research Need Statements for New England and beyond to be conceptualized in the workshop and put forward to NETC by a working group for the topic

##### Outcomes

The ICNet workshop was held in Portsmouth, NH on April 3-4, 2019. There were 48 attendees at the workshop representing academics, practitioners, and agencies (federal and state) from the northeast US. The workshop included knowledge exchange in the form of presentations, pop-up sessions, poster sessions, and panel discussions. Breakout brainstorming sessions developed initial research needs statements that were further developed and refined in the following months. Seven RNS were developed for further consideration by NETC and/or other funding mechanisms.

Through discussions, it was determined that the best mechanism to continue ICNet workshops in future years would be to establish a Transportation Pooled Fund (TPF) project.

##### Benefits

The workshop served to strengthen existing linkages between researchers and practitioners as well as to establish new linkages among attendees. Various research needs were identified and developed into NETC format research problem statements for further consideration.

##### Next Steps

A review of the research needs statements by individual agencies and NETC should be conducted to move forward within the NETC funding framework and to potentially be moved into consideration for funding at the national level (e.g. NCHRP).

TPF and contributions/commitments by states to continue regular ICNet workshops should be established.