

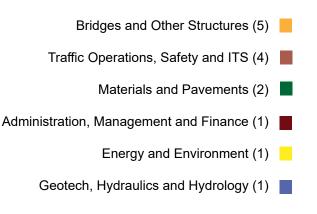
### NETC At-A-Glance (Phase VII 2018 - 2025)

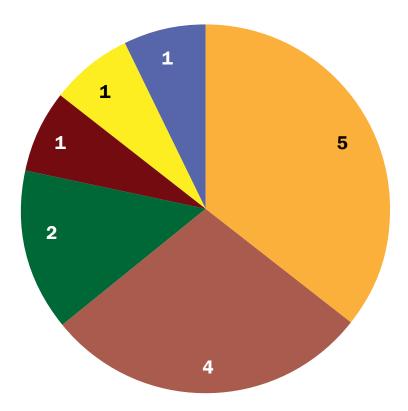
The <u>New England Transportation Consortium</u> (NETC) is a research cooperative among the six New England transportation agencies: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. Since its inception in 1990, NETC has been a Federal Highway Administration (FHWA) pooled fund supported by federal State Transportation and Research funds. This brief brochure summarizes the activities of Phase VII of the pooled fund, from 2018 to 2025.

Throughout its tenure, NETC has funded more than 100 research projects selected to address common problems in the region. During the most recent phase, the group funded 14 projects on a variety of topics spanning operations, management and structures design.

The chart at right shows the breakdown of these projects by topic area.

### **NETC Phase VII Research by Topic**





# Symposiums and Topical Discussions

Virtual and in-person Symposiums and Topical Discussions provide a forum for members, subject matter experts, and other key stakeholders to discuss topics of common interest, learn from each other, and share best practices.

#### March 2024 - Geotech Topical Discussion

Transportation professionals from the New England states met virtually to discuss innovations and best practices pertaining to geotech. <u>Learn more</u>.

#### February and March 2024 - Advanced Air Mobility Topical Discussions

These two half-day virtual events focused on issues related to advanced air mobility regional plans. Learn more.

#### January 2024 - Animal-Vehicle Collision Avoidance Topical Discussion

At this virtual event, attendees discussed strategies and solutions for reducing collisions between animals and vehicles. <u>Learn more</u>.

#### February 2022 - Bridge and Pavement Construction Symposium

Attendees met virtually to discuss innovations and share insights on challenges, successes and best practices related to bridge and pavement construction. <u>Learn more</u>.

#### September 2021 - Winter Maintenance Symposium 🕨

This virtual symposium focused on issues related to winter maintenance, including program management, materials, and performance measures. Learn more.

#### June 2019 - Research Symposium

Attendees gathered in Concord, NH to discuss issues and potential research projects related to materials, bridges, and the environment. The event also featured research project posters. <u>Learn more</u>.



Session 1. State Updates on Advanced Air Mobility Regional Plans

## 2024 Research Peer Exchange

June 25-27, 2024 | Concord, NH



Hosted by the Connecticut, Maine, and New Hampshire DOTs, this three-day in-person event focused on engaging subject matter experts, optimizing research budget and staff, and facilitating technology transfer. Participants included staff from all three host states, two additional NETC member states (Massachusetts and Vermont), four other state transportation agencies (Mississippi, Nevada, New Jersey, and Utah DOTs), and the Federal Highway Administration (FHWA). Participants shared what they saw as strengths, challenges and opportunities for the host agencies in the areas discussed, as well as takeaways for their own agencies. Learn more.

## Research

Advancing the state of practice in New England is a cornerstone of NETC. During Phase VII, 14 projects were completed. Highlights are included below.

## Initiating Seed Production for Effective Establishment of Native Plants on Roadsides in New England

Roadsides can make great pollinator habitats. This project developed a list of plant species, resources and guidance for establishing and maintaining native habitats in New England. <u>Project 21-3</u>.





## Multi-Scale Multi-Season Land-Based Erosion Modeling and Monitoring for Infrastructure Management

Major storms can cause erosion and landslides, which can affect roadway access. This research developed models to help the New England states monitor, forecast, and prioritize areas of erosion and slope instability. <u>Project 19-2</u>.

## Quality Review and Assessment of Pavement Condition Survey Vehicle Data Across New England

Recent changes to the way states collect and report their network condition data to the FHWA has created a need for higher-quality calibration of state-owned or consultant-utilized data-collection equipment. This project resulted in a highly successful implementation meeting that brought attendees together to discuss their agency's calibration sites. <u>Project 21-1</u>.



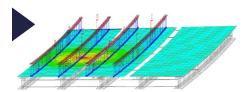


## Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections

As concrete delamination can affect a bridge's structural integrity, identifying and repairing the damage quickly is critical. This research examined the potential of using drones outfitted with infrared thermal imaging technology to identify delamination in hard-to-reach areas, making bridge inspections easier, faster and more cost-effective. <u>Project 20-3</u>.

### **Curved Integral Abutment Bridge Design**

Designed without the need for deck joints, integral abutment bridges tend to perform better over time and cost less to maintain than traditional bridge designs. In New England, this style has typically been used for bridges with straight spans. This project sought to develop standards for curved integral abutment bridge designs. <u>Project 19-1</u>.





New England Transportation Consortium TPF-5(373)

#### **MEMBER STATES**

Connecticut Department of Transportation Maine Department of Transportation Massachusetts Department of Transportation New Hampshire Department of Transportation Rhode Island Department of Transportation Vermont Agency of Transportation

### Contact Us NETC COORDINATOR

Kirsten Seeber CTC & Associates LLC kirsten.seeber@ctcandassociates.com

### **NETC Lead State Designee**

Jeff Pulver Maine Department of Transportation jeffrey.pulver@maine.gov

#### **NETC Advisory Committee Chair**

Emily Parkany Vermont Agency of Transportation <u>emily.parkany@vermont.gov</u>

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## Webinars

The selected webinars below took place during Phase VII, providing an opportunity for investigators to share research highlights and answer members' questions. <u>View the complete list of project webinars</u>.

Date	Title
September 2024	<u>21-3</u> - Initiating Seed Production for Effective Establishment of Native Plants on Roadsides in New England [ <u>Webinar</u> ]
March 2024	<u>19-3</u> - Improved Load Rating Procedures for Deteriorated Unstiffened Steel Beam Ends [ <u>Webinar</u> ]
February 2024	<u>20-2</u> - Current Status of Transportation Data Analytics and Pilot Case Studies Using Artificial Intelligence (AI) [Webinar]
August 2023	<u>20-3</u> - Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections [Webinar]
July 2023	21-1 - Quality Review and Assessment of Pavement Condition Survey Vehicle Data Across [ <u>Webinar</u> ]
March 2021	<u>18-3</u> - Integration of Unmanned Aircraft Systems (UAS) into Operations Conducted by State Departments of Transportation [ <u>Webinar</u> ]

# **Organizational Structure**

### **NETC Advisory Committee**

The Advisory Committee, made up of agency and university representatives, provides direct and continuous liaison among the project Technical Committees and NETC management.

#### **Transportation Agencies**

Mauricio Garcia-Theran, Connecticut Department of Transportation Melanie Zimyeski, Connecticut Department of Transportation Jeffrey Pulver, Maine Department of Transportation Ulrich Amoussou-Guenou, Maine Department of Transportation Hao Yin, Massachusetts Department of Transportation Nicholas Zavolas, Massachusetts Department of Transportation David Gaylord, New Hampshire Department of Transportation Deirdre Nash, New Hampshire Department of Transportation Christos Xenophontos, Rhode Island Department of Transportation Emily Parkany, Vermont Agency of Transportation