TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Maine DOT

INSTRUCTIONS:
Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # *(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*	**Transportation Pooled Fund Program - Report Period:**
TPF-5(373)	☐ Quarter 1 (January 1 – March 31) ☐ Quarter 2 (April 1 – June 30) ☑ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)

Project Title: New England Transportation Consortium VII		
Name of Project Manager(s): Dale Peabody	**Phone Number:** 207-624-3305	**E-Mail** dale.peabody@maine.gov
Lead Agency Project ID: 23430.18	**Other Project ID (i.e., contract #):**	**Project Start Date:** January 4, 2018
Original Project End Date: June 30, 2022	**Current Project End Date:** June 30, 2022	**Number of Extensions:** 0

Project schedule status:

☑ On schedule ☐ On revised schedule ☐ Ahead of schedule ☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
$2,066,312	$580,781	28%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$580,781 (11% of total funds spent)	$66,099	75%

Project Description:

A transportation research program, where research projects are conducted primarily by the Land Grant Universities of the New England states. This study was preceded by TPF-5(222), TPF-5(201), TPF-5(168), SPR-3(089), SPR-3(029), and SPR-3(009). Other State DOTs may participate in individual research projects by providing funds and a project technical committee member to represent their agency.

The New England Transportation Consortium (NETC) is a research cooperative between the state DOTs of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. The NETC is a valuable regional partnership for the identification, prosecution and dissemination of shared transportation research initiatives. The NETC represents:

- Financial leveraging opportunities and regional partnerships.
- Stronger partnerships between university faculty and state DOTs.
- User-defined, diverse research topics.
- Opportunities for research dissemination and training to practitioners in the field.

Now in its third decade, the NETC was developed to help New England states meet their special research needs by pooling resources and expertise. The NETC is now a well-established successful multistate partnership.

The objective of the pooled fund is to pool the financial, professional and academic resources of the region and to use them to research and develop improved methods of dealing with common problems in the planning, design, construction, maintenance, rehabilitation, reconstruction, and operation of transportation systems in the participating states. The program is intended to supplement, not to replace, ongoing state and federal research activities and other national programs such as the Cooperative Research Programs of the National Academies.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Monthly Advisory Committee meetings held on 7/28/20, 8/25/20 and 9/22/20.

18-2: Framework of Asphalt Balanced Mix Design for New England Agencies – University of Massachusetts-Dartmouth

- Project time line: 2/5/19 - 12/31/20. Project budget: $127,499.00
- Task 3 (Collect existing performance test data, available from recent state/regional projects, and related historical field performance data on the representative pavements.) - Task memo submitted to TC on 9/7/20.
- Task 4 (Analyze test and field performance data in order to develop preliminary recommendations for a BMD approach.) - Task memo submitted to TC on 9/7/20.
- Task 5 (Identify gaps in the test and performance data and develop an experimental plan for future research with the goal to further refine the development, validation, and implementation of a BMD approach for New England states.) - In progress. Without further data, the PI will have challenges developing specific BMD recommendations for each state and the recommendations/future work plans may be more generic in nature. Data was received from CT, ME and VT.
- Draft Final Report complete. TC reviewing.
- TC meeting held on 9/16/20.

18-3: Integration of Unmanned Aircraft Systems into DOTs - WSP USA Inc.

- Project time line: 4/16/19 - 3/31/21. Project budget: $146,631.57
- Task 3 (Address challenges associated with the UAS technologies, FAA rules and regulations - Task 3 report revised in accordance with the comments of the TC members.
- Task 4 (Develop procedures to carry out these UAS applications) - Task 4 is in progress. Task 4 report will be submitted to TC on 11/16/20.
- TC meeting held on 8/20/20.

Anticipated work next quarter:

Monthly Advisory Committee meetings to be held on 10/27/20, 11/17/20 and 12/15/20.

18-2: Framework of Asphalt Balanced Mix Design for New England Agencies
• Final TC meeting to review and provide comments on draft final report to be held on 11/6/20.

18-3: Integration of Unmanned Aircraft Systems into DOTs
• Task 4 report will be submitted to TC on 11/16/20. Task 4 project status meeting will be held early November. Draft of final report will be completed in January 2021.

19-1: Curved Integral Abutment Bridge Design
• PI will finalize and check Base Finite Element Model, wizards, and coding sheets.
• PI will begin mass production of iterative models.
• PI will submit revision to the Literature Review.

19-2: Erosion Modeling
• The next TC meeting will be planned for mid-January.
• Task 3 is expected to be completed by end of February 2021.

19-3: Deteriorated Steel Beam Ends
• Tasks 1 and Task 2 will be in progress.

Re-creating NETC
• Task 1 (SWOT analysis) will be completed.
• Work on Tasks 2 (Survey of NETC agencies) and Task 3 (Synthesis research) will begin.
• Next TAAC meeting will be held on 10/20/20.

Significant Results:

See Progress this Quarter.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

None.

Potential Implementation:

Results from 18-2: The project will make develop an experimental plan for future research with the goal to further refine the development, validation, and implementation of a BMD approach for New England states. State-specific recommendations will be made for CT, MA and VT, and general recommendations will be made for all states.