

**TRANSPORTATION POOLED FUND PROGRAM  
QUARTERLY PROGRESS REPORT**

Date: 1/31/2019

Lead Agency (FHWA or State DOT): Vermont Agency of Transportation

<b>Transportation Pooled Fund Program Project #</b> TPF-5(222)		<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 1 – December 31)																																																																									
<b>Project Title:</b> New England Transportation Consortium (VI)																																																																											
<b>Name of Project Manager(s):</b> Emily Parkany		<b>Phone Number:</b> 802-272-6862																																																																									
<b>E-Mail</b> emily.parkany@vermont.gov																																																																											
<b>Lead Agency Project ID:</b> CA0306		<b>Other Project ID (i.e., contract #):</b>																																																																									
		<table border="0"> <tr><td>NETC 06-4</td><td>9/16/13</td></tr> <tr><td>NETC 07-1</td><td>7/1/13</td></tr> <tr><td>NETC 09-2</td><td>9/1/13</td></tr> <tr><td>NETC 09-3</td><td>9/1/13</td></tr> <tr><td>NETC 10-3</td><td>9/16/13</td></tr> <tr><td>NETC 13-1</td><td>9/1/14</td></tr> <tr><td>NETC 13-2</td><td>6/1/14</td></tr> <tr><td>NETC 13-3</td><td>12/1/14</td></tr> <tr><td>NETC 14-1</td><td>3/1/15</td></tr> <tr><td>NETC 14-2</td><td>2/1/15</td></tr> <tr><td>NETC 14-4</td><td>7/06/15</td></tr> <tr><td>NETC 15-1</td><td>12/1/16</td></tr> <tr><td>NETC 15-2</td><td>1/1/17</td></tr> <tr><td>NETC 15-3</td><td>8/1/16</td></tr> <tr><td>NETC 15-4</td><td>7/5/18</td></tr> <tr><td>NETC 17-1</td><td>4/1/18</td></tr> <tr><td>NETC 17-2</td><td>7/5/18</td></tr> </table>		NETC 06-4	9/16/13	NETC 07-1	7/1/13	NETC 09-2	9/1/13	NETC 09-3	9/1/13	NETC 10-3	9/16/13	NETC 13-1	9/1/14	NETC 13-2	6/1/14	NETC 13-3	12/1/14	NETC 14-1	3/1/15	NETC 14-2	2/1/15	NETC 14-4	7/06/15	NETC 15-1	12/1/16	NETC 15-2	1/1/17	NETC 15-3	8/1/16	NETC 15-4	7/5/18	NETC 17-1	4/1/18	NETC 17-2	7/5/18																																						
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		<b>Number of Extensions:</b>																																																																									

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
NETC 06-4	\$242,909	\$214,777.87	100%
NETC 07-1	\$198,154	\$190,421.37	100%
NETC 09-2	\$80,000	\$78,811.11	100%
NETC 09-3	\$165,000	\$149,695.39	100%
NETC 10-3	\$150,158	\$87,819.56	100%
NETC 13-1	\$191,710	\$189,411.00	100%
NETC 13-2	\$249,785	\$238,408.29	100%
NETC 13-3	\$100,000	\$110,000.00	100%
Phase II	\$39,713	(total included in line above)	40%
NETC 14-1	\$100,000	\$85,615.00	80%
NETC 14-2	\$205,554	\$166,251.89	100%
NETC 14-4	\$200,000	\$197,283.82	100%
NETC 15-1	\$164,970	\$164,966.30	99%
NETC 15-2	\$150,000	\$149,613.00	95%
NETC 15-3	\$150,000	\$149,677.76	100%
NETC 15-4	\$50,000	\$40,378.13	95%
NETC 17-1	\$50,000	\$50,000.00	100%
NETC 17-2	\$50,000	\$29,320.90	95%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
NETC 06-4 \$0.0 0%	\$0.0	183% (based on 24 months)
NETC 07-1 \$0.0 0%	\$0.0	121% (based on 33 months)
NETC 09-2 \$0.0 0%	\$0.0	110% (based on 30 months)
NETC 09-3 \$0.0 0%	\$0.0	125% (based on 28 months)
NETC 10-3 \$0.0 0%	\$0.0	221% (based on 24 months)
NETC 13-1 \$0.0 0%	\$0.0	109% (based on 47 months)
NETC 13-2 \$0.0 0%	\$0.0	200% (based on 24 months)
NETC 13-3 \$585.40 0.6%	\$0.0	400% (based on 12 months)
Phase II \$0.0 0%	\$0.0	80% (based on 5 months)
NETC 14-1 \$0.0 0%	\$7,573.18	136% (based on 33 months)
NETC 14-2 \$0.0 0%	\$0.0	104% (based on 26 months)
NETC 14-4 \$0.0 0%	\$0.0	129% (based on 24 months)
NETC 15-1 \$1,870.98 1.1%	\$30,654.55	104% (based on 24 months)
NETC 15-2 \$2,905.08 1.9%	\$8,219.13	100% (based on 24 months)
NETC 15-3 \$0.0 0%	\$0.0	117% (based on 24 months)
NETC 15-4 \$18,641.70 37.3%	\$23,849.63	83% (based on 6 months)
NETC 17-1 \$4,500.00 9.0%	\$2,500.00	100% (based on 6 months)
NETC 17-2 \$9,278.30 18.6%	\$20,042.60	133% (based on 6 months)

\*Note: 13-3 Phase II was fully executed as a contract modification on August 17, 2018.

Project Description:

- 06-4 Preventative Maintenance and Timing of Applications, Completed June 2017:  
[http://www.newenglandtransportationconsortium.org/files/netcr101\\_06-4.pdf](http://www.newenglandtransportationconsortium.org/files/netcr101_06-4.pdf)
- 07-1 In-Place Response Mechanisms of Recycled Layers Due to Temperature and Moisture Variations, Completed November 2016: [http://www.newenglandtransportationconsortium.org/files/netcr96\\_07-1.pdf](http://www.newenglandtransportationconsortium.org/files/netcr96_07-1.pdf)
- 09-2 Effective Establishment of Native Grasses on Roadsides, Completed June 2016:  
[http://www.newenglandtransportationconsortium.org/files/netcr97\\_09-2.pdf](http://www.newenglandtransportationconsortium.org/files/netcr97_09-2.pdf)
- 09-3 Advanced Composite Materials: Prototype Development and Demonstration, Completed August 2016:  
[http://www.newenglandtransportationconsortium.org/files/netcr98\\_09-3.pdf](http://www.newenglandtransportationconsortium.org/files/netcr98_09-3.pdf)

10-3	Low Temperature and Moisture Susceptibility of RAP Mixtures with Warm Mix Technology, Completed March 2018: <a href="http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/10-3/NETC_10-3_Final%20Report_03_23_18.pdf">http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/10-3/NETC_10-3_Final%20Report_03_23_18.pdf</a>
13-1	Development of High-Early Strength Concrete for Accelerated Bridge Construction Closure Pour Connections: <a href="https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC_ReportFinal_High-Early-Strength-Concrete-V3.pdf">https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC_ReportFinal_High-Early-Strength-Concrete-V3.pdf</a>
13-2	HMA Mixtures Containing Recycled Asphalt Shingles (RAS): Low Temperature and Fatigue Performance of Plant-Produced Mixtures: <a href="http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/13-2/NETC%2013-2%20Final%20Report_20180625.pdf">http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/13-2/NETC%2013-2%20Final%20Report_20180625.pdf</a>
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: <a href="https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC_Final_14_1_updated-1.pdf">https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC_Final_14_1_updated-1.pdf</a>
14-2	Investigation of Northern Long Eared Bat Roosting Sites on Bridges, Completed May 2017: <a href="http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/14-4/NETC_14-4_Final_Report_20180322.pdf">http://www.newenglandtransportationconsortium.org/files/Final%20Deliverables/14-4/NETC_14-4_Final_Report_20180322.pdf</a>
14-4	Optimizing Future Work Zones in New England for Safety and Mobility, Completed March 2018: <a href="http://www.uvm.edu/~transctr/pdf/netc/Final%20Deliverables/14-4/NETC_14-4_Final_Report_20180322.pdf">http://www.uvm.edu/~transctr/pdf/netc/Final%20Deliverables/14-4/NETC_14-4_Final_Report_20180322.pdf</a>
15-1	Use of Forested Habitat Adjacent to Highways by Northern Long-Eared Bats
15-2	Using the new SHRP2 Naturalistic Driving Study Safety Databases to Examine Safety Concerns for Teens and Older Drivers
15-3	Moisture Susceptibility Testing for Hot Mix Asphalt Pavements in New England: <a href="https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC-15-3-Final-Report-1.pdf">https://www.newenglandtransportationconsortium.org/wp-content/uploads/NETC-15-3-Final-Report-1.pdf</a>
15-4	Quick Response: Quality Assurance (QA) Processes for Asphalt Pavement Construction in the Northeast
17-1	Quick Response: New England Connected and Autonomous Vehicles: <a href="http://www.newenglandtransportationconsortium.org/wp-content/uploads/17-1-Final-Report_20181019.pdf">http://www.newenglandtransportationconsortium.org/wp-content/uploads/17-1-Final-Report_20181019.pdf</a>
17-2	Quick Response: Quantification of Research Benefits

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

NETC 13-1, This project has been completed. Final report, fact sheet, and poster have been uploaded to the NETC website.

NETC 13-3, Phase I of the final report has been completed and has been uploaded to the NETC website.

NETC 13-3 Phase II, The research team developed the questionnaire to be used for interviewing New England state DOT financial offices. Interviews with CT, ME, and VT were completed. NH provided written answers. MA and RI are still in the works. A survey was also developed to collect information pertaining to QA inspection paperwork and upcoming projects.

NETC 14-1, All interviews were completed. The final report, fact sheet, and poster were also completed.

NETC 15-1, The project team finalized the MYSE distribution modeling and submitted a draft of the final report to the TAC for review and comments.

NETC 15-2, The project team held a TAC conference call in October and December. The team has been revising the draft final report to incorporate feedback from the TAC.

NETC 15-3, This project has been completed. Final report, fact sheet, and poster have been uploaded to the NETC website.

NETC 15-4, A draft report was completed this quarter and is in the process of being finalized.

NETC 17-1, This project has been completed. Final report, fact sheet, and poster have been uploaded to the NETC website.

NETC 17-2, A final TAC meeting was held during December to present draft deliverables. The project team has completed a draft final report.

**Anticipated work next quarter:**

NETC 13-3 Phase II, The research team will incorporate interview and survey results into a final report, fact sheet, and poster.

NETC 15-1, The project team plans to submit the final version of the final report, poster, and fact sheet.

NETC 15-2, The project team plans to submit the final version of the final report, poster, and fact sheet.

NETC 15-4, The final report, poster, and fact sheet will be finalized for the website.

NETC 17-2, The final report, poster, and fact sheet will be finalized for the website after the additional TAC input.

**Significant Results:**

There were no significant results to report during 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).**

NETC 13-1, None. The project was completed this quarter.

NETC 13-3 (Phase II), The researchers have not been able to get in contact with MassDOT for interviews after several attempts. RIDOT could not identify someone suitable to be interviewed. This process of scheduling interviews took longer than expected. The researchers will try to complete as many tasks as they can before the project end date.

NETC 14-1, Project funding has expired, however, the final deliverables have been completed.

NETC 15-1, None during the current period.

NETC 15-2, None during the current period.

NETC 15-3, None. The project was completed this quarter.

NETC 15-4, None during the current period.

NETC 17-1, None. The project was completed this quarter.

NETC 17-2, None during the current period.

**Potential Implementation:**

Five of the 17 research projects listed above are still in the research phase or working towards a final report. Project 14-1 implementation is not planned by the PI. Twelve research projects (NETC 06-4, 07-1, 09-2, 09 -3, 10-3, 13-1, 13-2, 14-1, 14-2, 14-4, 15-3, and 17-1) have completed their final reports and technical transfer items (poster and fact sheet). Project 17-2 is a six-month long project looking at quantification of research benefits focusing on recent NETC projects. The Advisory Committee is hopeful that this project will provide guidance for themselves and researchers on how to think about implementing these research projects in the future.