**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Date: __6/30/2014________

Lead Agency (FHWA or State DOT): __Vermont Agency of Transportation__________________

**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))

<table>
<thead>
<tr>
<th>TPF-5(222)</th>
</tr>
</thead>
</table>

**Transportation Pooled Fund Program - Report Period:**
- □ 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 (VI)

**Name of Project Manager(s):** Bill Ahearn

**Phone Number:** 802-828-2561

**E-Mail** Bill.Ahearn@state.vt.us

**Lead Agency Project ID:** CA0306

**Other Project ID (i.e., contract #):**
- NETC 06-4
- NETC 07-1
- NETC 09-2
- NETC 09-3
- NETC 10-3

**Project Start Date:** 9/16/13 7/1/13 9/1/13 9/1/13 9/16/13

**Original Project End Date:**
- NETC 06-4 9/15/15
- NETC 07-1 3/31/16
- NETC 09-2 2/28/16
- NETC 09-3 8/31/15
- NETC 10-3 9/15/15

**Current Project End Date:**
- 9/15/15
- 3/31/16
- 2/28/16
- 8/31/15
- 9/15/15

**Number of Extensions:**
- 0
- 0
- 0
- 0
- 0

Project schedule status:
- [✓] On schedule  □ On revised schedule  □ Ahead of schedule  □ Behind schedule

**Overall Project Statistics:**

<table>
<thead>
<tr>
<th>Total Project Budget</th>
<th>Total Cost to Date for Project</th>
<th>Percentage of Work Completed to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETC 06-4 $242,909</td>
<td>$0</td>
<td>12%</td>
</tr>
<tr>
<td>NETC 07-1 $198,154</td>
<td>$48,462.14</td>
<td>20%</td>
</tr>
<tr>
<td>NETC 09-2 $80,000</td>
<td>$1,083.20</td>
<td>25%</td>
</tr>
<tr>
<td>NETC 09-3 $165,000</td>
<td>$39,217</td>
<td>60%</td>
</tr>
<tr>
<td>NETC 10-3 $150,158</td>
<td>$0</td>
<td>22%</td>
</tr>
</tbody>
</table>

TPF Program Standard Quarterly Reporting Format – 9/2011 (revised)
Quarterly Project Statistics:

<table>
<thead>
<tr>
<th></th>
<th>Total Project Expenses and Percentage This Quarter</th>
<th>Total Amount of Funds Expended This Quarter</th>
<th>Total Percentage of Time Used to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETC 06-4</td>
<td>$0</td>
<td>$0</td>
<td>39%</td>
</tr>
<tr>
<td>NETC 07-1</td>
<td>$48,462.14</td>
<td>$45,082.11</td>
<td>35%</td>
</tr>
<tr>
<td>NETC 09-2</td>
<td>$1,083.20</td>
<td>$0</td>
<td>30%</td>
</tr>
<tr>
<td>NETC 09-3</td>
<td>$39,217</td>
<td>$0</td>
<td>39%</td>
</tr>
<tr>
<td>NETC 10-3</td>
<td>$0</td>
<td>$0</td>
<td>39%</td>
</tr>
</tbody>
</table>

Project Description:

06-1 Preventative Maintenance and Timing of Applications
07-1 In-Place Response Mechanisms of Recycled Layers Due to Temperature and Moisture Variations
09-2 Effective Establishment of Native Grasses on Roadsides
09-3 Advanced Composite Materials: Prototype Development and Demonstration
10-3 Low Temperature and Moisture Susceptibility of RAP Mixtures with Warm Mix Technology

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

06-4, UMass Dartmouth received data on CDs from NHDOT and is in the process of reviewing the data to include in the research project. UMass Dartmouth continued work on the literature review and internet survey.

07-1, Accomplishments this period include testing and data collection from the existing Warren Flats and Kancamagus sites in NH and identification and partial instrumentation of two new sites in ME.

09-2, The following activities were implemented during this reporting period:
- John Campanelli was hired for the Graduate Assistant position to work on this project. He conducted the literature search for the appropriate mixture of native seeds to establish demonstration plots.
- April 12 – Cristian Schulthess and John Campanelli collected soil samples from the proposed demonstration sites along Rt. 6.
- April 23 Kuzovkina and Schulthess met with Don Woodall from Colonial Seed Co at the road sites to discuss the project.
- Colonial Seed Company, CT was consulted during April-May for the protocols suitable for the establishments of demonstration plots.
- CT DOT managers were contacted in order to obtain the permit for the establishment of three demonstration sites along Rt. 6. The meeting with the DOT managers was scheduled for May 9 2014 to inspect the sites to confirm the suitability of obtaining permit. The permit was obtained on May 14, 2014.
- May 20, 2014 all co-PIs, Colonial Seed Co and other consultants on the project met at the proposed demonstration sites along Rt. 6 to confirm the establishment protocols. The seeding protocols include the use of a seed drill, hydroseeding, use of sawdust, and use of a Jacobsen overseeder.
- CT DEEP was contacted to assist with the Truax drill and to provide an operator for the establishment of one demonstration site. Uconn Landscaping was scheduled to conduct the hydroseeding, and Colonial Seed to conduct the overseeding.
- Establishment of the demonstration sites along Rt. 6:
  - May 14, 2014 – all demonstration sites were sprayed with RoundUp non-selective herbicide.
  - May 21, 2014 – all demonstration sites were mowed and raked.
  - May 27, 2014 – a site with sawdust application was planted.
  - May 28, 2014 – a site was hydroseeded with two levels of mulch.
  - May 29, 2014 – a site was planted with the Truax seed drill.
June 3, 2014 – a site was seeded with the Jacobsen overseeder.
June 11, 2014 – two botanists from the Arnold Arboretum visited the sites to conduct a survey of existing native and introduced vegetation along Rt. 6.
By-weekly site inspections were conducted throughout June to observe the germination and establishment rates.
July 8, 2014 Inspection of the demonstration sites with Mark Lavoi from the Colonial Seed Co to assess the early establishment success of plantings and herbicide needs.

09-3, The following activities were implemented during this reporting period:
- Draft specifications have been submitted to committee – Final versions are ready for final submittal
- Reports for task 1, 2 and 3 have been drafted and will be submitted in the next quarter
- Potential demonstration projects have been identified. Follow up is needed to get these projects moving
- Vendor witness plates received for ACO and Kenway.

10-3, UMass Dartmouth conducted additional meetings with the two contractors, (Palmer Paving - MA, & Tilcon - CT) who will produce mixtures for this study. Based on the additional meetings, the production matrix was updated. UMass Dartmouth updated a list of state agencies and contractors that will be targeted to complete the surveys.

**Anticipated work next quarter:**

06-4, Obtain information on new or planned pavement preservation projects in New England.

07-1, The research team will be continuing analysis on the data collected from the two existing NH sites during the 2014 spring thaw period. The team will also finalize the installation of instrumentation at the two new ME sites, pending construction schedules.

09-2, Continue the literature review, evaluation of the establishment of the demonstration plots and data collection as described in the proposal. Provide maintenance of the demonstration plots. Contact the native plant nurseries in the region for availability of different native species. Continue the discussions with the stakeholders to receive sufficient feedback about the project.

09-3, Submission of reports for task 1, 2 and 3. Determine demonstration bridges. Determine list of bridge projects that can be included for demonstrations. Vendor evaluation checklist to be submitted. Material testing for vendor witness plates for 2 of 3 vendors.

10-3, Complete Literature Review. Determine Critical Information.

**Significant Results:**

None as of this reporting period.

**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 09-2 and 09-3 contracts were executed 6 weeks after the start date listed in the contract. This should not cause a significant delay in the project.

**Potential Implementation:**

The 5 research projects listed above are fairly new. Implementations of the results of those projects are not anticipated in the near future.