

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): New Hampshire 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>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> <p style="text-align: center;">TPF-5(230)</p>	Transportation Pooled Fund Program - Report Period: <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)	
Project Title: <p style="text-align: center;">Evaluation of Plant-Produced High-Percentage RAP Mixtures in the Northeast</p>		
Name of Project Manager(s): <p style="text-align: center;">Jo Sias Daniel</p>	Phone Number: <p style="text-align: center;">603-862-3277</p>	E-Mail <p style="text-align: center;">jo.daniel@unh.edu</p>
Lead Agency Project ID:	Other Project ID (i.e., contract #):	Project Start Date: <p style="text-align: center;">8/11/2010</p>
Original Project End Date: <p style="text-align: center;">12/31/2013</p>	Current Project End Date: <p style="text-align: center;">12/31/2014</p>	Number of Extensions: <p style="text-align: center;">1</p>

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
781,706 Revised to 731,287	667,755	90%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
	0	

Project Description:

Research Objectives

The objectives of this research project are to:

1. Evaluation the performance in terms of low temperature cracking, fatigue cracking, and moisture sensitivity of plant produced RAP mixtures in the laboratory and field.
2. Establish guidelines on when it is necessary to bump binder grades with RAP mixtures.
3. Provides further understanding of the blending that occurs between RAP and virgin binder in plant-produced mixtures.
4. Refine fatigue failure criteria for RAP mixtures that can be used in the simplified Viscoelastic Continuum Damage (S-VECD) model.

Research Plan

The research plan is broken down into three phases. Phase I will focus on evaluating the effects of binder grade and plant type on the properties of mixtures with various percentages of RAP. Phase II of the study will be geared towards evaluating the fatigue failure criteria in the S-VECD model. Phase III is a laboratory study to isolate the effects of mixture variables without changing plant production variables.

The following tasks will be required to achieve the research objectives for both phases of this project:

1. Producing Plant Mixtures.
2. Testing and Analysis of Asphalt Binders and Mixtures.
3. Construction and Evaluation of Field Test Sections.
4. Reporting.

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

The updated contract with the new end date has been finalized.

During this quarter, the research team has focused on two tasks:

1. Phase III testing
2. Interim report summarizing the Phase I results

1. Phase III

Most of the Phase III specimens have been fabricated and shipped for testing. NCSU, Rutgers, and UMass Dartmouth have been testing the Phase III specimens.

2. Interim Report

The research team is in the process of finalizing the interim report summarizing the Phase I testing results to include the updated binder testing results. This will be completed and submitted to the technical committee for comment very soon.

Anticipated work next quarter:

1. Interim Report that includes data, analysis, and preliminary conclusions from the Phase I mixtures and updated binder testing will be finalized after receiving comments back from the technical committee
2. Finish specimen fabrication of Phase III test specimens
3. Continue testing and analysis of Phase III test specimens
4. Develop scope and budget for future tasks, formally add these tasks to the project and solicit funding
5. Continue testing remaining Phase II mixtures

Significant Results:

There are no results to present at this time as testing is still underway in Phase III.

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).

Potential Implementation: