

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Virginia DOT (VDOT)_____.

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> TPF-5(268)		Transportation Pooled Fund Program - Report Period: <input checked="" 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 type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: <h3 style="margin: 0;">National Sustainable Pavement Consortium</h3>			
Name of Project Manager(s): Kevin Kenneth McGhee	Phone Number: (434) 293-1956	E-Mail Kevin.McGhee@VDOT.Virginia.gov	
Lead Agency Project ID: VCTIR 103567	Other Project ID (i.e., contract #): 448679	Project Start Date: 7/1/2012	
Original Project End Date: 6/30/2018	Current Project End Date: 6/30/2018	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
\$225,036 *	\$175,343	78%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$24,063 (11%)	\$24,063	78%

* Received; total committed = \$500,000

Project Description:

Through a regional pooled fund, this program of research focuses on enhancing pavement sustainability. The initial project scope covers:

- ✓ Examine emerging sustainable materials, technologies, products and pavement systems, how to facilitate their adoption, and what testing approaches and methods are needed to implement these technological improvements.
- ✓ Identify an appropriate set of metrics that comprises all aspects of pavement sustainability and the adaptation or development of tools designed to assess pavement sustainability on qualitative and quantitative scales.
- ✓ Examine how sustainability considerations will affect all aspects of pavement engineering and management such as planning, design, construction, maintenance, management, and reclamation and develop guidelines for integration of these tools into pavement/ asset management business processes.
- ✓ Investigate the effect of climatic change on regional pavement engineering in terms of design, construction, maintenance, and management.

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

- Continued with the development of a case study on cold in-place recycling on a local roads in Christiansburg Virginia.
 - Collected construction and cost information, interviewed the town engineers, and scheduled non-destructive testing.
- Completed the development of a network-level decision analysis technique for including the environmental impacts into pavement management decision making. The findings have been documented in a the following paper:
 - “A multi criteria decision analysis technique for including environmental impacts in sustainable infrastructure management business practices,” which has been submitted to *Transportation Research Part D: Transport and Environment*.
- Completed the project-level life cycle assessment case study. The findings have been documented in a the following paper:
 - “A life cycle assessment of in-place recycling and conventional pavement construction and maintenance practices,” which has been submitted to the *Structure and Infrastructure Engineering Journal*.
- Prepared a revised problem statement for a project focused on incorporating life-cycle assessment into the pavement-type selection process as agreed during the last TAC meeting.
- Collaborated with the organization of the International Symposium on Pavement Life Cycle Assessment (LCA 2014) in Davis, CA.
- Started the organization of the next TAC meeting in Davis, CA in conjunction with the symposium.

Anticipated work next quarter:

- Expand the framework for a multi criteria decision analysis technique for including environmental impacts in sustainable infrastructure management business practices to be able to capture Stakeholders feedback.
- Finalize the documentation of the cold in-place recycling project in Christiansburg Virginia.
- Organize the next TAC meeting in Davis, CA in conjunction with the symposium.
- Continue to support the organization of the International Symposium on Pavement Life Cycle Assessment (LCA 2014) in Davis, CA.
- Help organize a training workshop on pavement recycling in Wisconsin. Offer the service to other members.
- If approved by the TAC members, start work on the third project focused on incorporating life-cycle assessment into the pavement-type selection process.

Significant Results:

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).

No problems were encountered in this quarter.

Potential Implementation: