

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): IOWA 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 # TPF-5(117)	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 4 – December 31)	
Project Title: Development of Performance Properties of Ternary Mixtures: Field Demonstration Projects		
Project Manager: Peter Taylor	Phone: 294-9333	E-mail: ptaylor@iastate.edu
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Lead Agency Project ID: RT 0149	Other Project ID (i.e., contract #): Addendum 241	Project Start Date: 12/01/05
Original Project End Date: 8/25/11	Current Project End Date: 7/25/2012	Number of Extensions: Pooled fund project; interim funding

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	Total Percentage of Work Completed
\$675,000	\$581,714.49	80

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$8,680.06		5%

Project Description:

This phase of the project is intended to provide states and contractors with the use and field management of ternary mixtures. The National CP Tech Center will provide its state-of-the-art 44-foot long mobile laboratory equipped for on-site cement and concrete testing. The mobile lab will be made available for testing at each project site to demonstrate the tests and procedures available for field management of ternary mixtures. Contractors will be provided with a list of potential mixture designs that encompass the optimum properties identified in earlier phases and the materials available in the local market. The contractors would be able to make minor adjustments in a selected mixture design to meet the needs of their equipment and crews.

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

- A paper titled “Drying shrinkage behavior of mortars made with ternary blends” has been accepted for presentation by TRB Committee AFN20: Properties of concrete.
- CA and NY field reports were completed.
- Lab testing of concrete from CA and NY was completed.
- Report writing and preparing papers for TRB for tech transfer.
- An invitation to a TAC meeting has been sent out.

Anticipated work next quarter:

- Execution of the OK field trip.
- Analysis of the data collected.
- Continue preparation of a model specification.

Significant Results:

No additional significant results this quarter, however previous quarterly reports have indicated the following:

- The laboratory phase is completed and the final report is available: http://www.intrans.iastate.edu/reports/ternary_mixtures_lab_study_w_cvr.pdf
- Nine properties were tested and analyzed. These concrete mixtures evaluated during this phase are being used to conduct field studies.
- Report on tests on pastes and mortars is complete
- Report on laboratory tests on concrete mixtures is complete
- Eight field trips completed
- Work on a final report has started.

Circumstance affecting project or budget (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).

The federal component of this pooled fund project will be completed by July 25, 2012. An extension of the pooled fund project may be requested in order to complete some of the tech transfer that will result from the final report.