

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(300)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2014) Quarter 2 (April 1 – June 30, 2014) X Quarter 3 (July 1 – September 30, 2014) Quarter 4 (October 4 – December 31, 2014)	
Project Title: Performance and Load Response of Rigid Pavement Systems		
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Lead Agency Project ID:	Other Project ID (i.e., contract #): Addendum 504	Project Start Date: 5/29/14
Original Project End Date: 5/31/2017	5/31/2017	Number of Extensions:

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
\$920,000.00	0	%

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
0	N/A	N/A

Project Description:

The modern approach to highway design is embodied in the Mechanistic-Empirical Pavement Design Guide (MEPDG), which incorporates models embedded in dedicated software, such as AASHTOWare Pavement ME Design, to predict pavement performance in greater detail than before. Full implementation of the MEPDG by state departments of transportation requires customizing or calibrating the software to state and local conditions, which in turn requires collecting data on climate, material properties, load response, and pavement performance.

The MEPDG software uses these data inputs to more accurately simulate the load response of pavements and long-term pavement performance. Local calibration of the software involves comparing long-term performance simulation results to actual performance data at local sites if possible or from matching pavements in the LTPP database. New York is one of the states that have previously instrumented test pavement sections to acquire local data to improve calibration of the MEPDG software. The installed sensors are still functioning to an extent that permits collection of additional useful data. This project has these objectives:

- Collecting load response and performance data and environmental monitoring at selected test pavements in New York for four years.
- Installing new instrumented sections as needed for a better understanding of rigid pavement response, including monitoring for the duration of the project.
- Determining the impact of a base on long-term performance of rigid pavement utilizing the data acquired in fulfilling the first two objectives and other nationally available data on the topic.

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

- ORITE travelled to the I 86 test site on the week of August 11th for four days. Activities included assisting the New York State Department of Transportation (NYSDOT) with FWD testing, conducting a forensic investigation, and documenting all distresses on the test sections.
- The data acquisition systems in the field were checked to verify they were operational, and the on-site weather station was rehabbed.
- The data collected on the trip were summarized in a short report that was sent to the NYSDOT liaison.
- Work was started to utilize the data to improve the calibration of the MEPDG catalog for NY.
- Initial calibration data was sent to the NYSDOT liaison for comments.

Anticipated work next quarter:

- A field visit to the I-90 site is being arranged with NYSDOT.
- Data from the FWD testing are being analyzed and plotted to be sent to NYSDOT, including load transfer efficiencies, and spreadabilities of the overlay sections.
- We are continuing to build the NYSDOT design catalog and are awaiting response from our initial report.

Significant Results:

- The overlay sections on I86 are still performing well with little to no distress found.

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).

- None
- TPF Program Standard Quarterly Reporting Format –12/2012