TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): <u>IOWA DOT</u>			
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(169)		Transportation Pooled Fund Program - Report Period:	
		□Quarter 1 (January 1 – March 31)	
		X Quarter 2 (April 1 – June 30)	
		□Quarter 3 (July 1 – September 30)	
		□Quarter 4 (October 4 – December 31)	
Project Title: Field Monitoring of Curved Girder Bridges with Integral Abutments			
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Project Investigator: Brent Phares	Phone: E-mail: 515-294-5879 bphares@iastate.edu		
Lead Agency Project ID: RT 281	Other Project ID (i.e., contract #): Addendum 323		Project Start Date: 6/01/08
Original Project End Date: 5/31/13	Current Project End Date:		Number of Extensions:
Project schedule status: $ X \text{ On schedule } $			
Total Project Budget	Total Cost to Date for Project		Total Percentage of Work
\$325,000.00	\$160,823.61		Completed 55%
Quarterly Project Statistics:			
Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter		Percentage of Work Completed This Quarter

Project Description:

- Group 1 Information Collection
 - Form TAC
 - Survey of available technologies
 - o Review of available engineering literature
 - Inspect existing curved and chorded curved girder bridges
- Group 2 Collect and Analyze Data on the Performance of Five or More Bridges
 - o Finalize an instrumentation plan
 - o Monitor and analyze behavior of bridges for two thermal cycles
 - Develop and Validate simple analytical models
- Group 3 Develop Project Conclusions and Recommendations
 - Establish a meeting with TAC
 - o Submit final report

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

We conducted live load testing of the project bridges. This was work outside of the original scope but approved by the TAC. This testing has given us significant information that will be useful to the project. Long-term data collection on three of the bridges is nearing completion (a problem with the other two will delay data collection completion).

Anticipated work next quarter:

We plan to continue analyzing the collected data and to begin drawing conclusions with respect to long-term behavior and associated bridge design. Analysis of the live load response will continue but will not be ready to draw conclusions.

Significant Results:

We are finding that there are considerable forces developed from temperature variations – a parameter that does not seem to be taken into account during design.

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).

No problems have been encountered in the last quarter.