

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(169)	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), 2011	
Project Title: Field Monitoring of Curved Girder Bridges with Integral Abutments		
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Project Investigator: Brent Phares	Phone: 515-294-5879	E-mail: 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: Same	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
\$325,000.00	\$205,245.84	65%

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$11,479.33		5%

Project Description:

- Group 1 – Information Collection
 - Form TAC
 - Survey of available technologies
 - 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
 - Finalize an instrumentation plan
 - 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
 - Submit final report

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

In preparation for the TAC meeting held this quarter, the research team worked to finalize the content, form, and flow of results to be presented in the final report (specifically related to long-term temperature behavior – but with carry over to the load performance aspect as well). During the TAC meeting (a lengthy meeting), the concept was presented in detail. The developed concept was approved by the TAC and the research team has spent time since then beginning to fill in the various pieces of the report. With respect to live load behavior, the research team continues to analyze the collected data and make comparisons with design assumptions.

Anticipated work next quarter:

In the next quarter the long term behavior portion of the report should be complete or nearly complete. We should also be very close to finalizing the live load behavior analysis portion as well. It is hoped that the research team will then be able to begin the analytical portion of the project.

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.