TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): FHWA

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.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)*	**Transportation Pooled Fund Program - Report Period:**
TPF-5(283)	☐ Quarter 1 (January 1 – March 31) ☑ Quarter 2 (April 1 – June 30) ☐ Quarter 3 (July 1 – September 30) ☐ Quarter 4 (October 1 – December 31)

Project Title:		
Influence of Vehicular Live Loads on Bridge Perfromance		
Name of Project Manager(s):	**Phone Number:**	**E-Mail**
Tom Saad, Fred Faridazar	708.283.3521	thomas.saad@dot.gov
Lead Agency Project ID:	**Other Project ID (i.e., contract #):**	**Project Start Date:**
		January , 2013
Original Project End Date:	**Current Project End Date:**	**Number of Extensions:**
January, 2018	July, 2022	

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
$2.2M	$1.6M	70%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date

Project Description:

Collect research quality bridge loads and bridge response data from in-service bridges to determine the effects of live loads on bridge performance, independent of all other influences on bridge component performance. Develop a comprehensive protocol for collecting research quality data, collect data at several locations across the country, maintain systems and store data in the LTBP Bridge Portal, and analyze data to quantify influences of live loading on bridge component performance.

Create 'national' database for truck loads on bridges.

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

Weekly conference calls
Full data collection on the three study bridges underway. (OR, WI, and GA)
Data synchronization efforts on Oregon bridge begin to automate data collection process. Data 'scrubbing' and automation process to follow for WI and GA bridges.
Work performed to 'debug' GA bridge instrumentation.

Anticipated work next quarter:

Complete punch list of items for I-85 bridge in Georgia and conduct load test of bridge and visual inspection.
Complete instrumentation of SR 2 bridge in Wisconsin and conduct load test and validation of PWIM.
Continue data collection of I-84 bridge in Oregon.
Evaluate potential continued use of experimental BWIM systems on bridges in Oregon and Wisconsin that are zero cost contributions to the study.
Continue efforts to automate data collection and synchronization on all three study bridges.

Significant Results:

Instrumentation of the third reference bridge on I-85 in Georgia completed. Protocol for instrumenting and collecting a bridge utilizing an existing PWIM site is developed.

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).

Phase II contract in place to allow for maintenance of instrumentation at three project bridge sites (OR, WI, and GA) and long-term data collection and analysis. Extended project through July 2022, or until funds are expended. Long-term data collection and analysis is desirable to measure bridge element deterioration more accurately. Trends of deterioration may be seen over 1 or 2 years of data collection, however, the trends will be more obvious over long-term monitoring and under higher volume of loading.

Potential Implementation:

Continued operation of fiber optic BWIM systems on two study bridges will be examined and the potential cost-effectiveness and reliability of this experimental technology will be assessed.

Data collection synchronization and automation for all three bridges to begin.