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)* TPF-5(283)		**Transportation Pooled Fund Program - Report Period:** ☐ 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): Tom Saad, Fred Faridazar	**Phone Number:** 708.283.3521	**E-Mail** thomas.saad@dot.gov
Lead Agency Project ID:	**Other Project ID (i.e., contract #):**	**Project Start Date:** January , 2013
Original Project End Date: January, 2018	**Current Project End Date:** January, 2023	**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	Percentage of Work Completed to Date
		46%

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.):

Conference calls on progress continue to be help each Tuesday morning.

• Coordination with WIDOT on the WIM system and determining data availability continues.

• Communications with IRD were conducted to have access to the IRD WIM data loggers on site.

• An outline for the work plan and quality control plan has been developed, and candidate bridge sites candidate bridge sites in Georgia, North Carolina, Pennsylvania, and Minnesota have been identified and forwarded to FHWA. The outline was submitted to FHWA on September 8, 2017.

• TOCOR continued discussion with Georgia DOT regarding the instrumentation of I-85 SB over Greenville Road. This bridge has in odd concrete deck detail at what may be a mid-span joint (see photo). A set of bridge plans and inspection report is being requested to further investigate.

• Received link to I-84 SB Bridge plans on October 18th and downloaded the plans. An assessment of the plans was initiated.

• Developed the instrumentation plan for Hurley, Wisconsin bridge

• Completed ordering and delivery of sensors and data acquisition components with lead times to facilitate installation prior to winter weather at site. Due to bad weather the installation was incomplete due primarily to high water levels preventing installation of sensors for the mid-span of the bridge. End-Span sensors were installed, and enclosure hung. Camera pole was installed with assistance from WIDOT providing auger. Camera and weather station were mounted. The existing roadside cabinet was cleaned out and prepared for installation to new equipment.

• A second trip is needed to install the remainder of the sensor and complete cabling of the sensors to the data acquisition units and to the roadside cabinet. This work will require coordination with WIDOT for use of their snooper and for the provision of traffic control.

Anticipated work next quarter:

Develop plan for instrumenting a steel girder bridge in Georgia (I-85) which will utilize an existing PWIM sight at a load enforcement site.

Coordinate efforts with Georgia DOT, MCCD and State Patrol and determine if bridge can be instrumented in the first quarter of FY2018.

Continued improvement and data collection at Oregon and Wisconsin bridge sites.

Significant Results:

Instrumentation of 2nd 'reference bridge' on SR 2 in Hurley Wisconsin is performed. Access to PWIM data is available and being monitored.

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).

None.

Potential Implementation:

Development of protocol for instrumentation of a steel girder bridge is developed for collecting data to establish how vehicular live loads affect bridge component performance.