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:**	**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
		25%

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.):

• Re-instated weekly project calls now scheduled for Tuesday mornings subject to cancellation from time to time.
• Prepared optimized data collection plan for the Oregon Bridge.
• Initiated coordination with Oregon DOT in regards of work sharing with ODOT taking on the development of instrumentation plans for the bridge. Pennoni to review and approve these plans in accordance to the data collection plan submitted.
• Prepared paper comparing Intercomp Strain Gauge Strip Sensor with Kistler Quartz Piezo strip sensor and submitted to FHWA on February 23.
• Attended meeting at TFHRC on February 24 on Fiber Optic Bridge WIM system proposed for installation on the Oregon and Wisconsin bridges.
• Transmitted a technical paper by Heimi, Taylor and Ansari to FHWA on the fiber optic technology and B-WIM approach to measuring shear force to estimate truck weight.
• Obtained point-cloud file from Oregon DOT on pavement roughness immediately upstream of the Oregon Bridge. This data file was processed and plan sheets prepared. The roughness index of the pavement is within the criteria used by LTPP for WIM sites.
• Requested base plan information from Oregon DOT to develop base plans for the WIM site.
• Initiated development of WIM base plans and specification based in readily available information.
• Conducted Web-Conference Meeting with the TAC on March 10
• Collected and forwarded supplemental documentation related to Intercomp Strain Gage Strip Sensors, Overview of NSF NHERI at UTexas program collaboration discussed during the TAC meeting and a paper on bridge testing using a Vibroseis truck to distribute to TAC members.

Anticipated work next quarter:

Coordinate with Oregon DOT to instrument first bridge with both PWIM and BWIM technologies. Also coordinate visual inspection of bridge prior to data collection. Finalize instrumentation plan.

Significant Results:

Significant coordination with Oregon DOT who will provide additional financial contributions by awarding a contract for bridge instrumentation with a local vendor.

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).

Bridge instrumentation pending award of project and notice to proceed from Oregon DOT.

Potential Implementation:

Instrument first bridge in mid to late CY 2016.