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
		28%

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.):

• Conducted weekly project calls
• Field view of the Oregon Bridge was conducted on July 18th attended by Steve Lovejoy (ODOT), Barry Myers (EMS), Jeff Purdy (Pennoni) and Kirk Grimmelsman (Pennoni). Location of cabinets, cameras and conduit runs for electrical service were discussed. Cabinet and camera locations were staked and marked. Reviewed trial sensor installation by EMS and suggested that the sensors should be mounted on the side of the flange rather than on the bottom. This makes for an easier installation without compromising the data from the sensor. WIM station was located and its cabinet location defined and staked. Trip report was submitted to FHWA.
• Discussion with FHWA regarding the WIM technology to be deployed resulted in the determination that quartz-piezo sensor strip should be used rather than the strain gage sensor strip previously recommended and used by ODOT at the weight enforcement stations. FHWA determined through discussion with several states that there was insufficient data on strain gage strip sensor performance to utilize this technology at the first test bridge.
• Prepared preliminary WIM installation plans and submitted for comment by FHWA and Oregon DOT on September 15th. Comments were received and revised WIM plans were prepared and submitted for review and sealing by an ODOT professional engineer.
• ODOT anticipated bridge instrumentation installation to occur in October requiring a 3-month period from procurement of equipment to the beginning of data collection. Therefore, data collection is anticipated to begin in December 2016. .
• NTP issued to EMS on September 19th for the procurement and installation of senors and data acquisition units (DAQs). Coordinated with ODOT and EMS to accelerate installation of sensors before temperature get too cold for epoxy.
• Coordinated installation of power service and electrical contractor to have this work completed in Mid-October.
• Determined that Oregon will require a licensed electrician to install low voltage signal cable in conduit for the WIM system. Notified WIM installation contractor of this requirement and initiated coordination of this installation with a

Anticipated work next quarter:

Bridge instrumentation and visual inspection of bridge components along with RABIT and THUMPR evaluation.

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 Oct-Nov 2016.