

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: June 30, 2019

Lead Agency (FHWA or State DOT): Indiana 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 # <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> <u>TPF 5-281</u>	Transportation Pooled Fund Program - Report Period: <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input checked="" type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: Center for the Aging Infrastructure: Steel Bridge Research, Inspection, Training and Education Engineering Center – S-BRITE		
Name of Project Manager(s): Tommy E. Nantung	Phone Number: (765) 463-1521 ext. 248	E-Mail tnantung@indot.in.gov
Lead Agency Project ID:	Other Project ID (i.e., contract #):	Project Start Date: 9/1/2013
Original Project End Date: 10/1/2015	Current Project End Date: 8/31/2020	Number of Extensions: None

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**
\$1,230,000*	\$617,903	75%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date**
\$29,177***	2.4%	75%

*Additional partners have joined S-BRITE and others have renewed participation, hence total project budget has increased.

**Since end date has been extended, project percentages have been updated (estimates)

***this is a revised expenditure for this period. Previous QPR included expenses for April and May of 2019 by mistake.

Project Description:

The objective is to develop the Steel Bridge Research, Inspection, Training, and Education Engineering Center (S-BRITE Engineering Center) focused on existing steel highway bridges. This National Center will be the first of its kind and will become the leading education, training, research, and engineering center related to all aspects affecting the existing aging steel bridge and structure inventory. Although the Center will be focused on highway bridges, it will also support stakeholders of steel railroad bridges as well as steel ancillary structures, such as lighting towers and sign supports. The Center will contribute to improved asset management decisions for DOTs, FHWA, and other partners relative to existing steel bridge inventory.

This impact will be realized through:

- Research
- Training
- Technical Support

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

- Scheduled "Inspecting Steel Bridges for Fatigue August 6&7 at Purdue and invited all partner states
- Hosted the US Army Corps steel bridge inspection class in May of 2019. The US Army Corps are an S-BRITE partner.
- S-BRITE website continues to be updated (<https://engineering.purdue.edu/CAI/SBRITE>)
- Continue to coordinate the acquisition of additional specimens for S-BRITE. Specifically, members of the research team have been in discussions with INDOT to obtain samples of a deteriorated concrete deck that can be placed on existing girders to teach inspectors about sounding decks and for use when evaluating other NDE methods for testing decks.
- Continued to provided DEN support to all partners, in particular for Michigan, Indiana, and South Dakota.
- A Special task associated with evaluating the redundancy of twin-tub girder bridges for the state of Wisconsin continued.
- The results from the Probability of Detection Study (POD) related visual inspection for fatigue cracks has been completed and is in the final publishing stage. The report, which is in two volumes, will be available on the Purdue ePubs site in early August 2019. The first volume is an executive summary of the research while the second volume is a full project report.

Anticipated work next quarter:

- Continue with on-site and off-site training for partners
- Offer S-BRITE course on retrofitting steel bridges for fatigue. This will likely be offered in the fall of 2019 and partner states will be invited to send participants. This is a VERY unique course in that students actually install various retrofits in addition to participating in classroom exercises.
- Continue with DEN support for all partners
- Continue to work with DOTs to obtain items for bridge component gallery.

Significant Results:

1. Training of employees from several State DOT.
2. DEN support has provided solutions to various DOT problems.
3. S-BRITE research results are being disseminated

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:

None to date