TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Date: Dec 31, 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.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)* ***TPF 5-281***	**Transportation Pooled Fund Program - Report Period:** ☐Quarter 1 (January 1 – March 31) ☐Quarter 2 (April 1 – June 30) ☐Quarter 3 (July 1 – September 30) XQuarter 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:** **INDEFINITE**	**Number of Extensions:** None

Project schedule status:

X 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**
$1,260,000*	**$738,989**	**80%**

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date**
$59,607	**4.7%**	**80%**

*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)

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.):

- Texas DOT has joint S-BRITE as a partner.
- S-BRITE website continues to be updated (https://engineering.purdue.edu/CAI/SBRITE)
- Steel orthotropic deck panels that have been fatigue tested at Lehigh University have been delivered to S-BRITE and erected (see photograph 1 and 2).
- An all-bolted truss specimen has been acquired and erected at S-BRITE (see photograph #3)
- Continued to provided DEN support to all partners.
- A Special task associated with evaluating the redundancy of twin-tub girder bridges for the state of Wisconsin has been completed. A simplified approach to design twin tub girders bridges that would not be classified as FCMs has been developed and submitted for AASHTO consideration. The draft AASHTO-ready provisions are available to partners upon request.
- Training for assisting inspector's perceptive skills has been developed. A Beta version of this training will be offered in February 2020.

Anticipated work next quarter:

- Continue with on-site and off-site training for partners.
- Offer S-BRITE course on retrofitting steel bridges for fatigue. The development of this course was funded by INDOT. This is a VERY unique course in that students actually install various retrofits in addition to participating in classroom exercises (see photo). While there is significant cost to the course, it has been very well received. S-BRITE will very likely be offering the course to partner states and allow one individual per state to participate. Details will be forthcoming.
- 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

Photograph #1 – Sample #1 of steel orthotropic deck

Photograph #2 – Sample #2 of steel orthotropic deck placed on steel truss bridge

Photograph 3 – Bolted Steel Truss Specimen