

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: June 30, 2021

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: INDEFINITE	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**
\$1,585,000*	\$934,527	85%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date**
\$30,625	2.0%	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.):

- Continued to provide DEN support to all partners.
- Based on the survey conducted following the "S-BRITE Update Webinar" held in the first quarter, a project focused on developing performance testing and certification criteria for bridge inspectors (centered on steel bridges) was selected. The project scope will be developed in more detail in the third quarter, circulated for review by partner states, and then initiated in the fall of 2021.
- At present, due to the COVID-19 Pandemic, in-person short courses can be held at Purdue, but not at the facility that is located very close to the S-BRITE Center. This makes logistics very difficult for the class. However, S-BRITE will hold a class for the US Army Corps in mid-July under these restrictions. Depending on how that class goes, a decision will be made to begin to hold more courses under that model or to wait to fall when normal operations are expected to resume.
- S-BRITE obtained the components from an entire 150-foot span steel through truss bridge built in the 1930. The bridge was deemed historic and was dismantled. However, it was never claimed for alternate use. Therefore, INDOT donated it to S-BRITE. As it is an entire truss, there are a significant number of pieces that are available for research, training etc.
- Dr. Connor was made aware that TPF-5(281), the original S-BRITE pooled fund study MUST BE CLOSED OUT due to FHWA rules. Purdue and INDOT are working to 1) close out the old study and 2) imitate a follow on study to continue S-BRITE. Partner states will be kept informed regarding this progress. From a support point of view, the transitions should be seamless to partner states.

Anticipated work next quarter:

- Prepare scope and budget for proposed study on developing performance testing and certification criteria for steel bridge inspectors.
- Offer S-BRITE course on retrofitting steel bridges for fatigue on campus as soon as travel restrictions are lifted for partner states.
- 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).

COVID 19 has eliminated all on-site training at Purdue. Obviously, this has greatly reduced the ability of S-BRITE to provide training to partners and consultants. Optimistically, in-person training will resume in August of 2021.

Potential Implementation:

S-BRITE continues to have tremendous impact and benefit for owners, designers, and fabricators of steel bridges