

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 5-387</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: Development of an Integrated Unmanned Aerial Systems (UAS) Validation Center		
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: 9/1/2018	Current Project End Date: 8/31/2021	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**
\$575,000	\$38,586	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**
\$17,725	3.0%	36%

*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:

This study proposes to develop the basic standards, protocols, and testing requirements that a given UAS must meet and demonstrate for a particular application.

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

- Progress has been made in the initial development of evaluation criteria for UAS based on the kick-off meeting held in January of 2019. One of the concepts includes the development of a self-contained obstacle course that could be standardized for use. Such a standardized test has the advantage of ensuring that UAS meet the same base requirements, regardless of the state in which the inspection takes place.
- The research team is in the process of constructing concrete deck specimens with defects to evaluate the feasibility of creating such specimens for use in evaluating the capability of various UAS to detect and quantify such damage.
- The preliminary testing protocols for testing the capability of UAS began.
- Efforts are underway to develop the pilot and sensing evaluation criteria.

Anticipated work next quarter:

- Continue with the development of testing protocols
- Schedule Project Panel meeting for some time in the 3rd Quarter.

Significant Results:

1. None to date

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).

While the project is back on schedule, the structural engineering student who recently joined the project has decided to pursue an MBA and will no longer be part of the project. This is the second student to leave the project which obviously has a negative impact on the project. Dr. Connor is seeking a new student at this time.

Potential Implementation:

None to date