

**NEW ENGLAND TRANSPORTATION CONSORTIUM
QUARTERLY PROJECT PROGRESS REPORT**

- A. PROJECT NUMBER AND TITLE:** NETC 18-3, Integration of Unmanned Aircraft Systems (UAS) into Operations Conducted by New England Departments of Transportation
- B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):** Jon Gustafson (WSP USA, Inc.)
- C. WEB SITE ADDRESS (If one exists):** None.
- D. START DATE (Per NETC Agreement):** April 16, 2019
- E. END DATE (Per NETC Agreement):** March 31, 2021
- F. ANTICIPATED COMPLETION DATE:** March 31, 2021
- G. PROJECT OBJECTIVES:** The objective of this research is to provide guidance to New England state DOTs regarding best practices when incorporating UAS into daily operations.
- H. REPORT PERIOD:** Quarter 2, 2019 (April 1 – June 30)
- I. ACCOMPLISHMENTS THIS PERIOD:** The project was awarded April 16, 2019 and the project kickoff meeting was held on May 29, 2019. Current Task 1 activities underway include the literature review on UAS applications to support State DOT missions, the New England State DOT profile framework (in development), and the data call for specific documents and information (sent to the TAC on June 24, 2019) from New England State DOTs. The literature review is focusing on UAS program components (organization structure, training, funding, quality management, etc.), transportation applications (comparison of traditional methods and UAS-enabled), and benefit/cost information. This will inform the assessment of the effectiveness, efficiency, safety, and any cost/labor savings.
- J. PROBLEMS ENCOUNTERED (If any):** None.
- K. TECHNOLOGY TRANSFER ACTIVITIES:** No activities were completed during the reporting period. In September 2019, this project will be included in the VTrans Research and Innovation Showcase. A project fact sheet and poster will be developed for the event. However, participation in this showcase event is outside the scope of this project.

L. STATUS BY TASK:

Task	Description	% Complete
Task 1	Explore UAS applications to support state DOT missions.	18%
Task 2	Identify up-to-date technologies and support systems necessary for the identified UAS applications.	Not started
Task 3	Address challenges associated with the UAS technologies, FAA rules and regulations.	Not started
Task 4	Develop procedures to carry out these UAS applications.	Not started
Final Report	Compilation of research analysis and findings.	Not started
NETC Technology Transfer	NETC Technology Transfer toolbox including project fact sheet, poster, and webinar recording.	Not started
Overall		4%

M. PERCENT COMPLETION OF TOTAL PROJECT: 4%

N. ACTIVITIES PLANNED FOR NEXT QUARTER: Next quarter, it is anticipated that Task 1 will be completed (by September 16, 2019) with the Task 1 report due September 30, 2019. The remaining Task 1 activities include the literature review and analysis, the interview guides and interviews of the FHWA EDC5 core implementation team, and the profiles for each New England State DOT. Also, using the profiles and the priorities of each New England State DOT, UAS applications will be selected and compared with industry effective practices. These selected UAS applications will be the basis for subsequent Tasks. After Task 1 is completed, a progress meeting with the NETC TAC will be held.

O. FINANCIAL STATUS:

As of: July 1, 2019

Total Project Budget: \$146,631.57

Total Expenditures: \$5,969