

**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):** Jagannath Mallela (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 3, 2020 (July 1 – September 30)
- I. ACCOMPLISHMENTS THIS PERIOD:** The Task 3 report that focused on addressing challenges associated with UAS application were revised in accordance with the comments of the TAC members, with reorganizing its chapters and additional improvements made to FAA regulations and recommendations for Part 107 waivers activities were completed. Existing guidelines (latest versions of UAS SOPs and use-case level guidelines) were collected from NETC DOTs to inform data requirements for Task 4. Task 4 will focus on developing procedures and decision support constructs for UAS use-cases. Findings will be documented in Task 4 report to be submitted to TAC on November 16, 2020
- J. PROBLEMS ENCOUNTERED (If any):** No major challenges are anticipated, and Task 4 report is expected to be delivered on time (November 16, 2020).
- K. TECHNOLOGY TRANSFER ACTIVITIES:** None.

L. STATUS BY TASK:

Task	Description	% Complete
Task 1	Explore UAS applications to support state DOT missions.	100%
Task 2	Identify up-to-date technologies and support systems necessary for the identified UAS applications.	100%
Task 3	Address challenges associated with the UAS technologies, FAA rules and regulations.	100%
Task 4	Develop procedures to carry out these UAS applications.	30%
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		61%

M. PERCENT COMPLETION OF TOTAL PROJECT: 61%

N. ACTIVITIES PLANNED FOR NEXT QUARTER: This quarter will involve developing operational procedures and guidelines for UAS deployment for the transportation applications (Task 4 report) and compilation of final research report. Task 4 report will include general programmatic requirements for UAS and use-case specific parameters that will be compiled to a decision-support framework. The final research report will be structured with its contents derived from all the key findings of the interim task reports including literature review, research objectives, methodology, findings from case studies, implementation challenges, and decision support framework.

O. FINANCIAL STATUS:

As of: September 30th, 2020

Total Project Budget: \$146,631.57

Total Expenditures: \$88,764.60