

**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 2, 2020 (April 1 – June 30)
- I. ACCOMPLISHMENTS THIS PERIOD:** Task 3, “Address Challenges Associated with UAS”, activities were completed. Task 3 activities included conducting six case studies (via interview) with representatives from each DOT to understand the work processes and challenges associated with UAS deployment and FAA regulations for selected transportation applications. Detailed process maps were developed focusing on pre-flight planning, flight operations, and data processing and shared with the TAC Committee to request their comments. Findings are being documented in Task 3 report, to be turned in July 16<sup>th</sup>, 2020
- J. PROBLEMS ENCOUNTERED (If any):** COVID-19 has caused coordination challenges in scheduling interviews for case studies and requesting feedbacks. However, all the required activities are completed within the required timeframe and Task 3 report will be delivered on time (July 16<sup>th</sup>, 2020).
- K. TECHNOLOGY TRANSFER ACTIVITIES:** None.

**L. STATUS BY TASK:**

<b>Task</b>	<b>Description</b>	<b>% Complete</b>
<b>Task 1</b>	Explore UAS applications to support state DOT missions.	<b>100%</b>
<b>Task 2</b>	Identify up-to-date technologies and support systems necessary for the identified UAS applications.	<b>100%</b>
<b>Task 3</b>	Address challenges associated with the UAS technologies, FAA rules and regulations.	<b>90%</b>
<b>Task 4</b>	Develop procedures to carry out these UAS applications.	<b>Not started</b>
<b>Final Report</b>	Compilation of research analysis and findings.	<b>Not started</b>
<b>NETC Technology Transfer</b>	NETC Technology Transfer toolbox including project fact sheet, poster, and webinar recording.	<b>Not started</b>
<b>Overall</b>		<b>46%</b>

**M. PERCENT COMPLETION OF TOTAL PROJECT: 46%**

**N. ACTIVITIES PLANNED FOR NEXT QUARTER:**, Task 3 is nearly complete and will be submitted on July 16<sup>th</sup>. Over the next three (3) months, the team will be expanding on the process maps, developed as part of Task 3, to perform Task 4: developing operational procedures and guidelines for UAS deployment for the transportation applications. In developing the operational procedures, each New England State DOT's policies on UAS will be reviewed to extract requirements associated with authorities, operations, procurement, restrictions, and others deemed necessary. The procedural guidelines will also include a decision support construct that guides each State DOT in determining suitability and eventual go/no-go decision.

**O. FINANCIAL STATUS:**

*As of: June 30<sup>th</sup>, 2020*

**Total Project Budget:** \$146,631.57

**Total Expenditures:** \$67,618.90