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): https://www.newenglandtransportationconsortium.org/projects/netc-18-3/
- **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 4, 2020 (October 1 December 31)
- I. ACCOMPLISHMENTS THIS PERIOD: The research team worked on Task 4 that included a thematic review of Standard Operating Procedure documents of the New England State DOTs and recommendations for improvements. Implementation Plans were also developed to assist New England DOTs in their deployment for the chosen six transportation use cases. Findings were presented to the NETC TAC on November 12th and the Task 4 report was submitted to the Panel on November 30th after incorporating the comments from the Panel. The draft final report that consolidates the research activities conducted is anticipated to be submitted to TAC on January 5, 2021
- **J. PROBLEMS ENCOUNTERED (If any):** No major challenges are anticipated, and Draft final report is expected to be delivered on January 5,2021.
- 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	100%
	for the identified UAS applications.	
Task 3	Address challenges associated with the UAS technologies,	100%
	FAA rules and regulations.	
Task 4	Develop procedures to carry out these UAS applications.	100%
Final Report	Compilation of research analysis and findings.	65%
NETC Technology	NETC Technology Transfer toolbox including project fact	Not started
Transfer	sheet, poster, and webinar recording.	
	Overall	82%

M. PERCENT COMPLETION OF TOTAL PROJECT: 82%

N. ACTIVITIES PLANNED FOR NEXT QUARTER: This quarter will involve development of draft research report, panel review, and preparation of revised, final research report. The final research report will be structured with its contents derived from all the key findings of the interim task reports including review of state of practice, research objectives, methodology, findings from case studies, implementation challenges, and implementation plans for UAS use cases. The quarter will also involve NETC Tech transfer that includes a webinar, a research summary and a poster with key findings of the research

O. FINANCIAL STATUS:

As of December 31, 2020

Total Project Budget: \$146,631.57 **Total Expenditures:** \$120,084.85