

FACT SHEET

Integration of Unmanned Aerial Systems (UAS) into Operations Conducted by New England Departments of Transportation

RESEARCH PROJECT TITLE

Integration of Unmanned Aircraft Systems (UAS) into Operations Conducted by New England Departments of Transportation (NETC)

STUDY TIMELINE

April 2019–March 2021

PRINCIPAL INVESTIGATOR

Jagannath Mallela, Ph.D., WSP

NETCCONTACT

Kirsten Seeber
NETC Coordinator
CTC & Associates
kirsten.seeber@
ctcandassociates.com

MORE INFORMATION

[NETC Coordinator will add link to the final report on NETC website](#)

NETC, a cooperative effort of the transportation agencies of the six New England states, funded this research. Through the Consortium, the states pool professional, academic, and financial resources for transportation research to develop improved methods for dealing with common problems associated with the administration, planning, design, construction, rehabilitation, reconstruction, operation and maintenance of the region's transportation system.

The NETC is hosted by CTC & Associates.

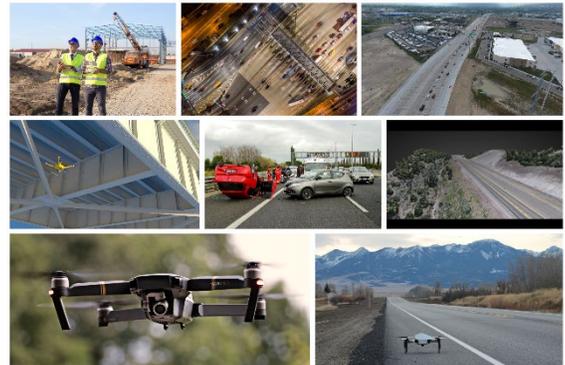
Introduction

Unmanned aerial systems (UAS) have seen increased use in the transportation sector. UAS have provided significant improvements in the ability to collect information in challenging environments, as well as savings in data collection expenses. New England State Departments of Transportation (DOTs) requested an evaluation of their current programs and identification of other best practices for establishing and sustaining a UAS program for their daily operations.

Methodology

The report evaluated and provided recommendations on organizational structure for UAS programs, Federal Aviation Administration (FAA) rules for operations, and detailed analysis for the following UAS cases that are being used in New England:

- Emergency response and recovery
- Public outreach and engagement
- Bridge inspection
- Surveying and mapping
- Construction inspection
- Traffic analysis



Conclusion

The research team presented its findings to the NETC in the published report, which suggests review or modifications to the following items: organizational structure, standard operating procedures, risk assessment, aircraft sensor and platform selection, post-flight processing, data management, and FAA coordination for the use cases selected.

New England DOTs have a good foundation for using UAS in their operations. The additional recommendations outlined in the report can assist with leveraging the potential of UAS for data collection in daily operations.

What are the potential impacts?

The recommendations for New England State DOTs will assist them in updating their existing processes and streamlining their UAS programs. Implementing these recommendations will help innovate UAS data collection processes and provide DOTs significant financial savings and a safer environment to collect data.