

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

A. PROJECT NUMBER AND TITLE:

NETC 20-3 Investigating Thermal Imaging Technologies and UAV to Improve Bridge Inspections

B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):

Kevin Ahearn, PE, AECOM

C. WEB SITE ADDRESS (If one exists):

None

D. START DATE (Per NETC Agreement):

2/19/2021

E. END DATE (Per NETC Agreement):

~~3/31/2023~~ 6/30/2023 (contract extended 3 months)

F. ANTICIPATED COMPLETION DATE:

~~3/31/2023~~ 6/30/2023 (contract extended 3 months)

G. PROJECT OBJECTIVES:

Develop UAV-based inspection and analysis protocols using infrared thermal imaging to determine the existence and extend of concrete delamination, with emphasis on the underside of bridge decks.

H. REPORT PERIOD:

2nd Quarter, 2023

I. ACCOMPLISHMENTS THIS PERIOD:

AECOM conducted an introductory virtual training and in-person training/demonstration for New England agency staff. The Final Report, Fact Sheet, and Poster were submitted and are available on the NETC Project Page.

J. PROBLEMS ENCOUNTERED (If any):

None

K. TECHNOLOGY TRANSFER ACTIVITIES:

In addition to the NETC member states, several New Jersey Department of Transportation staff attended the introductory virtual training session for thermal imaging and unmanned aerial vehicles held via Microsoft Teams on 5/12/23.

L. STATUS BY TASK:

Task	Description	% Complete
Task 1	Desk scan of current technologies	100%
Task 2	Field demonstration of chosen IR/UAV models and data analysis	100%
Task 3	Develop inspection and analysis protocols	100%
Task 4	Draft final report, technology transfer strategy, and toolbox	100%
Task 5	Final report	100%

M. PERCENT COMPLETION OF TOTAL PROJECT: 100%

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

The following activities are anticipated for the next quarter:

- Perform project close-out webinar (schedule August 8th)

O. FINANCIAL STATUS:

As of: July 10th, 2023

Total Project Budget: \$174,931.41

Total Expenditures: \$166,296

Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than three (3) working days after the end of each calendar quarter.