

**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

F. ANTICIPATED COMPLETION DATE:

3/31/2023

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:

4th Quarter, 2022

I. ACCOMPLISHMENTS THIS PERIOD:

Task 4, draft final report and technology transfer strategy and toolbox documents were completed and submitted to the Technical Committee for review on 12/2/22.

J. PROBLEMS ENCOUNTERED (If any):

None

K. TECHNOLOGY TRANSFER ACTIVITIES:

None

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	Not started

M. PERCENT COMPLETION OF TOTAL PROJECT: 90%

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

The following activities are anticipated for the next quarter:

- Revise draft final report and technology transfer strategy and toolbox documents based on feedback from Technical Committee
- Perform project close-out webinar
- Discuss potential tasks that can be performed if there are additional funds remaining after submission of final report

O. FINANCIAL STATUS:

As of: *January 9th, 2023*

Total Project Budget: \$174,931.41

Total Expenditures: \$134,126

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.