

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

**A. PROJECT NUMBER AND TITLE: NETC 15-3**

**B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s): Eshan V. Dave, University of New Hampshire**

**C. WEB SITE ADDRESS (If one exists):**

**D. START DATE (Per NETC Agreement): 8/1/2016**

**E. END DATE (Per NETC Agreement): 7/31/2018**

**F. ANTICIPATED COMPLETION DATE: 7/31/2018**

**G. PROJECT OBJECTIVES:**

1. Evaluate good and poor performing asphalt mixtures in New England and determine mechanisms responsible for poor performing mixtures
2. Determine impacts of remedial measures (anti-stripping additives and hydrated lime) in reducing moisture susceptibility of poor performing mixtures
3. Assess impacts of moisture induced-damage on pavement performance and service life
4. Recommend an evaluation framework consisting of appropriate test procedure(s), specification, analysis procedure verified with field performance data that is reliable and suitable for moisture susceptibility testing of asphalt mixtures used in New England

**H. REPORT PERIOD: 1/1/2017 – 3/31/2017**

**I. ACCOMPLISHMENTS THIS PERIOD:**

The main focus of work in this quarter was on expanding and completing review of literature on topics associated with this research study. This was done by continuing to review recently published literature pertaining to moisture-induced damage in asphalt mixtures and experimental procedures to assess extent of moisture-induced damage. The research team also collected and reviewed US state and Canadian province specifications to conduct a state of the practice review on moisture-induced testing methods. The research team has prepared an in-depth and detailed survey through a web-based software, Qualtrics that will be distributed to the six New England state transportation agencies. This survey covers the agency's current practices as well as experiences related to moisture-induced damage in asphalt mixtures. The project kick off meeting was also held during this quarter. During the kick-off meeting project goals, tasks and timeline were presented along with a summary of literature review. Preliminary testing plan as well as sampling requirements were also discussed during the kick-off meeting.

**J. PROBLEMS ENCOUNTERED (If any):**

**K. TECHNOLOGY TRANSFER ACTIVITIES:**

No activity to report.

**L. STATUS BY TASK:**

**Task 1: State of the Practice and Literature Review:** The research team has continued the literature review process as well as collected current agency specifications (US state and Canadian provinces) to review the current state of practice. This will be finalized and documented by end of April. A comprehensive survey was developed to collect additional information from various agencies regarding their practices as well as experiences in context of moisture-induced damage in asphalt mixtures. The survey will be distributed to the six New England state transportation agencies in the coming weeks.

**Task 2: Identify and Inspect Moisture Susceptible Mixes and Develop Testing Plan:** A preliminary testing plan was developed and proposed to the technical committee during the project kick off meeting. The material sampling plan is also currently under development.

**Task 3: Laboratory Testing:** No activity to report.

**Task 4: Final Report and Recommendations:** This quarterly report serves as the deliverable for the reported calendar quarter. No other activity is reported.

**M. PERCENT COMPLETION OF TOTAL PROJECT:   5   %**

**N. ACTIVITIES PLANNED FOR NEXT QUARTER:**

- Distribute survey to the six New England state transportation agencies.
- Collect and analyze survey responses. These responses will be used finalize testing and material sampling plans.
- Begin sampling plant-produced materials.
- Begin laboratory testing and conditioning per the final testing plan.

**O. FINANCIAL STATUS:**

**As of: 1/1/2017**

**Total Project Budget: \$ 150,000**

**Total Expenditures: \$ 7500**

**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.**