### 16. Abstract

Given the primary goal of maintaining safe driving conditions, the decision on when to treat a roadway for winter weather conditions is of paramount importance in the overall effective maintenance of a roadway. Many sources of data can be utilized in making the decision regarding when to treat. However, recent advances in technology, primarily related to sensing capabilities, can now provide timely and accurate data that can assist in the decision-making process. This project identified and reviewed technologies that would be suitable to aid in snow and ice operations along the Tobin Bridge. Many technologies and/or weather monitoring systems were explored, several were deemed not relevant for the Tobin Bridge at the current time. Following collection and assessments of pertinent information related to the technologies, a project implementation meeting was held with representatives of the research team, Massachusetts Port Authority (MassPort), Massachusetts Highway Department (MassHighway), and Executive Office of Transportation & Public Works (EOTPW) with the purpose of discussing the findings and identifying possible implementation strategies. After reviewing the technologies, the meeting participants discussed several implementation possibilities and recommendations for further consideration including a road surface information system (RSIS) and both a hand held and truck mounted infrared temperature measuring device.

### 17. Key Word

Pavement Weather Sensors, Weather Sensing, Snow and Ice Operations

### 18. Distribution Statement

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