

Quarterly Progress Report:

Project Number and Title: Road Salt Impact Assessment

Research Area: Thrust Area 4

PI: Jonathan Rubin, Ph.D., Professor, University of Maine

Co-PI(s): Ali Shirazi, Ph.D., Assistant Professor, University of Maine

Reporting Period: 08/15/2020 to 09/30/2020

Submission Date: 09/30/2020

Overview: (Please answer each question individually)

Provide BRIEF overview and summary of activities performed during the reporting period.

During the reporting period, the research team worked on reviewing the literature related to the impact of winter conditions and maintenance strategies on roadway safety. A graduate student was hired on 09/01/2020 to continue literature review. Critical safety variables were identified and the project team is working with Maine DOT to obtain safety data needed for this study. We are also working on obtaining/collecting the weather data needed for the analysis.

Provide context as to how these activities are helping achieve the overarching goal(s) of the project...

Reviewing the existing studies is critical to identify the existing models, investigating the current practice, and explore the critical data needed for statistical modeling. The research team is closely working with Maine DOT to acquire data needed for the project.

Describe any accomplishments achieved under the project goals...

The project started on 08/15/2020. A graduate student was hired in September to assist with literature review, data collection, statistical analysis and interpreting the results. The research team reviewed multiple studies and selected critical publications related to this topic, and identified some of the critical variables.

Complete the following tables to document the work toward each task and budget (add rows/remove rows as needed, make sure you complete the Overall Project progress row and include all tasks even if they have ended or have not been started)...

Table 1: Task Progress			
Task Number	Start Date	End Date	% Complete
Task 1	08/15/2020	12/31/2020	35%
Task 2	08/15/2020	12/31/2020	10%
Task 3	01/01/2021	05/31/2020	Not Started
Task 4	06/01/2021	07/31/2021	Not Started
Task 5	08/01/2021	08/31/2021	Not Started
Overall Project:	08/15/2020	08/31/2021	5%

Table 2: Budget Progress		
Project Budget	Spend – Project to Date	% Project to Date*
\$66,435.14	\$4,578.53	% 6.9

***Include the date the budget is current to: September 30, 2020**

Describe any opportunities for training/professional development that have been provided.

The project team included a graduate student in September 2020 to assist the research team on conducting the literature review, data collection, data cleaning, statistical analysis and interpreting the results.

Describe any activities involving the dissemination of research results (be sure to include outputs, outcomes, and the ways in which the outcomes/outputs have had an impact during the reporting period. Please use the tables below for any Publications and Presentations in addition to the description of any other technology transfer efforts that took place during the reporting period.)... Use the tables below to complete information about conferences, workshops, publications, etc. **List all other outputs, outcomes, and impacts after the tables** (i.e. patent applications, technologies, techniques, licenses issued, and/or website addresses used to disseminate research findings).

Table 3: Presentations at Conferences, Workshops, Seminars, and Other Events				
Title	Event	Type	Location	Date(s)
N/A				

Table 4: Publications and Submitted Papers and Reports				
Type	Title	Citation	Date	Status
N/A				

Participants and Collaborators:

Use the table below to list all individuals who have worked on the project.

Table 5: Active Principal Investigators, faculty, administrators, and Management Team Members			
Individual Name	Email Address	Department	Role in Research
Jonathan Rubin	rubinj@maine.edu	School of Economics	PI
Ali Shirazi	shirazi@maine.edu	Civil and Environmental Engineering	CO-PI

Use the table below to list all students who have participated in the project during the reporting. (This includes all paid, unpaid, intern, independent study, or any other student that participated in this project.)

Table 6: Student Participants during the reporting period				
Student Name	Email Address	Class	Major	Role in research
Alainie Sawtelle		Master Student	Civil Engineering (Transportation)	Graduate Research Assistant

Use the table below to list any students who worked on this project and graduated during this reporting period.

Table 7: Student Graduates			
Student Name	Role in Research	Degree	Graduation Date
N/A			

Use the table below to list organizations have been involved as partners on this project and their contribution to the project.

Table 8: Research Project Collaborators during the reporting period						
Organization	Location	Contribution to the Project				
		Financial Support	In-Kind Support	Facilities	Collaborative Research	Personnel Exchanges
Maine Department of Transportation (Maine DOT)	Augusta, ME	x				

List all other outputs, outcomes, and impacts here (i.e. patent applications, technologies, techniques, licenses issued, and/or website addresses used to disseminate research findings). Please be sure to provide detailed information about each item as with the tables above.

N/A

Have other collaborators or contacts been involved? If so, who and how? (This would include collaborations with others within the lead or partner universities; especially interdepartmental or interdisciplinary collaborations.)

No new collaborators have been added

Who is the Technical Champion for this project?

Name: Mr. Robert A Skehan
Title: Director, Office of Safety
Organization: Maine Department of Transportation
Location (City & State): Augusta, ME
Email Address: robert.skehan@maine.gov

Changes:

N/A

Planned Activities:

The research team will continue working on literature review. We hope to acquire safety data from Maine DOT and complete the dataset with weather data. Preliminary data analysis is expected to be performed during the next reporting phase.