

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** CR 21-07: Determining the Migration of Chloride-Based Deicers through Different Soil Types

**OBJECTIVES:** This project aims to achieve a clear, quantitative picture about the physicochemical properties of various types of soils (texture-based, commonly used in the areas of interest) and migration behavior of selected deicers through these soil types.

**PERIOD COVERED:** July 1 – Sept. 30, 2022

**PARTICIPATING AGENCIES:**

Washington State University – Prime  
Roadtech, Inc. - Subcontractor

**PROJECT MANAGER:**

Hafiz Munir / Tom Peters

**SP&R PROJECT NO:**

MnDOT No. 1047787

**PROJECT IS:**

\_\_\_\_ Planning  
 X  Research & Development

**LEAD AGENCY:** MnDOT

Federal Project No.  
TPF-5(353)

**PRINCIPAL INVESTIGATOR:**

Xianming Shi, Ph.D., P.E., WSU

**ANNUAL BUDGET:**

\$99,980

**PROJECT EXPENDITURES TO DATE:**

\$5,647

**WORK COMPLETED:**

*Project Management*

The PI worked with the Technical Advisory Committee (TAC) to kick off this project on July 22, 2022.

Task 1. Literature Review and Survey (60% complete). The project team completed a draft Literature Review and submitted that to the Technical Advisory Committee on Oct. 5, 2022. The PI developed a survey questionnaire and with the TAC's approval distributed it to Snow Ice List Serve and others to capture practitioner insights and lessons learned by roadway agencies on the relevant issue. So far about 14 valid responses have been received.

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

Work in the coming quarter will consist of project management as well as the completion of Task 1 (Literature Review and Survey) and the beginning of Task 2 (Developing the Experimental Plan).

**STATUS AND COMPLETION DATE:**

Partially due to the delay in contract approval and the unexpected delay in securing sufficient number of survey responses, we are now slightly behind schedule but will try to catch up in the next quarters.

Task	Current Task Start Date	Current End Date for Task Approval	Revised Task Start Date	Revised Due Date to Submit Draft Deliverables	Revised End Date for Task Approval
1	06/01/2022	09/30/2022			
2	09/01/2022	12/31/2022			
3	01/01/2023	05/30/2023			
4	05/01/2023	08/31/2023			
5	06/01/2023	09/30/2023			
5	08/01/2023	11/30/2023			