

State Planning and Research Program Quarterly Report

PROJECT TITLE: *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: Oct. 1 – Dec. 31, 2022

PARTICIPATING AGENCIES: Minnesota Department of Transportation and the Clear Roads Technical Advisory Committee

PROJECT MANAGER:
Hafiz Munir / Tom Peters

SP&R PROJECT NO:
MnDOT No. 1047792

PROJECT IS:

LEAD AGENCY: MnDOT

Federal Project No.
TPF-5(353)

____ Planning
 X Research & Development

PRINCIPAL INVESTIGATOR:
Xianming Shi, Ph.D., P.E., WSU

ANNUAL BUDGET:
\$99,980

PROJECT EXPENDITURES TO DATE:
\$8,003

WORK COMPLETED:

Project Management

The PI submitted the quarterly progress report in Oct. 2022.

Task 1. Literature Review and Survey (90% complete). The project team completed a draft Literature Review and submitted that to the Technical Advisory Committee on Oct. 5, 2022. The PI also presented the findings from Task 1 via a ZOOM meeting on Oct. 31, 2022 and received the feedback from the project TAC. Subsequently, the Task 1 deliverable was greatly improved to incorporate the comments from the 1st round of TAC review and to incorporate a number of new survey responses. This updated file was submitted to the project TAC in early Jan. 2023.

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 approximately 5 months 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			