

**State Planning and Research Program
Quarterly Report**

PROJECT TITLE: *pH Waiver for Deicing Products and the Qualified Products List*

OBJECTIVES: To help Clear Roads determine the appropriate pH range for deicing products listed on the Qualified Product List (QPL).

PERIOD COVERED: April 1 – June 30, 2024

PARTICIPATING AGENCIES: Minnesota Department of Transportation, Clear Roads Technical Advisory Committee, Washington State University – Prime, and Monte Vista Associates LLC – Subcontractor

PROJECT MANAGER:
Hafiz Munir / Tom Peters

LEAD AGENCY: MnDOT

PRINCIPAL INVESTIGATOR:
Xianming Shi, WSU

SP&R PROJECT NO:
MnDOT Contract No.
1052957

Federal Project Number:
TPF-5(479)

PROJECT IS:

____ Planning
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ANNUAL BUDGET: FY22: \$124,154;
FY23: \$25,377
TOTAL BUDGET: \$149,531

PROJECT EXPENDITURES TO DATE: \$9,912

WORK COMPLETED:

The PI worked with the project TAC to hold the kickoff meeting online, on December 1, 2023. Then the PI submitted the presentation slides and the draft meeting notes.

In Jan. 2024, there was a contract amendment signed and approved, as follows: During the project kickoff meeting, the project subcommittee agreed that it would serve the project better to test samples of “targeted” deicer products with pH values of a certain range.

Task 1 (Literature Search): **95%** complete. The draft literature review was submitted in late May 2024, which is now under review by the project TAC. To identify the aforementioned targeted deicers, a survey of the Clear Roads membership was conducted. This expanded Task 1 (Literature Review) but did not add any funds to the task or project budget.

Task 2 (Developing the Testing Plan): **40%** complete.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Project management activities.

Task 2 (Developing the Testing Plan): to complete.

Task 3 (Laboratory Investigation): to initiate.

STATUS AND COMPLETION DATE:

This project is a few months behind schedule. Since the Project PI Dr. Xianming Shi is leaving WSU for the University of Miami, he is proposing to transfer the PI role to Dr. Zhipeng Li at WSU. A no-cost time extension request will be needed once the PI transition occurs in July 2024.