

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** *Best Management Practices for Liquid Chloride Storage and Pumping Systems*

**OBJECTIVES:** The goal of this project is to examine and document liquid deicing storage and pump systems currently being used by departments of transportation (DOTs) and public works agencies across the country and best practices for managing and maintaining these systems.

**PERIOD COVERED:** October 1 to December 31, 2023

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

**PROJECT MANAGER:**  
Hafiz Munir / Tom Peters

**SP&R PROJECT NO:**  
MnDOT Contract No.

**PROJECT IS:**

**LEAD AGENCY:** MnDOT

Federal Project Number:  
TPF-5(479)

Planning  
 Research & Development

**PRINCIPAL INVESTIGATOR:**  
Karalyn Clouser and Laura Fay (Co-PI)  
WTI, Montana State University

**ANNUAL BUDGET:** \$75,000

**PROJECT EXPENDITURES TO DATE:** \$10,098.48

**WORK COMPLETED:**

- Agency survey was sent to the Clear Roads Member list, APWA Winter Maintenance Group, TRB Winter Maintenance Committee and Friends, and Snow & Ice Listserv on September 15, 2023.
- Agency survey was closed October 25, 2023.
- Task 2 Agency Survey Results document was sent to Clear Roads TAC on November 28, 2023.
- Draft interview questions lists (Task 3) were sent to the Clear Roads TAC on December 11, 2023 for review prior to Task 2 Meeting.
- The project Task 2 Meeting was held December 15, 2023.
- Task 2 Agency Survey Results document was accepted by Clear Roads TAC at December 15, 2023 meeting.
- Meeting notes and an updated draft agency survey was sent to the Clear Roads TAC on December 15, 2023.
- Task 3 Interview Questions lists were updated based on Clear Roads TAC feedback received.

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

- Task 3 interviews will be completed, and findings will be summarized.
- Task 4 draft manual outline will be developed based on findings from the survey and interviews.

**STATUS AND COMPLETION DATE:**

In Progress. Anticipated Project Completion Date: December 31, 2024.