

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** *Evaluation of Indoor Automated Stockpile Measurement Systems*

**OBJECTIVES:** The goal of this project is to conduct a data-driven evaluation of currently available automated or semi-automated indoor salt stockpile measuring systems in order to improve agencies' day-to-day management of their salt stockpile inventories.

**PERIOD COVERED:** Q3 2022 (July 1 through September 30, 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 Contract No.  
1030951

**PROJECT IS:**

       Planning  
  X   Research & Development

**LEAD AGENCY:** MnDOT

**PRINCIPAL INVESTIGATOR:**

Brian Hirt, CTC & Associates

Federal Project Number:  
TPF-5(353)

**ANNUAL BUDGET:** \$84,727.00  
(18-month project budget)

**PROJECT EXPENDITURES TO DATE:** \$40,580.06

**WORK COMPLETED:**

- **Task 1: Project Management.** Coordinated communication among Technical Advisory Panel (TAP) members. Planned next steps for the project.
- **Task 7: Data Analysis of System Performance.** Completed data analysis.
- **Task 8: Final Report and Brief.**
  - Completed first draft of the report.
    - Submitted draft final report to the project TAP.
    - Prepared update and findings PowerPoint for the fall Clear Roads meeting; presented to the full Technical Advisory Committee TAC and answered questions.

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

- **Task 1: Project Management.**
  - Continue project coordination.
- **Task 8: Final Report and Brief.**
  - Meet with the project TAP to collect comments and make final revisions to the report.
  - Write, lay out, and deliver two-page project brief.

**STATUS AND COMPLETION DATE:**

This project is on track for completion by November 30, 2022.