

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** *Using GIS to Highlight Highway Segments Sensitive to Deicing Materials*

**OBJECTIVES:** Develop a geospatial tool that incorporates data about roadways, topography, hydrology, and ecology to model the impact of de-icing chemical application on the local environment.

**PERIOD COVERED:** January 1 to March 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.  
1044529

**PROJECT IS:**

Planning  
 Research & Development

**LEAD AGENCY:** MnDOT

Federal Project Number:  
TPF-5(353)

**PRINCIPAL INVESTIGATOR:**

Mark Gallagher, SRF Consulting

**ANNUAL BUDGET:** \$49,279

**REVISED:** \$71,116

**TOTAL:** \$142,430

**PROJECT EXPENDITURES TO DATE:** \$ 130,748.37

**WORK COMPLETED:**

- Completed beta-level revised version of GIS tool
- Tested revised tool
- Updated installation guide
- Began developing quick set up video script

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

- Continue work on expanded scope items
  - Demonstrate revised tool
  - Begin production of instructional video segments
  - Complete updated written set up and usage guides.

**STATUS AND COMPLETION DATE:**

Project start was delayed due to committee availability for kickoff.

Some delays in tool development and initial installations by beta testers have made an extension of completion date for delivery of a revised tool attractive. Discussions are underway to extend the completion date to December 31, 2022, and increase the budget by roughly 10%.

Based on committee requests a more comprehensive amendment was submitted. Work is expected to resume in late 2022.

The current contract expiration date is 9/30/2023. The contract date was extended to all further ease-of-use development.