

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** Standards and Guidance for Using Mobile Sensor Technology to Assess Winter Road Conditions

**OBJECTIVES:** Create guidance for using weather sensing technology to assess road conditions. Undertake rigorous field testing of equipment from major manufacturers in order to develop standardized measurement scales for each parameter. Develop metrics that can be used to describe road conditions.

**PERIOD COVERED:** July 1 to September 30, 2017

**PARTICIPATING AGENCIES:**

Minnesota Department of Transportation and the Clear Roads Technical Advisory Committee

**PROJECT MANAGER:**

Debra Fick/ Tom Peters

**LEAD AGENCY:** MnDOT

**PRINCIPAL INVESTIGATOR:**

Erik Minge, SRF Consulting Group

**SP&R PROJECT NO:**

MnDOT Contract No.  
1026091

Federal Project Number:  
TPF-5(218)

**PROJECT IS:**

☐ Planning  
☒ Research & Development

**ANNUAL BUDGET:** \$76,190

**PROJECT EXPENDITURES TO DATE:** \$51,236.87

**WORK COMPLETED:**

- Finalize literature review
- Conducted survey
- Completed and delivered survey report
- Delivered test plan for comments
- Received and tested all sensors
- Designed and began construction of sensor mounting assembly on test trailer

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

- Complete construction of test trailer
- Test installation of sensors
- Coordinate with MnROAD for Phase 1 tests
- Finalize test plan
- Begin testing as weather permits

**STATUS AND COMPLETION DATE:**

The project completion date is April 30, 2019.

A contract extension was approved to provide adequate time for survey development and review.