

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:**

*Quantifying the Impact New Capital Projects will have on Roadway Snow and Ice Control Operations*

**OBJECTIVES:**

1. *Survey other state DOTs for potential case studies*
2. *Develop a Methodology*
3. *Develop a Calculation Tool*
4. *Apply the Tool to the Case Studies*

**PERIOD COVERED:** October 1, 2016 – December 31, 2016

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

**PROJECT MANAGER:**

Debra Fick/ Tom Peters

**SP&R PROJECT NO:**

MnDOT Contract No.  
06428

**PROJECT IS:**

Planning  
 Research & Development

**LEAD AGENCY:** Mn/DOT

**PRINCIPAL INVESTIGATOR:**

Jim Sullivan, University of Vermont

Federal Project Number:

TPF-5(218)

**TOTAL BUDGET:** \$145,622

**PROJECT EXPENDITURES TO DATE:** 70%

**WORK COMPLETED:**

- Completed survey data collection and preliminary selection of case studies
- Completed the first round of field data collection for four case study routes in NH and Minnesota
- Completed the integrated RSIC model development and tested its application for Vermont
- Developed inputs for the integrated RSIC model for four case studies in Vermont
- Applied the integrated RSIC model to four case studies in Vermont
- Created and delivered presentation materials for the Task 2 deliverable
- Participated in the third of four teleconferences (kickoff, Task 1, and Task 2) and presented the preliminary results of Task 2

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

- Conduct the second round of field data for four case study routes in NH and Minnesota
- Begin development of the MS Excel decision-support tool
- Begin writing the Draft Project Report

**STATUS AND COMPLETION DATE:** In spite of the late start for the first project teleconference and the survey (one month late) in the first quarter, the project is still on schedule since these tasks were not on the critical path. The second task was started one month early to ensure that the project remained on schedule. However, since the project started in July 2015, the contracted 18-month duration did not include two winter seasons for field data collection. The end date was originally January 2017, but ending the project then would have made it impossible to get a second round of RSIC field data. Extending the project 6 months to a full 24-month duration provided adequate time to get the 2nd round of data, analyze it, and write the final report.