

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** *Utilization of AVL/GPS Technology: Case Studies*

**OBJECTIVES:** The goal of this project is to help state DOTs make more informed decisions with respect to implementation of AVL/GPS technology for winter maintenance. Much is known about what winter maintenance AVL/GPS technologies are available from different vendors as well as which highway agencies are making use of them. Highway agencies will significantly benefit from a deeper examination of winter maintenance AVL/GPS implementation. Detailed agency case studies developed in this project will bring to light more nuanced issues related to winter maintenance AVL/GPS. The project will highlight the types of issues that agencies should consider, provide guidance for successful implementation, and serve as possible templates for agencies to get the best value out of different levels of AVL/GPS applications.

**PERIOD COVERED:** April 1, 2018 – June 30, 2018

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

**PROJECT MANAGER:**

Debra Fick/ Tom Peters

**LEAD AGENCY:** Mn/DOT

**PRINCIPAL INVESTIGATOR:**

Ming-Shiun Lee, PhD, PE

**SP&R PROJECT NO:**

MnDOT Contract No.  
1026092

Federal Project Number:  
TPF-5(218)

**PROJECT IS:**

Planning  
 Research & Development

**ANNUAL BUDGET:** \$113,697.53 (Project Budget)

**PROJECT EXPENDITURES TO DATE:** \$105,999.92

**WORK COMPLETED:**

- Task 3: Interviews and Case Studies (100% complete) – Based on the survey results, six agencies were selected for interviews and case studies. Interviews were conducted in November and December 2017, and January 2018. Interview summaries and case study reports were finalized and submitted in May 2018.
- Task 4: Recommendations (100% complete) – Finding from Tasks 1 through 3 were synthesized and summarized in a Recommendations document that highlights recommended best practices and key considerations for implementation and utilization of AVL/GPS for winter maintenance activities. The Recommendations document was submitted in April 2018.
- Task 5: Final Report (95% complete) – Draft final report that incorporates all findings and results from previous tasks was submitted for review in June 2018.

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

- Task 5: Final Report – Finalize the final report and deliver a project closeout webinar.

**STATUS AND COMPLETION DATE:**

The project is on budget and is expected to be completed by August 31, 2018.