

**State Planning and Research Program  
Quarterly Report**

**PROJECT TITLE:** *Expanded Use of AVL/GPS Technology*

**OBJECTIVES:** To help state transportation agencies optimize the value gained from the acquisition of AVL/GPS units by deploying them year-round, rather than just in winter maintenance operations.

**PERIOD COVERED:** July 1, 2021 to September 30, 2021

**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.  
1044528

**PROJECT IS:**

Planning  
 Research & Development

**LEAD AGENCY:** MnDOT

Federal Project Number:  
TPF-5(353)

**PRINCIPAL INVESTIGATOR:**

Ming-Shiun Lee, PhD, PE  
AECOM Technical Services, Inc.

**ANNUAL BUDGET:** \$73,123.72

**PROJECT EXPENDITURES TO DATE:** \$ 19,729.69

**WORK COMPLETED:**

- Task 1: Literature Review
  - Finalized literature review summary.
- Task 2: Survey of Practice
  - Developed questionnaires for the three surveys.
  - Identified contacts for survey distribution.
  - Reviewed the draft surveys with the Subcommittee.
  - Executed surveys and conducted follow-ups with survey respondents.
  - Analyzed survey responses.

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

- Task 2: Survey of Practice
  - Develop a survey summary report.
  - Conduct additional surveys to non-transportation agencies/industry.
  - Identify case study recommendations.
  - Conduct a progress meeting with the Subcommittee.
  - Finalize survey summary report and case study recommendations.
- Task 3: Develop Case Studies
  - Develop case study interview questions.
  - Make arrangements for case study interviews.

**STATUS AND COMPLETION DATE:**

On schedule and budget. Expected project completion August 31, 2022.