

State Planning and Research Program Quarterly Report

PROJECT TITLE: *Calculating Plow Cycle Times from Automatic Vehicle Location (AVL) Data*

OBJECTIVES: To develop a methodology to calculate plow cycle times, considering various relevant factors; and use the methodology to create the framework for a visualization tool that agencies can format with their own electronic data.

PERIOD COVERED: July 1 to September 30, 2023.

PARTICIPATING AGENCIES: Minnesota Department of Transportation, Clear Roads Pooled Fund, and AECOM Technical Services, Inc.

PROJECT MANAGER:
Hafiz Munir / Tom Peters

SP&R PROJECT NO:
MnDOT Contract No.
1047791

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: \$125,377.84

PROJECT EXPENDITURES TO DATE: \$89,220.09

WORK COMPLETED:

- Task 1: Project Management
 - Prepared progress reports and invoices.
- Task 5: Online Tool Framework
 - Worked on the tool/dashboard framework.
 - Developed use cases and workflows for the online tool/dashboard framework.
 - Developed tool/dashboard design.
- Task 6: Final Report and Webinar
 - Initiated the development of the final report.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

- Task 1: Project Management
 - Conduct a check-in meeting with the project subcommittee to review the draft tool framework and demonstrate the sample tool.
- Task 5: Online Tool Framework
 - Submit the tool/dashboard framework for the subcommittee's review.
 - Submit a sample tool and provide a demonstration to the subcommittee.
 - Finalize the tool framework.
 - Finalize online tool/dashboard design and user guide.
- Task 6: Final Report and Webinar
 - Prepare a draft version of the final report for the subcommittee's review.
 - Finalize the final report per subcommittee comments.
 - Prepare a presentation for the closeout webinar.
 - Conduct a closeout webinar with the Clear Roads Technical Advisory Committee.

STATUS AND COMPLETION DATE:

Project is on budget and is approximately two months behind schedule. Expected project completion December 31, 2023.