

**State Planning and Research Program
Quarterly Report**

PROJECT TITLE: *Measuring the Efficiencies of Tow Plows and Wing Plows*

OBJECTIVES: First, the research will develop a strong practitioner-based understanding of real-world life cycle costs, benefits, and efficiencies of tow plows and wing plows, including maintenance, operational, and storage issues. Second, the research will develop tools for DOT decision-making and procurement, including a Decisions Support Tool and a Best Practices Guide, which will be helpful in procurement decisions and in actual use of such plows.

PERIOD COVERED: April 1, 2021 – June 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.
1034818

PROJECT IS:

Planning
 Research & Development

LEAD AGENCY: MnDOT

Federal Project Number:
TPF-5(353)

PRINCIPAL INVESTIGATOR:

Ty Lasky, UC-Davis

ANNUAL BUDGET: \$37,967 (Proj Yr 2)
(Total Project Budget): \$124,980

PROJECT EXPENDITURES TO DATE: \$109,331

WORK COMPLETED:

- AHMCT completed Task 5, peer review of simulation results and work to resolve any concerns identified during the peer review process. Task 5 description section was included in the combined Task 5, 6 & 7 report.
- AHMCT provided DST demonstrations to individual DOTs.
- AHMCT took detailed notes of the DOT individualized DST demonstration sessions which included DOT comments and suggestions.
- AHMCT completed Task 8, Best Practices Guide, and documented it in the draft final report. Task 8 is complete.
- AHMCT submitted draft final report, which summarizes prior interim reports, documents Task 8, and summarizes the CR-19-03 research results. Addressed feedback received to date.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

- Original scope included “Task 7: Decision Support Tool”. This effort led to development of a detailed software tool. The original task proposed did not anticipate the complexity of the tool developed. Development of a detailed user’s guide was not included in original scope. The project panel and the researchers strongly believe that such a user’s guide should be developed.
- AHMCT has submitted a request for a time and cost amendment to perform Task 10: Decision Support Tool User’s Guide. If this amendment is approved, AHMCT’s focus in Q3-2021 will be on development of the Decision Support Tool User’s Guide.
- If the amendment is not approved, AHMCT will provide the final project closeout webinar. Based on the status of the amendment review and any webinar logistics, we anticipate this webinar would occur after the current contract end date of July 31, 2021. AHMCT is happy to support such timing if needed.

STATUS AND COMPLETION DATE:

- Time and cost extension is needed if Task 10 is to be included. Six-month amendment requested to modify end date to January 31, 2021.
- If amendment is not approved, on schedule, expected project completion July 31, 2021. Closeout webinar may occur after the current end date.