

**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, 2020 – June 30, 2020

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

<p>PROJECT MANAGER: Debbie Sinclair / Tom Peters</p> <p>LEAD AGENCY: MnDOT</p> <p>PRINCIPAL INVESTIGATOR: Ty Lasky, UC-Davis</p>	<p>SP&R PROJECT NO: MnDOT Contract No. 1034818</p> <p>Federal Project Number: TPF-5(353)</p>	<p>PROJECT IS:</p> <p style="text-align: center;"><input type="checkbox"/> Planning <input checked="" type="checkbox"/> Research & Development</p>
---	---	---

<p>ANNUAL BUDGET: \$24,000 (Total Project Budget): \$124,980</p>	<p>PROJECT EXPENDITURES TO DATE: \$13,982</p>
---	--

- WORK COMPLETED:**
- Presented AHMCT background, project plan, and Task 1 details at project kickoff, April 15, 2020.
 - Provided committee with draft outline for Decision Support Tool plan, April 15, 2020.
 - Literature and project review completed, June 29, 2020.
 - Provided committee with draft survey questions (Task 2), June 3 and 23, 2020.
 - Survey question draft in SurveyMonkey near completion, June 30, 2020

- SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**
- Provide committee with Survey question draft in SurveyMonkey.
 - Distribute survey to participants via SurveyMonkey, collect, and analyze results.
 - Complete Survey of Practice.
 - Develop draft recommendations and test plan, provide to committee for review.
 - Begin developing Simulations (Roadway Types/Geometries).

STATUS AND COMPLETION DATE:

- On schedule, expected project completion July 31, 2021

We accelerated Task 1 to get the project back on schedule. The proposed duration was 18 months, and the proposal did not include a fixed start date or ties to actual dates for schedule. There seems to have been a miscommunication between our submitted proposal and development of the final schedule in the contract. The contract allows just over 16 months for the project, and the first task draft was due approximately 7 days after the work start date. This effort was originally scheduled for two months. However, based on our strong background in this area, and by dedicating our researcher’s time for a full work week to this effort, we provided the deliverable according to the truncated schedule, and the project is back on the contracted schedule.