

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** *High Performance Plow Blade Evaluation*

**OBJECTIVES:** The objective of this project is to develop a field test protocol and cost-benefit analysis methodology that may be reproduced by Clear Roads agencies in future testing, so that other blades may be evaluated and compared using the same standard procedures used in this project.

**PERIOD COVERED:** January 1 to March 31, 2021

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

**PROJECT MANAGER:**  
Debbie Sinclair / Tom Peters

**SP&R PROJECT NO:**  
MnDOT Contract No.  
1031542

**PROJECT IS:**

\_\_\_\_ Planning  
  X   Research & Development

**LEAD AGENCY:** MnDOT

Federal Project Number:  
TPF-5(353)

**PRINCIPAL INVESTIGATOR:**  
William Schneider IV, PhD.,  
University of Akron

**ANNUAL BUDGET:** \$99,673.93 (Project Budget)

**PROJECT EXPENDITURES TO DATE:** \$71,340

**WORK COMPLETED:**

- Task 1: Literature review compiled in matrix-style summary (100%)
- Task 2: Survey of DOTs in matrix-style summary (100%)
- Task 3: List of potential blades and testing locations for research (100%)
- Task 4: Design Test Protocol (100%)
- Task 5: Field data collection (100%)
- Task 6: Standard Test Protocol (95%)
- Task 7: Cost-Benefit Analysis (95%)
- Task 8: Quick Reference Guide (95%)
- Task 9: Final Report (95%)

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:** We are planning on doing future work involving testing new blades in the lab.

**STATUS AND COMPLETION DATE:** At this point we are working with Clear Roads to pass an addendum to develop the future laboratory testing scope of work related to this project.