

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** Defensive Driving for Snowplow Operators

**OBJECTIVES:** Develop two comprehensive and engaging winter maintenance operator training modules on defensive driving and safe driving.

**PERIOD COVERED:** March 1, 2019 to March 31, 2019

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

**PROJECT MANAGER:**

Lisa Jansen/Tom Peters

**LEAD AGENCY:** MnDOT

**PRINCIPAL INVESTIGATOR:**

Matthew Camden, VTTI

**SP&R PROJECT NO:**

MnDOT Contract No.:  
1031541

Federal Project Number:  
TPF-5(353)

**PROJECT IS:**

Planning  
 Research & Development

**ANNUAL BUDGET:** \$70,000 (total project budget)

**PROJECT EXPENDITURES TO DATE:** \$0

**WORK COMPLETED:**

- **Task 1: Kickoff Webinar.** In Task 1, the Virginia Tech Transportation Institute (VTTI) research team met with the project subcommittee via a webinar on March 25, 2019. The purpose of this kickoff meeting was to introduce project personnel and to review and address key elements of the project. No revisions to the project tasks were requested during the kickoff meeting.

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

- **Task 2: Literature Review.** In Task 2, the VTTI team will conduct a literature review to document current safe and defensive driving practices with a focus on winter maintenance operators. Based on the team's previous work (Gupta, Olson, & Hanowski, 2009; Tidwell, Trimble, & Blanco, 2016), much of the literature on safe and defensive driving strategies for heavy vehicles has already been collected and documented. This will greatly simplify the completion of this task. Thus, the review will focus on filling in any gaps in this information pertaining specifically to winter maintenance operations. The VTTI will complete the draft literature review by April 30, 2019.
- **Task 3: IRB Approval.** VTTI will develop the questionnaire for Task 4. The VTTI team will submit this questionnaire to the Project Subcommittee for review and approval by April 30, 2019. Additionally, VTTI will receive approval from the Virginia Tech Institutional Review Board to perform data collection.
- **Task 4: State Department of Transportation Questionnaire.** VTTI will create an online version of the questionnaire and will begin the data collection process. As in Camden et al. (2014) and Camden et al. (2017), the VTTI team will work with Clear Roads member states to distribute the questionnaire. Additionally, VTTI will distribute the questionnaire to winter maintenance personnel in local governments through the American Association of State Highway and Transportation Official's (AASHTO) Snow and Ice Listserv.

**STATUS AND COMPLETION DATE:**

This project is ongoing and ends on August 31, 2020.