

State Planning and Research Program Quarterly Report

PROJECT TITLE: CR18-06. Standardized Test Procedures for Ice Melting Capacity of Deicers

OBJECTIVES: The goal of this research is to evaluate the suitability of the mechanical rocker test as a standardized laboratory test that can realistically and robustly assess the performance of deicers, which is needed to allow DOTs to make data-driven procurement decisions.

PERIOD COVERED: Oct. 1, 2022 – Dec. 31, 2022

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

PROJECT MANAGER: Hafiz Munir / Tom Peters LEAD AGENCY: MnDOT PRINCIPAL INVESTIGATOR: Xianming Shi, Ph.D., P.E., WSU	SP&R PROJECT NO: MnDOT No. 1033080 Federal Project No. TPF-5(353)	PROJECT IS: <input type="checkbox"/> Planning <input checked="" type="checkbox"/> Research & Development
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ANNUAL BUDGET: \$74,086	PROJECT EXPENDITURES TO DATE: \$68,094
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WORK COMPLETED:

The PI submitted the Quarterly Progress Report in Oct. 2022. During the last quarter, we filed the paperwork for a 7-month no-cost time extension, at the request of the Clear Roads project subcommittee, to ensure that the contract includes time for the PI to provide assistance for concurrent AASHTO Balloting, which will take place during the summer of 2023. This support may include responding to comments from AASHTO committees and revision of the IMC test method.

Task 1. Mechanical Rocker Test Procedure Evaluation (100% complete).

Task 2. Interim Report (100% complete).

Task 3. Standard Test Procedure Development (100% complete).

Task 4. Standard Test Procedure Presentation (100% complete).

Task 5. AASHTO Balloting Assistance (50% complete). Note that the AASHTO Committee on Pavement and Materials decided to officially vote on the provisional standardization of this IMC test protocol in *November 2022 and that concurrent AASHTO balloting won't occur until the summer of 2023. We will stand by for directions from Clear Roads regarding a potential amendment.*

Task 6. Final Report (20% complete).

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

The work in the coming quarter will consist of project management.

STATUS AND COMPLETION DATE:

The latest version of schedule is provided as follows.

Task	Current Task Start Date	Current End Date for Task Approval	Revised Task Start Date	Revised Due Date to Submit Draft Deliverables	Revised End Date for Task Approval
1	02/01/2020	02/28/2022	No change		
2	11/01/2020	02/28/2022	No change		
3	02/01/2021	04/30/2022	No change		
4	05/01/2022	09/30/2022	No change		
5	09/01/2022	12/31/2022	09/01/2022	07/31/2023	08/30/2023
6	08/01/2021	02/28/2023	08/01/2021	07/31/2023	09/30/2023