

State Planning and Research Program Quarterly Report

PROJECT TITLE: *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 is needed to allow DOTs to make data-driven procurement decisions.*”

PERIOD COVERED:

Oct. 1, 2020 – Dec. 31, 2020

PARTICIPATING AGENCIES:

Washington State University – Prime
Monte Vista Associates LLC – Subcontractor
Roadtech, Inc. - Subcontractor

PROJECT MANAGER:

Debbie Sinclair / Tom Peters

SP&R PROJECT NO:

MnDOT Contract No.
1033080

PROJECT IS:

 Planning
 X Research & Development

LEAD AGENCY: MnDOT

Federal Project No.
TPF-5(353)

PRINCIPAL INVESTIGATOR:

Xianming Shi, Ph.D., P.E.
Washington State University

ANNUAL BUDGET:

\$74,086

PROJECT EXPENDITURES TO DATE:

\$24,040

WORK COMPLETED:

Project Management

COVID-19 and associated lockup during the last quarter have continued to slow down the progress in this project, particularly the testing at peer labs.

Task 1. Mechanical Rocker Test Procedure Evaluation (65% complete). We have shipped the seven panel-identified liquid deicer samples (along with the test protocol) to four peer labs who agreed to join the Round-Robin Testing Program. One of them have sent us the testing data while the other three are still working on the testing. The WSU lab has completed 90% of the laboratory testing thus far. We have fully analyzed the data received from the previous Nebraska DOT projects related to the Mechanical Rocker Test.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Work in the coming quarter will consist of project management as well as the continuation of Task 1 and the beginning of Task 2 (Interim Report).

STATUS AND COMPLETION DATE:

We plan to request a no-cost time extension of eight months, which would have the schedule revised 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	08/31/2020	02/01/2020	03/31/2021	05/31/2021
2	07/01/2020	10/31/2020	11/01/2020	04/30/2020	06/30/2021
3	10/01/2020	12/31/2020	02/01/2021	05/31/2021	07/30/2021
4	10/01/2020	03/31/2021	02/01/2021	09/30/2021	11/30/2021
5	12/01/2020	04/30/2021	05/01/2021	10/31/2021	12/31/2021
6	04/01/2021	07/31/2021	08/01/2021	01/31/2022	03/31/2022