

State Planning and Research Program Quarterly Report

PROJECT TITLE: Synthesis of Material Application Methodologies for Winter Operations

OBJECTIVES: The goal of this research is to “create a synthesis of best management practices for application rates, material application methodologies and material usage, including chloride brines applied directly or as additives to abrasives and rock salts”.

PERIOD COVERED:
Jan. 1, 2018– Mar. 31, 2018

PARTICIPATING AGENCIES:
Washington State University – Prime
Monte Vista Associates LLC - Consultant

<p>PROJECT MANAGER: Tom Peters/Deb Fick</p> <p>LEAD AGENCY: Mn/DOT</p> <p>PRINCIPAL INVESTIGATOR: Xianming Shi, Ph.D., P.E.</p>	<p>SP&R PROJECT NO: MnDOT Contract No. 1001326</p> <p>Federal Project No. TPF-5(218)</p>	<p>PROJECT IS:</p> <p style="text-align: center;"><u> </u> Planning <u> X </u> Research & Development</p>
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ANNUAL BUDGET: \$117,658	PROJECT EXPENDITURES TO DATE: \$117,658
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WORK COMPLETED:

Project Management
This includes the submission of quarterly progress report by the project PI to the Clear Roads program in Jan. 2018 and some communications between the PI and the Clear Roads coordinator, as well as between the PI and the consultant.

Task 1. Literature review (100% completed)
A revised literature review was submitted for panel review again in December 2016. It highlights current practices, innovative practices, and trends related to materials used, their application rates, and the application methodologies and equipment under various road weather scenarios (temperature ranges, storm conditions, and other climate and operating conditions).

Task 2. Interview Plan (100% completed)
In December 2016, an updated interview plan was submitted to the panel for review.

Task 3. Interviews (100% completed)
The interviews were conducted with more than 35 agencies and an interview memo was submitted in Sept. 2017. The detailed notes of the interviews are also available upon request by the panel.

Task 4. Guidebook (95% completed)
In response to the review comments received from the project panel, the research team updated the Guidebook to improve both in terms of contents and graphics/look-and-feel. Some panel members have sent review comments while others are still reviewing the revised Guidebook.

Task 5. Final report (95% completed)
 A draft final report was prepared and submitted to the project panel for review.

Task 6. Final presentation (0% completed)

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Work in the coming quarter will consist of project management as well as drafting deliverables for tasks 4 and 5 and scheduling the final webinar (Task 6).

STATUS AND COMPLETION DATE:

Another no-cost, six-month time extension is being planned, in order to produce a usable product approved by the project panel. The proposed project timeline is shown 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	05/25/2016	12/15/2016	05/25/2016	10/15/2016	12/15/2016
2	05/25/2016	07/30/2016	05/25/2016	Not Applicable	07/30/2016
3	07/15/2016	09/15/2017	07/15/2016	07/15/2017	09/15/2017
4	12/015/2016	12/15/2017	12/015/2016	1/15/2018	7/31/2018
5	04/01/2017	02/28/2018	04/01/2017	1/30/2018	7/31/2018
6	07/01/2017	03/31/2018	07/01/2017	6/15/2018	9/30/2018