

State Planning and Research Program Quarterly Report

PROJECT TITLE: Snow Removal Performance Metrics

OBJECTIVES: • The goal of this research is to “identify effective performance metrics for snow and ice maintenance operations.”

PERIOD COVERED:

Jan. 1, 2016– March 31, 2016

PARTICIPATING AGENCIES:

Washington State University – Prime
The Narwhal Group – Subcontractor
Monte Vista Associates LLC - Subcontractor

PROJECT MANAGER: Tom Peters

SP&R PROJECT NO:

MnDOT No. 06910

PROJECT IS:

LEAD AGENCY: Mn/DOT

TPF-5(218)

Planning
 Research & Development

PRINCIPAL INVESTIGATOR:

Xianming Shi, Ph.D., P.E.

ANNUAL BUDGET:

\$74,640

PROJECT EXPENDITURES TO DATE:

\$30,762

WORK COMPLETED:

Project Management

Project management activities during the quarter were focused on budget and timeline maintenance as well as management of subcontracts. A six-month no-cost time extension was requested and the paperwork is being reviewed by the sponsor. This request, if approved, would extend the current project end date in the contract for three months, from July 31, 2016 to October 30, 2016.

Task 1. Literature review (95% completed)

The WSU team conducted a comprehensive literature review and prepared a draft literature review for the project panel to review. During the fall of 2015, a revised literature review document was submitted to the project panel again, with all the previous review comments addressed. We will complete this task by adding any new references published before this project's end date.

Task 2. Survey (100% completed)

During the fall of 2015, a revised survey instrument was submitted to the project panel again, with the review comments addressed. The approved survey was then implemented online and distributed out to the snow/ice control community to gather information. During the last quarter, The Narwhal Group assisted the WSU team in this task, further reaching out to state DOTs, city and county public works departments, Canadian ministry of transportation and other international government agencies, and private maintenance firms. A total of more than 60 responses have been received, including some new ones from state DOTs and European agencies during the last quarter.

Task 3. Analysis and Matrix Development (90% completed)

During the last quarter, The Norwhal Group assisted the WSU team in this task and we completed a draft analysis of the survey responses and submitted these to the project panel for review.

Task 4. Recommendations (0% completed)

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Work in the coming quarter will consist of project management as well as the completion of Task 3 and Task 4.

STATUS AND COMPLETION DATE:

On budget and on schedule.

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	05/01/2015	06/30/2015	05/01/2015	06/30/2015	09/30/2015
2	07/01/2015	10/31/2015	07/01/2015	Not Applicable	12/31/2015
3	11/01/2015	01/31/2016	01/01/2016	03/31/2016	04/30/2016
4	02/01/2016	04/30/2016	05/01/2016	06/30/2016	07/31/2016