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, 2017 – March 31, 2017

PARTICIPATING AGENCIES:

Washington State University – Prime The Narwhal Group – Subcontractor

Monte Vista Associates LLC - Subcontractor

PROJECT MANAGER:	SP&R PROJECT NO:	PROJECT IS:
Deb Fick/Tom Peters	MnDOT No. 06910	
		Planning
LEAD AGENCY:	Federal Project No.	X Research & Development
Mn/DOT	TPF-5(218)	
PRINCIPAL INVESTIGATOR:		
Xianming Shi, Ph.D., P.E.		
ANNUAL BUDGET:	PROJECT EXPENDITURES TO DATE:	
\$74,640	\$74,640	

WORK COMPLETED:

Project Management

Project management activities during the quarter were focused on budget and timeline maintenance as well as management of subcontracts. In Feb. 2017, the research team received the Notice to Proceed from Mn/DOT.

- Task 1. Literature review (100% completed)
- Task 2. Survey (100% completed)
- Task 3. Analysis and Matrix Development (100% completed)

Task 4. Recommendations (100% completed)

A revised project final report was submitted on March 23, 2017, which significantly condensed the body of the project final report (based on the last round of review comments from the project panel) and moved much of the details into appendices of the report.

The key findings of this project was presented at the TRB Annual Meeting in DC. Jan. 2017. A paper has been accepted for publication by the *Transportation Research Record* as follows.

Xu, G., Sturges, L., Chapman, M., Albrecht, C.P., Bergner, D.L., Shi, X. Snow Removal Performance Metrics: Past, Present, and Future. *Transportation Research Record*, 2017, in press.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

None, pending approval of revised final report by Clear Roads project subcommittee.

STATUS AND COMPLETION DATE:

On budget and revised schedule since the no-cost time extension to June 30, 2017 has been approved by the Minnesota DOT.