

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** Training for Supervisors and Operators

**OBJECTIVES:** The goal of this project is to develop a comprehensive, easy-to-use training program for winter maintenance supervisors and operators. Under this contract, our team will work with the Minnesota Department of Transportation and Clear Roads Technical Advisory Committee to identify and compile the many resources on winter maintenance and develop a series of 18 training modules for supervisors, seasoned operators, and new operators for use in the classroom or online. Information gathered through synthesis is only valuable if it can be effectively transmitted in clearly prepared documents and materials.

**PERIOD COVERED:** April 1, 2016 – June 30, 2016

**PARTICIPATING AGENCIES:**

Clear Roads

DOTs: Kansas, Rhode Island, Iowa, Maine, Oregon, Missouri, Ohio, South Dakota, Washington, Illinois, Minnesota, Nebraska, Connecticut, Pennsylvania, Massachusetts, Michigan, California, Wyoming, Vermont, Wisconsin, North Dakota, Vermont, Virginia, Montana, Idaho, Utah, Colorado, New York, and Federal Highway Administration.

**PROJECT MANAGER:**

Tom Peters, MnDOT

**LEAD AGENCY:**

Minnesota Department of Transportation

**PRINCIPAL INVESTIGATOR:**

Jim Grothaus, University of Minnesota

**SP&R PROJECT NO:**

MnDOT Contract No.  
99008 Work Order No. 168

Federal Project ID:  
TPF-5(218)

**PROJECT IS:**

Planning  
 Research & Development

**ANNUAL BUDGET:**

\$100,000

**PROJECT EXPENDITURES TO DATE:**

It is an 18 month contract. We have completed 16 months of the work. An estimate of the amount of spent to date would be:  
\$90,000.00

**WORK COMPLETED:**

A project TAP meeting was held on June 27 to discuss the current status of the original 18 modules and how to move forward with the remaining 6.

An amendment has been processed to develop more training modules. Current progress on the additional modules:

Module 23: "Getting ready for Winter" out for review to project champion. Awaiting feedback. Hope to make requested changes and get it out to bigger review team yet this week.

Module 20: "Record Keeping" going out for review to project champion today. Likely out to bigger team for review in 2 weeks.

Module 22: Snow Disposal and managing snow disposal, just started working on this. ClearRoads has not assigned a project champion to it yet.

Module 24: Drivers Education. Reviewing resources sent by Cliff. Should get started on module design yet this week.

**Status of Clear Roads Training Modules:**

Date: June 30, 2016

Mod.	Topic	Status					Shared with the TAPs
		Technical Content Complete by Fortin Consulting	Powerpoint Finalized	Teaching guide	Pre and Post Assessment	Student Evaluations	
1	Plowing Procedures	X	X	x	x	X	X
2	Truck Operations	X	X	X	X	X	X
3	Spreader Procedures	X	X	X	x	X	X
4	Material Use	X	X	X	x	X	X
5	Pre-wetting	X	X	x	x	X	X
6	Brine Production	X	X	x	x	X	X
7	De-icing	X	x	x	x	X	X
8	Anti-icing	X	x	x	x	X	X
9	Safety	X	x	x	x	X	X
10	De-Icing Agent Management Policy	X	X	x	X	X	X
11	Level of Service	X	x	x	x	X	X
12	Principles of Ice Formation	X	x	x	x	X	X
13	Science of Freeze Point Depressants	X	X	x	x	X	X
14	Snow and Ice Control Agents and the Environment	X	X	x	X	X	X
15	Drift Control	X	x	x	x	X	X
16	Weather Basics	X	X	x	X	X	X
17	Bridge Frost	X	x	x	x	X	X
18	Avalanche Management	X	x	x	x	X	x

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

Updated versions of the 18 modules will be shared with Clear Road members by July 13, 2016. The project team will get final technical comments by to the consultant by July 23<sup>rd</sup>. A draft report is scheduled to be completed by August 1<sup>st</sup>. The consultant will plan to have a Webinar for Clear Road Members in the middle of September.

**STATUS AND COMPLETION DATE:** Final deliverables are due September 30, 2016, while the contract expires November 30, 2016.