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: January 1, 2016 – March 31, 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	SP&R PROJECT NO: MnDOT Contract No.	PROJECT IS:			
LEAD AGENCY: Minnesota Department of Transportation	99008 Work Order No. 168 Federal Project ID:	PlanningX Research & Development			
PRINCIPAL INVESTIGATOR: Jim Grothaus, University of Minnesota	TPF-5(218)				
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: \$80,000.00				

WORK COMPLETED:

To date the project team has worked on the following modules. Each of the PPT modules contains technical information and photos. The instruction workbook, quizzes, PPT formatting still need to be complete. Fortin Consulting has been working very closely with the TAP to obtain comments and approval during this process.

Fortin Consulting completed the technical content for all 18 training modules. It is my understanding that the technical content is accurate and has had the appropriate technical review. Fortin had constant communication with the TAP during this process. The U of MN has completed the supporting materials that consist of: training guide, pre-assessment, post-assessment, answer key for each test, and a student evaluation.

The U of MN has received comments back from the TAP and has addressed comments for the 18 modules.

Status of Clear Roads Training Modules:

Date: March 31, 2016

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

