# 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, 2015 – June 30, 2015

**PARTICIPATING AGENCIES:**
University of Minnesota – Prime
Fortin Consulting Inc. - Subcontractor

**PROJECT MANAGER:** Tom Peters
**LEAD AGENCY:** Minnesota Department of Transportation
**PRINCIPAL INVESTIGATOR:** Jim Grothaus

**SP&R PROJECT NO:** MnDOT Contract No. 99008 Work Order No. 168
**PROJECT IS:**
- Planning
- Research & Development

**ANNUAL BUDGET:** $100,000

**PROJECT EXPENDITURES TO DATE:**
It is an 18 month contract. We have completed 1/2 (9 months) of the work. An estimate of the amount of spent to date would be: $50,000.00
WORK COMPLETED:
To date the project team has worked on the following modules. Each of the PPT modules contains technical information and photos. These modules are approx. 80% complete. 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. A conference call to discuss project progress is scheduled for August 12, 2015

14 Modules are at 80% complete. Each of these modules has a PPT with Technical Content that has been approved by the TAP but do have the supporting materials (instruction workbook, pre/post test, answer key, etc…)

Module 1: Plowing Procedures
Module 2: Truck Operations
Module 3: Spreaders
Module 4: Material Use
Module 5: Pre-wetting
Module 6: Brine Production
Module 7: De-icing
Module 8: Anti-icing (including brine use)
Module 10: De-icing Agent Management Policy
Module 11: Level of Service
Module 13: Science of Freeze Point Depressants
Module 14: Snow and Ice Control Agents and the Environment
Module 16: Weather Basics
Module 17: Bridge Frost

The following four Modules are currently being developed from a technical point of view and are at various stages in the review process:

Module 9: Safety
Module 12: Principle of Ice Formation
Module 15: Drift Control and Wind
Module 18: Avalanche Management
**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

We anticipate finalizing the instructional workbook, quizzes, and final PPT format for six of the modules by September 30, 2015. This date has changed since the last quarterly report. It still meets the deadlines that are listed in the contract. Meet and review the materials with the Technical Advisory Panel (TAP) in August 2015. Work on remaining modules and review them with the TAP. Have highest priority modules (up to six) ready by September 30, 2015.

Additionally we will submit a request for an amendment to develop an additional 5 modules.

**STATUS AND COMPLETION DATE:**

We have approval of Task 1, 2 and 3. We have not submitted a request for approval for Task 4. We will discuss this at the August 12, 2015 Meeting.