



## Clear Roads Status Report

Clear Roads is a pooled fund research program (Wisconsin is the Lead State) aimed at rigorous testing of winter maintenance materials, equipment and methods for use by highway maintenance crews. It responds to a need for research based on practical experience. Primary activities include:

- Evaluating winter maintenance materials, equipment and methods under real-world conditions
- Developing specifications and recommendations
- Studying and promoting innovative techniques and technologies that will save agencies money, improve safety and increase efficiency

### OUR PARTNERS

Colorado Department of Transportation  
Illinois Department of Transportation  
Indiana Department of Transportation  
Iowa Department of Transportation  
Massachusetts Highway Department  
Michigan Department of Transportation  
Minnesota Department of Transportation

Missouri Department of Transportation  
New York Department of Transportation  
Ohio Department of Transportation  
Utah Department of Transportation  
Virginia Department of Transportation  
Wisconsin Department of Transportation  
Wyoming Department of Transportation

### COMPLETED PROJECTS

#### **Synthesis of Best Practices for Eliminating Fogging and Icing on Winter Maintenance Vehicles**

*Results:* The report compiles a range of solutions, both long-term and short-term, for keeping snow plow glass and mirror surfaces clean of winter precipitation inside and out.

#### **Calibration Accuracy of Manual and Ground-Speed-Control Spreaders**

*Results:* The report provides guidelines to help snow plow operators establish and maintain accurate calibration of ground speed controllers

### RESEARCH IN PROGRESS

#### **Determining Effectiveness of Deicing Materials and Procedures**

*Expected results:* A portable test method for determining the effectiveness of deicers that could be used by any interested state in a variety of locations under a variety of winter conditions.

*Expected completion date:* February 2009

#### **Development of Standardized Test Procedures for Carbide Insert Snowplow Blade Wear**

*Expected results:* Testing procedures that could be used by an independent testing laboratory to determine life expectancy of any carbide insert snowplow blade.

*Expected completion date:* July 2009

### **Development of Standardized Test Procedures for Evaluating Deicing Chemicals**

*Expected results:* Standard tests that will help simplify the deicer evaluation process for state DOTs.

*Expected completion date:* April 2009

### **Development of Interface Specifications for Mobile Data Platforms on DOT Vehicles**

*Expected results:* Communication and data format specifications that would support a “plug and play” approach to integrating sensors and other devices with mobile data platforms used by State DOT’s.

*Expected completion date:* January 2010

### **Development of a Toolkit for Cost-benefit Analysis of Specific Winter Maintenance Practices, Equipment and Operations**

*Expected results:* A standard tool, manual and training for cost-benefit analysis of specific winter maintenance practices, equipment and operations.

*Expected completion date:* July 2010

### **Developing and Evaluating Safe Winter Driving Messages**

*Expected results:* A better understanding of how to deliver messages that will change the perception and winter driving behavior of high-risk demographics.

*Expected completion date:* November 2009

## **PARTNERSHIP PROJECTS**

### **National Winter Maintenance Peer Exchange**

In collaboration with Aurora, SICOP, FHWA, and PNS, Clear Roads helped plan a national winter maintenance peer exchange conference dedicated to information sharing and research coordination among winter maintenance professionals. The conference took place in Columbus, Ohio on August 28 and 29, 2007. Thirty-five states plus Washington D.C. attended. Work continues on the 70 research problem statements developed.

### **National Winter Safety Campaign**

Clear Roads initiated a national multimedia campaign designed to educate drivers about the importance of driving safely in winter conditions. **“Ice and Snow... Take it Slow”**

### **Computer-Based Training**

Clear Roads supports the efforts of the Snow and Ice Pooled Fund Cooperative Program in developing additional computer-based training modules related to winter maintenance. Proper Plowing Techniques was released last Fall. Mitigating Blowing Snow, Deicing Chemicals, and Snow and Ice Management should be available early in 2008.

### **Snowplow Design**

Clear Roads is working with the Winter Concept Vehicle Pooled Fund to conduct research on optimum snowplow design.

For more information on any Clear Roads project please visit the Web site at:

[www.clearroads.org](http://www.clearroads.org)