



QUARTERLY PROGRESS REPORT

December 31, 2005

Pooled Fund Project: TPF-5(092)

Title: Test and Evaluation of Materials, Equipment and Methods for Winter Highway Maintenance

Web site: <http://www.clearroads.org>

Project Description

Clear Roads is a pooled fund research project aimed at rigorous testing of winter maintenance materials, equipment and methods for use by highway maintenance crews. Created by seasoned winter maintenance engineers in 2004, Clear Roads responds to a need for research based on practical experience. By conducting structured field testing and evaluation across a range of winter conditions and highway maintenance organizational structures, Clear Roads projects will deliver immediately useful data and recommendations on the effectiveness, ease of use, optimum application rates, durability, and more, of many advanced winter operations technologies.

Activity This Quarter

Meetings

There were no TAC meetings this quarter.

Administration

Administration of this pooled fund is handled by CTC & Associates LLC. One year, renewable contract scheduled to expire 1/12/06.

Prepared for the February 21 and 22 TAC meeting in Minneapolis, Minnesota. Drafted meeting materials, secured conference location, and invited guest participants.

Updated Clear Roads Web site, coordinated progress reporting and invoicing with researchers on new projects.

Worked with WisDOT financial and research representatives to effectively handle contributions from Clear Roads member states.

Research Projects

Work got underway this quarter for two new Clear Roads research projects:

Calibration of Manual and Ground-Speed-Controlled Salters

With the goal of determining the calibration accuracy of ground-speed-controlled salters, this study will document controller settings, actual salt usage and prewetting rate information from trucks with various types of controller units during winter storm events. Results will include guidelines to help snowplow operators establish and maintain accurate calibration of ground speed controllers, reducing salt usage and improving efficiency.

Contract awarded to Blackburn and Associates. Project expected to be completed by 10/31/07. Refer to project quarterly report at www.clearroads.org for detailed progress update.

Synthesis of Best Practices for Eliminating Icing and Fogging on Winter Maintenance Vehicles.
 This study will investigate best practices for eliminating fogging and icing on winter maintenance vehicles. The researcher will conduct a comprehensive survey to identify effective methods for combating or preventing moisture on windows and mirrors while maintaining the comfort and safety of the plow operator. Results will include a compilation of the most effect designs, technologies, materials and practices for keeping snow plow glass and mirror surfaces clean of winter precipitation inside and out.

Contract awarded to CTC & Associates LLC. Project expected to be completed by 8/31/06. Refer to project quarterly report at www.clearroads.org for detailed progress update.

Work Next Quarter

- Update and expand Clear Roads Web site with detailed project information
- February TAC meeting in Minneapolis, Minnesota to include investigator project updates and discussion of new research proposals
- Continue recruitment and marketing efforts

Membership

Below are the current TAC representatives from each of the seven member states.

- Tom Martinelli, Wisconsin Department of Transportation, Committee Chair
- Dennis Burkheimer, Iowa Department of Transportation
- Benjamin Zwart, Minnesota Department of Transportation
- Timothy Jackson, Missouri Department of Transportation
- Dennis Belter, Indiana Department of Transportation
- Tim Croze, Michigan Department of Transportation
- Diana Evans, Ohio Department of Transportation

2006 Budget

Funding

Funds already obligated	\$325,000
Remaining 2006 funds to be obligated	<u>\$50,000</u>
Total available through 12/31/06:	\$375,000

Expenses (some estimated)

Calibration project	\$199,500.00
Anti-icing/fogging project	\$24,430.00
2004 travel/supplies	\$1,348.50
2005 travel/supplies/marketing	\$7,589.02
2005 administration	\$29,000.00
2006 administration	\$29,000.00
2006 estimated travel/supplies/marketing	<u>\$12,000.00</u>
Total expenses	302,867.52

Estimated funds available for 2006 research projects

\$375,000 (obligated by 12/31/06) - \$302,867.52 (estimated expenses) = **\$72,132.48**