Goals and Objectives

The Maintenance Operations Research program strives to maintain on active and visible applied research effort that involves all MnDOT maintenance areas, including snow and ice control technology/winter maintenance, road and bridge maintenance, roadside maintenance, work zone safety and traffic control, advanced technologies and technology transfer. The goal is to identify, develop and implement the most effective maintenance procedures, materials and equipment throughout the state.

Implementation

The Maintenance Operations Research program uses a structured implementation process to ensure that the results of successful maintenance research projects get incorporated into field operations. To optimize the return on the research investment, the program contributes 25% of the available budget for projects in implementation.



Acknowledgements

The Maintenance Operations Research program is able to make a significant impact on the efficiency, safety, and cost of state maintenance operations. MOR would like to thank the Area Maintenance Engineers and District champions for their enthusiastic involvement. We sincerely appreciate these contributions, as well as the strong support of MnDOT's Office of Maintenance in advancing technology implementation.



For more information please visit: Minnesota Department of Transportation: <u>http://www.dot.state.mn.us/</u> MnDOT Office of Maintenance Research Unit:

http://www.dot.state.mn.us/maintenance/research/research.h tml

DISCLAIMER

Trade names are used on occasions to better identify the type or use of a product or material involved in field research. However, use of these names in no way implies Minnesota Department of Transportation's (MnDOT) endorsement of the product or material discussed unless there is a specific MnDOT recommendation to that effect. No attempt was made to identify which product or registered trademark associated with



A Practical Guide to Innovation

MAINTENANCE OPERATIONS RESEARCH

MOR/NTREC



About the Program

The Maintenance Operations Research (MOR) program is a unique statewide collaboration focused on identifying and applying real-world solutions to highway maintenance operations. Managed by the MnDOT Office of Maintenance, the program funds the testing and evaluation of innovative products and practices that have the potential to significantly improve the efficiency and safety of MnDOT maintenance activities. The Maintenance Operations Research program funds research projects across the state in the areas of Winter Maintenance; Winter Material; Road and Bridge Maintenance; Roadside Maintenance; Equipment and Tools; and Safety, Traffic Control and Work Zone Safety.

MOR

The Maintenance Operations Research (MOR) section encourages and funds applied research and assists in developing innovations up to \$15,000.00. It promotes operational or "hands on" research, encourages the development of ideas and methods that improves transportation and promotes implementation.

NTREC

The New Technology, Research and Equipment Committee (NTREC) is a sub-committee of the Minnesota Department of Transportation's Operations Management Group (OMG). This committee is responsible for approving projects \$15,000.00 and up. They meet twice a year to review proposals.

Selection Criteria

Maintenance Operations Research staff, with assistance from NTREC members, developed a set of criteria to ensure that research proposals submitted meet the goals and the purpose of the Maintenance Operations Research Program. Projects submitted for funding consideration are evaluated based on the following criteria:

- Availability of funding and matching resources
- Expected benefits or return on investment
- Potential for improving safety in the field
- Opportunity for statewide implementation
- Innovation

Approval

Once a project is approved for funding through the MOR/NTREC Program an approval letter is sent to the project Champion. This approval letter will include a funding string and the amount approved toward the project. If additional funding is needed, district funds will be used. The procurement must occur in the accordance with all state laws, rules and procedures, and must be performed by a Certified ALP Buyer.

