

Clear Roads Winter Maintenance Research—TPF-5(353)

Minnesota Department of Transportation (MnDOT)

Beginning almost 20 years ago, the Clear Roads Transportation Pooled Fund (TPF) project has completed 86 research and synthesis projects in the areas of methods, equipment, materials, training, technology, and safety. This project began by focusing on basic winter maintenance before transitioning to developing training and online tools.



Impact on Transportation Industry

Recipient

- Clear Roads has advanced the national state of the practice for winter maintenance by providing updated guidance and training sessions requested by more than 1,145 agencies.
- Clear Roads helped identify best practices for applying deicer to keep salt on roadways and out of the environment.
- The Maryland DOT reported a savings of more than \$90 million in well contamination claims for the past nine winters after implementing Clear Roads best practices.

Group of snow plows clearing a highway of snow.

Source: FHWA

Clear Roads functions as a national research consortium that supports State department of transportation (DOT) winter maintenance professionals.

Clear Roads has grown almost tenfold since its inception, and its members continue to reinvest in it, recognizing the project's value.

Clear Roads project activities include developing specifications, training programs, and recommendations, as well as studying and promoting innovative techniques and technologies to improve winter operations and help State DOTs respond to Federal legislation.



Partnerships

- Clear Roads has 39 member State DOTs and partners with the Federal Highway Administration, American Association of State Highway and Transportation Officials (AASHTO), American Public Works Administration, and Norwegian Public Roads Administration.
- The project supports small State DOTs with a curated qualified-products list that allows agencies of all sizes to save time, costs, and energy.
- The non-State DOT partners provide valuable input at the program and project level. At the project level, State DOT members collaborate on project committees, directing the efforts of research investigators.

- The West Virginia DOT realized a dramatic reduction in corrosion damage and repairs after Clear Roads shared corrosion prevention-related deicer best practices.
- Training on best practices is available to any agency. DOTs, private-sector companies, and commercial driver's license training providers use Clear Roads technology transfers.
- Seventy percent of study members have implemented findings from their material application projects, and 64 percent have implemented findings from Clear Roads' annual survey of State winter maintenance data.
- Clear Roads is working with AASHTO's Committee on Materials and Pavements to obtain provisional approval of an ice melting capacity test method for liquid deicers.
- Clear Roads is also developing a Proficiency Testing Program for deicer laboratories with AASHTO's resource program.



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