TRB Snap Search: Winter Operations & Maintenance

TRB's involvement in research on Winter Operations & Maintenance from 2017-2024

The Transportation Research Board (TRB) provides innovative, research-based solutions to improve how we move. TRB is part of the National Academies of Sciences, Engineering, and Medicine, an independent, non-profit institution that provides objective advice on scientific, engineering, and medical issues.

A resource to the nation and to the transportation community worldwide, TRB provides an extensive portfolio of services:

- Opportunities for information exchange on current transportation research and practice
- Management of cooperative research and other research programs
- Analyses of national transportation policy issues and guidance on federal and other research programs
- Publications and access to research information from around the world

All available Snap Searches can be accessed online here: http://www.trb.org/InformationServices/Snap.aspx

TRB Research

TRID – The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation

- Click here to view search results on TRB published research on Winter Operations & Maintenance within the past six years.

Specialty Reports

- Critical Issues in Transportation for 2024 and Beyond
- Critical Issues in Transportation 2019
- COVID-19 Addendum to Critical Issues in Transportation
- Racial Equity Addendum to Critical Issues in Transportation

Recent Reports & Publications

- Airport Cooperative Research Program (ACRP)
  - Report 134 - Applying Whole Effluent Toxicity Testing to Aircraft Deicing Runoff
  - Report 72 - Guidebook for Selecting Methods to Monitor Airport and Aircraft Deicing Materials
  - Synthesis 67 - Airside Snow Removal Practices for Small Airports with Limited Budgets

- The Marine Board
  - Letter Report - Acquisition and Operation of Polar Icebreakers: Fulfilling the Nation's Needs

- National Cooperative Highway Research Program (NCHRP)
  - NCHRP 06-19 - Guidebook for Mechanical Methods for Snow and Ice Control Operations
  - NCHRP 06-18 - Guide for Snow and Ice Control Operations
  - IDEA Report 234 - Field Test and Evaluation of a Solar Snow Fence
  - IDEA Report 204 - Biomimetic Antifreeze Molecules: A Novel Solution to Deicing Salts and Air-Entraining Admixtures
  - IDEA Report 190 - Self-de-icing LED Signals for Railroads and Highway Intersections
  - Report 1085 - Development of Guidelines for Vehicle and Equipment Marking and Lighting
  - Report 889 - Performance Measures in Snow and Ice Control Operations
  - Safety IDEA Report 29 - Self-Deicing LED Signal for Railroads and Highway Intersections
  - Synthesis 623 - Wintertime Pavement Maintenance Practices

- Transit Cooperative Research Program (TCRP)
  - Synthesis 129 - Managing Extreme Weather at Bus Stops

- Transportation Research Circulars
Current & Upcoming Projects

- Current Projects
  - NCHRP 20-44(37) - Workshops on Performance Measures in Snow and Ice Control Operations
  - NCHRP Synthesis 20-05/Topic 54-18 - Wintertime Pavement Maintenance Practices
  - NCHRP Synthesis 20-05/Topic 55-01 - State DOT Policies and Practices on the Use of Corrosion Resistant Reinforcing Bars
  - NCHRP Synthesis 20-05/Topic 55-21 - Funding for Maintenance of Complete Streets
  - NCHRP IDEA 20-30/IDEA 239 - A Real-Time Ice Warning System Empowered by Dielectric Ice Sensors for Bridges

- Upcoming Projects
  - NCHRP 15-61A - Hydrologic and Hydraulic Design Guide to Incorporate Climate Science in Transportation Infrastructure

Reports from the National Academies Press on Winter Operations & Maintenance

- Future Directions for Southern Ocean and Antarctic Nearshore and Coastal Research
- Oil in the Sea IV: Inputs, Fates, and Effects
- Service Life Assessment and Predictive Modeling for an Aging Critical Infrastructure
- Integrating Social and Behavioral Sciences Within the Weather Enterprise
- Antarctic Sea Ice Variability in the Southern Ocean-Climate System

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees - Search by transportation mode and committee topic
  - ACP10 - Regional Transportation Systems Management and Operations
  - AKG30 - Geo-Environmental and Climatic Impacts on Geomaterials
  - AKR10 - Maintenance and Operations Management
  - AKR20 - Roadside Maintenance Operations
  - AKR30 - Maintenance Fleet and Equipment
  - AKR40 - Winter Maintenance
  - AKR50 - Road Weather
  - AKT10 - Pavement Management Systems
  - AKT30 - Pavement Maintenance
  - AKT40 - Structures Maintenance
  - AKT50 - Bridge and Structures Management
  - AKT70 - Maintenance Management Systems
  - AMR50 - Extreme Weather and Climate Change Adaptation
  - AR050 - Railroad Infrastructure Design and Maintenance
  - AR060 - Rail Transit Infrastructure Design and Maintenance
  - AV030 - Environmental Impacts of Aviation
  - AW030 - Marine Environment

Task Forces - Search for task force under committee here

CRP Panels - Select CRP Panel or Synthesis Panel and search by mode/topic
  - D0159 - Pavement ME Design: Improved Consideration of the Influence of Subgrade Soils Susceptible to Shrink/Swell and/or Frost Heave on Pavement Performance
  - D0618 - Update the AASHTO Guide for Snow and Ice Control
  - D0619 - Guidebook for Mechanical Methods for Snow and Ice
  - DA0287 - Determining Airfield Pavement Deicer and Anti-Icer Contributions to Airport Stormwater
  - DA0296 - Update ACRP Report 99: Guidance for Treatment of Airport Stormwater Containing Deicers
  - SN5418 - Wintertime Pavement Maintenance Practices

Councils
  - A001C - Young Members Coordinating Council
Recent and Upcoming Events

**Upcoming Events** – In the Upcoming Events tab under Types, choose what event you are interested in, search titles by keyword

**International Conference on Road Weather and Winter Maintenance**
*May 9-10, 2023*
*Washington, D.C.*

**National Aviation System Planning Symposium**
*May 15-18, 2023*
*Irving, CA*

**Innovations in Travel Analysis and Planning Conference**
*June 4-6, 2023*
*Indianapolis, IN*

**TRB International Conference on Low Volume Roads**
*July 23-26, 2023*
*Cedar Rapids, IA*

- [Concrete Overlays of Asphalt](#) – March 11, 2021
- [Planning an Effective Airport Deicing Runoff Management Program](#) – December 8, 2020
- [Guide to Snow and Ice Performance Measures: Key Findings & Recommendations](#) – May 15, 2019

TRB’s Transportation Research Information Services (TRIS)

TRIS includes the [TRB Library](#) and the [TRIS Databases](#) (listed below) which are available free on TRB’s website.

The TRB Library provides information services to TRB staff, sponsors, TRB Committee members and panels and researchers. Access to the TRB Library is a benefit to TRB sponsors and TRB committee members.

In cooperation with your State DOT Library or Information Service, the TRB Library provides:

- Reference and research assistance
- Literature searches
- Articles for TRB Committee work

The TRB Library provides training on effective and efficient use of the following TRIS resources:

- [Transportation Research International Documentation (TRID)](https://trid.trb.org) – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- [Transportation Research Thesaurus (TRT)](https://trt.trb.org) – A tool to improve the indexing and retrieval of transportation information.
- [Research in Progress (RiP) Database](https://rip.trb.org) – Current or recently completed transportation research projects
- [Publications Index (PubsIndex) Database](https://pubsindex.trb.org) – The papers, articles and reports published by the Transportation Research Board, Strategic Highway Research Programs or the Marine Board

**Contact or Questions:** [TRBLibrary@nas.edu](mailto:TRBLibrary@nas.edu)