TRB Snap Search: Winter Operations & Maintenance

TRB's involvement in research on Winter Operations & Maintenance from 2015-2022

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 seven years.

Subject Webpages

- Operations & Traffic Management Research at TRB
- Maintenance & Preservation Research at TRB

Specialty Reports

- 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 123 - A Guidebook for Airport Winter Operations
  - 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)
  - IDEA Report 204 - Biomimetic Antifreeze Molecules: A Novel Solution to Deicing Salts and Air-Entraining Admixtures
  - Report 889 - Performance Measures in Snow and Ice Control Operations
  - Safety IDEA Report 29 - Self-Deicing LED Signal for Railroads and Highway Intersections

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

- Transportation Research Circulars
  - E-Circular 248 - 12th International Conference on Low-Volume Roads

Current & Upcoming Projects
Current Projects
- NCHRP 06-18 - Guide for Snow and Ice Control Operations
- NCHRP 06-19 - Guidebook for Mechanical Methods for Snow and Ice Control Operations
- NCHRP 20-44(37) - Workshops on Performance Measures in Snow and Ice Control Operations
- NCHRP IDEA 20-30/IDEA 234 - Field Test & Evaluation of A Solar Snow Fence

Upcoming Projects
- ACRP 02-96 - Guidance for Treatment of Airport Stormwater Containing Deicers
- NCHRP Synthesis 20-05/Topic 54-18 - Wintertime Pavement Maintenance Practices

Reports from the National Academies Press on Winter Operations & Maintenance
- 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
- Attribution of Extreme Weather Events in the Context of Climate Change

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
- Project Panels Related to Operations & Traffic Management
- Project Panels Related to Maintenance & Preservation

Councils
- A001C – Young Members Coordinating Council

Recent and Upcoming Events
Upcoming TRB Conferences – Use left hand menu to filter events

18th Biennial National Harbor Safety Committee Conference
June 13-15, 2022
Boston, MA

Automated Road Transportation Symposium
July 18-21, 2022
Garden Grove, CA

TRB International Conference on Low Volume Roads
July 23-26, 2023
Cedar Rapids, IA
Upcoming Events – In the Upcoming Events tab under Types, choose what event you are interested in, search titles by keyword

Past Events - In the Past Events tab under Types, choose what event you are interested in, search titles by keyword

- 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) – trid.trb.org - The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- Transportation Research Thesaurus (TRT) – trt.trb.org – A tool to improve the indexing and retrieval of transportation information.
- Research in Progress (RiP) Database – rip.trb.org - Current or recently completed transportation research projects
- Research Needs Statements (RNS) – rns.trb.org - Research needs as identified by TRB Technical Activities standing committees
- Publications Index (PubsIndex) Database – 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