TRB Snap Search: Environment & Sustainability

TRB’s involvement in research on Environment & Sustainability from 2022-2023

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 Environment & Sustainability within the past year.

Specialty Report

- 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

- Consensus Study Reports
  - Recycled Plastics in Infrastructure: Current Practices, Understanding, and Opportunities

- National Cooperative Highway Research Program (NCHRP)
  - IDEA Report 213 - SEAHIVE - Sustainable Estuarine and Marine Revetment
  - Legal Research Digest 89 - Planning and Environment Linkages: Review of Statutory Authority and Case Law
  - Report 1058 - Assessing Air Pollution Dispersion Models for Emissions Regulation
  - Report 1036 - Guide for Roadway Cross Section Reallocation
  - Synthesis 609 - Use of Unmanned Aerial Systems for Inspection of Stormwater Best Management Practices
  - Synthesis 602 - Resilient Design with Distributed Rainfall-Runoff Modeling
  - Synthesis 599 - Practices for Bioretention Stormwater Control Measures
  - Synthesis 586 - Use of Recycling Agents in Asphalt Concrete Mixtures
  - Web-Only Document 308 - Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector

- Transportation Research Circulars
  - E-Circular 279 - Advancing Low- and Zero-Emission Marine Vessel Technology Options Workshop
  - E-Circular 277 - 13th National Conference on Transportation Asset Management

Current & Upcoming Projects

- Current Projects
• ACRP 02-90 - Development of Airport Construction Emission Inventory Tool (ACEIT) Version 2.0
• ACRP 02-94 - Update ACRP WebResource 4: Airport Air Quality Resource Library
• ACRP 02-95 - Understanding Airport Air Quality and Public Health Studies Related to Airports: An Update to ACRP Report 135
• ACRP 02-96 - Update ACRP Report 99: Guidance for Treatment of Airport Stormwater Containing Deicers
• ACRP 02-97A - Update ACRP Report 43: Improving Environmental Performance at Small Airports
• ACRP 02-97 - Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
• ACRP 02-98 - Airport Energy Resiliency Primer and Roadmap
• ACRP 02-99 - Incorporating Environmental Justice and Equity Principles and Data into Airport Decision-Making
• ACRP 02-100 - Carbon Removal and Reduction to Support Airport Net-Zero Goals
• ACRP 02-101 - Environmental Stewardship and Compliance Training for Airport Employees
• ACRP 11-09 - Impact of New Corporate Environmental Standards Impact Airports
• ACRP Synthesis 11-03/Topic 502-22 - Airport Programs that Reduce Landside Vehicle Carbon Emissions
• NCHRP 05-22A - Gaps and Emerging Technologies in the Application of Solid-State Roadway Lighting
• NCHRP 09-66 - Performance Properties of Laboratory Produced Recycled Plastic Modified (RPM) Asphalt Binders and Mixtures
• NCHRP 09-65 - Capturing Durability of High Recycled Binder Ratio (RBR) Asphalt Mixture
• NCHRP 09-68 - Recycled Asphalt Materials: Binder Availability and Its Impact on Mix Performance
• NCHRP 09-69 - Verifying Quantities of Materials Used in Asphalt Mixtures at Production Facilities
• NCHRP 14-47 - Tools and Technology for Roadside Landscape Asset Management
• NCHRP 15-68 - Effective Low-Noise Rumble Strips
• NCHRP 15-80 - Design Guide and Standards for Infrastructure Resilience
• NCHRP 17-88 - Roadside Encroachment Database Development and Analysis
• NCHRP 20-05/Topic 55-07 - Complying with Stormwater Retrofit Permit Requirements Through Third-Party Partnerships
• NCHRP 20-06/Topic 27-03 - Legal Problems Arising out of Highway Programs. Topic 27-03. Rewrite Of Volume 3 Selected Studies In Transportation Law Environmental Law And Transportation
• NCHRP 20-30/IDEA 246 - Developing a Method for Selecting Low-Energy Mixing and Compaction Temperatures for Asphalt Mixtures Considering Asphalt Lubrication and Aggregate Characteristics
• NCHRP 20-44(24) - Pilot Test of Proposed Standard Practice for Recycling Agents in Asphalt Mixtures Incorporating RAP and RAS
• NCHRP 23-26 - Measuring Impacts and Performance of State DOT Resilience Efforts
• NCHRP 24-50 - Rewrite of the AASHTO Drainage Manual
• NCHRP 25-64 - Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
• NCHRP 25-25B - Research for the AASHTO Standing Committee on the Environment
• NCHRP 25-61 - Development of On-Bridge Stormwater Treatment Practices
• NCHRP Synthesis 20-05/Topic 54-01 - Practices to Identify and Mitigate PFAS Impacts on Highway Construction Projects and Maintenance Operations
• NCHRP Synthesis 20-05/Topic 54-02 - Outsourcing Stormwater Best Management Practice Inspection and Maintenance Activities
• NCHRP Synthesis 20-05/Topic 54-21 - Practices in the Transportation Planning Process to Address Climate Resilience and GHG Emission Quantification and Reduction
• TCRP J-11/Task 43 - Analysis of Public Transportation Health Impacts and Benefits
• TFPF 05 - Evaluation of FHWA's Initiative on Integrating NEPA and Permitting

- Upcoming Projects
  - ACRP 02-102 - A Balanced Look at Local Airport Activity and Climate Change
  - ACRP 11-09/Topic 01 - Impact of New Corporate Environmental Standards Impact Airports
  - ACRP 01-62 - Impact of Flooding on the Resiliency of Pavement Systems
  - NCHRP 05-25 - Guide to the Contextual Application of Overhead Lighting on Highways
  - NCHRP 08-158 - A Compendium for Communicating the Value of Freight and Community Interactions
  - NCHRP 10-123 - Incorporating Quality Assurance into Green Public Procurement Practices
  - NCHRP 10-126 - Develop a Standard Testing Protocol for the Approval of Field-cured Products for Use on DOT Projects
  - NCHRP 15-61A - Hydrologic and Hydraulic Design Guide to Incorporate Climate Science in Transportation Infrastructure
  - NCHRP 20-05/Topic 55-16 - Use of Sustainable Materials for Erosion and Sediment Control Practices
  - NCHRP 20-44(43) - Implementing the Benefits of Green Infrastructure for Effective Roadside Water Management
Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic
  - AEP70 – Environmental Analysis and Ecology
  - AEP80 – Transportation-Related Noise and Vibration
  - AIL50 – Environmental Issues in Transportation Law
  - AKD40 – Landscape and Environmental Design
  - AKD50 – Hydrology, Hydraulics, and Stormwater
  - AKG50 – Geo-Environmental and Climatic Impacts on Geomaterials
  - AME10 – Equity in Transportation
  - AM000 – Transportation Sustainability and Resilience Group
  - AMR50 – Extreme Weather and Climate Change Adaptation
  - AMS00 – Transportation and Sustainability
  - AMS10 – Air Quality and Greenhouse Gas Mitigation
  - AMS20 – Resource Conservation and Recovery
  - AMS30 – Transportation Energy
  - AMS40 – Alternative Fuels and Technologies
  - AT040 – Transportation of Hazardous Materials
  - AV030 – Environmental Impacts of Aviation
  - AW030 – Marine Environment

Task Forces - Search for task force under committee here

CRP Panels
  - D10123 – Quality Assurance and Sustainability
  - D205021 – Assessment and Simplification of Pavement Environmental Effects Models on Pavement Performance
  - D2525 – Research for the AASHTO Standing Committee on the Environment
  - D2543 – Case Studies for the Successful Completion of the NEPA Process for Multimodal Transportation Projects
  - D2564 – Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
  - D2568 – Successful Practices in Tracking and Implementing Environmental Commitments
  - DA02101 – Airport Employee Onboarding Environmental Guidebook
  - DA0276 – Evaluating the Environmental Benefits of Electric Air Conditioning and Power at Gates
  - DA0293 – Guidebook for Environmental Management of PFAS at Airports
  - DA0297 – Update ACRP Report 43: Improving Environmental Performance at Small Airports
  - DA0299 – Use of Equity and Environmental Justice Data to Support Airport Decision-Making
  - DA110232 – Airport Environmental Research Roadmap
  - DA110901 – How Will New Corporate Environmental Standards Impact Airports
  - SAS0217 – Synthesis of Sustainability’s Role in Enhancing Airport Capacity
  - TJ07 – Synthesis of Information Related to Transit Problems

Councils
  - A001C – Young Member Coordinating Council

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

**TRB Webinar: Life-Cycle Assessment for Pavements and Transportation Infrastructure**
*August 17, 2023*

**TRB’s Transportation Resilience 2023**
*November 13-15*
*Washington, DC*

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

**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*

**Marine Transportation System Innovative Science and Technologies Toward Greater Sustainability**
*June 19-22, 2023*
*Washington, D.C.*

**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
- **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