TRB Snap Search: Environment & Sustainability

TRB's involvement in research on Environment & Sustainability from 2022-2024

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 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

- Airport Cooperative Research Program (ACRP)
  - Report 261 - Advanced Air Mobility and Community Outreach: A Primer for Successful Stakeholder Engagement
  - Synthesis 127 - Airport Programs That Reduce Landside Vehicle Carbon Emissions

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

- National Cooperative Highway Research Program (NCHRP)
  - IDEA Report 236 - A Practical Method to Determine Reclaimed Asphalt Pavement (RAP) Binder Availability
  - 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 1107 - Effective Low-Noise Rumble Strips
  - Report 1058 - Assessing Air Pollution Dispersion Models for Emissions Regulation
  - Report 1036 - Guide for Roadway Cross Section Reallocation
  - Synthesis 624 - Use of Recycling Agents in Asphalt Concrete Mixtures
Recently Completed-Pending Publication

- ACRP 02-99 - Incorporating Environmental Justice and Equity Principles and Data into Airport Decision-Making
- ACRP 02-97 - Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
- NCHRP 25-64 - Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
- NCHRP 17-88 - Roadside Encroachment Database Development and Analysis
- NCHRP Synthesis 20-05/Topic 54-01 - Practices to Identify and Mitigate PFAS Impacts on Highway Construction Projects and Maintenance Operations

Current & Upcoming 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 02-97A - Update ACRP Report 43: Improving Environmental Performance at Small Airports
- ACRP 02-98 - Airport Energy Resiliency Primer and Roadmap
- 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 02-102 - A Balanced Look at Local Airport Activity and Climate Change
- ACRP Synthesis 11-03/Topic S07-04 - Airport Property Used for Parks and Recreational Use
- NCHRP 01-62 - Impact of Flooding on the Resiliency of Pavement Systems
- NCHRP 05-22A - Gaps and Emerging Technologies in the Application of Solid-State Roadway Lighting
- NCHRP 05-25 - Guide to the Contextual Application of Overhead Lighting on Highways
- 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 15-80 - Design Guide and Standards for Infrastructure Resilience
- NCHRP 20-05/Topic 55-07 - Stormwater Retrofit Programs and Practices Through Third-Party Partnerships
- NCHRP 20-05/Topic 55-16 - Use of Sustainable Materials for Erosion and Sediment Control Practices
- NCHRP 20-05/Topic 55-18 - Permitting, Design, and Construction Practices for Aquatic Organism Passage
- NCHRP 20-24(138)A - Collective and Individual Actions to Envision and Realize the Next Era of America’s Transportation Infrastructure—Phase 2
- NCHRP 20-24(144) - Enhancing State DOTs Agility in Project Development and Delivery
- NCHRP 20-44(24) - Pilot Test of Proposed Standard Practice for Recycling Agents in Asphalt Mixtures Incorporating RAP and RAS
- NCHRP 20-44(43) - Implementing the Benefits of Green Infrastructure for Effective Roadside Water Management
- NCHRP 20-44(44) - Implementing the Design Practices Guide for Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure
- NCHRP 23-26 - Measuring Impacts and Performance of State DOT Resilience Efforts
- NCHRP 23-33 - Managed Retreat To Address Extreme Weather, Natural Hazards, and Climate Impacts
- NCHRP 24-50 - Rewrite of the AASHTO Drainage Manual
- NCHRP 25-25B - Research for the AASHTO Standing Committee on the Environment
Updated Projects

- NCHRP 25-61 - Development of On-Bridge Stormwater Treatment Practices
- NCHRP IDEA 20-30/IDEA 245 - Simple and Rapid Tests for Assessing Quality and Consistency of Recycled Asphalt Pavement (RAP) for Recycled Asphalt Mixture Applications
- NCHRP IDEA 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 Synthesis 20-05/Topic 55-05 - Use and Availability of Supplementary Cementitious Materials for Concrete
- NCHRP Synthesis 20-05/Topic 55-11 - Construction Stormwater Program Management, Tracking, Reporting, and Compliance
- NCHRP Synthesis 20-05/Topic 55-16 - Use of Sustainable Materials for Erosion and Sediment Control Practices
- TCRP E-15 - Air Quality Inside Buses
- TCRP I-11/Task 43 - Analysis of Public Transportation Health Impacts and Benefits
- TFPE 05 - Evaluation of FHWA's Initiative on Integrating NEPA and Permitting

Upcoming Projects

- ACRP 03-77 - Incorporating Climate Change into Aviation Forecasts
- ACRP 11-08(24-03) - ACRP Insight Event – Airport Energy Resiliency
- NCHRP 08-158 - A Compendium for Communicating the Value of Freight and Community Interactions
- NCHRP 08-180 - Achieving Efficient Cultural Resources Management in Project Delivery
- NCHRP 08-181 - Impacts of Climate Change and Extreme Weather on the Mobility of Socially Vulnerable Populations
- NCHRP 08-184 - Induced Demand Assessment Framework: A Guide
- NCHRP 08-186 - Best Practices for Distributed Rainfall-Runoff Models to Transform Hydrologic and Hydraulic Modeling for Resilient Transportation Planning and Design
- NCHRP 10-123 - Incorporating Quality Assurance into Green Public Procurement Practices
- NCHRP 10-126 - Field-Cured Products and Water Quality: A Guide for Screening and Risk Mitigation
- NCHRP 15-61A - Hydrologic and Hydraulic Design Guide to Incorporate Climate Science in Transportation Infrastructure
- NCHRP 20-06/Topic 27-03 - Environmental and Planning Law and Transportation
- NCHRP 20-44(55) - Workshops and Peer Exchanges on Pollinator Habitat Conservation Along Roadways
- NCHRP 20-138 - Defining and Assessing Transportation System Health to Achieve a Resilient and Sustainable Transportation System
- NCHRP 23-38 - Incorporating Risk Management into Roadway Infrastructure Maintenance Practices
- NCHRP 24-52 - Guidelines for Resilient Erosion- and Sediment-Control Practices
- NCHRP 25-66 - Reviewing the REMEL Noise Database to Accommodate the Current Vehicle Fleet
- NCHRP 25-68 - Documenting and Verifying Environmental Commitments
- NCHRP 25-69 - Guide to Increasing and Sustaining Native Flora in Roadside Vegetation
- NCHRP 25-70 - Evaluating Carbon Reduction in Project Selection and Planning
- NCHRP 25-72 - Field Methods and Interlaboratory Tests to Establish the Accuracy and Precision of Measured Concentrations of Emerging Contaminants in Stormwater Runoff and Stormwater-Treatment System Effluent
- NCHRP 25-73 - Successful Community Impact Strategies During the Construction of Projects
- NCHRP 25-74 - Advancing Methods to Evaluate Greenhouse Gas Emissions During Transportation Decision Making and Performance Management
- NCHRP 25-75 - Simplified Methodology for Risk-Based Air Quality Assessments of NEPA Alternatives
- NCHRP Synthesis 20-05/Topic 56-02 - Design, Production, and Construction of High RAP Asphalt Mixtures
- NCHRP Synthesis 20-05/Topic 56-14 - State DOT Training Programs to Comply with NPDES Stormwater Permit Requirements
- TCRP B-52 - Intercity Bus: The State Role Updated

Reports from the National Academies Press on Environment & Sustainability

- Transportation and Infrastructure » Environment
- NAP - Environment and Environmental Studies
- Incorporating Climate Change and Climate Policy into Macroeconomic Modeling: Proceedings of a Workshop
- Greenhouse Gas Emissions from Wildland Fires: Toward Improved Monitoring, Modeling, and Management: Proceedings of a Workshop
- Modernizing Probable Maximum Precipitation Estimation
- Potential Hydrodynamic Impacts of Offshore Wind Energy on Nantucket Shoals Regional Ecology: An Evaluation from Wind to Whales
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
- **AJL50** - 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** – Select *CRP Panel* and *Synthesis Panel* and search by transportation mode and committee topic

- **D10123** - Quality Assurance and Sustainability
- **D2005** - Synthesis of Information Related to Highway Problems
- **D20138** - Defining and Assessing Transportation System Health to Achieve a Resilient and Sustainable Transportation System
- **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
- **DA0230** - Enhancing the Airport-Industry Database of Sustainable Practices
- **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
- **DTFPE07** - Evaluation of the Planning and Environment Linkages Program
- **SAS0217** - Synthesis of Sustainability’s Role in Enhancing Airport Capacity
- **SN5516** - Use of Sustainable Materials for Erosion and Sediment Control Practices
- **TI07** - Synthesis of Information Related to Transit Problems

**Councils**

- **A001C** – Young Member 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

**TRB’s Transportation Symposium on Environment, Energy, and Livable Economies**

*August 25-28, 2024*

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

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

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

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

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*Washington, D.C.*

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

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

**International Conference on Road Weather and Winter Maintenance**  
*May 9-10, 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](http://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](http://trt.trb.org) - A tool to improve the indexing and retrieval of transportation information.
- Research in Progress (RiP) Database – [rip.trb.org](http://rip.trb.org) - Current or recently completed transportation research projects
- Publications Index (PubsIndex) Database – [pubsindex.trb.org](http://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)