TRB Snap Search: Environment & Sustainability

TRB’s involvement in research on Environment & Sustainability from 2021-2022

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 Environment & Sustainability within the past year.

**Specialty Webpages**

- Environment Research at TRB
- Climate Change

**Specialty Report**

- 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)**
  - ACRP 02-87 - Determining Airfield Pavement Deicer and Anti-Icer Contributions to Airport Stormwater
  - Report 221 - Measuring Quality of Life in Communities Surrounding Airports
  - Report 220 - Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports
  - Synthesis 110 - Airport Renewable Energy Projects Inventory and Case Examples
  - Web-Only Document 51 - Commercial Space Vehicle Emissions Modeling

- **National Cooperative Highway Research Program (NCHRP)**
  - IDEA Report 211 - Reducing Stormwater Runoff with Biochar Addition to Roadway Soils
  - IDEA Report 200 - Rapid Rehabilitation of Highway Slopes Using Seeded Microbial Bio-Cement
  - Report 973 - Long-Term Aging of Asphalt Mixtures for Performance Testing and Prediction: Phase III Results
  - Synthesis 576 - Practices for Project-Level Analyses for Air Quality
  - Web-Only Document 308 - Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector

- **Special Reports**
  - Report 338 - Modernizing the U.S. Offshore Oil and Gas Inspection Program for Increased Agility and Safety Vigilance
  - Report 337 - The Role of Transit, Shared Modes, and Public Policy in the New Mobility Landscape

- **Transit Cooperative Research Program (TCRP)**
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 02-99 - 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 03-51 - Electric Aircraft on the Horizon -- An Airport Planning Perspective
- ACRP 07-18 - Develop Airfield Design Guidelines for Large Unmanned Aerial Systems (UAS)
- ACRP Synthesis 11-03/Topic S02-22 - Airport Programs that Reduce Landside Vehicle Carbon Emissions
- ACRP Synthesis 11-03/Topic S10-18 - Considerations for Establishing and Maintaining Successful Bee Programs on Airports
- NCHRP 05-22A - Gaps and Emerging Technologies in the Application of Solid-State Roadway Lighting
- NCHRP 08-124 - Quantifying the Impacts of Corridor Management
- 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 14-39 - Using Vegetated Compost Blankets to Achieve Highway Runoff Volume and Pollutant Reduction
- NCHRP 15-68 - Effective Low-Noise Rumble Strips
- NCHRP 15-80 - Design Guide and Standards for Infrastructure Resilience
- NCHRP 17-88 - Roadside Encroachment Data for All Vehicle Types Across a Range of Traffic Volumes
- NCHRP 17-87 - Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
- NCHRP 20-06/Topic 25-07 - Review of Statutory and Case Law on Planning and Environmental Linkages
- NCHRP 20-24(138) - Collective and Individual Actions for State Departments of Transportation Envisioning and Realizing the Next Era of America’s Transportation Infrastructure – Phase I
- NCHRP 20-44(23) - Pilot Test of Climate Change Design Practices Guide for Hydrology and Hydraulics
- NCHRP 20-44(24) - Pilot Test of Proposed Standard Practice for Recycling Agents in Asphalt Mixtures Incorporating RAP and RAS
- 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 25-55 - Assessment of Regulatory Air Pollution Dispersion Models to Quantify the Impacts of Transportation Sector Emissions
- NCHRP 25-60 - Watershed Approach to Mitigating Hydrologic Impacts of Transportation Projects
- NCHRP 25-61 - Development of On-Bridge Stormwater Treatment Practices
- NCHRP Synthesis 20-05/Topic 51-02 - Practices for Bridge Approach Pavement Details and Bridge Approach Pavement Support Details for Durability, Ride and Water Management
- NCHRP Synthesis 20-05/Topic 51-08 - Practice and Performance of Cold In-Place Recycling and Cold Central Plant Recycling
- NCHRP Synthesis 20-05/Topic 51-18 - Practices for Project-Level Analyses for Air Quality
- NCHRP Synthesis 20-05/Topic 52-17 - Use of Recycling Agents in Asphalt Concrete Mixtures
- NCHRP Synthesis 20-05/Topic 53-09 - Use of Unmanned Aerial Systems for Highway Stormwater Inspections
- NCHRP Synthesis 20-05/Topic 53-11 - Resilient Design with Distributed Rainfall Modeling
- TCRP A-46 - Quantitative Procedures for Designing and Operating Ferry Transit Services
- TCRP E-13 - COVID-19 and Transit Air Quality Protections (Insight Event)
- Transit IDEA J-04/IDEA 96 - Multi-stage Planning for Electrifying Transit Bus Systems with Multiformat Charging Facilities
• **Upcoming Projects**
  - [ACRP 02-95](#) - Update ACRP Report 135: Understanding Airport Air Quality and Public Health Studies Related to Airports
  - [ACRP 02-96](#) - Update ACRP Report 99: Guidance for Treatment of Airport Stormwater Containing Deicers
  - [ACRP 02-97](#) - Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
  - [ACRP 02-97A](#) - Update ACRP Report 43: Improving Environmental Performance at Small Airports
  - [ACRP 02-98](#) - Airport Energy Resiliency Primer and Roadmap
  - [ACRP 02-101](#) - Environmental Stewardship and Compliance Training for Airport Employees
  - [ACRP 02-102](#) - A Balanced Look at Local Airport Activity and Climate Change
  - [NCHRP 05-25](#) - Guide to the Contextual Application of Overhead Lighting on Highways
  - [NCHRP 08-158](#) - Communicating the Value, Interactions, and Impacts of Freight to Stakeholders
  - [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 10-123](#) - Quality Assurance and Sustainability
  - [NCHRP 15-61A](#) - Updates to the Design Practices Guide for Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure
  - [NCHRP 20-102(23)](#) - Potential Impacts of Highly Automated Vehicles and Shared Mobility on Traveler Behavior
  - [NCHRP 23-26](#) - Measuring Impacts and Performance of State DOT Resilience Efforts
  - [NCHRP 23-33](#) - Guidance in Planning for Managed Retreat as an Extreme Weather and Climate Adaptation Strategy
  - [NCHRP 25-68](#) - Successful Practices in Tracking and Implementing Environmental Commitments
  - [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 & Maintenance Activities
  - [NCHRP Synthesis 20-05/Topic 54-21](#) - Practices to Address Climate Change in the Transportation Planning Process

**Reports from the National Academies Press on Environment & Sustainability**

- An Approach for Assessing U.S. Gulf Coast Ecosystem Restoration
- Companion Animals as Sentinels for Predicting Environmental Exposure Effects on Aging and Cancer Susceptibility in Humans
- Data-Informed Societies Achieving Sustainability: Tasks for the Global Scientific, Engineering, and Medical Communities
- Climate-Resilient Supply Chains
- Progress, Challenges, and Opportunities for Sustainability Science
- Reflecting Sunlight - Recommendations for Solar Geoengineering Research and Research Governance
- Plasma Science - Enabling Technology, Sustainability, Security, and Exploration
- Progress Toward Restoring the Everglades
- The Use of Systematic Review in EPA’s Toxic Substances Control Act Risk Evaluations
- Review of the New York City Watershed Protection Program
- Assessment of Technologies for Improving Light-Duty Vehicle Fuel Economy—2025-2035
- Global Change Research Needs and Opportunities for 2022-2031
- The Challenge of Feeding the World Sustainably
- The Use of Systematic Review in EPA’s Toxic Substances Control Act Risk Evaluations

**Committees & Panels**

**Sign-up to be a committee "Friend"**

**TRB Standing Committees** – Search by transportation mode and committee topic

- [AEP 70](#) - Environmental Analysis and Ecology
- [AEP 80](#) - Transportation-Related Noise and Vibration
- [AIL 50](#) - Environmental Issues in Transportation Law
- [AKD 40](#) - Landscape and Environmental Design
- [AKD 50](#) - Hydrology, Hydraulics, and Stormwater
- [AME 10](#) - Equity in Transportation
- [AME 60](#) - Historic and Archeological Preservation in Transportation
- [AMR 50](#) - Extreme Weather and Climate Change Adaptation
- [AMR 10](#) - Air Quality and Greenhouse Gas Mitigation
Task Forces - Search for task force under committee here

CRP Panels
- Project Panels Related to Environment

Councils
- A001C – Young Member Coordinating Council

Recent and Upcoming Events

Upcoming TRB Conferences – Use left hand menu to filter events

**Conference on Sustainability and Emerging Transportation Technology**
*May 31 - June 2, 2022*  
*Irvine, CA*

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

**Conference on Scenario Planning in Transportation Planning**
*September 19-21, 2022*  
*Washington, D.C.*

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

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