

**TRB** TRANSPORTATION RESEARCH BOARD

## 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
  - [Report 14](#) - Deicing Planning Guidelines and Practices for Stormwater Management Systems, Second edition
  - [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 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
- [Special Reports](#)
  - [Report 340](#) - Investing in Transportation Resilience: A Framework for Informed Choices
  - [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 \(TCRP\)](#)
  - [Report 226](#) - An Update on Public Transportation's Impacts on Greenhouse Gas Emissions
  - [Report 222](#) - Analysis of Green Bond Financing in the Public Transportation Industry
  - [Report 219](#) - Guidebook for Deploying Zero-Emission Transit Buses

- [Transportation Research Circulars](#)
  - [E-Circular 271](#) - Critical Issues in Aviation and the Environment 2021
  - [E-Circular 270](#) - Opportunities for Research on Transportation and Equity

## 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 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 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 14-40](#) - Transforming Roadside Management and Technology Practices for the Benefit of Safety, Ecology, and Economy
  - [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 25-56](#) - Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector
  - [NCHRP 25-60](#) - Watershed Approach to Mitigating Hydrologic Impacts of Transportation Projects
  - [NCHRP 25-61](#) - Development of On-Bridge Stormwater Treatment Practices
  - [NCHRP IDEA 20-30/IDEA 211](#) - Reducing Stormwater Runoff and Pollutant Loading with Biochar Addition to Highway Greenways
  - [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 53-05](#) - Practices for Stormwater Bioretention
  - [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
  - [Transit IDEA J-04/IDEA 96](#) - Multi-stage Planning for Electrifying Transit Bus Systems with Multifunctional 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](#) - Updates to ACRP Environmental Reports 11, 43, 147 & 160
  - [ACRP 02-99](#) - Use of Equity and Environmental Justice Data to Support Airport Decision Making
  - [ACRP 02-100](#) - Pathways to Airport Net Zero Carbon Emissions

- [ACRP 02-101](#) - Airport Employee Onboarding Environmental Guidebook
- [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](#) - Recommended Procedures for Verifying Material Quantities at Asphalt Mix Plants
- [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 Synthesis 20-05/Topic 53-09](#) - Use of Unmanned Aerial Systems for Highway Stormwater Inspections
- [TCRP E-13](#) - COVID-19 and Transit Air Quality Protections (Insight Event)

### Reports from the [National Academies Press](#) on Environment & Sustainability

- [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

- [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
- [AME10](#) – Equity in Transportation
- [AME60](#) – Historic and Archeological Preservation in Transportation
- [AMR50](#) - Extreme Weather and Climate Change Adaptation
- [AMR10](#) - 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

- [Project Panels Related to Environment](#)

### Councils

- [A001C](#) – Young Member Coordinating Council

### Recent and Upcoming Events

[Upcoming Conferences](#)- Left hand menu “upcoming conferences by topic”  
(Conferences cosponsored by TRB are denoted with an asterisk.)

#### [Transportation Infrastructure Innovations for Durability and Resilience \(TriDurLE 2021\)\\*](#)

December 6, 2021

Austin, TX

#### [TRB Virtual Careers in Motion Networking Fair](#)

December 8, 2021

Washington, DC

**[Conference on Sustainability and Emerging Transportation Technology](#)**

*March 15, 2022*

**Irvine, CA**

**[American Society of Civil Engineers \(ASCE\) Geo-Congress 2022\\*](#)**

*March 20, 2022*

**Charlotte, NC**

**[18th Biennial National Harbor Safety Committee Conference](#)**

*June 13, 2022*

**Boston, MA**

**[International Conference of International Society for Intelligent Construction\\*](#)**

*September 6, 2022*

**Guimaraes, Portugal**

**[TRB Scenario Planning Conference](#)**

*September 19, 2022*

**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

**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
- **Research Needs Statements (RNS)** – [rns.trb.org](http://rns.trb.org) - Research needs as identified by TRB Technical Activities standing committees
- **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)