



TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Environment & Sustainability

TRB's involvement in research on Environment & Sustainability from 2017-2018

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

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.

Subject Webpage

- [Environment Research at TRB](#)

Specialty Webpage

- [Climate Change](#)

Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
 - [Report 179](#) - Dispersion Modeling Guidance for Airports Addressing Local Air Quality Health Concerns
 - [Report 174](#) - Green Stormwater Infrastructure - Volume 2: Guidebook
 - [Report 174](#) - Green Stormwater Infrastructure - Volume 1: Primer
 - [Report 173](#) - Use and Potential Impacts of AFFF Containing PFASs at Airports
 - [Report 169](#) - Clean Water Act Requirements for Airports
 - [Report 166](#) - Interpreting the Results of Airport Water Monitoring
 - [Synthesis 85](#) - Alternative Fuels in Airport Fleets
 - [Web-Only Document 34](#) - Assessing Aircraft Noise Conditions Affecting Student Learning--Case Studies
 - [Web-Only Document 32](#) - Improving AEDT Noise Modeling of Mixed Ground Surfaces
 - [Web-Only Document 30](#) - Development of a NOx Chemistry Module for EDMS/AEDT to Predict NO2 Concentrations
- [National Cooperative Highway Research Program \(NCHRP\)](#)
 - [Report 842](#) - Mapping Heavy Vehicle Noise Source Heights for Highway Noise Analysis
 - [Legal Research Digest 75](#) - Legal Requirements for State Departments of Transportation Agency Participation in Conservation Plans
- [Transportation Research Record: Journal of the Transportation Research Board](#)
 - [Volume 2628](#) - Environment and Energy
 - [Volume 2627](#) - Air Quality

Current & Upcoming Projects

- [Current Projects](#)
 - [ACRP 02-47](#) - Assessing Aircraft Noise Conditions Affecting Student Achievement--Case Studies
 - [ACRP 02-55](#) - Enhanced AEDT Modeling of Aircraft Arrival and Departure Profiles
 - [ACRP 02-67](#) - Airport Air Quality Management Guidebook and Resource Library
 - [ACRP 02-68](#) - Strategies for Reducing Local Stormwater Utility Fees for Airports
 - [ACRP 02-69](#) - Integrating Airport Sustainability and the NEPA Process
 - [ACRP 02-70](#) - Wetland Mitigation--A Guidebook for Airports
 - [ACRP 02-71](#) - Guidebook and Decision Tool for Managing Airport Stormwater Containing Deicers

- [ACRP 02-72](#) - Developing a Comprehensive Renewable Resources Strategy
- [ACRP 02-73](#) - Interactive Tool for Understanding NEPA at General Aviation Airports
- [ACRP 02-74](#) - Integrating Climate Change Risk into Airport Management Systems
- [ACRP 02-75](#) - Benefit-Cost Analyses Guidebook for Airport Stormwater
- [ACRP 02-76](#) - Optimizing the Use of Electric Pre-Conditioned Air (PCA) and Ground Power Systems at Airports
- [ACRP 02-77](#) - Revolving Funds for Sustainability Projects at Airports
- [ACRP 02-78](#) - Climate Resilience and Benefit Cost Analysis--A Handbook for Airports
- [ACRP 02-79](#) - Improving AEDT Modeling for Aircraft Noise Reflection and Diffraction from Terrain and Manmade Structures
- [ACRP 02-80](#) - Quantifying Emissions Reductions at Airports from the Use of Alternative Jet Fuels
- [ACRP 02-81](#) - Commercial Space Operations Noise and Sonic Boom Measurements
- [NCHRP 08-100](#) - Environmental Justice Analyses When Considering Toll Implementation or Rate Changes
- [NCHRP 10-91A](#) - Sustainable Highway Construction Practices
- [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 20-06/Topic 22-01](#) - Legal Requirements for State DOT Participation in Conservation Plans
- [NCHRP 20-07/Task 399](#) - Identifying Bridge Maintenance and Preservation Activities which Minimize Environmental Impact
- [NCHRP 20-101](#) - Guidelines to Incorporate the Costs and Benefits of Adaptation Measures in Preparation for Extreme Weather Events and Climate Change
- [NCHRP 20-119](#) - Evaluating the Suitability of Roadway Corridors for Use by Monarch Butterflies
- [NCHRP 24-42](#) - Underwater Installation of Filters Systems for Scour and Other Erosion Control Countermeasures
- [NCHRP 24-43](#) - Relationship Between Erodibility and Properties of Soils
- [NCHRP 25-25](#) - Research for the AASHTO Standing Committee on the Environment
- [NCHRP 25-25/Task 101](#) - Stormwater Monitoring Program Goals, Objectives and Protocols for State Departments of Transportation
- [NCHRP 25-25B](#) - Research for the AASHTO Standing Committee on the Environment
- [NCHRP 25-44](#) - Field Evaluation of Reflected Noise from a Single Noise Barrier
- [NCHRP 25-48](#) - Combined Interface for Project Level Air Quality Analysis
- [NCHRP 25-49](#) - Development of a Highway Construction Noise Prediction Model
- [NCHRP 25-51](#) - Limitations of the Infiltration Approach to Stormwater Management in the Highway Environment
- [NCHRP 25-52](#) - Meteorological Effects on Roadway Noise
- [NCHRP 25-53](#) - Approaches for Determining and Complying with TMDL Requirements Related to Roadway Stormwater Runoff
- [NCHRP 25-54](#) - Field Testing of BMPs Using Granulated Ferric Oxide Media to Remove Dissolved Metals in Roadway Stormwater Runoff
- [NCHRP Synthesis 20-05/Topic 48-05](#) - The Renewal of Stormwater Systems Using Trenchless Technologies
- [TCRP H-53](#) - Tools for a Sustainable Transit Agency
- [TCRP Synthesis I-07/Topic SA-41](#) - Battery Electric Buses - State of the Practice
- [Upcoming Projects](#)
 - [ACRP 02-82](#) - Advancing Airport Transportation to Achieve Zero-Emissions Status
 - [ACRP 02-83](#) - Measuring Quality of Life in Communities Surrounding Airports
 - [ACRP 02-84](#) - High Resolution Spatiotemporal Population Distribution Data and Modeling for Aviation Noise Research Studies
 - [ACRP 02-85](#) - Commercial Space Vehicle Emissions Modeling
 - [ACRP 02-86](#) - Measuring the Impact of Temporary Flight Restrictions on Airports
 - [ACRP 02-87](#) - Methods for Evaluating Airfield Pavement Deicer Contributions to Airport Stormwater Quality
 - [ACRP 11-02/Task 32](#) - Research Roadmap on Environmental Issues
 - [NCHRP 10-90](#) - Guidance for Complying with EPA Effluent Limitation Guidelines for Construction Runoff
 - [NCHRP 15-68](#) - Effective Low-Noise Rumble Strips
 - [NCHRP 17-88](#) - Roadside Encroachment Data for All Vehicle Types Across a Range of Traffic Volumes
 - [NCHRP 25-56](#) - Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector

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

- [Review of the Research Program of the U.S. DRIVE Partnership: Fifth Report](#)
- [Beyond Compliance: Strengthening the Safety Culture of the Offshore Oil and Gas Industry](#)

Committees & Panels

[Sign-up to be a committee "Friend"](#)

[Technical Activities Division Standing Committees](#) – Search by transportation mode and committee topic

- [ABE40](#) – Transportation and Sustainability
- [AD000](#) – Planning and Environment Group
- [ADC00](#) – Environment and Energy
- [ADC10](#) – Environmental Analysis in Transportation
- [ADC20](#) – Transportation and Air Quality
- [ADC30](#) – Ecology and Transportation
- [ADC40](#) – Transportation-Related Noise and Vibration
- [ADC50](#) – Historic and Archeological Preservation in Transportation
- [ADC60](#) – Resource Conservation and Recovery
- [ADC70](#) – Transportation Energy
- [ADC80](#) – Alternative Transportation Fuels and Technologies
- [ADD40](#) – Transportation and Sustainability
- [ADD50](#) – Environmental Justice in Transportation
- [AFB40](#) – Landscape and Environmental Design
- [AFB60](#) – Hydrology and Hydraulics
- [AFB65](#) – Stormwater
- [AL050](#) – Environmental Issues in Transportation Law
- [AT040](#) – Transportation of Hazardous Materials
- [AV030](#) – Environmental Impacts of Aviation
- [AW030](#) – Marine Environment

[Task Forces](#) - Search for *task force* under committee here

- [A0020T](#) – Climate Change and Energy
- [ADD55T](#) – Arterials and Public Health

CRP Panels

- [Project Panels Related to Environment](#)

Councils

- [A0040T](#) – Young Member Council

Policy Study

- [B0140](#) - Committee on Offshore Oil and Gas Safety Culture: A Framing Study

Recent and Upcoming Events

[Conferences \(co-sponsored by TRB\)](#) - Left hand menu “upcoming conferences by topic”

[ACRP Insight Event: Airport Roles in Reducing Transmission of Communicable Diseases](#)

March 6-7, 2018
Washington, D.C.

[Transport Research Arena 2018*](#)

April 16-19, 2018
Vienna, Austria

[4th GeoShanghai International Conference \(GeoShanghai 2018\)*](#)

May 27-30, 2018
Shanghai, China

[57th Annual Workshop on Transportation Law](#)

July 15-18, 2018
Cambridge, Massachusetts

[GeoChina 2018 International Conference*](#)

July 23-25, 2018
Hangzhou, Zhejiang, China

[2018 Annual Conference of the Florida Association of Environmental Professionals \(FAEP\)*](#)

September 2018

Orlando, Florida

[TRB Workshop at the 69th Highway Geology Symposium 2018*](#)

September 10, 2018

Portland, Maine

[GeoMEast International Conference 2018: "Sustainable Civil Infrastructures: Structural Integrity"*](#)

November 24-28, 2018

Cairo, Egypt

[Webinars](#) – View upcoming webinars, suggest a webinar or add registration information

TRB's Transportation Research Information Services (TRIS)

TRIS includes the [TRB Library](#) and the [TRIS Databases](#) (listed below) which are available for 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:

TRID – The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation - trid.trb.org

Practice Ready Papers (PRP) Database - Papers with information that is ready for immediate implementation or requires minimal additional research or implementation effort - prp.trb.org

Publications Index (PubsIndex) Database – The papers, articles and reports published by the Transportation Research Board, Highway Research Board, Strategic Highway Research Programs or the Marine Board - pubsindex.trb.org

Research in Progress (RiP) Database – Current or recently completed transportation research projects - rip.trb.org

Research Needs Statements (RNS) – Research needs as identified by TRB Technical Activities standing committees - rns.trb.org

Contact the Library at TRBLibrary@nas.edu or 1 (202) 334-2989