TRB Snap Search: Air Quality & Climate Change

TRB's involvement in research on Air Quality & Climate Change from 2020-2022

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 on Air Quality & Climate Change within the two past years.

Specialty Webpage

- Climate Change

Specialty Reports

- 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 220 - Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports

- National Cooperative Highway Research Program (NCHRP)
  - Report 938 - Incorporating the Costs and Benefits of Adaptation Measures in Preparation for Extreme Weather Events and Climate Change—Guidebook
  - 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
  - Web-Only Document 271 - Guidelines to Incorporate the Costs and Benefits of Adaptation Measures in Preparation for Extreme Weather Events and Climate Change

- Special Reports
  - Report 336 - Options for Reducing Lead Emissions from Piston-Engine Aircraft

- Transit Cooperative Research Program (TCRP)
  - Report 226 - An Update on Public Transportation's Impacts on Greenhouse Gas Emissions
  - Report 219 - Guidebook for Deploying Zero-Emission Transit Buses

- Transportation Research Circulars
  - E-Circular 277 - 13th National Conference on Transportation Asset Management
  - E-Circular 265 - Transportation Resilience 2019: 2nd International Conference on Resilience to Natural Hazards and Extreme Weather

Updated 05/24/2022
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 - Update ACRP Report 135: Understanding Airport Air Quality and Public Health Studies Related to Airports
  - ACRP Synthesis 11-03/Topic S02-22 - Airport Programs that Reduce Landside Vehicle Carbon Emissions
  - NCHRP 15-80 - Design Guide and Standards for Infrastructure Resilience
  - NCHRP 20-44(23) - Pilot Test of Climate Change Design Practices Guide for Hydrology and Hydraulics
  - NCHRP 20-59(55) - Transportation System Resilience: CEO Primer & Engagement
  - NCHRP 25-55 - Assessment of Regulatory Air Pollution Dispersion Models to Quantify the Impacts of Transportation Sector Emissions
  - NCHRP 25-64 - Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
  - NCHRP Synthesis 20-05/Topic 53-11 - Resilient Design with Distributed Rainfall Modeling

- **Upcoming Projects**
  - ACRP 02-97 - Update to the Guidelines, Tools, and Resources Related to ACRP Reports 11, 147, and 160
  - ACRP 02-102 - A Balanced Look at Local Airport Activity and Climate Change
  - NCHRP 23-26 - Measuring Impacts and Performance of State DOT Resilience Efforts
  - NCHRP 15-61A - Updates to the Design Practices Guide for Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure
  - TCRP E-13 - COVID-19 and Transit Air Quality Protections (Insight Event)

Reports from the [National Academies Press](https://nationalacademies.org) on Air Quality & Climate Change

- Communities, Climate Change, and Health Equity
- Engineering Responses to Climate Change
- Biodiversity at Risk: Today’s Choices Matter
- A Research Strategy for Ocean-based Carbon Dioxide Removal and Sequestration
- Indoor Exposure to Fine Particulate Matter and Practical Mitigation Approaches
- Wildland Fires: Toward Improved Understanding and Forecasting of Air Quality Impacts
- Frameworks for Protecting Workers and the Public from Inhalation Hazards
- Global Change Research Needs and Opportunities for 2022-2031
- Accelerating Decarbonization of the U.S. Energy System
- Climate Change: Evidence and Causes: Update 2020
- Evolving the Geodetic Infrastructure to Meet New Scientific Needs
- Advancing Urban Sustainability in China and the United States
- Understanding and Responding to Global Health Security Risks from Microbial Threats in the Arctic
- Implications of the California Wildfires for Health, Communities, and Preparedness
- Reducing Fuel Consumption and Greenhouse Gas Emissions of Medium- and Heavy-Duty Vehicles, Phase Two
- Advanced Technologies for Gas Turbines

Committees & Panels

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

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

- ABC991 - 12th National Conference on Transportation Asset Management
- ACP20 - Freeway Operations
- ACP35 - Managed Lanes
- AMR50 - Extreme Weather and Climate Change Adaptation
- AMS10 - Air Quality and Greenhouse Gas Mitigation
- AMS40 - Alternative Fuels and Technologies
- AV030 - Environmental Impacts of Aviation

**Project Panels**

- D1561 - Applying Climate Change Information to Hydrologic and Hydraulic Design of Transportation Infrastructure
- D2555 - Quantifying the Contribution of Vehicle Emissions to Local Air Quality
- D2564 - Resources for State DOTs to Consider Greenhouse Gas Emissions and Climate Change in NEPA Documents
Task Forces - Search for *task force* under committee here

Councils
- **A001C** – Young Members Coordinating Council

Recent and Upcoming Events

**Upcoming TRB Conferences** – Use left hand menu to filter events
**Upcoming Cosponsored Events** - Conferences cosponsored by TRB are denoted with an asterisk

*Maritime Risk Symposium*  
November 1-5, 2021  
Online

**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