



TRANSPORTATION RESEARCH BOARD

## TRB Snap Search: Air Quality & Climate Change

### TRB's involvement in research on Air Quality & Climate Change from 2018-2020

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](#)

### Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
  - [Report 220](#) - Guidebook for Developing a Zero- or Low-Emissions Roadmap at Airports
  - [Report 207](#) - Optimizing the Use of Electric Preconditioned Air (PCA) and Ground Power Systems for Airports
  - [Report 199](#) - Climate Resilience and Benefit–Cost Analysis: A Handbook for Airports
  - [Report 188](#) - Using Existing Airport Management Systems to Manage Climate Risk
  - [Report 185](#) - Airport Air Quality Management 101
  - [Synthesis 100](#) - Airport Greenhouse Gas Reduction Efforts
  - [Synthesis 89](#) - Clean Vehicles, Fuels, and Practices for Airport Private Ground Transportation Providers
  - [Web-Only Document 41](#) - Alternative Jet Fuels Emissions: Quantification Methods Creation and Validation Report
  - [Web-Only Document 35](#) - State of the Industry Report on Air Quality Emissions from Sustainable Alternative Jet Fuels
  - [WebResource 4](#) - Airport Air Quality Resource Library
- [National Cooperative Highway Research Program \(NCHRP\)](#)
  - [NCHRP 25-25/Task 108](#) - Creating Lookup Tables to Streamline the Determination of Emission Reductions for CMAQ Projects
  - [NCHRP 25-25/Task 104](#) - Streamlining Carbon Monoxide Project-Level Air Quality Analyses with Programmatic Agreements
  - [Report 938](#) - Incorporating the Costs and Benefits of Adaptation Measures in Preparation for Extreme Weather Events and Climate Change—Guidebook
  - [Report 924](#) - Foreseeing the Impact of Transformational Technologies on Land Use and Transportation
  - [Report 909](#) - Guide to Truck Activity Data for Emissions Modeling
  - [Web-Only Document 274](#) - Zero Emission Vehicles: Forecasting Fleet Scenarios and their Emissions Implications
  - [Web-Only Document 246](#) - Volume 1: TRAQS User Guide
  - [Web-Only Document 246](#) - Volume 2: TRAQS: A Combined Interface for Project-Level Air Quality Analysis
- [Transportation Research Circulars](#)
  - [E-Circular 248](#) - 12th International Conference on Low-Volume Roads
  - [E-Circular 238](#) - 2018 National Household Travel Survey Workshop

## Current & Upcoming Projects

- [Current Projects](#)
  - [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 25-56](#) - Methods for State DOTs to Reduce Greenhouse Gas Emissions from the Transportation Sector
  - [NCHRP Synthesis 20-05/Topic 51-18](#) - Practices for Project-Level Analyses for Air Quality
  - [TCRP J-11/Task 36](#) - An Update on Public Transportation's Impacts on Greenhouse Gas Emissions
- [Upcoming Projects](#)
  - [NCHRP 15-61A](#) - Updates to the Design Practices Guide for Applying Climate Change Information to Hydrologic and Coastal Design of Transportation Infrastructure
  - [NCHRP 15-80](#) - Design Guidance and Standards for Resilience
  - [NCHRP 20-44\(23\)](#) - Pilot Test of Climate Change Design Practices Guide for Hydrology and Hydraulics
  - [NCHRP 25-64](#) - Resources for State DOTs to Consider Greenhouse Gas Emissions and Climate Change in NEPA Documents

## Reports from the [National Academies Press](#) on Air Quality & Climate Change

- [Climate Change: Evidence and Causes: Update 2020](#)
- [Reducing Fuel Consumption and Greenhouse Gas Emissions of Medium- and Heavy-Duty Vehicles, Phase Two](#)
- [Advanced Technologies for Gas Turbines](#)
- [Review of the Bureau of Ocean Energy Management "Air Quality Modeling in the Gulf of Mexico Region" Study](#)
- [Climate Change and Ecosystems](#)
- [Enhancing Urban Sustainability with Data, Modeling, and Simulation](#)
- [Gaseous Carbon Waste Streams Utilization](#)
- [Negative Emissions Technologies and Reliable Sequestration](#)
- [Making Climate Assessments Work - Learning from California and Other Subnational Climate Assessments: Proceedings of a Workshop](#)

## Committees & Panels

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

[TRB Standing Committees](#) – Search by transportation mode and committee topic

- [ACP20](#) - Freeway Operations
- [AD000](#) - Planning and Environment Group
- [ADC20](#) - Transportation and Air Quality
- [ADD40](#) - Transportation and Sustainability
- [AHB35](#) - Managed Lanes
- [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
- [SN5118](#) - Practices for Project-Level Analyses for Air Quality

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

- [A0020T](#) - Climate Change and Energy

## Councils

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

## Recent and Upcoming Events

[Upcoming Conferences](#) - Left hand menu “upcoming conferences by topic”

*(Conferences cosponsored by TRB are denoted with an asterisk.)*

[2nd International Conference on 3D Printing and Transportation](#)

April 21, 2021

Washington, DC

**[2020 International Conference on Resource Sustainability: Sustainable Pavement Technologies\\*](#)**

*May 1, 2021*

**Tirupati, India**

**[13th National Conference on Transportation Asset Management](#)**

*August 7-10, 2021*

**Boston, Massachusetts**

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

[Past Webinars](#)

- [What's Cooler than Cool? Cooler Pavements for Urban Heat Island Mitigation](#) – August 13, 2020
- [Forecasting Zero Emission Vehicles Fleet Scenarios & Emissions Implications](#) – June 30, 2020
- [You Can Get There From Here - Developing an Emissions Roadmap for Airports](#) – May 21, 2020
- [Unclutter Your Processes – Simplifying Climate Risk Management at Airports](#) – October 8, 2019
- [The Near-Road Pooled Fund Study](#) – September 30, 2019
- [Capture the Data – Quantifying Airport Ground Access Vehicle Activity](#) – September 26, 2019
- [Programs to Support the Deployment of the Electric Vehicle Infrastructure](#) – April 3, 2019
- [Understanding Airport Air Quality Management and Public Health](#) – December 12, 2018
- [Federal Environmental Case Law Update on Transportation Matters](#) – October 10, 2018
- [How to Process AIS Data to Maximize Utility and Overcome Data Challenges](#) – September 18, 2018
- [Technology Changes Influencing the Decline of Vehicle Emissions](#) – April 25, 2018

**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](http://trid.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](http://pubsindex.trb.org)

**Research in Progress (RiP) Database** – Current or recently completed transportation research projects - [rip.trb.org](http://rip.trb.org)

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

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