TRB Snap Search: Data

TRB's involvement in research on Data 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
  o Click here to view search results on TRB published research Data within the past year.

Subject Webpage

- Data Research at TRB

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)
  o Report 229 - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions

- National Cooperative Highway Research Program (NCHRP)
  o NCHRP 20-07/Task 368 - Development of a Roadmap for Use of SHRP2 Safety Data to Enhance Existing Publications
  o NCHRP 20-50(22) - LTPP Data Analysis: Feasibility of Using LTPP Data to Improve Use of FWD and Longitudinal Profile Measurements
  o NCHRP 20-113F - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
  o Report 975 - Transportation System Resilience: Research Roadmap and White Papers
  o Report 974 - Application of Crash Modification Factors for Access Management, Volume 2: Research Overview
  o Report 964 - Protocols for Network-Level Macrotexture Measurement
  o Report 956 - Guidebook for Data and Information Systems for Transportation Asset Management
  o Synthesis 561 - Use of Vehicle Probe and Cellular GPS Data by State Departments of Transportation
  o Web-Only Document 302 - Development of a Comprehensive Approach for Serious Traffic Crash Injury Measurement and Reporting Systems
  o Web-Only Document 299 - Investigating the Relationship of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
  o Web-Only Document 296 - Guidelines for Cost-Effective Safety Treatments of Roadside Ditches

- Transit Cooperative Research Program (TCRP)
  o IDEA Report 93 - An Open Platform for Transit Agencies to Improve the Quality of Their Real-Time Data
  o Report 229 - Assessing and Mitigating Electrical Fires on Transit Vehicles
  o Synthesis 153 - The Transit Analyst Toolbox: Analysis and Approaches for Reporting, Communicating, and Examining Transit Data

Updated 11/11/2021
Current & Upcoming Projects

- **Transportation Research Circulars**
  - E-Circular 269 - 2020 Commodity Flow Survey Workshop

**Current Projects**

- ACRP 01-39 - Creative Marketing Techniques to Improve Revenue Generation Partnerships
- ACRP 01-41 - Airport Blockchain Implementation Guidebook
- ACRP 01-43 - Conducting Consumer Research of Air Passengers
- ACRP 02-89 - Industry Survey--Benefits and Costs for Airport Noise And Operations Monitoring Systems
- ACRP 03-57 - A Guidebook to Prepare Airports for Transformations in Wireless Connectivity
- ACRP 03-61 - Implementing and Improving Data Analytics Capabilities at Airports
- ACRP 03-62 - A Toolkit for Establishing Airport Catchment Areas
- ACRP 04-27 - Alternative Methods to Manage Tree Growth Near Airports
- ACRP 09-21 - Asset Information Handover Guidelines: From Planning and Construction to O&M
- ACRP 10-32 - U.S. Airport Industry Adoption of Automated Ground Vehicle Systems
- ACRP Synthesis 11-03/Topic S09-09 - Automated Pavement Condition Survey Practices at Airports
- BTRSCRPT08 - Tracking State Traffic Citation and Adjudication Outcomes
- BTSRCP BTS-09 - Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
- BTRSCRPT09 - Influence of Infrastructure Design on Distracted Driving
- NCHRP 01-60 - Measuring the Characteristics of Pavement Surface Images and Developing Standard Practices for Calibration, Certification, and Verification of Imaging Systems
- NCHRP 03-129 - Essential Communications: A Guide to Land Mobile Radio
- NCHRP 03-134 - Determination of Encroachment Conditions in Work Zones
- NCHRP 03-138 - Application of Big Data Approaches for Traffic Incident Management (TIM)
- NCHRP 08-119 - Developing Data Standards and Guidance for Transportation Planning and Traffic Operations - Phase 1
- NCHRP 08-123 - Census Transportation Data Field Guide for Transportation Applications
- NCHRP 08-124 - Quantifying the Impacts of Corridor Management
- NCHRP 08-145 - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
- NCHRP 10-106 - Update of AASHTO Standard Practice for Certification of Inertial Profiling Systems (R 56)
- NCHRP 10-110 - 3D Modeling Guide for Construction Inspection
- NCHRP 12-122 - Proposed AASHTO Guidelines for Applications of Unmanned Aerial Systems Technologies for Element-Level Bridge Inspection
- NCHRP 17-43 - Long-Term Roadside Crash Data Collection Program
- NCHRP 17-86 - Estimating Effectiveness of Safety Treatments in the Absence of Crash Data
- NCHRP 17-87 - Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
- NCHRP 17-88 - Roadside Encroachment Data for All Vehicle Types Across a Range of Traffic Volumes
- NCHRP 17-93 - Updating Safety Performance Functions for Data-Driven Safety Analysis
- NCHRP 19-18 - Transitioning Fuel Tax Assessments to a Road Usage Charge
- NCHRP 20-44(12) - Building Capacity for Self-Assessment of Data Effectiveness for Agency Business Needs
- NCHRP 20-44(39) - Consultant Support for Implementation of Guidebook for Managing Data from Emerging Technologies
- NCHRP 20-50(20) - LTPP Data Analysis: Develop Tools to Improve Accuracy of Traffic Loading Data Collection
- NCHRP 20-126(03) - Advancing Practices of In Situ Nondestructive Evaluation of Highway System Asset Foundational Condition and Capability
- NCHRP 20-121 - State DOT Contributions to the Study, Investigation, and Interdiction of Human Trafficking
- NCHRP 22-33 - Multi-State In-Service Performance Evaluations of Roadside Safety Hardware
- NCHRP 22-42 - Impact Performance Assessment of Barrier Performance at High Speeds
- NCHRP 22-44 - A Transportation Agency Data Collection Practice for Use with In-Service Performance Evaluations (ISPEs)
- NCHRP 22-47 - Incorporating Driver Behavior and Characteristics into Safety Prediction Methods
- NCHRP 23-02 - Guidelines on Collaboration and Information Security for State DOTs
- NCHRP 23-16 - Implementing and Leveraging Machine Learning at State Departments of Transportation
Upcoming Projects

- **ACRP 01-50** - Guidance for Improved Data Privacy Management for Airports
- **ACRP 02-99** - Use of Equity and Environmental Justice Data to Support Airport Decision Making
- **BTSCRP BTS-14** - Informing the Selection of Countermeasures by Evaluating, Analyzing, and Diagnosing Contributing Factors that Lead to Crashes
- **BTSCRP BTS-20** - Underreporting of Impaired and Distracted Driving Behaviors in Motor Vehicle Crashes
- **BTSCRP BTS-23** - The Impacts of Experience on Teen Driving: Evidence from the Naturalistic Driving Study
- **NCHRP 03-144** - Leveraging Existing Traffic Signal Assets to Obtain Quality Traffic Counts
- **NCHRP 07-31** - State DOT Usage of Bicycle and Pedestrian Data: Practices, Sources, Needs, and Gaps
- **NCHRP 07-32** - Future-Proofing Automatic Traffic Signal Performance Measurement Systems for Scalability, Transferability, and CAV Integration
- **NCHRP 08-157** - Best Practices for Data Fusion of Probe and Point Detector Data
- **NCHRP 15-81** - Guideline for Depicting Existing and Proposed Utility Facilities in Design Plans
- **NCHRP 17-100** - Leveraging Big Data and Artificial Intelligence to Streamline Safety Data Analyses
- **NCHRP 17-107** - Work Zone Intrusion Frequency and Characteristics
- **NCHRP 20-07/Task 354** - Work Zone Speed Limits and Crash Data Practices
- **NCHRP 20-24(119)** - Strategic Research in Support of the Connected and Automated Vehicle Executive Leadership Team
- **NCHRP 20-24(132)** - Understanding Knowledge Management in Context with Other Organizational Practices
- **NCHRP 20-50(22)A** - LTPP Data Analysis: Guidelines to Improve Use of FWD and Longitudinal Profile Measurements
- **NCHRP 20-102(17)** - Deployment Guidance for CV Applications in the Open Source Application Development Portal
- **NCHRP 22-42** - Impact Performance Assessment of Barrier Performance at High Speeds
- **NCHRP 23-23** - Data Governance Design and Implementation - Links Between Governance Approaches and Performance Effects in DOTs
- **NCHRP 23-25** - Interstate Information Sharing of State Truck Regulatory Requirements
- **NCHRP 23-27** - Strategies to Strengthen Data-Driven Decision Making
- **NCHRP Synthesis 20-05/Topic 53-14** - Use of Probe Data for Freight Planning and Operations
- **TCRP Synthesis I-07/Topic SH-23** - Partnerships for Equitable Pandemic Response and Recovery

Reports from the National Academies Press on Data

- Data Analytics and What It Means to the Materials Community
- Building Data Capacity for Patient-Centered Outcomes Research - Interim Report Two - Data Standards, Methods, and Policy
- Building Data Capacity for Patient-Centered Outcomes Research - Interim Report One - Looking Ahead at Data Needs
- Energizing Data-Driven Operations at the Tactical Edge
- Motivating Local Climate Adaptation and Strengthening Resilience-Making Local Data Trusted, Useful, and Used
Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic
- ACH40 - Human Factors of Infrastructure Design and Operations
- ACP70 - Highway Traffic Monitoring
- ACP80 - Traffic Simulation
- ACS20 - Safety Performance Analysis
- AED10 - Statewide/National Transportation Data and Information Systems
- AED20 - Urban Transportation Data and Information Systems
- AED30 - Information Systems and Technology
- AED40 - Geographic Information Science
- AED50 - Artificial Intelligence and Advanced Computing Applications
- AED60 - Statistical Methods
- AED70 - Freight Transportation Data
- AED80 - Visualization in Transportation
- AEP50 - Transportation Demand Forecasting
- AKD70 - Geospatial Data Acquisition Technologies
- AME80 - Community Resources and Impacts
- AP090 - Transit Data
- B0147 - Bridge Data Analysis Working Group
- B0154 - Review Evidentiary Protection for Public Transportation Safety Program Information

Task Forces - Search for task force under committee here

CRP Panels
- Project Panels Related to Data

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.)

Transportation Infrastructure Innovations for Durability and Resilience (TriDurLE 2021)*
December 6, 2021
Online

TRB Virtual Careers in Motion Networking Fair
December 8, 2021
Washington, DC

Accelerated Bridge Construction Conference*
December 8, 2021
online

Conference on Sustainability and Emerging Transportation Technology
March 15, 2022
Irvine, CA

International Data Science for Pavements Symposium*
March 22, 2022
McLean, VA

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