TRB Snap Search: Data

TRB’s involvement in research on Data from 2019-2020

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](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 Data within the past year.

Subject Webpage

- [Data Research at TRB](#)

Recent Reports & Publications

- [Airport Cooperative Research Program (ACRP)](#)
  - [Report 203](#) - Guidelines for Collecting, Applying, and Maintaining Pavement Condition Data at Airports
  - [Report 194](#) - Using Disaggregated Socioeconomic Data in Air Passenger Demand Studies
  - [Synthesis 95](#) - Airport Incident Reporting Practices

- [Conference Proceedings](#)

- [National Cooperative Freight Research Program (NCFRP)](#)
  - [Report 40](#) - Impacts of Policy-Induced Freight Modal Shifts
  - [Webpage](#) - Understanding and Using New Data Sources to Address Urban and Metropolitan Freight Challenges

- [National Cooperative Highway Research Program (NCHRP)](#)
  - [IDEA Report 193](#) - Turning Movement Counts on Shared Lanes: Prototype Development and Analysis Procedures
  - [IDEA Report 191](#) - Testing of In-Service Bridges Using Automated Ultrasonic Testing Methods
  - [Report 946](#) - Procedures and Guidelines for Validating Contractor Test Data
  - [Report 936](#) - A Guide to Ensure Access to the Results of Federally Funded Transportation Research
  - [Report 921](#) - Case Studies in Cross-Asset, Multi-Objective Resource Allocation
  - [Report 920](#) - Management and Use of Data for Transportation Performance Management; Guide for Practitioners
  - [Report 909](#) - Guide to Truck Activity Data for Emissions Modeling
  - [Report 904](#) - Leveraging Big Data to Improve Traffic Incident Management
  - [Report 902](#) - Benchmarking and Comparative Measurement for Effective Performance Management by Transportation Agencies
  - [Report 889](#) - Performance Measures in Snow and Ice Control Operations
  - [Synthesis 546](#) - Use of Weigh-in-Motion Data for Pavement, Bridge, Weight Enforcement, and Freight Logistics Applications
  - [Synthesis 541](#) - Practices on Acquiring Proprietary Data for Transportation Applications
  - [Synthesis 531](#) - Automated Pavement Condition Surveys
  - [Web-Only Document 281](#) - Integrating Tribal Knowledge into Processes to Identify, Evaluate, and Record Cultural Resources

- [Policy Studies](#)
Letter Report - Long-Term Infrastructure Program - January 2, 2020
Letter Report - Long-Term Infrastructure Program - January 30, 2019

Transit Cooperative Research Program (TCRP)
- Report 213 - Data Sharing Guidance for Public Transit Agencies – Now and in the Future
- Report 210 - Development of Transactional Data Specifications for Demand-Responsive Transportation
- Synthesis 139 - Transit Service Evaluation Standards
- Synthesis 138 - Public Transit Rider Origin-Destination Survey Methods and Technologies

Transportation Research Circulars
- E-Circular 263 - Conference on Performance and Data in Transportation Decision Making
- E-Circular 255 - Innovations in Freight Data Workshop
- E-Circular 245 - Transportation Oral History: State of the Practice and a Path Forward
- E-Circular 243 - SHRP 2 Safety Data Student Paper Competition 2017-2019
- E-Circular 242 - A Literature Review of Rail Trespassing and Suicide Prevention Research

Current & Upcoming Projects

Current Projects
- ACRP 01-39 - Creative Marketing Techniques to Improve Revenue Generation Partnerships
- ACRP 01-43 - Conducting Consumer Research of Air Passengers
- ACRP 02-84 - High Resolution Spatiotemporal Population Distribution Data and Modeling for Aviation Noise Research Studies
- ACRP 03-45 - Collecting and Sharing of Operational and Safety Data
- ACRP 10-27 - Using Collaborative Decision Making to Enhance the Management of Adverse Conditions, IROPS, and Crises
- ACRP 11-01/Topic 12-01 - Legal Implications of Data Collection at Airports
- BTSCRP BTS-04 - Tracking State Traffic Citation and Adjudication Outcomes
- BTSCRP BTS-08 - Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
- BTSCRP BTS-09 - Influence of Infrastructure Design on Distracted Driving
- NCHRP 01-57A - Developing Standard Definitions for Comparable Pavement Cracking Data
- 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 08-115 - Framework for Designing and Managing Data and Information Workflows for Transportation Assets
- NCHRP 08-116 - Framework for CV Pilot and Smart Cities Data Analytics for Policy Guidance
- 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 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 20-50(18) - LTPP Data Analysis: Significance of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
- NCHRP 20-50(20) - LTPP Data Analysis: Develop Tools to Improve Accuracy of Traffic Loading Data Collection
- NCHRP 20-50(22) - LTPP Data Analysis: Feasibility of Using LTPP Data to Improve Use of FWD and Longitudinal Profile Measurements
- 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 IDEA 20-30/IDEA 222 - Mixed Reality Assisted Infrastructure Inspections
- NCHRP IDEA 20-30/IDEA 209 - An Automated System for Pedestrian Facility Data Collection from Aerial Images
- NCHRP IDEA 20-30/IDEA 214 - An Enhanced Network-Level Curve Safety Assessment and Monitoring Using Mobile Devices
- The Portable Single Lane Traffic Counting Device
- A Real-Time Proactive Intersection Safety Monitoring and Visualization System Based on Radar Sensor Data
- Advances in Unstable Slope Instrumentation and Monitoring
- Electronic Ticketing of Materials for Construction Management
- Availability and use of Pedestrian Infrastructure Data to Support Active Transportation Planning
- Asset Management Approaches to Identifying and Evaluating Assets Damaged Due to Emergency Events
- Practices for Construction-Ready Digital Terrain Models
- State DOT Use of Vehicle Probe and Cellular GPS Data
- Vibration-based Longitudinal Rail Stress Estimation Exploiting Contactless Measurement and Machine Learning
- Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
- The Transit Analyst Toolbox: Analysis and Approaches for Reporting, Communicating, and Examining Transit Data

- Geospatial Data Governance--Organizational Factors and Best Practices
- Industry Survey--Benefits and Costs for Airport Noise And Operations Monitoring Systems
- A Guidebook to Prepare Airports for Transformations in Wireless Connectivity
- Guidelines for the Effective Transition of Asset Data from Design/Construction to Operations and Maintenance
- Automated Pavement Condition Survey Practices at Airports
- Understanding and Analyzing Crash Contributing Factors
- Experimental Implementation of Big Data Analytics for Traffic Incident Management
- State DOT Usage of Bicycle and Pedestrian Data: Practices, Sources, Needs, and Gaps
- Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
- Update of AASHTO Standard Practice for Certification of Inertial Profiling Systems (R 56)
- Evaluating and Implementing Unmanned Aerial Systems (UAS) into Bridge Management Methods Through Element-Level Data Collection
- Transitioning Fuel Tax Assessments to a Road Usage Charge
- Work Zone Speed Limits and Crash Data Practices
- Development of a Roadmap for Use of SHRP2 Safety Data to Enhance Existing Publications
- Strategic Research in Support of the Connected and Automated Vehicle Executive Leadership Team
- Planning Data Needs and Collection Techniques for CV/AV Applications
- Data Management Strategies for CV/AV Applications for Operations
- Deployment Guidance for CV Applications in the Open Source Application Development Portal
- Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
- Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
- Impact Performance Assessment of Barrier Performance at High Speeds
- A Transportation Agency Data Collection Practice for Use with In-Service Performance Evaluations (ISP Es)
- Supporting Data-Driven Decision Making through an Expansion of the Human Factors Guidelines for Road Systems
- Incorporating Driver Behavior Considerations in Safety Performance Estimates of Infrastructure Improvements
- Guidelines on Collaboration and Information Security for State DOTs
- Implementing and Leveraging Artificial Intelligence and Machine Learning at State Departments of Transportation
- Implementation of Subsurface Utility Engineering for Highway Design and Construction
- Use of Pavement Data Collection Technology for Pavement Data Quality Management and MAP-21 Target Setting
Reports from the National Academies Press on Data

- A Consumer Food Data System for 2030 and Beyond
- Planning for Long-Term Use of Biomedical Data
- Neuroscience Data in the Cloud
- Leveraging Commercial and Other Innovation for Future U.S. Navy Data Warfare Needs
- Enhancing Urban Sustainability with Data, Modeling, and Simulation
- Data-Driven Modeling for Additive Manufacturing of Metals
- Assuring Data Quality at U.S. Geological Survey Laboratories
- Improving Data Collection and Measurement of Complex Farms
- Groundwater Recharge and Flow - Approaches and Challenges for Monitoring and Modeling Using Remotely Sensed Data
- Opportunities from the Integration of Simulation Science and Data Science

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic
- ABG40 - Library and Information Science for Transportation
- ABI00 - Data and Information Systems
- ABI10 - National Transportation Data Requirements and Programs
- ABI20 - Statewide Transportation Data and Information Systems
- ABI30 - Urban Transportation Data and Information Systems
- ABI35 - Highway Traffic Monitoring
- ABI50 - Information Systems and Technology
- ABI60 - Geographic Information Science and Applications
- ABI65T - Innovations in Freight Data Workshop
- ABI90 - Freight Transportation Data
- ADB40 - Transportation Demand Forecasting
- AFB80 - Geospatial Data Acquisition Technologies
- ANB20 - Safety Data, Analysis and Evaluation

Task Forces - Search for task force under committee here
- A0030T – Data for Decisions and Performance Measures
- ABI32T – Using Census for Transportation Conference
- ABI45T – Understanding New Directions for the National Household Travel Survey
- ABI55T – Data Privacy, Security and Protection Policy
- ABI92T – Understanding Big Data in Freight Transportation

CRP Panels
- Project Panels Related to Data

Councils
- A0040T – Young Member Council

Recent and Upcoming Events

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

**Automated Vehicles Symposium 2020**
July 27, 2020
San Diego, CA

**International Conference on Advances in Materials and Pavement Performance Prediction (AM3P)**
August 5, 2020
San Antonio, TX

**Bridging Transportation Researchers Online Conference**
Webinars – View upcoming webinars, suggest a webinar or add registration information
Past Webinars
  o Data

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:

TRID – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation - 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

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 l (202) 334-2989