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](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

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)
  - Legal Research Digest 42 - Legal Implications of Data Collection at Airports
  - Report 235 - Guidebook on Conducting Airport User Surveys and Other Customer Research
  - Report 229 - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions

- National Cooperative Highway Research Program (NCHRP)
  - IDEA Report 209 - An Automated System for Pedestrian Facility Data Collection from Aerial Images
  - NCHRP 20-07/Task 368 - Development of a Roadmap for Use of SHRP2 Safety Data to Enhance Existing Publications
  - NCHRP 20-50(22) - LTPP Data Analysis: Feasibility of Using LTPP Data to Improve Use of FWD and Longitudinal Profile Measurements
  - NCHRP 20-113F - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
  - Report 977 - Access Management in the Vicinity of Interchanges, Volume 2: Research Overview
  - Report 975 - Transportation System Resiliency: Research Roadmap and White Papers
  - Report 974 - Application of Crash Modification Factors for Access Management, Volume 2: Research Overview
  - Report 964 - Protocols for Network-Level Macrotexture Measurement
  - Report 956 - Guidebook for Data and Information Systems for Transportation Asset Management
  - Synthesis 561 - Use of Vehicle Probe and Cellular GPS Data by State Departments of Transportation
  - Synthesis 560 - Practices for Construction-Ready Digital Terrain Models
  - Web-Only Document 319 - Roadside Safety Analysis Program (RSAP) Update
Web-Only Document 299 - Investigating the Relationship of As- Constructed Asphalt Pavement Air Voids to Pave ment Performance
Web-Only Document 298 - Developing a Systematic Approach for Determining Construction Contract Time
Web-Only Document 296 - Guidelines for Cost- Effective Safety Treatments of Roadside Ditches

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

Transportation Research Circulars
E-Circular 278 - Innovations in Freight Data Workshop
E-Circular 269 - 2020 Commodity Flow Survey Workshop

Current & Upcoming Projects

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 01-46 - A Guide for Geospatial Data Governance Policies and Procedures
ACRP 01-50 - Data Protection and Privacy Management Guidelines for Airports
ACRP 02-89 - Industry Survey--Benefits and Costs for Airport Noise And Operations Monitoring Systems
ACRP 02-99 - Incorporating Environmental Justice and Equity Principles and Data into Airport Decision-Making
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
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
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 17-100 - Leveraging Artificial Intelligence and Big Data to Enhance 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 (ISPs)
- 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
- NCHRP IDEA 20-30/IDEA 214 - An Enhanced Network-Level Curve Safety Assessment and Monitoring Using Mobile Devices
- NCHRP IDEA 20-30/IDEA 216 - The Portable Single Lane Traffic Counting Device
- NCHRP IDEA 20-30/IDEA 217 - A Real-Time Proactive Intersection Safety Monitoring and Visualization System Based on Radar Sensor Data
- NCHRP IDEA 20-30/IDEA 222 - Mixed Reality Assisted Infrastructure Inspections
- NCHRP IDEA 20-30/IDEA 225 - An Automated System for Large-Scale Intersection Marking Data Collection and Condition Assessment
- NCHRP IDEA 20-30/IDEA 230 - Automated Data and Feature Extraction from Bridge Plan
- NCHRP Synthesis 20-05/Topic 52-05 - Implementation of Subsurface Utility Engineering for Highway Design and Construction
- NCHRP Synthesis 20-05/Topic 52-07 - Use of Pavement Data Collection Technology for Pavement Data Quality Management and MAP-21 Reporting
- NCHRP Synthesis 20-05/Topic 52-14 - Models as Construction Contract Documents
- NCHRP Synthesis 20-05/Topic 52-19 - Technological Capabilities of DOTs for Digital Project Management and Delivery
- NCHRP Synthesis 20-05/Topic 53-14 - Use of Probe Data for Freight Planning and Operations
- TCRP G-18 - Improving Access and Management of Transit ITS Data
- TCRP I-05/Topic 19-03 - Navigating the Complexities of Sensitive Security Information (SSI) and Protected Critical Infrastructure Information (PCI)
- TCRP Synthesis I-07/Topic SH-23 - Partnerships for Equitable Pandemic Response and Recovery
- Transit IDEA I-04/IDEA 101 - Multimodal Transit with Citopia

**Upcoming Projects**
- BTSNCRP BTS-14 - Informing the Selection of Countermeasures by Evaluating, Analyzing, and Diagnosing Contributing Factors that Lead to Crashes
- BTSNCRP BTS-20 - Strategies to Address Misreporting of Impaired and Distracted Driving in Motor Vehicle Crashes
- BTSNCRP BTS-23 - Outcomes of Variability in Teen Driving Experience and Exposure: 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 08-165 - Integrating Active Transportation Data into Transportation Decision-Making
- NCHRP 15-81 - Guideline for Depicting Existing and Proposed Utility Facilities in Design Plans
- NCHRP 17-107 - Work Zone Intrusion Frequency and Characteristics
- NCHRP 17-110 - Template for gathering and disseminating telemetric data for safety and operational uses by state DOTs (Phase 1: state of the practice survey and synthesis)
- NCHRP 17-120 - Improved Method to Link Crash, Emergency Medical Service, and Trauma Registry Data to Expand Safety Data Analyses and Safety Program Development
- 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 23-16 - Implementing and Leveraging Machine Learning at State Departments of Transportation
- NCHRP 23-23 - Data Governance Design and Implementation - Links Between Governance Approaches and Performance Effects in DOTs
- NCHRP 23-25 - Architecture for an Information System for Reporting and Sharing Truck Regulatory Requirements Data
- NCHRP 23-27 - Strategies to Strengthen Data-Driven Decision Making
- NCHRP 25-66 - Update the National REMEL Database Used in FHWA Traffic Noise Model
- NCHRP Synthesis 20-05/Topic 54-04 - Mobile Devices as a Tool for Digitalized Project Documentation and Inspection
- NCHRP Synthesis 20-05/Topic 54-06 - Ancillary Asset Data Stewardship and Data Models

Reports from the National Academies Press on Data
- Modernizing the Consumer Price Index for the 21st Century
- Data Analytics and What It Means to the Materials Community
- Building Data Capacity for Patient-Centered Outcomes Research: Priorities for the Next Decade
- Building Data Capacity for Patient-Centered Outcomes Research: Interim Report 3 - A Comprehensive Ecosystem for PCO
- 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
- Empowering the Defense Acquisition Workforce to Improve Mission Outcomes Using Data Science
- Data in Motion: New Approaches to Advancing Scientific, Engineering and Medical Progress
- A Satellite Account to Measure the Retail Transformation - Organizational, Conceptual, and Data Foundations

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 TRB Conferences – Use left hand menu to filter events

18th Biennial National Harbor Safety Committee Conference
June 13-15, 2022
Boston, MA

Geospatial Data Acquisition Technologies in Design and Construction Summer Committee Meeting
July 25-27, 2022
Washington, D.C.

TRB’s Symposium on Visualization in Transportation
November 3-4, 2022
Washington, D.C.

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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 - The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- Transportation Research Thesaurus (TRT) – trt.trb.org – A tool to improve the indexing and retrieval of transportation information.
- Research in Progress (RiP) Database – rip.trb.org - Current or recently completed transportation research projects
- Research Needs Statements (RNS) – rns.trb.org - Research needs as identified by TRB Technical Activities standing committees
- Publications Index (PubsIndex) Database – 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