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TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Data

TRB's involvement in research on Data from 2020-2021

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 222 - Collecting and Sharing of Operations and Safety Data
  - Report 214 - BIM Beyond Design Guidebook
  - Synthesis 108 - Characteristics of the FBO Industry 2018-2019
  - Web-Only Document 48 - Evaluating the Use of Spatially Precise Diurnal Population Data in Aviation Noise Studies

- National Cooperative Freight Research Program (NCFRP)
  - Webpage - Understanding and Using New Data Sources to Address Urban and Metropolitan Freight Challenges

- National Cooperative Highway Research Program (NCHRP)
  - Report 952 - Guidebook for Managing Data from Emerging Technologies for Transportation
  - Report 947 - Implementing Information Findability Improvements in State Transportation Agencies
  - 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 934 - Traffic Forecasting Accuracy Assessment Research
  - Synthesis 556 - Asset Management Approaches to Identifying and Evaluating Assets Damaged Due to Emergency Events
  - Synthesis 546 - Use of Weigh-in-Motion Data for Pavement, Bridge, Weight Enforcement, and Freight Logistics Applications
  - Synthesis 545 - Electronic Ticketing of Materials for Construction Management
  - Web-Only Document 282 - Framework for Managing Data from Emerging Transportation Technologies to Support Decision-Making

- Policy Studies
  - Letter Report - Long-Term Infrastructure Program - January 2, 2020

- Transit Cooperative Research Program (TCRP)
  - IDEA Report 93 - An Open Platform for Transit Agencies to Improve the Quality of Their Real-Time Data
  - Report 218 - Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
  - Report 213 - Data Sharing Guidance for Public Transit Agencies – Now and in the Future
- Development of Transactional Data Specifications for Demand-Responsive Transportation

- Conference on Performance and Data in Transportation Decision Making

### 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 02-89 - 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 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
  - BTRCP BTS-04 - Tracking State Traffic Citation and Adjudication Outcomes
  - BTRCP BTS-08 - Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
  - BTRCP 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 03-138 - Application of Big Data Approaches for Traffic Incident Management (TIM)
  - NCHRP 08-115 - Framework for Designing and Managing Data and Information Workflows for Transportation Assets
  - 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 10-106 - Update of AASHTO Standard Practice for Certification of Inertial Profiling Systems (R 56)
  - 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) - LTTP Data Analysis: Significance of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
  - NCHRP 20-50(20) - LTTP Data Analysis: Develop Tools to Improve Accuracy of Traffic Loading Data Collection
  - NCHRP 20-50(22) - LTTP Data Analysis: Feasibility of Using LTTP 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 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 IDEA 20-30/IDEA 225 - An Automated System for Large-Scale Intersection Marking Data Collection and Condition Assessment
  - 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
  - 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 Synthesis 20-05/Topic 50-07 - Electronic Ticketing of Materials for Construction Management
- **NCHRP Synthesis 20-05/Topic 50-10** - Availability and use of Pedestrian Infrastructure Data to Support Active Transportation Planning
- **NCHRP Synthesis 20-05/Topic 51-06** - State DOT Use of Vehicle Probe and Cellular GPS Data
- **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
- **Safety IDEA Project 41** - Vibration-based Longitudinal Rail Stress Estimation Exploiting Contactless Measurement and Machine Learning
- **TCRP J-05/Topic 19-03** - Navigating the Complexities of Sensitive Security Information (SSI) and Protected Critical Infrastructure Information (PCII)

**Upcoming Projects**
- **ACRP 01-46** - Geospatial Data Governance--Organizational Factors and Best Practices
- **ACRP 03-61** - Assessing and Improving Data Analytic Capabilities in Airports
- **ACRP 04-27** - Effective Practices for Monitoring and Managing Tree Growth Off the Airport
- **ACRP 09-21** - Guidelines for the Effective Transition of Asset Data from Design/Construction to Operations and Maintenance
- **ACRP Synthesis 11-03/Topic S09-09** - Automated Pavement Condition Survey Practices at Airports
- **BTS/CRP BTS-14** - Understanding and Analyzing Crash Contributing Factors
- **NCHRP 07-31** - State DOT Usage of Bicycle and Pedestrian Data: Practices, Sources, Needs, and Gaps
- **NCHRP 08-145** - Utilizing Cooperative Automated Transportation (CAT) Data to Enhance the Use of Freeway Operational Strategies
- **NCHRP 12-122** - Proposed AASHTO Guidelines for Applications of Unmanned Aerial Systems Technologies for Element-Level Bridge Inspection
- **NCHRP 19-18** - Transitioning Fuel Tax Assessments to a Road Usage Charge
- **NCHRP 20-07/Task 354** - Work Zone Speed Limits and Crash Data Practices
- **NCHRP 20-07/Task 368** - Development of a Roadmap for Use of SHRP2 Safety Data to Enhance Existing Publications
- **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 20-44(12)** - Building Capacity for Self-Assessment of Data Effectiveness for Agency Business Needs
- **NCHRP 20-102(13)** - Planning Data Needs and Collection Techniques for CV/AV Applications
- **NCHRP 20-102(14)** - Data Management Strategies for CV/AV Applications for Operations
- **NCHRP 20-102(17)** - Deployment Guidance for CV Applications in the Open Source Application Development Portal
- **NCHRP 20-102(18)** - Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
- **NCHRP 20-113F** - Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
- **NCHRP 22-42** - Impact Performance Assessment of Barrier Performance at High Speeds
- **NCHRP 23-16** - Implementing and Leveraging Artificial Intelligence and Machine Learning at State Departments of Transportation
- **TCRP G-18** - Improving Access and Management of Transit ITS Data

**Reports from the National Academies Press on Data**

- **Evaluating Data Types: A Guide for Decision Makers using Data to Understand the Extent and Spread of COVID-19**
- **A Consumer Food Data System for 2030 and Beyond**
- **Life-Cycle Decisions for Biomedical Data**
- **Planning for Long-Term Use of Biomedical Data**
- **Roundtable on Data Science Postsecondary Education**
- **Applying Big Data to Address the Social Determinants of Health in Oncology**
- **Genomic Epidemiology Data Infrastructure Needs for SARS-CoV-2**
- **Neuroscience Data in the Cloud**
Leveraging Commercial and Other Innovation for Future U.S. Navy Data Warfare Needs

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
- ABI30 - Urban Transportation Data and Information Systems
- ABI65T - Innovations in Freight Data Workshop
- ACP70 - Highway Traffic Monitoring
- ACS20 - Safety Performance Analysis
- AED10 - Statewide/National Transportation Data and Information Systems
- AED30 - Information Systems and Technology
- AED40 - Geographic Information Science
- AED70 - Freight Transportation Data
- AEP50 - Transportation Demand Forecasting
- AKD70 - Geospatial Data Acquisition Technologies

Task Forces - Search for task force under committee here
- A0030T - Data for Decisions and Performance Measures
- ABJ32T - Using Census for Transportation Conference
- ABJ45T - Understanding New Directions for the National Household Travel Survey
- ABJ55T - Data Privacy, Security and Protection Policy
- ABJ92T - Understanding Big Data in Freight Transportation

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.)

- **Measuring and Managing Freight System Resilience Workshop**
  
  *April 6, 2021*
  
  *Online*

- **2021 NAEP Annual Conference and Training Symposium***
  
  *May 16, 2021*
  
  *Phoenix, AZ*

- **TRB Conference on Planning Applications**
  
  *June 21, 2021*
  
  *Online*

- **2021 Conference on Sustainability and Emerging Transportation Technology**
  
  *June 29, 2021*
  
  *Irvine, CA*

- **2021 Innovations in Freight Data**
  
  *September 21-23, 2021*
  
  *Irvine, CA*

Webinars – View upcoming webinars, suggest a webinar or add registration information

Past Webinars
- 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:

- **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