



TRB Snap Search: Safety & Human Factors

TRB's involvement in research on Safety & Human Factors from 2017-2018

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

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 Safety & Human Factors within the past year.

Subject Webpages

- [Safety & Human Factors Research at TRB](#)
- [Behavioral Traffic Safety Cooperative Research Program \(BTSCRCP\)](#)

Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
 - [Legal Research Digest 33](#) - Overview of Airport Duties and Standards of Care in Airfield Accident Cases
 - [Report 50](#) - Improved Models for Risk Assessment of Runway Safety Areas
- [Conference & Workshop Proceedings](#)
 - [Proceedings on the Web 21](#) - Pedestrian and Bicycle Safety: Summary of the 10th University Transportation Centers Spotlight Conference
- [IDEA Projects](#)
 - [Safety Project 28](#) - Field Validation of Inspection Gauges for Wheel Climb Safety at Switch Points
 - [Safety Project 26](#) - Remote Sensing with Mobile LiDAR and Imaging Sensors for Railroad Bridge Inspections
 - [Safety Project 25](#) - Dynamic Impact Factors on Existing Long Span Truss Railroad Bridges
- [Letter Reports](#)
 - [A Review of the Department of Transportation Testing and Analysis Results for Electronically Controlled Pneumatic Brakes: Letter Report \(Phase 2\)](#)
 - [Motor Carrier Safety Research Analysis Committee Letter Report: March 13, 2017](#)
- [National Cooperative Freight Research Program \(NCFRP\)](#)
 - [Report 37](#) - Using Commodity Flow Survey Microdata and Other Establishment Data to Estimate the Generation of Freight, Freight Trips, and Service Trips: Guidebook
- [National Cooperative Highway Research Program \(NCHRP\)](#)
 - [Briefing Document](#) - Strategies to Advance Automated and Connected Vehicles
 - [Brochure](#) - Connected and Automated Vehicles: NCHRP Support for Transportation Agency Leaders
 - [IDEA 181](#) - Development of Small Specimen Geometry for Asphalt Mixture Performance Testing
 - [Research Topic Highlight](#) - Roadway Tunnels
 - [Report 845](#) - Advancing Automated and Connected Vehicles: Policy and Planning Strategies for State and Local Transportation Agencies
 - [Report 841](#) - Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments
 - [Report 834](#) - Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities: A Guidebook

- [Synthesis 509](#) - Highway Worker Safety
- [Synthesis 506](#) - Effective Utility Coordination: Application of Research and Current Practices
- [Web-Only Document 239](#) - Impacts of Laws and Regulations on CV and AV Technology Introduction in Transit Operations
- [Web-Only Document 222](#) - Guidelines for the Application of Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities
- [Transit Cooperative Research Program \(TCRP\)](#)
 - [IDEA 82](#) - Active Safety-Collision Warning Pilot in Washington State
 - [IDEA 80](#) - Enhancing Safety and Security of Transit Systems using Computer Vision
 - [Synthesis 129](#) - Managing Extreme Weather at Bus Stops
 - [Synthesis 127](#) - Addressing Difficult Customer Situations
 - [Synthesis 126](#) - Successful Practices and Training Initiatives to Reduce Accidents and Incidents at Transit Agencies
- [TRB Special Reports](#)
 - [Report 325](#) - Safely Transporting Hazardous Liquids and Gases in a Changing U.S. Energy Landscape
 - [Report 324](#) - Designing Safety Regulations for High-Hazard Industries
 - [Report 323](#) - In-Service Performance Evaluation of Guardrail End Treatments
- [Transportation Research Circulars](#)
 - [E-Circular 222](#) - Automated Vehicles Symposium 2016
 - [E-Circular 221](#) - SHRP 2 Safety Data Student Paper Competition, 2015–2016
 - [E-Circular 220](#) - First International Roadside Safety Conference: Safer Roads, Saving Lives, Saving Money
- [Transportation Research Record: Journal of the Transportation Research Board](#)
 - [Volume 2663](#) - Human Performance, User Information, and Simulation
 - [Volume 2662](#) - Bicycles
 - [Volume 2661](#) - Pedestrians
 - [Volume 2660](#) - Operator Education and Regulation; Safe Mobility for Older Persons; Traffic Enforcement; Occupant Protection; Alcohol and Drugs
 - [Volume 2638](#) - Highway Design
 - [Volume 2637](#) - Motorcycles, Trucks, Buses, and Roundabouts
 - [Volume 2636](#) - Highway Safety Performance
 - [Volume 2635](#) - Safety Management
 - [Volume 2634](#) - Developing Countries
 - [Volume 2624](#) - Traffic Control Devices
 - [Volume 2619](#) - Traffic Signal Systems: Volume 1
 - [Volume 2617](#) - Visibility and Work Zone Traffic Control
 - [Volume 2616](#) - Freeway Operations; Regional System Management and Operations; Managed Lanes
 - [Volume 2611](#) - Marine Transportation and International Trade
 - [Volume 2601](#) - Safety Data, Analysis, and Evaluation

Current & Upcoming Projects

- [Current Projects](#)
 - [ACRP 03-42](#) - Airports and UAS
 - [ACRP 04-04B](#) - Emergency Management Training for Airport Critical Incidents
 - [ACRP 04-19](#) - Airport Emergency Planning Template: NIMS - Incident Command System Compliance
 - [ACRP 04-20](#) - Design Considerations for Airport EOCs
 - [ACRP 04-21](#) - Emergency Communication Models for Persons with Disabilities and Non-English Speakers
 - [ACRP 04-22](#) - Evaluating Compatibility Zoning at General Aviation Airports
 - [ACRP 06-04](#) - Identifying and Evaluating Airport Workforce Requirements
 - [ACRP 11-01/Topic 09-01](#) - Airport Public Health Preparedness & Response: Legal Rights, Powers & Duties
 - [NCHRP 05-22](#) - Guidelines for Solid-State Roadway Lighting
 - [NCHRP 15-65](#) - Development of Safety Performance Based Guidelines for the Roadside Design Guide
 - [NCHRP 17-11\(02\)](#) - Development of Clear Recovery Area Guidelines
 - [NCHRP 17-43](#) - Long-Term Roadside Crash Data Collection Program
 - [NCHRP 17-46](#) - Comprehensive Analysis Framework for Safety Investment Decisions
 - [NCHRP 17-50](#) - Lead States Initiative for Implementing the Highway Safety Manual
 - [NCHRP 17-54](#) - Consideration of Roadside Features in the Highway Safety Manual
 - [NCHRP 17-55](#) - Guidelines for Slope Traversability
 - [NCHRP 17-57](#) - Development of a Comprehensive Approach for Serious Traffic Crash Injury Measurement and

Reporting Systems

- [NCHRP 17-58](#) - Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials
 - [NCHRP 17-60](#) - Benefit-Cost Methodology for Behavioral Highway Safety Countermeasures
 - [NCHRP 17-62](#) - Improved Prediction Models for Crash Types and Crash Severities
 - [NCHRP 17-63](#) - Guidance for the Development and Application of Crash Modification Factors
 - [NCHRP 17-64](#) - Guidance for the Implementation of the Toward Zero Deaths National Strategy on Highway Safety
 - [NCHRP 17-65](#) - Improved Analysis of Two-Lane Highway Capacity and Operational Performance
 - [NCHRP 17-66](#) - Guidance for Selection of Appropriate Countermeasures for Opposite Direction Crashes
 - [NCHRP 17-67](#) - Identification of Factors Contributing to the Decline of Traffic Fatalities in the United States
 - [NCHRP 17-68](#) - Intersection Crash Prediction Methods for the Highway Safety Manual
 - [NCHRP 17-70](#) - Development of Roundabout Crash Prediction Models and Methods
 - [NCHRP 17-71](#) - Proposed AASHTO Highway Safety Manual, Second Edition
 - [NCHRP 17-72](#) - Update of Crash Modification Factors for the Highway Safety Manual
 - [NCHRP 17-73](#) - Systemic Pedestrian Safety Analyses
 - [NCHRP 17-74](#) - Application of Crash Modification Factors for Access Management
 - [NCHRP 17-75](#) - Leveraging Big Data to Improve Traffic Incident Management
 - [NCHRP 17-76](#) - Guidance for the Setting of Speed Limits
 - [NCHRP 17-77](#) - Guide for Quantitative Approaches to Systemic Safety Analysis
 - [NCHRP 17-78](#) - Understanding and Communicating Reliability of Crash Prediction Models
 - [NCHRP 17-79](#) - Safety Effects of Raising Speed Limits to 75 mph and Higher
 - [NCHRP 17-80](#) - Expansion of Human Factors Guidelines for Road Systems, Second Edition
 - [NCHRP 17-81](#) - Proposed Macro-Level Safety Planning Analysis Chapter for the Highway Safety Manual
 - [NCHRP 17-84](#) - Pedestrian and Bicycle Safety Performance Functions for the Highway Safety Manual
 - [NCHRP 20-07/Task 374](#) - Guidelines for Selecting Sign Sheeting Materials for AASHTO M268
 - [NCHRP 20-24\(110\)](#) - Development of Resources to Support State DOT Communications on Safety
 - [NCHRP 20-112](#) - A Research Roadmap for Transportation and Public Health
 - [NCHRP Synthesis 20-05/Topic 49-03](#) - Bridge Demolition Practices
 - [NCHRP Synthesis 20-05/Topic 49-04](#) - Very Short Duration Work Zone Safety for Maintenance and other Activities
 - [NCHRP Synthesis 20-05/Topic 49-08](#) - Pedestrian Safety Relative to Traffic Speed Management
 - [Safety IDEA Project 33](#) - Adaptive Prestressing System for Concrete Crossties
 - [Safety IDEA Project 34](#) - Prototype System for Managing Enterprise Rail Transport Risk for Hazmat
- [Upcoming Projects](#)
 - [ACRP 03-48](#) - Automation of Airside Vehicle Operations
 - [BTSCRP BTS-01](#) - Evaluate Workforce Motivational Programs: Safety Citizenship
 - [BTSCRP BTS-02](#) - Variable Message Signs
 - [BTSCRP BTS-03](#) - Primary Handheld Bans vs. Texting Bans
 - [BTSCRP BTS-04](#) - State Trends in Adjudication and Enforcement
 - [NCHRP 03-130](#) - Guide for Roundabouts
 - [NCHRP 03-132](#) - Guidance for Safe and Effective Temporary Traffic Control for Mobile Operations on Two-Lane Two-Way Roadways
 - [NCHRP 03-133](#) - Traffic Signal Design and Operations Strategies for Non-Motorized Users
 - [NCHRP 05-23](#) - The Unintended Consequences of LED Roadway Lighting: Effects on Road User Health and Driver Alertness
 - [NCHRP 05-24](#) - Guidelines for Vehicle and Equipment Color, Marking, and Lighting
 - [NCHRP 15-68](#) - Effective Low-Noise Rumble Strips
 - [NCHRP 17-82](#) - Proposed Guidance for Fixed Objects in the Roadside Design Guide
 - [NCHRP 17-83](#) - Briefings and Training Materials for Implementation of the Highway Safety Manual, Second Edition
 - [NCHRP 17-85](#) - Development and Application of Crash Severity Models for the Highway Safety Manual
 - [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 Database Development and Analysis
 - [NCHRP 20-65/Task 74](#) - Best Practices and Tools for Addressing Transportation Needs and Public Transit Demands to Support the Integration of the Olmstead Population In Community Settings
 - [NCHRP 20-65/Task 76](#) - Opportunities for State DOTs (and Others) to Encourage Shared Use Mobility Practices in Rural Areas
 - [NCHRP 20-65/Task 77](#) - Lessons Learned and Impacts to Date of State DOT Implementation of New Federal Transit Asset Management and Public Transportation Agency Safety Requirements
 - [NCHRP 20-121](#) - State DOT Contributions to the Study, Investigation, and Interdiction of Human Trafficking
 - [NCHRP 20-102\(16\)](#) - Preparing TIM Responders for Connected Vehicles and Automated Vehicles

- [NCHRP 20-102\(18\)](#) - Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
- [NCHRP 22-32](#) - Development of Methods to Evaluate Side Impacts for Next Edition MASH
- [NCHRP 22-33](#) - Multi-State In-Service Performance Evaluations of Roadside Safety Hardware
- [NCHRP 22-34](#) - Determination of Zone of Intrusion Envelopes under MASH Impact Conditions for Rigid Barrier
- [NCHRP 22-35](#) - Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- [NCHRP 22-36](#) - Development of the Next Generation, MASH, Portable Concrete Barrier
- [TCRP G-17](#) - Assessing Lifecycle and Human Costs of Bus Operator Workstation Design and Components

Reports from the [National Academies Press](#) on Safety & Human Factors

- [Improving Motor Carrier Safety Management](#)
- [The Health Effects of Cannabis and Cannabinoids](#)
- [Building a National Capability to Monitor and Assess Medical Countermeasure Use During a Public Health Emergency: Going Beyond the Last Mile: Proceedings of a Workshop](#)
- [Review of the Research Program of the U.S. DRIVE Partnership: Fifth Report](#)

Committees & Panels

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

[Technical Activities Division Standing Committees](#) – Search by transportation mode and committee topic

- [ABE60](#) – Accessible Transportation and Mobility
- [AFB20](#) – Roadside Safety Design
- [AHB60](#) – Highway/Rail Grade Crossings
- [AL070](#) – Tort Liability and Risk Management
- [AN000](#) – Safety and Systems Users Group
- [ANB00](#) – Safety
- [ANB10](#) – Transportation Safety Management
- [ANB20](#) – Safety Data, Analysis and Evaluation
- [ANB23](#) – Highway Safety Workforce Development
- [ANB25](#) – Highway Safety Performance
- [ANB30](#) – Operator Education and Regulation
- [ANB40](#) – Traffic Law Enforcement
- [ANB45](#) – Occupant Protection
- [ANB50](#) – Alcohol, Other Drugs, and Transportation
- [ANB60](#) – Safe Mobility of Older Persons
- [ANB70](#) – Truck and Bus Safety
- [ANB75](#) – Roundabouts
- [AND00](#) – Users Performance
- [AND10](#) – Vehicle User Characteristics
- [AND20](#) – User Information Systems
- [AND30](#) – Simulation and Measurement of Vehicle and Operator Performance
- [AND40](#) – Visibility
- [ANF10](#) – Pedestrians
- [ANF20](#) – Bicycle Transportation
- [ANF30](#) – Motorcycles and Mopeds
- [AR070](#) – Railroad Operational Safety
- [AT040](#) – Transportation of Hazardous Materials
- [AV090](#) – Aviation Security and Emergency Management
- [AW040](#) – Marine Safety and Human Factors

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

Policy Study

- [B0110](#) - Commercial Truck and Bus Safety Synthesis Program
- [B0140](#) - Offshore Oil and Gas Safety Culture: A Framing Study

CRP Panels

- [Project Panels Related to Safety & Human Factors](#)

Councils

- [A0040T](#) – Young Member Council

Recent and Upcoming Events

[Conferences \(co-sponsored by TRB\)](#) - Left hand menu "upcoming conferences by topic"

[Transport Research Arena 2018*](#)

April 16-19, 2018

Vienna, Austria

[Road Safety on Five Continents \(RS5C\)*](#)

May 16-18, 2018

Jeju Island, South Korea

[Tenth National Aviation System Planning Symposium](#)

May 20-22, 2018

Anchorage, Alaska

[Sixth National Bus Rapid Transit Conference](#)

June 18-20, 2018

Los Angeles, California

[2018 World Transport Convention*](#)

June 18-21, 2018

Beijing, China

[Fifth Biennial Marine Transportation System Research and Technology Conference](#)

June 19-21, 2018

Washington, D.C.

[7th International Conference on Innovations in Travel Modeling \(ITM\)](#)

June 24-27, 2018

Atlanta, Georgia

[9th International Conference on Bridge Maintenance, Safety and Management \(IABMAS2018\)*](#)

July 9-13, 2018

Melbourne, Australia

[12th National Conference on Transportation Asset Management](#)

July 14-17, 2018

San Diego, California

[12th Access Management Conference](#)

July 17-19, 2018

Madison, Wisconsin

[16th National Tools of the Trade Transportation Planning Conference](#)

August 22-24, 2018

Kansas City, Missouri

[2018 Workshop on Managed Lanes](#)

September 25-27, 2018

Bellevue, Washington

[23rd National Conference on Rural Public and Intercity Bus Transportation](#)

September 30-October 2, 2018

Breckenridge, Colorado

[TRANSED 2018: 15th International Conference on Mobility and Transport for Elderly and Disabled Persons](#)

November 2018

Taipei, Taiwan

[GeoMEast International Conference 2018: "Sustainable Civil Infrastructures: Structural Integrity"*](#)

November 24-28, 2018

Cairo, Egypt

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

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

Practice Ready Papers (PRP) Database - Papers with information that is ready for immediate implementation or requires minimal additional research or implementation effort - prp.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

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