



TRANSPORTATION RESEARCH BOARD

## TRB Snap Search: Safety & Human Factors

### TRB's involvement in research on Safety & Human Factors from 2018-2019

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 \(BTSCRCP\)](#)

### Specialty Report

- [Critical Issues in Transportation 2018](#)

### Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
  - [Legal Research Digest 19](#) - Legal Issues Related to Developing Safety Management Systems and Safety Risk Management at U.S. Airports
  - [Synthesis 90](#) - Incorporating ADA and Functional Needs in Emergency Exercises
  - [Synthesis 88](#) - Airport Community, Water Quality Events, and the Aircraft Drinking Water Rule
- [IDEA Projects](#)
  - [Highway IDEA 185](#) - CurvePortal for Automated Identification and Extraction of Horizontal Curve Information
- [National Cooperative Highway Research Program \(NCHRP\)](#)
  - [Report 881](#) - Traffic Control Devices and Measures for Deterring Wrong-Way Movements
  - [Report 875](#) - Guidance for Evaluating the Safety Impacts of Intersection Sight Distance
  - [Report 869](#) - Estimating the Safety Effects of Work Zone Characteristics and Countermeasures: A Guidebook
  - [Synthesis 523](#) - Integration of Roadway Safety Data from State and Local Sources
  - [Synthesis 515](#) - Practices for Preventing Roadway Departures
- [Transit Cooperative Research Program \(TCRP\)](#)
  - [Legal Research Digest 52](#) - Legal Implications of Video Surveillance on Transit Systems
- [TRB Special Reports](#)
  - [Report 326](#) - Admissibility and Public Availability of Transit Safety Planning Records
  - [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 232](#) - Automated Vehicles Symposium 2017: Summary of a Symposium
  - [E-Circular 229](#) - 10th SHRP 2 Safety Data Symposium: From Analysis to Results

### Current & Upcoming Projects

- [Current Projects](#)
  - [ACRP 02-79](#) - Improving AEDT Modeling for Aircraft Noise Reflection and Diffraction from Terrain and Manmade Structures
  - [ACRP 03-48](#) - Advanced Ground Vehicle Technologies (AGVT) for Airside Operations
  - [ACRP 03-42](#) - Airports and UAS
  - [ACRP 04-19](#) - Airport Emergency Planning Template: NIMS - Incident Command System Compliance
  - [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 Synthesis 11-03/Topic S01-19](#) - Data Acquisition and Protocols for Risk Management
  - [ACRP Synthesis 11-03/Topic S04-21](#) - Models for Law Enforcement at Airports
  - [NCHRP 03-127](#) - Cybersecurity of Traffic Management Systems
  - [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 03-134](#) - Determination of Encroachment Conditions in Work Zones
  - [NCHRP 05-22](#) - Guidelines for Solid-State Roadway Lighting
  - [NCHRP 05-23](#) - Effects of LED Roadway Lighting on Driver Sleep Health and Alertness
  - [NCHRP 05-24](#) - Guidelines for Vehicle and Equipment Color, Marking, and 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 17-66](#) - 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 17-71](#) - Proposed AASHTO Highway Safety Manual, Second Edition
  - [NCHRP 17-72](#) - Update of Crash Modification Factors for the Highway Safety Manual
  - [NCHRP 17-74](#) - Application of Crash Modification Factors for Access 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 17-82](#) - Proposed Guidance for Fixed Objects in the Roadside Design Guide
  - [NCHRP 17-84](#) - Pedestrian and Bicycle Safety Performance Functions for the Highway Safety Manual
  - [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 17-88](#) - Roadside Encroachment Database Development and Analysis
  - [NCHRP 17-89A](#) - HOV/HOT Freeway Crash Prediction Method for the Highway Safety Manual
  - [NCHRP 17-89](#) - Safety Performance of Part-Time Shoulder Use on Freeways
  - [NCHRP 20-07/Task 374](#) - Guidelines for Selecting Sign Sheeting Materials for AASHTO M268
  - [NCHRP 20-07/Task 420](#) - Road User Understanding of Bicycle Signal Symbol Indications
  - [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 20-102\(10\)](#) - Cybersecurity Implications of CV/AV Technologies on State and Local Transportation Agencies
  - [NCHRP 20-112](#) - A Research Roadmap for Transportation and Public Health

- [NCHRP 20-121](#) - State DOT Contributions to the Study, Investigation, and Interdiction of Human Trafficking
- [NCHRP 22-34](#) - Determination of Zone of Intrusion Envelopes under MASH Impact Conditions for Barrier Attachments
- [NCHRP 22-35](#) - Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- [NCHRP 22-36](#) - Synthesis of the Performance of Portable Concrete Barrier Systems
- [NCHRP 25-25/Task 105](#) - A Guidebook for Communications between Transportation and Public Health Communities
- [NCHRP IDEA 20-30/IDEA 203](#) - Safer Cushions
- [NCHRP IDEA 20-30/IDEA 206](#) - From Location Tracking to Continuous Interpretation: Rule-Based Automated Safety Work Zone Safety
- [NCHRP Synthesis 20-05/Topic 50-04](#) - Utility Pole Safety and Hazard Evaluation Approaches
- [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
- [TCRP F-26](#) - Improving the Health and Safety of Transit Workers with Corresponding Impacts on the Bottom Line
- [TCRP G-17](#) - Assessing Lifecycle and Human Costs of Bus Operator Workstation Design and Components
- [TCRP Synthesis J-07/Topic SA-45](#) - Current Practices In The Use of Onboard Technologies to Prevent Transit Bus Incidents and Accidents
- [TCRP Synthesis J-07/Topic SA-48](#) - Transit Security Preparedness – Current Practices
- [Transit IDEA J-04/IDEA 86](#) - Advanced Neutral Temperature Estimation Using Solitary Waves (ANTEUSW)
- [Transit IDEA J-04/IDEA 88](#) - Evaluation of an Automatic, Individual, Computer-Based Operator Education and Training Program
- [Upcoming Projects](#)
  - [ACRP 03-49](#) - Effective Collaboration to Plan and Respond to Communicable Disease Threats
  - [ACRP 06-08](#) - Human Factors in Airport Operations
  - [ACRP 08-03](#) - Construction Safety and Phasing Plans
  - [ACRP 11-01/Topic 10-04](#) - Updated Survey of Laws and Regulations Applicable to Airport Commercial Ground Transportation
  - [ACRP 11-02/Task 36](#) - Research Roadmap on Safety Issues
  - [ACRP Synthesis 11-03/Topic S04-25](#) - Escalator Falls
  - [BTSCRPT BTS-01](#) - Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
  - [BTSCRPT BTS-02](#) - Guide for Behavioral Traffic Safety Messaging on Variable Message Signs
  - [BTSCRPT BTS-03](#) - Examining the Implications of Legislation and Enforcement on Electronic Device Use While Driving
  - [BTSCRPT BTS-04](#) - Tracking State Traffic Citation and Adjudication Outcomes
  - [BTSCRPT BTS-06](#) - Guide for MPO and HSO Coordination on Behavioral Traffic Safety Countermeasures
  - [BTSCRPT BTS-08](#) - Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
  - [BTSCRPT BTS-09](#) - The Influence of Infrastructure Design on Distracted Driving
  - [NCHRP 03-134](#) - Determination of Encroachment Conditions in Work Zones
  - [NCHRP 03-135](#) - Wrong-Way Driving Solutions, Policy, and Guidance
  - [NCHRP 07-28](#) - Assessing the Impacts of Turn Lanes in Different Contexts and Modal Considerations to Increase Safety Performance
  - [NCHRP 17-83](#) - Briefings and Training Materials for Implementation of the Highway Safety Manual, Second Edition
  - [NCHRP 17-87](#) - Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
  - [NCHRP 17-90](#) - Validation of Roadside Crash Injury Metrics in Real World Crashes (Correlation of Actual Injury Outcomes to Those Predicted During Crash Testing)
  - [NCHRP 17-91](#) - Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
  - [NCHRP 17-92](#) - Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures
  - [NCHRP 17-93](#) - Updating Safety Performance Functions for Data-Driven Safety Analysis
  - [NCHRP 20-06/Topic 24-03](#) - Guidelines for Drafting Liability Neutral Transportation Engineering Documents
  - [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 22-29B](#) - Evaluating the Performance of Longitudinal Barriers on Curved, Superelevated Off-Ramps
  - [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 22-37](#) - Development of a Barrier Design to Accommodate Vehicles, Pedestrians, and Cyclists
- [NCHRP 22-38](#) - Development of MASH TL-3 Deflection Reduction Guidance for 31-inch Guardrail
- [NCHRP 22-39](#) - Guardrail Performance at Various Offsets from Curb for MASH TL-3 Applications
- [TCRP B-46](#) - Tactile Wayfinding in Transportation Settings for Travelers Who Are Blind or Visually Impaired
- [TCRP F-27](#) - Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
- [TCRP J-05/Topic 18-02](#) - Codes of Conduct on Transit Vehicles and Property: Legal Issues

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

- [The Human Factors of Process Safety and Worker Empowerment in the Offshore Oil Industry](#)
- [A Smarter National Surveillance System for Occupational Safety and Health in the 21st Century](#)
- [In-Time Aviation Safety Management: Challenges and Research for an Evolving Aviation System](#)

### Committees & Panels

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

[TRB 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

[Upcoming Conferences](#)- Left hand menu “upcoming conferences by topic”

*(Conferences cosponsored by TRB are denoted with an asterisk.)*

**Lifesavers\***

March 31-April 2, 2019

Louisville, Kentucky

**17th Biennial National Harbor Safety Committee Conference**

June 25-27, 2019

Houston, Texas

**6th International Conference on Women's Issues in Transportation (WiiT 2019)**

September 10-13, 2019

Irvine, California

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

[Past Webinars](#)

- [Safety and Human Factors](#)

**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](http://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](http://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](http://pubsindex.trb.org)

**Research in Progress (RiP) Database** – Current or recently completed transportation research projects - [rip.trb.org](http://rip.trb.org)

**Research Needs Statements (RNS)** – Research needs as identified by TRB Technical Activities standing committees - [rns.trb.org](http://rns.trb.org)

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