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

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- Opportunities for information exchange on current transportation research and practice
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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](https://www.trb.org/Research/TRID/)
  - 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](https://www.trb.org/Research/Safety/)
- [Behavioral Traffic Safety Cooperative Research Program (BTSCRP)](https://www.trb.org/Research/Safety/)

**Specialty Report**

- [Critical Issues in Transportation 2018](https://www.trb.org/Research/Safety/)

**Recent Reports & Publications**

- [Airport Cooperative Research Program (ACRP)](https://www.trb.org/Research/Safety/)
  - [Impacts on Practice - Mitigating Cattle Egret Strikes at Orlando International Airport](https://www.trb.org/Research/Safety/)
  - [Legal Research Digest 36 - Legal Issues Related to Implementation and Operation of SMS for Airports](https://www.trb.org/Research/Safety/)
  - [Synthesis 95 - Airport Incident Reporting Practices](https://www.trb.org/Research/Safety/)
  - [Synthesis 90 - Incorporating ADA and Functional Needs in Emergency Exercises](https://www.trb.org/Research/Safety/)
  - [Synthesis 88 - Airport Community, Water Quality Events, and the Aircraft Drinking Water Rule](https://www.trb.org/Research/Safety/)

- [Conference Proceedings](https://www.trb.org/Research/Safety/)
  - [Proceedings 55 - Airport Roles in Reducing Transmission of Communicable Diseases](https://www.trb.org/Research/Safety/)

- [IDEA Projects](https://www.trb.org/Research/Safety/)
  - [Highway IDEA 185 - CurvePortal for Automated Identification and Extraction of Horizontal Curve Information](https://www.trb.org/Research/Safety/)
  - [Safety IDEA 34 - Prototype System for Managing and Analyzing Enterprise Rail Transport Risks of Hazardous Materials](https://www.trb.org/Research/Safety/)
  - [Transit IDEA 85 - Location Aware Networks Optimizing Use of Transit Systems by Blind Travelers](https://www.trb.org/Research/Safety/)

- [National Cooperative Highway Research Program (NCHRP)](https://www.trb.org/Research/Safety/)
  - [NCHRP 08-36/Task 146 - Economic Resilience and Long-Term Highway/Transportation Infrastructure Investment](https://www.trb.org/Research/Safety/)
  - [NCHRP 22-36 - Synthesis of the Performance of Portable Concrete Barrier Systems](https://www.trb.org/Research/Safety/)
  - [NCHRP 25-25/Task 105 - A Guidebook for Communications between Transportation and Public Health Communities](https://www.trb.org/Research/Safety/)
  - [Report 911 - Guidelines for Slope Traversability](https://www.trb.org/Research/Safety/)
  - [Report 901 - Prioritization Procedure for Proposed Road–Rail Grade Separation Projects Along Specific Rail Corridors](https://www.trb.org/Research/Safety/)
  - [Report 894 - Performance of Longitudinal Barriers on Curved, Superelevated Roadway Sections](https://www.trb.org/Research/Safety/)
Special Reports
- Report 881 - Traffic Control Devices and Measures for Deterring Wrong-Way Movements
- Report 875 - Guidance for Evaluating the Safety Impacts of Intersection Sight Distance
- Synthesis 536 - Bridge Demolition Practices
- Synthesis 523 - Integration of Roadway Safety Data from State and Local Sources
- Synthesis 515 - Practices for Preventing Roadway Departures
- Web-Only Document 256 - Assessing Interactions Between Access Management Treatments and Multimodal Users

Transit Cooperative Research Program (TCRP)
- Legal Research Digest 52 - Legal Implications of Video Surveillance on Transit Systems

Transportation Research Circulars
- 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
- 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 03-49 - Effective Collaboration to Plan and Respond to Communicable Disease Threats
  - 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 11-02/Task 36 - Research Roadmap on Safety Issues
  - 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
  - ACRP Synthesis 11-03/Topic S04-25 - Escalator Falls
  - BTSCRBP BTS-01 - Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
  - BTSCRBP BTS-02 - Guide for Behavioral Traffic Safety Messaging on Variable Message Signs
  - BTSCRBP BTS-03 - Examining the Implications of Legislation and Enforcement on Electronic Device Use While Driving
  - BTSCRBP BTS-04 - Tracking State Traffic Citation and Adjudication Outcomes
  - BTSCRBP BTS-06 - Guide for MPO and HSO Coordination on Behavioral Traffic Safety Countermeasures
  - NCHRP 03-119 - Application of MASH Test Criteria to Breakaway Sign and Luminaire Supports and Crashworthy Work-Zone Traffic Control Devices
  - 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 15-68 - Effective Low-Noise Rumble Strips
  - 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 17-43 - Long-Term Roadside Crash Data Collection Program
- 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 17-66 - 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 17-72 - 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 17-82 - 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 17-86 - 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 17-89 - Safety Performance of Part-Time Shoulder Use on Freeways
- NCHRP 17-90 - 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 20-06/Topic 24-03 - Guidelines for Drafting Liability Neutral Transportation Engineering Documents
- 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 20-77 - 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 22-29B - Evaluating the Performance of Longitudinal Barriers on Curved, Super-elevated Off-Ramps
- 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 22-37 - Development of a Barrier Design to Accommodate Vehicles, Pedestrians, and Cyclists
- NCHRP 22-40 - Update to AASHTO M 180-18 and Associated Highway Guardrail Specifications
- 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 IDEA 20-30/IDEA 212 - Non-Gating Guardrail End Terminals
- NCHRP IDEA 20-30/IDEA 214 - An Enhanced Network-Level Curve Safety Assessment and Monitoring Using Mobile Devices
- NCHRP Synthesis 20-05/Topic 50-04 - Utility Pole Safety and Hazard Evaluation Approaches
- 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 36 - Onboard High-Bandwidth Fiber Optic Sensing System for Broken Rail Detection

Safety IDEA Project 40 - Using Light to Reduce Fatigue and Improve Alertness in Railway Operations

Safety IDEA Project 41 - Vibration-based Longitudinal Rail Stress Estimation Exploiting Contactless Measurement and Machine Learning

TCRP B-46 - Tactile Wayfinding in Transportation Settings for Travelers Who Are Blind or Visually Impaired

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 I-05/Topic 18-02 - Codes of Conduct on Transit Vehicles and Property: Legal Issues

TCRP Synthesis I-07/Topic SA-45 - Current Practices In The Use of Onboard Technologies to Prevent Transit Bus Incidents and Accidents


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 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

BSCRP BTS-08 - Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept

BSCRP BTS-09 - The Influence of Infrastructure Design on Distracted Driving

BSCRP BTS-10 - E-Scooter Safety: Issues and Solutions

BSCRP BTS-11 - Ensuring Child Safety in New Travel Modes

BSCRP BTS-12 - State Practices Promoting Older Driver Safety

BSCRP BTS-13 - Communicating Safe Behavior Practices to Vulnerable Road Users

BSCRP BTS-14 - Understanding and Analyzing Crash Contributing Factors (Joint project with NCHRP 22-45)

BSCRP BTS-15 - Highway Safety Strategies for Rural Communities

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 15-73 - Design Options to Reduce Turning Motor Vehicle–Bicycle Conflicts at Intersections

NCHRP 15-74 - Safety Evaluation of On-Street Bikeway Designs

NCHRP 15-78 - Trade-offs for Cross-sectional Reallocation on Urban and Suburban Roads


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 17-93 - Updating Safety Performance Functions for Data-Driven Safety Analysis

NCHRP 17-95 - Crash Modification Factors for Intelligent Transportation Systems (ITS) Applications

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 22-30 - In-Service Performance Evaluation of W-beam End Terminals

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 22-39 - Guardrail Performance at Various Offsets from Curb for MASH TL-3 Applications

NCHRP 22-43 - Developing Testing Protocol for a Family of Devices - Signs, Breakaway Poles, and Work Zone Devices

NCHRP 22-44 - Development of a Crash Data Collection Tool and Application Guidelines for MASH In-Service Performance

NCHRP 22-45 - Understanding and Analyzing Crash Contributing Factors

NCHRP 22-46 - Supporting Data-Driven Decision Making through an Expansion of the Human Factors Guidelines for Road Systems

NCHRP 22-47 - Incorporating Driver Behavior Considerations in Safety Performance Estimates of Infrastructure Improvements

NCHRP 22-48 - Methods for Short-Term Crash Prediction

NCHRP 22-49 - The Effect of Vehicle Mix on Crash Frequency and Crash Severity

NCHRP Synthesis 20-05/Topic 51-03 - Pavement Markings Placement and Removal Practices and Its Effect on Work Zone Safety
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.)

Joint Meeting of the AASHTO Committee on Design and Council on Active Transportation and TRB Roadside Safety Design Committee*
July 21, 2019
Reno, Nevada

6th International Conference on Women's Issues in Transportation (WliT 2019)
September 10-13, 2019
Irvine, California

Conference on Health and Active Transportation
December 11, 2019
Washington, DC

5th Conference of Transportation Research Group of India (CTRG)*
December 18, 2019
Bhopal, Madhya Pradesh, India

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

Past Webinars
  o 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

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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