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 (BTSCR)

Specialty Report

- Critical Issues in Transportation 2018

Recent Reports & Publications

- Airport Cooperative Research Program (ACRP)
  - 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
  - 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 324 - Designing Safety Regulations for High-Hazard Industries
  - Report 323 - In-Service Performance Evaluation of Guardrail End Treatments

- Transportation Research Circulars
  - E-Circular 229 - 10th SHRP 2 Safety Data Symposium: From Analysis to Results

Current & Upcoming Projects

Updated 12/05/2018
• **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 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 17-54 - 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 17-88 - Roadside Encroachment Database Development and Analysis
  - 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
- State DOT Contributions to the Study, Investigation, and Interdiction of Human Trafficking
- Determination of Zone of Intrusion Envelopes under MASH Impact Conditions for Barrier Attachments
- Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- Synthesis of the Performance of Portable Concrete Barrier Systems
- A Guidebook for Communications between Transportation and Public Health Communities
- Safer Cushions
- From Location Tracking to Continuous Interpretation: Rule-Based Automated Safety Work Zone Safety
- Utility Pole Safety and Hazard Evaluation Approaches
- Bridge Demolition Practices
- Very Short Duration Work Zone Safety for Maintenance and other Activities
- Pedestrian Safety Relative to Traffic Speed Management
- Adaptive Prestressing System for Concrete Crossties
- Prototype System for Managing Enterprise Rail Transport Risk for Hazmat
- Improving the Health and Safety of Transit Workers with Corresponding Impacts on the Bottom Line
- Assessing Lifecycle and Human Costs of Bus Operator Workstation Design and Components
- Current Practices In The Use of Onboard Technologies to Prevent Transit Bus Incidents and Accidents
- Transit Security Preparedness – Current Practices
- Advanced Neutral Temperature Estimation Using Solitary Waves (ANTEUSW)
- Evaluation of an Automatic, Individual, Computer-Based Operator Education and Training Program

**Upcoming Projects**
- Effective Collaboration to Plan and Respond to Communicable Disease Threats
- Human Factors in Airport Operations
- Construction Safety and Phasing Plans
- Updated Survey of Laws and Regulations Applicable to Airport Commercial Ground Transportation
- Research Roadmap on Safety Issues
- Escalator Falls
- Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
- Guide for Behavioral Traffic Safety Messaging on Variable Message Signs
- Examining the Implications of Legislation and Enforcement on Electronic Device Use While Driving
- Tracking State Traffic Citation and Adjudication Outcomes
- Guide for MPO and HSO Coordination on Behavioral Traffic Safety Countermeasures
- Use of SHRP2 Naturalistic Driving Study Database to Improve Teen Driving Safety: Phase 1 Proof of Concept
- The Influence of Infrastructure Design on Distracted Driving
- Determination of Encroachment Conditions in Work Zones
- Wrong-Way Driving Solutions, Policy, and Guidance
- Assessing the Impacts of Turn Lanes in Different Contexts and Modal Considerations to Increase Safety Performance
- Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
- Validation of Roadside Crash Injury Metrics in Real World Crashes (Correlation of Actual Injury Outcomes to Those Predicted During Crash Testing)
- Assessing the Impacts of Connected, Automated and Autonomous Vehicles on the Future of Transportation Safety
- Developing Safety Performance Functions for Rural Two-Lane Highways that Incorporate Speed Measures
- Updating Safety Performance Functions for Data-Driven Safety Analysis
- Guidelines for Drafting Liability Neutral Transportation Engineering Documents
- Preparing TIM Responders for Connected Vehicles and Automated Vehicles
- Minimum Safety Data Needed for Automated Vehicle Operations and Crash Analysis
- Evaluating the Performance of Longitudinal Barriers on Curved, Superellevated Off-Ramps
- Development of Methods to Evaluate Side Impacts for Next Edition MASH
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)

**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 - [riptrb.org](http://riptrb.org)

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

Contact the Library at TRBLibrary@nas.edu or I (202) 334-2989