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- Opportunities for information exchange on current transportation research and practice
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- 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](http://www.trb.org/InformationServices/Snap.aspx)

**Specialty Report**
- [Critical Issues in Transportation 2019](http://www.trb.org/InformationServices/Snap.aspx)

**Recent Reports & Publications**

- [Airport Cooperative Research Program (ACRP)](http://www.trb.org/InformationServices/Snap.aspx)
  - [Report 229](http://www.trb.org/InformationServices/Snap.aspx) - Airport Collaborative Decision Making (ACDM) to Manage Adverse Conditions
  - [Report 222](http://www.trb.org/InformationServices/Snap.aspx) - Collecting and Sharing of Operations and Safety Data
  - [Report 212](http://www.trb.org/InformationServices/Snap.aspx) - Airports and Unmanned Aircraft Systems, Volume 1: Managing and Engaging Stakeholders on UAS in the Vicinity of Airports
  - [Report 212](http://www.trb.org/InformationServices/Snap.aspx) - Airports and Unmanned Aircraft Systems, Volume 2: Incorporating UAS into Airport Infrastructure—Planning Guidebook
  - [Report 212](http://www.trb.org/InformationServices/Snap.aspx) - Airports and Unmanned Aircraft Systems, Volume 3: Potential Use of UAS by Airport Operators
  - [Synthesis 115](http://www.trb.org/InformationServices/Snap.aspx) - Practices in Airport Emergency Plans
  - [Synthesis 109](http://www.trb.org/InformationServices/Snap.aspx) - Escalator Falls
  - [Synthesis 106](http://www.trb.org/InformationServices/Snap.aspx) - Airport Risk Identification and Prioritization Practices
  - [Web-Only Document 50](http://www.trb.org/InformationServices/Snap.aspx) - Research Roadmap on Safety Issues
  - [Report 1](http://www.trb.org/InformationServices/Snap.aspx) - Using Electronic Devices While Driving: Legislation and Enforcement Implications

- [Conference Proceedings](http://www.trb.org/InformationServices/Snap.aspx)

- [IDEA Safety Program](http://www.trb.org/InformationServices/Snap.aspx)
  - [Rail IDEA Report 41](http://www.trb.org/InformationServices/Snap.aspx) - Vibration-based Longitudinal Rail Stress Estimation Exploiting Acoustic Measurement and Machine Learning
  - [Rail IDEA Report 40](http://www.trb.org/InformationServices/Snap.aspx) - Using Light to Reduce Fatigue and Improve Alertness in Railway Operations
  - [Rail IDEA Report 33](http://www.trb.org/InformationServices/Snap.aspx) - Adaptive Prestressing System for Concrete Crossties

- [National Cooperative Highway Research Program (NCHRP)](http://www.trb.org/InformationServices/Snap.aspx)
  - [NCHRP 03-127](http://www.trb.org/InformationServices/Snap.aspx) - Cybersecurity of Traffic Management Systems
  - [NCHRP 17-76](http://www.trb.org/InformationServices/Snap.aspx) - Guidance for the Setting of Speed Limits
Current & Upcoming Projects

- **Current Projects**
  - ACRP 03-49 - Effective Collaboration to Plan and Respond to Communicable Disease Threats
  - ACRP 03-57 - A Guidebook to Prepare Airports for Transformations in Wireless Connectivity
  - ACRP 04-24 - Guidelines to Develop an Anti-Human Trafficking Action Plan for Airports
  - ACRP 04-27 - Alternative Methods to Manage Tree Growth Near Airports
  - ACRP 08-03 - Construction Safety and Phasing Plans
  - ACRP 10-29 - Aircraft Jet Blast Estimation Tool
  - ACRP 11-02/Task 36 - Research Roadmap on Safety Issues
  - ACRP Synthesis 11-03/Topic S04-21 - Models for Law Enforcement at Airports
  - ACRP Synthesis 11-03/Topic S10-17 - Agricultural Operations on Airport Grounds
  - BTS/SCR BTS-01 - Guidance for Employer-Based Behavioral Traffic Safety Programs for Drivers in the Workplace
  - BTS/SCR BTS-02 - Guide for Behavioral Traffic Safety Messaging on Variable Message Signs
  - BTS/SCR BTS-04 - Tracking State Traffic Citation and Adjudication Outcomes
  - BTS/SCR BTS-06 - MPO and SHSO Coordination on Behavioral Traffic Safety
- 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
- E-Scooter Safety: Issues and Solutions
- Ensuring Child Safety in New Travel Modes
- State Practices Promoting Older Driver Safety
- Communicating Safe Behavior Practices to Vulnerable Road Users
- Highway Safety Strategies for Rural Communities
- Application of MASH Test Criteria to Breakaway Sign and Luminaire Supports and Crashworthy Work-Zone Traffic Control Devices
- Guide for Roundabouts
- Guidance for Safe and Effective Temporary Traffic Control for Mobile Operations on Two-Lane Two-Way Roadways
- Traffic Signal Design and Operations Strategies for Non-Motorized Users
- Determination of Encroachment Conditions in Work Zones
- Wrong-Way Driving Solutions, Policy, and Guidance
- Next Generation of the USLIMITS2 Speed Limit Setting Expert System
- Guidance on Midblock Pedestrian Signals (MPS)
- Guidelines for Vehicle and Equipment Color, Marking, and Lighting
- Development of Safety Performance Based Guidelines for the Roadside Design Guide
- Effective Low-Noise Rumble Strips
- Design Options to Reduce Turning Motor Vehicle–Bicycle Conflicts at Intersections
- Safety Evaluation of On-Street Bicycle Facility Design Features
- Guidebook for Urban and Suburban Roadway Cross-Sectional Reallocation
- Development of Clear Recovery Area Guidelines
- Long-Term Roadside Crash Data Collection Program
- Comprehensive Analysis Framework for Safety Investment Decisions
- Lead States Initiative for Implementing the Highway Safety Manual
- Development of a Comprehensive Approach for Serious Traffic Crash Injury Measurement and Reporting Systems
- Benefit-Cost Methodology for Behavioral Highway Safety Countermeasures
- Guidance for Selection of Appropriate Countermeasures for Opposite Direction Crashes
- Identification of Factors Contributing to the Decline of Traffic Fatalities in the United States
- Update of Crash Modification Factors for the Highway Safety Manual
- Application of Crash Modification Factors for Access Management
- Understanding and Communicating Reliability of Crash Prediction Models
- Safety Effects of Raising Speed Limits to 75 mph and Higher
- Expansion of Human Factors Guidelines for Road Systems, Second Edition
- Proposed Macro-Level Safety Planning Analysis Chapter for the Highway Safety Manual
- Proposed Guidance for Fixed Objects in the Roadside Design Guide
- Pedestrian and Bicycle Safety Performance Functions for the Highway Safety Manual
- Estimating Effectiveness of Safety Treatments in the Absence of Crash Data
- Enhancing Pedestrian Volume Estimation and Developing HCM Pedestrian Methodologies for Safe and Sustainable Communities
- Roadside Encroachment Database Development and Analysis
- Safety Performance of Part-Time Shoulder Use on Freeways
- Evaluation of Roadside Crash Injury Metrics in MASH
- 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
- Crash Modification Factors for Intelligent Transportation Systems (ITS) Applications
- Implementation of NCHRP Research Report 893: The Oregon DOT Statewide Pedestrian and Bicycle Plan
- Topical White Papers for the TRB Forum on Automated Vehicles and Shared Mobility
- State DOT Contributions to the Study, Investigation, and Interdiction of Human Trafficking
- NCHRP 20-123(11) - High-Value Research Marketing and Communications for 2020
- NCHRP 20-124 - Deploying Transportation Security Practices in State DOTs
- NCHRP 22-298 - Evaluating the Performance of Longitudinal Barriers on Curved, Super-elevated Off-Ramps
- 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 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 22-38 - Development of MASH TL-3 Deflection Reduction Guidance for 31-inch Guardrail
- NCHRP 22-39 - Guardrail Performance at Various Offsets from Curb MASH TL-3 Applications
- NCHRP 22-40 - Update to AASHTO M 180-18 and Associated Highway Guardrail Specifications
- NCHRP 22-43 - Proposed AASHTO Guidelines for Implementation of MASH for Sign Supports, Breakaway Poles, and Work Zone Traffic Control Devices
- NCHRP 22-44 - A Transportation Agency Data Collection Practice for Use with In-Service Performance Evaluations (ISPEs)
- NCHRP 22-45 - Understanding and Analyzing Crash Contributing Factors
- NCHRP 22-47 - Incorporating Driver Behavior and Characteristics into Safety Prediction Methods
- NCHRP 22-48 - Development of Crash Prediction Models for Short-Term Durations
- NCHRP 23-05 - Guidance for Training and Certification of Construction Inspectors for Transportation Infrastructure
- 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 214 - An Enhanced Network-Level Curve Safety Assessment and Monitoring Using Mobile Devices
- NCHRP IDEA 20-30/IDEA 217 - A Real-Time Proactive Intersection Safety Monitoring and Visualization System Based on Radar Sensor Data
- NCHRP IDEA 20-30/IDEA 223 - Fatigue Crack Inspection Using Computer Vision and Augmented Reality
- NCHRP IDEA 20-30/IDEA 226 - A Smart IoT Proximity Alert System for Highway Work Zone Safety
- NCHRP IDEA 20-30/IDEA 228 - A Retroreflective Road Lane Marking Tape 1,000X Brighter Than Existing Technology
- NCHRP Synthesis 20-05/Topic 51-03 - Pavement Markings Placement and Removal Practices and Its Effect on Work Zone Safety
- NCHRP Synthesis 20-05/Topic 52-01 - Highway Infrastructure Inspection Practices for the Digital Age
- NCHRP Synthesis 20-05/Topic 52-08 - Practices for Balancing Safety Investments in a Comprehensive Safety Program
- NCHRP Synthesis 20-05/Topic 52-09 - Use of Safety Management Systems in Managing Highway Maintenance Worker Safety
- NCHRP Synthesis 20-05/Topic 52-11 - Use of Smart Work Zone Technologies for Improving Work Zone Safety
- Safety IDEA Project 36 - Onboard High Bandwidth Fiber Optic Sensing System for Broken Rail Detection
- Safety IDEA Project 43 - Augmenting Reality for Safer Inspections of Railroad Infrastructure and Operations
- Safety IDEA Project 44 - Laser-based Non-destructive Spike Defect Inspection System
- Safety IDEA Project 45 - Development of a Fatigue Load for Railway Bridges
- TCRP A-44 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way
- 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 J-07/Topic SA-52 - Assessing Equity and Identifying Impacts Associated with Bus Network Redesigns
- Transit IDEA J-04/IDEA 98 - Safety Assessment of the Interaction Between the Autonomous Shuttle Bus and Vulnerable Road Users

- Upcoming Projects
  - ACRP 01-41 - Airport Blockchain Implementation Guidebook
  - ACRP 01-44 - Airport Insurance Requirements
  - ACRP 02-94 - Update ACRP WebResource 4: Airport Air Quality Resource Library
○ **ACRP 02-95** - Understanding Airport Air Quality and Public Health Studies Related to Airports: An Update to ACRP Report 135
○ **ACRP 04-25** - Airports and Communicable Diseases—Preparedness and Response
○ **ACRP 04-27** - Alternative Methods to Manage Tree Growth Near Airports
○ **ACRP 04-28** - Developing Alternative Aircraft Arresting Systems
○ **ACRP 06-08** - Human Factors in Airport Operations
○ **ACRP 10-30** - Evaluating the Effectiveness of an Airport’s Wildlife Hazard Management Program
○ **ACRP 11-02/Task 41** - Toward a Touchless Airport Journey
○ **BTSCRPT-14** - Understanding and Analyzing Crash Contributing Factors (Joint project with NCHRP 22-45)
○ **BTSCRPT-16** - Developing On-road Driver Skills Test and Scoring Guidance for Measuring and Predicting High Safety Risk Drivers
○ **BTSCRPT-17** - Determining the Effectiveness of Combined High Visibility Enforcement (HVE)
○ **BTSCRPT-18** - Objectives, Components, and Measures of Effective Traffic Safety Public Awareness and Education Efforts
○ **BTSCRPT-19** - Improving Moped and Seated Motor Scooter (50 cc or less) Rider Safety
○ **NCHRP 03-141** - Guidance on Midblock Pedestrian Signals (MPS)
○ **NCHRP 05-25** - Safety Performance of LED and Variable Lighting Systems
○ **NCHRP 07-31** - State DOT Usage of Bicycle and Pedestrian Data: Practices, Sources, Needs, and Gaps
○ **NCHRP 08-139** - Guide for Preventing and Mitigating the Risk of Bridge and Tunnel Strikes by Motor Vehicles
○ **NCHRP 10-109** - Modern Solutions to Safe and Efficient Work Zone Travel
○ **NCHRP 15-66** - Operational Performance and Safety Effects of Arterial Weaving Sections
○ **NCHRP 15-79** - Development of Guidance for Non-Standard Roadside Hardware Installations
○ **NCHRP 17-96** - Traffic Safety Culture Research Roadmap
○ **NCHRP 17-97** - Strategies to Improve Pedestrian Safety at Night
○ **NCHRP 17-99** - Safety Effectiveness Assessment of Advanced Highway-Rail Grade Crossing Improvements
○ **NCHRP 17-100** - Leveraging Big Data and Artificial Intelligence to Streamline Safety Data Analyses
○ **NCHRP 17-101** - Safe Systems in the U.S. – Developing a Roadmap for Transportation Road Designers, Planners, and Engineers
○ **NCHRP 20-07/Task 358** - Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers
○ **NCHRP 20-07/Task 368** - Development of a Roadmap for Use of SHRP2 Safety Data to Enhance Existing Publications
○ **NCHRP 20-102(16)** - Impacts of Connected, Automated Vehicle Technologies on Traffic Incident Management Response
○ **NCHRP 20-102(33)** - Safety of Vulnerable Road Users in a C/AV Future
○ **NCHRP 22-32A** - Development of Methods to Evaluate Side Impacts for Next Edition MASH
○ **NCHRP 22-42** - Impact Performance Assessment of Barrier Performance at High Speeds
○ **NCHRP 22-49** - The Effect of Vehicle Mix on Crash Frequency and Crash Severity
○ **NCHRP 22-50** - Crashworthiness of Roadside Hardware on Curbed Roadways
○ **NCHRP 22-51** - Evaluation of MASH 2016 Soil Specifications and Procedures
○ **NCHRP 23-09** - Scoping Study to Develop the Basis for a Highway Standard to Conduct an All-Hazards Risk and Resilience Analysis
○ **NCHRP 23-13** - Transportation Research Related to COVID-19
○ **NCHRP 23-13(01)** - Effective Tools and Practices for Measuring Telecommuting Employee Performance
○ **NCHRP 23-13(02)** - Employee Safety during COVID-19
○ **NCHRP 23-13(03)** - Guidance for State DOTs on Truck Rest and Service Areas for Critical Supply Chain Delivery
○ **TCRP C-25** - Bus Operator Barrier Design
○ **TCRP D-19** - Detecting and mitigating low level DC fault currents in transit systems thus eliminating electrical fires in tunnels and rights-of-way
○ **TCRP E-13** - COVID-19 and Transit Air Quality Protections (Insight Event)

**Reports from the National Academies Press on Safety & Human Factors**

○ **Decarcerating Correctional Facilities during COVID-19** - Advancing Health, Equity, and Safety
○ **Public–Private Partnerships for Global Health at the National, Municipal, and Community Levels**
○ **Value Proposition and Innovative Models for Multi-Sectoral Engagement in Global Health**
○ **Stronger Food and Drug Regulatory Systems Abroad**
○ **Health-Focused Public–Private Partnerships in the Urban Context**
○ **Predicting Human Health Effects from Environmental Exposures: Applying Translatable and Accessible Biomarkers of Effect**

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**TRB Standing Committees** – Search by transportation mode and committee topic
- ACH10 – Pedestrians
- ACH20 – Bicycle Transportation
- ACH30 – Human Factors of Vehicles
- ACH40 – Human Factors of Infrastructure Design and Operations
- ACH50 – Road User Measurement and Evaluation
- ACH60 – Vehicle User Education, Training, and Licensing
- ACS10 – Transportation Safety Management
- ACS20 – Safety Performance Analysis
- ACS50 – Impaired in Transportation
- ACS60 – Truck and Bus Safety
- AKD20 – Roadside Safety Design
- AKD80 – Roundabouts and other Intersection Design and Control Strategies
- AL070 – Tort Liability and Risk Management
- AME60 – Accessible Transportation and Mobility
- AN000 – Safety and Systems Users Group
- ANB00 – Safety
- ANB23 – Highway Safety Workforce Development
- ANB40 – Traffic Law Enforcement
- ANB45 – Occupant Protection
- ANB60 – Safe Mobility of Older Persons
- AND00 – Users Performance
- AND40 – Visibility
- ANF30 – Motorcycles and Mopeds
- AR070 – Rail Safety
- AR080 – Highway/Rail Grade Crossings
- 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**
- 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.)*

- **Innovations in Freight Data**
  *September 21, 2021*
  *Online*

- **ITS World Congress**
  *October 11, 2021*
  *Hamburg, Germany*

- **National Conference on Rural, Public, and Intercity Bus Transportation**
  *October 25, 2021*
  *online*

- **Drug-Impaired Driving Conference**
  *October 27, 2021*
  *online*
Conference on Transformative Times in Transportation Security
November 1, 2021
online

Maritime Risk Symposium*
November 2, 2021
online

International Conference on Roundabouts
April 1, 2022
Monterey, CA

18th Biennial National Harbor Safety Committee Conference
June 13, 2022
Boston, MA

13th Access Management Conference
July 1, 2022
online

TRANSED: Mobility, Accessibility, and Demand Response Transportation Conference
September 1, 2022
Seattle, WA

International Conference of International Society for Intelligent Construction*
September 6, 2022
Guimaraes, Portugal

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

Past Webinars
  o Safety and Human Factors

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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 - The world's largest and most comprehensive bibliographic source on all modes and disciplines of transportation
- Transportation Research Thesaurus (TRT) – trt.trb.org - A tool to improve the indexing and retrieval of transportation information.
- Research in Progress (RiP) Database – rip.trb.org - Current or recently completed transportation research projects
- Research Needs Statements (RNS) – rns.trb.org - Research needs as identified by TRB Technical Activities standing committees
- Publications Index (PubIndex) Database – pubsindex.trb.org - The papers, articles and reports published by the Transportation Research Board, Strategic Highway Research Programs or the Marine Board

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