



TRANSPORTATION RESEARCH BOARD
Safety and Human Factors Overview

TRB at a Glance

The mission of the Transportation Research Board (TRB) is to provide leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal.

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.

More info at www.trb.org

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

More information about TRIS is available online at: <http://www.trb.org/InformationServices/InformationServices.aspx>
Contact the Library at TRBLibrary@nas.edu or 1 (202) 334-2989

Upcoming Events

- Conferences (co-sponsored by TRB):
 - May 8, 2017 Green Bay, Wisconsin **5th International Conference on Roundabouts**
 - May 17, 2016 Rio de Janeiro, Brazil **Road Safety on Five Continents (RS5C)**
 - June 2, 2016 New York, New York **2016 Ferry Safety and Technology Conference**

Information continues behind



TRANSPORTATION RESEARCH BOARD

- June 12, 2016 Xi'an, China **Second International Symposium on Disaster Prevention & Mitigation of Highway Infrastructure**
 - June 15, 2016 Portland, Oregon **Use of Scenario Planning in Transportation Planning**
 - June 20, 2016 Baltimore, Maryland **TRB Standing Committee on Roadside Safety Design (AFB20) Summer Meeting**
 - June 28-30, 2016 Irvine, CA **Highway Safety Performance Midyear Committee Meeting (ANB25)**
 - July 12, 2016 Washington, DC **Occupant Protection Midyear Committee Meeting (ANB45)**
 - July 19-21, 2016 San Francisco, CA **Automated Vehicles Symposium 2016**
 - August 1-2, 2016 Woods Hole, MA **Safe Mobility for Older Persons Midyear Committee Meeting (ANB60)**
 - September 13, 2016 Portland, Oregon **21st Century Waterways: The Changing Tide of Harbor Safety - 16th Biennial Harbor Safety Committee Conference**
 - December 1-2, 2016 Washington, DC **10th University Transportation Center (UTC) Spotlight Conference: Bicycles and Pedestrians**
 - March 20-23, 2017 San Diego, CA **10th International Conference on Managing Fatigue in Transportation**
 - June 12, 2017 San Francisco, California **First International Roadside Safety Conference: "Safer Roads, Saving Lives, Saving Money"**
- Webinars:
 - June 7, 2016 NTI Webinar: **TCRP Report 169: Developing Best-Practice Guidelines for Improving Bus Operator Health and Retention**
 - June 15, 2016 TRB Webinar: **Application of Human Factors Guideline for Road Systems** TRB Webinar: **Application of Human Factors Guideline for Road Systems**
- View TRB webinars here: <http://www.trb.org/ElectronicSessions/ConferenceRecordings.aspx>

Technical Committees

- Standing Committees:
 - Accessible Transportation and Mobility (ABE60)
 - Task Force on Arterials and Public Health (ADD55T)
 - Roadside Safety Design (AFB20)
 - Highway/Rail Grade Crossings (AHB60)
 - Tort Liability and Risk Management (AL070)
 - Safety and Systems Users Group (AN000)
 - Section – Safety (ANB00)
 - Transportation Safety Management (ANB10)
 - Safety Data, Analysis and Evaluation (ANB20)
 - Highway Safety Workforce Development (ANB23)
 - Highway Safety Performance (ANB25)
 - Operator Education and Regulation (ANB30)
 - Traffic Law Enforcement (ANB40)
 - Occupant Protection (ANB45)
 - Alcohol, Other Drugs, and Transportation (ANB50)
 - Safe Mobility of Older Persons (ANB60)
 - Truck and Bus Safety (ANB70)
 - Roundabouts (ANB75)
 - Section - Users Performance (AND00)
 - Vehicle User Characteristics (AND10)
 - User Information Systems (AND20)
 - Simulation and Measurement of Vehicle and Operator Performance (AND30)
 - Visibility (AND40)
 - Section - Pedestrians and Cycles (ANF00)

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



TRANSPORTATION RESEARCH BOARD

- Pedestrians (ANF10)
- Bicycle Transportation (ANF20)
- Motorcycles and Mopeds (ANF30)
- Task Force on Transit Safety and Security (AP018T)
- Railroad Operational Safety (AR070)
- Transportation of Hazardous Materials (AT040)
- Aviation Security and Emergency Management (AV090)
- Marine Safety and Human Factors (AW040)

- Policy Study Committees:
 - Commercial Truck and Bus Safety Synthesis Program (B0110)
 - Committee for Review of USDOT Truck Size and Weight Study (B0136)
 - Offshore Oil and Gas Safety Culture Framing Study (B0140)
 - Committee on the Application of Real-Time Monitoring of Offshore Oil and Gas Operations (B0142)
 - Transportation Safety IDEA Program Committee (E1008)

- Council:
 - Young Member Council (A0040T)

To become Friend of any committee visit MyTRB.org

Research

- Recent Reports
 - ACRP Report, Issue 153 - Guidebook for IROPS Stakeholder Communication and Coordination.
 - ACRP Report, Issue 144 - Aircraft Systems (UAS) at Airports: A Primer.
 - ACRP Report, Issue 131 - A Guidebook for Safety Risk Management for Airports.

 - TCRP Report, Issue 175 - Guidebook on Pedestrian Crossings of Public Transit Rail Services.
 - TCRP Report, Issue 174 - Improving Safety Culture in Public Transportation.

 - TR News, Issue 301 - Research Pays Off: Low-Cost Approach to Reducing Crashes on Multilane Undivided Highways in Louisiana.
 - TR News, Issue 300 - Big Data Hit the Road: The First Year of Use of the SHRP 2 Safety Databases.

 - NCFRP Report, Issue 36 - Enhancing Sleep Efficiency on Vessels in the Tug/Towboat/Barge Industry.

 - NCHRP Synthesis of Highway Practice, Issue 486 - State Practices for Local Road Safety.

 - ACRP Impacts on Practice - Improving the Safety of Runway Safety Areas.

 - National Academies of Sciences, Engineering, and Medicine - Commercial Motor Vehicle Driver Fatigue, Long-Term Health, and Highway Safety: Research Needs.

 - NCHRP Report, Issue 811 - Institutionalizing Safety in Transportation Planning Processes: Techniques, Tactics, and Strategies.

 - ACRP Synthesis of Airport Practice, Issue 60 - Airport Emergency Post-Event Recovery Practices.

 - TCRP Synthesis of Transit Practice, Issue 114 - Critical Incident Management and Clearance Practices for Rail Transit.

 - Transportation Research E-Circular, Issue E-C196 - Improving Safety Data Programs Through Data Governance and Data Business Planning: A Peer Exchange.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



TRANSPORTATION RESEARCH BOARD

- TCRP Web Document, Issue 63 - Treatments Used at Pedestrian Crossings of Public Transit Rail Services.
- NCHRP Legal Research Digest, Issue 63 - Effect of MUTCD on Tort Liability of Government Transportation Agencies.
- Current research
 - Legal Aspects of Airport Programs. Topic 09-01. Airport Public Health Preparedness & Response: Legal Rights, Powers & Duties. (ACRP 11-01/Topic 09-01)
 - A Low-Cost Mobile Proximity Warning System in Highway Work Zone Safety. (NCHRP IDEA 20-30/IDEA 187)
 - Self-Deicing LED Signal for Railroad and Highway Intersections. (Safety IDEA Project 29)
 - Enhancing Safety and Security of Transit Systems Using Computer Vision. (Transit IDEA J-04/IDEA 80)
 - Active Safety-Collision Warning Pilot in Washington State. (Transit IDEA J-04/IDEA 82)
 - Evaluating the Airport Emergency Response Operations Simulation (AEROS) Tool (ACRP 04-04A)
 - Runway Protection Zone (RPZ) Risk Assessment Tool (ACRP 04-18)
 - Development of Clear Recovery Area Guidelines (NCHRP 17-11(02))
 - Long-Term Roadside Crash Data Collection Program (NCHRP 17-43)
 - Comprehensive Analysis Framework for Safety Investment Decisions (NCHRP 17-46)
 - Lead States Initiative for Implementing the Highway Safety Manual (NCHRP 17-50)
 - Consideration of Roadside Features in the Highway Safety Manual (NCHRP 17-54)
 - Guidelines for Slope Traversability (NCHRP 17-55)
 - Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments (NCHRP 17-56)
 - Development of a Comprehensive Approach for Serious Traffic Crash Injury Measurement and Reporting Systems (NCHRP 17-57)
 - Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials (NCHRP 17-58)
 - Safety Impacts of Intersection Sight Distance (NCHRP 17-59)
 - Benefit-Cost Methodology for Behavioral Highway Safety Countermeasures (NCHRP 17-60)
 - Improved Prediction Models for Crash Types and Crash Severities (NCHRP 17-62)
 - Guidance for the Development and Application of Crash Modification Factors (NCHRP 17-63)
 - Guidance for Selection of Appropriate Countermeasures for Opposite Direction Crashes (NCHRP 17-66)
 - Identification of Factors Contributing to the Decline of Traffic Fatalities in the United States (NCHRP 17-67)
 - Intersection Crash Prediction Methods for the Highway Safety Manual (NCHRP 17-68)
 - A Strategic Approach to Transforming Traffic Safety Culture to Reduce Deaths and Injuries (NCHRP 17-69)
 - Development of Roundabout Crash Prediction Models and Methods (NCHRP 17-70)
 - Systemic Pedestrian Safety Analyses (NCHRP 17-73)
 - Improved Analysis of Two-Lane Highway Capacity and Operational Performance (NCHRP 17-65)
 - Work Zone Crash Characteristics and Countermeasure Guidance (NCHRP 17-61)
 - Update of Crash Modification Factors for the Highway Safety Manual (NCHRP 17-72)
 - Proposed AASHTO Highway Safety Manual, Second Edition (NCHRP 17-71)
 - Guidance for the Implementation of the Toward Zero Deaths National Strategy on Highway Safety (NCHRP 17-64)
 - Expansion of Human Factors Guidelines for Road Systems, Second Edition (NCHRP 17-80)
 - Safety Effects of Raising Speed Limits to 75 mph and Higher (NCHRP 17-79)
 - Understanding and Communicating Reliability of Crash Prediction Models (NCHRP 17-78)
 - Quantitative Approaches to Systemic Safety Analysis (NCHRP 17-77)
 - Understanding the Relationship between Operating, Posted, and Design Speeds and Safety in the Setting of Speed Limits (NCHRP 17-76)
 - Leveraging Big Data to Improve Traffic Incident Management (NCHRP 17-75)
 - Developing Crash Modification Factors for Corridor Access Management (NCHRP 17-74)
- Upcoming projects
 - Airport Emergency Operations Centers Design Guide (ACRP 04-20)



TRANSPORTATION RESEARCH BOARD

- Airport Emergency Planning Template: NIMS - Incident Command System Compliance (ACRP 04-19)

Panel Member nominations accepted (<http://www.trb.org/TCRP/CRPInfoPanelMembers.aspx>)

Second Strategic Highway Research Program (SHRP 2)

- SHRP 2 Report, Issue Report S2-S31-RW-3 - Naturalistic Driving Study: Linking the Study Data to the Roadway Information Database.
- SHRP 2 Report, Issue Report S2-S31-RW-2 - Naturalistic Driving Study: Alcohol Sensor Performance.
- SHRP 2 Report, Issue Report S2-S31-RW-1 - Naturalistic Driving Study: Descriptive Comparison of the Study Sample with National Data.
- SHRP 2 Report, Issue Report S2-S06-RW-2 - Naturalistic Driving Study: Collecting Data on Cell Phone Use.
- SHRP 2 Report, Issue Report S2-S04A-RW-1 - Naturalistic Driving Study: Development of the Roadway Information Database.
- SHRP 2 Report, Issue Report S2-L07-RR-3 - Further Development of the Safety and Congestion Relationship for Urban Freeways.
- SHRP 2 Report, Issue Report S2-L13A-RW-1 - Designing the Archive for SHRP 2 Reliability and Reliability-Related Data.
- SHRP 2 Report, Issue Report S2-S08D-RW-1 - Analysis of Naturalistic Driving Study Data: Roadway Departures on Rural Two-Lane Curves.
- SHRP 2 Report, Issue Report S2-S08B-RW-1 - Analysis of Naturalistic Driving Study Data: Offset Left-Turn Lanes.
- SHRP 2 Report, Issue Report S2-S08A-RW-1 - Analysis of Naturalistic Driving Study Data: Safer Glances, Driver Inattention, and Crash Risk.
- SHRP 2 Report, Issue Report S2-S07-RW-1 - Naturalistic Driving Study: Field Data Collection.
- SHRP 2 Report, Issue Report S2-S06-RW-1 - Naturalistic Driving Study: Technical Coordination and Quality Control.