TRB Snap Search: Rail Safety Innovations

TRB’s involvement in research on Rail Safety Innovations from 2019-2021

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

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
- Click here to view search results on TRB published research Rail Safety Innovations within the past two years.

Subject Webpage
- Rail Research at TRB

Specialty Report
- Critical Issues in Transportation 2019

Recent Reports & Publications

- **IDEA Safety Projects**
  - Report 34 - Prototype System for Managing and Analyzing Enterprise Rail Transport Risks of Hazardous Materials
  - Report 33 - Adaptive Prestressing System for Concrete Crossties
  - Report 29 - Self-Deicing LED Signal for Railroads and Highway Intersections

- **Transit Cooperative Research Program (TCRP)**
  - IDEARapport 90 - sUAS-based GeoINTEL1 for Commuter Rail Parking in Rural and Suburban Areas
  - Report 218 - Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
  - Report 212 - Stray Current Control of Direct Current-Powered Rail Transit Systems: A Guidebook

Current & Upcoming Projects

- **Current Projects**
  - NCHRP 08-111 - Effective Decision-Making Methods for Freight-Efficient Land Use
  - NCHRP 20-07/Task 424 - AASHTO Guidelines for the Operation of Movable Bridges from Remote Locations
  - TCRP C-23 - Assessing and Mitigating Electrical Fires on Transit Vehicles
  - TCRP J-05/Topic 19-03 - Navigating the Complexities of Sensitive Security Information (SSI) and Protected Critical Infrastructure Information (PCII)
  - TCRP Synthesis J-07/Topic SB-34 - Coordination of Public Transit Services and Investments with Affordable Housing Policies

- **Upcoming Projects**
  - NCHRP 17-99 - Safety Effectiveness Assessment of Advanced Highway-Rail Grade Crossing Improvements
  - TCRP A-46 - Quantitative Procedures for Designing and Operating Ferry Transit Services
  - TCRP D-17 - Detecting and mitigating low level DC fault currents in transit systems thus eliminating electrical fires in tunnels and rights-of-way
  - TCRP D-21 - Planning for Innovation & Emerging Mobility Futures at Intermodal Passenger Facilities
  - TCRP J-05/Topic 20-02 - Liability Insurance Issues for Transit Lawyers: A Primer

Updated 12/08/2020
Reports from the National Academies Press on Safety Innovations

- Exploring the Current Landscape of Consumer Genomics
- Compounded Topical Pain Creams - Review of Select Ingredients for Safety, Effectiveness, and Use
- Regulating Medicines in a Globalized World
- A Quadrennial Review of the National Nanotechnology Initiative
- Evidence-Based Practice for Public Health Emergency Preparedness and Response

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic

- ABI65T - Innovations in Freight Data Workshop
- AMR30 - Transportation for National Defense
- AP065 - Rail Transit Systems
- AR000 - Rail Group
- AR010 - Intercity Passenger Rail
- AR020 - Passenger Rail Transportation
- AR030 - Railroad Operating Technologies
- AR040 - Freight Rail Transportation
- AR050 - Railroad Infrastructure Design and Maintenance
- AR060 - Rail Transit Infrastructure Design and Maintenance
- AR065 - Rail Transit Systems
- AR070 - Rail Safety
- AR080 - Highway/Rail Grade Crossings
- AT010 - Freight Transportation Economics and Regulation
- AT020 - International Trade and Transportation
- AT030 - Agricultural and Food Transportation
- AT040 - Transportation of Hazardous Materials
- AT045 - Intermodal Freight Transport
- E1008 - Rail Safety IDEA Program Committee

Task Forces - Search for task force under committee here

CRP Panels

- Project Panels Related to Rail

Policy Study

- B0137 - Evaluation of the Federal Railroad Administration Research and Development Program
- B0166 - Federal Railroad Administration R&D Program

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.)

Geosynthetics Conference*
February 21-24, 2021
Kansas City, MO

2021 NAEP Annual Conference and Training Symposium*
May 16, 2021
Phoenix, AZ

4th International Conference on Transportation Geotechnics*
May 23, 2021
Chicago, IL

Research Day at ITF Annual Summit - Transport Innovation for Sustainable Development
May 25, 2021
Leipzig, Germany
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:

- **Transportation Research International Documentation (TRID)** – [trid.trb.org](http://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](http://trt.trb.org) - A tool to improve the indexing and retrieval of transportation information.
- **Research in Progress (RiP) Database** – [rip.trb.org](http://rip.trb.org) - Current or recently completed transportation research projects
- **Research Needs Statements (RNS)** – [rns.trb.org](http://rns.trb.org) - Research needs as identified by TRB Technical Activities standing committees
- **Publications Index (PubsIndex) Database** – [pubsindex.trb.org](http://pubsindex.trb.org) - The papers, articles and reports published by the Transportation Research Board, Strategic Highway Research Programs or the Marine Board

Contact or Questions: [TRBLibrary@nas.edu](mailto:TRBLibrary@nas.edu)