TRB Snap Search: Rail

TRB's involvement in research on Rail from 2022-2024

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

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 within the past year.

Specialty Report

- Critical Issues in Transportation for 2024 and Beyond
- Critical Issues in Transportation 2019
- COVID-19 Addendum to Critical Issues in Transportation
- Racial Equity Addendum to Critical Issues in Transportation

Recent Reports & Publications

- National Cooperative Highway Research Program (NCHRP)
  - IDEA Report 190 - Self-de-icing LED Signals for Railroads and Highway Intersections

- Safety IDEA Program
  - Report 48 - Autonomous Detection of Compressed Air Leaks on Trains
  - Report 45 - Development of a Fatigue Load for Railway Bridges
  - Report 44 - Laser-Based Non-destructive Spike Defect Inspection System
  - Report 43 - Augmenting Reality for Safer Inspections of Railroad Infrastructure and Operations
  - Report 42 - Railroad Tunnel Inspections for Maintenance and Replacement Prioritization Using Untethered Ground Penetrating Radar and LIDAR Capable Unmanned Aerial Vehicles (UAVs)
  - Report 38 - Minimization of Weld Failures by Means of Gas and Shrinkage Porosity Reduction
  - Report 37 - Measuring Behavior of Railroad Bridges under Revenue Traffic using Lasers and Unmanned Aerial Vehicles (UAVs) for Safer Operations: Implementation

- Special Reports / Consensus Studies
  - Report 34 - Preparing for LNG by Rail Tank Car: A Readiness Review

- Transit Cooperative Research Program (TCRP)
  - Report 233 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way, Volume 1: Guidebook
  - Report 233 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way, Volume 2: Research Overview
  - Web-Only Document 76 - Performance-Based Track Geometry, Phase 3

Current & Upcoming Projects

- Current Projects
• **Upcoming Projects**
  o NCHRP 17-122 - Evaluation of Trespassing Detection and Warning Systems in the Vicinity of Highway-Rail Grade Crossings
  o TCRP D-22 - A Frog Design Primer and Research Roadmap
  o TCRP D-24 - Determination of Actual Derailment Loads on Transit Bridges
  o TCRP D-25 - Preparation of a Manuscript for Publication of the Track Design Handbook for Light Rail Transit, 3rd Edition

**Reports from the National Academies Press on Rail**
  o [Transportation and Infrastructure » Railroads](https://www.nap.edu/topics/railroads)
  o [Equitable and Resilient Infrastructure Investments](https://www.nap.edu/catalog/25962/equitable-and-resilient-infrastructure-investments)
  o [Corrosion of Buried Steel at New and In-Service Infrastructure](https://www.nap.edu/catalog/25961/corrosion-of-buried-steel-at-new-and-in-service-infrastructure)
  o [Investing in Resilient Infrastructure in the Gulf of Mexico](https://www.nap.edu/catalog/25959/investing-in-resilient-infrastructure-in-the-gulf-of-mexico)
  o [Service Life Assessment and Predictive Modeling for an Aging Critical Infrastructure](https://www.nap.edu/catalog/25958/service-life-assessment-and-predictive-modeling-for-an-aging-critical-infrastructure)

**Committees & Panels**

**Sign-up to be a committee "Friend"**

**TRB Standing Committees** - Search by transportation mode and committee topic
  o AMR10 - Critical Transportation Infrastructure Protection
  o AMR30 - Transportation for National Defense
  o AP065 – Urban Rail Transit Systems
  o AP075 - Light Rail Transit
  o AR000 - Rail Group
  o AR010 - Passenger Rail Transportation
  o AR020 - Rail Rolling Stock and Motive Power
  o AR030 - Railroad Operating Technologies
  o AR040 - Freight Rail Transportation
  o AR050 - Railroad Infrastructure Design and Maintenance
  o AR060 - Rail Transit Infrastructure Design and Maintenance
  o AR070 – Rail Safety
  o AR080 - Highway/Rail Grade Crossings
  o AT010 - Freight Transportation Economics and Regulation
  o AT015 - Freight Transportation Planning and Logistics
  o AT020 - International Trade and Transportation
  o AT030 - Agricultural and Food Transportation
  o AT040 - Transportation of Hazardous Materials
  o AT045 - Intermodal Freight Transport
  o E1008 - Rail Safety Innovations Deserving Exploratory Analysis (IDEA) Program Committee

**Task Forces** - Search for task force under committee here
CRP Panels

- D17122 - Evaluation of Trespassing Detection and Warning Systems in the Vicinity of Highway-Rail Grade Crossings
- D17123 - Guide for Evaluating the Safety Performance of Shared Railway-Highway Interfaces
- D2235 - Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- E1008 - Rail Safety Innovations Deserving Exploratory Analysis (IDEA) Program Committee
- STS059 - Electronic Surveillance of Railroad-Highway Crossings for Collision Avoidance, State of the Practice
- TD07 - Joint Track-Related Research with Assn of American Railroads -- Transportation Technology Center, Inc.
- TD24 - Determination of Actual Derailment Loads on Transit Bridges
- TD25 - Preparation of a Manuscript for Publication of the Track Design Handbook for Light Rail Transit, 3rd Edition
- TD26 - Develop a Rational Approach to Performing Rail Structure Interaction Analysis (RSI) and for Using the Results of the Analysis in Transit Bridge Design
- TJ1145 - Future of Commuter Rail

Policy Study

Councils

- A001C - Young Members Coordinating Council

Recent and Upcoming Events

Upcoming Events – In the Upcoming Events tab under Types, choose what event you are interested in, search titles by keyword

**TRB’s 2nd Conference on Advancing Transportation Equity**
*July 15-18, 2024*  
*Baltimore, MD*

**TRB’s Transportation Symposium on Environment, Energy, and Livable Economies**
*August 25-28, 2024*  
*Denver, CO*

**TRB’s International Conference on Women and Gender in Transportation**
*September 9-11, 2024*  
*Irvine, CA*

Past Events - In the Past Events tab under Types, choose what event you are interested in, search titles by keyword

**Innovations in Travel Analysis and Planning Conference**
*June 4-6, 2023*  
*Indianapolis, IN*

**National Conference on Transportation Asset Management**
*July 8-11, 2023*  
*Boston, MA*

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 - 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
- Publications Index (PubsIndex) Database – 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