TRB Snap Search: Rail

TRB's involvement in research on Rail from 2020-2021

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 within the past year.

**Subject Webpage**

- Rail Research at TRB

**Recent Reports & Publications**

- National Cooperative Highway Research Program (NCHRP)
  - Web-Only Document 287 - Planning and Implementing Multimodal, Integrated Corridor Management: Guidebook

- Safety IDEA Program
  - Report 41 - Vibration-based Longitudinal Rail Stress Estimation Exploiting Acoustic Measurement and Machine Learning
  - Report 40 - Using Light to Reduce Fatigue and Improve Alertness in Railway Operations
  - Report 39 - Non-Contact Scour Monitoring System for Railroad Bridges
  - Report 36 - Onboard High-Bandwidth Fiber-Optic Sensing System for Broken Rail Detection

- Special Reports / Consensus Studies
  - Report 337 - The Role of Transit, Shared Modes, and Public Policy in the New Mobility Landscape
  - Report 334 - Review of the Federal Railroad Administration’s Research and Development Program

- Transit Cooperative Research Program (TCRP)
  - IDEA Report 92 - Augmented Reality Dispatcher Interface
  - Report 218 - Characteristics and Elements of Non-Punitive Employee Safety Reporting Systems for Public Transportation
  - Synthesis 150 - Third Rail Insulator Failures: Current State of the Practice

- Transportation Research Circulars
  - E-Circular 266 - Transportation Asset Management in a COVID-19 World

**Current & Upcoming Projects**

- Current Projects
  - NCHRP 03-128 - Business Intelligence for Transportation System Management and Operations and Agency Decision Making
  - NCHRP 03-126 - Operational Standards for Highway Infrastructure
  - NCHRP 20-116 - Emergency Management in State Transportation Agencies

Updated 06/16/2021
- NCHRP IDEA 20-30 / IDEA 190 - Self-Deicing LED Signal for Railroad and Highway Intersections
- Safety IDEA Project 45 - Development of a Fatigue Load for Railway Bridges
- Safety IDEA Project 44 - Laser-based Non-destructive Spike Defect Inspection System
- Safety IDEA Project 43 - Augmenting Reality for Safer Inspections of Railroad Infrastructure and Operations
- Safety IDEA Project 38 - Fatigue Life Extension of Thermite Welds by Porosity Minimization
- TCRP A-44 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way
- TCRP D-07 - Joint Rail Transit Research with the Association of American Railroads/Transportation Technology Center, Inc.
- TCRP I-11/Task 37 - Transit and Micro-Mobility (Bikeshare, Scooter-share, etc.)

- **Upcoming Projects**
  - NCHRP 17-99 - Safety Effectiveness Assessment of Advanced Highway-Rail Grade Crossing Improvements
  - NCHRP 20-102(14) - Data Management Strategies for CV/AV Applications for Operations

- **Reports from the National Academies Press on Rail**
  - Global Change Research Needs and Opportunities for 2022-2031
  - Enhancing Federal Clean Energy Innovation
  - The Future of Electric Power in the United States
  - Reflecting Sunlight - Recommendations for Solar Geoengineering Research and Research Governance
  - Reducing Fuel Consumption and Greenhouse Gas Emissions of Medium- and Heavy-Duty Vehicles, Phase Two
  - Advancing Urban Sustainability in China and the United States
  - Strengthening Post-Hurricane Supply Chain Resilience - Observations from Hurricanes Harvey, Irma, and Maria

- **Committees & Panels**
  - **Sign-up to be a committee "Friend"**

- **Technical Activities Division Standing Committees** - Search by transportation mode and committee topic
  - 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
  - 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

- **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.)
How We Move Matters: Exploring the Connections between New Transportation and Mobility Options and Environmental Health
July 1, 2021
online

National Conference on Transportation Asset Management
August 10, 2021
online

XXI Pan-American Conference of Transport and Logistics 2021*
August 11, 2021
online

Conference on Transformative Times in Transportation Security
November 2, 2021
Washington, D.C.

Geo-Extreme Conference*
November 7, 2021
Savannah, GA

11th International Conference on the Bearing Capacity of Roads, Railways, and Airfields*
June 28, 2022
Trondheim, Norway

International Conference on Mobility and Transport for Older Adults and People with Disabilities (TRANSED)
September 1, 2022
Seattle, WA

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

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
- Research Needs Statements (RNS) – rns.trb.org - Research needs as identified by TRB Technical Activities standing committees
- 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