TRB Snap Search: Rail

TRB’s involvement in research on Rail from 2021-2022

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](http://www.trb.org/InformationServices/Snap.aspx) on TRB published research Rail within the past year.

Subject Webpage

- [Rail Research at TRB](http://www.trb.org/)

Specialty Report

- [Critical Issues in Transportation 2019](http://www.trb.org/)
- [COVID-19 Addendum to Critical Issues in Transportation](http://www.trb.org/)
- [Racial Equity Addendum to Critical Issues in Transportation](http://www.trb.org/)

Recent Reports & Publications

- [National Cooperative Highway Research Program (NCHRP)](http://www.trb.org/)
  - [Report 990 - Guidebook for Effective Policies and Practices for Managing Surface Transportation Debt](http://www.trb.org/)
  - [Web-Only Document 287 - Planning and Implementing Multimodal, Integrated Corridor Management: Guidebook](http://www.trb.org/)

- [Safety IDEA Program](http://www.trb.org/)
  - [Report 42 - Railroad Tunnel Inspections for Maintenance and Replacement Prioritization Using Untethered Ground Penetrating Radar and LIDAR Capable Unmanned Aerial Vehicles (UAVs)](http://www.trb.org/)
  - [Report 41 - Vibration-based Longitudinal Rail Stress Estimation Exploiting Acoustic Measurement and Machine Learning](http://www.trb.org/)
  - [Report 40 - Using Light to Reduce Fatigue and Improve Alertness in Railway Operations](http://www.trb.org/)
  - [Report 39 - Non-Contact Scour Monitoring System for Railroad Bridges](http://www.trb.org/)
  - [Report 38 - Minimization of Weld Failures by Means of Gas and Shrinkage Porosity Reduction](http://www.trb.org/)
  - [Report 37 - Measuring Behavior of Railroad Bridges under Revenue Traffic using Lasers and Unmanned Aerial Vehicles (UAVs) for Safer Operations: Implementation](http://www.trb.org/)
  - [Report 36 - Onboard High-Bandwidth Fiber-Optic Sensing System for Broken Rail Detection](http://www.trb.org/)

- [Special Reports / Consensus Studies](http://www.trb.org/)
  - [Report 339 - Preparing for LNG by Rail Tank Car: A Review of a U.S. DOT Safety Research, Testing, and Analysis Initiative](http://www.trb.org/)

- [Transit Cooperative Research Program (TCRP)](http://www.trb.org/)
  - [IDEA Report 92 - Augmented Reality Dispatcher Interface](http://www.trb.org/)
  - [Report 233 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way, Volume 1: Guidebook](http://www.trb.org/)

Updated 06/08/2022
- Report 233 - Strategies for Deterring Trespassing on Rail Transit and Commuter Rail Rights-of-Way, Volume 2: Research Overview

- 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
  - 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
  - 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

Reports from the National Academies Press on Rail

- Resilient Infrastructure in the Gulf of Mexico
- Service Life Assessment and Predictive Modeling for an Aging Critical Infrastructure
- Harnessing the Value of Co-Creating and Stewarding Places for Health, Equity, and Well-Being
- 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

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
  o B0137 - Evaluation of the Federal Railroad Administration Research and Development Program

Councils
  o A001C - Young Members Coordinating Council

Recent and Upcoming Events

Upcoming TRB Conferences – Use left hand menu to filter events

  TRANSED: Mobility, Accessibility, and Demand Response Transportation Conference
  September 12-16, 2022
  Online

  Conference on Scenario Planning in Transportation Planning
  September 19-21, 2022
  Washington, D.C.

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

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

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