TRB Snap Search: Rail

TRB's involvement in research on Rail from 2022-2023

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 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 345 - 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

Current & Upcoming Projects

- Current Projects
  - NCHRP 03-128 - Business Intelligence for Transportation System Management and Operations and Agency Decision Making
- Operational Standards for Highway Infrastructure
- NCHRP 17-99 - Safety Effectiveness Assessment of Advanced Highway-Rail Grade Crossing Improvements
- 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.

- Upcoming Projects
  - NCHRP 17-122 - Evaluation of Trespassing Detection and Warning Systems in the Vicinity of Highway-Rail Grade Crossings
  - TCRP D-22 - A Frog Design Primer and Research Roadmap

Reports from the National Academies Press on Rail
- Transportation and Infrastructure » Railroads
  - Equitable and Resilient Infrastructure Investments
  - Corrosion of Buried Steel at New and In-Service Infrastructure
  - Investing in 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

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic
- AMR10 - Critical Transportation Infrastructure Protection
- AMR30 - Transportation for National Defense
- AP065 - Urban Rail Transit Systems
- AP075 - Light Rail Transit
- AR000 - Rail Group
- AR010 - Passenger Rail Transportation
- AR020 - Rail Rolling Stock and Motive Power
- 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
- AT015 - Freight Transportation Planning and Logistics
- AT020 - International Trade and Transportation
- AT030 - Agricultural and Food Transportation
- AT040 - Transportation of Hazardous Materials
- AT045 - Intermodal Freight Transport
- E1008 - Rail Safety Innovations Deserving Exploratory Analysis (IDEA) Program Committee

Task Forces - Search for task force under committee here

CRP Panels
- D2235 - Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- STSA59 - 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.

Policy Study

Councils
- A001C - Young Members Coordinating Council

Recent and Upcoming Events

Upcoming TRB Conferences – Use left hand menu to filter events

Innovations in Travel Analysis and Planning Conference
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
- 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