TRB Snap Search: Construction

TRB’s involvement in research on Construction 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

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 on Construction within the past year.

Subject Webpage
- Construction Research at TRB

Recent Reports & Publications
- Airport Cooperative Research Program (ACRP)
  - Legal Research Digest 38 - Legal Issues Related to Large-Scale Airport Construction Projects
  - Report 214 - BIM Beyond Design Guidebook

- National Cooperative Highway Research Program (NCHRP)
  - Legal Research Digest 80 - Buy America Requirements for Federal Highway Projects
  - Report 960 - Proposed AASHTO Practice and Tests for Process Control and Product Acceptance of Asphalt-Treated Cold Recycled Pavements
  - Report 946 - Procedures and Guidelines for Validating Contractor Test Data
  - Report 945 - Strategies for Work Zone Transportation Management Plans
  - Report 939 - Guidebooks for Post-Award Contract Administration for Highway Projects Delivered Using Alternative Contracting Methods, Volume 1: Design–Build Delivery
  - Report 939 - Guidebooks for Post-Award Contract Administration for Highway Projects Delivered Using Alternative Contracting Methods, Volume 2: Construction Manager–General Contractor Delivery
  - Report 939 - Guidebooks for Post-Award Contract Administration for Highway Projects Delivered Using Alternative Contracting Methods, Volume 3: Research Overview
  - Report 937 - Guidebook for Implementing Alternative Technical Concepts in All Types of Highway Project Delivery Methods
  - Report 933 - Evaluating Mechanical Properties of Earth Material During Intelligent Compaction
  - Report 923 - Workforce Optimization Workbook for Transportation Construction Projects
  - Report 750 - Strategic Issues Facing Transportation, Volume 7: Preservation, Maintenance, and Renewal of Highway Infrastructure
  - Report 553 - Performance-Based Pavement Warranty Practices
  - Synthesis 563 - Performance Metrics for Public–Private Partnerships
  - Synthesis 548 - Development and Use of As-Built Plans by State Departments of Transportation
  - Synthesis 545 - Electronic Ticketing of Materials for Construction Management
  - Synthesis 544 - Concrete Technology for Transportation Applications
  - Web-Only Document 277 - Implementing Alternative Technical Concepts in All Types of Highway Project Delivery Methods
Transportation Research Circulars
- E-Circular 272 - Technology Exchange on Local Roads Bridge Programs
- E-Circular 260 - Managing Highway Rock Slope Scaling

Current & Upcoming Projects

- Current Projects
  - ACRP 02-90 - Development of Airport Construction Emission Inventory Tool (ACEIT) Version 2.0
  - ACRP 08-03 - Construction Safety and Phasing Plans
  - ACRP 11-02/Task 30 - Research Roadmap in the Area of Design and Construction of Airport Facilities and Infrastructure
  - NCHRP 02-25 - Workforce 2030--Attracting, Retaining, and Developing the Transportation Workforce: Design, Construction, and Maintenance
  - NCHRP 03-132 - Guidance for Safe and Effective Temporary Traffic Control for Mobile Operations on Two-Lane Two-Way Roadways
  - NCHRP 03-140 - Guidelines for Applications of RFID and Wireless Technologies in Highway Construction and Asset Management
  - NCHRP 05-24 - Guidelines for Vehicle and Equipment Color, Marking, and Lighting
  - NCHRP 09-64 - Developing Laboratory Methods and Specifications to Test Tack Coat Materials
  - NCHRP 10-109 - Modern Solutions to Safe and Efficient Work Zone Travel
  - NCHRP 10-102 - A Guidebook for Risk-Based Construction Inspection
  - NCHRP 11-08 - Improving Rights-of-Way Acquisition and Compensation Practices for Utility Relocation
  - NCHRP 12-95A - Proposed AASHTO Guidelines for Adjacent Precast Concrete Box Beam Bridge Systems
  - NCHRP 12-120 - Stainless Steel Strands for Prestressed Concrete Bridge Elements
  - NCHRP 14-43 - Construction Guide Specifications for Cold Central Plant Recycling and Cold In-Place Recycling
  - NCHRP 14-44 - Guide Specifications for the Construction of Slurry Seals, Scrub Seals, and Tack Coats
  - NCHRP 14-46 - Guidelines for the Maintenance and Construction of Rumble Strips
  - NCHRP 15-69 - Utility Conflict Impacts During Highway Construction
  - NCHRP 15-71 - Contingency Factors to Account for Risk in Early Construction Cost Estimates for Transportation Infrastructure Projects
  - NCHRP 18-18 - Design and Construction of Deck Bulb Tee Girder Bridges with UHPC
  - NCHRP 20-06/Topic 25-03 - Managing Enhanced Risk in the Mega Project Era
  - NCHRP 20-06/Topic 25-05 - The Legal Issues Associated with Consequential Damages Provisions in Construction Contracts
  - NCHRP 20-44(26) - Implementing Guide Specifications for the Construction of Chip Seals, Micro Surfacing, and Fog Seals
  - NCHRP 20-50(18) - LTPP Data Analysis: Significance of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
  - NCHRP 20-102(28) - Preparing Transportation Agencies for Connected and Automated Vehicles in Work Zones
  - NCHRP 23-05 - Guidance for Training and Certification of Construction Inspectors for Transportation Infrastructure
  - NCHRP 25-60 - Watershed Approach to Mitigating Hydrologic Impacts of Transportation Projects
  - NCHRP 25-62 - Improving the Efficiency and Consistency of Section 106 Compliance for State DOTs: Strategies for Project-Level Programmatic Agreements and Postwar Commercial Properties
  - NCHRP IDEA 20-30/IDEA 226 - A Smart IoT Proximity Alert System for Highway Work Zone Safety
  - NCHRP Synthesis 20-05/Topic 50-07 - Electronic Ticketing of Materials for Construction Management
  - NCHRP Synthesis 20-05/Topic 51-04 - Practices for Selecting Pedestrian and Bicycle Projects
  - NCHRP Synthesis 20-05/Topic 51-17 - Practices for Closing Out Highway Projects from Substantial Completion to Final Payment
  - NCHRP Synthesis 20-05/Topic 52-01 - Highway Infrastructure Inspection Practices for the Digital Age
  - NCHRP Synthesis 20-05/Topic 52-04 - Use of Unmanned Aircraft Systems for Departments of Transportation
  - NCHRP Synthesis 20-05/Topic 52-05 - Implementation of Subsurface Utility Engineering for Highway Design and Construction
  - NCHRP Synthesis 20-05/Topic 52-06 - Agency Inspection and Monitoring of Quality Control Plans for Use in Administering Quality Assurance Specifications
  - NCHRP Synthesis 20-05/Topic 52-11 - Use of Smart Work Zone Technologies for Improving Work Zone Safety
  - NCHRP Synthesis 20-05/Topic 52-14 - Models as Construction Contract Documents
• **Upcoming Projects**
  - NCHRP 08-148 - Utility Abandonment, Out of Service Plant, and Decommissioning without Removal on Public Right of Way
  - NCHRP 08-155 - Researching and Responding to Racial Disparities in Construction
  - NCHRP 10-110 - 3D Modeling Guide for Construction Inspection
  - NCHRP 10-111 - Evaluation and Selection of 3D Model Viewers for Construction Inspection
  - NCHRP 10-112 - Guidelines for Digital Technologies and Systems for Remote Construction Inspection for Highway Infrastructure Projects
  - NCHRP 10-113 - Design Review and 3D Model Quality Management for Model-based Design and Construction
  - NCHRP 12-124 - Improved Demand Predictions on Shear Stubs for Composite Steel Bridge Design
  - NCHRP 14-48 - Construction Guide Specifications for Pavement Treatments - Sand Seals and Ultra-thin Bonded Surface Treatments
  - NCHRP 20-06/Topic 25-06 - Legal Issues and Strategies for Best-Value Procurement for Highway Construction
  - NCHRP 20-07/Task 35B - Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers
  - NCHRP 22-56 - Development of Prefabricated Concrete Barrier Systems for Accelerated Bridge Construction
  - NCHRP 25-63 - Handbook on Deterring and Excluding Bats from Transportation Structures
  - NCHRP Synthesis 20-05/Topic 53-02 - Practices to Motivate Safe Behaviors with Highway Construction and Maintenance Crews
  - NCHRP Synthesis 20-05/Topic 53-07 - Curing Practices for Concrete Pavement
  - NCHRP Synthesis 20-05/Topic 53-09 - Use of Unmanned Aerial Systems for Highway Stormwater Inspections
  - TCRP J-05/Topic 19-04 - Transit Sponsor and Contractor Delay Damages and Remedies Due to Third Parties - Transit Facility Improvements -Common Legal Issues and Solutions

Reports from the [National Academies Press](https://www.nap.edu) on Construction

- [Bringing Fusion to the U.S. Grid](https://www.nap.edu/read/17883)
- [Strengthening Post-Hurricane Supply Chain Resilience](https://www.nap.edu/read/18769)

**Committees & Panels**

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

**TRB Standing Committees** – Search by transportation mode and committee topic

- ACP55 – Traffic Control Devices
- AIE60 – Contracting Equity
- AK000 – Transportation Infrastructure Group
- AKC10 – Construction Management
- AKC20 – Project Delivery Methods
- AKC30 – Quality Assurance Management
- AKC40 – Construction of Bridges and Structures
- ACK50 – Concrete Pavement Construction and Rehabilitation
- ACK60 – Asphalt Pavement Construction and Rehabilitation
- ACK70 – Fabrication and Inspection of Metal Structures
- AKD70 – Geospatial Data Acquisition Technologies
- AKG50 – Transportation Earthworks
- AKG70 – Foundations of Bridges and Other Structures
- AKG90 - Stabilization of Geomaterials and Recycled Materials
- AKM50 – Advanced Concrete Materials and Characterization
- AKM60 – Properties of Concrete and Constituent Materials
- AKM70 – Durability of Concrete

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

**CRP Panels**

- [Project Panels Related to Construction](https://www.trb.org)

**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.)

- **World Transport Convention 2021***
  June 15, 2021

- **International Symposium on Frontiers of Road and Airport Engineering***
  July 12, 2021
  online

- **Geospatial Data Acquisition Technologies in Design and Construction Summer Committee Meeting**
  July 27, 2021

- **Bridging Transportation Researchers Online Conference***
  August 5, 2021

- **GeoChina 2021 International Conference***
  September 18, 2021
  NanChang, Jiangxi, China

- **12th International Conference on Concrete Pavements***
  September 27, 2021
  online

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

- **Accelerated Bridge Construction Conference***
  December 8, 2021
  online

- **American Society of Civil Engineers (ASCE) Geo-Congress 2022***
  March 20, 2022
  Charlotte, NC

- **International Conference on Roundabouts**
  April 1, 2022
  Monterey, CA

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

Past Webinars
  - Construction

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 - 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