

**TRB** TRANSPORTATION RESEARCH BOARD

## TRB Snap Search: Construction

### TRB's involvement in research on Construction 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>

### 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](#)

### Specialty Report

- [Critical Issues in Transportation 2019](#)
- [COVID-19 Addendum to Critical Issues in Transportation](#)
- [Racial Equity Addendum to Critical Issues in Transportation](#)

### Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
  - [Report 214](#) - BIM Beyond Design Guidebook
- [National Cooperative Highway Research Program \(NCHRP\)](#)
  - [Report 965](#) - Mitigation of Weldment Cracking in Steel Highway Structures Due to the Galvanizing Process
  - [Report 960](#) - Proposed AASHTO Practice and Tests for Process Control and Product Acceptance of Asphalt-Treated Cold Recycled Pavements
  - [Synthesis 574](#) - Temporary Pavement Markings Placement and Removal Practices in Work Zones
  - [Synthesis 570](#) - Practices for Closing Out Highway Projects from Substantial Completion to Final Payment
  - [Synthesis 566](#) - Practices for Bridge Approach Systems
  - [Synthesis 563](#) - Performance Metrics for Public-Private Partnerships
  - [Synthesis 560](#) - Practices for Construction-Ready Digital Terrain Models
  - [Web-Only Document 299](#) - Investigating the Relationship of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
- [Transportation Research Circulars](#)
  - [E-Circular 274](#) - Quality Assurance: Past, Present, and Future
  - [E-Circular 272](#) - Technology Exchange on Local Roads Bridge Programs

### Current & Upcoming Projects

- [Current Projects](#)
  - [ACRP 02-90](#) - Development of Airport Construction Emission Inventory Tool (ACEIT) Version 2.0
  - [ACRP 03-56](#) - Airside Planning, Design, Construction, Operations, and Maintenance: WebResource
  - [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 08-114](#) - Systematic Approach for Estimating Construction Contract Time: A Guidebook
- [NCHRP 09-64](#) - Developing Laboratory Methods and Specifications to Test Tack Coat Materials
- [NCHRP 10-102](#) - A Guidebook for Risk-Based Construction Inspection
- [NCHRP 10-108](#) - Manual for Incorporating Nondestructive Testing (NDT) in Quality Assurance of Highway Pavement Construction
- [NCHRP 10-109](#) - Modern Solutions to Safe and Efficient Work Zone Travel
- [NCHRP 10-110](#) - 3D Modeling Guide for 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 20-06/Topic 25-06](#) - Legal Issues and Strategies for Best-Value Procurement for Highway Construction
- [NCHRP 20-07/Task 358](#) - Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers
- [NCHRP 20-44\(26\)](#) - Implementing Guide Specifications for the Construction of Chip Seals, Micro Surfacing, and Fog Seals
- [NCHRP 20-44\(29\)](#) - Training for Highway Construction Noise Prediction Model-RCNM2.0
- [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 25-63](#) - Handbook on Detering and Excluding Bats from Transportation Structures
- [NCHRP 25-64](#) - Considering Greenhouse Gas Emissions and Climate Change in Environmental Reviews: Resources for State DOTs
- [NCHRP IDEA 20-30/IDEA 226](#) - A Smart IoT Proximity Alert System for Highway Work Zone Safety
- [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
- [NCHRP Synthesis 20-05/Topic 52-19](#) - Technological Capabilities of DOTs for Digital Project Management and Delivery
- [NCHRP Synthesis 20-05/Topic 53-07](#) - Curing Practices for Concrete Pavement
- [NCHRP Synthesis 20-05/Topic 53-11](#) - Resilient Design with Distributed Rainfall-Runoff Modeling
- [TCRP J-05/Topic 20-01](#) - Legal Issues in Transit Mega Projects--Case Studies
- [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 10-111](#) - 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 Studs 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 26-02](#) - Analysis of Arbitration and Holdings in Construction Disputes
- [NCHRP 22-56](#) - Development of Prefabricated Concrete Barrier Systems for Accelerated Bridge Construction
- [NCHRP 24-51](#) - Effects of Construction Installation Methods on the Design and Performance of Drilled Shaft Foundations
- [NCHRP Synthesis 20-05/Topic 53-02](#) - Practices to Motivate Safe Behaviors with Highway Construction and Maintenance Crews
- [NCHRP Synthesis 20-05/Topic 53-09](#) - Use of Unmanned Aerial Systems for Highway Stormwater Inspections
- [TCRP I-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](#) on Construction

- [Service Life Assessment and Predictive Modeling for an Aging Critical Infrastructure](#)
- [Bringing Fusion to the U.S. Grid](#)

### Committees & Panels

[Sign-up to be a committee "Friend"](#)

[TRB Standing Committees](#) – Search by transportation mode and committee topic

- [ACP55](#) – Traffic Control Devices
- [AJE60](#) – Contracting Equity
- [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](#)

### 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.)*

[Transportation Infrastructure Innovations for Durability and Resilience \(TriDurLE 2021\)\\*](#)

December 6, 2021

Online

[TRB Virtual Careers in Motion Networking Fair](#)

December 8, 2021

Washington, DC

**[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](#)**

*May 15, 2022*

**Monterey, CA**

**[Geospatial Data Acquisition Technologies in Design and Construction Summer Committee Meeting](#)**

*July 1, 2022*

**Austin, TX**

**[International Conference of International Society for Intelligent Construction\\*](#)**

*September 6, 2022*

**Guimaraes, Portugal**

**[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](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](http://rip.trb.org) - Current or recently completed transportation research projects
- **Research Needs Statements (RNS)** – [rns.trb.org](http://rns.trb.org) - Research needs as identified by TRB Technical Activities standing committees
- **Publications Index (PubsIndex) Database** – [pubsindex.trb.org](http://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](mailto:TRBLibrary@nas.edu)