TRB Snap Search: Construction

TRB’s involvement in research on Construction from 2019-2020

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 196 - Guidebook for Integrating Collaborative Partnering into Traditional Airport Practices
  - Synthesis 102 - Value, Benefits, and Limitations of Qualifications-Based Selection for Airport Project Delivery
  - Web-Only Document 40 - Airport Design and Construction Narrative Research Roadmap

- National Cooperative Highway Research Program (NCHRP)
  - Legal Research Digest 80 - Buy America Requirements for Federal Highway Projects
  - Report 946 - Procedures and Guidelines for Validating Contractor Test Data
  - 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 923 - Workforce Optimization Workbook for Transportation Construction Projects
  - Report 916 - Sustainable Highway Construction Guidebook
  - Report 908 - Acceptance Criteria of Complete Joint Penetration Steel Bridge Welds Evaluated Using Enhanced Ultrasonic Methods
  - Report 750 - Strategic Issues Facing Transportation, Volume 7: Preservation, Maintenance, and Renewal of Highway Infrastructure
  - Synthesis 548 - Development and Use of As-Built Plans by State Departments of Transportation
  - Synthesis 544 - Concrete Technology for Transportation Applications
  - Synthesis 540 - Leveraging Private Capital for Infrastructure Renewal
  - Synthesis 536 - Bridge Demolition Practices

- Special Reports
  - Report 330 - Performance of Bridges That Received Funding Under the Innovative Bridge Research and Construction Program

- Transit Cooperative Research Program (TCRP)
  - Report 207 - Fast-Tracked: A Tactical Transit Study

Updated 06/10/2020
• **Transportation Research Circulars**
  - E-Circular 260 - Managing Highway Rock Slope Scaling
  - E-Circular 249 - Key Elements of Construction Quality Assurance for Implementation
  - E-Circular 248 - 12th International Conference on Low-Volume Roads

**Current & Upcoming Projects**

• **Current Projects**
  - ACRP 08-03 - Construction Safety and Phasing Plans
  - ACRP 09-15 - Building Information Modeling (BIM) Beyond Design
  - 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 03-111 - Effectiveness of Work Zone Transportation Management Plan (TMP) Strategies
  - NCHRP 03-132 - Guidance for Safe and Effective Temporary Traffic Control for Mobile Operations on Two-Lane Two-Way Roadways
  - NCHRP 05-24 - Guidelines for Vehicle and Equipment Color, Marking, and Lighting
  - NCHRP 08-112 - A Guidebook for Implementing Alternative Technical Concepts into Project Delivery Methods
  - NCHRP 09-62 - Rapid Tests and Specifications for Construction of Asphalt-Treated Cold Recycled Pavements
  - NCHRP 09-64 - Developing Laboratory Methods and Specifications to Test Tack Coat Materials
  - NCHRP 10-101 - Improving Mid-Term, Intermediate, and Long-Range Cost Forecasting: Guidance for State Departments of Transportation
  - 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 14-43 - Construction Guide Specifications for Cold Central Plant Recycling and Cold In-Place Recycling
  - NCHRP 18-18 - Design and Construction of Deck Bulb Tee Girder Bridges with UHP
  - NCHRP 20-50(18) - LTPP Data Analysis: Significance of As-Constructed Asphalt Pavement Air Voids to Pavement Performance
  - 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 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

• **Upcoming Projects**
  - ACRP 02-90 - Update the Airport Construction Emission Inventory Tool (ACEIT)
  - NCHRP 03-140 - Guidelines for Applications of RFID and Wireless Technologies in Highway Construction and Asset Management
  - NCHRP 08-148 - Utility Abandonment, Out of Service Plant, and Decommissioning without Removal on Public Right of Way
  - NCHRP 10-110 - 3D Modeling Guide for Construction Inspection
  - NCHRP 12-120 - Stainless Steel Strands for Prestressed Concrete Bridge Elements
  - NCHRP 14-44 - Guide Specifications for the Construction of Slurry Seals, Scrub Seals, and Tack Coats
  - 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 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 Aspects of Best-Value Procurement for Highway Construction (Update)
Reports from the National Academies Press on Construction

- Strengthening Post-Hurricane Supply Chain Resilience
- Developing Norms for the Provision of Biological Laboratories in Low-Resource Contexts
- Environmental Engineering for the 21st Century
- Independent Assessment of Science and Technology for the Department of Energy's Defense Environmental Cleanup Program

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

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.)

Bridging Transportation Researchers Online Conference*
August 12, 2020
Online
GeoMEast International Conference 2020: "Sustainable Civil Infrastructures"
November 8, 2020
Cairo, Egypt

Second International Conference on 3D Printing and Transportation
April 21, 2021
Washington, DC

GeoChina 2021 International Conference*
July 19, 2021
NanChang, Jiangxi, China

12th International Conference on Concrete Pavements*
August 29, 2021
Minneapolis, Minnesota

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

TRB’s Transportation Research Information Services (TRIS)
TRIS includes the TRB Library and the TRIS Databases (listed below) which are available for 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:

TRID – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation - trid.trb.org

Publications Index (PubsIndex) Database – The papers, articles and reports published by the Transportation Research Board, Highway Research Board, Strategic Highway Research Programs or the Marine Board - pubsindex.trb.org

Research in Progress (RiP) Database – Current or recently completed transportation research projects - rip.trb.org

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

Contact the Library at TRBLibrary@nas.edu or l (202) 334-2989