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- Opportunities for information exchange on current transportation research and practice
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- 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 Bridges & Other Structures within the past two years.

Subject Webpage

- Bridges & Other Structures 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

- Innovations Deserving Exploratory Analysis (IDEA)
  - Safety Report 45 - Development of a Fatigue Load for Railway Bridges
  - Safety Report 42 - Railroad Tunnel Inspections for Maintenance and Replacement Prioritization Using Untethered Ground Penetrating Radar and LIDAR Capable Unmanned Aerial Vehicles (UAVs)
  - Safety Report 39 - Non-Contact Scour Monitoring System for Railroad Bridges
  - Safety Report 37 - Measuring Behavior of Railroad Bridges under Revenue Traffic using Lasers and Unmanned Aerial Vehicles (UAVs) for Safer Operations: Implementation
- National Cooperative Highway Research Program (NCHRP)
  - IDEA Report 220 - Bridge Deck Sealer Monitor: Thermal Sealcheck
  - IDEA Report 210 - Material Characteristics of Cu-Based Superelastic Alloys for Applications in Bridge Columns to Improve Seismic Performance
  - IDEA Report 205-A - Bio-Inspired "MRI" of Concrete Bridges using Waveform-Based Ultrasonic Tomography
  - Report 999 - Design and Construction of Deck Bulb Tee Girder Bridges with UHPC Connections
  - Report 994 - Use of 0.7-in. Diameter Strands in Precast Pretensioned Girders
  - Report 989 - Reliability-Based Geotechnical Resistance Factors for Axially Loaded Micropiles
  - Report 971 - Revised Clear-Water and Live-Bed Contraction Scour Analysis
  - Report 965 - Mitigation of Weldment Cracking in Steel Highway Structures Due to the Galvanizing Process
  - Report 962 - Proposed Modification to AASHTO Cross-Frame Analysis and Design
  - Report 958 - Electrochemical Test Methods to Evaluate the Corrosion Potential of Earthen Materials
  - Synthesis 585 - Bridge Element Data Collection and Use
  - Synthesis 581 - Rehabilitation of Culverts and Buried Storm Drain Pipes
Current & Upcoming Projects

- **Synthesis 580** - Practices for Ensuring the Smoothness of Concrete Bridge Decks
- **Synthesis 577** - Collaborative Practices for Performance-Based Asset Management Between State DOTs and MPOs
- **Synthesis 571** - Load Rating of Bridges and Culverts with Missing or Incomplete As-Built Information
- **Synthesis 566** - Practices for Bridge Approach Systems
- **Synthesis 562** - Repair and Maintenance of Post-Tensioned Concrete Bridges
- **Web-Only Document 326** - Design Guidelines for Test Level 3 through Test Level 5 Roadside Barrier Systems Placed on Mechanically Stabilized Earth Retaining Walls
- **Web-Only Document 315** - Details of the Study on the Use of 0.7-in Diameter Strands in Precast Pretensioned Girders
- **Web-Only Document 314** - Updating the AASHTO LRFD Movable Highway Bridge Design Specifications
- **Web-Only Document 307** - Recommended Guidelines for the Selection of Test Levels 2 Through 5 Bridge Railings

- **Transportation Research Circulars**
  - **E-Circular 273** - History and Future Perspectives on Foundation Design for Transportation Structures
  - **E-Circular 272** - Technology Exchange on Local Roads Bridge Programs

**Current Projects**

- **NCHRP 08-139** - Guide for Preventing and Mitigating the Risk of Bridge and Tunnel Strikes by Motor Vehicles
- **NCHRP 12-95A** - Proposed AASHTO Guidelines for Adjacent Precast Concrete Box Beam Bridge Systems
- **NCHRP 12-115** - Guidelines for Risk-Based Inspection and Strength Evaluation of Suspension Bridge Main Cable Systems
- **NCHRP 12-116A** - Proposed AASHTO Specifications for Design of Piles for Downdrag
- **NCHRP 12-117** - Guidelines for Corrosion Protection of Steel Bridges Using Duplex Coating Systems
- **NCHRP 12-118** - Design and Construction Specifications for Bonded and Unbonded Post-Tensioned Concrete Bridge Elements
- **NCHRP 12-119** - MASH Railing Load Requirements for Bridge Deck Overhang
- **NCHRP 12-120** - Stainless Steel Strands for Prestressed Concrete Bridge Elements
- **NCHRP 12-121** - Guidelines for the Design of Prestressed Concrete Bridge Girders Using FRP Auxiliary Reinforcement
- **NCHRP 12-122** - Proposed AASHTO Guidelines for Applications of Unmanned Aerial Systems Technologies for Element-Level Bridge Inspection
- **NCHRP 12-123** - Proposed AASHTO Guideline for Load Rating of Segmental Bridges
- **NCHRP 12-124** - Design of Stud Shear Connectors in Composite Steel Bridges
- **NCHRP 14-45** - Guidelines for Response Planning, Assessment, and Rapid Restoration of Service of Bridges in Extreme Events
- **NCHRP 22-35** - Evaluation of Bridge Rail Systems to Confirm AASHTO MASH Compliance
- **NCHRP 22-41** - Proposed Modification to AASHTO LRFD Bridge Design Specifications, Section 13 — Railing
- **NCHRP 22-43** - Proposed AASHTO Guidelines for Implementation of MASH for Sign Supports, Breakaway Poles, and Work Zone Traffic Control Devices
- **NCHRP 22-56** - Development of Non-proprietary Prefabricated Solutions for Concrete Barrier Systems for Accelerated Bridge Construction
- **NCHRP 23-08** - A Guide for Incorporating Maintenance Costs into a Transportation Asset Management Plan
- **NCHRP 24-48** - A Methodology for Determining Scour Depth around Structures in Gravel-bed Rivers
- **NCHRP 25-61** - Development of On-Bridge Stormwater Treatment Practices
- **NCHRP 25-63** - Handbook on Deterring and Excluding Bats from Transportation Structures
- **NCHRP IDEA 20-30/IDEA 215** - Achieving Resilient Multi-Span Bridges by using Buckling-Restrained Braces
- **NCHRP IDEA 20-30/IDEA 222** - Mixed Reality Assisted Infrastructure Inspections
- **NCHRP IDEA 20-30/IDEA 223** - Fatigue Crack Inspection Using Computer Vision and Augmented Reality
- **NCHRP IDEA 20-30/IDEA 227** - Adjustable Cross-frames for the Erection of Steel Girder Bridges
- **NCHRP IDEA 20-30/IDEA 230** - Automated Data and Feature Extraction from Bridge Plan
- **NCHRP IDEA 20-30/IDEA 235** - High Bond Steel Fibers for Ultra High Performance Concrete (UHPC)
- **NCHRP IDEA 20-30/IDEA 239** - A Real-Time Ice Warning System Empowered by Dielectric Ice Sensors for Bridges
- **NCHRP IDEA 20-30/IDEA 240** - Stainless Steel Coated Rebar for Chloride Resistant Concrete Highways and Bridges
- **NCHRP Synthesis 20-05/Topic 53-11** - Resilient Design with Distributed Rainfall Modeling
- **NCHRP Synthesis 20-05/Topic 53-12** - Practices for Adding Bicycle and Pedestrians Access on Existing Vehicle Bridges

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- **NCHRP Synthesis 20-05/Topic 53-13** - Practices for Steel Bridge Fabrication and Erection Tolerances
- **NCHRP Synthesis 20-05/Topic 54-11** - Quality Control Checks for Bridge and Structure Analysis Models
- **NCHRP Synthesis 20-05/Topic 54-19** - Practices for Controlling Tunnel Leaks
- **TCRP D-19** - Detecting and Mitigating Low-Level DC Fault Currents in Transit Systems (Phase II TCRP Project D-17)

**Upcoming Projects**
- **NCHRP 10-111** - Guide for 3D Model Viewers for Construction Inspection
- **NCHRP 10-118** - Guidance for Efficient Timelines and Incentives/Disincentives for Accelerated Bridge Construction Projects
- **NCHRP 10-121** - Guidelines for the Application of Ground Modification Methods for Highway Structures
- **NCHRP 10-125** - Update Bridge Construction Requirements
- **NCHRP 12-125** - Earthquake-Induced Bridge Displacements
- **NCHRP 14-36** - Implementation of Bridge Preservation Actions
- **NCHRP 20-123(16)** - Roadmap for the Transformation to Computer Simulation-Based Assessment of Bridge Railings

**Reports from the National Academies Press on Bridges & Other Structures**
- Transportation and Infrastructure » Bridges and Other Structures
  - Equitable and Resilient Infrastructure Investments
  - Service Life Assessment and Predictive Modeling for an Aging Critical Infrastructure

**Committees & Panels**

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**TRB Standing Committees** – Search by transportation mode and committee topic
- **AKB00** - Bridges and Structures
- **AKB10** - Innovative Highway Structures and Appurtenances
- **AKB20** - Steel Bridges
- **AKB30** - Concrete Bridges
- **AKB40** - Testing and Evaluation of Transportation Structures
- **AKB50** - Seismic Design and Performance of Bridges
- **AKB60** - Tunnels and Underground Structures
- **AKB70** - Culverts, Buried Bridges and Soil Structure Interaction
- **AKC40** - Construction of Bridges and Structures
- **AKC70** - Fabrication and Inspection of Metal Structures
- **AKM50** - Advanced Concrete Materials and Characterization
- **AKG70** - Foundations of Bridges and Other Structures
- **AKM70** - Durability of Concrete
- **AKT40** - Structures Maintenance
- **AKT50** - Bridge and Structures Management
- **AKT60** - Bridge Preservation
- **AR050** - Railroad Infrastructure Design and Maintenance
- **AR060** - Rail Transit Infrastructure Design and Maintenance
- **B0162** - Review of Federal Highway Administration Infrastructure R&D – Expert Task Group on Bridges

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

**CRP Panels**
- **D10121** - Performance-based Specification for the Application of Ground Modification Methods for Bridges, Retaining Structures, and Associated Geotechnical Features
- **D1094** - Mitigation of Weldment Cracking of Highway Steel Structures due to the Galvanizing Process
- **D1095** - Toughness Requirements for Heat-Affected Zones of Welded Structural Steels for Highway Bridges
- **D12108** - Development of Guidelines for Uniform Service Life Design for Bridges
- **D12118** - Structural Design and Analysis of Post-Tensioned Concrete Structures with Flexible Fillers
- **D12123** - Proposed AASHTO Guideline for Load Rating of Segmental Bridges
- **D12124** - Design of Stud Shear Connectors in Composite Steel Bridges
Recent and Upcoming Events

Upcoming TRB Conferences – Use left hand menu to filter events

**International Conference on Road Weather and Winter Maintenance**
*May 9-10, 2023*
*Washington, D.C.*

**National Aviation System Planning Symposium**
*May 15-18, 2023*
*Irving, CA*

**Marine Transportation System Innovative Science and Technologies Toward Greater Sustainability**
*June 19-22, 2023*
*Washington, D.C.*

**National Conference on Transportation Asset Management**
*July 8-11, 2023*
*Boston, MA*

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- 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

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