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- Opportunities for information exchange on current transportation research and practice
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All available Snap Searches can be accessed online here: [http://www.trb.org/InformationServices/Snap.aspx](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 Materials within the past year.

**Subject Webpage**

- [Materials Research at TRB](#)

**Recent Reports & Publications**

- [IDEA Projects](#)
  - [Safety IDEA Report 41](#) - Vibration-based Longitudinal Rail Stress Estimation Exploiting Acoustic Measurement and Machine Learning
  - [Safety IDEA Report 33](#) - Adaptive Prestressing System for Concrete Crossties

- [National Cooperative Highway Research Program (NCHRP)](#)
  - [NCHRP 20-44(04)](#) - Implementing Products from NCHRP Research on Adhesive Anchor Systems
  - [IDEA Report 208](#) - Determining Bridge Deck Chloride Quantities Using Ground Penetrating Radar
  - [IDEA Report 207](#) - MILDGLASS: GFRP Strand for Resilient Mild Pre-Stressed Concrete
  - [IDEA Report 204](#) - Biomimetic Antifreeze Molecules: A Novel Solution to Deicing Salts and Air-Entraining Admixtures
  - [Legal Research Digest 80](#) - Buy America Requirements for Federal Highway Projects
  - [Report 973](#) - Long-Term Aging of Asphalt Mixtures for Performance Testing and Prediction: Phase III Results
  - [Report 967](#) - Asphalt Binder Aging Methods to Accurately Reflect Mixture Aging
  - [Report 961](#) - Entrained Air-Void Systems for Durable Highway Concrete
  - [Report 960](#) - Proposed AASHTO Practice and Tests for Process Control and Product Acceptance of Asphalt-Treated Cold Recycled Pavements
  - [Report 958](#) - Improved Test Methods and Practices for Characterizing Steel Corrosion Potential of Earthen Materials
  - [Report 946](#) - Procedures and Guidelines for Validating Contractor Test Data
  - [Report 933](#) - Evaluating Mechanical Properties of Earth Material During Intelligent Compaction
  - [Report 927](#) - Evaluating the Effects of Recycling Agents on Asphalt Mixtures with High RAS and RAP Binder
  - [Report 750](#) - Strategic Issues Facing Transportation, Volume 7: Preservation, Maintenance, and Renewal of Highway Infrastructure
  - [Synthesis 552](#) - Practices for Fabricating Asphalt Specimens for Performance Testing in Laboratories
  - [Synthesis 544](#) - Concrete Technology for Transportation Applications

**Current & Upcoming Projects**

- [Current Projects](#)
  - [ACRP 02-91](#) - Development of PFAS Source Differentiation Guidelines for Airports
  - [NCHRP 01-61](#) - Evaluation of Bonded Concrete Overlays on Asphalt Pavements
- Ruggedness of Laboratory Tests to Assess Cracking Resistance of Asphalt Mixtures
- A Calibrated and Validated National Performance-Related Specification for Emulsified Asphalt Binder
- Developing Laboratory Methods and Specifications to Test Tack Coat Materials
- Capturing Durability of High Recycled Binder Ratio (RBR) Asphalt Mixtures
- Performance Properties of Laboratory Produced Recycled Plastic Modified (RPM) Asphalt Binders and Mixtures
- Guide for Implementing Performance Specifications
- Guidelines for Corrosion Protection of Steel Bridges Using Duplex Coating Systems
- Stainless Steel Strands for Prestressed Concrete Bridge Elements
- Guidelines for the Design of Prestressed Concrete Bridge Girders Using FRP Auxiliary Reinforcement
- Design and Construction of Deck Bulb Tee Girder Bridges with UHPC
- Rating Concrete Water Permeability Based on Resistivity Measurements
- AASHTO LRFD Design, Installation, and Standard Practice of Testing for Cured In-Place Pipe Liners
- Guidelines for Selecting Sign Sheeting Materials for AASHTO M268
- Update to AASHTO M 180-18 and Associated Highway Guardrail Specifications
- Validation of the PFC Performance-Based Mix Design Method
- Implementation of Proposed AASHTO Standards for Asphalt Binders and Mixtures
- Pilot Test of Proposed Standard Practice for Recycling Agents in Asphalt Mixtures Incorporating RAP and RAS
- Implementing Guide Specifications for the Construction of Chip Seals, Micro Surfacing, and Fog Seals
- Facilitating Balanced Mix Design Implementation
- Breaking Barriers: Alternative Approaches to Avoiding and Reducing Highway Traffic Noise Impacts
- Lab Dielectric Measurement System for Asphalt Mixture Bulk Specific Gravity Determination
- A Retroreflective Road Lane Marking Tape 1,000X Brighter Than Existing Technology
- Bridge Deck Sealant Monitor: Thermal Sealcheck
- A Novel Durable, Healable and Conveniently Removable Pavement Marking Material Suitable for Both Permanent and Temporary Marking Uses
- Development of a Fast and Cost Effective Asphalt Mixture Fatigue Test System
- Material Characteristics of Cu-Based Superelastic Alloys for Applications in Bridge Columns to Improve Seismic Performance
- Use of Recycling Agents in Asphalt Concrete Mixtures
- Portland Cement Concrete Pavement Joint Sealant Practices and Performance
- Practice and Performance of Cold In-Place Recycling and Cold Central Plant Recycling
- Temporary Pavement Markings Placement and Removal Practices in Work Zones
- Concrete Technology for Transportation Applications
- Quality Assurance (QA) Aspects of Performance Related Specifications (PRS)

**Upcoming Projects**

- Development of Forensic Guidelines and Tools for PFAS Source Differentiation at Airports
- Guidebook for PFAS Management at Airports
- Developing Alternative Aircraft Arresting Systems
- Capturing Durability of High Recycled Binder Ratio (RBR) Asphalt Mixture
- Mechanical Properties of Laboratory Produced Recycled Plastic Modified (RPM) Asphalt Binders and Mixtures
- New Materials & Technology Deployment in Asphalt Pavement Structural Design
- Considering Binder Availability of Recycled Asphalt Materials
- Recommended Procedures for Verifying Material Quantities at Asphalt Mix Plants
o NCHRP 10-103 - Improving Guidance of AASHTO R 80/ASTM C 1778 for Alkali-Silica Reactivity (ASR) Potential and Mitigation
o NCHRP 10-104 - Evaluating Use of Unconventional Fly Ash Sources in Highway Concrete
o NCHRP 10-114 - Developing Performance and Safety Specifications for Rejuvenating Seals
o NCHRP 12-121 - Guidelines for the Design of Prestressed Concrete Bridge Girders Using FRP Auxiliary Reinforcement
o NCHRP Synthesis 20-05/Topic 53-13 - Practices for Steel Bridge Fabrication and Erection Tolerances

Reports from the National Academies Press on Materials
o An Assessment of the Material Measurement Laboratory at the National Institute of Standards and Technology
o Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant
o 2019-2020 Assessment of the Army Research Laboratory
o A Quadrennial Review of the National Nanotechnology Initiative - Nanoscience, Applications, and Commercialization
o Frontiers in Thermal Transport and Energy Conversion

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic
o ACP55 – Traffic Control Devices
o AKB10 – Innovative Highway Structures and Appurtenances
o AKB70 – Culverts, Buried Bridges and Soil Structure Interaction
o AKG20 – Soil and Rock Properties and Site Characterization
o AKG30 – Geo-Environmental and Climatic Impacts on Geomaterials
o AKG40 – Mechanics and Drainage of Saturated and Unsaturated Geomaterials
o AKG50 – Transportation Earthworks
o AKG80 – Geosynthetics
o AKG90 – Stabilization of Geomaterials and Recycled Materials
o AKM10 – Production and Use of Asphalt
o AKM20 – Binders for Flexible Pavement
o AKM30 – Asphalt Materials Selection and Mix Design
o AKM40 – Asphalt Mixture Evaluation and Performance
o AKM50 – Advanced Concrete Materials and Characterization
o AKM60 – Properties of Concrete and Constituent Materials
o AKM70 – Durability of Concrete
o AKM80 – Aggregates
o AKM90 – Polymer Concretes, Adhesives, and Sealers
o AKT30 – Pavement Maintenance

Task Forces - Search for task force under committee here

CRP Panels
o Project Panels Related to Materials

Councils
o 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.)

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 Nanotechnology of Cement and Concrete
May 23, 2022
Irvine, CA

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

Past Webinars

  o  Materials

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
- 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

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