



TRANSPORTATION RESEARCH BOARD

## TRB Snap Search: Maintenance & Preservation

### TRB's involvement in research on Maintenance & Preservation from 2017-2018

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

### 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 Maintenance & Preservation within the past year.

### Subject Webpage

- [Maintenance & Preservation Research at TRB](#)

### Recent Reports & Publications

- [Airport Cooperative Research Program \(ACRP\)](#)
  - [Impacts on Practice](#) - Impacts on Practice: Creating a Collaborative Environment Between Airport Operations and Maintenance
  - [Synthesis 85](#) - Alternative Fuels in Airport Fleets
- [IDEA Safety Projects](#)
  - [Report 27](#) - Field Evaluation of Ballast Fouling Conditions Using Machine Vision
- [National Cooperative Freight Research Program \(NCFRP\)](#)
  - [Report 37](#) - Using Commodity Flow Survey Microdata and Other Establishment Data to Estimate the Generation of Freight, Freight Trips, and Service Trips: Guidebook
- [National Cooperative Highway Research Program \(NCHRP\)](#)
  - [IDEA 181](#) - Development of Small Specimen Geometry for Asphalt Mixture Performance Testing
  - [IDEA 179](#) - Development of a Portable Stress Measurement Instrument
  - [IDEA 176](#) - Contactless Electrode for Fast Survey of Concrete Reinforcement Corrosion
  - [IDEA 175](#) - Rapid Detection of Fatigue Cracking in Steel Anchor Rods Using the Impulse Response Method
  - [Ready Results](#) - Extending Bridge Life by Maintaining Expansion Joints
  - [Ready Results](#) - New Guidelines for NDE Bridge Inspection Methods
  - [Ready Results](#) - Modern Inspection Practices for Culverts and Storm Drain Systems
  - [Report 871](#) - Long-Term Aging of Asphalt Mixtures for Performance Testing and Prediction
  - [Report 863](#) - Material Properties of Cold In-Place Recycled and Full-Depth Reclamation Asphalt Concrete
  - [Report 859](#) - Consequences of Delayed Maintenance of Highway Assets
  - [Report 857](#) - Performance-Related Specifications for Pavement Preservation Treatments
  - [Report 848](#) - Inspection Guidelines for Bridge Post-Tensioning and Stay Cable Systems Using NDE Methods
  - [Report 837](#) - Performance-Related Specifications for Emulsified Asphaltic Binders Used in Preservation Surface Treatments
  - [Report 820](#) - Framework for a Pavement-Maintenance Database System
  - [Synthesis 505](#) - Current Practices and Guidelines for the Reuse of Bridge Foundations
  - [Synthesis 502](#) - Practices for Establishing Contract Completion Dates for Highway Projects
  - [Synthesis 501](#) - Pavement Management Systems: Putting Data to Work
  - [Web-Only Document 236](#) - Incorporating Slab/Underlying Layer Interaction into the Concrete Pavement Analysis Procedures

- [Web-Only Document 235](#) - Quantifying the Influence of Geosynthetics on Pavement Performance
- [Transit Cooperative Rail Program \(TCRP\)](#)
  - [TCRP Synthesis 129](#) - Managing Extreme Weather at Bus Stops
- [TRB Special Reports](#)
  - [Report 323](#) - In-Service Performance Evaluation of Guardrail End Treatments
- [Transportation Research Circulars](#)
  - [E-Circular 220](#) – First International Roadside Safety Conference: Safer Roads, Saving Lives, Saving Money
- [Transportation Research Record: Journal of the Transportation Research Board](#)
  - [Volume 2670](#) - Finance and Pricing
  - [Volume 2657](#) - Quantification of Reduction in Hydraulic Conductivity and Skid Resistance Caused by Fog Seal in Low-Volume Roads
  - [Volume 2655](#) - Shear Wave Velocity Profiles of Roadway Substructures from Multichannel Analysis of Surface Waves and Waveform Tomography
  - [Volume 2646](#) - Integrating Guardrail System Preservation Policies into Asset Management Practices
  - [Volume 2645](#) - Economic Feasibility Study for Pavement Monitoring Using Synthetic Aperture Radar-Based Satellite Remote Sensing - Cost–Benefit Analysis
  - [Volume 2643](#) - Modeling Salt Usage During Snowstorms - Application of Hierarchical Linear Models with Varying Dispersion
  - [Volume 2642](#) - Structures
  - [Volume 2641](#) - Pavements: Volume 3
  - [Volume 2640](#) - Pavements: Volume 2
  - [Volume 2639](#) - Pavements: Volume 1
  - [Volume 2633](#) - Effects of Tack Coat Application on Interface Bond Strength and Short-Term Pavement Performance
  - [Volume 2631](#) - Asphalt Materials and Mixtures: Volume 1
  - [Volume 2629](#) - Use of Fly Ash to Minimize Deicing Salt Damage in Concrete Pavements
  - [Volume 2617](#) - Visibility and Work Zone Traffic Control
  - [Volume 2613](#) - Maintenance Services, Transportation Weather, and Winter Maintenance
  - [Volume 2612](#) - Maintenance and Preservation
  - [Volume 2607](#) - Railroads: Volume 1

## Current & Upcoming Projects

- [Current Projects](#)
  - [ACRP 09-15](#) - Building Information Modeling (BIM) Beyond Design
  - [ACRP 09-16](#) - Best Practices for Airport Obstruction Management
  - [ACRP 09-17](#) - Collecting, Applying, and Maintaining Pavement Condition Data at Airports
  - [ACRP 11-02/Task 29](#) - Research Roadmap in the Area of Airport Operations and Maintenance
  - [NCHRP 14-30](#) - Spot Painting to Extend Highway Bridge Coating Life
  - [NCHRP 14-36](#) - Proposed AASHTO Guide for Bridge Preservation Actions
  - [NCHRP 20-07/Task 380](#) - Proposed AASHTO Manual for the Maintenance of Roadways and Bridges
  - [NCHRP 20-07/Task 399](#) - Identifying Bridge Maintenance and Preservation Activities which Minimize Environmental Impact
  - [NCHRP 20-83\(03\)A](#) - Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure
  - [NCHRP Synthesis 20-05/Topic 49-04](#) - Very Short Duration Work Zone Safety for Maintenance and other Activities
  - [NCHRP Synthesis 20-05/Topic 49-06](#) - Design and Maintenance Practices for Urban Freeway Roadside Vegetation
  - [Safety IDEA Project 32](#) - Railroad Bridge Inspections for Maintenance and Replacement Prioritization Using Unmanned Aerial (UAVs) with Laser Scanning Capabilities
  - [TCRP E-11](#) - The Relationship Between Transit Asset Condition and Service Quality
  - [TCRP E-12](#) - Guidance for Calculating the Return on Investment in Transit State of Good Repair
- [Upcoming Projects](#)
  - [NCHRP 13-06](#) - Development of an Automated Tool to Assist in the Formulation and Maintenance of Long Range Equipment Replacement Plans
  - [NCHRP 20-44\(05\)](#) - Dissemination of “NCHRP Domestic Scan 14-01: Leading Management Practices in Determining Funding Levels for Maintenance and Preservation”
  - [NCHRP 20-50\(17\)](#) - LTPP Data Analysis: Consequences of Deferred Treatment of Pavement Preservation Treatment Placement on Asphalt Concrete, Portland Cement Concrete and Composite Pavement Structures

## Reports from the [National Academies Press](#) on Maintenance & Preservation

- [Improving Motor Carrier Safety Management](#)
- [Review of the Research Program of the U.S. DRIVE Partnership: Fifth Report](#)

## Committees & Panels

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

[Technical Activities Division Standing Committees](#) – Search by transportation mode and committee topic

- [AFD10](#) - Pavement Management Systems
- [AFD20](#) - Pavement Condition Evaluation
- [AFF40](#) - Testing and Evaluation of Transportation Structures
- [AFH60](#) - Asphalt Pavement Construction and Rehabilitation
- [AFP50](#) - Seasonal Climatic Effects on Transportation Infrastructure
- [AH000](#) - Operations and Preservation Group
- [AH010](#) - Surface Transportation Weather
- [AHB55](#) - Work Zone Traffic Control
- [AHD00](#) - Maintenance and Preservation
- [AHD10](#) - Maintenance and Operations Management
- [AHD15](#) - Maintenance and Operations Personnel
- [AHD18](#) - Pavement Preservation
- [AHD20](#) - Pavement Maintenance
- [AHD25](#) - Sealants and Fillers for Joints and Cracks
- [AHD30](#) - Structures Maintenance
- [AHD35](#) - Bridge Management
- [AHD37](#) - Bridge Preservation
- [AHD40](#) - Polymer Concretes, Adhesives, and Sealers
- [AHD45](#) - Corrosion
- [AHD50](#) - Roadside Maintenance Operations
- [AHD55](#) - Signing and Marking Materials
- [AHD60](#) - Maintenance Equipment
- [AHD65](#) - Winter Maintenance
- [AR060](#) - Railway Maintenance

[Task Forces](#) - Search for *task force* under committee here

## CRP Panels

- [Project Panels Related to Maintenance & Preservation](#)

## Councils

- [A0040T](#) – Young Member Council

## Recent and Upcoming Events

[Conferences \(co-sponsored by TRB\)](#) - Left hand menu “upcoming conferences by topic”

### [Transport Research Arena 2018\\*](#)

*April 16-19, 2018*

**Vienna, Austria**

### [8th Symposium on Pavement Surface Characteristics: SURF 2018\\*](#)

*May 2-4, 2018*

**South Brisbane, Australia**

**[9th International Conference on Bridge Maintenance, Safety and Management \(IABMAS2018\)\\*](#)**

*July 9-13, 2018*

**Melbourne, Australia**

**[GeoChina 2018 International Conference\\*](#)**

*July 23-25, 2018*

**Hangzhou, Zhejiang, China**

**[2018 Workshop on Managed Lanes](#)**

*September 25-27, 2018*

**Bellevue, Washington**

**[GeoMEast International Conference 2018: "Sustainable Civil Infrastructures: Structural Integrity"\\*](#)**

*November 24-28, 2018*

**Cairo, Egypt**

**[Webinars](#)** – View upcoming webinars, suggest a webinar or add registration information

## **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](http://trid.trb.org)**

**Practice Ready Papers (PRP) Database** - Papers with information that is ready for immediate implementation or requires minimal additional research or implementation effort - **[prp.trb.org](http://prp.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](http://pubsindex.trb.org)**

**Research in Progress (RiP) Database** – Current or recently completed transportation research projects - **[rip.trb.org](http://rip.trb.org)**

**Research Needs Statements (RNS)** – Research needs as identified by TRB Technical Activities standing committees - **[rns.trb.org](http://rns.trb.org)**

Contact the Library at **[TRBLibrary@nas.edu](mailto:TRBLibrary@nas.edu)** or 1 (202) 334-2989