



TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Pavement Design

TRB's involvement in research on Pavement Design 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 Pavement Design within the past year.

Subject Webpage

- [Design Research at TRB](#)

Recent Reports & Publications

- [Access Management Two-Volume Set - USB Edition](#)
- [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
 - [Legal Research Digest 74](#) - Liability of State Departments of Transportation for Design Errors
 - [Ready Results](#) - Better Travel Time Reliability, Improved Capacity Analysis
 - [Ready Results](#) - Choosing Safe, Cost-Effective Intersection Designs
 - [Ready Results](#) - New Standards Improve Safety of Adhesive Anchor Systems
 - [Ready Results](#) - New Guidelines for Lighting Overhead Signs
 - [Report 855](#) - An Expanded Functional Classification System for Highways and Streets
 - [Report 853](#) - Guidance for Design Hydrology for Stream Restoration and Channel Stability
 - [Report 843](#) - Long-Term Field Performance of Warm Mix Asphalt Technologies
 - [Report 842](#) - Mapping Heavy Vehicle Noise Source Heights for Highway Noise Analysis
 - [Report 844](#) - Guide for Integrating Goods and Services Movement by Commercial Vehicles in Smart Growth Environments
 - [Report 839](#) - A Performance-Based Highway Geometric Design Process
 - [Report 834](#) - Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities: A Guidebook
 - [Synthesis 506](#) - Effective Utility Coordination: Application of Research and Current Practices
 - [Synthesis 499](#) - Leveraging Technology for Transportation Agency Workforce Development and Training
 - [Web-Only Document 235](#) - Quantifying the Influence of Geosynthetics on Pavement Performance
 - [Web-Only Document 227](#) - Design of Interchange Loop Ramps and Pavement/Shoulder Cross-Slope Breaks
 - [Web-Only Document 225](#) - Appendices to NCHRP Research Report 842
 - [Web-Only Document 222](#) - Guidelines for the Application of Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities
- [Transportation Research Record: Journal of the Transportation Research Board](#)
 - [Volume 2655](#) - Geological, Geoenvironmental, and Geotechnical Engineering: Volume 1
 - [Volume 2641](#) - Pavements: Volume 3
 - [Volume 2640](#) - Pavements: Volume 2

- [Volume 2638](#) - Highway Design
- [Volume 2618](#) - Operational Effects of Geometrics and Access Management

Current & Upcoming Projects

- [Current Projects](#)
 - [NCHRP 01-52](#) - A Mechanistic-Empirical Model for Top-Down Cracking of Asphalt Pavement Layers
 - [NCHRP 01-53](#) - Proposed Enhancements to Pavement ME Design: Improved Consideration of the Influence of Subgrade and Unbound Layers on Pavement Performance
 - [NCHRP 01-54](#) - Guidelines for Limiting Damage to Flexible and Composite Pavements Due to the Presence of Water
 - [NCHRP 01-55](#) - Performance-Based Mix Design of Porous Friction Courses
 - [NCHRP 01-57A](#) - Developing Standard Definitions for Comparable Pavement Cracking Data
 - [NCHRP 01-58](#) - Quantifying the Effects of Implements of Husbandry on Pavements
- [Upcoming Projects](#)
 - [NCHRP 01-59](#) - Proposed Enhancements to Pavement ME Design: Improved Consideration of the Influence of Subgrade Soils Susceptible to Shrink/Swell and/or Frost Heave on Pavement Performance
 - [NCHRP 01-60](#) - Measuring the Characteristics of Pavement Surface Images and Developing Standard Practices for Calibration, Certification, and Verification of Imaging Systems
 - [NCHRP 01-61](#) - Evaluation of Bonded Concrete Overlays on Asphalt Pavements
 - [NCHRP 20-50\(20\)](#) - LTPP Data Analysis: Develop Tools to Improve Accuracy of Traffic Loading Data Collection
 - [NCHRP 20-50\(19\)](#) - LTPP Data Analysis: Feasibility of Using LTPP Data to Develop Relationships Between Laboratory- and Field-Derived Properties of Unbound Materials

Reports from the [National Academies Press](#) on Pavement Design

- [Measuring Personal Environmental Exposures: Proceedings of a Workshop—in Brief](#)

Committees & Panels

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

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

- [AF000](#) – Design and Construction Group
- [AFB00](#) – Design
- [AFB10](#) – Geometric Design
- [AFB20](#) – Roadside Safety Design
- [AFB30](#) – Low-Volume Roads
- [AFD30](#) – General and Emerging Pavement Design
- [AFD50](#) – Design and Rehabilitation of Concrete Pavements
- [AFD60](#) – Design and Rehabilitation of Asphalt Pavements
- [AFH10](#) – Construction Management
- [AFH15](#) – Project Delivery Methods
- [AFH20](#) – Quality Assurance Management
- [AFH30](#) - Emerging Design and Construction Technologies
- [AHB65](#) - Operational Effects of Geometrics

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

CRP Panels

- [Project Panels Related to Design](#)

Councils

- [A0040T](#) – Young Member Council

Recent and Upcoming Events

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

[International Conference on Advances in Materials and Pavement Performance Prediction \(AM3P\)*](#)

April 16-18, 2018

Doha, Qatar

[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

[4th GeoShanghai International Conference \(GeoShanghai 2018\)*](#)

May 27-30, 2018

Shanghai, China

[3rd International Conference on Transportation Infrastructure and Materials* \(ICTIM2018\)](#)

June 1-4, 2018

Tianjin, China

[12th National Conference on Transportation Asset Management](#)

July 14-17, 2018

San Diego, California

[GeoChina 2018 International Conference*](#)

July 23-25, 2018

Hangzhou, Zhejiang, China

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

November 24-28, 2018

Cairo, Egypt

[Sixth International Symposium on Nanotechnology in Construction \(NICOM6\)*](#)

December 2-5, 2018

Hong-Kong, China

[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

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

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 1 (202) 334-2989