



TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Pavement Design

TRB's involvement in research on Pavement Design from 2017-2019

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 two years.

Subject Webpage

- [Design Research at TRB](#)

Recent Reports & Publications

- [Commemorative Booklet](#) - AFD70 Standing Committee on Pavement Rehabilitation
- [National Cooperative Highway Research Program \(NCHRP\)](#)
 - [Report 869](#) - Material Properties of Cold In-Place Recycled and Full-Depth Reclamation Asphalt Concrete
 - [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
 - [Synthesis 499](#) - Leveraging Technology for Transportation Agency Workforce Development and Training
 - [Web-Only Document 257](#) - A Mechanistic–Empirical Model for Top–Down Cracking of Asphalt Pavements Layers
 - [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
- [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

Current & Upcoming Projects

- [Current Projects](#)
 - [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 01-57A](#) - Developing Standard Definitions for Comparable Pavement Cracking Data
 - [NCHRP 01-58](#) - Quantifying the Effects of Implements of Husbandry on Pavements
 - [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\(19\)](#) - LTPP Data Analysis: Feasibility of Using LTPP Data to Develop Relationships Between Laboratory- and Field-Derived Properties of Unbound Materials

- [NCHRP 20-50\(20\)](#) - LTPP Data Analysis: Develop Tools to Improve Accuracy of Traffic Loading Data Collection
- [NCHRP 20-50\(21\)](#) - Enhancements of Climatic Inputs and Related Models for Pavement ME Using LTPP Climate Tool (MERRA-2)
- [NCHRP Synthesis 20-05/Topic 50-03](#) - Use of Weigh-in-Motion Data for Improving Pavement, Bridge, Weight Enforcement, and Freight Logistics Practices

- [Upcoming Projects](#)

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

- [U.S.-Iran Engagement in Science, Engineering, and Health \(2010-2016\)](#)

Committees & Panels

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

[TRB 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

[Upcoming Conferences](#)- Left hand menu “upcoming conferences by topic”
(*Conferences cosponsored by TRB are denoted with an asterisk.*)

[Eighth International Conference on Case Histories in Geotechnical Engineering \(Geo-Congress 2019\)*](#)

March 24, 2019

Philadelphia, Pennsylvania

[2nd International Intelligent Construction Technologies Group Conference \(IICTG 2019\)*](#)

April 23, 2019

Beijing, China

[Ninth International Conference on Structural Health Monitoring of Intelligent Infrastructure \(SHMII-9\)*](#)

August 4, 2019

St. Louis, Missouri

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

[Past Webinars](#)

- [Design](#)

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:

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