



TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Geotechnology

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

Subject Webpage

- [Geotechnology Research at TRB](#)

Recent Reports & Publications

- [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
 - [Ready Results](#) - Measuring Modulus for Better-Performing Pavements
 - [Research Topic Highlights](#) - Bank Erosion and Bridge Scour
 - [Web-Only Document 235](#) - Quantifying the Influence of Geosynthetics on Pavement Performance
- [Transportation Research Record: Journal of the Transportation Research Board](#)
 - [Volume 2657](#) - Geological, Geoenvironmental, and Geotechnical Engineering: Volume 3
 - [Volume 2656](#) - Geological, Geoenvironmental, and Geotechnical Engineering: Volume 2
 - [Volume 2655](#) - Geological, Geoenvironmental, and Geotechnical Engineering: Volume 1

Current & Upcoming Projects

- [Current Projects](#)
 - [NCHRP 04-40](#) - Reliability-Based Geotechnical Resistance Factors for Axially-Loaded Micropiles
 - [NCHRP 21-10](#) - Manual on Subsurface Investigations – Update
 - [NCHRP 21-11](#) - Improved Test Methods and Practices for Characterizing Steel Corrosion Potential of Earthen Materials
 - [NCHRP 24-37](#) - Combining Individual Scour Components to Determine Total Scour
 - [NCHRP 24-41](#) - Defining the Boundary Conditions for Composite Behavior of Geosynthetic Reinforced Soil (GRS) Structures
 - [NCHRP 24-42](#) - Underwater Installation of Filters Systems for Scour and Other Erosion Control Countermeasures
 - [NCHRP 24-43](#) - Relationship Between Erodibility and Properties of Soils
 - [NCHRP 24-44](#) - Guidelines for Managing Geotechnical Risks in Design-Build Projects
 - [NCHRP 24-45](#) - Evaluating Mechanical Properties of Earth Material During Intelligent Compaction
 - [NCHRP 24-46](#) - Development of an Implementation Manual for Geotechnical Asset Management for Transportation Agencies
 - [NCHRP 24-47](#) - Revised Clear-Water and Live-Bed Contraction Scour Analysis
 - [NCHRP IDEA 20-30/IDEA 192](#) - Application of Microbial-Facilitated Stabilization for Sustainable Improvement of Expansive Pavement Subgrades

- [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 24-48](#) - Develop a Formula for Determining Scour Depth around Structures in Gravel-bed Rivers

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

- [Soils: The Foundation of Life: Proceedings of a Workshop-in Brief](#)
- [Investigative Strategies for Lead-Source Attribution at Superfund Sites Associated with Mining Activities](#)
- [Service-Learning in Undergraduate Geosciences: Proceedings of a Workshop](#)

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
- [AFP00](#) – Geological and Geoenvironmental Engineering
- [AFP10](#) – Engineering Geology
- [AFP20](#) – Geotechnical Site Characterization
- [AFP30](#) – Soil and Rock Properties
- [AFP40](#) – Geo-Environmental Processes
- [AFP50](#) – Seasonal Climatic Effects on Transportation Infrastructure
- [AFP60](#) – Engineering Behavior of Unsaturated Geomaterials
- [AFP70](#) – Aggregates
- [AFS00](#) – Geotechnical Engineering
- [AFS10](#) - Transportation Earthworks
- [AFS20](#) - Geotechnical Instrumentation and Modeling
- [AFS30](#) - Foundations of Bridges and Other Structures
- [AFS40](#) – Subsurface Soil-Structure Interaction
- [AFS60](#) - Subsurface Drainage
- [AFS70](#) – Geosynthetics
- [AFS80](#) - Stabilization of Geomaterials and Recycled Materials

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

CRP Panels

- [Project Panels Related to Geotechnology](#)

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

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

May 27-30, 2018

Shanghai, China

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

June 1-4, 2018

Tianjin, China

[GeoChina 2018 International Conference*](#)

July 23-25, 2018

Hangzhou, Zhejiang, China

[2018 Annual Conference of the Florida Association of Environmental Professionals \(FAEP\)*](#)

September, 2018

Orlando, Florida

[TRB Workshop at the 69th Highway Geology Symposium 2018*](#)

September 10, 2018

Portland, Maine

[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