TRB Snap Search: Geotechnology

TRB's involvement in research on Geotechnology from 2018-2019

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

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 Geotechnology within the past year.

Subject Webpage

- Geotechnology Research at TRB

Recent Reports & Publications

- National Cooperative Highway Research Program (NCHRP)
  - IDEA 186 - Development of an Electrical Probe for Rapid Assessment of Ground Improvement
  - Report 915 - Relationship Between Erodibility and Properties of Soils
  - Report 903 - Geotechnical Asset Management for Transportation Agencies, Volume 1: Research Overview
  - Web-Only Document 247 - Managing Geotechnical Risks in Design–Build Projects

- Transportation Research Circulars
  - E-Circular 230 – Culverts and Soil–Structure Interaction: Fifty Years of Change and a Twenty-Year Projection

Current & Upcoming Projects

- Current 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 12-114 - Guidance on Seismic Site Response Analysis with Pore Water Pressure Generation
  - NCHRP Synthesis 20-05/Topic 50-01 - Advancements in Use of Geophysical Methods for Transportation Projects
  - Structures
    - NCHRP Synthesis 20-05/Topic 50-06 - Advances in Unstable Slope Instrumentation and Monitoring
    - NCHRP Synthesis 20-05/Topic 50-13 - Estimating and Contracting Rock Slope Scaling Adjacent to Highways
    - NCHRP 20-06/Topic 24-02 - Potential Liability Associated with Unstable Slope Management Programs
    - NCHRP IDEA 20-30/IDEA 200 - Rapid Rehabilitation of Highway Slopes using Seeded Microbial Bio-Cement

- Upcoming Projects

Reports from the National Academies Press on Geotechnology

- Environmental Engineering for the 21st Century - Addressing Grand Challenges
- Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges
- Framing the Challenge of Urban Flooding in the United States
Land Management Practices for Carbon Dioxide Removal and Reliable Sequestration

Committees & Panels

Sign-up to be a committee "Friend"

**TRB 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
- **AFP00** – 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

**Upcoming Conferences**- Left hand menu “upcoming conferences by topic”

(Conferences cosponsored by TRB are denoted with an asterisk.)

- **2019 International Conference on Ecology and Transportation**
  
  September 22-26, 2019  
  Sacramento, California

- **3rd International Conference on Information Technology in Geo-Engineering (3rd ICITG 2019)**
  
  September 29-October 2, 2019  
  Guimaraes, Portugal

- **TRB Workshop at the 69th Highway Geology Symposium**
  
  October 21, 2019  
  Portland, Oregon

- **Geo-Structural Aspects of Pavements, Airfields, and Railways (GAP) 2019**
  
  November 4, 2019  
  Colorado Springs, Colorado

- **GeoMEast International Conference 2019: "Sustainable Civil Infrastructures: Beyond the Horizon"**
  
  November 10, 2019  
  Cairo, Egypt

- **American Society of Civil Engineers (ASCE) Geo-Congress 2020**
  
  February 25, 2020  
  Minneapolis, Minnesota

- **Geosynthetics 2020: Case Studies**
  
  March 8, 2020  
  Charleston, South Carolina
Webinars – View upcoming webinars, suggest a webinar or add registration information

Past Webinars

- Geotechnology

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

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

Snap Searches – Formerly called 'Overview Guides,' Snap Searches provide a succinct summary of activities in TRB on a given topic including: upcoming events such as conferences and webinars; names of Committees working on relevant issues; and a list of recent reports from TRB and The National Academies - www.trb.org/InformationServices/Snap.aspx

Contact the Library at TRBLibrary@nas.edu or I (202) 334-2989