

Transportation Research Board
Joint Section Subcommittee on Geotechnical Asset Management - AKG00(1)
2021 Annual Meeting – Washington, D.C.

Subcommittee on Geotechnical Asset Management (GAM) – AKG00(1)

<https://trb-gam.weebly.com>

Wednesday January 6, 2021
4:00 to 5:30 PM – Eastern

MEETING AGENDA

BUSINESS and ANNOUNCEMENTS (20 minutes)

1. Introduction by Co-Chairs and Deputy-Chairs - Including mechanics of our web-based meeting (Scott Anderson, BGC Engineering, Subcommittee Co-Chair)
2. Deputy-Chairs: Michelle Mann (NMDOT/USACE) and Michael McDonnell (Connecticut DOT)
3. Approval of last year's minutes (All)
4. GAM Subcommittee is a subcommittee of Geology and Geotechnical Engineering - AKG00(1)
5. TRB Announcements (Nancy Whiting, TRB)
6. FHWA Update (Silas Nichols/Khalid Mohamed, FHWA)
7. GAM Subcommittee Website: trb-gam.weebly.com (Darren Beckstrand, Landslide Technology, Subcommittee Co-Chair)

2021 Sponsored Sessions (and others relevant)

1. Tuesday, January 05, 12:00 PM-01:30 PM ET: Rockfall Management Subcommittee AKG10(1)
2. Wednesday, January 06, 10:00 AM-11:30 AM ET Advances in Landslides, Analysis and Control Subcommittee AKG10(2)
3. **Wednesday, January 06, 04:00 PM-05:30 PM ET: Geotechnical Asset Management Subcommittee AKG00(1)**
4. Friday, January 08, 10:00 AM-01:00 PM ET: Soil and Rock Properties and Site Characterization Committee
5. Monday, January 11, 02:00 PM-05:00 PM ET: Engineering Geology Committee
6. Friday, January 15, 02:00 PM-05:00 PM ET: Geotechnical Instrumentation and Modeling Committee
7. Thursday, January 21, 02:00 PM-05:00 PM ET: Workshop 1021 - Getting the Most Out of Big Data Analytics for All Facets of Transportation Geotechnics
8. Friday, January 22, 02:00 PM-05:00 PM ET: Workshop 1045 - Climatic Impacts on Performance of Road Foundation
9. **Monday, January 25, 02:30 PM-04:00 PM ET: Event 1116 - Geotechnical Asset Management in Action (see authors at the end of this agenda)**
10. Tuesday, January 26, 11:30 AM-01:00 PM ET: Event 1176 - Improving Site Characterization and Reliability with Innovative Laboratory and Field Testing
11. Tuesday, January 26, 01:00 PM-02:30 PM ET: Event 1193 - Geotechnology Accomplishments - A Historical Review and Future Outlook
12. **Thursday, January 28, 10:00 AM-11:30 AM ET: Event 1344 - Climate Change Impacts on Roadway Policies**
13. **Thursday, January 28, 01:00 PM-02:30 PM ET: Event 1383 - Geotechnical Asset Management – How Is It Working Out There? (see authors at the end of this agenda)**

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14. **Thursday, January 28, 04:00 PM-05:30 PM ET: Event 1418 - Evaluation of Geotechnical Assets through Instrumentation**
15. **Friday, January 29 01:00 PM-02:30 PM ET: Event 1443 - Data Acquisition and Geologic Modeling for Decisions: Network Scale to Site Scale (see authors at the end of this agenda)**
16. Others, as generated, can be entered in the chat?

Prior Business

1. FHWA/AAASHTO TAM Webinar 43: Geotechnical Assets, April 15 2020: [TAM Webinar 43](#)
2. GeoCongress 2020: Short Course - Implementation of Geotechnical Asset Management and Special Session 17 Temporal Forecast GeoRisk Distributed Infrastructure
3. Syntheses published in 2020:
 - a. Advances in Unstable Slope Instrumentation and Monitoring, [NCHRP Synthesis 554](#)
 - b. Estimating and Contracting Rock Slope Scaling Adjacent to Highways, [NCHRP Synthesis 555](#)
 - c. Asset Management Approaches to Identifying and Evaluating Assets Damaged Due to Emergency Events, [NCHRP Synthesis 556](#) (Highlights Oregon’s Unstable Slope Management Program)
4. ACTION: Syntheses awarded and announcement of questionnaires distributed following the meeting: Design Practices for Rock Slopes and Rockfall Management, NCHRP Synthesis 20-05/Topic 52-18
5. Published Legal Study NCHRP 20-06/Topic 24-02, Potential Liability Associated with Unstable Slope Management Programs: Timothy R. Wyatt, Conner Gwyn Schenck PLLC conducted the study. [Download here.](#)
6. Deterioration Rates and Life-Cycle Costs for Geotechnical Assets – Problem Number 2021-D-06 (Ty Ortiz) – **Not Selected** for 2021 National Cooperative Highway Research Program
7. ACTION: NASEM Committee on Geological and Geotechnical Engineering study “Corrosion of Buried Steel” initiated this year and will have a virtual workshop open to the public on March 9-10, 2021. [Information here.](#)
8. TPF-5(459) Pooled fund project “Developing and Calibrating Fragmental Rockfall Models using Physics Engines”, WashDOT Lead state.

Announcements

- GeoCongress 2022, Charlotte, NC, March 20-23, 2022
 - Abstracts Due [Feb 12, 2021](#)
- 2020 13th National Conference on Transportation Asset Management, Boston, MA
 - Postponed to [August 7-10, 2021](#)
- AEG in San Antonio, Texas, September 18 – 26, 2021
- HGS in Tacoma, WA, Aug 16 – 19, 2021 – Abstract submission date soon
- Others as recorded in the meeting Chat

PRESENTATIONS and DISCUSSIONS (60 minutes)

1. Andrew Doe – Australian Rail Track Corporation (ARTC) - Risk based earthworks asset review of Aurizon Rail Network (10 min)
2. Nick Farney (Western Federal Lands) and Eric Bilderback (National Park Service) – Use of the Unstable Slope Management Program for Federal Lands Management Agencies (15 min)

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3. Zac Sala (BGC Engineering) - The use of computer vision techniques in combination with widely available street level imagery for rock slope inventory (10 min)
4. Matt Lato (BGC Engineering) –Change detection at the corridor or network level (10 min)
5. 2021 Authors – Abstract to GAM contributions for 2021 (5 mins)
6. Dave Stanley (DASC) - Alaska's GAM Program - Understanding the Past; Building the Future (10 minutes)

RESEARCH NEEDS STATEMENT IDEA GENERATION SUMMARY (10 minutes)

CLOSURE AND ADJOURNMENT

TRB 2021 GAM Subcommittee Sponsored Sessions

Monday, January 25, 02:30 PM-04:00 PM ET: Event 1116 - Geotechnical Asset Management in Action

Geotechnical Asset Management for Louisiana, Gavin Gautreau and Adele Lee, Louisiana Department of Transportation and Development

Use of the Alaska Geotechnical Asset Management Database in Evaluation of Retaining Structures After an Earthquake, John Thornley & Alyson Mathers, Golder Associates and Barry Benko, Alaska Department of Transportation and Public Facilities

In-Situ Evaluation of Bridge MSE Retaining Walls with Excessive Panel Movements, Zaid Momani, University of Texas, Arlington, Nur Yazdani, University of Texas, Rio Grande Valley, Eynosias Beneberu, University of Texas, Arlington

State of the Practice Review of Integral Abutment Bridge in Response to Seasonal Temperature Change, Hao Liu, Jie Han, and Robert Parsons, University of Kansas

Thursday, January 28, 01:00 PM-02:30 PM ET: Event 1383 - Geotechnical Asset Management – How Is It Working Out There?

How legislative requirements are influencing GAM implementation in MnDOT, John Siekmeier, Minnesota Department of Transportation

Integrating geohazard programs into transportation asset management framework, Ty Ortiz, Colorado Department of Transportation

Overview of GAM in Highways England, James Codd, Highways England

Implementation of Evidence based GAM Practices, Simon Abbott, Network Rail

Remote sensing opportunities for inventory and condition assessment, Edward Hoppe, Virginia Department of Transportation

Friday, January 29 01:00 PM-02:30 PM ET: Event 1443 - Data Acquisition and Geologic Modeling for Decisions: Network Scale to Site Scale

Rock slope hazard modelling informed by remote sensing data – Next steps, D. Jean Hutchinson, Queen's University

Applying Remote Sensing to Rockfall Management Problems, Gabriel Walton, Colorado School of Mines

The bathtub curve: a data-driven model for geohazard event response, Dave Gauthier, BGC Engineering