

TRANSPORTATION RESEARCH BOARD
AFP00(1) Joint Section Subcommittee on Geotechnical Asset Management of AFP00 and AFS00

2019 Annual Meeting Minutes

Monday January 14, 2019

7:30pm to 9:30pm

SUBCOMMITTEE BUSINESS

1. Welcome and Introductions
2. Discussion regarding the organization of the subcommittee (Co-Chairs Scott Anderson and Darren Beckstrand, Deputy Chairs Michael McDonnell and Michelle Mann, Aine Mines, Committee Research Coordinator). Questions regarding Research Need Statements (RNS) should be addressed to either Darren or Aine.
3. Discussion regarding the TRB-GAM app/website (www.trb-gam.weebly.com). The app/website has information regarding the subcommittee's objectives, past meeting files, links and news.
4. Discussed activities in this year's TRB meeting, activities during the past year and upcoming activities, including;
 - 2019 TRB meeting
 - Workshop on Extreme Weather Impacts on Geohazards
 - Poster session on Geotechnical Asset Management: Risk, Rockfall, and Sinkholes
 - The 15th Dialogue with Leaders session honoring David Stanley
 - Observational Modeling for Performance Evaluation of Geotechnical Assets
 - Rockfall Subcommittee
 - Engineering Geology Committee
 - 2018 TRB Midyear Meeting and Highway Geology Symposium in Portland Maine
 - 2018 San Diego TAM conference
5. The Pre-Publication Drafts of the NCHRP 24-46 Research Report and Implementation Manual "Geotechnical Asset Management for Transportation Agencies" are now available online. Volume 1 – Research Overview <http://www.trb.org/Main/Blurbs/178601.aspx>
Volume 2 - Implementation Manual <http://www.trb.org/Main/Blurbs/178602.aspx>
Links to the manual's Appendices and corresponding Excel spreadsheet applications are also available through these links.
6. Discussed syntheses;
 - Topic 50-13 "Estimating and Contracting Rock Slope Scaling Adjacent to Highways"
Has been awarded
 - Topic 50-06 "Advances in Unstable Slope Instrumentation and Monitoring"
Will be sending out surveys regarding advancement and looking for case studies. It was noted that data processing will be an important component and a site selection process can be linked to GAM.

- NCHRP 20-06/Topic 24-02 “Potential Liability Associated with Unstable Slope Management”.

Study began in August 2018. Findings of the study either could accelerate or impeded the development of slope management systems depending on the amount of legal cover a management system can or cannot provide.

7. Dr. Erol Tutumluer, AFP00 Section Chair discussed;

- AFP00 consist of 7 committees and 1 joint subcommittee
- The section best paper was awarded to Aine Mines, Darren Beckstrand, Paul Thompson, Bret Boundy, Scott Helm and Jeff Jackson, “Estimating Event Likelihood for Rock Slope Assets on Transportation Networks”
- TRB had over 6000 papers
- 2020 TRB will be the 100th anniversary. There is a need for papers related to reviewing the accomplishments of the past 100 years
- 2021 TRB will focus on what should be the goals for the next 100 years.
- The subcommittee should focus on research needs and how to get them through the NCHRP process.

8. Silas Nichols, FHWA discussed;

- The Resource Center has lost and not yet replaced 5 positions, currently looking to fill one position
- EDC-5, Advanced Geotechnical Methods in Exploration (A-GaME) is intended to change the means of geologic site characterizations and risk management through the incorporation of several underutilized technologies into standard subsurface exploration programs.
- Past and present emphasis design and construction gaps
- Looking for geotechnical engineers to take a more active role in scour research
- New publication “Foundation Reuse for Highway Bridges” now available
- Research needed in design/construction of large diameter shaft...trying to catch up with construction
- Management of Geotech Tools software and IDEA Retaining Wall Evaluation Program to be moved to Geo-Institute
- Research on Unstable Slope Management recently completed
- NAS Corrosion study to rethink how geotechs manage corrosion
- Studying risk based assessments of MSE walls
- Geohazards study to be complete late summer with early fall training programs anticipated.

9. NCHRP Project 04-41, “Deterioration Rates and Unit Costs for Geotechnical Assets” The research needs statement was accepted, but the project was canceled based on recommendations from the project panel. The panel felt that the objectives could not be achieved using existing data and that owners should first incorporate GAM systems, utilizing the recently completed NCRHP 24-46 manuals, before any research into deterioration rates is started. The subcommittee discussed and was of the opinion that researching data and development of deterioration

models was needed by owners for the development/implementation of GAM and that the GAM itself will not deliver the data needed for deterioration models. It was decided to rewrite and resubmit the RNS. Consider holding a session/webinar/workshop with RNS authors and panel to help develop revised RNS. It is anticipated to be another 2-year effort.

10. Minnesota reported that management was reluctant to include GAM into their TAM program. It's hoped that the new GAM implementation Manual will help to rectify this. Minnesota will also be hosting Geo-Congress 2020 and noted abstract submission deadline of 1/31/19.

Presentations

1. GAM Implementation Manual – What to Expect – (Mark Vessely)
2. Geo-asset management perspectives from the rail industry – (Mario Ruel)
3. Applicable Lessons from Levee Monitoring – (Victoria Bennett)
4. Ability to Better Understand Resilience with a GAM Program in Place – (Darren Beckstrand)
5. Recognizing Scale and Getting All the Value You Can form a Point Cloud – (Richard Carter)
6. Legislating Geotechnical Asset Management: Lessons Learned – (John Siekmeier)
7. GAM-Past, Present, Future – (Dave Stanley)

Adjournment