TRANSPORTATION RESEARCH BOARD

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

2020 Annual Meeting Minutes

Monday January 13, 2020 6:00pm – 9:30pm

SUBCOMITTEE BUSINESS

- 1. Welcome and Introductions, approval of 2019 minutes.
- 2. Review of the organization of the GAM Subcommittee by Scott Anderson (Co-Chairs Scott Anderson and Darren Beckstrand, Deputy Chairs Michael McDonnel and Michelle Mann, Committee Research Coordinator Aine Mines)
 - a. Final location of GAM Subcommittee in the new TRB organization is still unclear, but it will remain a sub-committee.
- 3. Discussion of the TRB-GAM website (https://trb-gam.weebly.com) which contains information on the committee, past meeting files, links to pertinent research, and news (Darren Beckstrand)
- 4. Silas Nichols, FHWA discussed:
 - a. As of 2019, all states have developed transportation asset management plans (TAMPS) with the next set of TAMP updates set for 2022.
 - b. Most of these TAMPS did not include geotechnical assets, but incorporation is encouraged for the next update
 - c. FHWA is hopeful that the FAST Act will be reauthorized this fall, with an encouragement to add a GAM focus in the 5-group system
 - d. NCHRP GAM Implementation Manual (NCHRP Report 903) has been completed and published, and includes a list of 4 asset classes
 - e. GeoComp is completing a study on risk-based protocols on MSE walls
 - f. Following completion of Unstable Slope Management app and manual, FHWA is working to broaden some asset definitions in this research
 - g. Late spring/early summer training courses targeted for standardized data
- 5. Past Business Overview (Scott Anderson)
 - a. The 2019 HGS meeting in Portland, Oregon
 - b. Over 800 downloads of GAM Implementation Manual (NCHRP 24-46) since publication
 - Final report for legal study "Potential Liability Associated with Unstable Slope
 Management" (NCHRP 20-06/Topic 24-02) was submitted on 12/31/2019 and will be
 available to public shortly
 - d. New CIRIA report from United Kingdom with a case study of geotechnical asset decay
 - e. NCHRP Problem 2021-D-06 has a comment from FHWA and a review to be addressed within next week.
- 6. Dr. Anand Puppala, AFS Section Chair discussed:
 - a. Although this group will remain a subcommittee in the new TRB organization, there is a desire to see it transition to a full committee in the future
 - b. Theme for 2021 TRB Meeting will be "Launching a New Century of Mobility and Quality of Life"

- c. Provided an overview of changes to the papers process for TRB to encourage increased participation
- d. Overview of new TRB structure, which is outlined in the following website: http://www.trb.org/AboutTRB/TADStrategicAlignment.aspx
- 7. Review of work advanced/supported by the subcommittee:
 - a. Synthesis awarded in 2019 (Estimating and Contracting Rock Slope Scaling Adjacent to Highways – Topic 50-13 and Advances in Unstable Slope Instrumentation and Monitoring – Topic 50-06) are nearing completion and will be released by TRB shortly.
 - Legal study NCHRP 20-06/Topic 24-02, Potential Liability Associated with Unstable Slope
 Management Programs is also largely completed, with final publication anticipated
 shortly
- 8. Review of upcoming conferences with GAM component
 - a. Geo-Congress 2020 in Minnesota
 - b. HGS in Asheville, North Carolina; September 2020
 - c. AEG National Meeting in Portland, Oregon; September 2020

RESEARCH NEEDS DISCUSSION

- 1. Will reply to comments on Deterioration Rates and Life-Cycle Costs for Geotechnical Assets (NCHRP Problem Statement 2021-D-06) currently under review
- 2. FHWA is putting together a report on the status of state GAM programs, broad interest in developing a better understanding of where states are in the process, challenges/solutions
 - a. Puerto Rico peer exchange highlighted this interest
- Based on group discussion, given the current state of rapid change in GAM implementation, there is more benefit from advancing a seminar or workshop at TRB 2021 as opposed to submitting a specific research need statement
 - a. Session topic: How to share data collection methods between states?
 - b. Workshop topic: successful/proactive asset management examples, followed by breakout discussions
 - c. Session topic: How are states successfully using their GAM programs to get repairs funded?
 - d. Following group discussion, 3a will be revisited in the future, build a session proposal from topic 3b, and 3c will be incorporated into the committee agenda for 2021.
- 4. Potential need for future synthesis on various geotechnical asset failure types, relative likelihood of failure type, and relative risk associated with each failure type
- 5. To advance GAM, determine how to get the work of this subcommittee integrated into the TAM portal/online guide associated with the TAM Manual update (NCHRP 08-109; tamportal.com)

PRESENTATIONS:

- 1. GAM Implementation In Various States:
 - a. Tennessee DOT's GAM Program (Robert Jowers)
 - b. Louisiana's GAM Program (Gavin Gautreau)
 - c. Missouri DOT Initiation of GAM Program (Jen Harper)
 - d. Minnesota Statue Requires Resilient Transportation Support by Geotechnical Assets (John Siekmeier)

2. Research Updates and Future Needs

- a. Upcoming new version of AASHTO TAM Guide and potential ties to Geotechnical Asset Management (NCHRP Project 08-109)
- b. Potential Liability Associated with Unstable Slopes Management Program NCHRP 10-06 Legal Study update (Timothy Wyatt)
- c. Using Photogrammetry for Masonry Wall Monitoring (Lexi Hain)
- d. Decision-support and asset management from 3-D change maps: making simple bets from sophisticated data (Dave Gauthier)

ADJOURNMENT