

CEE 595F – Geotechnical Seminar – ONLINE

Friday, November 19, 2021 | 11:00am Central Time on Zoom

**FHWA's Geotechnical Research Program****Jennifer Nicks, Ph.D., P.E., M.ASCE**
FHWA

Speaker Bio: Jennifer Nicks, Ph.D., P.E., M.ASCE is a research geotechnical engineer for the Federal Highway Administration's Office of Infrastructure Research & Development. She has been with the FHWA Turner-Fairbank Highway Research Center in McLean, VA for over 10 years and manages a geotechnical research program focused on the design, construction, and performance of transportation infrastructure related to bridge foundations, retaining walls, approach embankments, and material characteristics. Dr. Nicks is active in several national and international professional organizations, serving as Chair of the Transportation Research Board's Geosynthetics committee and Vice-Chair of the Geo-Institute's Geotechnics of Soil Erosion committee and International Activities Council. She earned her Bachelor of Science, Master of Engineering, and Doctorate degrees in Civil Engineering at Texas A&M University and is a licensed professional engineer in the Commonwealth of Virginia.

Abstract: The Federal Highway Administration's (FHWA's) Geotechnical Research Program conducts applied research to solve transportation-related problems with the aim of building a transportation infrastructure that is economical, safer, and longer lasting. The roots of the FHWA Geotechnical Research Program can be traced back to the 1970's and continues to this date at the Turner-Fairbank Highway Research Center (TFHRC). Many projects are conducted in-house in TFHRC's state-of-the-art laboratories, but the program also supports external research projects through funding, technical reviews, and participation in National Cooperative Highway Research Program (NCHRP) and Transportation Pooled Fund studies. This presentation will provide an overview of the history, background, and ongoing research activities of FHWA's Geotechnical Research Program. Key research accomplishments and initiatives, such as the development of the Geosynthetic Reinforced Soil – Integrated Bridge System, the FHWA Deep Foundation Load Test Database, and the Next Generation Scour Program (NextScour), will also be highlighted.