



Elise Miller-Hooks, Ph.D.

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<http://civil.gmu.edu/miller/>

Dr. Elise Miller-Hooks holds the Bill and Eleanor Hazel Endowed Chair in Infrastructure Engineering in the Department of Civil, Environmental, and Infrastructure Engineering at George Mason University. Prior to this appointment, Dr. Miller-Hooks served as Program Director of the National Science Foundation (NSF) Civil Infrastructure Systems Program in the Civil, Mechanical and Manufacturing Innovation (CMMI) Division of the Engineering (ENG) Directorate, lead Program Officer for the Critical Resilient Interdependent Infrastructure Systems and Processes (CRISP) solicitation shared by the Computer and Information Science & Engineering (CISE), ENG, and Social, Behavioral and Economic Sciences (SBE) Directorates, and a cognizant program officer on CMMI's Smart and Connected Communities (i.e. Smart Cities) initiative. She served on the faculties of the University of Maryland, Pennsylvania State University and Duke University. Dr. Miller-Hooks received her Ph.D. (1997) and M.S. (1994) degrees in Civil Engineering from the University of Texas – Austin and B.S. *summa cum laude* in Civil Engineering from Lafayette College (1992). She has expertise in: multi-hazard civil infrastructure resilience quantification; disaster planning and response, e.g. urban search and rescue, building and regional evacuation and sheltering, and crowd modeling; mathematical modeling and optimization; transportation systems engineering; intermodal passenger and freight transport; real-time routing and fleet management; paratransit, ridesharing and bikeways; stochastic and dynamic network algorithms; and collaborative and multi-objective decision-making. She is/was principal investigator on grants with funding of approximately \$8 million, as well as co-PI of four centers with combined \$14 million in federal funds (\$28 million with match). Her research program has been funded by numerous agencies, including, for example, NSF, European Commission, Federal Highway Administration, U.S. Department of Transportation, I-95 Corridor Coalition, Maryland State Highway Administration, Maryland Industrial Partnerships, and various agencies and companies. She received a NSF CAREER award, Charley Wootan Award for Best Ph.D. Dissertation from the Council of UTCs, and several other national awards related to her dissertation and ongoing research, including two more recent best paper awards. Dr. Miller-Hooks has authored approximately 140 articles and reports, and over 190 conference presentations and invited lectures. She serves on the editorial boards of *Transportation Science* (Associate Editor), *Journal of Intelligent Transportation Systems* and *Transportation Research Part B*, and is Chair of the TRB Transportation Network Modeling Committee, founding Co-Chair of the TRB Task Force on Emergency Evacuation (now a full committee), and past president of the INFORMS (Institute for Operations Research and the Management Sciences) Transportation Science and Logistics Society (TSL) and the Women in OR/MS Forum (WORMS).