



Reconnaissance of damaged structures after the 2016 Muisne-Ecuador Earthquake



Abstract: Ecuador is very vulnerable to natural disasters due to its location. The 1906 earthquake of magnitude 8.8, which happened off the coast of Ecuador, is listed as one of the top ten largest earthquakes in the history of the planet. Recently the 2016 Muisne-Ecuador earthquake had significant structural, economic, social, and environmental consequences, especially along the Ecuador's coast. A total of 663 people were killed and more than 30,000 were injured in the earthquake. The findings of a post-earthquake investigation conducted by the speakers 10 days after the event in the Province of Manabí will be presented in this seminar. Mr. Morales will describe the damage incurred by hospitals, government office buildings and residences during the event. Mr. O'Connor will present a scan of the road transportation network with a focus on bridges.

Speaker(s) Bio:

Enrique Morales Moncayo, Ph.D. Candidate, Department of CSEE, University at Buffalo (UB): Mr. Morales received his BS in Civil Engineering from Espe University in Ecuador and his MS from UB. He is currently a Ph.D. student at UB and working in the area of earthquake engineering. Mr. Morales was responsible for the execution of projects related to rehabilitation of hospitals after 1998 earthquake as part of the Ecuadorian Army Corps of Engineers. Based on his experience and having lived three years in areas affected by earthquakes, he understands the need to reduce risk by improving the resiliency of structures exposed to natural hazards.

Jerome S. O'Connor, P.E., F-ASCE, Executive Director, Institute of Bridge Engineering, Department of CSEE, University at Buffalo (UB): Mr. O'Connor received his BS and MS degrees in Civil Engineering from Rensselaer Polytechnic Institute. He is currently serving as the Executive Director of the Institute of Bridge Engineering at UB. Mr. O'Connor has conducted a reconnaissance trip to Peru after the 2007 earthquake that had many of the characteristics of the 2016 earthquake. He has also investigated the damage to bridges after Hurricane Katrina as part of a Lifelines team for NIST. Both reports are available in MCEER.

Date: June 13, 2016

Time: 11:30 AM

Location: 140 Ketter Hall, North Campus,
University at Buffalo