University of Colorado **Boulder**

Post-Disaster Safety Evaluation of Buildings & Infrastructure

ATC-20, ATC-45, and Cal OES SAP Training

Rescheduled
Sunday
16 Aug 2020
8 AM - 5 PM

Training session

Colorado experiences earthquakes, floods, tornadoes, and other natural disasters that damage infrastructure and threaten people's safety. The 2013 Colorado floods damaged or destroyed 20,000 homes and 50 highway bridges. Colorado has experienced 7 damaging earthquakes since 1944 with magnitudes of 5.2 to 5.5, and in 1882 experienced a magnitude-6.6 earthquake near Estes Park. Damage from such events can overburden building safety officials and lifeline operators. Colorado is training a corps of volunteers to rapidly assess the safety of buildings and critical infrastructure, speed recovery, and help people quickly and safely return to their homes, offices, and public spaces. The training uses the de facto international standards for post-disaster safety evaluation procedures called Post-Earthquake, Windstorm and Flood Safety Evaluation of Buildings (ATC-20 and ATC-45).

The University of Colorado Boulder is providing training on ATC-20 and ATC-45 to prepare you to assess building and lifeline safety following a disaster. Taught by a University of Colorado structural engineer and certified California Office of Emergency Services Safety Assessment Program (Cal OES SAP) trainer with experience in U.S. and international disasters, you will learn basic engineering principles and standard procedures for post-disaster safety evaluation. You will participate in exercises using real-life examples of earthquake, hurricane, and flood damage from U.S. and abroad.

Training topics

- ATC-20/45 building safety evaluation procedures.
- Cal OES SAP certification for qualified professionals. Attendance is open to all but certification is limited to licensed engineers, architects, engineering geologists, building inspectors, and public-works inspectors; list at https://goo.gl/H2HahX.
- Training examples of damaged buildings from disasters in the U.S. and abroad.
- How do buildings and other infrastructure structurally react to extreme loads?
- Procedures and exercises for wood, masonry, concrete, and steel buildings.
- GREEN, YELLOW, and RED placards, what are they and how do we use them?
- When and how do you perform a safety assessment and post a building?

Training logistics

WHERE: Engineering Center ECCE room 1B41, Boulder CO; see map on reverse
COST & CLASS SIZE: $20 covers coffee, bagels, and donation to ASCE and EERI student chapters. Manuals provided free by FEMA. Limited to 50 people. Course provides optional continuing education units (0.8 CEUs from CU Boulder, $20 added fee to CU).

TO REGISTER: visit https://sap-cu-apr2020.eventbrite.com

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Instructor

Keith Porter, P.E., PhD., M.ASCE

Dr. Porter is a licensed California professional engineer, a research professor at the University of Colorado Boulder, and principal of the consulting company SPA Risk LLC. He has 30 years of experience in structural engineering practice and university research addressing natural disasters. He leads the new *Natural Hazard Mitigation Saves* study for the National Institute of Building Sciences, updating the groundbreaking, Congressionally-mandated 2005 benefit-cost analysis of natural hazard mitigation for 3 federal agencies and 4 private-sector sponsors. He helped to lead the US Geological Survey's ShakeOut, ARkStorm, Tsunami, and HayWired disaster planning scenarios. He has performed post-disaster reconnaissance and data collection after several natural disasters in the U.S. and abroad. He is a certified Cal OES SAP trainer and holds engineering degrees from UC Davis, UC Berkeley, and Stanford University.

Directions to classroom ECCE 1B41

Park in paid lot 440, https://goo.gl/maps/8p99Nmsjq1S2. Follow the dashed lines on the map below to ECCE 1B41. If walking from elsewhere on campus, point Google Maps here: https://goo.gl/maps/C7ewhWcRrS72.