


2016 NEC Agenda


What's New? What's Next? What's Your Role in Building A National Strategy?



Wednesday May 4, 2016	
7:30 AM – 8:30 AM	Registration Desk Open
8:30 AM – 9:00 AM	<p>Welcome <i>Join the Federal Alliance for Safe Homes (FLASH)[®], FEMA, and the Presenting Sponsor California Earthquake Authority (CEA) to kick-off the quadrennial National Earthquake Conference. Hear an overview of the conference and desired outcomes.</i></p> <ul style="list-style-type: none"> • Leslie Chapman-Henderson, FLASH • Angela Gladwell, Deputy Assistant Administrator for the Risk Management Directorate, FEMA • Glenn Pomeroy, CEO, California Earthquake Authority, <i>Presenting Sponsor</i>
9:00 AM – 9:30 AM	<p>Opening Keynote: Societal Impacts of Earthquake Systems Science <i>System science seeks to explain emergent phenomena at the system scale, such as global climate change or earthquake activity in California or Japan. The “system” is not a physical reality, but a hypothetical representation of nature, typically a numerical model or ensemble of models that simulates an emergent behavior and predicts its future course. This presentation will describe how earthquake system science has contributed to our understanding of seismic phenomena, focusing on the practical use of earthquake simulations to reduce seismic risk and enhance community resilience.</i></p> <ul style="list-style-type: none"> • Thomas H. Jordan, Director, Southern California Earthquake Center (SCEC)
9:30 AM – 10:00 AM	<p>National Seismic Hazard Maps <i>What's new about the maps and what are the implications with nearly 50 percent of U.S. population now identified at risk?</i></p> <ul style="list-style-type: none"> • Nicolas Luco, Research Structural Engineer, USGS
10:00 AM – 10:15 AM	<p>Break Sponsored by:</p> <div style="display: flex; align-items: center;">  <div style="font-size: small;"> <p>OPEN SYSTEMS & SERVICES</p> <p>K I N E M E T R I C S</p> </div> </div>
10:15 AM – 11:00 AM	<p>Induced Seismicity <i>What happens when the science changes? Issues with identifying, quantifying, accepting, presenting, communicating, mitigating a new threat.</i></p> <ul style="list-style-type: none"> • Michael Blanpied, Associate Program Director, USGS • Zach Schmiesing, Director of Thought Leadership, Verisk Analytics • Jason Carriere, Emergency Management Coordinator, Irving Police Department
11:00 AM – 11:45 AM	<p>Earthquake Early Warning Program <i>A report on the progress, planning, and communication strategies for helping the public understand how earthquake early warning works.</i></p> <ul style="list-style-type: none"> • Tina Curry, Deputy Director, California Governor's Office of Emergency Services (Cal OES) • Doug Given, National Earthquake Early Warning Coordinator, USGS
11:45 AM – 12:45 PM	Lunch and Recognition

12:45 PM – 1:15 PM	<p>Operational Earthquake Forecasting (OEF)/Aftershock Forecasting <i>Examination of client uses for OEF and gathering input to improve USGS products in development.</i></p> <ul style="list-style-type: none"> • Jeanne Hardebeck, Research Geophysicist, USGS • Nicholas van der Elst, Geophysicist, USGS
1:15 PM – 2:15 PM	<p>Lessons for Emergency Managers and Local Governments from the M7.05 HayWired Scenario <i>The USGS's HayWired scenario produced a lot of new science and engineering. This session will offer three lessons that emergency managers and local officials from earthquake country can draw from the HayWired scenario.</i></p> <p>Moderator: Kate Long, Earthquake Program Officer, Cal OES</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Keith Porter, Research Professor, University of Colorado Boulder and Principal, SPA Risk, LLC • Charles Scawthorn, Pacific Earthquake Engineering Research Center (PEER) and Principal, SPA Risk, LLC
2:15 PM – 2:30 PM	<p>Break</p>
2:30 PM – 3:30 PM	<p>Breakout Sessions</p> <p>1. A New ShakeMap Scenario Collection for Mitigation & Response Planning (Atlantic I & II) <i>The USGS ShakeMap and Nation Hazard Mapping team is developing a collection of earthquake scenarios to be use for mitigation and response planning, engineering, and loss analyses. The science behind and practical use aspects of these products will be discussed.</i></p> <p>Eric Thompson, Civil Engineer, USGS and David Wald, Seismologist, USGS</p> <p>2. Future Improvements to the U.S. Tsunami Warning System/Tsunami Playbooks (Pacific I & II) <i>The U.S. Tsunami Warning System has undergone major change since the 2004 Indian Ocean Tsunami, and with continued interest and funding will continue to improve services and response capability in the future. This session will discuss new methods of tsunami observation and GPS analysis, as well as improvements to tsunami forecast models, pre-event threat analysis, public preparedness, and better communication to those at risk. This will help ensure the U.S. system remains state-of-the-art. This session includes an overview of Tsunami Evacuation and Maritime Response Playbooks developed in California to address tsunamis of different sizes.</i></p> <p>Moderator: Kevin Miller, Tsunami Program Lead, Cal OES</p> <p>Panelists: Paul Whitmore, Director, NOAA/NWS National Tsunami Warning Center and Rick Wilson, Senior Engineering Geologist, California Geological Survey</p> <p>3. Leveraging Tools and NETAP Resources to Reduce Earthquake Risk in Your Community (International I) <i>To reduce future losses in earthquakes, it is necessary to evaluate the vulnerability of existing structures and initiate programs that encourage the mitigation of their deficiencies. The methodology developed for the Federal Emergency Management Agency (FEMA) by the Applied Technology Council (ATC) to quickly screen buildings for potential seismic hazards with the use of a simple form or electronic tool will be presented. First-hand experiences from a recent project for Southeastern Missouri's school buildings will also be discussed.</i></p>

	<p>Moderator: Brian Blake, Program Coordinator, Central U.S. Earthquake Consortium (CUSEC)</p> <p>Panelists: Mike Griffin, Principal CCS Group; Ayse Hortacsu, Director of Projects, Applied Technology Council; and Mai Tong, Physical Scientist, FEMA Building Science Branch</p> <p>4. South Napa Quake: One Year Later (International II)</p> <p><i>What was learned about building performance and nonstructural components from the 2014 Napa M6.0 earthquake? This session will include a review of the resulting recovery advisories and the afterslip map product that was developed to assist with recovery planning.</i></p> <p>Moderator: Wendy Phillips, Sr. Program Specialist, FEMA</p> <p>Tim Strack, Chairman, California Seismic Safety Commission, Ken Hudnut, Geophysicist, USGS; and Mike Mahoney, Senior Geophysicist, FEMA</p>
3:30 PM – 3:45 PM	Break
3:45 PM – 4:15 PM	<p>Addressing Risks from Natural Hazards in Schools</p> <p><i>This session will provide an overview of ongoing initiatives to develop guidance and tools for safer schools from natural hazards.</i></p> <p>Moderator: Mike Mahoney, Senior Geophysicist, FEMA</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Maggie Ortiz-Millan, Program Manager, Earthquake Engineering Research Institute, EERI • Veronica Cedillos, P.E., Associate Director of Projects, ATC
4:15 PM – 4:30 PM	<p>The New Executive Order for Federal Buildings</p> <p><i>An overview of the new, updated standard to improve the resilience and enhance the capability of essential Federal buildings to function during and after an earthquake, and reduce risk to the lives of persons who would be affected by earthquake failures in these buildings.</i></p> <ul style="list-style-type: none"> • Jack Hayes, NEHRP Director, National Institute of Standards and Technology (NIST)
4:30 PM – 5:30 PM	<p>Panel: Improving the Built Environment</p> <p><i>This panel will provide an overview of the latest building science research, engineering, and retrofit solutions to improve resiliency.</i></p> <p>Moderator: Ed Laatsch, Director, Planning, Safety, & Building Science Division , FEMA</p> <ul style="list-style-type: none"> • Performance-Based Seismic Design of Buildings Bob Hanson, Professor Emeritus, University of Michigan • NEHRP Recommended Seismic Provisions: Past, Present, and Future Mai Tong, Physical Scientist, FEMA • Project 17: Next Generation Ground Motion Maps for Building Codes Nicolas Luco, Research Structural Engineer, USGS • Simplified Evaluation of Older Concrete Buildings for Collapse Potential (ATC 78) William T. Holmes, Structural Engineer, Rutherford + Chekene • Innovative and Cost-Efficient Soft-Story Retrofit Solutions Annie Kao, P.E., Senior Field Engineer, Simpson Strong-Tie Co.
5:30 PM – 5:45 PM	<p>Daily Wrap-Up and Announcements</p> <ul style="list-style-type: none"> • Grace Kang, S.E, Director of Communications, Pacific Earthquake Engineering Research Center (PEER)

Thursday, May 5, 2016

8:30 AM – 9:00 AM	<p>The Human Story: New Zealand and Taiwan’s Experience <i>The M6.4 earthquake that shook Taiwan on February 6 and took 116 lives occurred just days before another M5.7 earthquake struck Christchurch, New Zealand. Earthquakes and their aftermath have become a way of life for Christchurch citizens since the 2011 earthquake that flattened parts of the city and left 185 dead. With Christchurch in the midst of a \$40B rebuild and Taiwan just starting on the road to recovery, the presenters will discuss the human toll of earthquakes.</i></p> <ul style="list-style-type: none"> • Mike Gillooly, Chief Resilience Officer, Christchurch, New Zealand • Wei-Sen Li, Secretary General, National Science and Technology Center for Disaster Reduction, Taiwan 
9:00 AM – 9:30 AM	<p>Integrating Access and Functional Needs <i>An overview of policies that support whole community integration, build resilient communities and further preparedness by implementing new theories and new best practices to engage stakeholders and create a blueprint for the integration of individuals with disabilities and those with an AFN that can be replicated in other states and used to build a national strategy. It’s what’s new and what’s next.</i></p> <ul style="list-style-type: none"> • Vance Taylor, Chief, Office of Access and Functional Needs, Cal OES
9:30 AM – 10:45 AM	<p>Panel: Resilience Through Design <i>Showcase of recent progress and issues regarding physical resilience.</i> Moderator: Marissa Aho, Chief Resilience Officer, City of Los Angeles Panelists:</p> <ul style="list-style-type: none"> • Lucy Jones, Scientist Emerita, USGS and Research Associate, Caltech • Patrick Otellini, Chief Resilience Officer, City and County of San Francisco • David Bonowitz, Structural Engineer, San Francisco • Leslie Chapman-Henderson, President and CEO, Federal Alliance for Safe Homes (FLASH)
10:45 AM – 11:00 AM	<p>Break</p>
11:00 AM – 12:00 PM	<p>Panel: Reducing Risk - The Role Insurance Plays in Building Resilient Communities <i>Due to the historic increase in earthquake activity Oklahoma and other Central U.S. states are grappling with how to educate their consumers about the role insurance, mitigation, and preparedness activities play in building resilient communities. The panelists will discuss how to represent earthquake risk and the role insurance plays in risk reduction, supporting recovery efforts, and building resilient communities.</i> Moderator: Glenn Pomeroy, CEO, California Earthquake Authority (CEA) Panelists:</p> <ul style="list-style-type: none"> • Maiclaire Bolton, Senior Product Manager, Global Earthquake Products, CoreLogic, Inc. • John Doak, Insurance Commissioner, State of Oklahoma • Laurie Johnson, Principal, Laurie Johnson Consulting
12:00 PM – 1:30 PM	<p>First Responder Video and Recognition</p> <ul style="list-style-type: none"> • Presented by Shirley Gordon, Vice President of Operations and Monica Buchanan, Claim Section Manager, State Farm Insurance Companies, and Wendy Phillips, Sr. Program Specialist, FEMA <p>National Awards of Excellence Ceremony and Luncheon <i>Sponsored by State Farm Insurance Companies</i></p>

	<ul style="list-style-type: none"> Presented by David Norman, Board Chair, Western States Seismic Policy Council (WSSPC)
1:30 PM – 2:15 PM	<p>Panel: Earthquake Protective Action Guidance & Messaging - Tweaking the Message <i>A review of the research that led to focusing the protective actions and messaging to emphasize the protective action objectives to potentially save lives and prevent injuries.</i></p> <ul style="list-style-type: none"> Mark Benthien, Director of Communication, Education, and Outreach, SCEC and Executive Director, Earthquake Country Alliance Jacqueline Snelling, Senior Policy Advisor, FEMA Individual and Community Preparedness Directorate Kim Shoaf, Family and Preventative Medicine Associate Professor, University of Utah School of Medicine
2:15 PM – 2:45 PM	<p>Communicating with the Public during an Earthquake Sequence <i>Understanding the psychosocial aspects affecting communication of earthquake information, aftershock forecasts and the benefits of coordinating communication roles to develop relationships with other responding agencies.</i></p> <ul style="list-style-type: none"> Anne Wein, Decision Scientist, USGS
2:45 PM – 3:15 PM	<p>Clearinghouse: Building Supportive Relationships between Science and Emergency Response <i>Clearinghouse post-event scientific sharing concept in California; how it worked in Napa and how it can be applied to support any state/territory during an event.</i></p> <ul style="list-style-type: none"> Anne Rosinski, Senior Engineering Geologist, California Geological Survey Maggie Ortiz-Millan, Program Manager, EERI 
3:15 PM – 3:30 PM	<p>Break Sponsored By:</p> 
3:30 PM – 4:30 PM	<p>Breakout Sessions</p> <ol style="list-style-type: none"> <p>Effectively Communicating Seismic Risk (Atlantic I & II) <i>Presenters will discuss how organizations and cities can partner with structural engineers to make their building investment last and tackle the challenge of how to explain these issues to both clients and policymakers. Communicating building performance levels and retrofit solutions clearly to clients helps foster a relationship essential to moving forward towards strengthening our cities. A live demo of the Temblor seismic risk app will be presented. Temblor uses the best available public data sources and methods, it's free, and ad-free. Temblor gives you the seismic hazard rank of your location, and the faults, quakes, landslides, and liquefaction zones around you.</i></p> <p>Michelle Kam-Biron, S.E., SECB Structural Engineers Association of Southern California (SEAOSC); Victoria Wigle, S.E., LEED AP BD+C Project Engineer, Thornton Tomasetti, Annie Kao, PE, Simpson Strong-Tie; and Ross Stein, Temblor</p> <p>National Seismic Hazard Maps Usability Study Workshop (Pacific I & II) <i>Emergency planners working closely with local officials can play an important role in helping communities prepare for earthquakes, mitigate their risks, and foster greater resiliency. The USGS National Seismic Hazard Maps (NSHM) are among the nation's most scientifically accurate and evidence based visual artifacts for earthquakes. This session will provide an overview of research to identify revisions</i></p>

	<p><i>and enhancements of the NSHM maps to improve interpretability and usability among Emergency Managers and closely affiliated professionals.</i></p> <p>Christina Zarcadoolas, PhD, Professor, CUNY School of Public Health and Wendy Vaughn, MA Graduate Center, CUNY</p> <p>3. ShakeCast: Automated Post-Earthquake Evaluation for Critical Facilities (International I)</p> <p><i>The USGS ShakeCast System is employed by numerous critical facility, utility, business, and government agencies. An introduction of ShakeCast will be provided, and users will be updated on evolving ShakeCast technologies. Users will be briefed on developing landslide and liquefaction modules, and improved engineering fragility components of the system.</i></p> <p>Kuo-Wan Lin, Seismologist, USGS and David Wald, Seismologist, USGS</p> <p>4. Inspiring Change in a Digital World (International II)</p> <p><i>Digital information sharing and conversation speeds delivery to audiences. Let's explore what's new and next with social media, email marketing, and web strategy, and how it can improve resilience.</i></p> <p>Moderator: Kristin Hogan-Schildwachter, Government Affairs Manager - City and County of San Francisco</p> <p>Panelists: Savannah Brehmer, Digital Media Manager, FEMA Region 10; Jordan Scott, Social Engagement Strategist, American Red Cross; and Jason Ballmann, Communication Specialist, SCEC</p>
4:30 PM – 5:30 PM	<p>Panel: Taking it to the Streets</p> <p><i>An overview of programs and initiatives to increase resiliency and strategies for private-sector preparedness.</i></p> <p>Moderator: Ines Pearce, CEO, Pearce Global Partners</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Mark Benthien, Director of Communication, Education, and Outreach, SCEC and Executive Director, Earthquake Country Alliance • Tim Smail, Senior Vice President – Engineering & Technical Programs, Federal Alliance for Safe Homes (FLASH) • Janiele Maffei, Chief Mitigation Officer, California Earthquake Authority
5:30 PM – 5:45 PM	<p>Daily Wrap-Up and Announcements</p> <ul style="list-style-type: none"> • Grace Kang, S.E, Director of Communications, Pacific Earthquake Engineering Research Center (PEER)
5:45 PM – 7:15 PM	Networking Reception
Friday, May 6, 2016	
8:30 AM – 8:45 AM	<p>Welcome and Introductions</p> <ul style="list-style-type: none"> • Mark Ghilarducci, Director, California Governor's Office of Emergency Services
8:45 AM – 9:15AM	<p>Keynote Presentation</p> <ul style="list-style-type: none"> • Craig Fugate, Administrator, FEMA
9:15 AM – 10:30 AM	<p>Panel: Building Coalitions to Breakdown Obstacles</p> <p><i>Communities and emergency managers want to partner to build community resilience but both are asking similar "how to" questions. This session will introduce participants to community resilience programs in the U.S. that vary in their approaches.</i></p> <p>Moderator: John Bwarie, Founding Partner, Stratiscope</p> <p>Panelists:</p>

	<ul style="list-style-type: none"> • David P. Eisenman, Professor of Medicine, UCLA Center for Public Health and Disasters • Charles Huyck, Executive Vice President, ImageCat, Inc.
10:30 AM – 10:45 AM	Break
10:45 AM – 12:00 PM	<p>Panel: Developing A Strategy for Moving Nationwide Seismic Resiliency Forward <i>Disasters are often focusing events for agenda setting and policymaking and many of the key seismic provisions for building codes, infrastructure standards, and public policy have been made in the wake of major earthquakes. But it has been more than 20 years since a major damaging earthquake struck in the United States and interest and support for NEHRP has waned as other natural disasters and national priorities have necessitated attention and competition for limited resources. In the absence of a major damaging earthquake, what can we do to enhance our advocating for earthquake hazard reduction policy attention and funding, particularly at the national level?</i></p> <p>Moderator: Laurie Johnson, Chairman, Advisory Committee on Earthquake Hazards Reduction (ACEHR)</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Ralph Archuleta, Professor, University of California Santa Barbara and Chair of the Scientific Earthquake Studies Advisory Committee • Elizabeth Duffy, Government Relations Director, Seismological Society of America • Robert Ezelle, Director, Washington Military Department’s Emergency Management Division (EMD) • Jack Hayes, NEHRP Director, NIST
12:00 PM – 12:30 PM	<p>Earthquake Resilience: Fulfilling our Role in Creating an Earthquake Resilient Future <i>Conference wrap-up and call to action.</i></p> <ul style="list-style-type: none"> • Leslie Chapman-Henderson, President and CEO, FLASH