

2012 National Earthquake Program Managers Meeting
April 10, 2012
The Peabody Hotel, Memphis, Tennessee

Presenters & Participants

State & Territorial Representatives

Charlisa Ussery	Alabama	Susan Walker	New Mexico
David Kang	Alaska	Kelly Kane	Oklahoma
Kathryn Long	California	Althea Rizzo	Oregon
Ken Brink	Colorado	Tammie Wells	South Carolina
Kim Richards	Hawaii	Cecil Whaley	Tennessee
Mark Stephensen	Idaho	Sheila Curtis	Utah
David Davis	Kentucky	Bill Lund	Utah
Elizabeth Barton	Maine	John Schelling	Washington
Robert Lathian	Mississippi	Tim Walsh	Washington
Steve Besemer	Missouri	Melinda Gibson	Wyoming
Rick Martin	Nevada	Roy Johnson	Wyoming
Jon Price	Nevada	Seth Wittke	Wyoming

Regional Consortia

Cale Ash	CREW	Mike Catsos	NESEC
Heidi Kandathal	CREW	Patricia Sutch	WSSPC
Jim Wilkinson	CUSEC	John Parrish	WSSPC
Brian Blake	CUSEC	Amy Lewis	WSSPC
Edward S. Fratto	NESEC		

NEHRP Agencies

Sandra Knight	FEMA HQ	Rob Lowe	FEMA Region IV
James Walke	FEMA HQ	John "Bud" Plisich	FEMA Region IV
Ed Laatsch	FEMA HQ	Lee Zachos	FEMA Region V
Mike Mahoney	FEMA HQ	Prince Aryee	FEMA Region VI
Wendy Phillips	FEMA HQ	Sue Evers	FEMA Region VII
Mai Tong	FEMA HQ	Doug Bausch	FEMA Region VIII
Erin Walsh	FEMA HQ	Jennifer Lynette	FEMA Region IX
Paul Morey	FEMA Region I	Tamra Biasco	FEMA Region X
Magda de la Matta	FEMA Region II	Ryan Ike	FEMA Region X
Gene Longenecker	FEMA Region IV	Jack Hayes	NIST

NEHRP Partners and Contract Support

Mark Benthien	Southern California Earthquake Center
Lesley Chapman-Henderson	FLASH
Tom McLane	ATC
Ken Smith	University of Reno-Nevada
Eric Vaughn	FLASH
Francoise Arsenault	BRI Consulting Group

I. Welcome and Opening Remarks

Cecil Whaley, Director, Planning, Exercises and Mitigation for the State of Tennessee, and host of the 2012 National Earthquake Program Managers (NEPM) meeting, welcomed the participants to Memphis and to the NEPM. He then introduced Sandra Knight, Deputy Administrator of the Federal Insurance and Mitigation Administration (FIMA), Federal Emergency Management Agency (FEMA).

Dr. Knight thanked everyone for the opportunity to participate again in the NEPM, which provides state, federal, and private partners in the earthquake community with an excellent venue to share their knowledge and expertise. Dr. Knight informed the participants that David L. Miller, the FIMA Associate Administrator, will address attendees during the plenary session of the National Earthquake Conference (NEC). She then introduced James Walke, the Director of FIMA's Risk Reduction Division. Mr. Walke remarked that the states, along with the federal agencies that form the National Earthquake Hazards Reduction Program (NEHRP) and their partners, are doing phenomenal work in earthquake mitigation and in reducing the risk from earthquakes in communities across the United States.

Mr. Whaley then asked all of the participants to introduce themselves.

II. Update on State Earthquake Assistance Funding

Ed Laatsch began his remarks by acknowledging John R. "Jack" Hayes, Jr., Director of NEHRP. Dr. Hayes has led NEHRP, which is funded at about \$100 million a year, since 2006. Under his leadership at the National Institute of Standards and Technology (NIST), there has been tremendous progress in strengthening the effectiveness of NEHRP and in building and maintaining partnerships.

Mr. Laatsch provided a brief background on the 50 percent cost match requirement for state assistance funds. From Fiscal Year (FY) 2009 to 2011, cost matching by the states was not an issue. For FY 2012, the FEMA Office of Chief Counsel (OCC) is mandating compliance with 44 C.F.R. Part 361, National Earthquake Hazards Reduction Assistance to State and Local Governments. Section 361.4, Matching Contributions, requires 50 percent cost matching (cash only, no in-kind resources) by participating states in the fourth year of the program. On April 5, 2012, Mr. Miller sent a letter to the states outlining the plan to meet the requirement. FEMA is in the process of determining the availability of matching funds with 13 of the 33 participating states and territories. This should be resolved very soon. Funds that cannot be awarded directly to the states will be provided to partners that support the states.

Charlisa Ussery from Alabama asked if the 50 percent matching requirement will be a permanent part of the state assistance program. Mr. Laatsch responded that it is now a requirement. However, this could change. The next NEHRP reauthorization may include new language on the state assistance program. Kathryn Long from California remarked that an in-kind match, as opposed to a cash only requirement, would make a significant difference. She also complimented FEMA on moving so quickly to address the issue and process the grants. Mr.

Whaley echoed those sentiments, commenting that he and others at the state level are very appreciative of the work undertaken by FEMA on behalf of the states over the past few years.

III. FEMA Regional Highlights

Region VIII

Doug Bausch provided an overview of the upcoming Great Utah ShakeOut exercise in Salt Lake City. It is estimated that 1 in 3 citizens in Utah will participate in the exercise and in other events scheduled for April 17-20. Activities include dissemination of an updated Preparedness Now video and the first ever, school-wide evacuation of about 40,000 students and staff from the University of Utah.

Mr. Bausch also discussed the inventory and assessment of 3,000 unreinforced masonry (URM) buildings in Salt Lake City. The project used the ATC-13 inventory, an inventory of buildings from the 2002 Olympics, and Salt Lake City assessment data. Approximately 90 percent of severe injuries are driven by this type of building. The survey has helped to identify mitigation priorities.

Region X

Tamra Biasco presented highlights of partnership work in Region X. The FEMA Risk Mapping, Assessment and Planning (MAP) program is very important in Region X and is now incorporating earthquake projects. For example, Risk MAP funds will be used for an earthquake assessment in Kodiak, Alaska. In June, an Evergreen Quake 2012 exercise will be conducted by FEMA and the U.S. Geological Survey (USGS). USGS has developed aftershock ShakeMaps for the entire 11-county area covered by the exercise. USGS also conducted an online webinar, developed a 100-page scenario document, and helped to develop descriptions of the faults. The collaboration on the Evergreen Quake exercise has been very well received and is an example of the great coordination between the USGS and FEMA over the past 4 years.

Ms. Biasco also has worked with FEMA staff and other partners on the development of a tsunami model for HAZUS. The work began in October and should be ready for testing this October. There have been limited funds for the project, which has included significant collaboration with the National Oceanic and Atmospheric Administration (NOAA). Region X also has developed a video to complement FEMA P-646, *Guidelines for Design of Structures for Vertical Evacuation from Tsunamis*.

Region IV

Gene Longenecker discussed his work on a virtual classroom format for National Earthquake Technical Assistance Program (NETAP) training. Virtual training on FEMA 154/ATC-20 will be held in Louisville, Kentucky, in late April. Classes in Tennessee and Alabama will participate in this training, along with participants from Georgia and South Carolina. In total, the training should reach about 200 participants.

Mr. Longenecker also reported on the efforts of Tammie Wells to develop a Southeast ShakeOut with staff from North Carolina, South Carolina, Virginia, and the Southern California Earthquake Center (SCEC). These efforts may be coordinated with a Northeast ShakeOut. Another initiative in Region IV is the development of a tsunami program for the Southeast.

Mr. Whaley thanked Mr. Longenecker and Brian Blake from the Central United States Earthquake Consortium (CUSEC) for all of their work on behalf of Region IV.

IV. State Highlights

Mr. Whaley asked the state earthquake program managers to describe best practices and accomplishments resulting from their state assistance funding.

Washington

John Schelling thanked FEMA for all of its support, particularly in tsunami activities, over the past year.

Mr. Schelling discussed some of the project work that has benefited from assistance funding in Washington, including the development of the Washington scenario catalog. The catalog includes 20 different scenarios and will help with mitigation and response planning, exercises, and training. The scenarios include overlays showing effects such as highway and bridge damage and businesses and employees affected by an earthquake. Other important projects are the Resilient Washington State (RWS) Initiative, which is based on the San Francisco Urban Planning and Response, or SPUR initiative, the School Seismic Needs Assessment Pilot Project in Walla Walla and Aberdeen, and Project Safe Haven. An implementation plan is now being developed for the RWS Initiative. The School Seismic Needs project will show the probability of collapse by percent. The Project Safe Haven Planning Process focuses on tsunami vertical evacuation and is an example of leveraging NEHRP funds.

Mr. Schelling acknowledged the work of Mark Benthien in preparing for a huge “Drop, Cover, and Hold On” drill for the West Coast.

Oregon

Althea Rizzo reported that Oregon will participate in the Great Oregon ShakeOut, which will take place on the same day as the Great California ShakeOut. She also thanked Mr. Benthien for all of his assistance on ShakeOut activities.

Last year, the Oregon legislature requested a resiliency plan. Developing the plan has been a significant effort involving eight working groups. The plan will be presented to the legislature next year. Ms. Rizzo also recently completed a 3-week roadshow for earthquake education and outreach. She met more than 1,500 people on her travels. The main focus of the trip was how to move from an awareness campaign to an action campaign. Another Oregon initiative is focused on tsunami evacuation planning and better signage. This initiative will be rolled out over the summer.

California

Ms. Long discussed a project to translate documents into Spanish and Chinese, which involved the leveraging of National Tsunami Hazard Mitigation Program (NTHMP) funds, and work with Cal Tech and the University of California-Berkeley on early warning systems. She mentioned that the recent earthquake in Mexico has brought early warning to the forefront. Many people asking for this, however, have unreasonable expectations.

The Great California ShakeOut this year will be even bigger and better. The Earthquake Country Alliance is a major recipient of NEHRP support and a primary sponsor of ShakeOut activities. The California Earthquake Authority Messaging Project also continues to receive attention. The purpose of this project is to identify the most compelling personal values in the individual decision-making process. Other work includes seismic retrofit options for critical facilities. This project has been funded for the first two cycles and hopefully will continue to receive funding.

Ms. Long also mentioned the Earthquake Engineering Research Institute (EERI) Concrete Coalition project. It is hoped that NEHRP funds will support Phase II of this work. Phase I involved working with jurisdictions in California to identify these buildings.

Alaska

David Kang acknowledged the support of Alaska's partners in earthquake mitigation, including the Division of Natural Resources, the University of Alaska-Fairbanks, the West Coast and Alaska Tsunami Warning Center, and the National Weather Service (NWS). The Alaska Seismic Safety Commission also is a major partner and has been focusing on public school seismic safety, seismic safety training, and seismic planning scenarios. In 2014, Alaska will hold events, including a large exercise, marking the 50th anniversary of the 1964 Great Alaskan Earthquake.

Outreach and awareness activities include preparedness training, outreach via community PSAs, the "Get Ready Alaska" campaign, and kiosks for seismic and tsunami awareness. Other projects include the update of the state hazard mitigation plan, cataloguing earthquake faults, integrating natural and manmade hazards into a single program, retrofit of schools, and tsunami siren systems.

Utah

Sheila Curtis thanked Mr. Benthien for his support of the Great Utah ShakeOut, a 3-day event this year. He has been working tirelessly on the ShakeOut for the past 2 years. Nine counties will participate in the exercise on the Wasatch Front. State officials also have worked with the Federal Aviation Administration and the National Guard on an Air Op plan. The goal was to have 700,000 participants. This has been surpassed and more than 800,000 people have now signed up. Many private partners will participate in the events.

Colorado

Ken Brink thanked FEMA for its ongoing support of state activities. In Colorado, these activities have focused on the post-earthquake assessment of critical infrastructure and coordination with many groups after the recent 6.5 magnitude earthquake, the largest earthquake in

Colorado in 56 years. Other projects include the continued strengthening of relationships with communities, the rapid visual screening (RVS) of facilities, support for the Great Utah ShakeOut, and HAZUS training.

Nevada

Rick Martin reported that Nevada held its first ShakeOut in 2010, with participation of about 190,000 Nevadans. This year, the goal is 500,000. In 2011, there were 110 magnitude 3.0 or greater earthquakes in Nevada. Each 3.0 magnitude earthquake receives a 24/7 review and update of the Nevada and USGS web pages.

Recent activities include the update of HAZUS; generation of ShakeMap and HAZUS output; a 2011 joint meeting with the Utah Seismic Safety Commission, which focused on URM; an updated Nevada seismicity map; a GPS and geodetic strain map; and engagement with the Nevada Gaming Security Commission.

Idaho

Mark Stephenson discussed the Idaho ShakeOut, which was modest in comparison to some of the other ShakeOuts but considered a big victory by the state and local earthquake community. Next winter, there will be an earthquake scenario in eastern Idaho that will include the failure of Palisades Dam. He noted that there have been many more cases of landslides in Idaho. As a result, canal and levee safety has become an important issue. Another issue continues to be unmapped faults. He added that Idaho does not have monitoring equipment for earthquakes (equipment in Wyoming is used). Idaho is attempting to identify funding for its own seismic monitoring equipment.

Other activities include revisions to the state plan, a school seismic needs assessment pilot project with the State of Washington, and a revised Earthquake Preparedness Guide for Idaho.

New Mexico

Susan Walker provided an overview of two important projects in New Mexico. One project is the seismic vulnerability assessment of eight counties in New Mexico. The second project is the adaptation of the FEMA Tremor Troops and Seismic Sleuths educational programs for New Mexico. She thanked FEMA and other state staff for their assistance.

Wyoming

Melinda Gibson reported that Wyoming, one of the most sparsely populated states in the U.S., is now in its second year in the earthquake assistance program. Project work includes the development of 16 earthquake scenarios, a tool to teach kids about "Drop, Cover, and Hold On;" informational postcards with basic earthquake mitigation tasks; and an URM inventory. She thanked her colleagues at the state level and FEMA for all of their support and assistance.

Maine

Elizabeth Barton discussed the seismic risk in Maine, which is not significant. For initiatives, Maine takes advantage, when feasible, of successful projects conducted by other states. Work

includes NETAP-funded training and training in HAZUS-MH, developing public earthquake awareness materials for schools and the emergency management community, and updating the state database for critical facilities.

Alabama

Ms. Ussery discussed projects undertaken in Alabama, including a series of slide presentations; planning for ShakeOut activities in 2013; updating an earthquake science curriculum for the 8th grade; updates to the Emergency Operations Plan; training in FEMA 154/ATC-20; updating of web pages; and collaborative work on Capstone 14, a multistate exercise to test corrective actions taken from the National Level Exercise (NLE) 2011. Another interesting project is the 17-foot by 17-foot simulator being developed by the University of Alabama-Tuscaloosa. The simulator is scheduled to be installed by May 1. Alabama also plans to establish a seismic safety council.

Kentucky

David Davis described a new video contest for elementary and high school students. He showed participants the winning high school video on the simple steps homeowners can take to protect their families and homes from an earthquake. Because of the success of the video contest, there are now plans to set up a writing contest for middle school students. Kentucky also is working on the Capstone 14 initiative. Mr. Davis thanked Steve Besemer in Missouri for sharing many of his project ideas with him.

Missouri

Mr. Besemer reported that Missouri has used its funds for non-structural mitigation for school districts; supported earthquake awareness events across the state; and improved its website. In February 2012, Missouri held its Earthquake Awareness Month, which was very successful. There were more than 400,000 participants from Missouri in the Great Central U.S. ShakeOut. For future events, the goal is to have higher participation from parts of the state with the greatest seismic risk.

The Missouri Seismic Safety Commission continues to meet quarterly and is a very active and supportive partner. The Commission has developed its own webpage so it can delve into more technical issues and supplied a poster contest for Earthquake Awareness Month. Another important partner in Missouri is the S.A.V.E. Coalition. The Coalition has deployed twice over the past 12 months for wind events. The deployments are a good practice for earthquake events. Training also was conducted this year for school safety officers.

Next year, there are plans to refine the catastrophic plan for earthquakes, work with CUSEC on the 2013 ShakeOut, and support local mitigation, including a new outreach and awareness neighborhood program.

Oklahoma

Kelly Kane discussed the recent earthquakes in Oklahoma and the community response to those earthquakes. Preliminary Damage Assessments (PDAs) were conducted on more than 200

homes in 2 counties. Six homes were destroyed, 21 homes had major damage, and 37 homes had minor damage. The counties did not qualify for assistance from FEMA. A declaration from the Small Business Administration (SBA) was requested to enable SBA loans. Of the 97 SBA loans applied for, 57 applications were approved for more than \$2 million. Some outreach work coincided with the earthquakes and was very timely.

Oklahoma also participated in the Great Central U.S. ShakeOut. There were about 65,000 participants from Oklahoma, a huge increase from the previous year (10,000 participated). In 2012 and 2013, there are plans to work with the Oklahoma Geological Survey to supplement the earthquake budget.

South Carolina

Ms. Wells reported on three projects being conducted in South Carolina: sponsorship of an earthquake section at the South Carolina State Museum; annual HAZUS training for county officials; and the update of state seismic maps to show the history of earthquakes by region. As a result of the updates, the maps have transitioned into a guide format.

Upcoming projects include a workshop with the University of South Carolina for K-12 educators on how to bridge the science divide and reactivation of the South Carolina Seismic Safety Commission. The Commission was a very positive partner in South Carolina when it was active. A meeting will be held this summer to discuss the reactivation.

V. Regional Consortia Updates

Northeast States Emergency Consortium

Ed Fratto is the Executive Director of Northeast States Emergency Consortium (NESEC), which includes the member states of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

Mr. Fratto highlighted an important project underway in the Northeast, the URM Building Inventory and Mitigation Strategy, a new mapping technology to raise awareness of the number, location, and types of URM buildings and the mitigation strategies available. Many of the URM buildings in the Northeast are in urban areas, from Boston down to New York City. Preliminary data indicates that there are 1,637,517 URM buildings in the Northeast (16,240 in Boston based on HAZUS data and 18,919 in Boston based on data from parcel maps, resulting in an 86 percent agreement between HAZUS and the parcel maps). Preliminary findings are that the HAZUS-MH data is reasonable; parcel maps support the HAZUS data; and Google maps can serve as validation tools.

Western States Seismic Policy Council

Patricia Sutch, Executive Director of the Western States Seismic Policy Council (WSSPC), provided an overview of WSSPC, which was established in 1979. Thirty-nine agency members of WSSPC include the directors of the geological surveys and emergency management agencies from 13 states in the western region, British Columbia, the Yukon Territory, American Samoa,

Guam, and the Northern Mariana Islands, and representatives from 7 seismic councils and commissions. Affiliate members include private corporations, local governments, non-profit organizations, universities, and individuals who share the common goal of reducing losses from earthquakes. Approximately 84 percent of the seismic risk in the United States is located in the WSSPC region.

The primary work of WSSPC is developing policy. WSSPC develops policy recommendations via three standing Committees: the Basin and Range Province Committee, the most active Committee; the Tsunami Hazard Mitigation Committee; and the Committee for Engineering, Construction, and Building Codes. Today, 15 policy recommendations have been developed by WSSPC, all of which are posted on the WSSPC web page at www.wsspc.org.

The focus this year is on earthquake scenarios and seismic risk reduction strategies. As a result of two policy recommendations adopted in 2010, the WSSPC Earthquake Safe Schools Initiative was established. A major part of this Initiative is the development of a checklist template for schools. Other WSSPC activities include establishment of a policy liaison with the Cascadia Region Earthquake Workgroup (CREW); seismic council and committee meetings at the 2012 NEC; adoption of state seismic legislation; creation of legislative web pages for each of the WSSPC states so that the states can review and compare legislation; the WSSPC annual report on state outreach; newsletters; and special reports.

Cascadia Region Earthquake Workgroup

Cale Ash, President of CREW, thanked Ms. Biasco for her support. He described the mission and goals of CREW, established in the mid-1990s and the youngest of regional earthquake consortia. CREW is now halfway through its 5-year strategic plan. Ongoing projects include a series of business roundtables (one was held recently in Portland and events are scheduled for Vancouver and Seattle in May); the recovery and mitigation webcast series; public forms; resiliency planning support for Washington and Oregon; and continuing website development and enhancements.

Future projects will include community earthquake and tsunami master planning and model ordinances; Cascadia Subduction Zone scenario updates; video shorts on earthquake preparedness and mitigation; resiliency planning; additional public forums; and the continued fostering of partnerships with WSSPC, EERI, and other organizations.

Central United States Earthquake Consortium

Jim Wilkinson, Executive Director of CUSEC, provided an overview of CUSEC. CUSEC was established in 1983 and includes 8 member states and 10 associate states represented in FEMA Regions IV, V, VI, and VII. The CUSEC Board of Directors includes the heads of the emergency management agencies of the eight member states: Alabama, Arkansas, Illinois, Indiana, Kentucky, Missouri, Mississippi, and Tennessee. Mr. Wilkinson discussed a sample of CUSEC projects since the last NEPM. The projects include public awareness and education, mitigation, response and recovery, and application of research.

In the awareness arena, CUSEC has hosted three Town Hall meetings; created and distributed brochures and newsletters; continued its GeoCache initiative (500 visitors); conducted and supported Earthquake Awareness Month with CUSEC states; briefed the Congressional Natural Hazards Caucus; and coordinated key events, including the 1811-1812 Bicentennial, the Great Central U.S. ShakeOut (2.4 million participants), and the NEC. CUSEC also was the recipient of the 2011 White House Champions of Change award (Mr. Blake) and received a 2011 FEMA Individual and Community Preparedness award.

In mitigation, CUSEC conducted three FEMA 154/ATC-20 courses, a Get Your Home Ready for Earthquake seminar, two hospital mitigation workshops, and created a non-structural mitigation for homeowners display. Response and recovery activities include work with the USGS and state geologists to develop better response and recovery plans and work on NLE 2011. CUSEC also is supporting Capstone 14 and will host a workshop for the private sector and emergency management community on August 14-16, 2012, in the Chicago area on how the two sectors can better work together. Research application projects focus on integration of new hazards information into the earthquake program and work with state geological surveys and the USGS to support national response planning.

VI. FEMA Headquarters Briefing

Building Codes and New FEMA Products

Mike Mahoney provided an update on building code activities. The 2012 International Building Codes (IBC) are ready for adoption. The code change cycle for the 2015 IBC and the International Existing Building Code (IEBC) is now underway. The Code Resource Support Committee (CRSC) met last week and drafted its position on almost 100 changes. The 2012 code change hearings will be held in Dallas on April 29-May 8 and the final action hearings on the code changes will be held in Portland in October 21-14. The 2015 International Residential Code (IRC) code change cycle begins in January 2013. The 2015 International Codes will be available in 2014.

Mr. Mahoney discussed FEMA E-74, *Reducing the Risks of Nonstructural Earthquake Damage*. For this publication, there is work underway to capture recent data from earthquakes in Chile (failure of more than 70 percent of elevators); Christchurch (collapse of precast emergency exit stairways in 12 buildings); and Japan (tsunami warning systems). This year, FEMA will release on CD FEMA P-807, *Seismic Evaluation and Retrofit of Weak Story Multi-Unit Woodframe Structures*. This publication presents a new technique to more effectively retrofit these structures and includes a calculation tool to account for the strength of all walls in the building. FEMA also will publish FEMA P-50, *Simplified Seismic Assessment Procedures for Detached Single Family Woodframe Dwellings*, and FEMA P-50-1. FEMA P-50 is based on ATC-50 and was co-sponsored by the California Earthquake Authority. FEMA P-50-1 is a retrofitting guide.

ROVER Update

Mai Tong presented an update on the Rapid Observation of Vulnerability and Estimation of Risk (ROVER) software. The software, which was developed for FEMA by ATC, SPA Risk LLC, and Instrumental Software Technologies, Inc., converts the paper-based RVS procedure into an electronic version for smart phone devices. ROVER greatly reduces the work involved in data collection, storage, processing, and management and provides a faster and more efficient way to conduct field evaluation of large numbers of buildings to determine their seismic risks. FEMA released ROVER in October 2011 and has shipped more than 700 copies. More than 600 users have signed up on the ROVER website (www.atc-rover.org).

Dr. Tong also mentioned the SeismicWaves article published on ROVER in the fall 2011 (available on www.nehrp.gov). A ROVER user group, the ROVER Ready Alliance, will be introduced soon and there will be ongoing NETAP training on ROVER.

New Earthquake Training Courses

Wendy Phillips and Tom McLane presented on two new earthquake mitigation training courses: *Earthquake Basics – Science, Risk, and Mitigation*, IS-325, and a train-the-trainer course, *Home and Business Earthquake Safety and Mitigation*, FEMA P-909.

Earthquake Basics is a 30-minute independent study course that presents non-technical information on earthquake science, risk, and mitigation. The course also discusses techniques for structural and nonstructural earthquake mitigation. *Earthquake Basics* is targeted to many audiences, including homeowners, business owners, the private sector, government workforce at all levels, first responders, non-profit organizations, volunteers, and community-based organizations. *Earthquake Basics* resides on the FEMA Emergency Management Institute (EMI) website (<http://training.fema.gov/IS/>).

The new *Home and Business Earthquake Safety and Mitigation* course provides training on structural and nonstructural earthquake mitigation. The course has three components: a *Train-the-Trainer* course, a *Home and Business Earthquake Safety and Mitigation* course, and a *Hands-On Interactive Mitigation Demonstration*. The course will create a cadre of trainers with the ability to provide basic knowledge on earthquakes and the simple steps that can be taken to mitigate seismic risk in homes and businesses. The training consists of PowerPoint slides, hands-on demonstration instructions, supply lists, scripts, quiz (and answers), certificate, and posters. Audiences include government at all levels, emergency managers, first responders, businesses, volunteer community groups, and all others interested in leading an earthquake safety presentation.

Mr. McLane reviewed some of the other training courses hosted under NETAP and thanked Jennifer Lynette for her support of NETAP training this year.

VII. CUSEC State Website

Mr. Blake provided an update on the new CUSEC website for the states (<http://eqprogram.net>). The website is now ready for use by the states and emergency managers. Postings to the website can be made directly by the states and by CUSEC staff. The states also will be able to pull back their own content. A grassroots committee will be established soon to build out the resources section on the site. A formal rollout of the website will be held this summer.

VIII. ShakeOut!

Mr. Benthien of SCEC thanked everyone for their collaboration and support of ShakeOut activities across the U.S. ShakeOut started in California and keeps expanding, with everyone contributing great ideas for improving the events and the response. Two weeks ago, the New Zealand ShakeOut site was launched and there is a lot of excitement over the planned Tokyo ShakeOut. The goals for ShakeOut include participation by millions of people; shifting the culture about earthquakes; and a significant increase in readiness.

IX. Senior State Earthquake Program Managers Leadership Panel

Mr. Whaley, Ms. Long, Ms. Wells, and Ms. Curtis participated on the panel to discuss what can be done to advance state earthquake mitigation and preparedness. The panelists made the following recommendations:

- Partnerships, including those with non-governmental organizations (NGOs) and the private sector, are vitally important to sustaining state programs.
- When working in partnerships, ensure that products are produced and updated.
- Do not ignore opportunities. Those who appear least likely to be important can prove to be the most helpful.
- Community and senior level support are key to making programs and projects successful.

X. Strategic Planning for the Future

Mr. Laatsch began the discussion on strategic planning for the future of NEHRP and the NEPM by reviewing the focus areas of disaster codes, implementation and outreach, and state assistance and the roles of the NEHRP agencies and their partners in these areas. He noted that NEHRP has received billions of dollars in funding since the Program was established in 1977. Through the years, leveraging has proven to be a key component of successful NEHRP projects and partnerships. During this NEPM, he has learned about new websites, training courses, and partnerships. The state of NEHRP is good. Although funding continues to be an issue, this is not unique to NEHRP and NEHRP is accomplishing a great deal despite reductions.

Mr. Laatsch also reviewed some of the action items from the 2011 NEPM: the need for greater synergy and interagency coordination; focus on resilience; and collaboration with the National

Emergency Management Association (NEMA). He asked about the value of holding quarterly conference calls with all of the states. Mr. Blake reported that CUSEC states now hold monthly calls, and that a quarterly conference call with all of the states would be feasible. The calls could be facilitated through the new state website.

Ms. Long agreed that it would be valuable to hold a quarterly or semi-annual conference call. She also recommended scheduling more free time for networking at the NEPM meetings. Mr. Laatsch commented that an action item for the next NEPM meeting could be presentations by the states on how they have used their matching funds. Another topic could be the tools available to increase collaboration among the states, such as more frequent conference calls, the use of LISTSERV, and more time for networking.

XI. Summary and Closing Remarks

John Parrish, the WSSPC Chair, expressed his appreciation to Mr. Laatsch and the FEMA team on the state assistance program this year. He also thanked Mr. Laatsch for attending the NEMA meeting to discuss the state assistance program.

Mr. Whaley thanked everyone for their participation. He will set up an *ad hoc* committee to work with Heidi Kandathal at CREW and with EERI on a 2-day NEPM meeting next year in Seattle. The committee will also include Mr. Schelling, Ms. Sutch, Ms. Long, Mr. Davis, and Mr. Blake.

Mr. Laatsch also thanked everyone for their contributions. He and Dr. Knight then awarded Certificates of Appreciation from FEMA to Mr. Fratto, Ms. Kandathal, Ms. Phillips, Ms. Sutch, Ms. Wells, Mr. Whaley, and Mr. Wilkinson for their efforts in hosting this year's NEPM and for all of their work over the years in earthquake mitigation.

Mr. Whaley then adjourned the NEPM meeting at 5:30 p.m.