

**MEETING SUMMARY
STATE EARTHQUAKE PROGRAM MANAGERS MEETING
SEATTLE, WASHINGTON
APRIL 22, 2008**

OVERVIEW

Earthquake program managers from 17 states attended the annual State Earthquake Program Managers Meeting, held at the Westin Hotel in Seattle, Washington, from 8:00 a.m. to 5:00 p.m. on April 22, 2008. States represented included the following: Alabama, Alaska, Arkansas, California, Hawaii, Idaho, Illinois, Indiana, Kentucky, Mississippi, Missouri, Nevada, New York, Oregon, South Carolina, Utah, and Washington.

The meeting was held in conjunction with the 2008 National Earthquake Conference, which took place at the Westin Hotel during April 22–26, 2008. In addition to state earthquake program managers, about 20 other persons participated in the meeting. They included earthquake program personnel from the Federal Emergency Management Agency's (FEMA) headquarters and regional offices, as well as representatives from the Central United States Earthquake Consortium (CUSEC), Northeast States Emergency Consortium, Western States Seismic Policy Council, and British Columbia Provincial Emergency Program. CUSEC Executive Director Jim Wilkinson served as moderator, assisted by CUSEC Program Coordinator Brian Blake.

During the morning session, the state program managers first shared issues, activities, and approaches that are currently of interest to them. They then discussed the concept of a “model” state earthquake program. Topics addressed during the afternoon session included the following: state clearinghouses, earthquake awareness activities, FEMA activities, NEHRP strategic planning, and future meetings of the state earthquake program managers.

ISSUES OF INTEREST TO STATE EARTHQUAKE PROGRAMS¹

Utah

The large number of unreinforced masonry (URM) buildings in Utah have been identified as a major seismic risk. As a first step in confronting this risk, the state legislature this year passed a resolution calling for an inventory of all public URM buildings (structures open to the public). The legislature also enacted measures concerning the seismic mitigation of school buildings and a requirement that qualified structural engineers must be involved in the design of specified structures. The state seismic safety commission and structural engineers association were key players in helping to pass this legislation.

¹ Listed in the order in which they were presented.

Arkansas

The legislature rejected a proposal to upgrade state building codes from the 2000 International Building Code (IBC) to the 2006 IBC. In response to fears that the change would increase construction costs, legislators tabled the measure for further study, despite a prior study that concluded that the newer code would reduce costs by increasing the options available to builders. Resistance to code upgrades is an issue that arises every few years in CUSEC member states. FEMA can provide position papers, expert speakers, and other resources that can help state earthquake programs present accurate information about the impact of code upgrades.

The state is telling rural residents to be prepared to subsist on their own for 7–10 days following a major New Madrid earthquake. The new governor has already held two cabinet-level exercises in the state emergency operations center (EOC). The state is using information developed through a hurricane gap analysis to update county earthquake plans and ultimately the state plan. The state geological survey is surveying soils statewide for use in transportation infrastructure planning, and the state plans to provide the data gathered to USGS for use in seismic hazard mapping.

Kentucky

An issue that has come to the fore in Kentucky concerns financial liability for actions or accidents involving trained disaster-response volunteers. The right people will need to be brought to the table to craft a legislative solution to this issue. The state earthquake program is working to get some of the funding sought by the state from the Department of Homeland Security's (DHS) Emergency Management Performance Grant (EMPG) Program earmarked for seismic projects.

Alaska

The state has been focused on obtaining and putting to use funds from FEMA's Pre-Disaster Mitigation (PDM) Grant Program and Hazard Mitigation Grant Program (HMGP). Mitigation projects have included structural and nonstructural retrofitting of schools and other public buildings. The state has also examined the possibility of implementing all-hazards sirens, and is surveying Alaska's critical infrastructure under a FEMA Hazard Mitigation Technical Assistance Program (HMTAP) project. Outreach activities are under consideration for the 45th anniversary of the 1964 Great Alaska Earthquake. The state earthquake program is still taking advantage of the 2004 Denali earthquake, which impacted small communities, to stimulate cooperation with outreach efforts.

Idaho

The magnitude 6.0 earthquake that occurred near Wells, Nevada, in February 2008 has "helped" state earthquake program personnel in neighboring Idaho, enabling them to remind the state's new governor and emergency management director of the earthquake hazards faced in the region. Program staff have been working with Idaho counties to help them get their hazard mitigation plans in place. It has been challenging to get them to focus on natural hazards given the prominent availability of lucrative homeland security funding. Rural seismic safety seminars are being planned for this fall in conjunction with

the 25th anniversary of the Borah Peak earthquake. A new state seismic safety advisory commission has been created, and it has proven challenging to obtain full, balanced participation. The commission includes plenty of representatives from academia but needs more building officials.

Alabama

Alabama has a new state emergency management director whose background is in hurricanes. A state-level planning workshop has been held in connection with the New Madrid catastrophic planning initiative; planning classes have also been organized for interested building inspectors and engineers. HAZUS runs are planned for each county near the seismic zone to provide data that the counties can use in preparing earthquake annexes for disaster response plans.

Washington

Earthquake preparedness has been a recent focus in the state; the governor is interested in preparedness and April is preparedness month. The state earthquake program has been working on updating and integrating the use of HAZUS, ShakeMap, and ShakeCast, and can now generate ShakeMaps within 6 minutes of an event. State cabinet members have used ShakeMap and HAZUS tools in connection with Seattle fault scenario exercises.

Local town-hall meetings have proven to be an effective means of getting seaside communities involved in tsunami preparedness. The state is considering the development of early-warning systems so that bridge traffic, for example, could possibly be shut off in time to save lives. The state has prepared diagrams of school buildings for security preparedness and is looking at incorporating additional information on the buildings' status in relation to earthquake and tsunami preparedness. Tsunami evacuation remains a significant issue; the legislature has provided funding for the development of all-hazards radio, but the state also needs to address landowners' concerns about their potential liability for persons evacuating to higher ground on private property.

Missouri

The state earthquake program has been involved in the New Madrid catastrophic planning project, although this work has been pushed back somewhat by the demands placed on staff by recent natural disasters. The governor has affirmed that earthquakes are the state's top disaster-planning priority, but earthquake program staff and funds are nevertheless declining. Staff have helped the state seismic commission update their strategic plan. The state is not really doing any earthquake mitigation projects at this time, although it has partnered with FEMA and CUSEC on mitigation training for health care facilities. The governor's insurance task force, established to study Katrina-inspired concerns about potential insurance problems following a major earthquake, has drafted a report to the governor. The task force is recommending the creation of a catastrophic insurance fund and an associated seismic advisory committee.

Illinois

The state EOC was activated in response to the magnitude 5.2 earthquake that occurred in southern Illinois on April 18, 2008. This was done as a precautionary measure; although no casualties and little damage resulted from the quake, there was a tremendous amount of media interest in the event. This shows how, in the event of a large, damaging earthquake in the region, the states involved would likely be deluged with media inquiries.

The state has recently been focusing more on response than on mitigation. The earthquake response plan, which was perceived to need a more operational focus, has been revamped to meet standards of the Emergency Management Accreditation Program. Central reception and staging areas for supplies are being addressed under the plan, and the state is looking at using airports in the southern part of the state for these sites. The Mid-America Earthquake Center has prepared some rather conservative loss estimates for Illinois in connection with the New Madrid catastrophic planning project.

Nevada

The earthquake that occurred this past February near the town of Wells caught the state somewhat by surprise. Fortunately only one injury was associated with the quake, but about 2,100 URM structures were damaged. The state responded with proposed legislation that would require a statewide inventory of URMs; this bill was passed by the legislature but vetoed by Nevada's new governor. Legislative strategy is now shifting toward an all-hazards approach, with the Wells earthquake serving as a potent reminder of the need for action.

Indiana

Although emergency management funds are not earmarked for earthquakes in Indiana, the state nevertheless has some good earthquake planning efforts under way. Thirty-two of the state's 92 counties have been funded for earthquake disaster planning, and six state-level workshops have been held in connection with the New Madrid catastrophic planning initiative. District-level New Madrid workshops are now getting under way in the state.

British Columbia (Canada)

The earthquake program is currently unfunded in British Columbia (that is, the program manager has no funds with which to hire staff or carry out projects). The province does have a disaster response plan; the program manager is trying to make the plan more operational, in part by identifying and prioritizing response routes that can be used to get responders and supplies into disaster areas. The province has not experienced a significant quake since 1946, and as a result, outreach efforts have been neglected.

Mississippi

The earthquake program is working to develop an earthquake annex for the state disaster response plan, and is working with at-risk counties to create their respective annexes.

CUSEC

The Illinois earthquake of April 18, 2008, generated some 38,000 reports from members of the public who felt the shaking. These reports stretched across 13 states. Utilization of the CUSEC Web site surged, from 2,000 page views the day before the quake to 27,000 views the day of the event. In addition, the New Madrid fault was the third most popular Google search topic in the nation during the immediate aftermath of this magnitude 5.2 quake.

Oregon

In recent years the state has used the rapid visual screening procedures developed by FEMA to assess and prioritize earthquake risks among schools and emergency facilities statewide. The state is currently working to mitigate these facilities, and has initiated workshops to examine the vulnerability of ports, energy facilities, and other critical infrastructure. The state earthquake program is focusing on public awareness by working with surrounding states to leverage the attention and resources being generated through their activities. An earthquake response exercise is being planned for April of next year. Oregon's 36 county governments, which are responsible for funding earthquake-related activities at the local level, are hard-pressed to do so because of revenue losses associated with the decline of the timber industry in the state.

South Carolina

The state earthquake program is developing an earthquake preparedness guide for the public. Plans are to distribute the guide in community newspapers during earthquake awareness observances in November. The program continues to try to leverage support for earthquake-related activities by piggybacking onto activities funded for hurricanes and other natural hazards.

Hawaii

The earthquake that struck Hawaii in October of 2006 has led to a study of how the residential post-and-pier construction unique to the state can be mitigated. The state is working to update its earthquake and tsunami preparedness plans.

California

During the 1980s and 1990s, the state had as many as 30 staff working on earthquake preparedness. The earthquake program now has three employees—the manager and one staff person each for Southern California and the Bay Area. The Golden Guardian exercise planned for November 2008 is based on a magnitude 7.8 scenario earthquake on the southern San Andreas fault. Public outreach will be carried out through the Dare to Prepare campaign, and HAZUS runs are being completed for eight impacted counties and seven impacted cities.

The tsunami that hit the northern California town of Crescent City in 2006 caused about \$10 million worth of damage. The event rekindled concerns about and efforts to enhance the coastal tsunami warning system. In March 2008, the state conducted the first test of the Emergency Alert System involving live tsunami warning codes in northern California's Humboldt County.

New York

Over the past year the state earthquake program has been involved in updating the earthquake-related portions of the state's multihazard mitigation plan. This effort included adjusting the U.S. Geological Survey (USGS) seismic hazard maps for the state to incorporate the effects of local soil conditions. Adjusted maps were produced for all 62 counties in the state for inclusion in the plan. Schools in areas of relatively high seismicity were identified to state education officials so that they can arrange for seismic assessment of these buildings. The state is also working to develop key data on its 16,000 state government buildings so that their seismic vulnerability can be evaluated.

MODEL STATE EARTHQUAKE PROGRAM

Attendees discussed how earthquake programs differ from state to state and from the programs of years past. The focus was on the essential or common elements that exist or should exist among these programs. Information and opinions shared included the following:

- In the past, when they were funded largely through a FEMA grant program dedicated to earthquakes, state earthquake programs were organized according to FEMA guidance, with required and elective program elements. Although it could be difficult to divide program funds among these elements, it was clear what elements made up each program. Since then, programs have become less regulated and more amorphous. Has the organizational pendulum swung from one extreme to the other? Should some of the old structure or commonalities be reintroduced? If so, how?
- The organizational settings in which earthquake programs operate vary from state to state. Within state emergency management departments, earthquake programs can be part of mitigation, preparedness, operations, or other divisions, or can be autonomous programs that interface with all of these divisions. Earthquake program staffing also varies by state, ranging from multiple, full-time employees to one or more employees who divide their time between earthquakes and other hazards or functions.
- The DHS EMPG program is a principal vehicle through which to obtain federal funds for state earthquake programming. The EMPG program is administered through FEMA's National Preparedness and Grant Programs directorates, while the FEMA earthquake (NEHRP) program is housed in the Mitigation Directorate. FEMA NEHRP staff do, however, provide input for the annual EMPG program guidance, and would be willing to carry forward input from state earthquake programs.
- Annual work plans can be key to obtaining EMPG funds for earthquake programs. State emergency management agencies applying for EMPG funds are required to submit work plans, prepared in cooperation with FEMA's regional offices, that describe how they propose to use the funds. State earthquake programs can work to secure the resources that they need by contributing to the development of these work plans. Also, by developing and implementing their own dedicated work plans in consultation with state emergency management directors, state earthquake programs

can become better positioned to influence the EMPG work plans and persuade directors that they deserve a share of EMPG funds. In Idaho, for example, the state earthquake program must prepare annual work plans in order to compete for a share of the state's EMPG funds.

- Rather than seeking a return to separately regulated and funded offices, state earthquake programs should concentrate on how to succeed within their existing organizational environments. In addition to work plans, there are other tools and approaches that the programs can use to enhance their visibility and garner the support they need. Earthquake awareness observances, for example, can be used to boost the visibility of the program as well as awareness of hazards and risks. Other strategies include maximizing participation in disaster exercises and catastrophic planning projects; contributing to the development of state hazard mitigation plans; offering earthquake program orientations to incoming management; and working with state training and exercise officers to shape future exercises and build earthquake-related training resources.
- NEHRP—including FEMA's regional and headquarters earthquake program staff as well as the other NEHRP agencies—is another source of support for state earthquake programs. NEHRP staff at FEMA headquarters communicate with the agency's regional earthquake program coordinators via monthly conference calls, and some regional coordinators similarly communicate with state program managers. FEMA's personnel can provide technical expertise and training resources. The state earthquake program in Utah, for example, has benefitted greatly from its ongoing partnership with FEMA Region VIII earthquake staff.
- Because FEMA's NEHRP program is housed within the Mitigation Directorate, the support that it can provide is perhaps weighted toward mitigation. At the state level, however, earthquake programs need to include elements from all phases of emergency management—preparedness, response, and recovery as well as mitigation. It may be helpful to try to establish a NEHRP subcommittee within the National Emergency Management Association (NEMA) that could advocate for state earthquake program needs at the state and federal levels across all phases of emergency management.
- Among the elements that are important to the success of state earthquake programs are the following:
 - Adequate funding and staffing
 - A comprehensive approach that addresses preparedness, public education, warnings, response, and mitigation
 - A strategy for engaging local governments, the private sector, and the community on an ongoing basis
 - Long-term strategic plans and related annual work plans
 - Ways to keep engaged with relevant agencies, academia, and other experts so as to stay abreast of state-of-the-art developments in the field

- Routine training that is comprehensive and standard across states
- Federal partners that provide guidance and identify and promote best practices

ESTABLISHING STATE CLEARINGHOUSES

Attendees talked about the uses of post-earthquake clearinghouses and current plans, approaches, and templates relating to their establishment. In this discussion, “clearinghouses” referred to the temporary field offices described in USGS Circular 1242, *The Plan to Coordinate NEHRP Post-Earthquake Investigations* (2003). According to the circular, immediately after a sufficiently large earthquake,

“the USGS, FEMA, and EERI will work with state agencies to organize a field technical clearinghouse. Depending on ability and capability, the affected state(s) may take the lead in organizing the clearinghouse. . . . The clearinghouse is the focal point for coordinating activities and promoting the safety of all field parties during initial post-earthquake reconnaissance.”

The major points made in this discussion were as follows:

- Under Circular 1242, the USGS has the lead clearinghouse role at the federal level in cooperation with the other NEHRP agencies. Although the Mitigation Directorate, home to FEMA’s NEHRP program, has the lead role for FEMA, funding for post-earthquake clearinghouses would come from FEMA’s Disaster Operations Directorate.
- CUSEC has had to plan a clearinghouse approach that reflects the likelihood that multiple states would be impacted by a major earthquake occurring in the central United States. Although the traditional approach described in Circular 1242 is to establish a single centralized clearinghouse for each earthquake, the CUSEC states plan to stand up a separate clearinghouse in each impacted state and coordinate their activities regionally.
- The CUSEC states envision that clearinghouses would be set up near joint field offices. They are working to pre-identify schools that would be willing to serve as clearinghouse sites, and to pre-identify and pre-credential the researchers and officials who would likely make up initial post-earthquake field parties.
- Clearinghouses are the interface between emergency management and scientific research communities in post-earthquake environments. Consequently, they provide both challenges and opportunities. To realize their full potential, clearinghouses must ensure that information flows in both directions between field researchers and emergency managers. Researchers can provide expert observations that are of value for response as well as recovery operations, and emergency managers can provide the guidance on access that keeps responders unhindered and researchers safe.

- State emergency management directors may need to be educated on the value of clearinghouses and the two-way communications that these resources can facilitate. And staff from state geological surveys, who are typically called upon to represent the research community in clearinghouses, may need to be introduced to the role of emergency management. CUSEC plans call for state geological surveys to represent researchers in both clearinghouses and EOCs. In Utah, plans call for clearinghouses to be housed in and run by the state geological survey, and for field researchers to be linked into the damage assessment process being coordinated by emergency managers.
- The clearinghouse set up in the wake of Hurricane Katrina is still in operation. Geographic information system (GIS) and remote-sensing expertise have been integral to this operation, along with the expertise of emergency managers and geological surveys. Earthquake clearinghouse plans should perhaps incorporate GIS support as a third main component along with emergency management and geological surveys. The Katrina experience has also demonstrated that it is possible for clearinghouses to attract and greatly benefit from donated equipment and services.
- In California, the clearinghouse concept dates back to the 1970s. Plans have been built through a partnership among the state earthquake program, the state geological survey, the state seismic safety commission, and others. Interaction between EOCs and clearinghouses has become more important as those involved have recognized the potential value of such communication. A clearinghouse will be incorporated into the Golden Guardian exercise play this fall in southern California.
- Sample state plans for the establishment of post-earthquake clearinghouses are available from California, Utah, and WSSPC, among others.

EARTHQUAKE AWARENESS ACTIVITIES

The observances and activities that various states are using to increase public awareness and preparedness were discussed. These activities are summarized below.

Earthquake awareness week and tsunami awareness week observances are held together each year in Alaska. The governor issues a proclamation and television weather reports feature earthquake and tsunami trivia. In some years there have also been tests of broadcast emergency alert systems with live earthquake or tsunami warning codes.

Earthquake and tsunami awareness events are also linked in Hawaii. The state holds two large earthquake or tsunami preparedness exercises each year, which are timed to coincide with regular monthly tests of Hawaii's tsunami warning sirens. April is tsunami and earthquake awareness month; media events are held during the first week to launch the observance, and outreach to specific groups takes place during the remainder of the month. The state Web site allows visitors to enter their address to see where they are in relation to tsunami evacuation zones, and also offers interactive quizzes that enable citizens to test their preparedness knowledge.

During the 1980s and 1990s, the State of California sponsored earthquake awareness observances every year. State funds used for those events were redirected to other uses about 5 years ago. Since then, local governments have stepped in to keep these observances going. The state has secured EMPG funds with which to reinstate its activities in 2009. In the past, each week of earthquake awareness month had a different theme involving outreach to different target groups such as business, unions, local governments, etc. This year, in conjunction with the Golden Guardian exercise, an art college has been engaged to put up earthquake preparedness messages on the sides of buildings in downtown Los Angeles.

CUSEC has worked for years to coordinate the annual observances of its eight member states. Six of these states held their observances together in February this year. This coordination helps to increase awareness that everyone across the region faces the same hazard and similar risks related to that hazard. Observances have typically featured outreach to the public through town-hall meetings, workshops for local public officials and business leaders, and varied training activities. This year in Missouri, the state partnered with FEMA to provide training designed for public and private health care facilities on nonstructural mitigation and incremental rehabilitation.

In South Carolina, the state has partnered with the National Weather Service to place special emphasis on “drop, cover, and hold” drills in schools during earthquake awareness week. In last year’s observance, four counties had 100 percent of their schools participate in these drills.

All businesses over a certain size are required to participate in earthquake preparedness exercises during Oregon’s annual earthquake awareness observances. These businesses are required to report to the state on their participation. In some years, donations have been solicited from the private sector to fund the purchase of prizes for school systems achieving 100 percent participation in earthquake drills.

FEMA NEHRP ACTIVITIES

Earthquake program personnel from FEMA’s headquarters and regional offices spoke about their recent activities and the challenges and opportunities faced by the program. Their remarks are summarized below in the order presented.

Marie Gonzalez, Caribbean Area Division, FEMA Region II

FEMA’s office for Puerto Rico and the Virgin Islands maintains a strong partnership with the University of Puerto Rico at Mayaguez, which has carried out studies to map tsunami evacuation zones and operates a clearinghouse for FEMA’s local earthquake and tsunami awareness and preparedness materials. Videos are used as the primary public awareness tool. FEMA has also produced interactive CDs for children and adolescents, and uses an earthquake simulator that is sponsored by local businesses.

The regional seismic monitoring network is now operating 24/7 with the help of local funding. Hurricanes remain the number one threat, but in the event of hurricane-related disaster declarations the islands seek HMGP projects relating to earthquakes and tsunamis as well. Currently a large HMGP project is under way to develop protected underground power distribution for the local banking industry.

Joe Rachel, FEMA Region IV

Last year South Carolina held a daylong observance marking the 120th anniversary of the state's 1886 earthquake. This was a good opportunity to bring together public officials, community members, and the media to focus on the earthquake hazard and the work of the state earthquake program.

Region IV held its first joint mitigation-earthquake meeting in 2007. This event highlighted several model seismic mitigation efforts in the region, and provided an opportunity for state earthquake program managers to meet and discuss how to work together with state and regional mitigation personnel. Georgia Tech talked about their research on bridge retrofitting, and Memphis Light, Gas and Water described their \$1.2 million PDM-funded retrofit project. This project addressed both earthquake and flood risks, although it was the benefit-cost modeling related to flooding that got the project funded.

Region IV staff have also been working with the Mid-America Earthquake Center and HAZUS in connection with the New Madrid catastrophic planning project.

J. P. Marsch, FEMA Region V

Mr. Marsch became the earthquake program coordinator for Region V in September of last year. In March he participated in an all-office briefing on how Region V would respond to a major earthquake in the New Madrid Seismic Zone (NMSZ). In October, the office will participate in a regional planning workshop held for the New Madrid catastrophic planning project.

Mr. Marsch has been assisting Illinois and Indiana with their state hazard mitigation plans. The Illinois plan features detailed risk assessment information on 33 counties that was developed through collaboration between earthquake program staff and mitigation and planning personnel. Southern Illinois University has received a grant to help 20 counties in the southern part of the state develop plans that will enable them to better compete for PDM and HMGP funding. The City of Waterloo, Illinois, located southeast of St. Louis, is using an \$800,000 PDM grant to seismically retrofit their new high school as it is constructed.

Kent Baxter, FEMA Region VI

Mr. Baxter replaced Chuck Gregg as the earthquake program coordinator for Region VI in May of last year. He is assisted by Patricia Schaffer, and they look forward to working further with Arkansas and New Mexico on seismic matters.

Sue Evers, FEMA Region VII

Staff from Regions IV and VII recently assisted with an earthquake tabletop exercise conducted at the annual conference of the Four Corners Emergency Management group. The group, which comprises local emergency management officials from counties in the four-corners region of Kansas, Missouri, Oklahoma, and Arkansas, used the exercise to learn how to respond to earthquakes outside the NMSZ, as well as how to assist in the event of a major New Madrid quake.

Several training activities were recently conducted in Missouri in connection with earthquake awareness month. These included nonstructural mitigation workshops, structural assessment and visual evaluation training, and a course on earthquake medicine.

Doug Bausch, FEMA Region VIII

The seismic vulnerability of existing URM buildings is of major concern to Utah and other states in and beyond Region VIII. In Utah, where URM structures continued to be built until the mid-1970s, scenarios indicate that these buildings could account for 80 percent of severe casualties in a damaging earthquake. Consequently, the state is undertaking efforts to inventory, prioritize, and ultimately mitigate these structures.

Region VIII is supporting these efforts in several ways. FEMA headquarters and Region VIII have worked together to develop a soon-to-be-completed guidebook on URM mitigation designed for local officials nationwide. And FEMA has developed an automated version of the FEMA 154 rapid visual screening tool that is designed for use on handheld devices. This tool, which reduces screening time per building, is being pilot-tested in Utah for use in the state's URM inventory. Region VIII is also supporting a pilot project aimed at further integrating HAZUS with the USGS ShakeMap tool.

David Kennard, FEMA Region IX

Mr. Kennard is the interim acting earthquake program coordinator for Region IX until a new coordinator is hired to replace Jeff Lusk. Region IX has been working with the State of California on several planning documents, including a disaster response CONOPS plan, which was partially implemented recently for wildfires in southern California, and CONPLAN1, which scripts the initial 14-day response to a major northern California earthquake.

FEMA is participating in the Earthquake Country Alliance, a broad-based public-private partnership that is promoting earthquake awareness and preparedness and improved response and mitigation capabilities in southern California. This year, the group is focusing on the Great Southern California ShakeOut, a series of events scheduled for November. The ShakeOut will include the nation's largest-ever public earthquake preparedness drill as well as the Golden Guardian emergency response exercise and other activities. Golden Guardian will be based on a catastrophic southern San Andreas fault scenario that FEMA has helped to develop.

Region IX has employed a multihazard approach in responding to disasters. Support for earthquake-related training was secured following flooding in Nevada, and several projects were funded in the wake of the October 2006 earthquake in Hawaii. These include a HAZUS validation study and a study of harbor vulnerability and mitigation.

Ed Laatsch, FEMA Headquarters, Mitigation Directorate

Mr. Laatsch introduced the NEHRP program staff from FEMA headquarters: Cathleen Carlisle, Larry Hultengren, Mike Mahoney, Mike Tong, and Anita Vollmer. They and Mr. Laatsch reside organizationally within the Mitigation Directorate, Risk Reduction Division, Building Science Branch.

Mr. Laatsch spoke about some of the major challenges and opportunities faced by the FEMA earthquake program. Resource availability has become a challenge as program funding has declined from 70 percent to 30 percent of the levels authorized over the last 5 years. In response, NEHRP staff have been using every available opportunity to make a business case for augmenting the program's budgeted funds, including developing performance measures for the program. These efforts have begun to show some success; Mr. Laatsch is cautiously optimistic that the program may receive additional funds in FY 2009 with which to reestablish an earthquake state assistance program at about half of its former strength.

The program is also trying to leverage existing funds by maximizing public-private partnerships and by providing written input to the EMPG program guidance for states. NEHRP staff provided input for the FY 2008 guidance, with some success, and will provide input again this year for the FY 2009 guidance. The intent is to try to more clearly articulate that earthquake projects are as eligible for EMPG funding as are projects relating to other hazards.

Building codes pose another challenge for the program. Despite the successes achieved in standardizing building codes nationwide through the International Code Council (ICC), some communities have continued to amend out seismic provisions when adopting these codes. In response, NEHRP staff are talking with the ICC to put together a memorandum of understanding on an approach to reducing such amendments.

Critical infrastructure and lifelines are another challenge, since the earthquake program no longer has enough funding to support lifelines work. In response, headquarters staff are pursuing contacts in the DHS Office of Infrastructure Protection to try to leverage support for this work through their activities. The independent NEHRP advisory committee has cited program implementation, largely the province of FEMA, as a deficiency within NEHRP. In addition to its efforts to secure additional assistance for state earthquake programs, FEMA is responding by developing a new model outreach and awareness initiative. This effort, undertaken through a contract with the Safe America Foundation, will entail working with local chambers of commerce and others to design and implement earthquake awareness campaigns in selected cities on the West Coast and in the NMSZ.

Mike Pawlowski, FEMA Headquarters, Disaster Operations Directorate

Along with similar projects under way in California and Florida, the New Madrid catastrophic planning project is currently a major focus of FEMA disaster operations staff. Through this project, FEMA is working with CUSEC and other partners to develop a comprehensive, integrated set of plans for responding to a major earthquake in the NMSZ at local, state, regional, and national levels. Based on a magnitude 7.8 earthquake scenario, this project has the attention of the President and members of Congress.

HAZUS has been used to analyze potential losses in 220 counties across the eight-state NMSZ under this scenario. FEMA has brought local emergency management officials together with project planners to develop response plans based on the impacts forecast by HAZUS. So far, the project has sponsored more than 40 workshops at local and state levels to develop and refine these plans.

The response plan developed in Tennessee has emerged as a model that other states in the region can draw from. FEMA has also begun to work with Nebraska on plans for accommodating some of the NMSZ residents who would be displaced by the disaster. The project will culminate with a toptoff exercise in 2011.

NEHRP STRATEGIC PLANNING

Mr. Laatsch briefly described the new draft *Strategic Plan for the National Earthquake Hazards Reduction Program: Fiscal Years 2008–2012*. The National Institute of Standards and Technology developed this draft in consultation with the other NEHRP agencies. The draft is available for public review and comment on the NEHRP Web site (www.nehrp.gov) through May 9, 2008.

The draft plan includes 3 program goals, 14 objectives, and 9 cross-cutting strategic priorities. Mr. Wilkinson urged attendees to review the plan and submit comments by the deadline.

ONLINE STATE TOOLKIT

Anita Vollmer, from FEMA headquarters, described the two “toolkit” handouts distributed to attendees. NEHRP staff at headquarters have been thinking about developing a new Web site designed specifically for state earthquake program managers. The site would add to and become a component of current FEMA earthquake Web content. The handouts included a draft outline of proposed toolkit content, and a sample Web page illustrating some of this content. The intent is to provide a single online location where state managers can go to find information, links, and resources of use to them. Ms. Vollmer asked attendees to think about the sorts of content that would be useful to them and send comments and suggestions to her (anita.vollmer@dhs.gov) by June 30, 2008.

FUTURE MEETINGS

Attendees discussed potential locations and dates for the next annual state earthquake program managers meeting. It was suggested that the next meeting be held somewhere out East in late April or early May of 2009. The most popular site suggested was the Emergency Management Institute in Emmitsburg, Maryland. Ed Fratto of the Northeast States Emergency Consortium agreed to check with his member states for possible alternative locations, and Mr. Wilkinson will assemble a committee to plan for the meeting.