

Summary Minutes

Nevada Earthquake Safety Council

2 August 2006

The Nevada Earthquake Safety Council (NESC) met from 9:15 a.m. to 3:18 p.m. at the Clark County Building Department's Russell/Cameron Office, (4701 W. Russell Road) in Las Vegas. These and previous minutes are posted on the NESC Web site (www.nbmg.unr.edu/nesc).

Ron Lynn chaired the meeting. Individuals attending the meeting are members of the Council:

John Anderson*, Nevada Seismological Laboratory
 Alan Bennett*, Plans Examiner with the City of Reno
 Ian Buckle*, University of Nevada, Reno – Center for Earthquake Engineering Research
 David Burns, Nevada Division of Emergency Management
 Larry Casey, Nevada Commission on Homeland Security
 Stacey L. Cruz, Nevada Division of Emergency Management
 Craig dePolo, Nevada Bureau of Mines and Geology, who held the proxy for Mike Blakely*, Blakely, Johnson, and Ghusn,
 Diane dePolo, Nevada Seismological Laboratory, who held the proxy for Jenelle Hopkins*, Clark County School District, Las Vegas
 Terri Garside, Nevada Bureau of Mines and Geology, who held the proxy for Wayne Carlson*, Nevada Public Agency Insurance Pool
 Mark Harris*, Nevada Public Utilities Commission
 Werner Hellmer, Clark County Department of Development Services, Building Department
 Bruce Hurley, National Nuclear Security Administration/Nevada State Office
 Steve Koenig*, Bellagio Resorts
 Kimberly Lukasiak, Southwest Gas Corporation
 Jeff Lusk, Federal Emergency Management Agency
 Greg Moss*, The Moss Group
 Glade Myler, Office of the Attorney General
 Jim O'Donnell*, UNLV
 Jon Price*, Nevada Bureau of Mines and Geology
 Jim Reagan*, Sierra Pacific Power Company, who also held the proxy for Marge Gunn Nutman*, Nevada Association of Counties & Lincoln County Office of Emergency Management
 Burt Slemmons*, University of Nevada, Reno (retired), consultant in Las Vegas
 Eric Simmons, Federal Emergency Management Agency
 Wanda Taylor, who held the proxy for Catherine Snelson*, UNLV Geoscience Department
 Jim Walker, Nevada Department of Transportation

* indicates member of the Board of Directors.

A quorum of directors (the necessary 11) was present.

Board Members unable to attend or send a proxy included:

Bernie Anderson*, Nevada Assembly
 Greg Flanigan*, Farmers Insurance
 Warren Hardy*, Nevada State Senator
 Ed Ruttan*, American Red Cross
 Jim Werle*, Converse Consultants

The minutes of the 10 May 2006 meeting were unanimously approved.

Education Committee

Diane dePolo reported that although the committee did not meet, she and Jenelle Hopkins have been in contact by e-mail about ideas for hazard mitigation in classrooms (with an earthquake safe certificate for classrooms, an earthquake-safe award for schools with a certain number of classrooms certified, and links to Web sites with mitigation efforts). Several ideas were offered for advertising the program on the Web.

ACTION ITEM: Ron Lynn tasked the Education Committee to follow up on the concept of hazard mitigation in classrooms, including developing a plan for implementation.

Ron further suggest that NESC invite David Broxerman and Lisa Conner from the Clark County School District, which is building about one new classroom per day, to the next NESC meeting in Las Vegas to discuss earthquake mitigation in their schools.

ACTION ITEM: Terri Garside should invite Ken Smith to speak at the next NESC meeting about this summer's teach-the-teacher efforts.

Diane does not have time to raise funds for a calendar. If funds can be raised (approximately \$30,000), it can be done. Ron Lynn suggested that the Clark County Regional Flood Control District (Gale Fraser) may be interested in helping to fund a hazards calendar that would also highlight floods.

Research Committee

Craig dePolo reported that the Southern Nevada seismic hazard meeting will be next spring. It will be a joint meeting with an engineering group for which Barbara Luke is an organizer.

Craig recently attended the national earthquake program managers meeting on behalf of NESC and the Nevada Division of Emergency Management. Progress is being made with tribal communities. There was much discussion about post-earthquake technical clearinghouses at the meeting; a word of warning is that funding may not be reimbursed by the federal government for clearinghouse activities.

Craig noted that a Nevada Quaternary Fault Working Group is being formed to come to consensus on parameters for major faults near urban areas that could cause earthquakes and to make recommendations to the USGS on which faults need further study.

Policy Recommendation Committee

No report

Strategic Planning Committee

The Council unanimously adopted the 2005 Annual Report, which is posted on the NESC Web site.

Ron Lynn thanked Jim Reagan for his efforts in preparing the report and requested that committee chairs review the strategic plan and report on 2006 activities in a timely manner.

DEM Update

Elizabeth Ashby introduced Dan Burns and Stacey Cruz, public information officers for the Nevada Division of Emergency Management.

Elizabeth reported that an emergency management accreditation for DEM took place in early July of 2006. This is a nationwide program to ensure standardization and implementation of emergency management procedures. DEM met most of the requirements but has some work to do to comply with all the criteria.

The new Emergency Operations Center building for DEM should be completed in October 2006.

DEM's exercise and training calendar is available on the Web (www.dem.state.nv.us). Registration is done on line. There will be incident command system classes in September in Las Vega and Washoe County.

The Nevada National Guard Civil Support Team will have a tabletop exercise involving weapons of mass destruction on September 14 at the Legislative Council Bureau and a full-scale exercise October 9-13.

The State Comprehensive Emergency Management Plan has been completed. Copies are available from DEM upon request.

DEM is administering a Homeowners' Disaster Assistance Program to help with recovery from recent floods. DEM is also working on securing mitigation funds.

DEM is starting the process of updating its hazard mitigation plan.

DEM is working on a donations management plan in conjunction with VOAD, the American Red Cross, Salvation Army, and other volunteer organizations. This will include how to take donations and where to store items.

It does not appear that there will be any federal fiscal year 2006 year-end or carry-over funds. Nonetheless, NESC is encouraged to continue to submit proposals, because funds may become available in the future.

DEM has positions open for an administrative staff officer, three grants and projects analysts, and an exercise officer.

Discussion of a Joint Meeting with the Utah Seismic Safety Commission and the NESC

Craig dePolo explained that Utah and Nevada would like to eventually hold a workshop on rural disasters, perhaps in Wendover/West Wendover. Ron Lynn has attended some Utah meetings, and Walter Arabasz and Bob Carey have attended NESC meetings in the past. The Utah commission has invited NESC to a joint meeting, perhaps in Zion National Park. One option for dates is May 10-11, 2007, immediately following the May 7-9 meeting of the Rocky Mountain Section of the Geological Society of America in St. George, Utah. We would spend one night in Utah. Ron Lynn suggested that there also be coordination with the Nevada and Utah associations of counties, and that a focus could be on strategic planning for earthquake preparedness and mitigation. Jeff Lusk suggested that FEMA could add some training sessions (such as basic HAZUS or home retrofit) to the meeting. Glade Myler offered to give a presentation on the legal role in emergencies.

ACTION ITEM: Craig dePolo will investigate dates for a joint meeting of the Utah and Nevada earthquake safety councils.

Policy Recommendations Committee

No report.

Discussion of Possible Endorsement of a Nevada Earthquake Professionals' Top Ten Actions.

Craig dePolo led a discussion about this topic and how it fits with the strategic plan for Nevada's earthquake mitigation. As reported at the last NESC meeting, as part of the 100th anniversary of the 1906 San Francisco

Earthquake, the California earthquake professionals adopted the “Top Ten Actions for Northern California.” These include:

Develop a Culture of Preparedness

1. Every household, government agency, and business must know the seismic risks of the buildings they occupy, the transportation systems they use, and the utilities that serve them, as well as the actions they can take to protect themselves.
2. Every household, government agency, and business needs to be prepared to be self-sufficient for at least three days (72 hours) following a disaster.
3. Citizens and governments need to take steps to ensure adequate response care for special needs and vulnerable populations.
4. Government agencies, the region’s major industries, and earthquake professionals have to work together to prepare the region to respond to and recover from major earthquakes. This can be done through region-wide, multi-organizational plans, training, exercises and coordination assessments, as well as continuing improvements in our collective understanding of seismic risks.

Invest in Reducing Losses

5. Building owners, governments, and the earth science and engineering professionals must target potential collapse-hazard buildings for seismic mitigation, through retrofit, reduced occupancy, or reconstruction.
6. Governments and other relevant agencies must retrofit or replace all facilities essential for emergency response to ensure that they function following earthquakes. These facilities include fire and police stations, emergency communications centers, medical facilities, schools, shelters, and other community-serving facilities.
7. Governments and other relevant agencies must set priorities and retrofit or replace vulnerable response- and community-serving infrastructure, including cellular communications, airports, ports, roads and bridges, transportation, water, dams and levees, sewage and energy supplies, to ensure that functions can be resumed rapidly after earthquakes.

Ensure Resiliency in Recovery

8. Government agencies, the region’s major industries, and earthquake professionals have to plan collaboratively for the housing, both short- and long-term, of residents displaced by potential fires, large numbers of uninhabitable buildings, and widespread economic and infrastructure disruption following a major earthquake.
9. Every household, government agency, and business has to assess and plan for financing the likely repair and recovery costs following a major earthquake.
10. Federal, state and local governments, the insurance industry, and the region’s major industries have to collaborate to ensure adequate post-event funding to provide economic relief to individuals and communities after a major earthquake, when resources are most scarce yet crucial for recovery and reconstruction.

Craig led a discussion about this list. He asked what response or stimulation does NESC have. He noted that under item 2, the State of Idaho is planning for five, rather than three, days of self sufficiency after a major earthquake. He suggested that we amend the Nevada earthquake mitigation plan for any of the favored goals that are not specifically addressed in the current plan.

In the discussion, Ron Lynn noted that Nevada has done a good job of adopting the latest seismic provisions in the International Building Code, but we haven’t done enough regarding non-structural hazards and retrofitting some buildings, such as schools. Also, more work needs to be done to train hotel staff in what needs to be done after an earthquake.

John Anderson noted that California has a law that requires placards at the entrance of buildings that are collapse hazards (mostly unreinforced masonry buildings, URM’s); he suggested that more needs to be added to the Nevada earthquake mitigation plan on dealing with this issue. On this issue and more generally, he

advocated that the plan should identify those who are responsible for various actions. Ron Lynn noted that we still need to identify all the URMs, and John Anderson noted that information such as local site conditions are major factors in the shaking that particular types of buildings will experience during earthquakes.

Bruce Hurley expressed concern about water availability after an earthquake in southern Nevada.

Jim Reagan stated that rural communities generally do better than urban areas in terms of the time needed for responding to disasters.

Bruce Hurley suggested that the “most vulnerable” populations should perhaps include tourists, in addition to homeless, elderly, children, people in hospitals, non-English speaking population, and other people with special needs. Glade Myler noted that many aspects of the concerns about people who are most vulnerable are being addressed in plans of other state agencies, such as the Division of Health.

Ian Buckle stated that although the California top-ten list is laudable, stronger language with actions need to be developed in the Nevada earthquake mitigation plan.

Elizabeth Ashby noted that Nevada already has good plans and agreements in place among counties and cities for cooperation during major disasters.

Jeff Lusk noted a concern for identifying and expanding what are considered as critical facilities; from his experience with the Katrina hurricane, such facilities as out-patient dialysis and chemotherapy didn't have back-up power generators, and unfortunately people therefore died. Alan Bennett and Werner Hellmer noted that the International Building Code already includes aspects of strengthening critical facilities.

Jeff also noted that long-term housing for displaced populations needs attention in strategic planning. Glade Myler noted that “continuity of government” and “continuity of operations” are concepts built into many emergency management plans. Steve Koenig stressed the importance of getting the buy-in of corporations and governmental agencies. Jim Reagan noted that there are big problems with small businesses' not having emergency plans.

Elizabeth Ashby will bring up some of these points at a conference next week on special needs populations.

ACTION ITEM: Craig dePolo will build the California Top Ten concepts, along with the comments offered at this meeting, into a draft of the Nevada earthquake hazard mitigation plan.

Ron Lynn suggested that a strategic planning session should be held after revamping a draft of the Nevada earthquake hazard mitigation plan.

John Anderson suggested that a positive aspect of the California Top Ten concept has been its effectiveness in public outreach. Jim Reagan suggested that a top-ten list be developed as an outgrowth of the earthquake hazard mitigation plan. Jim further suggested that we try to roll out the revised Nevada earthquake hazard mitigation plan during the next Earthquake Awareness Week (in February 2007).

FEMA Update

Jeff Lusk introduced Eric Simmons, Mapping Engineer with FEMA's National Flood Insurance Program (NFIP) map-modernization program. Eric described NFIP and the map-modernization efforts. Congress has funded the program in the last few years, and more funding is expected for modernization in the next several years. Digital flood insurance rate maps (DFIRMs) are being produced and are now available on the Web. Before final adoption of the maps, FEMA releases drafts of the maps and allows for appeals and community input. Typically, the map modernization program is being done on a county-wide basis. Clark County has new modern maps. Washoe County is going through the process, and DFIRMs are planned for Carson City

and Lyon County. Maps are being produced now to the vertical datum for 1988 (rather than the 1929 datum for which the standard U.S. Geological Survey topographic maps were made).

Data from high-precision topographic mapping (including airborne LIDAR data and digital orthophoto quadrangle maps), if acquired as part of the program, and information on how to get these data are available from FEMA. Currently, requests for the ancillary data of this sort need to be made to FEMA in writing, rather than downloading them from the Web.

Flooding on alluvial fans is one of FEMA's top priorities for DFIRMs in the western states.

More information about the NFIP can be found at www.hazards.fema.gov and www.fema.gov/plan/prevent/fhm/mh_main.shtm.

Video Presentation

During lunchtime, a Wild Nevada (Public Television) episode on the Dixie Valley fault, featuring Craig dePolo, was shown.

State Vulnerability Assessment

Barry Smith, Deputy Program Manager for Keystone, International, Inc., discussed the unclassified version of the report that his firm has produced on a state vulnerability assessment for the Nevada Homeland Security Commission. Their firm focused on four areas in an all-hazards approach: (1) national security incidents (terrorism), (2) natural hazards (earthquakes, floods, etc.), (3) technology/industrial incidents (hazardous materials), and (4) cyber threats. They interviewed officials in each of Nevada's counties, talked with the Nevada Division of Emergency Management and the National Guard, UNR (Drs. Anderson and Price). Among other scenarios that they modeled were scenarios for earthquakes in the Reno-Carson City and Las Vegas areas. Nevada is one of a two states that have a completed statewide vulnerability assessment (Kentucky is the other).

Their recommendations and evaluations included:

There is a challenge in the analysis and dissemination of information that is available publicly. They are recommending creation of a system called Terrorism Early Warning for the dissemination of intelligence information. They also recommend adapting the City Watch information system in use in the Las Vegas area to create a State Watch information system.

They recommend using the two major law enforcement investigatory capabilities in Nevada (in Washoe and Clark Counties) to assist small agencies in rural counties. They also recommend a statewide investigatory capability.

They recommend that the State implement the Nevada Communication Interoperability Plan. This will require leadership, collaboration, use of standard operating procedures, new technology, training and exercise, and use of new communication systems.

The state needs a lot of attention in the areas of chemical, biological, radiological, nuclear and explosive detection. They recommend establishing a working group to determine capabilities and requirements and to develop a strategic plan.

There are three accredited bomb squads in Nevada (two in northwestern Nevada – Douglas and Washoe – and one in Clark County). They recommend development of a statewide bomb squad and one for the northeastern part of the state. They recommend training in advanced improvised explosive devices.

Rural counties need help with WMD and HAZMAT response and decontamination. They recommend operating agreements with Washoe and Clark Counties.

Regarding medical surge (dealing with massive numbers of casualties), they recommend planning to develop additional temporary hospital bed space beyond what is available in hospitals.

There is only one mass prophylaxis (immunizations, drugs to counteract radiological hazards, etc.) plan in place in Nevada (in Clark County). They recommend development of a statewide plan in coordination with the Homeland Security Commission.

Regarding emergency planning, they recommend updating of emergency management plans and creation of a working group to support development of a statewide plan that would help fill the gaps in rural counties.

Regarding citizen preparedness, they recommend development of a statewide plan to enhance public awareness, including the public school system.

Regarding risk management, they felt that the state is well prepared.

Regarding training needs, they recommend more coordination.

They recommend more stockpiling of relief supplies, particularly at rural airfields.

In conclusion, they feel that the State of Nevada currently has adequate response assets for most hazards.

Larry Casey mentioned that there are good Web sites available for individuals to make themselves better prepared for disasters.

Effective Earthquake Risk Mitigation: Part 1 – Why We Under-Prepare for Hazards

Craig dePolo gave a presentation on this topic. Even in San Francisco Bay Area, where about 70% of the population recognizes the earthquake threat, only about 20% feel that they are prepared for an earthquake. In his research into this topic, drawing heavily on a 2006 article by Meyer, he found two primary answers: (1) people's lives are too busy, and (2) human cognitive behavior confounds learning, decisions, and actions regarding mitigation for major hazards, for which repetitions are few and far between. There are innate human tendencies (biases) toward (a) learning by focusing on short-term feedback, (b) seeing the future as a simple extrapolation of the present, and (c) overly discounting the value of ambiguous future rewards compared to short-term costs. To overcome these problems, four conclusions are: (1) Be sensitive to biases when interacting with people. Avoid language that might invoke a bias in a majority of people. Recognize when people are engaging in a "bad: bias. (2) Add reasoning, language, arguments, graphics, etc. to help people get past thresholds to mitigation invoked by the largest biases. Tell people in a friendly way biases to avoid and why. (3) Develop mitigation strategies that are consistent with people's busy lives and are perceived to enrich people's lives. Create or use opportunities to help people mitigate. Make mitigation easy. (4) Be proactive following events that are counter-motivational for earthquake risk mitigation; maintain mitigation momentum.

Craig also recommended visiting the Web site 72.org for information on personal preparedness.

Update on Recent Earthquakes in Nevada

John Anderson reported on the status of the Advanced National Seismic System in Nevada. The Nevada Seismological Laboratory operates a seismic network with three clusters of strong-motion instruments – one in the Reno area, one in the Las Vegas area, and one near Yucca Mountain. The latter is funded primarily by

the U.S. Department of Energy, whereas the responsibilities for the other areas and the broader state, rest at the federal level with the U.S. Geological Survey and its Advanced National Seismic System. There are only partial coverages with strong-motion instruments in the Las Vegas and Carson City-Reno areas. These instruments are needed in part to detect ground motions from large earthquakes. The latter information will be used by emergency managers immediately after an earthquake – to produce a ShakeMap within a few minutes after an earthquake showing areas of most intense ground motion and likely damage. This information can also be fed quickly into HAZUS, FEMA’s loss-estimation computer model to estimate likely casualties and damage.

One of the needs for more strong-motion data is to understand the near-field aspects of ground motion in normal faulting (extensional) environments. Theoretical and scale modeling implies considerable differences in ground motions on the hanging wall versus footwall sides of normal faults – factors that are not currently considered in probabilistic seismic hazard analysis. Portable instruments are needed for these investigations, which would involve precise measurements of aftershocks.

Wanda Taylor advocated placing more strong-motion instruments in the northwest, southeast, and northeast parts of Las Vegas Valley. Jim O’Donnell suggested a station near the North Las Vegas airport, where the lowest shear-wave velocities within 30 meters of the surface have been measured. Bert Slemmons suggested more instruments near Fernley and Fallon, which are also rapidly undergoing suburban growth.

Jim Reagan suggested that the Nevada Seismological Laboratory work with utilities and businesses as they build new structures, asking that they accommodate strong-motion seismic instruments on their properties.

John described two major initiatives to help reduce the risks from earthquakes. One initiative is at the federal level – to add funds to the U.S. Geological Survey’s budget to enhance earthquake risk reduction. This would include improvements in the statewide coverage of seismic instruments (including completion of the Advanced National Seismic System coverage in urban areas and the purchase of portable seismic instruments), improvements in the coverage of geodetic measurements throughout the state, and additional funding for the competitive grants part of the National Earthquake Hazards Reduction Program. A key opportunity is to take over the operation of the seismic instruments that the National Science Foundation (NSF) is deploying, on approximately a 70-kilometer grid across Nevada. The NSF will operate these instruments for only about 18 months, so the effort is to add funds to the U.S. Geological Survey’s budget to take over operation of these instruments after the NSF completes its EarthScope experiment in the western part of the United States. This will allow small earthquakes throughout the state to be accurately measured and located. It will also help refine seismic velocity models for the region. A similar approach was effective in the Grand Teton area. Funds were added to the base budget of the USGS, so that after needs in that area were met, funds could be used for continuing maintenance and for new instruments in other parts of the country.

The other initiative is a State Legislative initiative of the University of Nevada, Reno and the Board of Regents of the Nevada System of Higher Education to reduce the risks from natural hazards. The first priority for this initiative is to enhance earthquake investigations by the Nevada Seismological Laboratory and the Nevada Bureau of Mines and Geology and to add capabilities to the Nevada State Climate Office. This would include new positions in network seismology, earthquake geology, geodesy, and the climate office.

Western States Seismic Policy Council (WSSPC)

Jon Price reported that WSSPC plans to have its next annual meeting in Nevada, in association with the annual meeting of the International Code Council, September 30 to October 4, 2007. Jon and Craig dePolo are working with the WSSPC Board of Directors to develop the agenda for the meeting. There will certainly

be items of interest to the NESC, and NESC members will be welcome to attend. Craig suggested that NESC be an official sponsor of the meeting.

Old Business

Ron Lynn reviewed action items from the previous NESC meeting, all of which have been covered. Elizabeth Ashby will follow up on Rick Martin's item to communicate statistics about assistance to private individuals to Bernie Anderson.

New Business

No additional items were introduced.

Announcements

The next quarterly meeting of the Council will be on Wednesday, November 8, 2006, beginning at 9:30 a.m. in the Harry Reid Engineering Laboratory on campus of the University of Nevada, Reno.

Public Comment Period

Jeff Lusk asked about tribal representation at NESC meetings.

ACTION ITEM: Elizabeth Ashby will provide Terri Garside with names of tribal emergency-management contacts. Terri will add these to the electronic distribution list for NESC agendas and minutes.

Ron Lynn noted that the latest BLM land sale in Clark County totaled \$11 million for 27 acres.

The meeting was adjourned at 3:18 p.m..

REVIEW OF ACTION ITEMS

The Education Committee is tasked to follow up on the concept of hazard mitigation in classrooms, including developing a plan for implementation.

Terri Garside should invite Ken Smith to speak at the next NESC meeting about this summer's teach-the-teacher efforts.

Craig dePolo will investigate dates for a joint meeting of the Utah and Nevada earthquake safety councils.

Craig dePolo will build the California Top Ten concepts, along with the comments offered at this meeting, into a draft of the Nevada earthquake hazard mitigation plan.

Elizabeth Ashby will provide Terri Garside with names of tribal emergency-management contacts. Terri will add these to the electronic distribution list for NESC agendas and minutes.

respectfully submitted by Jon Price, 22 August 2006

Nevada Earthquake Safety Council
c/o Nevada Bureau of Mines and Geology
University of Nevada/MS 178
Reno, Nevada 89557

775/784-6691 ext. 126

NEVADA EARTHQUAKE SAFETY COUNCIL
Members of the Board of Directors and Officers
(as of 10 May 2006)

Business and Industry, Southern Nevada	Steve Koenig, Bellagio Resorts
Business and Industry, Northern Nevada	vacant
Insurance Industry (statewide)	Greg Flanigan Farmers Insurance (Las Vegas)
State Government (statewide)	Mark Harris Public Utilities Commission (Carson City)
Local Government, City	Wayne Carlson Nevada Public Agency Insurance Pool (Carson City)
Local Government, County	Marge Gunn Nutman Nevada Assoc. of Counties & Lincoln Co. Office of EM
Seismology (statewide)	John Anderson Nevada Seismological Laboratory (UNR)
Geosciences, Southern Nevada	Burt Slemmons Las Vegas consultant, UNR (retired)
Geosciences, Northern Nevada	Jonathan G. Price Nevada Bureau of Mines and Geology
Engineering, Southern Nevada	Jim Werle Converse Consultants
Engineering, Northern Nevada	Mike Blakely Structural Engineers Association of NV
Education (statewide)	Jenelle Hopkins Clark County School District, Las Vegas
Community Organizations, Southern Nevada	Ed Ruttan American Red Cross
Community Organizations, Northern Nevada	Jim Reagan Sierra Pacific Power Company
University, Southern Nevada	Catherine Snelson UNLV Geoscience Department
University, Northern Nevada	Ian Buckle UNR Center for Civil Engineering Earthquake
Research	
Building Official, Southern Nevada	Ronald L. Lynn Clark County Building Department
Building Official, Northern Nevada	Alan Bennett City of Reno
State Senate	Warren Hardy Nevada State Senator (Las Vegas)
State Assembly	Bernie Anderson Nevada State Assemblyman (Sparks)
Member at Large, Southern Nevada	Jim O'Donnell UNLV
Member at Large, Northern Nevada	Greg Moss The Moss Group

Members of the Executive Committee

Chair

First Vice Chair-South

First Vice Chair-North

Second Vice Chair-South

Second Vice Chair-North

Secretary

Past Chair

Division of Emergency Management Representatives

Ronald L. Lynn

Burt Slemmons

Jim Reagan

Jim Werle

Greg Moss

Jonathan G. Price

John Anderson

Rick Martin