



CITY OF BEVERLY HILLS STAFF REPORT

To: Honorable Mayor & City Council
From: Pamela Mottice Muller, Director of Emergency Management
Subject: Annual Disaster Exercise: Southern California Shakeout and Golden Guardian
Attachments: 1. Southern California Shakeout Handouts
2. The Shakeout Earthquake Scenario

INTRODUCTION

On Thursday November 13, 2008 from 10:00 a.m. to 2:30 p.m., the City will join Federal, State, County and other Cities in participating in the Southern California Shakeout and by holding the annual Golden Guardian disaster exercise. All employees will have the opportunity to participate in all or part of the exercise. The exercise goal is to enhance the City's disaster readiness by improving and rehearsing a variety of functions and responsibilities in the field, in Department Operating Centers (DOC's) and in the Emergency Operations Center (EOC). The purpose of this exercise is to provide a positive learning experience for City staff, which encourages teamwork, increases communication on all levels and provides for the expansion of emergency management and public safety skills.

DISCUSSION

This year's combination field, DOC, and EOC functional exercise is designed to include the completion of multiple real time tasks and activities.

Exercise objectives are as follows:

- Practice the City's ability to mobilize initial and overall response to the earthquake scenario.
- Incorporate stakeholders into the initial and on-going response (e.g. schools, chamber, businesses).
- Assess the City's ability to collect and analyze shake values and damage information from a variety of sources.
- Coordinate a multi department level Field, DOC & EOC response using the City's Emergency Operations Plan, the National Incident Management System (NIMS), the Standardized Emergency Management System (SEMS), the Incident Command System, and the Master Mutual Aid Plan.

Meeting Date: October 14, 2008

- Allow city emergency management personnel to assess their current level of operational readiness both in the field, in the DOC's and the EOC.
- Establish communication between the field, dispatch, DOC's, the EOC, outside agencies and the County of Los Angeles.
- Test enhanced technologies.
- Complete pre-established department exercises, activities and tasks that will meet the goals set forth by the departments.

The exercise is divided into the following two parts:

Southern California Shakeout

The Great California Shakeout is the largest earthquake drill in United States history. This drill is organized to inspire Southern Californians to ready themselves for an earthquake, and to prevent disasters from becoming catastrophes. Staff and the Health and Safety Commission invites the community to join the employees of the City of Beverly Hills and over five million other Southern Californians at 10:00 a.m. on November 13, 2008 to stop and think, "If there was an earthquake right now, what would I do?" Everyone is encouraged to take action and Drop, Cover, and Hold. All City of Beverly Hills employees will participate as well as the Beverly Hills School District. Staff requests your assistance in disseminating information and by having your friends, family, and place of business participate. For more information and to register go to www.shakeout.org. Attached is a handout which provides additional details.

Golden Guardian 2008 Full Scale Exercise

The full scale exercise will focus on the response and recovery from a catastrophic magnitude 7.8 major earthquake on the San Andreas Fault with a rip zone starting in the vicinity of Bombay Beach, at the Salton Sea area of Imperial County and stretching to the vicinity of Lake Hughes in Los Angeles County. The earthquake and resultant damage estimates have been developed by the US Geological Survey and other geologists and geophysicists to represent a scientifically supportable disaster. Dr. Lucy Jones recently spoke as part of the City's speaker's forum on this recent study. Her presentation can be found on the City's website. The Shakeout/Golden Guardian Scenario booklet which condenses the 120 page report is provided.

Operation Shakeout & Golden Guardian is an excellent opportunity to train and rehearse the response of City staff and our stakeholders in all areas of response.

FISCAL IMPACT

All employees will participate in a half hour long "Drop, Cover, and Hold" exercise. Afterwards selected employees will participate at various times and at various response levels. City services should not be affected during this time.

Meeting Date: October 14, 2008

RECOMMENDATION

The City Council is invited to participate in all or part of the exercise. At 10:00 a.m. on November 13, 2008 staff requests all City Council members stop, wherever you are and whatever you are doing and think, "If an earthquake happened right now, what would I do?" and then take the appropriate immediate action.

Secondly, the City Council will then be provided an opportunity to role play during the disaster response portion of the exercise. Each of you will be provided with an envelope to open at 10:05 a.m. which will provide you with instructions and the scenario background. Staff will contact you in the future in regards to your availability and to discuss your level of involvement in the exercise.

Pamela Mottice-Muller 

The Great Southern California ShakeOut



Southern California Businesses: Get Ready to Shake Out!

ShakeOut is One-of-a-Kind

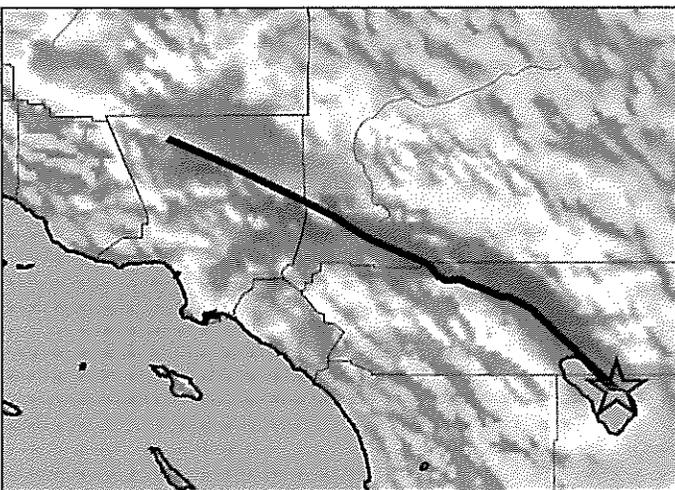
The Great Southern California ShakeOut is a week of special events featuring the **largest earthquake drill in U.S. history**, organized to inspire Southern Californians to get ready for big earthquakes, and to prevent disasters from becoming catastrophes.

An Earthquake Drill for the Record Books

At 10 a.m. on November 13, 2008, millions of southern Californians will "Drop, Cover, and Hold On." Why? An enormous earthquake is an inevitable part of our future, and the ShakeOut Drill is our chance to practice what to do when it happens. Individuals, families, businesses, schools and organizations will join firefighters, police officers, and other emergency responders in our largest-ever earthquake preparedness activity. Don't miss out!

Beyond the Drill

In addition to the ShakeOut Drill, there are many other ways to participate in the ShakeOut, tailored for businesses, schools, individuals, places of worship, and communities. Plus you can create your own event for your neighborhood, business or school. See the ShakeOut website for a schedule of all events.



This potential magnitude 7.8 earthquake on the San Andreas fault is the basis of the ShakeOut. The U.S. Geological Survey has led a collaboration of experts to understand how this earthquake would affect southern California. In an earthquake like this one, the shaking will last two to three minutes. The 1994 Northridge earthquake shook for seven seconds.

ShakeOut Major Events: November 2008

- ShakeOut Drill (Nov. 13)
- City of Los Angeles International Earthquake Conference (Nov. 12-14, ieo.lacity.org)
- Golden Guardian Emergency Response Exercise (Nov. 13-19)
- L.A. Earthquake: Get Ready Rally (Nov. 14)
- Take One More Step (Nov. 14-16)

You Can Make a Difference!

Actions taken now will save lives and property, and help speed recovery for everyone. Many are simple and inexpensive, and can be started today.

Join in the drill

- Conduct a drill with your employees on November 13.
- Encourage your employees and vendors to ask their families and neighbors to "Drop, Cover, and Hold On."

Create or update your business disaster plan

- Use the ShakeOut as an opportunity to explore the impacts of a major earthquake on your business.
- Are heavy items secured so they won't fall?
- Does your building meet modern seismic codes?
- Do you need a back-up generator or water supply?
- Do you have proper numbers of fire extinguishers?
- Visit www.ShakeOut.org/business for resources.

Contribute to the ShakeOut

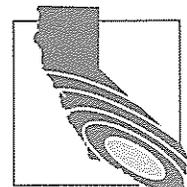
- Help spread the word about the ShakeOut.
- Create and share your own ShakeOut events.
- Sponsor ShakeOut activities and publications.

Register on the ShakeOut web site, and you will:

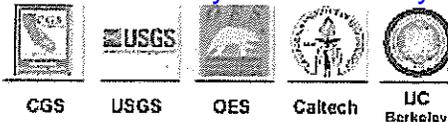
- Be notified of ShakeOut news and updates.
- Get connected with other participants.
- Receive a ShakeOut disaster script for your area, as a guide for your drill and planning.
- Set an example that motivates others to get prepared.

www.ShakeOut.org

Earthquake Country Alliance
 ShakeOut Steering Committee
 United States Geological Survey
 California Office of Emergency Services
 California Seismic Safety Commission
 Southern California Earthquake Center
 City of Los Angeles
 Art Center College of Design
 California Institute of Technology



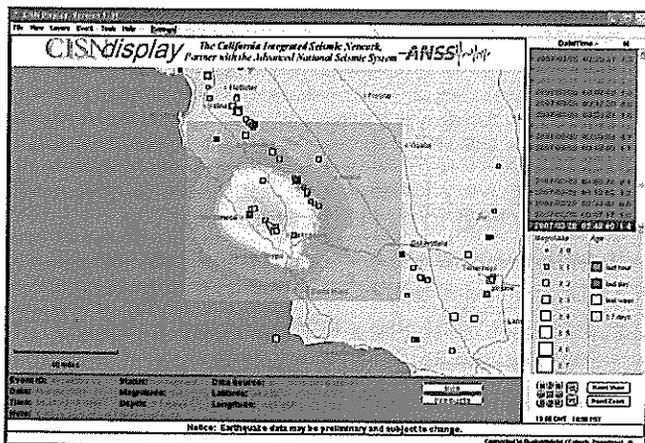
CISNdisplay



Reliable Delivery of Real-time Earthquake Hazards Information to Critical Users

Project Summary

The California Integrated Seismic Network (CISN) has collaborated to develop a next-generation earthquake notification system. The CISN Display graphically alerts users, in near real-time, of seismicity as well as vital earthquake-hazards information following a significant earthquake. This program suite is expected to provide emergency managers, and other decision makers with the information and tools necessary to effectively deploy limited personnel and resources in support of recovery efforts after a major earthquake. This effort helps fulfill a CISN mandate: *to disseminate earthquake information in support of public safety, emergency response, and loss mitigation.* This software architecture includes a client GUI known as the CISN Display, a server module identified as the QuakeWatch Server, and the messaging middleware supporting an XML messaging schema.



CISN Display with San Simeon M6.5 ShakeMap overlay.

Real-time Earthquake Display

Primary to the CISN Display's operation is its active monitoring of near real-time seismicity, and other geo-hazards information. Newly received messages and updates are immediately posted to the screen. Virtually all user functionality previously available in CUBE/REDI has been replicated in the CISN Display. However, the new client also boasts a number of upgrades that enhance its functionality as well as its reliability and robustness. New improvements include stateful connectivity, server fail-over capability, data persistence, platform independence, a highly configurable graphical-interface and modular software architecture. These design improvements combine to form the basis of a highly scalable client, and introduce a new level of reliability and application robustness not previously available.

Gateway to Other Earthquake Products

A secondary, but equally important function of the CISN Display is its service as a Web portal to all relevant earthquake hazards information produced after a large earthquake. Web-based products currently available for delivery are *ShakeMap*, *HAZUS Input files*, *Felt Reports*, *Focal Mechanisms*, *Waveform Images*, *Aftershock Forecasts*, *Tsunami Warnings* and more. URLs to these and other Internet products are automatically created on the CISN Display and made available so users have quick access to crucial decision-making information. In the case of ShakeMap, a behavior may be selected by the user to automatically display the ShakeMap in a

separate browser window as soon as it becomes available on the Web. This distribution system will help promote future online tools and services since they can be rapidly distributed and made available to critical users everywhere.

GIS Mapping Capabilities

To provide critical users a means of visually performing initial assessments of potentially damaged infrastructures, a GIS mapping engine has been integrated into the CISN Display. Thanks to the OpenMap project the client interface is able to plot many popular formats of GIS vector-layers. This allows users to make quick and reasonable assessments of vital infrastructure, when viewed alongside earthquake hazards information such as ShakeMap. In addition to geo-political boundaries such as state and county lines, imported GIS graphics may also represent roadways, airports, railroads, bridges and other public lifelines vulnerable to earthquake damage. In essence this mapping feature allows each organization to customize the application interface specific to their operation's needs. Additionally, users are also able to have ShakeMap shape files automatically downloaded and plotted directly onto the CISN Display map. This added behavior was a direct result of beta-tester feedback, and illustrates the collaborative approach taken in user-participation development.

Additional Benefits

One of the many residual benefits to come from CISN Display's development is its ability to extend its utility beyond California, as a nationwide geo-hazards alarming tool. Because of software-choice considerations made earlier on in its design, this tool can easily scale to include notifications outside the CISN region. Hence additional features were added to facilitate other seismic networks to tailor the interface settings to their liking and allow them to operate the software as an integrated part of their operations.

Application Installation Requirements

Listed below are the recommended *minimum* items needed to operate the CISN Display application.

- ◆ Java Runtime Environment 1.4.X or higher (available from Sun at <http://java.com/en/index.jsp>)
- ◆ Pentium-III, 1GHz CPU speed (or comparable hardware)
- + Monitor resolution 1024 x 762 or higher
- ◆ 384 Mb RAM or more
- ◆ IP Address (private or public)
- ◆ Access to Internet on ports 39977/39988
- ◆ CISN Display user account: www.cisn.org/software

Interested users will be asked to register their organization to access to the software. Users will create an account profile and provide basic contact information. User requests will be approved per the current CISN *Access Policy*.

Development Partners

CISN Display is a cooperative project between OES, Caltech, CGS, UCB and the USGS. Funding for the project comes from the OES, USGS, FEMA/OES Hazards Mitigation Grants Program, Emergency Management Performance Grant Programs, and the National Tsunami Hazards Mitigation Program of NOAA. Additional financial support was provided by ISTI; developers of the CISN Display and other custom software solutions. For information regarding the CISN Display contact Nick Scheckel, Sr. Seismic Analyst, at 626 396-6946 or Margaret Vinci, ERA/Caltech Programs Manager, at 626 395-3298.