

## **Scenarios –**

R. Hamburger, January 18, 2009

In recent years, the USGS, together with regional emergency preparedness agencies, local chambers of commerce and volunteer participation by design professionals have developed scenario studies in which the potential outcomes of a large magnitude event near a major urban center are forecast. One such scenario was developed for the San Francisco Bay area, and published on the hundredth anniversary of the 1906 San Francisco earthquake. In late 2008, a similar scenario, termed “Shakeout” was held for the greater Los Angeles region, simulating a large magnitude event on the southern segment of the San Andreas fault.

Such scenarios are valuable exercises from several perspectives. First, they permit a mobilization of the resources necessary to perform a credible and sound projection of the likely losses such events can produce. In each case, the projected losses, in terms of life and financial loss were staggeringly high. Such projections provide valuable ammunition for earthquake professionals to fight the complacency that inevitably sets into a community, years after it has experienced its last earthquake disaster. Also, these scenarios permit realistic testing of emergency communications and response networks and mobilization of volunteer resources. Finally, they have received significant attention from the news media, providing a warning to the public at large, however, short lived, that their communities and they themselves are at significant risk.

Future scenarios should be planned and executed on a regular, perhaps annual or biannual basis, in major communities with substantive risk including Los Angeles, San Francisco, and Seattle. In future scenarios, government planning agencies should be encouraged to mobilize the substantial resources of the private sector to take action to mitigate the identified risks before the scenario actually occurs. In the past, the scenarios have been short-lived, falling out of the public’s attention weeks to months after publication, with little real action taken to address the identified risk. Future scenarios should be built around public and private partnerships forged to implement real and effective mitigation measures.