



## A Message from Earthquake Science, Engineering, and Emergency Management Professionals

The 1906 Earthquake left many legacies for California, including anticipation of the next, inevitable, great quake. Our 100th Anniversary Earthquake Conference will bring together earthquake professionals from around the world – scientists, engineers and preparedness experts – in San Francisco on April 18, 2006, to commemorate the 1906 Earthquake, review what we have learned, and discuss what we can do to further preparedness.

*We believe that though many areas of California are better prepared than ever before,  
we are not yet ready for the next great earthquake.*

The past 100 years have seen remarkable societal strides to reduce earthquake vulnerability and loss through changes in planning, preparedness, building codes, education, and training. Earthquake scientists are identifying the dangerous faults in California and around the world, and developing models for the location and intensity of future earthquakes. Engineers are determining how to construct buildings and infrastructure that will withstand strong shaking and ground shifts. Policy makers, community leaders, businesses, emergency responders and the general public are working to reduce damage and improve response. In the Bay Area alone, the combined public and private investment and commitment to retrofitting buildings, bridges, and pipelines exceeds \$20B over the past 20 years.

While a greater understanding of earthquakes and preparedness gives us reason to feel secure, California's size, complexity and leading role in today's global economy – and the startling devastation of Hurricane Katrina -- give us substantial cause for concern.

### What Happens When the Next Large Earthquake Hits?

Most experts in earth science, engineering, and emergency response have concluded that when a 1906-size earthquake happens again, for example in San Francisco:

- People will be relatively safe in buildings and infrastructure built since the 1970's.
- Buildings and infrastructure built before the 1970's that have not been strengthened may suffer major damage or complete collapse, causing thousands of casualties and extreme economic hardship.
- Many families, businesses, and institutions with response and recovery plans in place will act safely; many others do not have adequate plans in place and will suffer.
- Many government agencies are better prepared to respond to an emergency.
- Many businesses will be brought to a halt for weeks, some for months. The economic impact of a 1906-size earthquake will be between \$100 billion and \$200 billion. The economic effects will be felt worldwide, and it will take years to fully restore the epicenter's business activities.



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### **Reducing Our Vulnerability to Earthquakes**

Without the advancements in knowledge, public policy, construction and preparedness that have occurred in the past century, the expected number of casualties in a major earthquake would likely be five to ten times larger, and the economic disruption and losses at least double. Significant progress has been made, but the predicted life loss and economic disruption still is much greater than necessary.

We invite earthquake professionals worldwide to unite with others in their regions and nations in new mitigation efforts, preparedness, and emergency response activities.

### **Working together, we can:**

- Develop better policies, incentives, training programs, and construction practices to protect the populace.
- Improve emergency response, recovery, and reconstruction planning so we can recover from an earthquake disaster as quickly as possible.
- Increase the public's awareness of our vulnerability to earthquakes and the importance of preparedness at home, at work, at school, and in the community.
- Continue research into the source, size, and location of future earthquakes; into the performance of buildings and infrastructure during earthquakes; and into behavior, public policy – federal, state, and local -- and emergency management to improve recovery from the next big earthquake.

Our conference, timed to the centennial of San Francisco's 1906 earthquake, will focus on California. But the lessons and policies will ripple to quake-sensitive regions worldwide, and affect preparations for all natural disasters.

As professionals in the field, we are committed to the best possible preparation for a major earthquake.

For more information about the 100th Anniversary Earthquake Conference, go to [www.1906eqconf.org](http://www.1906eqconf.org)