Pre-1906 Earthquake Facts

•*Northwestern California*: A record of a large tsunami in Japan supported by geologic evidence from the Pacific Northwest indicates a magnitude (M) 9 earthquake occurred along the Cascadia Subduction Zone on January 26, 1700.

•*San Francisco Bay Area*: In the last half of the 1800s, damaging earthquakes (magnitude 6 or greater) occurred in the San Francisco Bay area on average every 4 years; this rate slowed down after the 1906 earthquake. One significant earthquake of this period was a M 7 earthquake in 1868 centered in the East Bay, labeled the "Great San Francisco Earthquake" prior to the 1906 earthquake.

•*Southern California:* In 1857, the M 7.9 Fort Tejon earthquake ruptured nearly 200 miles of the central portion of the San Andreas fault. Although this earthquake is considered to be greater than the 1906 earthquake, it caused little damage because southern California's population was small at the time.

100-YEAR EARTHQUAKE TIMELINE

1906 – M 7.9 San Francisco Earthquake

1925 – M 6.8 Santa Barbara Earthquake

1933 – M 6.4 Long Beach Earthquake

1940 – M 7.0 Imperial Valley Earthquake

1952 – M 7.3 Kern County Earthquake

1971 – M 6.6 San Fernando/Sylmar Earthquake

1979 – M 6.4 Imperial Valley Earthquake

1983 – M 6.4 Coalinga Earthquake

1989 – M 6.9 Loma Prieta Earthquake

1992 – M 7.3 Landers Earthquake

1994 – M 6.7 Northridge Earthquake

2003 – M 6.5 San Simeon Earthquake

2006

Photo sources: CGS, U.S. Geological Survey, and Southern California Earthquake Center.

EARTHQUAKE MYTH BUSTER – Scientists cannot predict earthquakes.

Earthquake movies always seem to show a scientist predicting an earthquake just before it happens. Though we have made great advances in our understanding of and preparedness for earthquakes, we have no way of knowing when exactly they will happen. However, by studying the history of earthquakes in specific areas, scientist can give a long-term PROBABILITY of when a sizeable earthquake might occur. In this respect, experts believe that within the San Francisco Bay area, there is a 62% chance of an earthquake of magnitude 6.7 or greater in the next 30 years.