**Figure 1.** Map of study region showing 1-second spectral acceleration ground motions of the 1906 San Francisco Earthquake (based on Boatwright et al., 2006)

**Figure 2.** Map of study region showing 1-second spectral acceleration ground motions for a magnitude M7.9 earthquake on the San Andreas Fault (near San Francisco)
Figure 3. Map of study region showing 1-second spectral acceleration ground motions for the 1989 Loma Prieta earthquake based on Pitarka et al. (1997)

Figure 4. Map of study region showing 19 counties and areas of greater and lesser building density (i.e., total building square footage normalized by census tract area)
Figure 5. Trends in study region population and building exposure growth, 1900 - 2040, normalized to 2006 values

Figure 6. Map of study region showing 19 counties and areas of older and newer buildings (based on age of residential buildings)
Figure 7. Distribution of buildings by age group for key counties and the study region.

Figure 8. Map of study region showing direct economic loss ratio by census tract for all buildings based on 1906 MMI ground motions.
Total Building Economic Loss = 122.43 Billion Dollars
Top 4 Counties:
- San Francisco - $33.8 B
- Santa Clara - $28.4 B
- San Mateo - $26.4 B
- Alameda - $15.0 B

Figure 9. Map of study region showing direct economic loss ratios by census tract for all buildings based on magnitude M7.9 ground motions