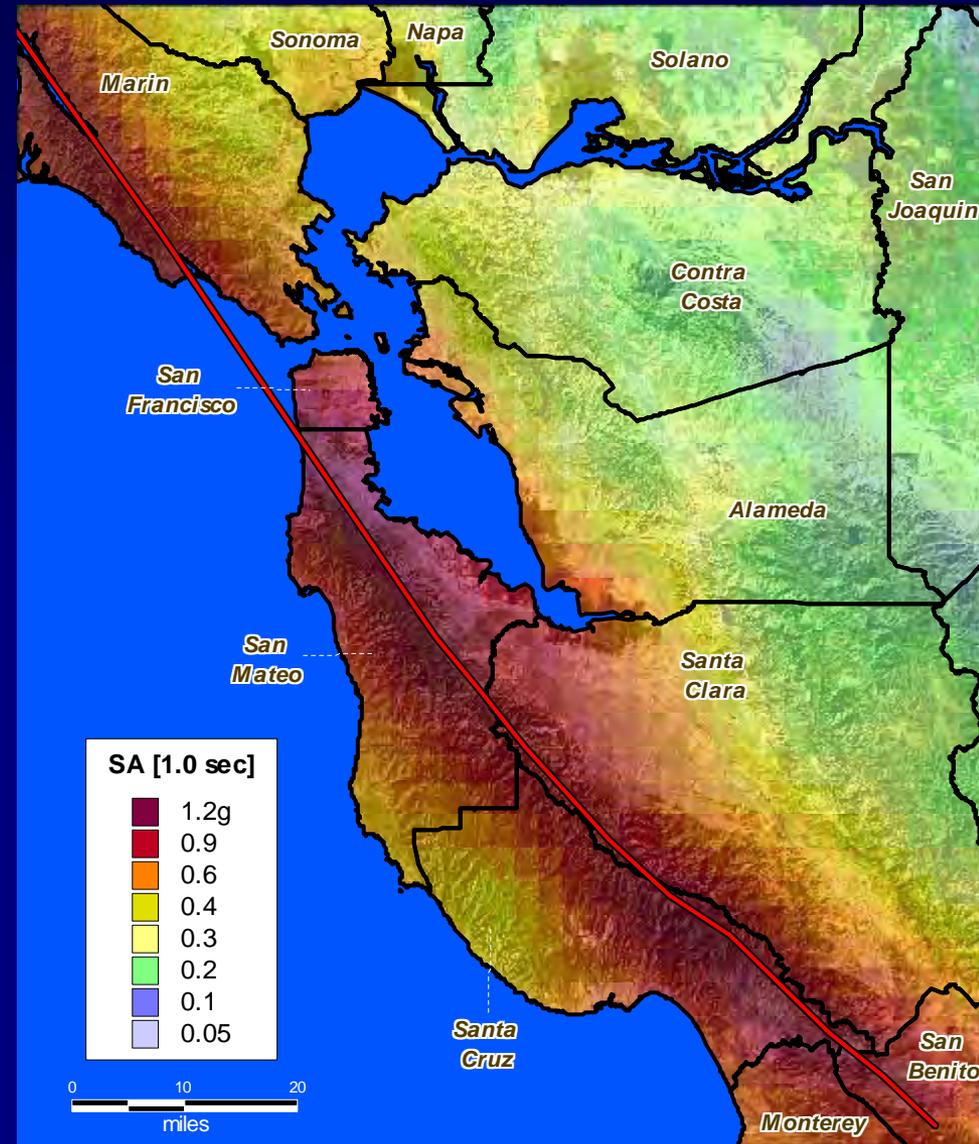


Emergency Response

HAZUS-MH Used to Support San Francisco Bay Area Earthquake Exercise

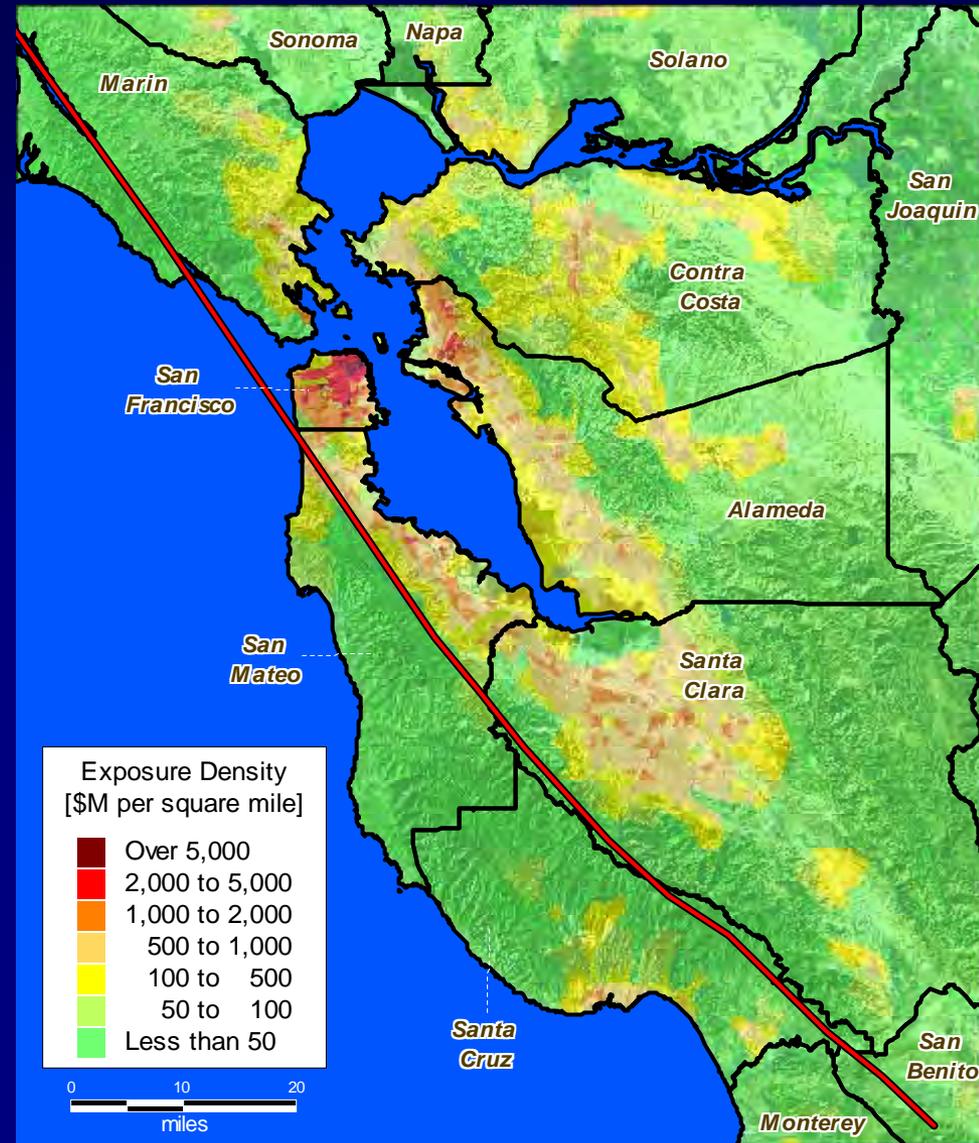
Overview of Shaking

- All counties will be affected
- San Francisco, San Mateo, and Santa Clara counties with highest risk (combination of strong shaking and dense / vulnerable assets)



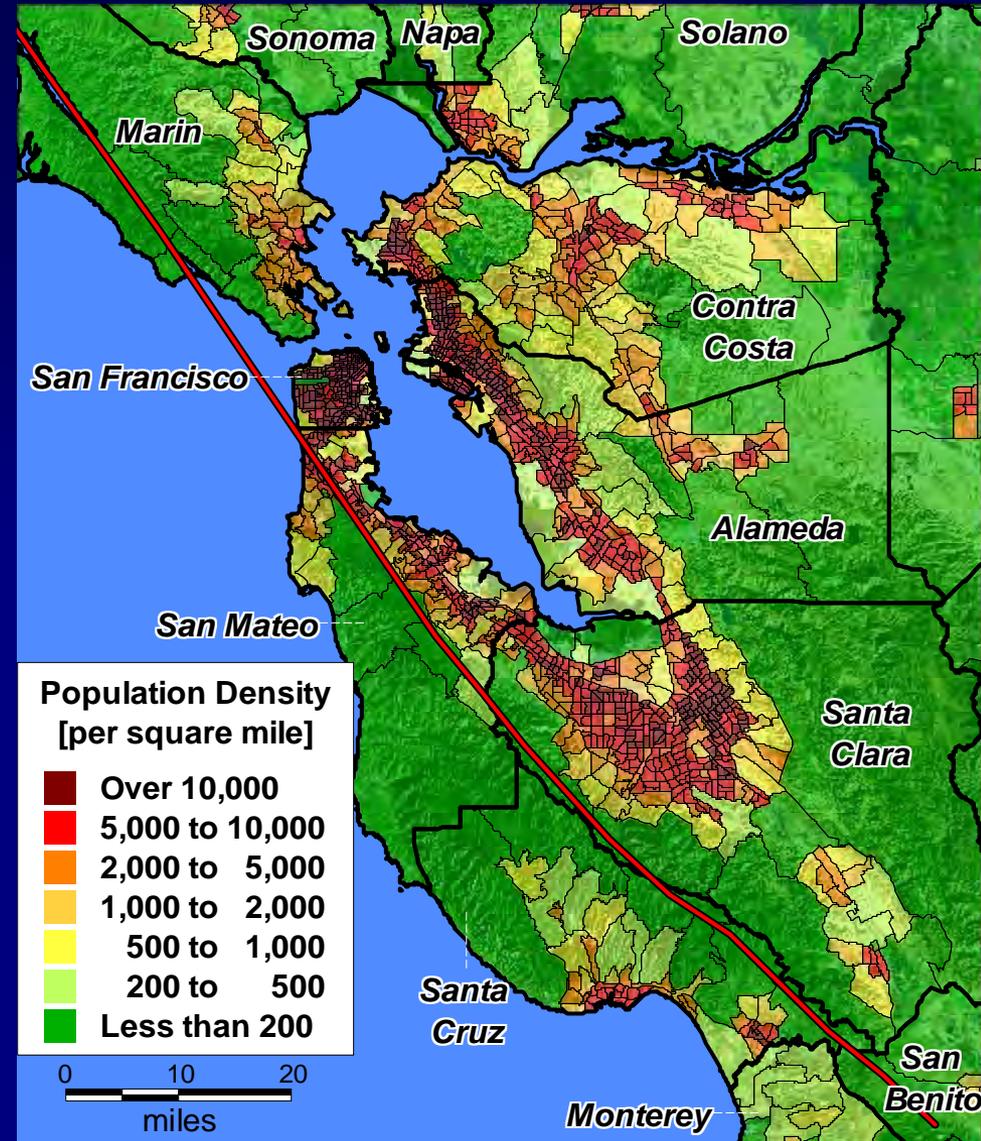
Overview of Assets at Risk

- 1.1 trillion dollars of building exposure
- 780 Billion dollars of residential exposure
- 204 Billion dollars of commercial exposure
- 43 billion dollars of industrial exposure



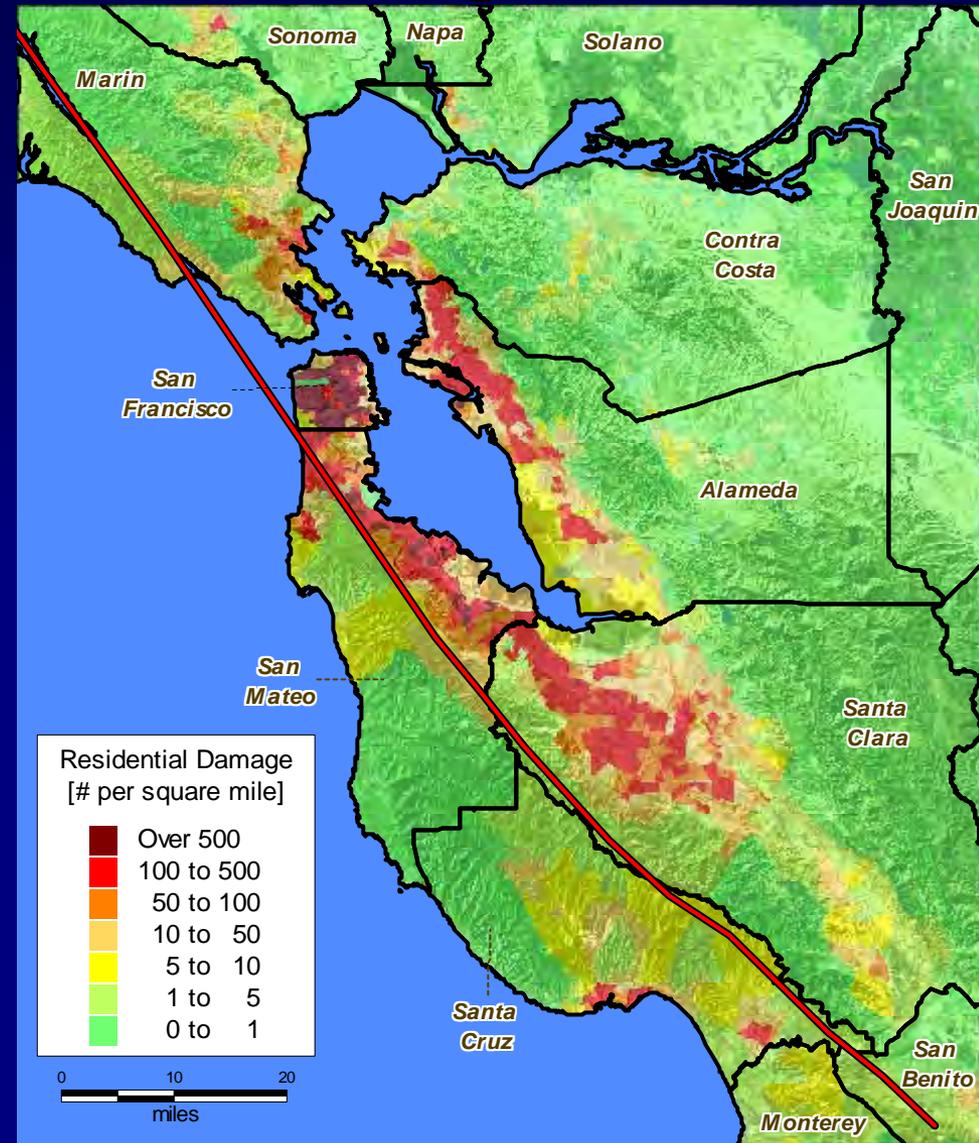
Population at Risk

- 10.5 million people
- 3.7 million households
- About 0.6 million households with annual income less than 20K
- About 1.2 million people over 65 years old



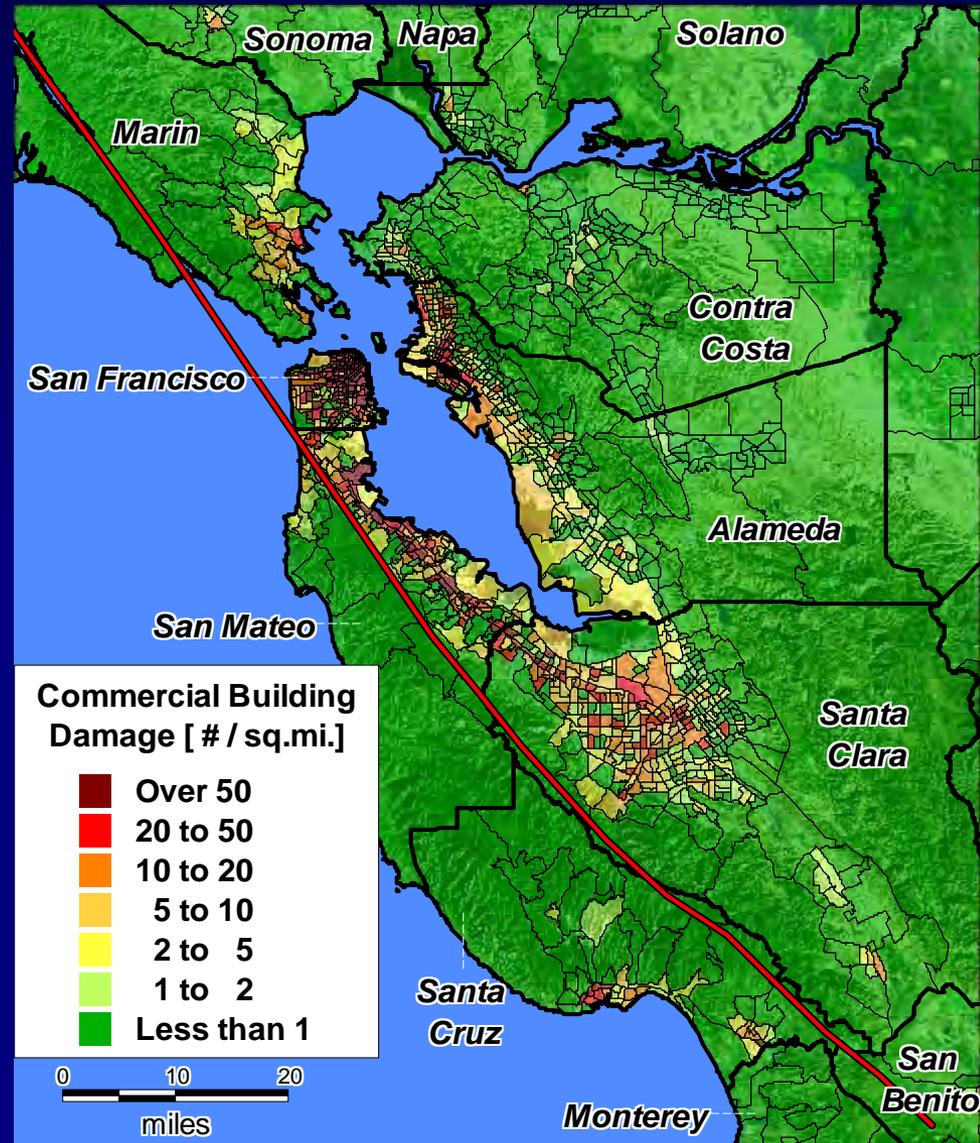
Residential Damage

- Over 3 million residences
- Over 100,000 residences potentially destroyed



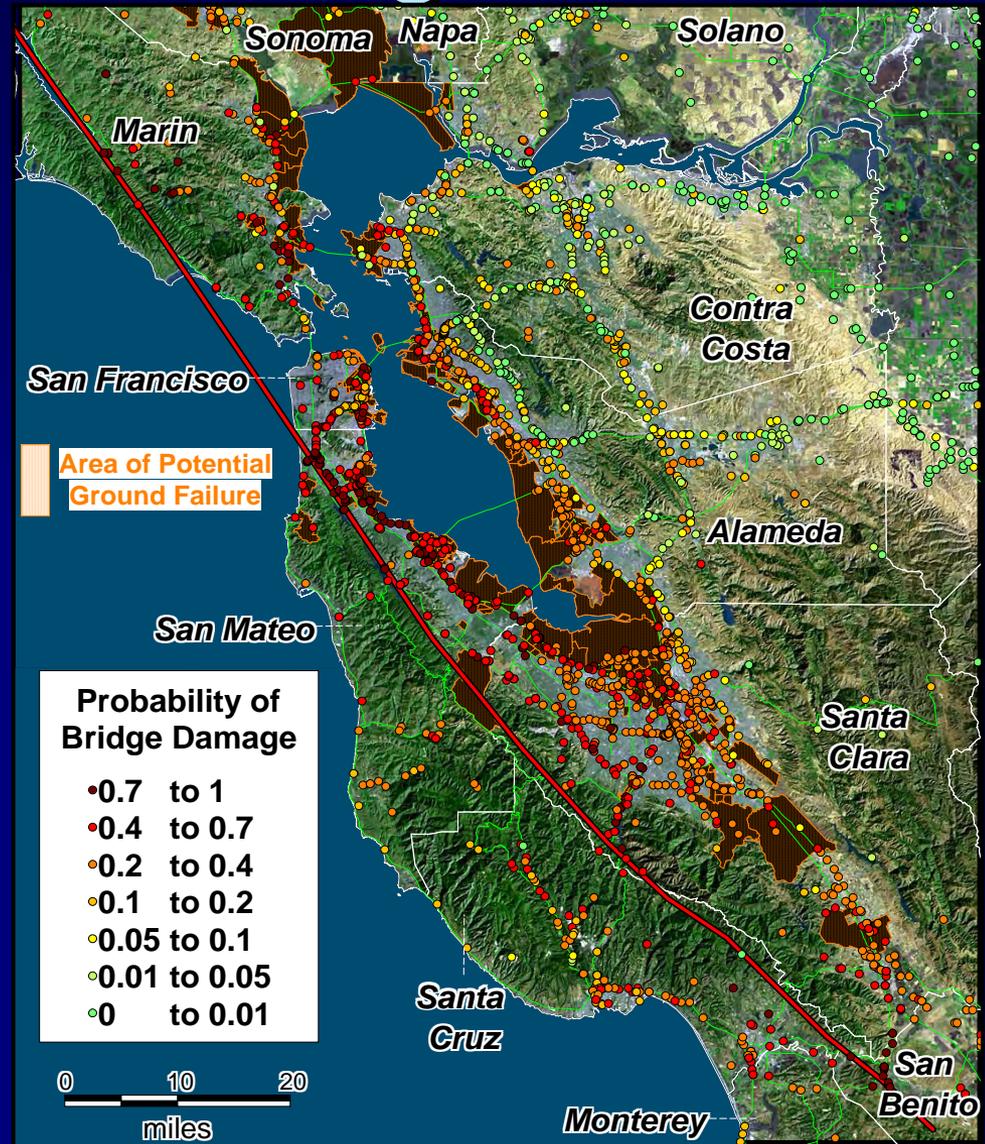
Commercial Damage

- About 70,000 commercial facilities
- Over 10,000 facilities with at least extensive damage



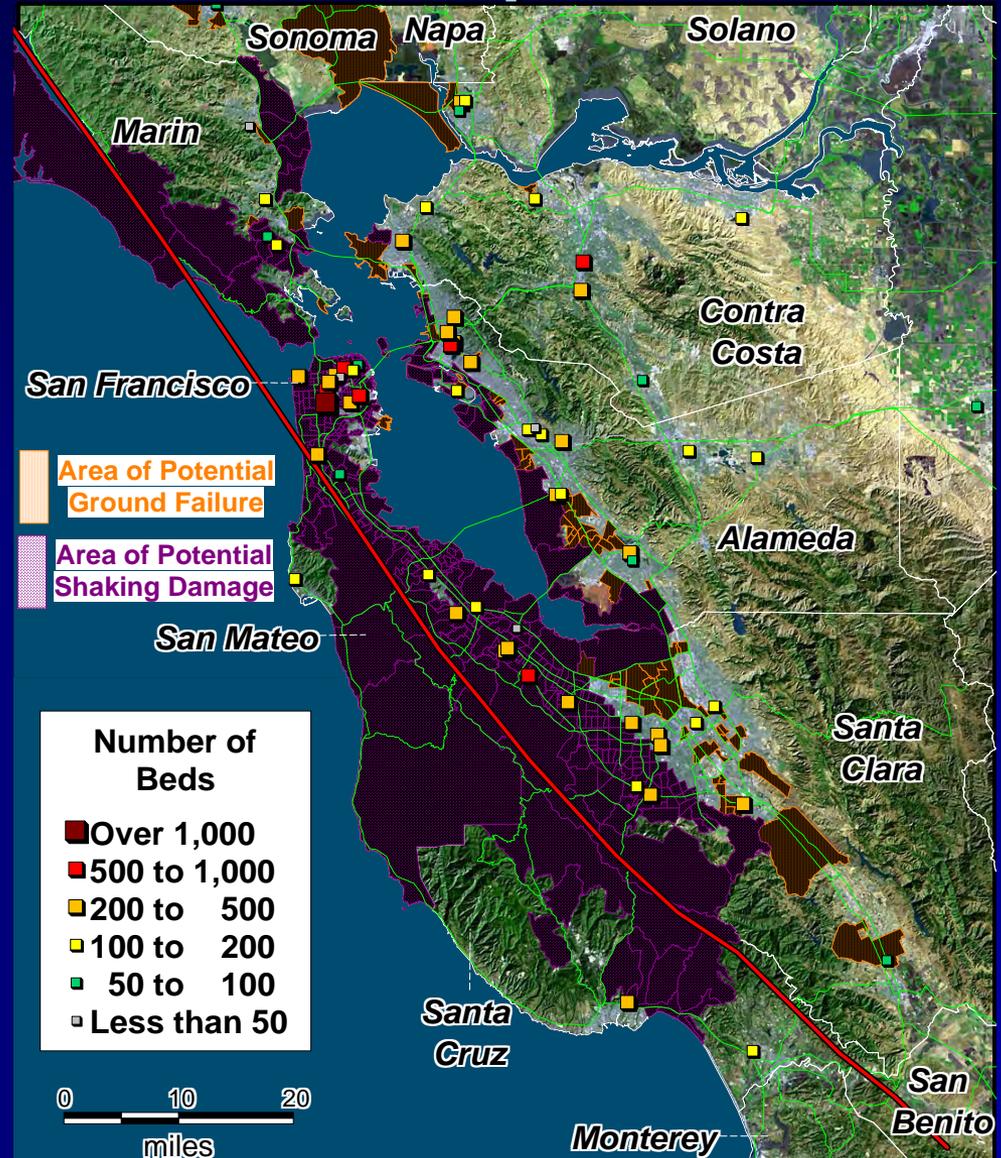
Damage to Bridges

- About 6900 bridges in 19-county area
- Over 1,300 bridges may require repairs
- Map shows damage to multi-span bridges



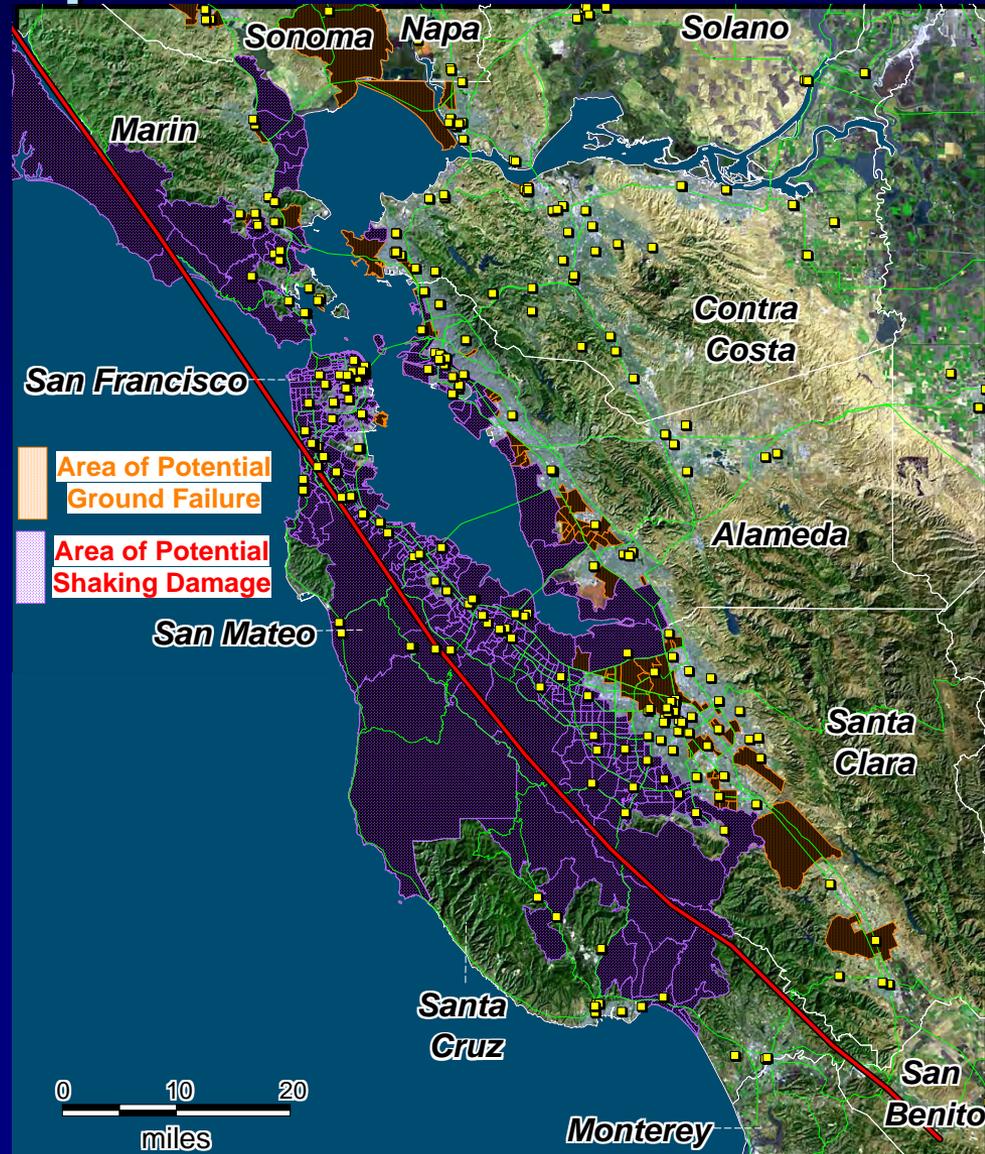
Performance of Hospitals

- About 120 hospitals (excluding clinics)
- About 30 to 50 hospitals may suffer minor to major damage



Emergency Response Facilities

- 35 fire stations may be seriously affected
- 50 police stations may be seriously affected
- 2 EOC's potentially with significant damage



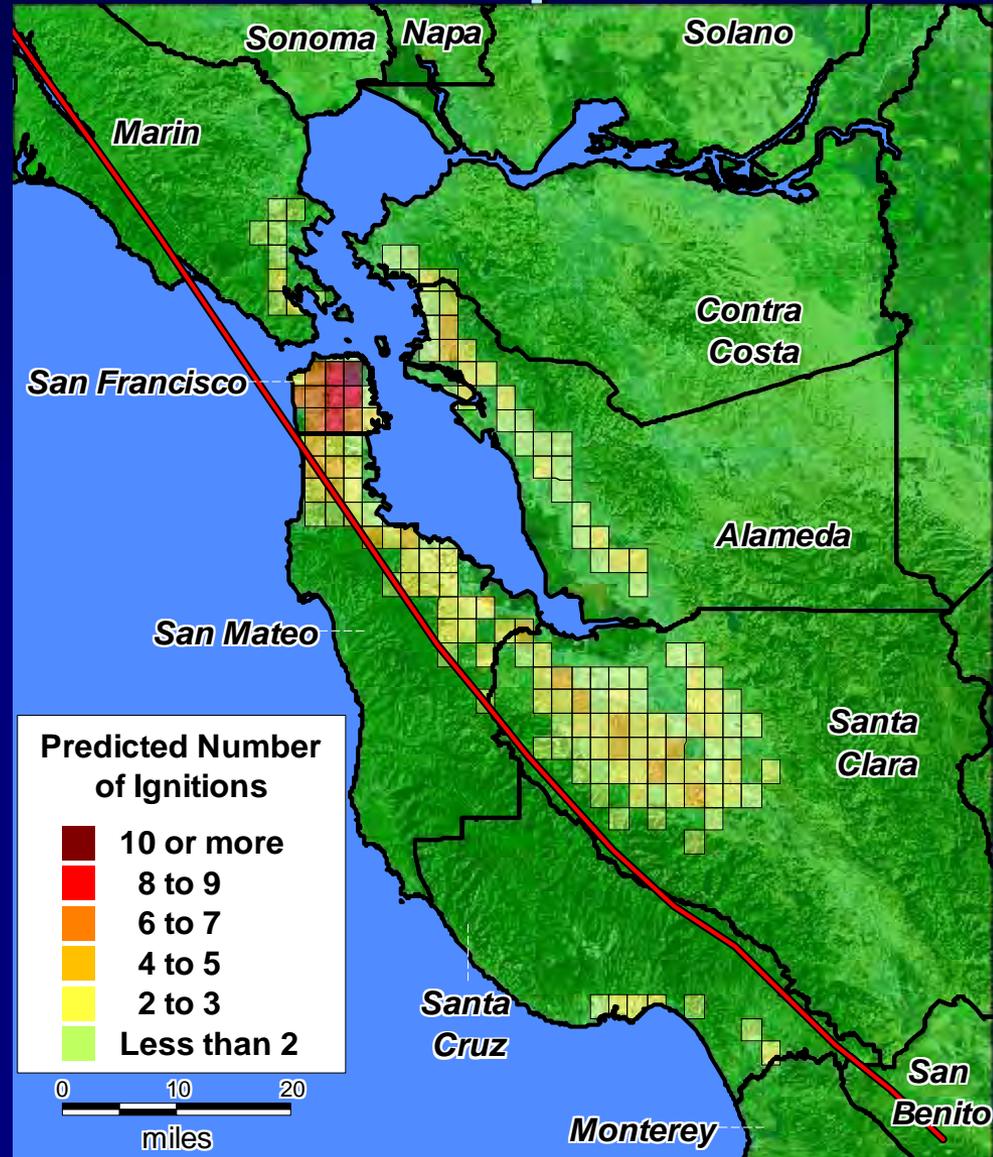
School Performance

- About 4,000 schools in 19-county area
- About 400 schools may be closed
- Schools shown in yellow dots



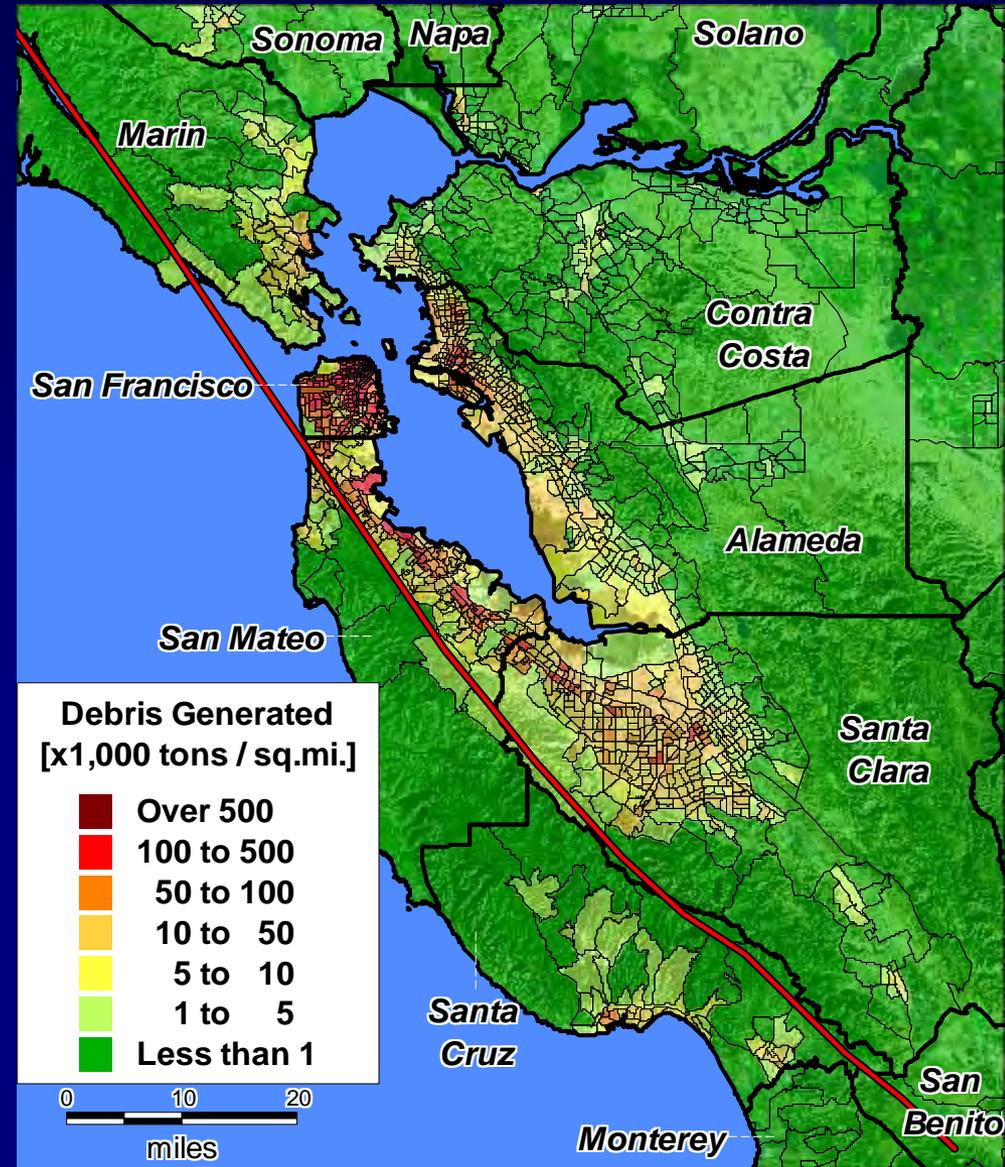
Fire Ignitions and Consequences

- 500 to 600 Fires
- About 100 in San Francisco
- San Francisco, San Mateo, Santa Clara, Alameda, and Marin Counties at highest risk



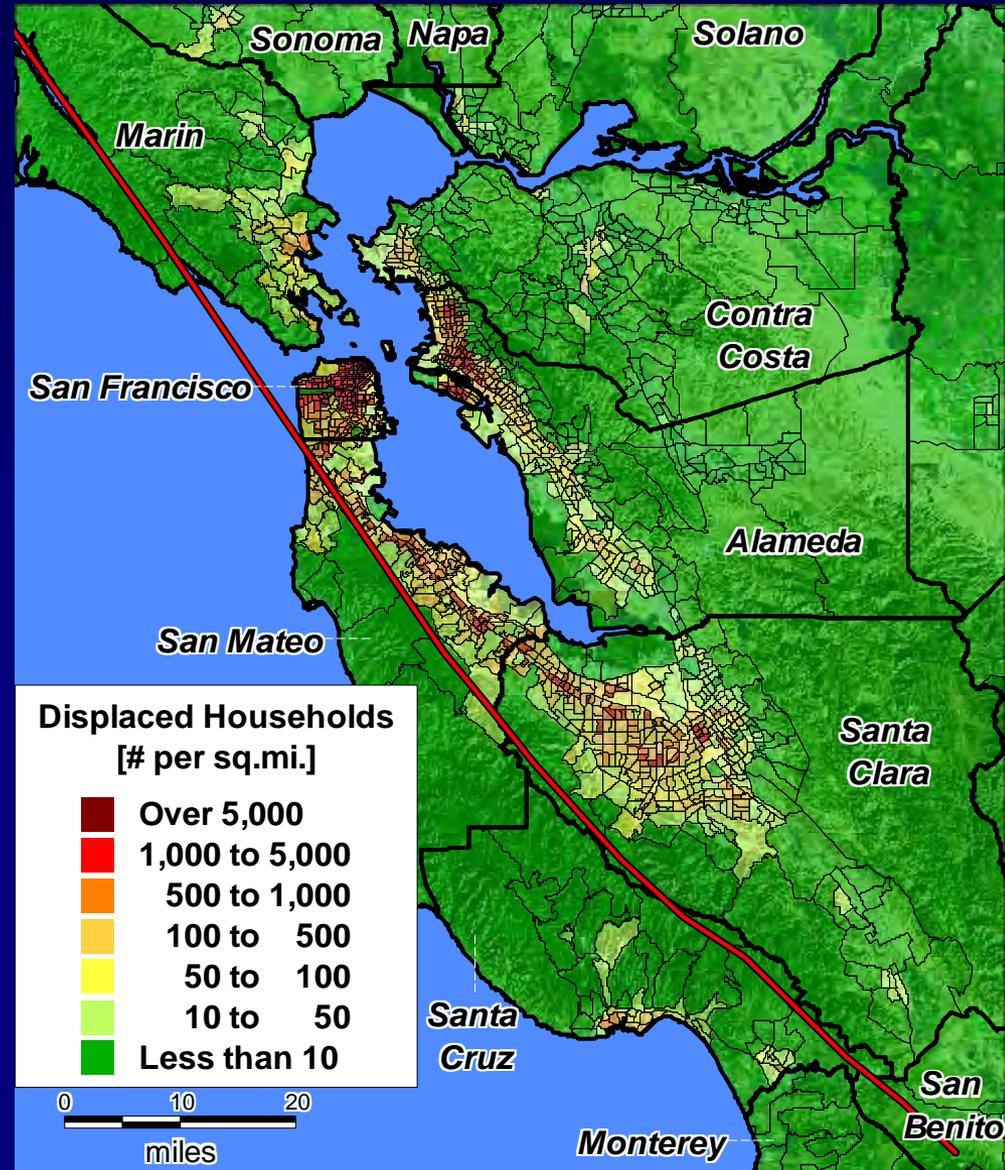
Debris Generated

- 25 to 40 Million tons of debris generated



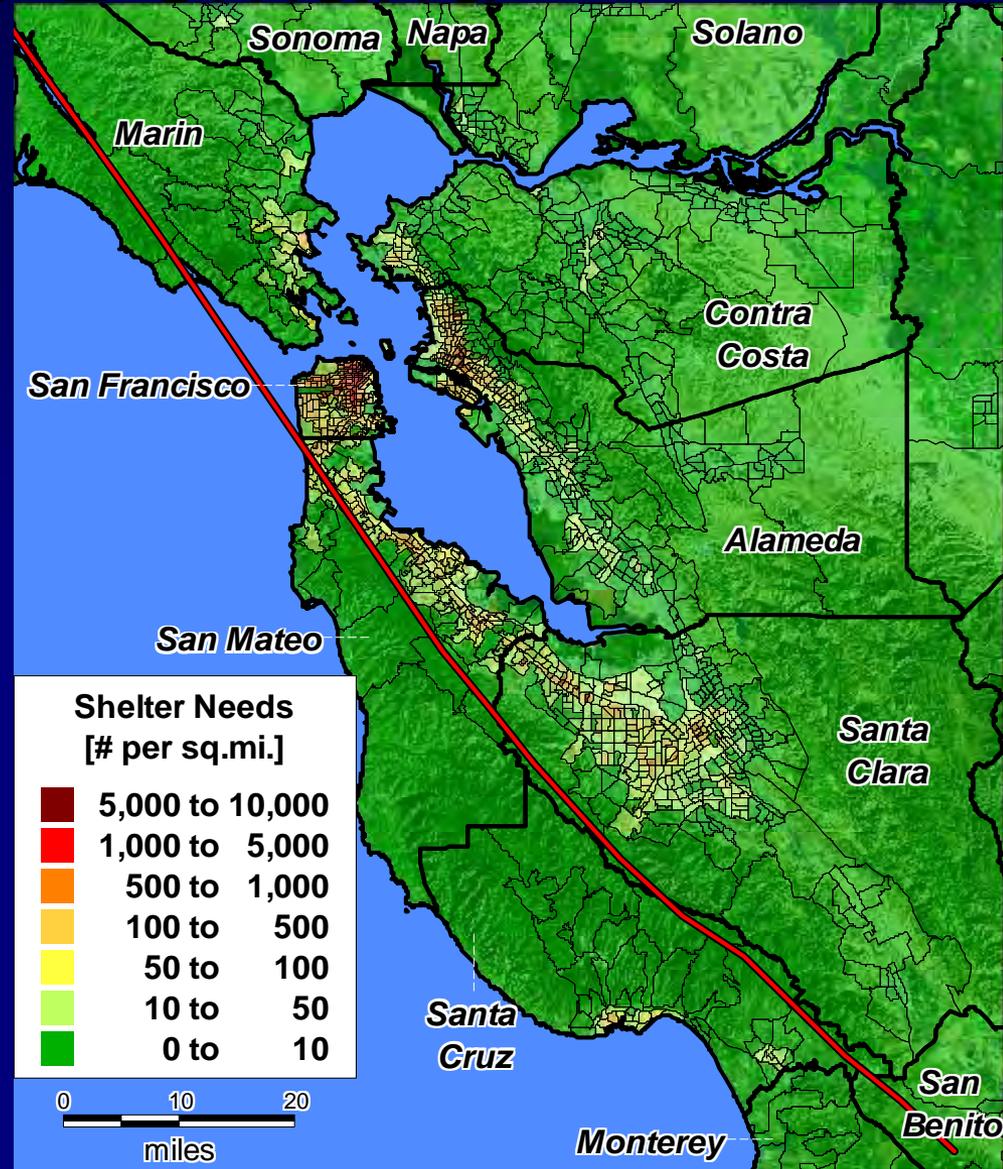
Displaced Households

- 200,000 to 300,000 displaced households



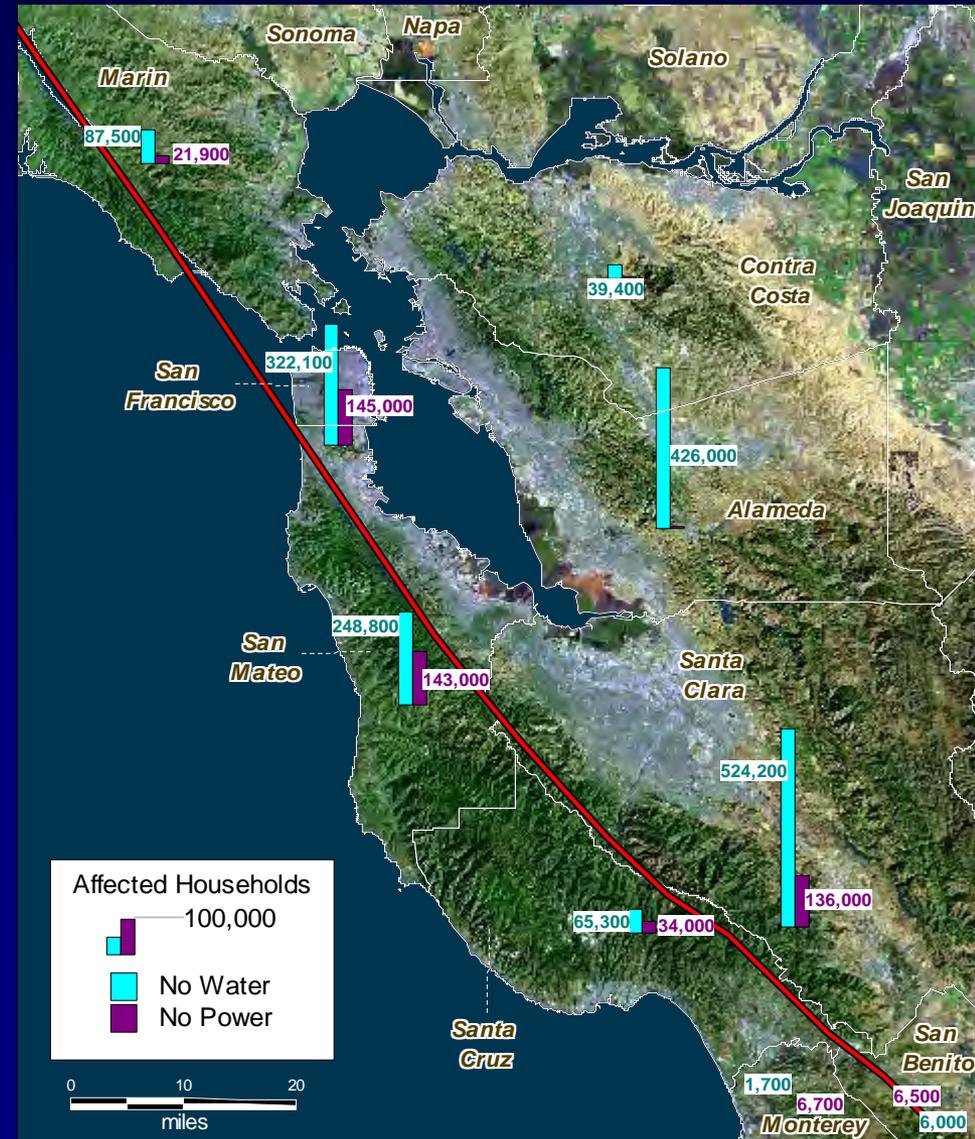
Shelter Demand

- 60,000 to 120,000 persons requiring short-term shelter



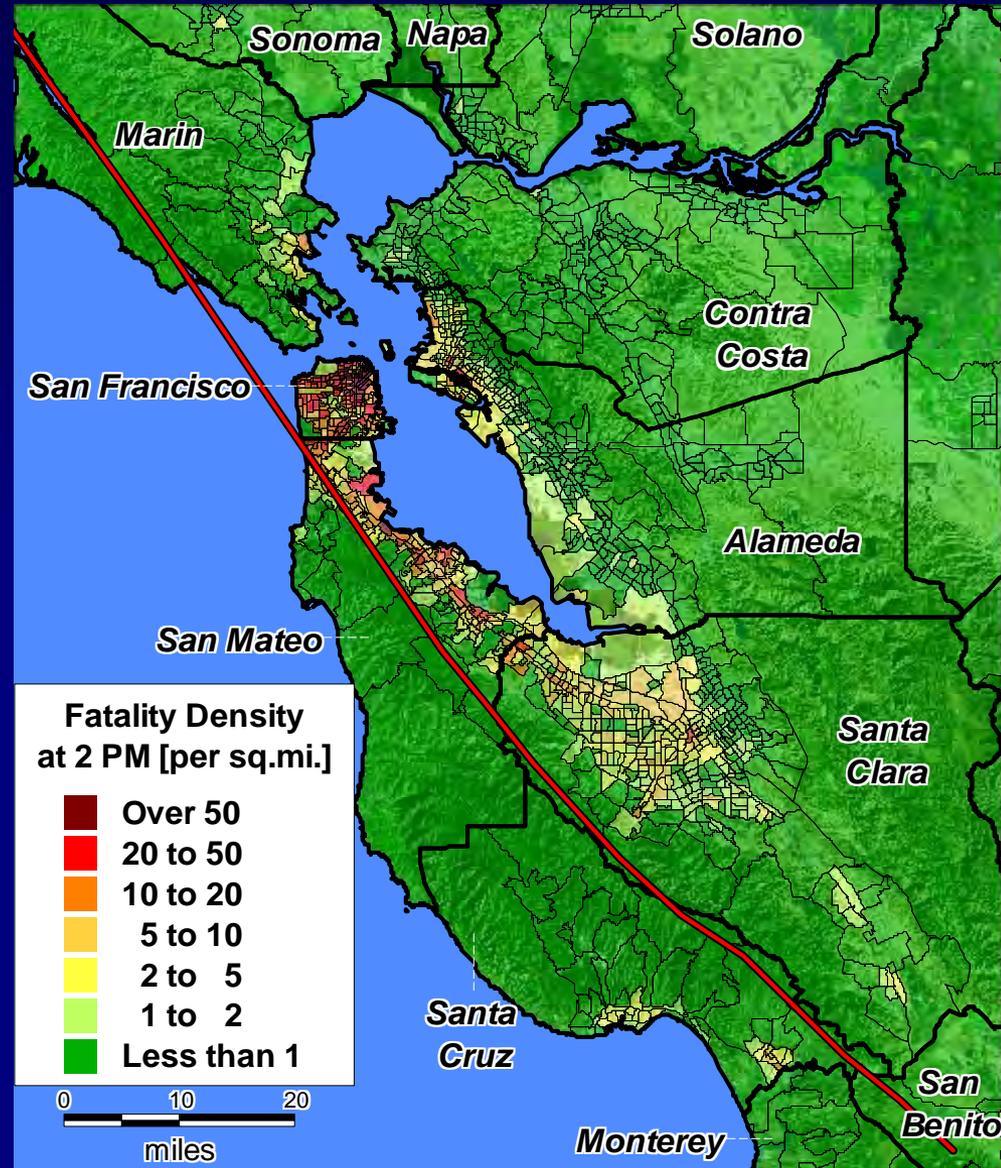
Utility Disruption

- Total Households in 19 counties = 3.66 Million
- Households without power (1 day after EQ) = 0.5 Million
- Households without water (1 day after EQ) = Over 1 Million



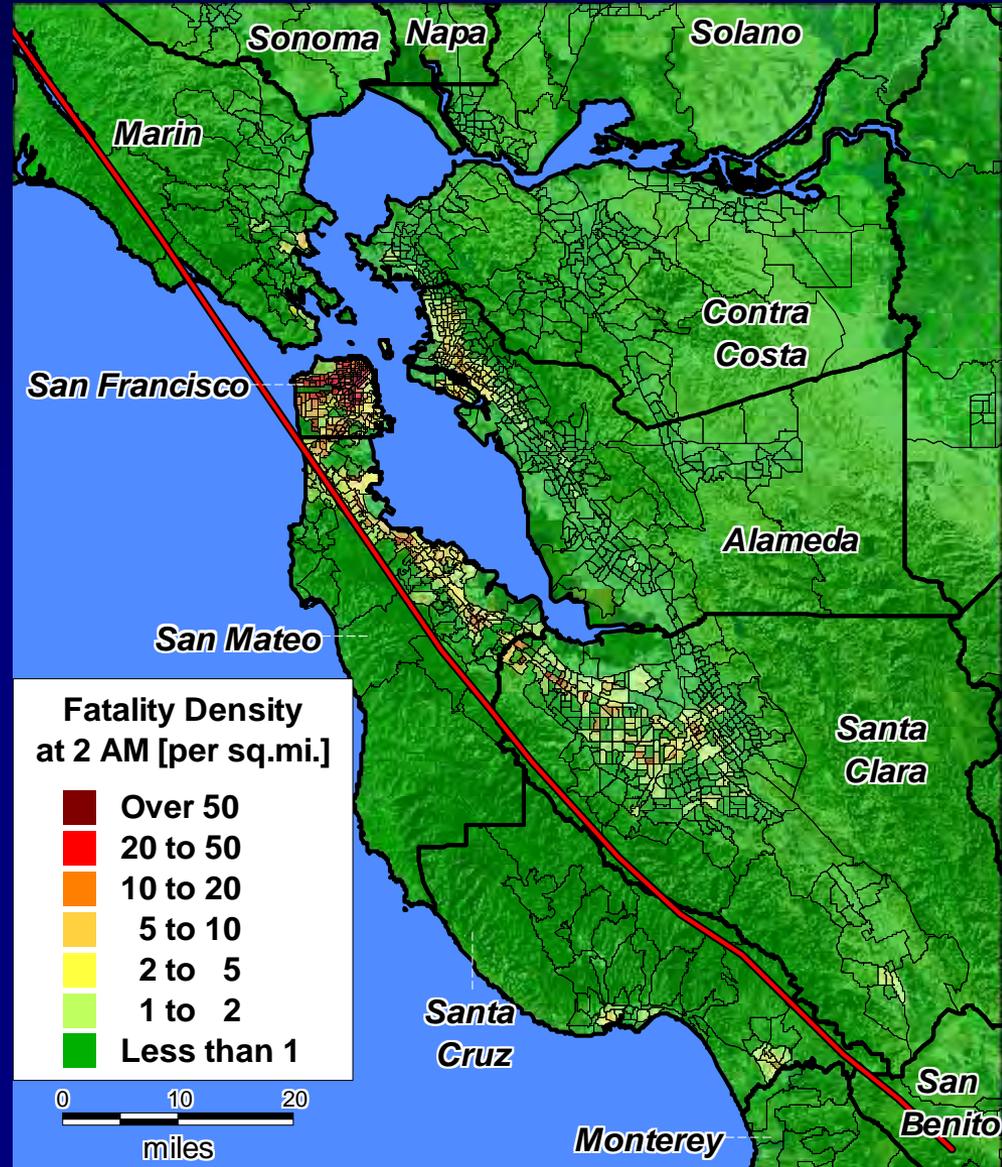
Daytime Casualties

- Injuries = 13,000
- Deaths = 3,400



Nighttime Casualties

- Injuries = 8,000
- Deaths = 1,800



Economic Impact

- Over 120 Billion Dollars of Building Losses
- All direct and indirect losses will be in excess of 150 Billion dollars

