

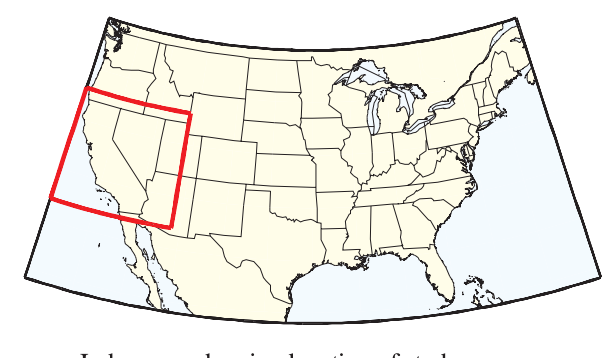
**Explanation**

| %g  | Color         |
|-----|---------------|
| 200 | Dark Red      |
| 160 | Red           |
| 120 | Orange-Red    |
| 80  | Orange        |
| 60  | Yellow-Orange |
| 50  | Yellow        |
| 40  | Light Yellow  |
| 30  | Yellow-Green  |
| 20  | Light Green   |
| 18  | Green         |
| 16  | Light Green   |
| 14  | Green         |
| 12  | Light Green   |
| 10  | Light Green   |
| 8   | Light Green   |
| 6   | Light Green   |
| 4   | Light Green   |
| 2   | Light Green   |
| 0   | White         |

+ 6.2 Point value of spectral response acceleration expressed as a percent of gravity

— 10 — Contour of spectral response acceleration expressed as a percent of gravity

Note: contours are irregularly spaced



Index map showing location of study area

**DISCUSSION**

The acceleration values contoured are the random horizontal component. Reference site condition is firm rock, defined as having an average shear-wave velocity of 760 m/sec in the top 30 meters, corresponding to the boundary between NEHRP site classes B and C.

In some situations, particularly in areas of high ground-motions (e.g., along the San Andreas Fault) there are discontinuous chains, or islands, of high ground-motion values. This is an artifact of the grid spacing used in the calculations. In most cases these chains should be replaced with continuous bands of high ground-motion values enclosing the chains.

Documentation, gridded values, and ARC/INFO coverages used to make the maps are available at <http://geohazards.cr.usgs.gov/ev/>

**ACKNOWLEDGMENTS**

California portion of the map produced jointly with the California Division of Mines and Geology. Ken Rubstales prepared the ARC/INFO digital data and formatted the GIS versions of the maps.

**REFERENCES**

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1996, National Seismic-Hazard Maps: Documentation June 1996; U.S. Geological Survey Open-File Report 96-532, 110 p.

Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1997, Seismic-Hazard Maps for the Conterminous United States: U.S. Geological Survey Open-File Report 97-131, 12 sheets, scale 1:7,000,000.

Petersen, M., Bryant, W., Cramer, C., Cao, T., Reichle, M., Frankel, A., Lienkaemper, J., McCroly, P., and Schwartz, D., 1996, Probabilistic Seismic Hazard Assessment for the State of California: California Division of Mines and Geology Open-File Report 96-08, 66 p., and U.S. Geological Survey Open-File Report 96-706, 66 p.

**SEISMIC-HAZARD MAPS FOR CALIFORNIA, NEVADA AND WESTERN ARIZONA/UTAH  
MAP D - HORIZONTAL SPECTRAL RESPONSE ACCELERATION FOR 0.2 SECOND PERIOD (5% OF CRITICAL DAMPING)  
WITH 10% PROBABILITY OF EXCEEDANCE IN 50 YEARS**

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Nancy Dickman, Stanley Hanson and Margaret Hopper**

1997

Digital data prepared with ARC/INFO 7.04 running under Solaris 2.5 on a UNIX workstation  
Albers Equal-Area Conic Projection  
Standard Parallels: 28°N and 45°N  
Central Meridian: 118°W

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