Labor Market Risks of a Magnitude 6.9 Earthquake in Alameda County

The Hayward fault underlies Alameda County, a populous urban area in Northern California, and is estimated to have a 27 percent chance of experiencing a seismic event by 2032. Alameda County is home to 413,000 employees, 807,100 employees, and a total quarterly payroll of $9.3 billion.

The County also lies over approximately three-fourths of the length of the Hayward fault and is therefore the county in the region most exposed to earthquakes on this fault. When we overlay employment on shaking intensity zones, we find that a large number of employees are located in areas which are expected to experience the greatest intensity as measured by MMI.

Within Alameda County, we estimate that:

- Approximately 90 percent of the businesses, employees, and payrolls are located in or attributed to the most intense shaking zones on the map (MMI-VIII and MMI-VII+).
- More than half of the businesses, employees, and payrolls are in the zones characterized as having severe shaking and moderate to heavy damage (MMI-VII+). There are more than 400,000 employees in the most intense shaking zones earning $6.2 billion in quarterly payrolls.

The interruption to business from a M6.9 Hayward earthquake could affect nearly all businesses and employees in Alameda County.

### Potential Employment Exposure from a Hayward M6.9 Earthquake, Alameda County, MMI VIII or Greater

- Health Care & Social Assistance
- Government
- Educational Services
- Retail Trade
- Professional, Scientific, & Technical Services
- Accommodation & Food Services
- Construction
- Administrative Support & Waste Management Services
- Transportation & Warehousing
- Finance & Insurance
- Other Services
- Management of Companies & Enterprises
- Real Estate & Rental & Leasing
- Utilities
- Manufacturing

Data sources:
- Quarterly Census of Employment and Wages (QCEW) data are from 2005 Third Quarter.
- Employment is from September 2006.
- Compensation data are not included in the data.

Data analysis and cartography by the U.S. Bureau of Labor Statistics.