

CALIFORNIA EARTHQUAKE ZONING and PROBABLE MAXIMUM LOSS EVALUATION PROGRAM

*An Analysis of Potential Insured Earthquake Losses
from Questionnaires Submitted to
the California Department of Insurance by
Licensed Property/Casualty Insurers in California
for: 2002 ~ 2010*

California Administrative Code
Title 10, Chapter 5, Subchapter 3, Section 2307

DAVE JONES
Insurance Commissioner

California Department of Insurance
Los Angeles, California
May 2012

The statistics were compiled and the report prepared by the:

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DEPARTMENT OF INSURANCE

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Dear California Consumer:

I am very pleased to release this "California Earthquake Zoning and Probable Maximum Loss Evaluation Program" report.

As part of our effort to inform the general public of earthquake peril in the State, we are publishing this updated report to provide the information and tools to deal with this catastrophic risk.

If you are interested in other insurance topics, the CDI has a full range of insurance guides available on our Website at www.insurance.ca.gov or by calling our Consumer Hotline at 800-927-HELP (4357)

Sincerely,

A handwritten signature in cursive script that reads "Dave Jones".

Dave Jones
Insurance Commissioner

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Introduction

In the aftermath of the 1971 San Fernando earthquake, concern about the exposure of the insurance industry to earthquake losses increased greatly. This led the California Department of Insurance to issue Ruling 226 which requires all licensed insurers to annually report their insured exposures for earthquake shake damage on residential and commercial structures in California. At that time, the percentage of homes and commercial structures insured for earthquake damage was less than 10%. Insurance losses from the San Fernando earthquake (magnitude/M 6.6) were about \$46 million.

Since then, the demand for earthquake insurance has grown dramatically, along with the dramatic increase in residential and commercial building values. After the 1989 Loma Prieta earthquake in Northern California, the insurance industry paid more than \$1 billion in losses. The 1994 Northridge earthquake (M 6.7) in Southern California was the most costly earthquake in the United States. Early estimates put insured losses at \$12.5 billion. However, overall incurred losses were \$44 billion [\$20 billion for property damage], of which \$15.3 billion were insured losses. In 2010 dollars, the insured losses are estimated at \$22.55 billion (*from Insurance Information Institute's Earthquake Statistics Report -- http://www.iii.org/facts_statistics/earthquakes-and-tsunamis.html*). While no insurers went out of business after the Northridge earthquake, the financial impact was severely constricting for all insurers.

With the memory of the massive earthquake that struck the northeastern coast of Japan on March 11, 2011 in mind, the necessity of earthquake preparedness and earthquake insurance is again emphasized. The Tōhoku earthquake and resulting tsunami (or the "Eastern Japan Great Earthquake Disaster") was a magnitude 9.0 undersea earthquake that struck at 2:46 PM local time with an epicenter 80 miles east of Sendai, Japan in the Pacific Ocean. As of March 31, per the Japan Meteorological Agency (JMA), there were over 380 aftershocks of magnitude 5 or greater, with at least 64 shocks of magnitude 6.0 or greater and 3 above magnitude 7.

The earthquake generated several tsunami waves, the first of which struck 26 minutes after the earthquake and towered in excess of 15 meters (49.2 feet) in some areas and as high as 30 meters (nearly 100 feet) in Ofunato. The tsunami swept across the coastlines of Miyagi, Iwate and Fukushima prefectures, causing many towns to be completely washed away. As of April 6th, the death toll was 12,431 with an estimated 15,500 missing. More than 3,000 people were injured and at least 203,000 homes and other structures were damaged. The Japanese government estimates total economic losses to range between JPY 16.2 to 25.3 trillion (USD 198 to 309 billion).

As of September 30, 2011, the National Police Agency of Japan updated their report to 15,815 deaths and 3,966 missing, with 15,749 deaths coming from Iwate, Miyagi, and Fukushima prefectures (http://www.npa.go.jp/archive/keibi/biki/index_e.htm). The JMA reports that as of December 2011, there have been 6 aftershocks of magnitude 7+ or greater; 96 magnitude 6 or greater, and 580 magnitude 5 or greater (http://www.jma.go.jp/jma/en/2011_Earthquake.html) .

Despite all of Japan's earthquake and tsunami preparedness, the magnitude of the earthquake was much greater than surmised and the height of the waves greater than their safety barriers. However, Japanese practice of how to react in an earthquake and/or evacuate for a tsunami probably saved countless lives. California has been fortunate to avoid such a great tragedy in recent years.

This Report

Each year, all licensed insurers report to the California Department of Insurance on a detailed questionnaire their insured exposures for earthquake shake damage on residential and commercial structures in California. These questionnaires include calculations for estimating what is called the Probable Maximum Loss (PML), or the expected insured loss after deductible, for structure and contents damage from a large earthquake.

The questionnaires/reports received from the individual insurers are not made public. Only the aggregate results for all insurance companies are published here. This report covers the reported earthquake insurance exposure for 2002 to 2010. The main purpose of this reporting requirement is to make an effort to quantify each insurance company's exposure to a large earthquake, to monitor insurer solvency and ability to pay claims, and to monitor the aggregate industry exposure.

The demand for earthquake insurance has grown dramatically over recent years and, hence, so has the insurance industry's exposure to large amounts of insured earthquake losses. Ordinarily, insurers deal with situations which involve many insurable risk exposures, the total of which is predictable based on past loss experience. Earthquake insurance, on the other hand, deals with low frequency and high severity events, where the past event history is not reliable for predicting the future loss experience at a particular location. Instead, the insurance industry must rely on engineering, geological, and seismological information and professional expertise to make estimates of the potential loss exposure to a group of insured buildings in a particular fault zone.

The California Department of Insurance uses the information from these earthquake questionnaires to monitor the financial stability of the individual companies and to encourage the prudent expansion and availability of needed earthquake insurance. The insurers use this PML information to manage their portfolios of earthquake risks to ensure that the insurer's potential loss does not exceed the insurer's capacity to pay the losses. With this report, the Department is updating the PML information for 2002 to 2010.

The Insurance Industry's Aggregate Earthquake Exposure

All property/casualty insurance companies licensed to do business in California are required to report annually their PML earthquake exposure with respect to risks located in California. A copy of the Instructions, with maps of the earthquake zones, is included in the Appendix of this report.

Table 1 shows a historical summary of the insurance industry insuring a substantial amount of earthquake risk in California. It displays Direct Insured Probable Maximum Loss (PML) and total Direct Liability by earthquake zones in California. The insurance industry's aggregate insured PMLs on a direct basis (meaning before reinsurance) are shown for earthquake insurance in effect at the end of the respective years.

Probable Maximum Loss (PML) means the average monetary loss (after the specified deductible) which will be experienced by typical buildings in a given earthquake building class in the specified earthquake PML zone for the maximum size earthquake that is likely to occur in that earthquake zone. This definition assumes a large magnitude earthquake, and the damage results only from vibratory (or shake) motion. The PML is obtained by multiplying a specified PML factor times the

replacement value of the structure and contents, which is assumed to be equal to the insured coverage limit or *direct liability*.

Direct Liability is the industry total amount of earthquake insurance coverage in the policies. For instance, an insurer insuring a \$200,000 house for that amount of earthquake coverage would have a direct liability of \$200,000, and a PML of \$4,260 for a 10% deductible policy in San Francisco (using a 2.13% PML factor for Zone A).

The given PML percentages were derived from an examination of the structural damage in past earthquakes, with engineering adjustments for the size of the earthquake, and the results averaged over the earthquake zone. Actual insured losses will vary due to poor soil conditions (including landslide and liquefaction) and close proximity to the fault line. In fact, at the Loma Prieta earthquake, the soil conditions and the proximity to the fault line had a greater effect on insured losses than did the type or condition of the structure.

TABLE 1: TOTAL PROBABLE MAXIMUM LOSSES (PMLS) -- ALL COMPANIES REPORTING

This table shows that the insurance industry insures a substantial amount of earthquake risk in California.

(in \$millions)

Direct Insured Probable Maximum Losses (PMLs) as of the End of:

Earthquake Zone	2000	Revised 2001	% Chng 2001/00	2002	% Chng 2002/01	2003	% Chng 2003/02	2004	% Chng 2004/03	2005	% Chng 2005/04	2006	% Chng 2006/05	2007	% Chng 2007/06	2008	% Chng 2008/07	2009	% Chng 2009/08	2010	% Chng 2010/09
A. San Francisco	\$11,886	\$10,630	-10.6%	\$8,003	-24.7%	\$8,893	11.1%	\$10,735	20.7%	\$10,369	-3.4%	\$11,950	15.2%	\$14,368	20.2%	\$16,354	13.8%	\$16,632	1.7%	\$19,048	14.5%
B. Los Angeles/Orange	\$17,276	\$12,072	-30.1%	\$10,992	-8.9%	\$11,944	8.7%	\$15,117	26.6%	\$14,618	-3.3%	\$16,428	12.4%	\$22,290	35.7%	\$23,980	7.6%	\$25,677	7.1%	\$28,094	9.4%

(in \$millions)

Total Direct Liability (total property values) and Direct Insured PMLs (expected damage) across California:

Earthquake Zone	Dir Liab 2000	Dir Liab 2001	% Chng 2001/00	Dir Liab 2002	% Chng 2002/01	Dir Liab 2003	% Chng 2003/02	Dir Liab 2004	% Chng 2004/03	Dir Liab 2005	% Chng 2005/04	Dir Liab 2006	% Chng 2006/05	Dir Liab 2007	% Chng 2007/06	Dir Liab 2008	% Chng 2008/07	Dir Liab 2009	% Chng 2009/08	Dir Liab 2010	% Chng 2010/09
A. San Francisco	\$119,936	\$133,076	11.0%	\$126,708	-4.8%	\$147,232	16.2%	\$138,162	-6.2%	\$159,969	15.8%	\$184,399	15.3%	\$151,524	-17.8%	\$167,365	10.5%	\$156,177	-6.7%	\$250,199	60.2% *
B. Los Angeles/Orange	\$174,206	\$174,989	0.4%	\$174,082	-0.5%	\$185,943	6.8%	\$188,210	1.2%	\$223,910	19.0%	\$235,685	5.3%	\$239,825	1.8%	\$277,706	15.8%	\$269,896	-2.8%	\$287,596	6.6%
C. Santa Barbara	\$39,004	\$40,030	2.6%	\$45,410	13.4%	\$52,643	15.9%	\$53,111	0.9%	\$65,668	23.6%	\$69,649	6.1%	\$59,497	-14.6%	\$64,608	8.6%	\$111,176	72.1%	\$79,749	-28.3%
D. San Diego	\$35,094	\$36,989	5.4%	\$37,873	2.4%	\$41,375	9.2%	\$46,929	13.4%	\$55,893	19.1%	\$61,833	10.6%	\$63,785	3.2%	\$71,834	12.6%	\$73,713	2.6%	\$84,523	14.7%
E. South-East	\$43,333	\$43,334	0.0%	\$42,963	-0.9%	\$46,819	9.0%	\$53,707	14.7%	\$66,109	23.1%	\$67,728	2.4%	\$69,018	1.9%	\$74,366	7.7%	\$70,652	-5.0%	\$106,670	51.0%
F. Central	\$7,388	\$11,930	61.5%	\$16,735	40.3%	\$13,930	-16.8%	\$9,377	-32.7%	\$10,018	6.8%	\$11,364	13.4%	\$11,936	5.0%	\$14,299	19.8%	\$15,525	8.6%	\$34,875	124.6%
G. North-Central	\$21,191	\$20,402	-3.7%	\$17,304	-15.2%	\$20,614	19.1%	\$20,098	-2.5%	\$22,468	11.8%	\$28,068	24.9%	\$26,245	-6.5%	\$30,591	16.6%	\$32,747	7.0%	\$101,308	209.4%
H. North	\$1,966	\$2,359	20.0%	\$2,195	-6.9%	\$2,033	-7.4%	\$2,395	17.8%	\$2,376	-0.8%	\$3,259	37.2%	\$2,979	-8.6%	\$3,086	3.6%	\$2,646	-14.2%	\$3,873	46.4%
Earthquake Zone	Dir PML 2000	Dir PML 2001	% Chng 2001/00	Dir PML 2002	% Chng 2002/01	Dir PML 2003	% Chng 2003/02	Dir PML 2004	% Chng 2004/03	Dir PML 2005	% Chng 2005/04	Dir PML 2006	% Chng 2006/05	Dir PML 2007	% Chng 2007/06	Dir PML 2008	% Chng 2008/07	Dir PML 2009	% Chng 2009/08	Dir PML 2010	% Chng 2010/09
A. San Francisco	\$11,886	\$10,630	-10.6%	\$8,003	-24.7%	\$8,893	11.1%	\$10,735	20.7%	\$10,369	-3.4%	\$11,950	15.2%	\$14,368	20.2%	\$16,354	13.8%	\$16,632	1.7%	\$19,048	14.5%
B. Los Angeles/Orange	\$17,276	\$12,072	-30.1%	\$10,992	-8.9%	\$11,944	8.7%	\$15,117	26.6%	\$14,618	-3.3%	\$16,428	12.4%	\$22,290	35.7%	\$23,980	7.6%	\$25,677	7.1%	\$28,094	9.4%
C. Santa Barbara	\$3,985	\$2,503	-37.2%	\$2,788	11.4%	\$3,078	10.4%	\$3,784	23.0%	\$3,758	-0.7%	\$4,563	21.4%	\$5,028	10.2%	\$5,754	14.4%	\$28,307	392.0%	\$6,908	-75.6%
D. San Diego	\$4,011	\$3,012	-24.9%	\$3,087	2.5%	\$3,291	6.6%	\$4,359	32.4%	\$4,614	5.9%	\$5,133	11.2%	\$6,472	26.1%	\$7,762	19.9%	\$7,386	-4.8%	\$8,609	16.6%
E. South-East	\$4,952	\$3,382	-31.7%	\$3,722	10.1%	\$4,194	12.7%	\$5,306	26.5%	\$5,652	6.5%	\$6,032	6.7%	\$8,260	36.9%	\$9,882	19.6%	\$10,569	7.0%	\$14,354	35.8%
F. Central	\$908	\$893	-1.6%	\$1,071	19.9%	\$1,025	-4.3%	\$1,186	15.7%	\$1,075	-9.4%	\$1,555	44.7%	\$2,068	33.0%	\$2,375	14.9%	\$2,582	8.7%	\$3,723	44.2%
G. North-Central	\$2,306	\$1,783	-22.7%	\$1,737	-2.6%	\$3,033	74.6%	\$2,935	-3.2%	\$2,574	-12.3%	\$3,557	38.2%	\$4,137	16.3%	\$5,092	23.1%	\$9,369	84.0%	\$14,860	58.6%
H. North	\$178	\$360	101.7%	\$208	-42.3%	\$255	22.9%	\$337	31.8%	\$268	-20.4%	\$418	56.0%	\$412	-1.3%	\$509	23.5%	\$512	0.6%	\$579	13.0%

*Note: In 2010, one group revised its method of reporting earthquake date. All their EQ data was reported in Zone A, where the majority of their risk is located. Subsequently, the Aggregate 2010 Direct Liability for Zone A increased significantly.

Residential versus Commercial Earthquake Insurance

The markets for residential and commercial earthquake insurance are quite different and are examined separately. *Table 2* shows a historical summary of the insurance industry insuring residential and commercial buildings in Zone A (San Francisco), and Zone B (Los Angeles/Orange).

TABLE 2: TOTAL PROBABLE MAXIMUM LOSSES (PMLS) for RESIDENTIAL and COMMERCIAL CLASSES

This table compares the amount of Residential EQ and Commercial EQ insurance for San Francisco County and Los Angeles/Orange Counties.

Direct Insured PMLs (in \$millions) as of the End of:																					
	Dir PML 2000	Dir PML 2001	% Chng 2001/00	Dir PML 2002	% Chng 2002/01	Dir PML 2003	% Chng 2003/02	Dir PML 2004	% Chng 2004/03	Dir PML 2005	% Chng 2005/04	Dir PML 2006	% Chng 2006/05	Dir PML 2007	% Chng 2007/06	Dir PML 2008	% Chng 2008/07	Dir PML 2009	% Chng 2009/08	Dir PML 2010	% Chng 2010/09
Earthquake Zone																					
A. San Francisco																					
- Residential (1A, B, E)	\$1,146	\$1,126	-1.7%	\$1,262	12.0%	\$1,520	20.4%	\$1,634	7.5%	\$1,564	-4.3%	\$1,759	12.4%	\$1,418	-19.4%	\$1,520	7.2%	\$1,272	-16.3%	\$1,397	9.8%
- Commerical & others	\$10,740	\$9,504	-11.5%	\$6,741	-29.1%	\$7,373	9.4%	\$9,101	23.4%	\$8,805	-3.3%	\$10,191	15.7%	\$12,950	27.1%	\$14,835	14.6%	\$15,360	3.5%	\$17,651	14.9%
Total:	\$11,886	\$10,630	-10.6%	\$8,003	-24.7%	\$8,893	11.1%	\$10,735	20.7%	\$10,369	-3.4%	\$11,950	15.2%	\$14,368	20.2%	\$16,354	13.8%	\$16,632	1.7%	\$19,048	14.5%
% Residential	10%	11%		16%		17%		15%		15%		15%		10%		9%		8%		7%	
% Commercial	90%	89%		84%		83%		85%		85%		85%		90%		91%		92%		93%	
Direct Insured PMLs (in \$millions) as of the End of:																					
	Dir PML 2000	Dir PML 2001	% Chng 2001/00	Dir PML 2002	% Chng 2002/01	Dir PML 2003	% Chng 2003/02	Dir PML 2004	% Chng 2004/03	Dir PML 2005	% Chng 2005/04	Dir PML 2006	% Chng 2006/05	Dir PML 2007	% Chng 2007/06	Dir PML 2008	% Chng 2008/07	Dir PML 2009	% Chng 2009/08	Dir PML 2010	% Chng 2010/09
Earthquake Zone																					
B. Los Angeles / Orange																					
- Residential (1A, B, E)	\$1,306	\$1,130	-13.5%	\$1,025	-9.3%	\$1,161	13.3%	\$1,324	14.1%	\$1,411	6.5%	\$1,357	-3.8%	\$1,777	30.9%	\$1,871	5.3%	\$1,858	-0.7%	\$1,788	-3.8%
- Commerical & others	\$15,970	\$10,942	-31.5%	\$9,968	-8.9%	\$10,783	8.2%	\$13,792	27.9%	\$13,207	-4.2%	\$15,071	14.1%	\$20,514	36.1%	\$22,109	7.8%	\$23,819	7.7%	\$26,306	10.4%
Total:	\$17,276	\$12,072	-30.1%	\$10,992	-8.9%	\$11,944	8.7%	\$15,117	26.6%	\$14,618	-3.3%	\$16,428	12.4%	\$22,290	35.7%	\$23,980	7.6%	\$25,677	7.1%	\$28,094	9.4%
% Residential	8%	9%		9%		10%		9%		10%		8%		8%		8%		7%		6%	
% Commercial	92%	91%		91%		90%		91%		90%		92%		92%		92%		93%		94%	

Commercial and residential earthquake insurance are two different markets, with a different group of insurers in each market. The charts on the following page show the breakdown between the amount of residential versus commercial earthquake insurance for “Zone A” (San Francisco Bay Area and North Coast Counties) and “Zone B” (Los Angeles County and Orange County).

The Northridge earthquake occurred in the Los Angeles area on January 17, 1994. In reaction, there should have been large increases in residential earthquake insurance in 1995 and 1996. However, due to industry-wide restrictions on the sale of residential earthquake insurance, the drastic increase in rates, and the reduction in coverages after the Northridge earthquake, the trend was reversed in a decreasing mode (see Charts 1 and 2). Only existing residential earthquake insurance policies were renewed in Los Angeles and San Francisco. All of the increase in PML in 1995 can be attributed to increases in commercial earthquake insurance.

The following charts show the Direct Insured PML for Residential vs. Commercial in Zone A and Zone B.

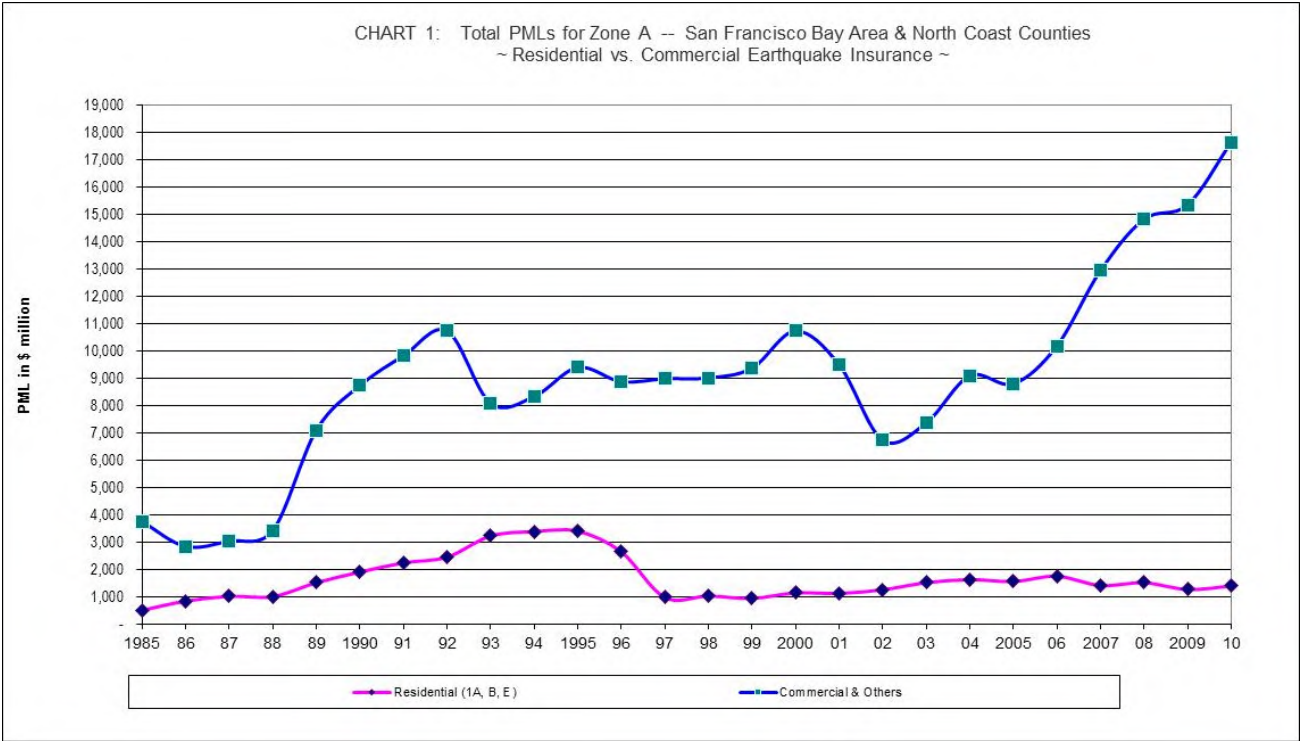
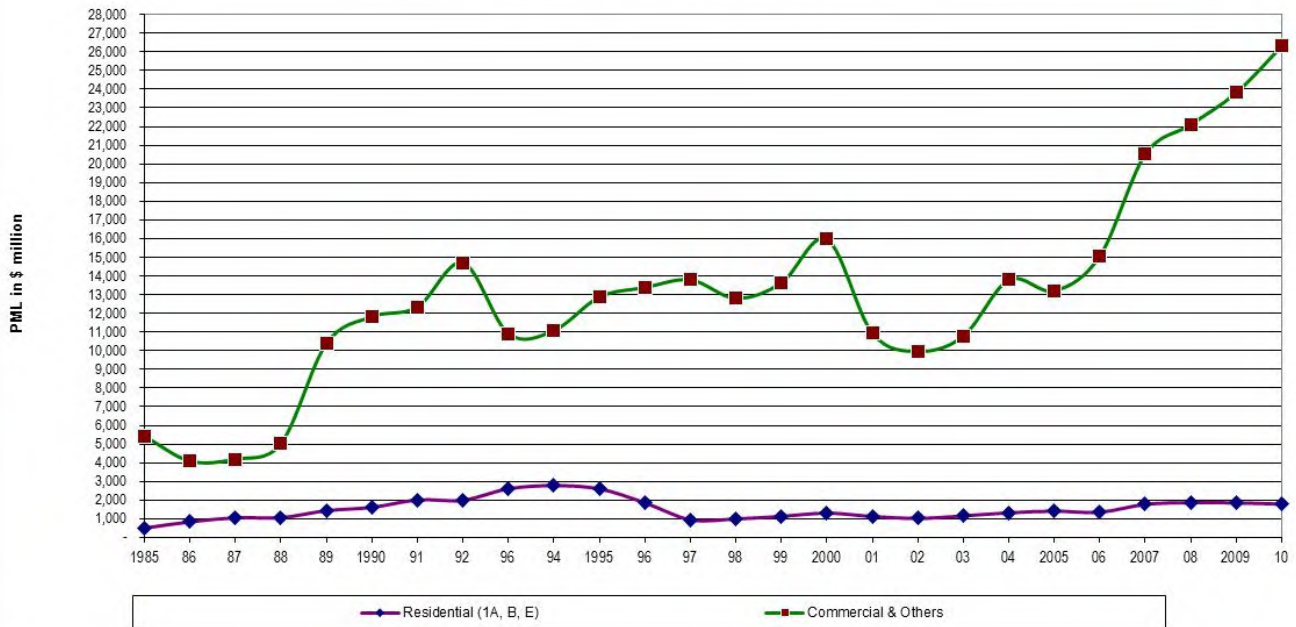


CHART 2: Total PMLs for Zone B -- Los Angeles County & Orange County
~ Residential vs. Commercial Earthquake Insurance ~



CALIFORNIA EARTHQUAKE INSURANCE
Total Direct Insured PMLs For Residential and Commercial Classes
(\$ millions)

Zone A: San Francisco Bay Area and North Coast Counties				Zone B: Los Angeles County and Orange County			
Year	Residential (1A, B, E)	Commercial & Others	Total	Year	Residential (1A, B, E)	Commercial & Others	Total
1985	510	3,758	4,268	1985	508	5,427	5,935
1986	846	2,848	3,694	1986	839	4,093	4,932
1987	1,020	3,046	4,066	1987	1,059	4,198	5,257
1988	1,011	3,435	4,446	1988	1,065	5,039	6,104
1989	1,519	7,105	8,624	1989	1,439	10,397	11,836
1990	1,910	8,742	10,652	1990	1,617	11,824	13,441
1991	2,247	9,829	12,076	1991	2,015	12,346	14,361
1992	2,457	10,742	13,199	1992	1,997	14,710	16,707
1993	3,230	8,093	11,323	1993	2,614	10,914	13,528
1994	3,393	8,336	11,729	1994	2,778	11,085	13,863
1995	3,406	9,406	12,812	1995	2,605	12,880	15,485
1996	2,648	8,884	11,532	1996	1,859	13,386	15,245
1997	978	8,990	9,968	1997	952	13,795	14,747
1998	1,033	9,020	10,053	1998	997	12,808	13,805
1999	947	9,374	10,321	1999	1,135	13,634	14,769
2000	1,146	10,740	11,886	2000	1,306	15,970	17,276
2001	1,126	9,504	10,630	2001	1,130	10,942	12,072
2002	1,262	6,741	8,003	2002	1,025	9,968	10,992
2003	1,520	7,373	8,893	2003	1,161	10,783	11,944
2004	1,634	9,101	10,735	2004	1,324	13,792	15,117
2005	1,564	8,805	10,369	2005	1,411	13,207	14,618
2006	1,759	10,191	11,950	2006	1,357	15,071	16,428
2007	1,418	12,950	14,368	2007	1,777	20,514	22,290
2008	1,520	14,835	16,354	2008	1,871	22,109	23,980
2009	1,272	15,360	16,632	2009	1,858	23,819	25,677
2010	1,397	17,651	19,048	2010	1,788	26,306	28,094

Most of the commercial earthquake insurance is sold on large commercial buildings. Small commercial businesses generally don't buy earthquake insurance, because of the cost, the short time horizon of small businesses, the small amount of assets at risk, and the availability of disaster loans and grants. Disaster recovery for small businesses is a very important but complex, social and economic problem. The downtown areas of Whittier, Santa Cruz, and Northridge were slow to recover after their earthquakes despite the substantial financial aid available, partly because people and businesses moved out of the damaged downtown areas.

For the Northridge earthquake, the insured losses were predominately residential, because of the location of the earthquake in a mainly residential, university area, and because of the high number of contents, chimney, and garden wall claims. There were a large number of commercial losses (mainly apartments and condominiums, and some unexpected problems with some steel buildings), but residential losses still predominated. Had the Northridge earthquake occurred in downtown Los Angeles, commercial losses would have been far greater than residential losses. However, this may also soon change as more people are moving to downtown Los Angeles into newly built or converted condominiums, lofts, and apartments.

Table 3 shows the very large amount of commercial earthquake exposure in Los Angeles. In San Francisco, most of the commercial earthquake exposure was located south of San Francisco in Silicon Valley.

TABLE 3: DIRECT PROBABLE MAXIMUM LOSS (PML) by EARTHQUAKE ZONE

This table shows the Residential versus Commercial PMLs by geography. Los Angeles/Orange Counties have the most Commercial exposure.

RESIDENTIAL (1A, B, E Classes): Direct Insured PMLs (in \$millions) as of the End of:

<i>Earthquake Zone</i>	2000	Revised 2001	% Chng 2001/00	% Chng 2002	% Chng 2002/01	% Chng 2003	% Chng 2003/02	% Chng 2004	% Chng 2004/03	% Chng 2005	% Chng 2005/04	% Chng 2006	% Chng 2006/05	% Chng 2007	% Chng 2007/06	% Chng 2008	% Chng 2008/07	% Chng 2009	% Chng 2009/08	% Chng 2010	% Chng 2010/09
A. San Francisco	\$1,146	\$1,126	-1.7%	\$1,262	12.0%	\$1,520	20.4%	\$1,634	7.5%	\$1,564	-4.3%	\$1,759	12.4%	\$1,418	-19.4%	\$1,520	7.2%	\$1,272	-16.3%	\$1,397	9.8%
B. Los Angeles/Orange	\$1,306	\$1,130	-13.5%	\$1,025	-9.3%	\$1,161	13.3%	\$1,324	14.1%	\$1,411	6.5%	\$1,357	-3.8%	\$1,777	30.9%	\$1,871	5.3%	\$1,858	-0.7%	\$1,788	-3.8%
C. Santa Barbara	\$524	\$355	-32.3%	\$431	21.4%	\$507	17.6%	\$545	7.5%	\$654	20.1%	\$615	-6.0%	\$569	-7.5%	\$619	8.9%	\$615	-0.7%	\$549	-10.8%
D. San Diego	\$151	\$137	-9.1%	\$112	-18.0%	\$146	29.9%	\$184	25.8%	\$231	26.0%	\$242	4.7%	\$267	10.1%	\$297	11.1%	\$289	-2.7%	\$261	-9.5%
E. South-East	\$281	\$262	-6.7%	\$222	-15.3%	\$234	5.4%	\$305	30.3%	\$335	9.9%	\$354	5.5%	\$427	20.5%	\$432	1.2%	\$352	-18.5%	\$302	-14.3%
F. Central	\$31	\$67	112.6%	\$130	94.6%	\$101	-22.4%	\$49	-51.9%	\$58	19.6%	\$55	-5.0%	\$52	-5.0%	\$58	10.1%	\$55	-4.0%	\$27	-51.9%
G. North-Central	\$81	\$78	-2.9%	\$64	-17.9%	\$73	12.8%	\$94	29.0%	\$114	22.1%	\$123	7.5%	\$97	-20.9%	\$101	4.3%	\$65	-35.5%	\$57	-13.4%
H. North	\$12	\$11	-7.8%	\$13	10.7%	\$15	15.5%	\$17	15.4%	\$18	8.0%	\$17	-9.6%	\$18	9.4%	\$19	5.6%	\$7	-61.7%	\$10	33.4%

COMMERCIAL & ALL OTHERS Classes: Direct Insured PMLs (in \$millions) as of the End of:

<i>Earthquake Zone</i>	2000	Revised 2001	% Chng 2001/00	% Chng 2002	% Chng 2002/01	% Chng 2003	% Chng 2003/02	% Chng 2004	% Chng 2004/03	% Chng 2005	% Chng 2005/04	% Chng 2006	% Chng 2006/05	% Chng 2007	% Chng 2007/06	% Chng 2008	% Chng 2008/07	% Chng 2009	% Chng 2009/08	% Chng 2010	% Chng 2010/09
A. San Francisco	\$10,740	\$9,504	-11.5%	\$6,741	-29.1%	\$7,373	9.4%	\$9,101	23.4%	\$8,805	-3.3%	\$10,191	15.7%	\$12,950	27.1%	\$14,835	14.6%	\$15,360	3.5%	\$17,651	14.9%
B. Los Angeles/Orange	\$15,970	\$10,942	-31.5%	\$9,968	-8.9%	\$10,783	8.2%	\$13,792	27.9%	\$13,207	-4.2%	\$15,071	14.1%	\$20,514	36.1%	\$22,109	7.8%	\$23,819	7.7%	\$26,306	10.4%
C. Santa Barbara	\$3,461	\$2,148	-37.9%	\$2,357	9.7%	\$2,571	9.1%	\$3,240	26.0%	\$3,104	-4.2%	\$3,949	27.2%	\$4,460	12.9%	\$5,135	15.1%	\$27,693	439.3%	\$6,360	-77.0%
D. San Diego	\$3,860	\$2,875	-25.5%	\$2,974	3.5%	\$3,145	5.8%	\$4,175	32.7%	\$4,383	5.0%	\$4,890	11.6%	\$6,205	26.9%	\$7,466	20.3%	\$7,097	-4.9%	\$8,348	17.6%
E. South-East	\$4,671	\$3,120	-33.2%	\$3,500	12.2%	\$3,960	13.2%	\$5,001	26.3%	\$5,316	6.3%	\$5,678	6.8%	\$7,833	38.0%	\$9,450	20.6%	\$10,217	8.1%	\$14,052	37.5%
F. Central	\$877	\$826	-5.7%	\$941	13.9%	\$924	-1.8%	\$1,138	23.1%	\$1,016	-10.7%	\$1,500	47.6%	\$2,015	34.4%	\$2,317	15.0%	\$2,527	9.0%	\$3,696	46.3%
G. North-Central	\$2,225	\$1,704	-23.4%	\$1,672	-1.9%	\$2,960	77.0%	\$2,842	-4.0%	\$2,459	-13.5%	\$3,434	39.6%	\$4,040	17.6%	\$4,991	23.5%	\$9,303	86.4%	\$14,804	59.1%
H. North	\$166	\$348	109.9%	\$195	-44.0%	\$241	23.3%	\$320	32.8%	\$250	-21.9%	\$401	60.9%	\$394	-1.7%	\$490	24.3%	\$505	3.0%	\$569	12.7%

The commercial exposure has always been greater than the residential exposure; however, the demand for residential earthquake insurance before 1995 was increasing. Before 1995, about 80% of the earthquake exposure was commercial. However, in 1995 and 1996, restrictions were placed on the sale of residential earthquake insurance and the amount of commercial earthquake insurance increased to about 90% of the total insured earthquake exposure. Since the Northridge earthquake, the amount of residential earthquake insurance has declined from about 20% in 1995 to about 9% of the total earthquake insurance in 2006. This change is due to legislation passed by the California Legislature in 1996 authorizing the issuance of the “mini” earthquake policy and the creation of the California Earthquake Authority (CEA).

In 1995, the California Legislature passed legislation, AB 1366, authorizing insurers to offer a basic or “mini” residential earthquake insurance policy for compliance with the law requiring that earthquake coverage be offered with the purchase of a homeowners’ policy. This “mini” policy has a 15% deductible on the structure, no coverage for appurtenant structures (such as detached garages, swimming pools, and garden walls which are frequently damaged in an earthquake) and greatly limited coverage for contents. The PML for the “mini” policy is about 68-73% lesser of the PML for the typical residential earthquake policy with a 10% deductible in effect at the time of the Northridge earthquake. Insurers began selling this “mini” policy statewide in 1996. The significant drop in residential PML for 1996 and 1997 in both San Francisco and Los Angeles partly reflected this phase-in of the “mini” policy.

The California Legislature authorized the creation of the California Earthquake Authority (CEA) in 1996. The CEA is an insurance pool for earthquake insurance on homes, condos, and rental units. There is no commercial coverage offered. The CEA insured only a few policies in December 1996, and didn’t become fully operational until 1997. Insurers representing about 70% of the homeowners’ insurance market began placing their residential earthquake policies with the CEA. The policy that is insured by the CEA is the “mini” policy. Insurers that were not members of the CEA also offered the “mini” policy, but many also offered the option of choosing lower deductibles. The CEA later began offering lower deductibles for an extra charge, but very few people chose it.

According to a Department of Insurance survey conducted shortly after the Northridge earthquake, 42% of the homes in the Northridge area had earthquake insurance in 1994 (30% of the homes statewide). The policies included a lower deductible and broader coverage.

In 2001, fewer than 16% of the homes in California had earthquake insurance. This figure has since dropped down to less than 12% in 2005 and 2006, and continues to remain at about that level in 2010 (11.8%). Of those that had earthquake insurance, most had the restricted “mini” policy. The “mini” policy has a very high 15% deductible that would pay little or nothing in the event of a moderate earthquake. In other words, on a \$200,000 home, damage under \$30,000 would not be covered by the earthquake insurance policy. The Commissioner remains concerned that 88.2% of residences have no earthquake coverage, and the 11.8% that do have coverage would receive little or nothing in the event of a moderate earthquake.

As an option to the “mini” policy, in 2011, the Commissioner approved the CEA “Homeowner’s Choice” policy, which will be offered beginning July 1, 2012. Consumers may tailor the policy by choosing 10% or 15% deductibles, increased limits, or other terms to suit their needs. The “Choice” product features a separate contents deductible which allows personal property to be covered at a much lower deductible. Consumers are also granted the option to decline certain coverage, including contents and/or living expenses.

The California Department of Insurance, in addition to collecting earthquake PML loss data, also monitors the homeowners and earthquake insurance marketplace. The Department annually publishes a Residential and Earthquake Insurance Coverage Study called "Earthquake Premium and Policy Count Data Call." It can be found in the Department's website. The report documents the trend in the number of residential earthquake insurance policies issued by the CEA and by other insurers.

RESIDENTIAL EARTHQUAKE INSURANCE PREMIUM and POLICY COUNT

Total Residential Market	1996	1997	1998	1999	2000	2001	2002
Total # of Residential Policies (including CEA)	7,600,348	7,888,439	7,863,075	8,117,239	8,164,975	8,117,496	8,284,627
EQ Written Premium	\$778,006,665	\$606,430,271	\$588,724,450	\$625,837,060	\$637,262,420	\$661,266,849	\$661,365,500
# of Earthquake Policies	2,385,746	1,540,846	1,371,662	1,363,194	1,282,400	1,285,982	1,211,800
% of Residential Policies w/ Earthquake Coverage	31.39%	19.53%	17.44%	16.79%	15.71%	15.84%	14.63%

Total CEA Companies:	1996	1997	1998	1999	2000	2001	2002
EQ Written Premium	\$576,560,688 *	\$436,901,121	\$399,348,674	\$417,802,063	\$419,779,934	\$429,533,010	\$428,110,390
# of Policies	1,884,615	1,103,938	942,469	920,358	838,635	832,440	788,991
CEA Policies (% of Total)	78.99%	71.64%	68.71%	67.51%	65.40%	64.73%	65.11%

*Note: 1996 - Includes Earthquake policies issued by CEA member companies before being renewed through a CEA policy.

Source: "Residential and Earthquake Insurance Coverage Study"

By the California Department of Insurance [1996-2003: SAD; 2004-2010: RSB]

RESIDENTIAL EARTHQUAKE INSURANCE PREMIUM and POLICY COUNT

Total Residential Market	2003	2004	2005	2006	2007	2008	2009	2010
Total # of Residential Policies (including CEA)	8,546,498	8,729,111	8,937,821	8,844,725	9,001,216	9,212,237	9,489,964	9,764,340
EQ Written Premium	\$660,797,807	\$760,795,532	\$698,620,721	\$810,196,265	\$864,547,908	\$931,158,954	\$952,271,407	\$977,600,407
# of Earthquake Policies	1,140,233	1,207,360	1,059,366	1,132,542	1,176,235	1,159,533	1,137,790	1,152,700
% of Residential Policies w/ Earthquake Coverage	13.34%	13.83%	11.85%	12.80%	13.07%	12.59%	11.99%	11.81%

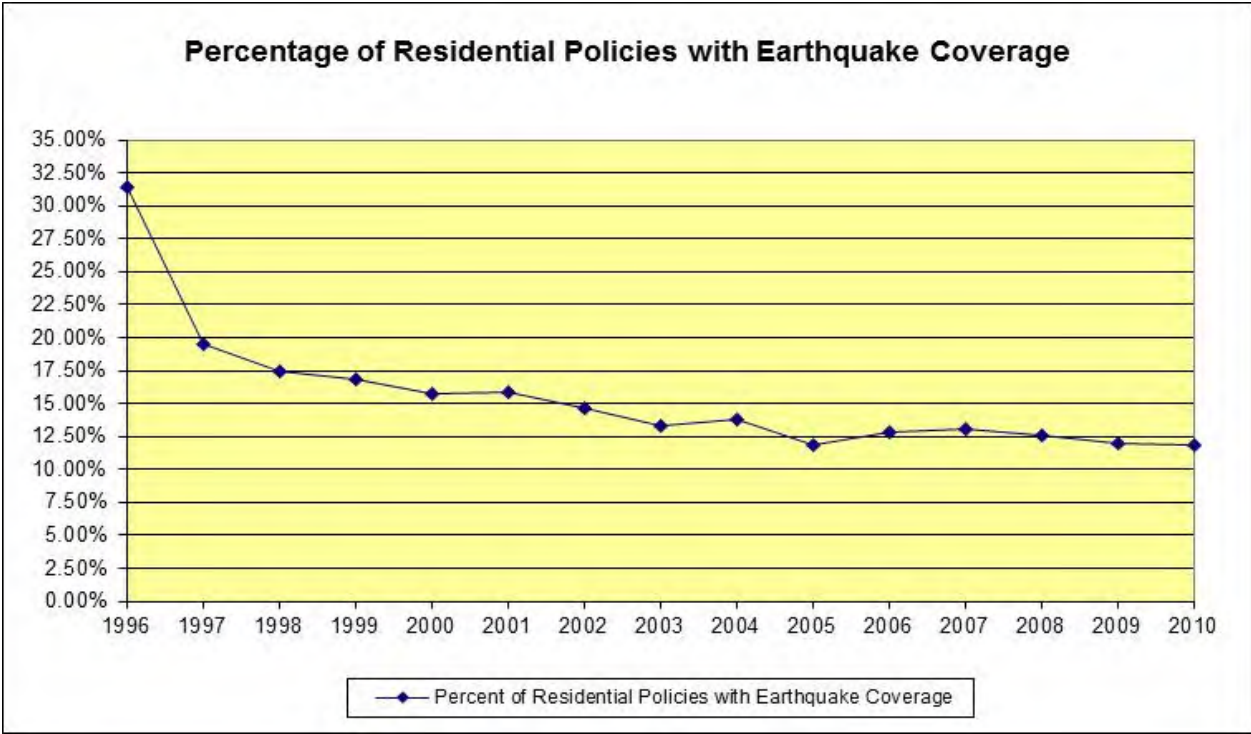
Total CEA Companies:	2003	2004	2005	2006	2007	2008	2009	2010
EQ Written Premium	\$421,882,938	\$486,158,762	\$501,713,436	\$496,842,555	\$493,500,893	\$564,691,461	\$577,608,451	\$590,240,171
# of Policies	730,614	766,450	745,468	752,868	769,729	800,652	792,080	809,386
CEA Policies (% of Total)	64.08%	63.48%	70.37%	66.48%	65.44%	69.05%	69.62%	70.22%

*Note: 1996 - Includes Earthquake policies issued by CEA member companies before being renewed through a CEA policy.

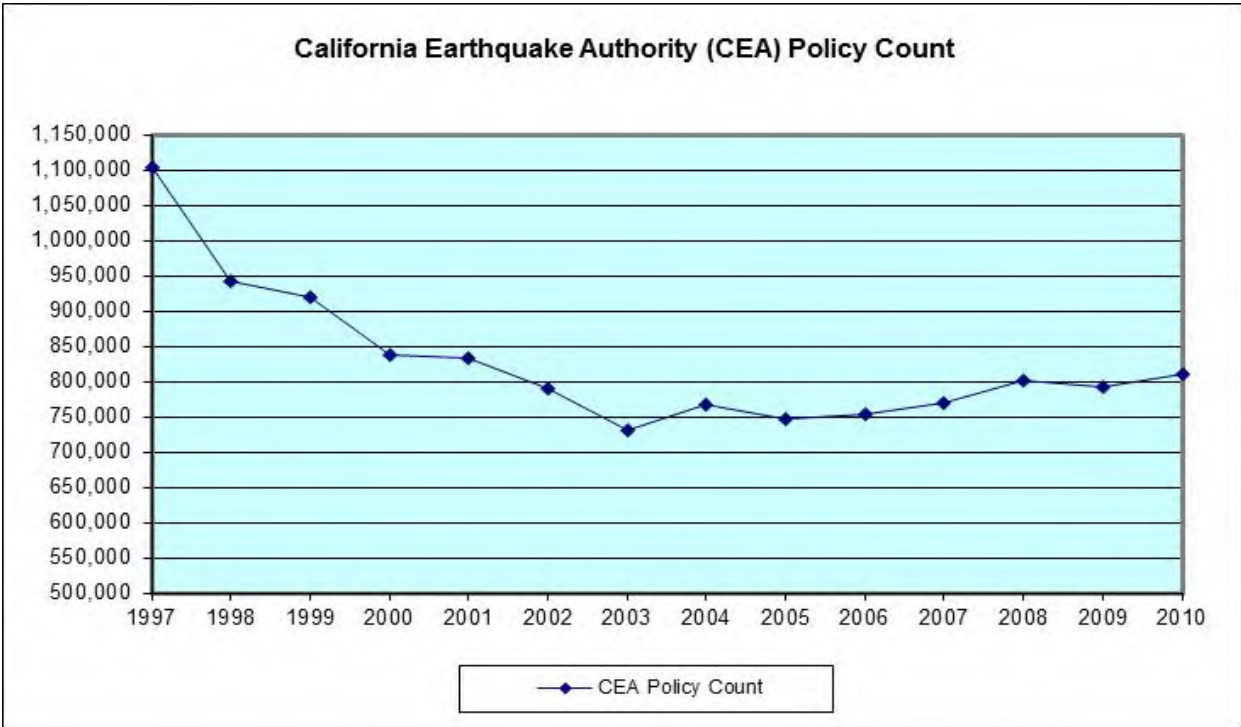
Source: "Residential and Earthquake Insurance Coverage Study"

By the California Department of Insurance [1996-2003: SAD; 2004-2010: RSB]

This chart shows that the amount of policies with residential earthquake coverage.



This chart shows the amount of earthquake policies with the California Earthquake Authority.



Reinsurance has a Vital Role in the Earthquake Insurance Market

The reinsurance market plays a vital role in distributing earthquake losses into the worldwide insurance industry, thus enabling earthquake insurance to be offered to the extent that it is in California. Reinsurance is used especially with respect to large commercial buildings, or to limit the total loss from one earthquake event.

Earthquake insurance could not be sold by primary insurers in California without the participation of the reinsurance market, especially for commercial earthquake insurance. Reinsurance is the sharing of insurance risks between insurers with respect to a contract on specific risks or with respect to a catastrophe contract applying to all risks in one earthquake zone. Insurers share the risks because it is safer for an insurer to insure a portion of many buildings, rather than take all of the risk on a few buildings.

A *per risk* reinsurance contract limits the insured loss to the primary insurer on each individual structure insured. A *catastrophe* contract limits the total amount of loss to the primary insurer from one event. An example of a per risk treaty is one which will pay 50% of each and every loss. A catastrophe reinsurance treaty only pays if the aggregate losses exceed a very high amount, such as \$25 million. Due to the unpredictable nature of the peril of earthquakes, great reliance is placed on per risk and catastrophe reinsurance. The extent of the use of reinsurance is shown in Table 4. *Direct PML* is the total amount of PML covered by insurance and written by *primary* insurers, before consideration of any reinsurance shared (*ceded*) to other insurers.

From Table 4, we can see that the amount of PML which is reinsured with other insurers worldwide is very substantial; in 2000-01, about 50-60% of direct PML was reinsured. In 2005-06, this amount has dropped to around 40-50%. In 2007-2010, this amount dropped even lower to around 30-40%. However, without the availability of the worldwide reinsurance market, the availability of earthquake insurance in California would be greatly restricted

Table 4 shows that per risk reinsurance was used much more in Commercial than in Residential earthquake insurance for years 2000 to 2003. The trend then tilted for years 2004 to 2010.

TABLE 4: USE of PER RISK REINSURANCE by RESIDENTIAL vs. COMMERCIAL - 2000 to 2010

2000 Zone -- Area	Residential			Commercial			Combined Total PML		
	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2000 Direct PML	2000 Net PML	% PML Ceded
A San Francisco	\$1,146	\$1,019	11.1%	\$10,740	\$3,687	65.7%	\$11,886	\$4,706	60.4%
B Los Angeles/Orange	\$1,306	\$1,056	19.1%	\$15,970	\$6,057	62.1%	\$17,276	\$7,113	58.8%
C Santa Barbara	\$524	\$314	40.1%	\$3,461	\$1,427	58.8%	\$3,985	\$1,741	56.3%
D San Diego	\$151	\$129	14.4%	\$3,860	\$1,374	64.4%	\$4,011	\$1,503	62.5%
E South-East	\$281	\$232	17.4%	\$4,671	\$1,923	58.8%	\$4,952	\$2,156	56.5%
F Central	\$31	\$29	7.0%	\$877	\$381	56.6%	\$908	\$410	54.8%
G North-Central	\$81	\$69	14.8%	\$2,225	\$995	55.3%	\$2,306	\$1,064	53.8%
H North	\$12	\$12	1.4%	\$166	\$67	59.6%	\$178	\$79	55.5%

TABLE 4: USE of PER RISK REINSURANCE by RESIDENTIAL vs. COMMERCIAL - 2000 to 2010

	Residential			Commercial			Combined Total PML		
Revised: 04/06									
2001 Zone -- Area	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2001 Direct PML	2001 Net PML	% PML Ceded
A San Francisco	\$1,126	\$889	21.0%	\$9,504	\$3,817	59.8%	\$10,630	\$4,707	55.7%
B Los Angeles/Orange	\$1,130	\$758	32.9%	\$10,942	\$4,612	57.9%	\$12,072	\$5,370	55.5%
C Santa Barbara	\$355	\$260	26.6%	\$2,148	\$950	55.8%	\$2,503	\$1,210	51.7%
D San Diego	\$137	\$108	21.5%	\$2,875	\$1,090	62.1%	\$3,012	\$1,197	60.2%
E South-East	\$262	\$216	17.6%	\$3,120	\$1,331	57.4%	\$3,382	\$1,546	54.3%
F Central	\$67	\$59	12.1%	\$826	\$297	64.0%	\$893	\$356	60.1%
G North-Central	\$78	\$70	11.0%	\$1,704	\$715	58.0%	\$1,783	\$785	56.0%
H North	\$11	\$11	4.1%	\$348	\$244	29.9%	\$360	\$255	29.0%
2002 Zone -- Area	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2002 Direct PML	2002 Net PML	% PML Ceded
A San Francisco	\$1,262	\$974	22.8%	\$6,741	\$2,970	55.9%	\$8,003	\$3,944	50.7%
B Los Angeles/Orange	\$1,025	\$792	22.7%	\$9,968	\$4,521	54.6%	\$10,992	\$5,313	51.7%
C Santa Barbara	\$431	\$331	23.1%	\$2,357	\$1,009	57.2%	\$2,788	\$1,341	51.9%
D San Diego	\$112	\$98	12.9%	\$2,974	\$1,228	58.7%	\$3,087	\$1,326	57.0%
E South-East	\$222	\$186	16.5%	\$3,500	\$1,477	57.8%	\$3,722	\$1,662	55.3%
F Central	\$130	\$112	13.6%	\$941	\$344	63.5%	\$1,071	\$456	57.4%
G North-Central	\$64	\$60	7.3%	\$1,672	\$757	54.8%	\$1,737	\$816	53.0%
H North	\$13	\$12	3.5%	\$195	\$88	54.8%	\$208	\$100	51.7%
2003 Zone -- Area	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2003 Direct PML	2003 Net PML	% PML Ceded
A San Francisco	\$1,520	\$972	36.1%	\$7,373	\$3,544	51.9%	\$8,893	\$4,515	49.2%
B Los Angeles/Orange	\$1,161	\$766	34.0%	\$10,783	\$5,074	52.9%	\$11,944	\$5,841	51.1%
C Santa Barbara	\$507	\$354	30.1%	\$2,571	\$1,178	54.2%	\$3,078	\$1,533	50.2%
D San Diego	\$146	\$108	26.1%	\$3,145	\$1,370	56.4%	\$3,291	\$1,478	55.1%
E South-East	\$234	\$185	20.9%	\$3,960	\$1,813	54.2%	\$4,194	\$1,998	52.4%
F Central	\$101	\$77	24.1%	\$924	\$348	62.3%	\$1,025	\$425	58.5%
G North-Central	\$73	\$61	15.7%	\$2,960	\$1,601	45.9%	\$3,033	\$1,662	45.2%
H North	\$15	\$14	3.7%	\$241	\$121	49.6%	\$255	\$135	47.0%
2004 Zone -- Area	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2004 Direct PML	2004 Net PML	% PML Ceded
A San Francisco	\$1,634	\$751	54.0%	\$9,101	\$4,863	46.6%	\$10,735	\$5,614	47.7%
B Los Angeles/Orange	\$1,324	\$590	55.4%	\$13,792	\$7,047	48.9%	\$15,117	\$7,637	49.5%
C Santa Barbara	\$545	\$289	46.9%	\$3,240	\$1,699	47.6%	\$3,784	\$1,988	47.5%
D San Diego	\$184	\$108	41.0%	\$4,175	\$2,094	49.8%	\$4,359	\$2,202	49.5%
E South-East	\$305	\$189	38.2%	\$5,001	\$2,398	52.0%	\$5,306	\$2,587	51.3%
F Central	\$49	\$33	32.8%	\$1,138	\$596	47.6%	\$1,186	\$629	47.0%
G North-Central	\$94	\$73	22.5%	\$2,842	\$1,506	47.0%	\$2,935	\$1,579	46.2%
H North	\$17	\$15	13.0%	\$320	\$217	32.1%	\$337	\$232	31.1%
2005 Zone -- Area	Direct PML	Net PML	% PML Ceded	Direct PML	Net PML	% PML Ceded	2005 Direct PML	2005 Net PML	% PML Ceded
A San Francisco	\$1,564	\$766	51.0%	\$8,805	\$4,808	45.4%	\$10,369	\$5,574	46.2%
B Los Angeles/Orange	\$1,411	\$789	44.1%	\$13,207	\$6,909	47.7%	\$14,618	\$7,698	47.3%
C Santa Barbara	\$654	\$397	39.3%	\$3,104	\$1,735	44.1%	\$3,758	\$2,133	43.3%
D San Diego	\$231	\$129	44.3%	\$4,383	\$2,226	49.2%	\$4,614	\$2,355	49.0%
E South-East	\$335	\$230	31.6%	\$5,316	\$2,579	51.5%	\$5,652	\$2,808	50.3%
F Central	\$58	\$47	19.7%	\$1,016	\$638	37.3%	\$1,075	\$684	36.3%
G North-Central	\$114	\$84	26.6%	\$2,459	\$1,388	43.6%	\$2,574	\$1,471	42.8%
H North	\$18	\$16	11.9%	\$250	\$186	25.5%	\$268	\$202	24.6%

TABLE 4: USE of PER RISK REINSURANCE by RESIDENTIAL vs. COMMERCIAL - 2000 to 2010

	Residential			Commercial			Combined Total PML		
			% PML			% PML	2006	2006	% PML
2006 Zone -- Area	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded
A San Francisco	\$1,759	\$783	55.5%	\$10,191	\$6,453	36.7%	\$11,950	\$7,236	39.4%
B Los Angeles/Orange	\$1,357	\$744	45.1%	\$15,071	\$9,171	39.1%	\$16,428	\$9,915	39.6%
C Santa Barbara	\$615	\$337	45.1%	\$3,949	\$2,474	37.4%	\$4,563	\$2,811	38.4%
D San Diego	\$242	\$125	48.3%	\$4,890	\$3,085	36.9%	\$5,133	\$3,210	37.5%
E South-East	\$354	\$236	33.4%	\$5,678	\$3,372	40.6%	\$6,032	\$3,608	40.2%
F Central	\$55	\$41	26.0%	\$1,500	\$845	43.7%	\$1,555	\$886	43.0%
G North-Central	\$123	\$78	36.2%	\$3,434	\$2,177	36.6%	\$3,557	\$2,255	36.6%
H North	\$17	\$13	22.4%	\$401	\$251	37.5%	\$418	\$264	36.9%
2007 Zone -- Area	Direct PML	Net PML	% PML	Direct PML	Net PML	% PML	2007	2007	% PML
	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded
A San Francisco	\$1,418	\$738	47.9%	\$12,950	\$8,330	35.7%	\$14,368	\$9,068	36.9%
B Los Angeles/Orange	\$1,777	\$757	57.4%	\$20,514	\$12,820	37.5%	\$22,290	\$13,577	39.1%
C Santa Barbara	\$569	\$273	51.9%	\$4,460	\$2,964	33.5%	\$5,028	\$3,237	35.6%
D San Diego	\$267	\$116	56.7%	\$6,205	\$3,953	36.3%	\$6,472	\$4,069	37.1%
E South-East	\$427	\$228	46.7%	\$7,833	\$5,168	34.0%	\$8,260	\$5,396	34.7%
F Central	\$52	\$38	27.1%	\$2,015	\$1,292	35.9%	\$2,068	\$1,331	35.6%
G North-Central	\$97	\$70	27.6%	\$4,040	\$2,898	28.3%	\$4,137	\$2,969	28.2%
H North	\$18	\$13	26.8%	\$394	\$229	42.0%	\$412	\$242	41.4%
2008 Zone -- Area	Direct PML	Net PML	% PML	Direct PML	Net PML	% PML	2008	2008	% PML
	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded
A San Francisco	\$1,520	\$810	46.7%	\$14,835	\$9,222	37.8%	\$16,354	\$10,031	38.7%
B Los Angeles/Orange	\$1,871	\$776	58.5%	\$22,109	\$13,307	39.8%	\$23,980	\$14,083	41.3%
C Santa Barbara	\$619	\$299	51.8%	\$5,135	\$3,338	35.0%	\$5,754	\$3,637	36.8%
D San Diego	\$297	\$129	56.3%	\$7,466	\$4,732	36.6%	\$7,762	\$4,861	37.4%
E South-East	\$432	\$242	44.0%	\$9,450	\$6,333	33.0%	\$9,882	\$6,575	33.5%
F Central	\$58	\$41	28.7%	\$2,317	\$1,621	30.0%	\$2,375	\$1,662	30.0%
G North-Central	\$101	\$72	28.7%	\$4,991	\$3,637	27.1%	\$5,092	\$3,709	27.2%
H North	\$19	\$14	29.2%	\$490	\$345	29.7%	\$509	\$358	29.7%
2009 Zone -- Area	Direct PML	Net PML	% PML	Direct PML	Net PML	% PML	2009	2009	% PML
	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded
A San Francisco	\$1,272	\$598	53.0%	\$15,360	\$11,521	25.0%	\$16,632	\$12,119	27.1%
B Los Angeles/Orange	\$1,858	\$714	61.6%	\$23,819	\$17,579	26.2%	\$25,677	\$18,293	28.8%
C Santa Barbara	\$615	\$286	53.4%	\$27,693	\$20,909	24.5%	\$28,307	\$21,196	25.1%
D San Diego	\$289	\$116	59.7%	\$7,097	\$5,374	24.3%	\$7,386	\$5,491	25.7%
E South-East	\$352	\$175	50.3%	\$10,217	\$7,223	29.3%	\$10,569	\$7,398	30.0%
F Central	\$55	\$41	26.8%	\$2,527	\$1,955	22.6%	\$2,582	\$1,995	22.7%
G North-Central	\$65	\$37	42.9%	\$9,303	\$6,281	32.5%	\$9,369	\$6,318	32.6%
H North	\$7	\$3	61.8%	\$505	\$353	30.1%	\$512	\$355	30.6%
2010 Zone -- Area	Direct PML	Net PML	% PML	Direct PML	Net PML	% PML	2010	2010	% PML
	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded	Direct PML	Net PML	Ceded
A San Francisco	\$1,397	\$680	51.3%	\$17,651	\$14,329	18.8%	\$19,048	\$15,009	21.2%
B Los Angeles/Orange	\$1,788	\$557	68.9%	\$26,306	\$20,039	23.8%	\$28,094	\$20,596	26.7%
C Santa Barbara	\$549	\$196	64.3%	\$6,360	\$5,261	17.3%	\$6,908	\$5,457	21.0%
D San Diego	\$261	\$70	73.2%	\$8,348	\$6,759	19.0%	\$8,609	\$6,829	20.7%
E South-East	\$302	\$124	58.8%	\$14,052	\$11,845	15.7%	\$14,354	\$11,969	16.6%
F Central	\$27	\$10	64.0%	\$3,696	\$3,285	11.1%	\$3,723	\$3,294	11.5%
G North-Central	\$57	\$24	57.8%	\$14,804	\$14,013	5.3%	\$14,860	\$14,036	5.5%
H North	\$10	\$4	54.9%	\$569	\$384	32.4%	\$579	\$389	32.8%

Most of the reinsurance is sold to insurers worldwide. There has been a large growing market for catastrophe reinsurance developing in Bermuda. The heavy reliance on the worldwide insurance market is not necessarily a regulatory concern. California law sets forth requirements for acceptable reinsurance arrangements. Reinsurers shall be either admitted or accredited or, if non-domestic, have approved U.S. Trusts or Letters of Credit issued by qualified U.S. financial institutions.

TABLE 5: USE of REINSURANCE

This table shows that most of the earthquake risk is distributed through the reinsurance market.

Direct and Ceded PMLs (in \$millions) as of the End of:																					
	Revised	% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng	
Zone A: San Francisco	2000	2001	2001/00	2002	2002/01	2003	2003/02	2004	2004/03	2005	2005/04	2006	2006/05	2007	2007/06	2008	2008/07	2009	2009/08	2010	2010/09
Direct PML	\$11,886	\$10,630	-10.6%	\$8,003	-24.7%	\$8,893	11.1%	\$10,735	20.7%	\$10,369	-3.4%	\$11,950	15.2%	\$14,368	20.2%	\$16,354	13.8%	\$16,632	1.7%	\$19,048	14.5%
Per risk PML ceded	\$7,180	\$5,923	-17.5%	\$4,059	-31.5%	\$4,377	7.9%	\$5,121	17.0%	\$4,795	-6.4%	\$4,714	-1.7%	\$5,300	12.4%	\$6,323	19.3%	\$4,513	-28.6%	\$4,039	-10.5%
Net PML after per risk	\$4,706	\$4,707		\$3,944		\$4,515		\$5,614		\$5,574		\$7,236		\$9,068		\$10,031		\$12,119		\$15,009	
Catastrophe PML ceded	\$1,644	\$460	-72.0%	\$1,152	150.5%	\$1,238	7.4%	\$1,851	49.6%	\$2,524	36.4%	\$2,493	-1.3%	\$3,121	25.2%	\$3,278	5.1%	\$3,404	3.8%	\$4,039	18.6%
Net after Catastrophe ceded	\$3,062	\$4,247		\$2,792		\$3,278		\$3,764		\$3,050		\$4,744		\$5,947		\$6,753		\$8,715		\$10,970	
Total PML Ceded																					
by Primary Insurers	\$8,824	\$6,383	-27.7%	\$5,211	-18.4%	\$5,615	7.8%	\$6,972	24.2%	\$7,319	5.0%	\$7,206	-1.5%	\$8,420	16.8%	\$9,601	14.0%	\$7,918	-17.5%	\$8,078	2.0%
% Ceded	74.2%	60.0%		65.1%		63.1%		64.9%		70.6%		60.3%		58.6%		58.7%		47.6%		42.4%	
Direct and Ceded PMLs (in \$millions) as of the End of:																					
	Revised	% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng		% Chng	
Zone B: Los Angeles/Orange	2000	2001	2001/00	2002	2002/01	2003	2003/02	2004	2004/03	2005	2005/04	2006	2006/05	2007	2007/06	2008	2008/07	2009	2009/08	2010	2010/09
Direct PML	\$17,276	\$12,072	-30.1%	\$10,992	-8.9%	\$11,944	8.7%	\$15,117	26.6%	\$14,618	-3.3%	\$16,428	12.4%	\$22,290	35.7%	\$23,980	7.6%	\$25,677	7.1%	\$28,094	9.4%
Per risk PML ceded	\$10,162	\$6,702	-34.0%	\$5,679	-15.3%	\$6,103	7.5%	\$7,480	22.6%	\$6,920	-7.5%	\$6,513	-5.9%	\$8,714	33.8%	\$9,897	13.6%	\$7,383	-25.4%	\$7,498	1.6%
Net PML after per risk	\$7,113	\$5,370		\$5,313		\$5,841		\$7,637		\$7,698		\$9,915		\$13,577		\$14,083		\$18,293		\$20,596	
Catastrophe PML ceded	\$2,094	\$1,112	-46.9%	\$1,320	18.7%	\$1,973	49.4%	\$2,590	31.3%	\$3,522	36.0%	\$3,708	5.3%	\$4,439	19.7%	\$4,802	8.2%	\$4,966	3.4%	\$5,215	5.0%
Net after Catastrophe ceded	\$5,020	\$4,257		\$3,993		\$3,868		\$5,047		\$4,176		\$6,207		\$9,138		\$9,281		\$13,327		\$15,380	
Total PML Ceded																					
by Primary Insurers	\$12,256	\$7,815	-36.2%	\$6,999	-10.4%	\$8,076	15.4%	\$10,070	24.7%	\$10,442	3.7%	\$10,220	-2.1%	\$13,153	28.7%	\$14,698	11.8%	\$12,350	-16.0%	\$12,714	2.9%
% Ceded	70.9%	64.7%		63.7%		67.6%		66.6%		71.4%		62.2%		59.0%		61.3%		48.1%		45.3%	

The availability of reinsurance for catastrophe perils such as earthquakes and hurricanes depends on the availability of capital among the worldwide reinsurance companies and the impact of all types of catastrophes around the world. In 1998-2000, reinsurance was readily available at relatively low rates even as the frequency and severity of natural disasters seemed to be increasing. The leading reinsurers of earthquake insurance are Lloyd's of London, a number of specialty reinsurers in Bermuda, and some very large reinsurers in Europe.

The availability and cost of reinsurance in the worldwide insurance market varies yearly, and this affects the availability and cost of earthquake insurance for California property owners. In 2001, the cost and availability of reinsurance started to become more difficult. Consequently, the use (amount ceded) of reinsurance started to decline. After the September 11, 2001 terror attacks in New York and at the Pentagon, insurers and reinsurers had to pay billions of dollars for property, liability, and workers' compensation claims. This impacted the availability and price of reinsurance in the years after 2001. In 2004-05, the United States' massive hurricane losses, especially from Hurricanes Katrina and Rita, again jolted the reinsurance market.

Table 6 and the chart show that the reinsurance market is subject to change. There were wide increases and decreases in the use of the reinsurance over these years, depending on price and availability. The primary cause of the change is the number of catastrophes around the world each year, earthquake and non-earthquake.

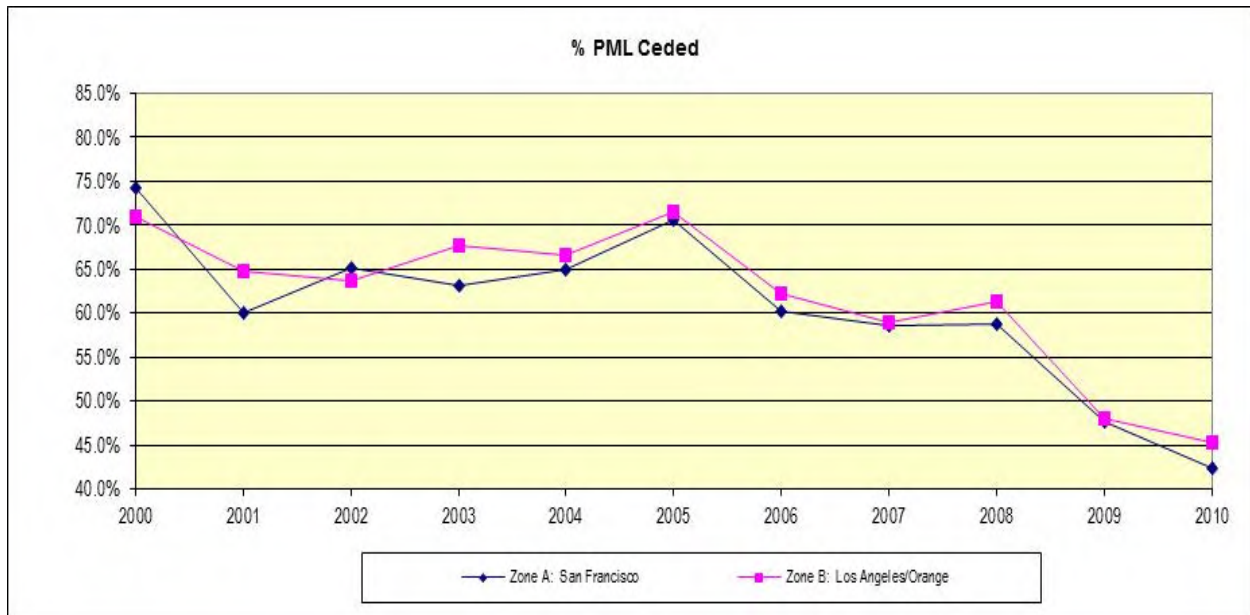
When reinsurance rates rise, new capital comes into the market and then the rates stabilize again. The reinsurance companies have become very knowledgeable about earthquake insurance and the use of computer models to estimate the PML for a portfolio of risks and to estimate the proper rates.

TABLE 6: AMOUNT of PROBABLE MAXIMUM LOSS (PML) CEDED to REINSURERS

This table shows the amount of PML ceded each year, which varies with the price of reinsurance.

	Direct Insured PMLs (in \$millions) as of the End of:										
	Revised										
Zone A: San Francisco	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Direct PML	\$11,886	\$10,630	\$8,003	\$8,893	\$10,735	\$10,369	\$11,950	\$14,368	\$16,354	\$16,632	\$19,048
Retained after Reinsurance	<u>\$3,062</u>	<u>\$4,247</u>	<u>\$2,792</u>	<u>\$3,278</u>	<u>\$3,764</u>	<u>\$3,050</u>	<u>\$4,744</u>	<u>\$5,947</u>	<u>\$6,753</u>	<u>\$8,715</u>	<u>\$10,970</u>
Total Ceded	\$8,824	\$6,383	\$5,211	\$5,615	\$6,972	\$7,319	\$7,206	\$8,420	\$9,601	\$7,918	\$8,078
% Ceded	74.2%	60.0%	65.1%	63.1%	64.9%	70.6%	60.3%	58.6%	58.7%	47.6%	42.4%

	Direct Insured PMLs (in \$millions) as of the End of:										
	Revised										
Zone B: Los Angeles/Orange	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Direct PML	\$17,276	\$12,072	\$10,992	\$11,944	\$15,117	\$14,618	\$16,428	\$22,290	\$23,980	\$25,677	\$28,094
Retained after Reinsurance	<u>\$5,020</u>	<u>\$4,257</u>	<u>\$3,993</u>	<u>\$3,868</u>	<u>\$5,047</u>	<u>\$4,176</u>	<u>\$6,207</u>	<u>\$9,138</u>	<u>\$9,281</u>	<u>\$13,327</u>	<u>\$15,380</u>
Total Ceded	\$12,256	\$7,815	\$6,999	\$8,076	\$10,070	\$10,442	\$10,220	\$13,153	\$14,698	\$12,350	\$12,714
% Ceded	70.9%	64.7%	63.7%	67.6%	66.6%	71.4%	62.2%	59.0%	61.3%	48.1%	45.3%



These PMLs are only a Portion of All of the Potential Insured Losses

A major earthquake in the Los Angeles/Orange area would cost at least \$12-18 billion (Table 1) in insured structural damage from shaking, but this is only a part of the potential insurance exposure. This report only covers shake damage because that type of loss is the easiest to quantify. In the 1989 Loma Prieta and 1994 Northridge earthquakes, over 90% of the insured losses were from shake damage to structures and contents. However, there is a significant potential insurance exposure from fire, because every commercial fire policy and homeowners' insurance policy covers fire damage following an earthquake. The 1991 Oakland fire shows the disastrous potential of wind driven fires. In that event, 1,941 homes were destroyed and 2,069 were partially damaged, for a total insured loss of about \$2 billion. That type of event could easily have been caused by an earthquake.

Property damage and bodily injury liability are now recognized as major exposures because architects, engineers, builders, landlords, neighbors, municipalities, and utility companies could be sued for building damage and collapse, and every bodily injury or death is a potential lawsuit. Additional insurance exposure could arise from workers' compensation, commercial and private passenger vehicles, high valued contents, business interruption coverage, additional living expense, debris removal, and medical costs. Furthermore, there are claim adjustment expenses, even if there is nothing payable under the insurance policy (because of the high deductible). This indicates that the total insured exposure for earthquake damage would be considerably more than the estimates in this report for shake damage only.

Recent Earthquakes

Earthquakes occur every minute, maybe every second, just like a human breathes every second. We do not feel most of these earthquakes because they are either extremely small or mild or occur deep underground or undersea. The United States Geological Survey (USGS) publishes lists of real-time earthquake activity around the world or in the United States via their website at:

<http://earthquake.usgs.gov/earthquakes/>.¹

After the 1994 Northridge earthquake (M 6.7), California has been fortunate to not have a similar major earthquake causing such severe damage and huge losses. But looking at the large earthquakes which have occurred outside of the United States in recent years, we must raise our earthquake awareness and prepare for the possibility of a catastrophic earthquake in California.

The following *Table 7* lists major damage-causing earthquakes that have occurred in California since 1975. A column has been added to show the “Estimated Property Damage in 2010 Dollars” for some of the costliest earthquakes per the Insurance Information Institute’s (I.I.I.) Earthquake Statistics (http://www.iii.org/facts_statistics/earthquakes-and-tsunamis.html). I.I.I.’s estimate includes both insured and uninsured losses.

¹ USGS - List of All Earthquakes in California-Nevada recorded during the last week:
http://earthquake.usgs.gov/earthquakes/recenteqscanv/Quakes/quakes_all.html

USGS - List of the Latest Earthquakes in the World recorded during the past 7 days:
http://earthquake.usgs.gov/earthquakes/recenteqsww/Quakes/quakes_all.html

USGS - Latest Earthquakes M3.0+ in the USA - Past 7 days:
http://earthquake.usgs.gov/earthquakes/recenteqsus/Quakes/quakes_big.php

USGS - List of the past week's M3+ earthquakes in California/Nevada region:
http://earthquake.usgs.gov/earthquakes/recenteqscanv/Quakes/quakes_big.html

Per the USGS, they are in process of replacing various reports with a new version, with the current format being phased out. The USGS’ new Real-time Earthquake Map (<http://earthquake.usgs.gov/earthquakes/map/>) can be used to access the latest earthquake information and event details. The Real-time Earthquake Map User Guide (<http://earthquake.usgs.gov/earthquakes/map/help.php>) describes how to use the new map and all its features.

TABLE 7: CALIFORNIA EARTHQUAKES
Magnitude 6.0 and Greater Earthquakes from 1970 to 2010

Date	Epicenter	Magnitude	Overall Losses when Occurred *1	Insured Losses when Occurred	Insured Losses Adjusted to 2010 \$s *2
February 9, 1971	San Fernando - near Sylmar (Southern California)	6.5	\$553 Million		
October 15, 1979	Imperial Valley	6.5			
May 25-27, 1980	Hilton Creek (Mammoth Lakes/Owens Valley area)	6.2 (& 3 M6 aftershocks)			
November 8, 1980	Mad River (Cape Mendocino/Eureka area)	7.2			
April 26, 1981	Westmorland (Southern California)	6.0			
May 2, 1983	Coalinga (western San Joaquin Valley) / Central California	6.5	\$31 Million		
April 24, 1984	Morgan Hill	6.2			
September 10, 1984	Offshore: Mendocino Fracture Zone (~140 miles SW of Eureka)	6.7			
November 23, 1984	Eastern Sierra (Round Valley), near Bishop	6.2			
July 8, 1986	North Palm Springs, Northern Coachella Valley	6.1 (5.8)			
July 20-21, 1986	Chalfant Valley (Near Bishop)	6.2 & 6.6			
July 31, 1987	Mendocino	6.0			
October 1, 1987	Whittier Narrows (& M5.5 aftrshk on 10/4/87) / So. California	5.9	\$360 Million	\$75 Million	\$145 Million
November 23, 1987	Elmore Ranch (Imperial County)	6.2			
November 24, 1987	Superstition Hills (Imperial Cnty)	6.6			
October 17, 1989	Loma Prieta (Santa Cruz) / San Francisco Bay area	6.9	\$10 Billion	\$960 Million	\$1.69 Billion
August 17, 1991	Cape Mendocino region, near Honeydew (San Andreas North)	6.2			
- July 12, 1991	Offshore: 50 miles WNW of Crescent City	6.9			
- August 16, 1991	Offshore: 62 miles WSW of Crescent City	6.2			
- August 17, 1991	Offshore: around 62 miles WSW of Crescent City	7.1			
April 22, 1992	Joshua Tree (Morongo Valley)	6.1			
April 25, 1992	Cape Mendocino region / Northern California Coast	7.2	\$66 Million		
- April 26, 1992	Cape Mendocino region	6.5 (6.6) & 6.7 (6.5)			
June 28, 1992	Landers [4:57am] / Southern California	7.6	\$100 Million	\$40 Million	
- June 28, 1992	Big Bear [8:05 am] / Southern California	6.4 (6.6)			
May 17, 1993	Big Pine (North Death Valley)	6.1			
January 17, 1994	Northridge / Southern California	6.7	\$44.0 Billion	\$15.3 Billion	\$22.55 Billion
September 1, 1994	Offshore: 90 miles SW of Cape Mendocino	6.9 to 7.2			
September 12, 1994	Tahoe Valley (at Carter's Station, NV)	6.0			
February 18, 1995	Offshore: around 80 miles W of Eureka	6.6			
October 16, 1999	Hector Mine (by Joshua Tree, near Lavic Lake)	7.1			
September 3, 2000	Yountville/Napa	5.2	\$80 Million	\$50 Million	\$63 Million
December 22, 2003	San Simeon/Paso Robles (Central California)	6.5	\$200 Million	\$40 Million	\$47 Million
September 28, 2004	Parkfield (Monterey County in Central California)	6.0			
June 14, 2005	Off the Coast of No. California (91 mi WSW of Crescent City)	7.2	{ a tsunami warning was briefly issued - a few injuries resulted from the evacuation }		
June 16, 2005	Off the Coast Of Northern California (aftershock of 6/14 quake)	6.7			
January 9, 2010	Offshore: Northern California/Humboldt County	6.5	Damage est. at \$43 Million.		
April 4, 2010	Northern Baja California, Mexico / Imperial County, CA	7.2	\$150 Million	\$100 Million	\$100 Mil

*1 : Includes insured and uninsured losses.

*2 : Adjusted to 2010 dollars by Munich Re, per the Insurance Information Institute (I.I.I.)

Source: US Department of the Interior - US Geological Survey,
and the 2009-10 I.I.I.'s website (Earthquake Statistics)

The Mendocino (7/31/1987, M6.0), Loma Prieta (10/17/1989, M6.9), Landers (6/28/1992, M 7.6), and San Simeon (12/22/2003, M6.5) earthquakes were significant earthquakes but not in insurance terms, even though the Loma Prieta earthquake had about \$1 billion in insured losses. The real surprise came with the 1994 Northridge earthquake. The total insured losses from the Northridge earthquake has grown to over \$15 billion. To put the \$15 billion amount in context, the population of Los Angeles County (where Northridge is located) was 9,244,646, with 1,565,862 single unit dwellings and 1,402,997 apartment units (as of January 1, 1995 - "*California Statistical Abstract, 1995*"). This works out to \$1,623 per person over a very large geographical area for just insurance payments. The value of the total loss would be much greater if disaster assistance, loss of use, and uncompensated losses were included.

The Future and the Role of Scientific Knowledge

In the past decade, there has been a dramatic increase in interest in the science of earthquakes by the insurance industry. This interest has extended to seismic maps, structural engineering, and earthquake damage mitigation. Considering the amount of money that can be paid out in insured losses from earthquakes and hurricanes, the use of scientific knowledge, the use of computer technology, the interest in the mitigation of losses to existing buildings, the promotion of wise construction of future buildings, and the enforcement of building codes will continue to grow.

The California Geological Survey, a California state agency, has been issuing detailed Seismic Hazard Zone maps for the populated areas of California. These maps are available at:
<http://www.consrv.ca.gov/CGS/Pages/index.aspx>.

The California Seismic Safety Commission produces volumes of seismic information based on numerous studies and experiments, including shaking a fully-operational five-story structure on the largest shake table in the western United States. More information can be found at:
<http://www.seismic.ca.gov/index.html>.

The United States Geological Survey also has a wealth of public information on earthquakes at <http://earthquake.usgs.gov>. Periodically, the USGS issues probability predictions of major earthquakes in California.

The result will be a better insurance product with risk-based premiums, reasonable coverage, and an insurance industry that can better manage its portfolio of catastrophe risks.

Earthquake Rates and Coverages

In the early 1980s and before, insurers charged one rate for earthquake insurance (about \$2.00 per \$1,000 of coverage and a 5% deductible) for a standard house anywhere along the coast. A lower rate was charged for the interior of the state and a higher rate for masonry homes. So few homes had earthquake insurance, that the insurance industry did not pay much attention to the actuarial correctness of these rates. This is no longer true.

Today, earthquake insurance rates are as complicated as private passenger automobile insurance rates (which vary by the insured's driving record, number of years of driving experience, annual mileage driven, claims frequency and severity of rating territory, type of car, usage of car, gender, marital status, etc.). As part of its regulatory authority, all earthquake insurance rates must be filed and approved by the California Department of Insurance prior to the rates' implementation. Earthquake insurance rates now being filed with the Department are based on average annual expected losses by zip code (which reflect soil conditions and proximity to known faults), building construction, and policy coverage. The rates are usually based on catastrophe modeling results of large earthquakes that are likely to occur only in the next hundred years, with some tempering for large earthquakes that occur only once every two or three hundred years.

In the short term, insurers want to know the "exceedance probabilities." That is, the probability of the aggregate losses from one earthquake event exceeding a certain amount. Exceedance probabilities are used to price earthquake reinsurance. In addition, a guide often used by insurers is to ask how many years of premium would it take to pay for a large size earthquake. Many insurers regard 5 to 10 years, or even more years, of premium to pay for a large earthquake as a reasonable level of risk to take.

A typical earthquake policy insures for loss against structural damage, damage to contents, and loss of use (residential) or business income (commercial). *Loss of use* covers the cost of additional living expenses such as the cost of moving into a hotel or an apartment until the structure is repaired, or it covers the loss of rental income on the house. *Business income* covers the loss of profits and the costs arising from the shutdown of the business (sometimes called "business interruption"). In the Loma Prieta earthquake, for every \$100 of insured residential damage, there was an average of \$20 of contents damage, and \$10 of loss of use. It turned out that these ratios were the same for the 1994 Northridge earthquake, even though the dollar amounts were much greater.

A 15% deductible is actually quite high. In order for a house to sustain damage to at least 15% of its value, the house must be located within 20 miles of the fault or on poor soil condition. Nevertheless, rates being charged for the 15% deductible policies have risen to about \$3.00 per \$1,000 of coverage for wood frame houses on good soil and up \$6.00 or \$7.00 per \$1,000 for houses in higher risk locations or near known faults. For a high value house in a high risk area, the premium can easily run into thousands of dollars per year.

From the consumer perspective, these rates make purchasing earthquake insurance a difficult decision making process. From surveys and focus groups, it is known that the decision to purchase earthquake insurance is price sensitive. There are indications that the demand for earthquake insurance is still strong, but homeowners in the medium to low risk areas (where the premiums are in the \$300 to \$700 range) are buying most of the policies. However, the homeowners in the higher risk areas are often deciding not to pay the large premiums.

Probable Maximum Loss and Capacity

The terms *capacity* and *probable maximum loss (PML)* need to be discussed. Since an insurance company has limited financial resources, insurance professionals need measures to quantify the amount of exposure to potential loss that the company might sustain from a catastrophic event. Suppose an insurance company sold earthquake insurance on 100,000 homes in the San Francisco Bay area, with an average replacement cost of \$200,000. The aggregate replacement cost of these homes would then be \$20 billion ($\$200,000 \times 100,000$). It is highly unlikely that any event (even a 1991 Oakland type fire) could destroy all 100,000 homes. In the event of an earthquake, most of the homes would be only partially damaged and many not damaged at all. Thus, insurers need an estimate of what the actual total damage might be.

For many years, fire insurance managers used the concept of a *probable maximum loss* to estimate what percentage of a particular building would likely be damaged in the event of a fire. The California Department of Insurance carried this concept over to earthquake insurance when it devised its Earthquake Questionnaire in the 1970s. In the questionnaire, the replacement cost of the insured homes is multiplied by a “PML percentage factor” to give a dollar estimate of the expected average damage to all of the insured homes in that defined earthquake zone.

For a single family residence and a 10% deductible earthquake policy, the PML percentage factor is 2.13% of the insured value in the San Francisco Bay area earthquake zone. This means that the expected average PML loss from a major earthquake for the above example of 100,000 homes would be \$426 million ($2.13\% \times \20 billion). The 2.13% figure was derived by inspecting typical damaged houses in past earthquakes in California.

The damage statistics were compiled by structural engineers and then estimates were made of what the damage would be to these houses if the earthquake had been a major earthquake. The result was the 2.13% PML factor for insurance with a 10% deductible. There are different PML factors for different deductibles and for commercial buildings of differing construction. The goal is to estimate what would happen if the maximum likely fault rupture occurred at one of the large faults in the affected zone. The PML percentage also varies from fault zone to fault zone.

From an insurance company underwriter’s point of view, \$426 million is a much more useful number than the \$20 billion figure. Say that the insurer only wants to commit \$250 million of the insurance company’s surplus to a possible earthquake event in the San Francisco Bay area earthquake zone. Then, the underwriter can determine that there are too many earthquake policies in the zone.

Like the rates, the probable maximum loss estimate does not include an estimate of damage from the mega-catastrophe earthquake event, nor does it include the possibility of an unusually large number of small or medium size earthquakes. Sometimes PML estimates are described as assuming the largest expected earthquake in the next hundred years. Other times, the PML estimates are said to be based on the size of an earthquake at the 90th percentile of damaging earthquakes.

With the advent of computer modeling and more sophisticated exposure analysis techniques, the question has been asked, “Are PMLs obsolete?” The point of the question is that a computer model can generate a table of average annual losses by zip code and a graph of exceedance probabilities. With this information, an insurer can choose a level of risk and plan accordingly. The level of risk will determine how much earthquake insurance to sell and what kind of reinsurance program to

purchase. On the other hand, the PML tends only to answer the question, “What is the worst thing that can happen?”

An insurer’s *capacity* is the maximum amount of PML exposure on all building risks that an insurer is willing to insure in any one earthquake zone. When a limit is placed on a certain earthquake zone, such as \$250 million, this is called a capacity limit of \$250 million for that zone. Sometimes it is expressed in terms of the state as a whole. In other words, capacity is the maximum amount of aggregate loss that the insurer is willing to put at risk from one earthquake event.

After the 1994 Northridge earthquake, insurance companies re-evaluated their PML exposures in relationship to their chosen capacity for California earthquake exposure. Consequently, many insurers announced that they would not be selling any more earthquake insurance policies (but would be renewing existing policies). Of course, after the Northridge earthquake, many property owners saw what an earthquake can do to a home and decided that they wanted earthquake insurance, only to find that it was not available.

The insurer determines its capacity based on the amount of surplus the insurer has, the insurer’s cash flow and profits from other lines of insurance in California and other states, and the availability and cost of reinsurance. “Reserves” are amounts set aside to pay losses for events which have already occurred and are not available to pay future earthquake losses. All this boils down to asking how much of the insurer’s resources is the management willing to risk on one major earthquake, and this is what is called “capacity.”

Improving the Insurability of Earthquake Risks

The art of insuring earthquakes is essentially a strategy of limiting the potential insured loss in each location where such an event is likely to occur. Fundamental insurance textbooks often make the statement that catastrophic perils are not insurable risks. What statements like this mean is that catastrophic perils are events that rarely occur or might not occur at all in a given period (year). However, when a catastrophe does occur, the potential damage is very severe and devastating. The catastrophe loss does not behave like regular insurable risk loss. There is no stable flow of annual losses such as losses in automobile or workers’ compensation insurance so that actuaries or statisticians can use the prior years’ loss experience data to run the predictive model to estimate future losses. However, with proper modification, catastrophes are actually insurable up to a certain limit.

Insurance companies have been insuring catastrophic events for hundreds of years. One of the first forms of insurance insured ships and cargo at sea, when each loss of a ship and cargo was certainly a catastrophic event. Today, nuclear reactors, large sporting events, airplanes, oil spills, prescription drugs, (defective) household products, hurricanes, and terror attacks all present the possibility of a very large number of losses at once. Various insurance programs have been devised to protect the public to some extent in each of these situations.

In the case of earthquakes, the worst situation an insurer can have is to have all of the insured exposures concentrated in one area, in fully-insured high-valued houses, and built on poor soil conditions (liquefaction or hillsides) near a fault line. In this case, the PML from one event would be very high indeed.

In order to make the potential loss from an earthquake more insurable, the strategy is essentially one of sticking to basic risk management techniques. The strategy involves these essential points:

- ◆ Spread the risks geographically, to reduce the proportion of total risks insured that can be affected by one earthquake. This is done by identifying the known fault areas and spreading the number of insured risks among these areas.
- ◆ Control the amount of loss that is probable from each risk. This is done by imposing large deductibles, by not insuring high-valued dwellings, by imposing exclusions (such as brick veneer, swimming pools, garden walls, etc.), by limiting the coverage on contents, and by requiring earthquake retrofitting to lessen the building's susceptibility to earthquake damage.
- ◆ Make the rates reflect the risk of loss. This is to avoid underpricing earthquake insurance in high-risk areas. Underpricing will cause the insurer to attract a lot of insureds and result in adverse financial results for the insurer in the long run.
- ◆ Judiciously purchase reinsurance. Reinsurance can be purchased to limit the amount of loss on each risk or on the aggregate of all risks combined. Since reinsurance is expensive, the proper coverage and price must be worked out carefully. On commercial risks, reinsurance is a necessary element of the strategy.
- ◆ Utilize the vast available research in seismology, geology, and structural engineering. An effective strategy to improve the insurability of earthquakes must include the exploitation of this available research. In the Loma Prieta earthquake, the damage causing liquefaction areas in the Marina District and the hillside areas in Santa Cruz were all well known.

The implementation of this strategy will make small and medium-sized earthquakes insurable.

Reference

California Earthquake Zoning and Probable Maximum Loss Evaluation Program
by Richard J. Roth, Jr., FCAS (1997-1998); California Department of Insurance

California Earthquake Zoning and Probable Maximum Loss Evaluation Program (1997-2001)
by the California Department of Insurance (2003)

Earthquake Premium and Policy Count Data Call Report
by the California Department of Insurance

Earthquake Information Sources & Other Related Links

- * United States Geological Survey (USGS) - Earthquake Hazards Program:
www.earthquake.usgs.gov
<http://earthquake.usgs.gov/earthquakes/map/> (Real-time Earthquake Map – World, U.S., CA)

- * Regional information via the National Earthquake Information Center (NEIC) --
<http://earthquake.usgs.gov/regional/neic/>

- * California Integrated Seismic Network (CISN): <http://www.cisn.org>
The CISN is the region of the Advanced National Seismic System that represents California. It is a partnership among federal, state, and university agencies involved in California earthquake monitoring.

- * Northern California Earthquake Data Center (NCEDC): www.ncedc.org
The NCEDC is a joint project of the UC Berkeley Seismological Laboratory and the USGS. The NCEDC is a long-term archive and distribution center for seismological and geodetic data for Northern and Central California.

- U.C. Berkeley Seismological Laboratory: <http://seismo.berkeley.edu/seismo/>

- * Southern California Seismic Network (SCSN): www.scsn.org
The SCSN is a cooperative project of Caltech and the USGS. SCSN monitors ground motion from the U.S./Mexico border north to a line which passes approximately through San Luis Obispo and Big Pine. They import data from UC San Diego's Anza Network, the UC Berkeley Seismological Laboratory, and the University of Nevada at Reno's Seismological Laboratory, to help locate earthquakes. The SCSN is the Southern California portion of the California Integrated Seismic Network (CISN).

- * Southern California Earthquake Center (SCEC): www.scec.org
The SCEC, headquartered at the University of Southern California, is a community of over 600 scientists, students, and others at over 60 institutions worldwide. SCEC is funded by the National Science Foundation and the U.S. Geological Survey to develop a comprehensive understanding of earthquakes in Southern California and elsewhere, and to communicate useful knowledge for reducing earthquake risk.

- Putting Down Roots in Earthquake Country* www.earthquakecountry.info/roots/
Earthquake science and preparedness handbooks published by the SCEC, and updated yearly by the SCEC and the Earthquake Country Alliance.

- * California Department of Insurance (CDI): www.insurance.ca.gov
The CDI provides consumer guides on earthquake insurance and earthquake preparedness, along with various earthquake reports and studies.

- * California Earthquake Authority (CEA): www.earthquakeauthority.com
The CEA provides earthquake insurance policy information, a rate calculator, and a list of member companies.

- * CA Geological Survey (CGS), CA Dept. of Conservation: www.conservation.ca.gov/cgs/
The CGS provides information on California earthquakes and the Seismic Hazard Mapping Program.

- * California Seismic Safety Commission: www.seismic.ca.gov
Established in 1975 by the passage of the Seismic Safety Commission Act, the Commission advises the Governor, Legislature, and state/local governments on ways to reduce earthquake risk. The Commission also investigates earthquakes and researches earthquake-related issues and reports.

- * Insurance Information Institute (I.I.I.): www.iii.org
The I.I.I. provides insurance information and loss data on many subjects, including earthquake.

Appendix I

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List of Magnitude 5.0 or greater California Earthquakes (1966 to December 2011)

<i>Date</i>	<i>Location of Earthquake</i>	<i>Magnitude</i>
September 14, 2010 [03:52:17 am PDT]	Aftershock of the 04/04/10 M 7.2 quake: Baja California, Mexico (19 miles SSW of Guadalupe Victoria, Baja Calif, Mexico; 55 miles SSE of El Centro, CA)	M 5.0
July 7, 2010 [04:53:33 pm PDT]	Borrego Springs (Riverside-San Diego County, Southern California) (15 miles NNW of Borrego Springs; 25 miles SW of Indio; 30 miles S of Palm Springs) * Called the Collins Valley Earthquake - located near the Coyote Creek Segment of the San Jacinto Fault. Minor damage: broken jars/glassware. * This quake is considered a "trigger quake" (and not a direct aftershock from the M7.2 Baja California earthquake).	M 5.4
June 14, 2010 [09:26:58 pm PDT]	Aftershock: Ocotillo (Imperial County, Southern California) (Near the US/Mexico border: 5 miles ESE of Ocotillo; 15 miles WSW of Seeley, CA; 22 miles WSW from El Centro, CA) * An aftershock to the April 4 th , M 7.2 Baja California earthquake. It was followed by numerous aftershocks including five M4.0+ quakes.	M 5.7
April 4, 2010 [03:40:41 pm PDT]	El Mayor - Cucapah Earthquake -- Baja California, Mexico / Imperial County region (Southern California) (Epicenter located 30 miles SSE of Calexico, CA. Closest town was 11 miles WSW from the epicenter, located at Guadalupe Victoria, Baja Calif. Norte, Mexico; 29 miles SSE from Mexicali, Baja CA, Mexico) * Deaths: 2 * Injured: 233 * Damage: In Mexico, Mexicali – 2 people killed, 233 injured & 25,000 residents left homeless. Estimated economic damage: above \$12.3Billion MXN (\$1Billion USD); insured losses at \$3.7 Billion MXN (\$300 Million USD). * Worst affected area in Southern CA was Calexico. Total economic losses across Imperial County estimated at over \$100 Million USD. * Quake struck at 3:40 pm, April 4 (Easter Sunday) - epicenter south of Mexicali, near the village of Guadalupe Victoria; about 30 miles south of the U.S./Mexico border. In Mexicali, 5,200 homes in rural areas south of the main city were severely damaged/destroyed. Walls, roofs and foundations were cracked; water bubbled up from underground, flooding some homes; several churches and more than 50 miles of roads were damaged. Many businesses sustained major damage. * Calexico, CA: 80% of buildings in historic downtown were red-tagged; a federal building & Jefferson Elementary School were damaged; three large tanks holding the city's water supply were damaged. Initial estimated damage: \$14.7 million. * El Centro, CA: several water-main breaks and cracks in buildings occurred. Water systems in El Centro, Holtville, Imperial & Calexico, all in Imperial County, needed repairs. In Imperial Valley, 9 county government buildings were damaged. * Earthquake caused more than \$100 million in damage in California alone. Extensive damage to water treatment systems, schools, businesses and homes. At least 800 homes were severely damaged. Most significant damage was to water and sewage systems in El Centro & Calexico. Offices in the region's main hospital also suffered extensive damage. 3 schools in Calexico suffered an estimated \$15 million in damages; county government buildings suffered damage up to \$20 million. At least 100 mobile homes were knocked off their foundations or toppled. * As of 4/07/10, there were more than 500 aftershocks, 6 of which were M5.0 or greater.	M 7.2
February 4, 2010 [12:20:22 pm PST]	Offshore: Northern California/Humboldt County (31 miles WNW of Punta Gorda, CA; 34 miles W of Petrolia; 36 miles WSW of Ferndale; 48 miles SW of Eureka) * Scientists are working to determine if the Feb. 4th quake was an aftershock of the Jan. 9th M6.5 quake or a rupture of a different fault that may have been partly triggered by the earlier earthquake.	M 5.9
January 9, 2010 [04:27:38 pm PST]	Offshore: Northern California/Humboldt County (27 miles W of Ferndale; 33 miles WSW of Eureka) * Main quake was followed by many smaller aftershocks, including four M4.0+. * Injuries: 1 serious injury consisting of a broken hip. * Damage: as of 01/14/10, was estimated at around \$43 million for Humboldt County. Damage occurred to 463 buildings, structures and roads – including 10 homes & 1 business that were destroyed. Damaged locations: 9 government buildings, the Bayshore Mall, the Eureka Post Office, roads, and homes/apartment property. Quake mainly caused damage in the town of Eureka. Property damage consisted of: cracks in walls/floors, shattered windows, broken dishes/glassware, bent railings on bridges, damaged merchandise, some water/gas/sewer leaks, structural damage to numerous buildings, downed chimneys, fallen masonry, and houses moved off of foundations. Widespread power outages had occurred throughout Humboldt County, with power cut to about 36,000 customers, but it was mainly restored the next day. * According to the USGS, this was the largest earthquake in the region since June 2005.	M 6.5

December 30, 2009 [10:48:57 am PST]	Baja California, Mexico (13 miles NNW from Guadalupe Victoria, Baja California, Mexico; 21 miles SE from Mexicali, Baja Calif, Mexico; 23 miles SE from Calexico, CA)	M 5.8
* Followed by many smaller aftershocks, including a M4.8 at 10:53am & a M4.0 at 11:07am.		
October 3 to 7, 2009	Olancha Earthquake Sequence	
* At least 435 events through October 7th, activity beginning 10/01/09.		
* Mw5.0 mainshock occurred 11 miles northeast of Olancha, in the Eastern Sierra Nevada at 3:01 am (Pacific) on 10/01/09. It was preceded by a M1.5 foreshock, and developed a robust aftershock sequence, with six aftershocks M3.0+, and more than 85 aftershocks within the first 9 hours.		
* Mw5.2 earthquake occurred at 6:14pm on 10/02; was preceded by a M4.8 at 6:09pm & a M4.9 at 6:10pm.		
October 2, 2009 [06:15:59 pm PDT]	Keeler/Olancha (Inyo County, Central California) (7 miles S from Keeler; 11 miles NE from Olancha; 18 miles SE from Lone Pine)	M 5.2
October 1, 2009 [03:01:24 am PDT]	Keeler/Olancha (Inyo County, Central California) (7 miles S from Keeler; 11 miles NE of Olancha, CA; 19 miles SE of Lone Pine)	M 5.0
* A swarm of small earthquakes clustered around the Owens Valley on the eastern slope of the Sierra Nevada in Inyo County.		
* Consisted of hundreds of smaller temblors, including nine M4+ quakes.		
September 19, 2009 [03:55:17 pm PDT]	Baja California, Mexico (10 miles WNW from Guadalupe Victoria, Baja California, Mexico; 23 miles SSE from Mexicali, Baja Calif., Mexico; 25 miles SSE from Calexico & 34 miles SSE of El Centro, CA)	M 5.1
* M 5.1 earthquake was followed by many smaller quakes including a M4.4 on 9/19 at 17:36 pm.		
May 17, 2009 [08:39:36 pm PDT]	Lennox/Hawthorne (Los Angeles County, Southern California) (1 mile ESE from Lennox; 1 mile N Hawthorne; 2 miles SW of Inglewood; 10 miles SW of Los Angeles Civic Center)	M 4.7
* A M4.7 earthquake occurred 1 miles south of Inglewood, in the Los Angeles area at 8:39 pm on Sunday, 5/17/09. The main shock was followed by a M3.1 aftershock at 8:45 pm. The largest aftershock was a M4.0, which occurred at 3:49pm PDT on Tuesday, 5/19/09. There were at least 16 aftershocks, ranging from M1.1 to M4.1.		
* The tremor cracked windows, knocked down ceiling tiles and damaged light poles.		
* The 1933 Mw6.4 Long Beach quake was located 25 miles to the southeast along the Newport-Inglewood fault.		
December 5, 2008 [08:18:42 pm PST]	Ludlow (San Bernardino County, Southern California) (16 miles WNW from Ludlow; 35 miles E from Barstow)	M 5.1
* No injury or damages. A probable aftershock of the 1999 Hector Mine earthquake.		
* The earthquake struck a sparsely populated area of California's Mojave Desert, located within the Mojave Shear Zone. Mainshock was followed by an aftershock sequence that included 30 recorded events in the first 36 hours. Largest aftershock was a M 3.4 on 12/08.		
November 28, 2008 [05:42:18 am PST]	Off the Coast of Northern California (Humboldt County) (142 miles W from Petrolia; 144 miles W from Ferndale; 151 miles W from Eureka)	M 5.9
* No reports of damage.		
November 20, 2008 [11:23:00 am PST]	Earthquake Swarm: Baja California, Mexico (13 miles WNW from Guadalupe Victoria, Baja Calif., Mexico; 24 miles SSE from Mexicali, Baja Calif., Mexico; 25 miles SSE of Calexico, CA; 35 miles SSE of El Centro, CA)	M 5.0
July 29, 2008 [11:42:15 am PDT]	Chino Hills (San Bernardino County, Southern California) (3 miles WSW from Chino Hills; 4 miles SE of Diamond Bar; 5 miles NNE of Yorba Linda; 7 miles S from Pomona; 21 miles W of Riverside)	M 5.4
* The Mw5.4 main shock-aftershock sequence started 2 miles SW of Chino Hills, in the Chino Hills at a depth of about 9 miles. Main shock was followed by a M3.8 aftershock at 11:52am, and a M3.6 at 1:41 pm.		
* No major damage or injuries; mostly fallen objects/broken merchandise, cracked walls, some burst pipes in Los Angeles and at LAX. Some minor structural damage to homes, water mains and gas lines was reported throughout the Los Angeles region. Phone/internet systems shut down awhile due to overwhelming demand.		
* Eight minor injuries were reported at senior citizen facilities in Orange County.		
April 29, 2008 [08:03:06 pm PDT]	Near Shasta-Trinity National Forest, Northern California (Occurred in the mountainous area 10 miles SE of Willow Creek; 35 miles E of Eureka)	M 5.4
* No reported injuries or damage.		

February 8, 2008 [11:12:06 pm PST]	Baja California, Mexico Earthquake Swarm (14 miles NW from Guadalupe Victoria, Baja CA, Mexico; 19 miles SSE from Mexicali, Baja CA; 21 miles SE of Calexico, CA; 30 miles SSE of El Centro, CA) * These earthquakes occurred near the Cerro Prieto Geothermal field. As of 2/22, the earthquake swarm near the US/Mexico border included 4 events of M5.0 or larger and 7 M 4.0+ quakes. The larger quakes were felt in the Imperial Valley region & eastern San Diego County. No injuries or major damage.	M 5.4
October 30, 2007 [08:04:54 pm PDT]	Alum Rock / Milpitas (San Francisco Bay Area, California) (5 miles NNE from Alum Rock, CA in the Diablo Range foothills east of San Jose; 7 miles E of Milpitas; 9 miles NE of San Jose City Hall ~ on the Calaveras Fault) * Some reports of fallen items, a burst water pipe, broken windows and cracks in the walls, but no serious property damage or injury was reported. Over 40 small aftershocks; the biggest was a M3.7 on 10/31/07 at 3:54 pm. This was the largest earthquake in the area since Loma Prieta on 10/17/89.	M 5.4
June 24, 2007 [07:32:25 pm PDT]	Offshore Northern California: West of Trinidad, CA (35 miles W of Trinidad, CA; 41 miles NW of Eureka, CA)	M 5.1
May 9, 2007 [00:50:05 am PDT]	Offshore Northern California (Humboldt County) (35 miles WNW of Punta Gorda; 39 miles W from Petrolia; 42 miles WSW from Ferndale)	M 5.2
May 9, 2007 [01:07:32 am PDT]	Offshore Northern California (Humboldt County) (34 miles WNW of Punta Gorda, CA; 37 miles W from Petrolia, CA)	M 4.5
February 26, 2007 [04:19:54 am PST]	Offshore Northern California (near Humboldt County) (32 miles W of Ferndale, CA; 37 miles NW of Punta Gorda, CA)	M 5.4
July 19, 2006 [04:41:43 am PDT]	Offshore: Northern California (4 miles WNW of Punta Gorda, CA; 8 miles of WSW of Petrolia, CA)	M 5.0
May 24, 2006 [9:20:26 PM PDT]	Cerro Prieto, Mexico earthquake sequence (Baja California) (7 miles W of Guadalupe Victoria, Baja California; 29 miles SSE of Calexico, CA) * The earthquake sequence started with a ML3.9 foreshock at 9:19pm on 5/23/06, followed by the Mw5.4 quake 80 seconds later, at 9:20pm. Main shock was located 29 miles to the SSE of Mexicali in Baja California near the Cerro Prieto geothermal field. It was widely felt in San Diego, Temecula, Coachella Valley & Blythe, CA. * Followed by a M4.2 aftershock on 5/27 and a M4.4 & M4.2 on 5/28.	M 5.4
August/Sept. 2005	Obsidian Butte Swarm (Imperial Valley, Southern CA) (1 mile SSE of Obsidian Butte; 8 miles SW of Niland, CA) * Renewed seismic activity in the Brawley Seismic Zone began late on 08/28/2005; highest level of activity included a M4.6 & a M4.5 quake at 3:47 & 3:50 pm (PDT) on 08/31/2005; largest quake was a M5.1 on 09/01/2005 at 6:27:19 pm (PDT).	M 5.1
June 16, 2005 [10:21:41 pm PDT] at epicenter	Off Coast Of Northern California (aftershock) (123 miles W of Ferndale; 127 miles W of from Eureka, CA) * Aftershock of the June 14 th quake.	M 6.7
June 16, 2005 [01:53:25 pm PDT]	Yucaipa (San Bernardino County in Southern California) (2 miles NE of Yucaipa; 17 miles E of San Bernardino; 10 miles NW of Banning) * Injuries: 2 people at San Bernardino & 1 person at Lake Arrowhead. * Slight damage: mainly shattered glass. Some residential structural damage was reported, including minor stress cracks in older houses. Rock slides were reported on Highway 38.	M 4.9
June 14, 2005 [06:50:54 pm PDT at epicenter] [07:50:54 pm PDT on West Coast]	Off the Coast of Northern California (the Gorda Plate) (91 miles WSW of Crescent City [Del Norte County]; 92 miles WNW of Trinidad) * A tsunami warning was briefly issued for the California coast but was cancelled after an hour. Shaking but no major structural damage. A few injuries resulted from car accidents due to the evacuation. Aftershock sequence included a M6.7 at 10:21 pm on 6/16, several M4+ quakes, and numerous smaller quakes.	M 7.2
June 12, 2005 [08:41:46 am PDT]	Anza (Southern California) ~ San Jacinto Fault (6 miles ESE of Anza, CA; 17 miles SSE of Idyllwild; 20 miles S of Palm Springs) * Slight damage – mainly falling ceiling tiles and items falling from shelves.	M 5.2
April 16, 2005 [12:18:13 pm PDT]	Wheeler Ridge (Kern County - Central California) (13 miles W of Wheeler Ridge; 25 miles SSW of Bakersfield)	M 5.2 (~4.7)
March 17, 2005 [11:23:58 pm PST]	Offshore Northern California (34 miles WNW of Punta Gorda; 45 mi WSW of Fortuna; 55 mi SW of Eureka)	M 4.7 (5.0)

September 30, 2004 [11:54:29 am PDT]	Aftershock of the 9/28/04 Parkfield Earthquake (9 miles NW of Parkfield) * This was one of the largest aftershock from the M 6.0 Parkfield earthquake (09/28/04)	M 5.0
September 29, 2004 [10:10:04 am PDT]	Aftershock of the Parkfield quake (5 miles NW of Parkfield)	M 5.0
September 29, 2004 [3:54:54 pm PDT]	Arvin Earthquake in Kern County (Southern California) (17 miles NE of Arvin in the southern Sierra Nevada; 21 miles E of Bakersfield, CA) * Possible aftershock, related to the Parkfield quake (Arvin quake was less than 200 km SE of the M 6.0 Parkfield earthquake).	M 5.0
September 28, 2004 [10:15:24 am PDT]	Parkfield Earthquake (Central California) (7 miles SSE of Parkfield; 22 miles NE of Paso Robles; 20 miles SW of Avenal) * Injuries: None. * Damage: Some damage to pipes; broken bottles, etc. at Parkfield Winery; some structural damage. * Quake ruptured primarily NW along the San Andreas Fault. This was a long anticipated earthquake. Moderate-sized earthquakes have occurred at fairly regular intervals – in 1857, 1881, 1901, 1922, 1934, & 1966 on this stretch of the San Andreas Fault. It had been predicted that another M6 earthquake would hit the Parkfield region between 1985-1993. * Two M5.0 aftershocks occurred on 9/29 & 9/30, along with over 600 microquakes.	M 6.0
September 18, 2004 [4:02:17 pm PDT]	Adobe Hill Swarm - East of Mono Lake (Central California) (23 miles SE of Bodie, CA; 22 miles SSW of Qualeys Camp, NV) * Sequence occurred near the California-Nevada border, just east of Mono Lake and beneath the Adobe Hills. Preceded by M4.0 & M4.1 quakes; followed by a M5.4 aftershock at 4:43pm and a M4.1 at 4:48 pm on 9/18.	M 5.5
June 15, 2004 [3:28:49 pm PDT]	Offshore Baja California, Mexico (42 miles SE of San Clemente Islands (SE tip); 46 miles WSW of San Diego)	M 5.2
December 22, 2003 [11:15:56 am PST]	San Simeon Earthquake (San Luis Obispo County in Central CA) (6 miles NE from San Simeon; 10 miles N of Cambria; 13 miles W of Lake Nacimiento; 24 miles WNW from Paso Robles) * Deaths: 2 in Paso Robles. Injuries: 47 in the Paso Robles-Templeton area. * Estimated damage: \$20 million (to \$60 million) in "insured" losses. "Actual" losses estimates ranged to \$250 million. At least \$171 million is for damage to residences including mobile homes. * 290 homes and 190 commercial structures were damaged. Areas affected include: Arroyo Grande, Atascadero, Morro Bay, Oceano, Paso Robles, San Luis Obispo, San Miguel, San Simeon, Templeton, etc. * Paso Robles was the hardest hit area. Two women were killed by the collapse of the Acorn Building. 20 other historic buildings (mostly unreinforced masonry) were severely damaged. Estimated damage for this area could exceed \$100 million. Also, major damage to the City Hall parking lot where a hot sulfur spring erupted, the Carnegie Library, and to Flanson Middle School. * Other notable damage: Mission San Miguel Archangel; Atascadero's City Hall & the Printery building; water main & gas line breaks; and the closure of Oceano's airport due to cracks in the runway. * There were over 100 M3.0+ aftershocks in the 48 hours since the main quake. The largest was a M4.7 occurring 11 minutes afterwards.	M 6.5
August 15, 2003 [2:22:12am PDT]	Offshore: 75 miles WNW of Ferndale, CA (76 miles W of Eureka, CA in the Pacific Ocean)	M 5.1
February 22, 2003 [4:19am PST]	Big Bear City (Southern California) (3 miles N of Big Bear City, in the San Bernardino Mtns. near the Helendale fault) * Injuries: None. * Damage - slight: Shaking, broken windows, cracks, and fallen/broken items. * As of 1pm on 02/22, the aftershock sequence included 5 quakes larger than M4 and 8 additional ones larger than M3. Largest aftershock was a M4.6 on 02/24.	M 5.4
June 17, 2002	Offshore: Bayview (Northern California) (23 miles W of Bayview, CA; 24 miles W of Eureka, CA)	M 5.1 (Mw 5.3)
May 13, 2002 [10:00:29 pm PDT]	3 miles SW of Gilroy (Central California) (9 miles NW of San Juan Bautista in the Santa Cruz Mountains, near the Castro fault ~ parallel to the south end of the Sargent fault) * Damage: little – mainly broken glass and emptied shelves, etc.	M 5.2 (Mw 4.9)
February 22, 2002 [11:32:41 AM UTC]	Laguna Salada (Baja California) (26 miles SSE of Calexico, CA ~ felt mainly in Imperial & San Diego Counties) * Aftershock sequence included a M4.1 quake an hour later, a M4.0 on the 24th, & at least 26 M3+ quakes as of February 25. Aftershocks continued throughout March.	M 5.7

October 30, 2001	Anza (northern San Diego County, Southern California) (10 miles ESE of Anza and 21 miles S of Palm Springs, on the San Jacinto Fault Zone)	M 5.1
August 10, 2001	Around 9 miles West of Portola (Northeastern California)	M 5.5
February 10, 2001	4 miles NNW of the town of Big Bear Lake (Southern California) * Largest aftershock was a M 4.2 occurring 3 hours later.	M 5.1
January 13, 2001	Offshore: Cape Mendocino (Northern California) (57 miles WNW from Ferndale, CA)	Rvds: M 5.4 (5.6)
September 3, 2000 [1:36 am]	Yountville (Napa Valley-Sonoma area in Northern California) (6 miles NE of Sonoma, 3 miles WSW of Yountville, 10 miles NW of Napa) * Injuries: 25; 3 of them serious. * Damages: initial estimate between \$5-15 million, rose to \$60 million in property damage. * Damage occurred mainly in Napa & Yountville; around 2,500 structures damaged. Damage included: hundreds of fallen chimneys; broken windows; items knocked down from shelves; cracked walls & foundations; and broken water & gas lines. As of 9/08, the City of Napa issued 168 "yellow tags" and 16 "red tags". * As of 12:00am on 9/09, there were over 300 small aftershocks, only 11 of which were larger than M1.6.	M 5.2
March 16, 2000 [7:19 am]	Offshore: Mendocino Fracture Zone (off the coast of Cape Mendocino; 49 miles W of Punta Gorda) * Followed by M 4.8 quake 8 hours later. No reports of damage.	M 5.9 (5.8)
January 7, 2000	Offshore: around 110 miles WSW of Eureka (Gorda plate)	M 5.4
December 24, 1999	Ukiah (Northern California) (20 miles SE of Fort Bragg and 20 miles W of Ukiah)	M 5.4
October 20, 1999	Lavic Lake (Hector) - aftershocks (10 miles N of Lavic Lake, in the extreme northern portion of the aftershock zone) * Two M 5.0 quakes occurred at 6:54pm and 6:57 pm. Another M 5.0 aftershock occurred in the same location on 10/22/99.	M 5.0
October 16, 1999 [02:46:44 am]	Hector Mine (Southern California) (47 miles ESE of Barstow; 32 miles N of Joshua Tree in the High Desert region on the Twenty-Nine Palms Marine Corps Base, near Lavic Lake) * Injuries: None. * The M7.1 quake occurred in a remote area of the Mojave Desert, and created a 25-mile long surface rupture, along what had been classified as an inactive fault. Followed by two M5.8 aftershocks at 2:59am & 5:57am. As of mid-November, the Hector sequence consisted of the main shock and at least 6 M5's, 48 M4's, 276 M3's, & many smaller quakes. * The quake derailed a passing Amtrak train, causing some injuries but none serious. * Also occurring on or near October 16 th , were swarms in the Brawley Seismic Zone – one under the Salton Sea north of Obsidian Butte and another in the Westmorland area. There was also some activity south of the US/Mexico border.	M 7.1
August 17, 1999 [6:06 pm]	Marin County (Northern California) (17 miles NNW of San Francisco at Bolinas, CA – on a small thrust fault very close to the San Andreas Fault, near the section ruptured by the SF 1906 quake) * Felt throughout the northern Bay Area. Shaking was strong enough that all BART trains were temporarily stopped while the tracks were inspected. No damage.	M 5.0
August 1, 1999	Central California/Nevada border (near Scotty's Junction in Nevada – NE of Death Valley National Park) * Felt in Mammoth Lakes and Ridgecrest in CA.	M 5.7
May 15, 1999 [6:22 am]	Near Mammoth Lakes, California (12 miles SE of Mammoth Lakes in the High Sierras, 8 miles WSW of Toms Place) * By May 20, more than 1500 aftershocks were recorded. More than 60 M3.0+ and several M4+ aftershocks were recorded; the largest, a M4.7 occurred 4 hours later.	M 5.6
May 14, 1999	Yucca Valley/Joshua Tree area (Southern California) (5 miles SSW of Joshua Tree in the Little San Bernardino Mountains) * Aftershock to the 1992 Landers M7.3 earthquake. Followed that day by a M4.0 and a M4.2	Rvds: M 4.9 (5.0)
November 26, 1998 [11:49 am]	3 miles NW of Redding (northern Sacramento Valley - Northern California) * Largest earthquake occurring in the Redding area in the past 120 years. * Followed by dozens of aftershocks, with the largest measuring M4.4 on 11/26 and M4.2 on 11/28. Minor damage.	M 5.2

October 30, 1998	Near the north shore of Lake Tahoe (CA-NV border) (about 7 miles SE of Truckee or 3miles NE of Tahoe Vista)	M 5.4
August 12, 1998	7 miles SSE of San Juan Bautista (Central California)	M 5.4
* The quake ruptured a section of the San Andreas fault. Items were thrown from tables and shelves and pictures knocked from walls, but there was no significant damage. As of 8/20, there were over 250 aftershocks recorded; the largest was a M3.3 on 8/18.		
June to Aug. 1998	Toms Place / Mammoth Lakes sequence	
June 8, 1998 [10:24 pm]	Toms Place (East of Mammoth Lakes) (about 0.5 miles S of the caldera boundary, near the Hilton Creek fault)	M 5.1
July 14, 1998	South of the Long Valley caldera (7 miles W of Toms Place, 11 miles ESE of Mammoth Lakes)	M 5.1
* As of 6:00pm on June 9th, the aftershocks included over 400 quakes big enough to be detected. Only 5 aftershocks were greater than M3.		
* As of July 2 nd , the total number of aftershocks was around 1600, including several quakes 12 miles S of Mammoth Lakes (9 miles S of Long Valley caldera).		
March 5, 1998	Coso Earthquake (southern Owens Valley, near Little Lake) (17 miles ENE of Little Lake)	M 5.2
* As of March 9, there were 495 recorded earthquakes in the Coso sequence; largest was a M5.1 aftershock that occurred on March 6.		
October 26, 1997	Offshore: 65 miles West of Trinidad (NW of Eureka)	M 5.2
April 26, 1997	Northridge aftershock (6 miles NNE of Simi Valley)	M 5.1
* Aftershock to the M 6.7 Northridge quake of January 17, 1994.		
* As of 4/27/97: 55 smaller aftershocks to this quake. This was the 10 th aftershock of M>5.0 since the Northridge earthquake; previous one occurred on 06/26/95.		
March 18, 1997	Calico Earthquake (12 miles ENE of Barstow in the Calico Mountains)	Rvds: M 5.3 (5.0)
* Aftershock of the M7.3 Landers earthquake of June 28, 1992.		
* This was the 23 rd M5+ quake in the continuing Joshua Tree/Landers/Big Bear sequence.		
January 21, 1997 [11:17 pm]	1 mile NW of Punta Gorda, off the coast of Cape Mendocino * M4.2 foreshock on Jan. 13; followed by a M4.6 aftershock on Jan. 22 at 12 am. Largest aftershock was a M5.2 on Jan. 25. No significant damage.	M 5.7
December 26, 1996	13 miles SW of Eureka (Northern California) – the Gorda plate	M 5.4
* Damage: \$5 million		
* Damage included cracked walls, broken windows, broken utility lines, and power outages. A fire destroyed a building.		
November 27, 1996	Coso Range swarm (16 miles E of Coso Junction)	M 5.3
* Followed by a M 5.1 quake occurring the next day and over 3,000 small aftershocks in the following six months.		
July 24, 1996	Offshore: West of Eureka (115 miles W of Crescent City)	M 5.7 (6.0)
January 7, 1996	Ridgecrest	M 5.2
September 20, 1995	10 miles North of the town of Ridgecrest	M 5.8
August 17, 1995	11 miles North of the town of Ridgecrest	M 5.4
* The M5.4 foreshock generated 2,500 aftershocks during the following 5 weeks. After the M5.8 quake, over 1,900 aftershocks occurred during the following 2 weeks.		
September 12, 1995	Markleeville (Double Springs Flats) (along the California-Nevada border north of Mammoth Lakes)	M 5.9
June 26, 1995	Northridge aftershock	M 5.0
May 9, 1995	Ridgecrest	M 5.5
February 18, 1995	Offshore: around 80 miles West of Eureka	M 6.6
* Followed on 3/01/95 by a M4.6 aftershock. Items knocked over, but no reports of damage.		
December 26, 1994	Eureka Earthquake: offshore - 12 miles WSW of Eureka (Northern California)	M 5.4
* Damage: over \$5 million. * Minor injuries.		
* Followed by a M 4.4 aftershock on 2/08/1995 (offshore 11 miles W of Eureka)		

September 12, 1994	Tahoe Valley (18 miles SE of Tahoe Valley – epicenter at Carter’s Station in Nevada) * Followed by a M 5.3 aftershock.	M 6.0
September 1, 1994	Mendocino Fracture Zone (located offshore about 90 miles SW of Cape Mendocino) * No damage due to its far-offshore location.	M 6.9~7.0
January 17, 1994 [4:31am] * Deaths: 57 ~ 60. * Damage: \$13 to \$20 billion in estimated insured & uninsured property damage. [\$12.5 billion in insured losses (includes commercial and auto claims, in addition to the \$8.3 billion in residential claims). By 1998, it was reported that insurers paid an estimated \$15.3 billion in losses.] Combined economic loss was \$20-\$40 billion. * Damage occurred in Los Angeles, Ventura, Orange & San Bernardino Counties, especially in the cities of Fillmore, Glendale, Santa Clarita, Santa Monica, Simi Valley, and in western & central Los Angeles. 25,000 dwellings were uninhabitable; 7,000 buildings were red-tagged (severely damaged) and 22,000 buildings were yellow-tagged (moderately damaged). 9 hospitals were closed, and 9 parking garages collapsed. * Major freeway damage occurred up to 32 km from the epicenter; collapses and other severe damage forced closure of portions of 11 major roads to downtown Los Angeles. Section of the I-5 Fwy collapsed. Major damage to Cal State University of Northridge, St. Vibiana’s Cathedral in Los Angeles, and the L.A. Coliseum. * One of the most significant incidents occurred at the Northridge Meadows Apartment Complex, a 3-story / 120 unit apartment complex, which collapsed from the quake. The first floor was crushed to a crawl space of 2 to 3 feet. There were 16 fatalities. * Intense aftershock sequence lasted for years and included more than 14,000 events, including ten M 5s – the largest of which was a M 5.9 which occurred 1 minute after the main jolt. 13 aftershocks of M 4.0+ occurred between January 18 & 28.	Northridge (San Fernando Valley, Southern California) (20 miles WNW of Los Angeles; 1 mile SSW of Northridge) Rvsd: M 6.7 Mw	
November 14, 1993	Parkfield area (Central California)	M 5.0 (4.6)
August 21, 1993	Landers aftershock (Southern California) (outside of Barstow, in the Calico Mountains)	M 5.0
May 27, 1993	Wheeler Ridge / Bakersfield (Southern California) (around 15 miles SSW of Bakersfield in Kern County)	M 5.2
May 17, 1993	Big Pine, California (Inyo County)	M 6.1
July 11, 1992 (13 miles NNE of the town of Mojave, on the Garlock Fault)	California City/Mojave (in Kern County) * Possibly triggered by the Landers quake.	M 5.7
July 5, 1992	Lavic Lake (San Bernardino County, Southern California)	M 5.0
June 28, 1992	Landers - Big Bear sequence (Southern California) * Deaths: 1 in Yucca Valley; 2 died from heart attacks. * Injuries: 402. * Damage: around \$92.3 million (includes both insured and uninsured property damage); around \$40 million in estimated insured property damage. * At least 4,369 homes were damaged & 77 were destroyed – estimated cost of \$48 million. Over 600 mobile homes fell off their foundations. 27 businesses were destroyed & 139 had minor damage - loss of approximately \$17 million. Damage to roads, schools, and other public facilities – estimated loss of \$27 million. * The M 6.1 Joshua Tree earthquake (which occurred on April 22, 1992) might have been a foreshock of these quakes. * Elevated microseismicity was recorded throughout the western U.S. within minutes of the jolt and lasted for several months. Most notable was the Little Skull Mountain M5.6 earthquake near the Nevada Test Site on the following day and a M5.5 jolt on the Garlock fault on July 11. Elevated activity was also recorded volcanoes at Mammoth Lakes, Mt. Shasta and Yellowstone.	
June 28, 1992 (4:57 am) * Damage occurred in Yucca Valley, Joshua Tree, and Landers. * Followed by an aftershock sequence consisting of thousands of tremors, including 143 quakes registering M4.0+ (19 of which were M5s, the largest was a M5.7). * Seven M5+ aftershocks occurred from 6/28 to 7/01:	Landers (High Desert of Southern California) (eastern side of the San Bernardino Mtns, near Landers; 6 miles N of Yucca Valley)	M 7.3 (7.6)
June 28, 1992 (8:05am) * Caused substantial damage in Big Bear area; landslides/blocked roads in the San Bernardino Mountains. * A M5.5 pre-shock, and M5.1 & M5.0 aftershocks two hours later. 3 other M5+ aftershocks: M5.1 on 8/17/92; M5.4 on 11/27/92; M 5.3 on 12/3/92.	Big Bear (San Bernardino Mountains, Southern California) (occurred just 3 hours after the Landers quake – 5 miles SE of Big Bear Lake; 25 miles E of San Bernardino)	M 6.4 (6.6)

- April 25-26, 1992** **Cape Mendocino Region (Northern CA) aka: The Petrolia/Ferndale or Lost Coast Quake**
(located onshore near Petrolia; in the area of the Mendocino Triple Junction) **M 7.2**
- April 25 [11:06am] 2 miles NW of Petrolia (Humboldt County) **M 6.5 (6.6), M 6.7 (6.5)**
- April 26 [12:41am & 04:18 am] about 14 miles offshore in the Gorda plate
- * Injuries: 95+ * Damages: around \$66 million from the 3 quakes.
 - * Plate-glass windows shattered and bricks & masonry fell onto the sidewalk and street. Homes were shaken from their foundations, chimneys toppled, and underground utility lines were broken. Scotia's shopping mall and businesses in Petrolia were destroyed by earthquake related fires. Ferndale, Fortune, Honeydew, Petrolia, Rio Del, and Scotia were declared federal disaster zones.
 - * April 25th earthquake produced some of the strongest ground shaking ever recorded. It uplifted a 12-mile stretch of coastline near Cape Mendocino by 1 to 4 feet, killing intertidal communities of barnacles, sea urchins and algae. The quake produced a tsunami that reached coastal communities within minutes and reached a maximum height of 1-1/2 feet at Crescent City.
- April 22, 1992** **Joshua Tree (Southern California)** **M 6.1**
- [9:50:23 pm PDT] (11 miles E of Desert Hot Springs; 18 miles N of Indio)
- * Injuries: 32 minor. * Damage: around \$34,000
 - * Preceded by a M 4.6 foreshock and followed by three M5 aftershocks South of Joshua Tree ~ M5.0 on 5/18/92; M5.0 on 07/24/92; & M 5.1 on 09/15/92.
 - * Damage was slight to moderate in Joshua Tree, Yucca Valley, Desert Hot Springs, Palm Springs, and Twentynine Palms.
- July – August 1991** **Honeydew Earthquake sequence** **M 6.2 – 7.1**
- | | | | |
|-----------------|---------|--|-------|
| July 12, 1991 | 7:50pm | 50 miles WNW of Crescent City in the Pacific Ocean | M 6.9 |
| August 16, 1991 | 3:26pm | 62 miles WSW of Crescent City, offshore | M 6.3 |
| August 17, 1991 | 12:29pm | Cape Mendocino region, near Honeydew | M 6.2 |
| | | (located onshore about 13 miles SSE of Cape Mendocino) | |
| August 17, 1991 | 3:30pm | around 62 miles WSW of Crescent City, offshore | M 7.1 |
- * Possibly a foreshock to the April 1992 Cape Mendocino earthquake.
 - * 60% of residents in Honeydew reported structural damage from the M6.2 quake.
 - * The "Honeydew" quake was the only one centered on land. It caused substantial damage in the Matole River Valley. Homes were shaken from their foundations, chimneys fell, walls cracked, and windows were broken. Landslides, rock falls, and liquefaction occurred. Water flows from local springs changed.
- June 28, 1991** **Sierra Madre (San Gabriel Valley in Southern California)** **M 5.8**
- [7:43 am PDT] (12 miles NE of Pasadena)
- * Deaths: 2. * Injuries: 100 (mostly minor). * Damage: \$33.5 million
 - * Caused extensive rockslides, but no surface rupture. Damage to mostly unreinforced masonry buildings – broken walls, etc.
- April 18, 1990** **Chittenden, California (about 6 miles NW of San Juan Bautista)** **M 5.4**
- * Probable aftershock to the Loma Prieta quake.
- February 28, 1990** **Upland/Claremont (Southern California)** **M 5.5**
- [3:43 pm] (2 miles NW of Upland; about 30 miles E of Los Angeles)
- * Injuries: 38 minor. * Damage: \$10.4 million
 - * Triggered landslides which blocked roads in the Mount Baldy area; some damage to the San Antonio Dam. In Claremont, Upland, and nearby cities, the most common structural damage was to unreinforced masonry like chimneys or substandard foundations.
- October 17, 1989** **Loma Prieta (Bay Area, Northern California)** **M 7.1 (Mw 6.9)**
- [5:04 pm] (15 miles NE of Santa Cruz, along the San Andreas Fault in the Santa Cruz Mountains)
- * Deaths: 63. * Injuries: 3,757.
 - * Damage: around \$7 billion (includes insured and uninsured property damage) [around \$960 million in insured losses]. Hardest hit were San Francisco, Oakland, Santa Cruz, Los Gatos, and Watsonville. Other areas with severe property damage included Monterey, Boulder Creek, Corralitos, Hollister, Moss Landing and several communities in the Santa Cruz Mountains.
 - * 414 single-family homes & 104 mobile homes were destroyed; over 18,000 homes were damaged. Chimney damage, cracks in walls and driveways, houses shifting from their foundations, wall failures, etc. 97 businesses were destroyed and 2,575 were damaged.
 - * In Watsonville, 5 miles from the earthquake's epicenter, about 90% of the structural damage was from the failure of unreinforced masonry buildings and wooden structures that were not properly bolted to foundations. In Santa Cruz: 135 residential structures suffered major damage. The business district was destroyed when brick facades and older unreinforced masonry buildings collapsed.
 - * Liquefaction of the soil caused damage to runways and bridges. Liquefaction and fire caused heavy damage to houses and apartment buildings in the Marina District of San Francisco.
 - * 1.25 miles of the Cypress Street elevated section of Interstate 880 (I-880) in Oakland collapsed, killing 42 people. 30 feet of the upper deck of the San Francisco-Oakland Bay Bridge also collapsed. The Embarcadero Freeway was damaged and later demolished.
 - * More than 1,000 landslides and rockfalls occurred in the Santa Cruz Mountains.

January 18, 1989	10 miles South of Malibu (Southern California) * Several injuries and slight damage.	M 5.0
December 3, 1988	Pasadena (Southern California)	M 5.0
June 12, 1988	Around 8 miles NE of San Jose, along the Calaveras Fault, Santa Clara Valley	M 5.3
June 10, 1988	Tejon Ranch / Grapevine (in Kern County) (15 miles NE of Frazier Park; 32 miles SSE of Bakersfield) * Caused the pumping plant on the California Aqueduct to be temporarily shut down.	M 5.4
November 23, 1987	Elmore Ranch (Imperial County, Southern California) (17 miles SE of Salton City; around 90 miles E of San Diego)	M 6.2
November 24, 1987	Superstition Hills (Southern California) (20 miles SSE of Salton City; around 90 miles E of San Diego) * Injuries: 94. * Damage: \$2.7 million to \$4 million (in Imperial County)	M 6.6
October 1, 1987	Whittier Narrows (San Gabriel Valley, So. California)	M 5.9 (5.8)
October 4, 1987 [7:42 am]	Whittier Narrows ~ aftershock (7 miles SE of Pasadena; around 10 miles E of downtown Los Angeles) * 2 quakes, 3 days apart, occurred on a previously unknown fault east of Los Angeles, between Whittier and Montebello along the WNW trending Whittier fault zone. * Deaths: 8. * Injuries: 200. * Damage: \$358 million. More than 10,400 buildings damaged - mainly older unreinforced masonry residential and commercial buildings in Whittier, Alhambra and Pasadena. 123 houses & 1,347 apartment units were destroyed; 513 houses & 2,040 units sustained major damage. Damage to the San Gabriel Mission. Minor damage to 24 bridges in the area.	M 5.5 (5.3)
July 31, 1987	Mendocino area	M 6.0
July 21, 1986 [7:42 am / 14:42 UTC]	Chalfant Valley (Bishop), California (about 6 miles N of Bishop, in the east-central Sierra Nevada Mountains, along the northern portion of the Fish Slough fault zone) * Injured: 2 * Estimated property damage: \$2.7 million in the Bishop-Chalfant area. * Bishop: cracked chimneys & walls, broken windows, etc. Chalfant: about 20 mobile homes were damaged and a number of others were shaken off their supports, damaging water/gas lines. Many small landslides and rockfalls occurred in the epicentral area. * A foreshock occurred on July 20 at 14:29 UTC, and a M 5.2 aftershock occurred on July 31 at 07:22 UTC. Thousands of smaller aftershocks occurred through 09/30/86.	M 6.2
July 13, 1986 [6:47 am PDT]	Offshore: 32 miles WSW from Oceanside, Southern California * Deaths: 1. * Injuries: 28. * Damage: almost \$1 million * Over 50 buildings were damaged in this quake.	M 5.8 (5.3)
July 8, 1986 [2:21 am]	North Palm Springs (Southern California) (6 miles NW of North Palm Springs in the Northern Coachella Valley, in the Mission wash area between the Mission Creek and Banning faults) * Injuries: 40. * Damage: around \$4.5 to \$6 million * Significant damage to at least 51 homes in the Palm Springs/Morongo Valley areas; 16 business structures and 4 houses destroyed. Broken utility lines. * The aftershock sequence included as many as 13 M4's over several years.	M 6.1 (5.8)
August 4, 1985	East of Coalinga ~ aftershock (Southern California)	M 5.8
November 26, 1984	8 miles SSE of Toms Place, California (East of Mammoth Lakes)	M 5.6
November 23, 1984	Eastern Sierra (Round Valley), California (10 miles W of Bishop in Round Valley) * Followed by thousands of aftershocks, including three of M5+.	M 6.2
September 10, 1984	Offshore: Mendocino Fracture Zone (around 140 miles SW of Eureka)	M 6.7
April 24, 1984	Morgan Hill (Northern California) (Along the Calaveras Fault, Santa Clara Valley) * Injuries: 27. * Damage: around \$10 million * One bridge damaged; damage was mainly to homes shifted off their foundations; cracks in walls, driveways/sidewalks, etc. * Fire was a primary cause of damage in the cities of Morgan Hill and San Jose. A fire at a San Jose shopping center was the largest single loss in the earthquake, totaling approximately \$1 million.	M 6.1

May 2, 1983 [4:42 pm]	Coalinga (Central California in western San Joaquin Valley) (near Anticline Ridge, about 9 miles NE of Coalinga)	M 6.5
<ul style="list-style-type: none"> * Injuries: 200, 47 seriously. * Damage: \$31 million * Over 800 houses destroyed or severely damaged – slid off their foundations, collapsed brick/block walls, etc. Major damage to over 70 apartment buildings. In the 8-block downtown commercial district, 59 of the 139 buildings collapsed or were heavily damaged. Most severe damage occurred to pre-1930 buildings of unreinforced brick masonry wall construction. Production from nearby oil fields was shut down for some time. * Strong aftershocks continued for more than two years. The largest 1983 aftershocks included a M 6.0 on July 22 and a M 5.2 on September 9. 		
September 30, 1981	Mammoth Lakes	M 5.8
September 4, 1981	North of Santa Barbara Island	M 5.9
April 26, 1981	Westmorland (Southern California)	M 6.0
November 8, 1980 [2:27 am]	Cape Mendocino (Gorda) /Eureka (Northern California) or Trinidad Earthquake (located offshore about 30 miles W of Trinidad)	M 7.2
<ul style="list-style-type: none"> * Injuries: 8. * Damage: around \$1.75 million * Freeway overpass on Highway 101 S of Eureka collapsed. Many chimneys were knocked down; water & sewer lines severed; & 2 homes shifted from their foundations. Many cracked walls and broken windows. 		
June 8, 1980	Victoria in Northern Baja California (SSE of Calexico, CA – south of the US/Mexico border)	M 6.4
May 25-27, 1980	Mammoth Lakes / Owens Valley area (sparsely populated area)	M 6.2
<ul style="list-style-type: none"> * Injuries: 13. * Damage: \$2 million * Followed by a M6.0 aftershock and two M6.1 aftershocks. 		
February 25, 1980	White Wash Earthquake (near the Anza seismic gap) (25 miles S of Palm Springs)	M 5.5
January 24, 1980 [11:00 am]	Livermore (Contra Costa County, California) (in the East Bay hills of Contra Costa County, centered just N of Livermore along the Marsh Creek-Greenville fault system)	M 5.8 (5.5)
<ul style="list-style-type: none"> * Deaths: 1 (possible heart attack). * Injuries: 44. * Damage: \$11.5 million. * Most commonly reported damage consisted of broken utility lines, broken windows and glassware, chimney damage, mobile homes knocked off supports, cracked plaster, and fallen ceiling tiles. About \$10 million of the damage occurred in the Lawrence Livermore Laboratory. * Surface fault ruptures occurred near the overpass at Interstate 580 & Greenville Road and extending northwest-ward for about 3.7miles. Aftershocks included a M5.1 occurring one minute later & a M5.4 on January 26th. 		
October 15, 1979	Imperial Valley, Southern CA (Mexico-California border) (18 miles SE of El Centro in Baja California)	M 6.5
<ul style="list-style-type: none"> * Injuries: 91. * Damage: \$30 million * Destroyed 2 houses & 11 commercial buildings; damaged 1,565 houses & 440 commercial buildings. Also damaged the All American Canal and the irrigation system in the Imperial Valley. * This quake produced a slip in the earth of about 20 inches. 		
August 6, 1979	Coyote Lake, Santa Clara Valley (SE of Morgan Hill, along the Calaveras Fault)	M 5.8
<ul style="list-style-type: none"> * Injuries: 16. 		
January 1, 1979	8 miles South of Malibu (Los Angeles County, Southern California)	M 5.2
August 13, 1978	Santa Barbara (Southern California) (under the Santa Barbara Channel - less than 1 mile SE of Santa Barbara)	M 5.1
<ul style="list-style-type: none"> * Injuries: 65, mostly minor. * Damage: \$15 million * Preceded by a swarm of small earthquakes from March through July 1978. Felt strongly in Goleta and at UC Santa Barbara. Shattered windows, derailed a freight train, and damaged several buildings. 		
November 26, 1976	Offshore: West of Orick (Northern California) (around 80+ miles offshore, W of Orick and NW of Eureka)	M 5.8 ~6.3
August 1, 1975	4.5 miles South of Oroville, California (along the western foothills of the Sierra Nevada; along the Cleveland Hill fault)	M 5.8
<ul style="list-style-type: none"> * Damage: \$2.5 million * Toppled chimneys, broke windows, cracked walls, and downed lighting fixtures. * Caused nearly 2.5 miles of discontinuous surface fault ruptures, stopping just short of Oroville Dam. 		

May 31, 1975	Galway Lake (36 miles SE of Barstow ~ Southern California)	M 5.0
February 21, 1973	Offshore: Point Mugu (Ventura County, Southern CA) (9 miles SE of Oxnard; 40 miles W of Los Angeles) * Injuries: 15. * Damage: \$1 million * Destroyed powerlines, but caused little other serious damage.	M 5.3 (5.9)
February 9, 1971 [6:01 am PST]	San Fernando ~near Sylmar (Southern California) (occurred in a sparsely populated area of the San Gabriel Mountains, near northern San Fernando Valley, along the San Fernando fault zone; 6 miles NNE of Sylmar) * Deaths: 65, mostly at the V.A. Hospital where 49 people died. * Injuries: about 2,000 injuries. * Damage: \$553 million (includes insured and uninsured losses). * Caused extensive property damage in the Los Angeles area, including the collapse of structures at Olive View Hospital in Sylmar & the Veterans Administration Hospital at San Fernando; the collapse of several freeway overpasses; and damage to the Lower Van Norman Dam and the Pacoima Dam. Caused more than 10 miles of discontinuous surface ruptures with average displacements of about 3 feet both horizontally and vertically. * Followed by a strong aftershock sequence that included four M5+ quakes.	M 6.6
September 12, 1970	Lytle Creek area (15 miles NW of San Bernardino), Southern California * Preceded by a M 4.1 foreshock. <i>Caused landslides and blocked roads; minor damage elsewhere.</i>	M 5.2
October 1, 1969 [9:57 pm]	Santa Rosa (Northern California) (occurred on the Rodgers Creek fault) * Deaths: 1. * Injuries: 15. * Damage: \$8.35 million * The 2 quakes occurred 80 minutes apart; caused significant damage in Santa Rosa. 74 buildings were damaged (21 required subsequent demolition).	M 5.6 & 5.7
April 28, 1969	Coyote Mountain, California (on the Anza Fault)	M 5.8
June 25, 1968	Punta Gorda	M 5.4
April 8, 1968	Borrego Mountain (Imperial Valley, Southern CA) (1 mile N of Ocotillo Wells) * Severed power lines in San Diego County & collapsed ceilings in Imperial Valley. Caused landslides and hurled large boulders downslope.	M 6.4 (6.5)
September 12, 1966	Truckee, California	M 6.0
June 27, 1966	6 miles NW of the town of Parkfield, California * Sparsely populated area – very little damage. Parkfield is now a center for earthquake prediction research.	M 6.0

Historic California Earthquakes (1965 and Prior)

<i>Date</i>	<i>Location of Earthquake</i>	<i>Magnitude</i>
October 8, 1965	Santa Clara Valley, California	M 6.8
1962	Willits (Northern California)	M 5.2
August 9, 1960	Offshore: West of Cape Mendocino	M 6.2
April 1, 1959	Loyalton, California (along the California/Nevada border) (north of Truckee, centered between Loyalton, CA & Border Town, NV – centered along the southern portion of Lassen Peak-Almanor-Mohawk fault zone) * Damage consisted of fallen chimneys, shattered windows, cracked walls.	M 5.8
March 2, 1959	Castro fault (Northern California)	M 5.3
March 22, 1957	Daly City (Northern California) * Injuries: 40. * Damage: over \$1 million	M 5.3
October 11, 1956	Offshore: West of Cape Mendocino	M 6.0
October 24, 1955	Concord (Northern California)	M 5.4
December 21, 1954	Arcata (Humboldt Bay area), California (centered NE of Arcata in the Blue Lake-Fieldbrook area) * Death: 1. * Injuries: several. * Damage: \$2.1 million * Damage consisted of many toppled chimneys in Arcata and Eureka, shattered windows, and damaged merchandise. Eureka City Hall and the Humboldt County Courthouse suffered extensive damage, and Hwy. 101 between Arcata and Eureka cracked and bulged in places. * A strong aftershock occurred on December 30 which contributed to damage.	M 6.5
November 25, 1954	Offshore: West of Cape Mendocino, CA	M 6.5
March 19, 1954	San Jacinto Fault aka: the Arroyo Salada earthquake (Southern California) (15 miles W of Salton City)	M 6.4
January 12, 1954	West of Wheeler Ridge (Kern County)	M 5.9
September 23, 1953	On the Anza Fault	M 5.1
November 21, 1952 [11:46 pm]	San Simeon (Bryson), California (around 5 miles N of Hearst Castle, centered in the central Santa Lucia Range along the Nacimiento fault zone) * Caused widespread light to moderate damage to many surrounding towns, including Cambria, King City, Paso Robles, San Luis Obispo, San Simeon, and Santa Maria. Damage included fallen chimneys, cracked walls and severed waterpipes.	M 6.0
August 22, 1952	6 miles ESE of Bakersfield (Kern County) * Deaths: 2. * Injuries: 40. * Damage: an additional \$10 million in property damage. * The fifth strongest aftershock of the July 21 Kern County quake. Most damage occurred to unreinforced brick buildings in a 64-block area of downtown Bakersfield.	M 5.8
July 21, 1952 [3:52 am]	Arvin-Tehachapi (Kern County earthquake) (23 mile S of Bakersfield; 40 miles SW of Tehachapi; along White Wolf Fault) * Deaths: 12 (9 of them children). * Injuries: 35. * Widespread damage: around \$50-60 million (includes the August 22 nd quake). * Over 400 buildings in Kern County were damaged/destroyed from the quake and its aftershocks, of which 100 had to be torn down. Many of the damaged buildings were of unreinforced masonry/brick work. 70% of downtown Tehachapi was destroyed. Reinforced concrete railroad tunnels with 18-inch thick walls were cracked, twisted and caved in. Railroad tracks were shifted and bent into S shapes. Much damage to the agricultural area in Arvin. * At least twenty M5+ aftershocks occurred, including a M6.4 on July 21, a M6.1 on July 23, and a M6.1 on July 29. * On August 22, a M5.8 aftershock near Bakersfield took two more lives and caused extensive damage to previously weakened buildings.	Ms 7.7 (Mw 7.3)

December 25, 1951	South of San Clemente Island *Caused minor damage from Long Beach to San Diego.	M 5.9
December 21, 1951	Offshore: West of Cape Mendocino * Deaths: 1. * Damage: \$2 million	M 6.6
October 8, 1951	Offshore: West of Cape Mendocino	M 6.0
August 6, 1951	San Andreas Fault (near Pinnacles National Monument)	M 4.9
May 2, 1949	Pinto Mountain (Joshua Tree area)	M 5.9
March 25, 1949	Offshore: West of Eureka	M 6.2
December 4, 1948	Desert Hot Springs (Southern California) (5 miles E of Desert Hot Springs within the Little San Bernardino Mountains) * Caused damage mainly in Palm Springs, but also caused water pipes to break in Los Angeles, Pasadena, and San Diego.	M 6.5
February 24, 1948	Near San Clemente Island (Southern California)	M 5.3
April 10, 1947	Manix, California (25 miles E of Barstow) * Largest quake (until 1992) and the first to cause surface rupture in the Mojave area. * Minor damage consisted of cracked concrete floors and cracked walls.	M 6.4
March 15, 1946	Walker Pass (near Lake Isabella) (32 miles ENE of Lake Isabella in a remote region of Upper South Fork Valley of the Kern River; 5 miles NNW of Walker Pass, along the southeastern margin of the Sierra Nevada Mountains) * Damage included cracked walls and shattered windows. Landslides in the mountains, and cracks in the ground and in the concrete along the L.A. Aqueduct. * Aftershock sequence lasted for years and consisted of five M5's and at least two dozen M4's which occurred mainly during the first few weeks.	M 6.3 (6.0)
September 28, 1945	Offshore: West of Crescent City	M 6.0
May 19, 1945	Offshore: West of Cape Mendocino	M 6.2
October 21, 1942	Fish Creek Mountains (Imperial Valley, Southern CA) (28 miles W of Brawley; around 60 miles E of San Diego)	M 6.5 (6.6)
November 14, 1941	Torrance-Gardena (Southern California) (near Wilmington, along the Newport-Inglewood fault zone) * Damage: \$1.1 million * Some 50 business/residential structures received significant damage. Damage to oil fields and equipment; ruptured oil tank.	Rvds: M 4.8 (5.4)
October 21, 1941	Compton (Southern California) (E of Carson, along the Newport-Inglewood fault zone) * Damage: around \$100,000 * Light to moderate damage in Compton and Gardena.	M 4.9 (4.8)
October 3, 1941	Offshore: West of Cape Mendocino	M 6.4
September 14, 1941	Tom's Place, California (around 15 miles SE of Mammoth Lakes) * The M6.0 quake occurred around 2 hours after the M5.8.	M 5.8 & 6.0
June 30, 1941	Carpinteria/Santa Barbara, California (6 miles ESE of Santa Barbara; 4 miles WSW of Carpinteria) * Damage: around \$150,000 * Damage consisted of broken water mains and cracked walls.	M 5.9 (5.5)
May 13, 1941	Offshore: West of Cape Mendocino	M 6.0
February 9, 1941	Offshore: West of Cape Mendocino	M 6.6

May 18, 1940 [8:37 pm PST] * Deaths: 9. * Followed by a M5.5 aftershock an hour later. Damaged irrigation systems, bent railway lines, destroyed bridges, and shifted the earth by 6 feet. At Imperial, 80% of the buildings were damaged by the first quake. The second quake damaged Brawley's downtown business area; many structures were damaged and about 50% of them had to be condemned.	Imperial Valley (Southern California) (5 miles N of Calexico; around 90 miles E of San Diego) * Injuries: 20. * Damage: \$6 million	M 7.1 (6.9)
February 8, 1940	Chico (Southern California)	M 6.0
March 25, 1937	Buck Ridge aka: the Terwilliger Valley earthquake (Southern California) (around 13 miles NE of Borrego Springs; 20 miles S of Indio)	M 6.0
June 3, 1936	Offshore: West of Cape Mendocino	M 5.9
Dec. 30-31, 1934 Dec. 30: [5:52 am] Dec. 31: [10:45 am] * Caused much damage in the Imperial Valley (CA). Damaged bridges, twisted railroad tracks, brick/masonry buildings collapsed, damaged irrigation ditches, and severed underground pipes. No reports of casualties.	Laguna Salada (Baja California) (California/Mexico border region, S of Calexico, along the Cerro Prieto fault zone) * A M6.7 quake followed by a M7.1 quake on the following day.	M 6.7 & 7.1
July 6, 1934	West of Eureka	M 6.5
June 8, 1934	Parkfield, California	M 6.0
March 10, 1933 [5:54 pm] * Deaths: 115 – 120. * Most severe damage occurred in Compton and Long Beach. Buildings collapsed; houses were knocked off their foundations. Many schools were damaged and that led to the establishment of state standards for safer school design. * Strong aftershock sequence lasting nearly three years. Consisted of over 120 M4+ quakes. This included ten in the M5 range (six of which occurred within 24 hours of the mainshock). Largest was a M5.5 that occurred the same night.	Offshore: Long Beach (Southern California) (SE of Long Beach, centered near the border of Huntington and Newport Beach, on the Newport-Inglewood-Rose Canyon fault zone) * Injuries: 600. * Damage: \$40 million (1933 figures)	M 6.3- 6.4
June 6, 1932 * Deaths: 1. * Property damage was severe in Eureka – toppled chimneys, shattered windows and ruptured water mains. Several homes were shaken from foundations in Arcata and liquefaction occurred around the Humboldt Bay.	North of Arcata, California / Offshore of Eureka (Humboldt Bay area) * Injuries: several.	M 6.4
November 4, 1927 [5:50 am] * Buildings in Arroyo Grande, Berros, Guadalupe, Halcyon, Lompoc, Los Alamos, Nipomo, and Santa Maria sustained heavy damage, including collapsed walls and ceilings, toppled chimneys, etc. * Caused liquefaction and earth/rockslides throughout the south-central CA Coast Range. * A 6-foot high tsunami was observed at Surf, Pismo Beach, and Port San Luis. The offshore quake shook ships in the Pacific and stunned/killed many fish.	Offshore: Point Arguello (Lompoc), California (offshore about 7 miles W of Point Sal or 21 miles WSW of Santa Maria)	M 7.1 – 7.3
September 17, 1927	Bishop region	M 6.0
December 10, 1926	West of Cape Mendocino	M 6.0
October 22, 1926	Off the coast of Monterey, California * Two quakes occurred 1 hour apart. Damage at Monterey, Santa Cruz, and San Juan Bautista	M 6.1 & 6.1
June 29, 1925 * Deaths: 13. * The quake leveled 36 blocks of downtown Santa Barbara and compelled legislators to improve building standards.	Santa Barbara, California (offshore in the Santa Barbara Channel; 8 miles SW of Santa Barbara) * Damage: \$6.5 - \$8 million	M 6.2 – 6.8
June 4, 1925	West of Eureka, California	M 6.0
July 22, 1923	North San Jacinto Fault (7 miles South of San Bernardino) * Injuries: 2 critically. * Minor damage – primarily in San Bernardino and Redlands.	M 6.3 (6.0)
January 22, 1923	Offshore: Cape Mendocino (off the coast of Humboldt County) * Damaged homes at Ferndale, Petrolia, and Upper Mantole; broke water lines.	M 7.2

March 10, 1922	Parkfield	M 6.3
January 31, 1922	Offshore: West of Eureka	M 7.3
January 26, 1922	Offshore: West of Eureka	M 6.0
July 15, 1918	Offshore: West of Eureka	M 6.5
April 21, 1918	San Jacinto/Hemet, California	M 6.8
* Deaths: 1. * Injuries: 10. * Damage: \$200,000 * Quake caused many landslides, changed the course of several streams, and caused the temperature of hot springs to change. Most damage occurred in the towns' business district due to collapsed masonry.		
November 10, 1916	South of Death Valley	M 6.1
October 23, 1916	Tejon Pass region	M 5.3
December 31, 1915	West of Eureka	M 6.5
June 22, 1915	El Centro (southern Imperial Valley, Southern California)	M 6.3 & 6.3
[03:59 UTC (06/23/15) (5 miles ENE of El Centro, California) [04:56 UTC * "Two" 11-second quakes, occurring one hour apart, wrecked buildings, overturned chimneys, and knocked down walls in the Calexico-El Centro area. Second shock completed the destruction of the buildings that were already weakened. Damage extended from Mexicali north to Calexico, El Centro, and Heber, where almost every brick and adobe building was damaged. * 6 killed and several seriously injured in Mexicali by the second quake. * Damage: estimated at \$900,000 for both Mexico and the United States (damage at El Centro was estimated at \$600,000).		
May 6, 1915	West of Cape Mendocino	M 6.2
April 24, 1914	Truckee region	M 6.0
February 18, 1914	Truckee region	M 5.5
July 1, 1911	Morgan Hill (Central California)	M 6.6
(Santa Clara Valley region on the Calaveras fault) * Caused substantial damage at Gilroy, Morgan Hill, Los Gatos, San Jose, Santa Clara, and other nearby towns. Several buildings were wrecked while others sustained cracked walls, downed chimneys, and broken windows.		
August 5, 1910	West of Crescent City	M 6.6
May 15, 1910	Northwest of Lake Elsinore (Southern California)	M 6.0 (5.5)
[8:57 am] (around 52 miles SE of Los Angeles in Temescal Valley) * Damage included toppled chimneys over a wide region, including Corona, Riverside, and Temescal; shattered windows & cracked walls.		
March 19, 1910	West of Cape Mendocino	M 6.0
March 11, 1910	Watsonville	M 5.8
October 29, 1909	Cape Mendocino	M 5.8
November 4, 1908	Death Valley, California	M 6.0
September 20, 1907	San Bernardino region	M 5.3
April 23, 1906	Arcata, California	M 6.4
April 19, 1906	Imperial Valley, California	M 6.2
April 18, 1906	San Francisco, California (along the San Andreas fault)	Ms 8.25, Mw 7.8
[5:12 am local time] (epicenter was offshore from the San Francisco–San Mateo county line) * Deaths: in 2005, the death count was raised from an original estimate of 478 to above 3,000; however, a final official number is not known. * Number of injured: unknown. * The magnitude was estimated at 7.8 to a possible 8.3, since a precise method of measuring seismic activity was not yet available. A strong foreshock occurred at 5:12 a.m., followed by the main shock some 20 to 25 seconds later. The shaking from the major quake lasted approximately 45 to 60 seconds, and was felt from southern Oregon to south of Los Angeles and inland as far as central Nevada.		

April 18, 1906	San Francisco, California (along the San Andreas fault)	(con't)
<ul style="list-style-type: none"> * The earthquake and ensuing 3-day fire destroyed much of the city, leaving 250,000 homeless. * Damage: direct quake losses of about \$24 million, as well as fire losses of about \$400 to \$500 million. * Per the Insurance Information Institute (III), insured losses were about \$235 million. Of this amount, only \$180 million was able to be paid by the insurers (approximately \$3.9 billion in 2009 dollars). * Earthquake damage was extremely severe in SF. Many buildings collapsed – buildings made of brick and unreinforced masonry, especially those built on landfills. The quake ruptured gas and water mains, causing fires to break out among the city's many wooden structures and leaving the fire department with few functioning water sources. Dynamite was used on neighborhood blocks and mansions in an attempt to create firebreaks; however, some ill-placed explosions helped spread the fire. By the time it was over, 522 city blocks (over 4 square miles of the city) and 28,188 buildings were destroyed (by one count – 24,671 wood buildings and 3,168 brick buildings). * The severe shaking brought down buildings 60-80 miles away, and caused cracked walls up to 100 miles away. Damage occurred throughout San Jose, Hollister, and cities throughout Sonoma County. Santa Rosa's downtown business district was destroyed as were many of its residences. Stanford University suffered severe damage. * Surface ruptures occurred for over 270 miles along the northernmost section of the San Andreas Fault, from a fault splay at Shelter Cove in Humboldt County to Pajaro Gap at the southern extent of the Santa Cruz Mountains. 		
August 3, 1903	San Jose, California	M 5.5
June 11, 1903	San Jose, California	M 5.5
August 1, 1902	Los Alamos (in northern Santa Barbara County), California	M ?
March 3, 1901	Parkfield, California (along the San Andreas fault in Central California)	M 6.4
<ul style="list-style-type: none"> * Chimneys toppled and windows shattered over a wide area. * The quake occurred in nearly the same location as two quakes prior to it (1857 and 1881), but it was not until the 1980's and after three more quakes (1922, 1934, 1966) of similar magnitude that a pattern of every 21-22 years was discovered. In an effort to "catch a quake", the USGS set up a sophisticated monitoring network to understand the dynamics of how and when an earthquake occurs. However, since 1966 to 2004, there have been no temblors registering greater than M 5.0. 		
December 25, 1899	San Jacinto Valley region (Southern California) (centered in the southern portion of the valley near Hemet & San Jacinto, along northern segment of the San Jacinto fault zone)	M 6.4 – 6.6
<ul style="list-style-type: none"> * Deaths: 6 (at the Soboba Indian Reservation by falling adobe walls). * Severely Injured: 8. * Heavy damage to both towns – most brick buildings were either badly damaged or destroyed. 		
July 22, 1899	Lytle Creek/Cajon Pass region (Southern California) (around 15 miles NW of San Bernardino) * Triggered landslides; heaviest damage occurred in San Bernardino area.	M 5.75
July 6, 1899	Morgan Hill, California	M 5.75
April 16, 1899	Offshore: West of Eureka (Northern California)	M 7.0
<ul style="list-style-type: none"> * It was described as one of the most severe shocks ever experienced. Felt along the California coast from Crescent City in the north to Albion in Mendocino County in the south. 		
April 15, 1898	Mendocino, California	M 6.5
March 31, 1898	Mare Island (Sonoma County)	M 6.5
<ul style="list-style-type: none"> * Damage: \$350,000. Damaged several buildings at Mare Island Naval Yard and Tubbs Island; knocked houses in Sonoma County off their foundations. 		
June 20, 1897	Gilroy, California (occurred along the Calaveras fault in the south San Francisco Bay Area; centered in the Santa Clara Valley, south of San Jose near Gilroy)	M 6.25
<ul style="list-style-type: none"> * Numerous unreinforced brick buildings collapsed throughout Santa Clara Valley, at Gilroy, Hollister and Morgan Hill. Brick chimneys toppled in Salinas and San Jose. No injuries were reported. 		
July 31, 1897	Mendocino area	M 6.0
August 17, 1896	Southeast Sierra Nevada	M 6.0
October 23, 1894	East of San Diego	M 5.75
September 30, 1894	Cape Mendocino region	M 6.0

July 30, 1894	Lytle Creek region (Southern California)	M 6.0
November 13, 1892	Hollister, California	M 5.75
May 28, 1892	San Jacinto or Elsinore fault region	M 6.5
April 19, 1892	Vacaville, California	M 6.4
<p>* Several buildings at Allendale, between Vacaville and Winters, collapsed. Ground fissures formed near Allendale. At Vacaville, almost all brick structures were destroyed, many frame buildings were damaged, and chimneys were twisted or knocked to the ground. Similar damage was reported from Winters (Yolo County). In Dixon, many school buildings were almost ruined.</p>		
April 21, 1892	Winters, California	M 6.4
<p>* Weakened structures hit by the April 19 earthquake were further damaged. At Winters, many buildings that withstood the April 19 shock were leveled. At Esparto, every brick chimney fell and wood-frame buildings were wrenched out of shape. Many chimneys were wrecked at Sacramento and Woodland. Additional loss was slight at Dixon and Vacaville.</p>		
February 23, 1892	Imperial Valley (Southern California)	M 7.8
<p>* Destroyed the adobe buildings at the old Carrizo Station; destroyed a church & schoolhouse in Paradise Valley; caused broken chimneys/cracked walls in San Diego.</p>		
July 26, 1890	Cape Mendocino region	M 6.25
April 24, 1890	Pajaro Gap / San Juan Bautista region	M 6.0
<p>* Damaged brick and framed buildings from San Juan Bautista to Green Valley</p>		
February 9, 1890	San Jacinto or Elsinore fault region (?)	M 6.5
September 30, 1889	Bishop region	M 5.75
June 20, 1889	Susanville, California	M 6.0
May 19, 1889	Antioch, California	M 6.25
April 29, 1888	Mohawk Valley (Plumas County)	M 6.0
April 12, 1885	South Diablo Range (near Bitterwater, San Benito County)	M 6.25
January 31, 1885	Susanville, California	M 5.75
March 26, 1884	Santa Cruz Mountains	M 6.0
January 28, 1884	Klamath Mountains	M 5.75
September 5, 1883	Offshore: Santa Barbara Channel	M 6.25
March 6, 1882	Hollister, California	M 5.75
April 10, 1881	West San Joaquin Valley	M 6.0
February 2, 1881	Parkfield, California	M 5.75
May 9, 1878	Punta Gorda region	M 6.0
November 15, 1875	Imperial Valley - Colorado River Delta	M 6.25
January 24, 1875	Honey Lake (Lassen County)	M 6.0
November 23, 1873	Crescent City (Northern California)	M 6.7 - 7.3
<p>* Damage to brick buildings in Crescent City and in towns along the Oregon Coast.</p>		
May 3, 1872	Imperial Valley (Southern California)	M 5.75

March 26, 1872 [~2:30am]	Owens Valley (Sierra Nevada Fault) * Deaths: 27. * Injuries: 56. * Damage: \$250,000 * One of the largest quakes in California's history. The town of Lone Pine was destroyed and the Sierra Nevada rose by 13 feet. Aftershock sequence was intense, including three M 6 quakes - the largest of which registered M6.9 on April 11. * Landslides and rock falls occurred throughout the mountains; water spouts were formed around Owens Lake and liquefaction failures produced enormous cracks around the perimeter of the eastern Sierra lake. Extensive surface fault ruptures occurred for over 76 miles, from south of Owens (Dry) Lake near the Haiwee Reservoir, to a little north of Big Pine.	M: 7.4 - 7.8
March 2, 1871	Offshore: Cape Mendocino	M 6.0
February 17, 1870	Los Gatos, California	M 6.0
October 21, 1868 [7:53 am]	South Hayward Fault (east San Francisco Bay area) * Deaths: 30. * Property loss: \$350,000 * Occurred along the southern extension of the Hayward fault in the east San Francisco Bay Area, and caused extensive surface fault ruptures from Castro Valley to about Coyote Creek in Milpitas. * Damage was severe in San Francisco, San Leandro, and especially in Hayward. Nearly every building there suffered extensive damage and many structures were completely wrecked.	M 6.8
July 15, 1866	West San Joaquin Valley	M 6.0
October 8, 1865 [~12:45 pm]	Santa Cruz Mountains (foothills of Santa Clara County) * First major recorded earthquake to hit San Francisco. * Damage: \$500,000 * Quake caused severe damage in several towns – New Almaden, Petaluma, San Francisco, San Jose, Santa Clara, and Santa Cruz.	M 6.5
March 5, 1864	East of San Francisco Bay	M 5.75
February 26, 1864	North of Watsonville (San Juan Bautista region, Central California) * Caused widespread local damage, felt as far away as Napa	M 5.9
May 27, 1862	San Diego region	M 6.0
July 4, 1861	San Ramon Valley	M 5.75
December 16, 1858	San Bernardino region	M 6.0
November 26, 1858	San Jose region	M 6.25
January 9, 1857 [8:24 am]	Fort Tejon (on the San Andreas Fault in Central CA) (about 45 miles NE of San Luis Obispo ~ exact epicenter uncertain) * Deaths: 1. * One of the greatest quakes recorded in the U.S., it caused over 220 miles of surface ruptures along the San Andreas Fault (from Parkfield almost to Wrightwood), with maximum horizontal fault displacements of about 32 feet. Mainshock was preceded by several slight to moderate foreshocks. The intense aftershock sequence included at least two M6 quakes on January 9th and 16th. * Caused severe damage at Fort Tejon, and much damage to the mission in Ventura; the water of Tulare Lake and some rivers were thrown upon their banks. Caused the Kern River to flow backwards for a time.	M 7.9
February 15, 1856	San Francisco Peninsula	M 5.5
July 10, 1855	Los Angeles region	M 6.0
June 1838	San Francisco Peninsula * This quake is associated with a probable rupture on the San Andreas Fault (from near Santa Clara to San Francisco). * Cracked walls at Mission Dolores (San Francisco) and cracked walls/broken pottery in Monterey.	M 6.8
June 10, 1836	Hayward Valley	M 6.75
September 24, 1827	Los Angeles region	M 5.5

December 21, 1812 [11:00 am]	Santa Barbara Channel (Santa Barbara – Ventura region) * Exact epicenter is unknown – probably offshore in the Santa Barbara channel.	M 7.1
* Deaths: 1.		
* A strong foreshock 15 minutes earlier caused most residents to be outside when the main shock came, thus preventing many injuries. Destroyed Mission La Purisima (in Lompoc Valley), and the church at Mission Santa Barbara. Also severely damaged Missions Santa Ynez, San Buenaventura & San Fernando, and the Santa Barbara Presidio.		
December 8, 1812	Wrightwood Earthquake (Southwest of San Bernardino County) San Juan Capistrano, 1812	M 6.9~7.0
* Exact location of the epicenter is not known - along the San Gabriel Mountains segment of the San Andreas fault. Surface ruptures may have extended at least 16 miles NW of Wrightwood, along the northern flank of the San Gabriel Mountains, and possibly as far S as the San Bernardino Valley.		
* 40 people died in the collapse of the San Juan Capistrano mission church.		
* Extensive damage to the bell tower and living quarters at the San Gabriel Mission. Quake was felt as far away as the Mission San Diego.		
June 24, 1808	San Francisco region	M 6.0
November 22, 1800	San Diego region (Southern California)	M 6.5
October 11, 1800	San Juan Bautista region (Central California)	M 6.2
July 28, 1769	Los Angeles Basin (about 30 miles southeast of Los Angeles)	M: est. 6.0
* Members of Portola's expedition were the first Europeans to experience an earthquake in California.		
* Followed by four violent aftershocks.		

Data source for earthquake information:

U.S. Geological Survey (USGS) Earthquake Hazards Program:

<http://www.earthquake.usgs.gov/>

<http://earthquake.usgs.gov/earthquakes/map/> (Real-time Earthquake Map – World, U.S., California, Alaska, Hawaii)

National Earthquake Information Center - NEIC

<http://earthquake.usgs.gov/regional/neic/>

California Integrated Seismic Network:

<http://www.cisn.org/>

State of California, Department of Conservation, California Geological Survey:

http://www.conservation.ca.gov/index/Earthquakes/Pages/qh_earthquakes.aspx

State of California, Seismic Safety Commission:

<http://www.seismic.ca.gov/>

Southern California Seismographic Network:

<http://www.scsn.org/>

Southern California Earthquake Data Center:

<http://www.data.scec.org/>

Northern California Earthquake Data Center:

<http://www.ncedc.org/>

U.C. Berkeley Seismological Laboratory:

<http://seismo.berkeley.edu/>

USGS Earthquake Hazards Program – Northern California:

<http://earthquake.usgs.gov/regional/nca/>

National Geophysical Data Center (NGDC) - National Hazards – Earthquake Data

<http://www.ngdc.noaa.gov/hazard/earthqk.shtml>

The United States Geological Survey's (USGS) Explanation of "Magnitude"

Seismologists indicate the size of an earthquake in units of magnitude. There are many different ways that magnitude is measured from seismograms because each method only works over a limited range of magnitudes and with different types of seismometers. Some methods are based on body waves (which travel deep within the structure of the earth), some based on surface waves (which primarily travel along the uppermost layers of the earth), and some based on completely different methodologies. However, all of the methods are designed to agree well over the range of magnitudes where they are reliable.

Preliminary magnitudes based on incomplete but available data are sometimes estimated and reported. For example, the Tsunami Centers will calculate a preliminary magnitude and location for an event as soon as sufficient data is available to make an estimate. In this case, time is of the essence in order to broadcast a warning if tsunami waves are likely to be generated by the event. Such preliminary magnitudes, which may be off by one-half magnitude unit or more, are sufficient for the purpose at hand, and are superseded by more exact estimates of magnitude as more data become available.

Earthquake magnitude is a logarithmic measure of earthquake size. In simple terms, this means that at the same distance from the earthquake, the shaking will be 10 times as large during a magnitude 5 earthquake as during a magnitude 4 earthquake. The total amount of energy released by the earthquake, however, goes up by a factor of 32.

Magnitudes commonly used by seismic networks include:

Magnitude type	Applicable magnitude range	Distance range	Comments
Duration (Md)	<4	0-400 km	Based on the duration of shaking as measured by the time decay of the amplitude of the seismogram. Often used to compute magnitude from seismograms with "clipped" waveforms due to limited dynamic recording range of analog instrumentation, which makes it impossible to measure peak amplitudes.
Local (ML)	2-6	0-400 km	The original magnitude relationship defined by Richter and Gutenberg for local earthquakes in 1935. It is based on the maximum amplitude of a seismogram recorded on a Wood-Anderson torsion seismograph. Although these instruments are no longer widely in use, ML values are calculated using modern instrumentation with appropriate adjustments.
Surface wave (Ms)	5-8	20-180 degrees	A magnitude for distant earthquakes based on the amplitude of Rayleigh surface waves measured at a period near 20 sec.
Moment (Mw)	>3.5	all	Based on the moment of the earthquake, which is equal to the rigidity of the earth times the average amount of slip on the fault times the amount of fault area that slipped.
Energy (Me)	>3.5	all	Based on the amount of recorded seismic energy radiated by the earthquake.
Moment (Mi)	5-8	all	Based on the integral of the first few seconds of P wave on broadband instruments (Tsuboi method).
Body (Mb)	4-7	16-100 degrees (only deep earthquakes)	Based on the amplitude of P body-waves. This scale is most appropriate for deep-focus earthquakes.
Surface wave (MLg)	5-8	all	A magnitude for distant earthquakes based on the amplitude of the Lg surface waves.

Source: USGS' website [<http://earthquake.usgs.gov/earthquakes/glossary.php>]

Earthquake Classification:

Magnitude	Classification
0 - 3	Micro
3.0 - 3.9	Minor
4.0 - 4.9	Light
5.0 - 5.9	Moderate
6.0 - 6.9	Strong
7.0 - 7.9	Major
8 and higher	Great

[Q: What are the earthquake magnitude classes? <http://earthquake.usgs.gov/learn/faq/?faqID=24>]

Measuring Earthquakes

Q: What is the difference between intensity scales and magnitude scales?

A: Intensity scales, like the Modified Mercalli Scale and the Rossi-Forel scale, measure the amount of shaking at a particular location. So the intensity of an earthquake will vary depending on where you are. Sometimes earthquakes are referred to by the maximum intensity they produce.

Magnitude scales, like the Richter magnitude and moment magnitude, measure the size of the earthquake at its source. So they do not depend on where the measurement is made. Often, several slightly different magnitudes are reported for an earthquake. This happens because the relation between the seismic measurements and the magnitude is complex and different procedures will often give slightly different magnitudes for the same earthquake.

(<http://earthquake.usgs.gov/learn/faq/?faqID=29>)

Intensity

The intensity is a number (written as a Roman numeral) describing the severity of an earthquake in terms of its effects on the earth's surface and on humans and their structures. Several scales exist, but the ones most commonly used in the United States are the Modified Mercalli scale and the Rossi-Forel scale. There are many intensities for an earthquake, depending on where you are, unlike the magnitude, which is one number for each earthquake.

<http://earthquake.usgs.gov/learn/glossary/?term=intensity>

Q: Why are there often different magnitudes reported for the same earthquake?

A: When an earthquake occurs, the first information that is processed and relayed is usually based on a small subset of the seismic stations in the network, especially in the case of a larger earthquake. This is done so that some information can be obtained immediately without waiting for all of it to be processed. As a result, the first magnitude reported is usually based on a small number of recordings. As additional data are processed and become available, the magnitude and location are refined and updated. Sometimes the assigned magnitude is "upgraded" or slightly increased, and sometimes it is "downgraded" or slightly decreased.

Sometimes the earthquake magnitude is reported by different networks based on only their recordings. In that case, the different assigned magnitudes are a result of the slight differences in the instruments and their locations with respect to the earthquake epicenter.

<http://earthquake.usgs.gov/learn/faq/?faqID=22>

Magnitude

The magnitude is a number that characterizes the relative size of an earthquake. Magnitude is based on measurement of the maximum motion recorded by a seismograph. Several scales have been defined, but the most commonly used are:

- (1) local magnitude (ML), commonly referred to as "Richter magnitude,"
- (2) surface-wave magnitude (Ms),
- (3) body-wave magnitude (Mb), and
- (4) moment magnitude (Mw).

Scales 1-3 have limited range and applicability and do not satisfactorily measure the size of the largest earthquakes. The moment magnitude (Mw) scale, based on the concept of seismic moment, is uniformly applicable to all sizes of earthquakes but is more difficult to compute than the other types. All magnitude scales should yield approximately the same value for any given earthquake.

<http://earthquake.usgs.gov/learn/glossary/?term=magnitude>

The Modified Mercalli Intensity Scale

The effect of an earthquake on the Earth's surface is called the intensity. The intensity scale consists of a series of certain key responses such as people awakening, movement of furniture, damage to chimneys, and finally - total destruction. Although numerous intensity scales have been developed over the last several hundred years to evaluate the effects of earthquakes, the one currently used in the United States is the Modified Mercalli (MM) Intensity Scale. It was developed in 1931 by the American seismologists Harry Wood and Frank Neumann. This scale, composed of 12 increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. It does not have a mathematical basis; instead it is an arbitrary ranking based on observed effects. The Modified Mercalli Intensity value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place.

The **lower** numbers of the intensity scale generally deal with the manner in which the earthquake is felt by people. The **higher** numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above.

The following is an abbreviated description of the 12 levels of Modified Mercalli intensity:

- I. Not felt except by a very few under especially favorable conditions.
- II. Felt only by a few persons at rest, especially on upper floors of buildings.
- III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
- IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
- V. Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
- VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
- VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
- VIII. Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
- IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb.

Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.

- X.** Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
- XI.** Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
- XII.** Damage total. Lines of sight and level are distorted. Objects thrown into the air.

*Abridged from "The Severity of an Earthquake, a U. S. Geological Survey General Interest Publication"
U.S. Government Printing Office: 1989-288-913*

Source: USGS' website [<http://earthquake.usgs.gov/learning/topics/mercalli.php>]

Earthquake Facts and Statistics:

Source: USGS Earthquake Hazards Program's website [<http://neic.usgs.gov/neis/eqlists/eqstats.html>]

Frequency of Occurrence of Earthquakes	
Magnitude	Average Annually
8 and higher	1 ¹
7 - 7.9	17 ²
6 - 6.9	134 ²
5 - 5.9	1,319 ²
4 - 4.9	13,000 (estimated)
3 - 3.9	130,000 (estimated)
2 - 2.9	1,300,000 (estimated)
¹ Based on observations since 1900.	
² Based on observations since 1990.	

Magnitude vs. Ground Motion and Energy

Magnitude Change	Ground Motion Change (Displacement)	Energy Change
1	10.0 times	about 32 times
0.5	3.2 times	about 5.5 times
0.3	2.0 times	about 3 times
0.1	1.3 times	about 1.4 times

This table shows that a magnitude 7.2 earthquake produces 10 times more ground motion than a magnitude 6.2 earthquake, but it releases about 32 times more energy. The energy release best indicates the destructive power of an earthquake.

Per the USGS/NEIC website, “the USGS estimates that several million earthquakes occur in the world each year. Many go undetected because they hit remote areas or have very small magnitudes. The NEIC now locates about 50 earthquakes each day, or about 20,000 a year.

As more and more seismographs are installed in the world, more earthquakes can be and have been located. However, the number of large earthquakes (magnitude 6.0 and greater) have stayed relatively constant.”

Number of Earthquakes Worldwide for 2000 - 2011												
Located by the US Geological Survey National Earthquake Information Center												
Magnitude	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
8.0 to 9.9	1	1	0	1	2	1	2	4	0	1	1	1
7.0 to 7.9	14	15	13	14	14	10	9	14	12	16	23	19
6.0 to 6.9	146	121	127	140	141	140	142	178	168	144	151	185
5.0 to 5.9	1,344	1,224	1,201	1,203	1,515	1,693	1,712	2,074	1,768	1,896	2,104	2,276
4.0 to 4.9	8,008	7,991	8,541	8,462	10,888	13,917	12,838	12,078	12,291	6,805	10,267	13,315
3.0 to 3.9	4,827	6,266	7,068	7,624	7,932	9,191	9,990	9,889	11,735	2,905	4,329	2,791
2.0 to 2.9	3,765	4,164	6,419	7,727	6,316	4,636	4,027	3,597	3,860	3,014	4,624	3,643
1.0 to 1.9	1,026	944	1,137	2,506	1,344	26	18	42	21	26	39	47
0.1 to 0.9	5	1	10	134	103	0	2	2	0	1	0	1
No Magnitude	3,120	2,807	2,938	3,608	2,939	864	828	1,807	1,922	17	24	11
Total	22,256	23,534	27,454	31,419	31,194	30,478	29,568	29,685	31,777	* 14,825	* 21,562	* 22,289
Estimated Deaths	231	21,357	1,685	33,819	228,802	88,003	6,605	712	88,011	1,790	320,120	21,953

* *Note:* As of May 8, 2012

<http://earthquake.usgs.gov/earthquakes/eqarchives/year/eqstats.php>

Starting in January 2009, the USGS National Earthquake Information Center no longer locates earthquakes smaller than magnitude 4.5 outside the United States, unless they receive specific information that the earthquake was felt or caused damage.

Number of Earthquakes Worldwide for 1990 - 1999										
Located by the US Geological Survey National Earthquake Information Center										
Magnitude	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
8.0 to 9.9	0	0	0	0	2	2	1	0	1	0
7.0 to 7.9	18	16	13	12	11	18	14	16	11	18
6.0 to 6.9	109	96	166	137	146	183	149	120	117	116
5.0 to 5.9	1,617	1,457	1,498	1,426	1,542	1,318	1,222	1,113	979	1,104
4.0 to 4.9	4,437	4,335	5,128	4,999	4,518	8,003	8,756	7,903	7,303	6,972
3.0 to 3.9	2,517	2,990	4,692	4,326	5,041	5,151	4,923	4,513	5,945	5,605
2.0 to 2.9	2,364	2,925	3,066	5,393	5,371	3,842	2,391	2,400	4,091	4,201
1.0 to 1.9	474	801	886	1,170	779	645	295	388	805	715
0.1 to 0.9	0	1	3	9	17	19	1	4	10	5
No Magnitude	5,054	3,863	4,072	3,997	1,944	1,826	2,186	3,415	2,426	2,096
Total	16,590	16,484	19,524	21,476	19,371	21,007	19,938	19,872	21,688	20,832
Estimated Deaths	52,056	3,210	3,920	10,096	1,634	7,980	589	3,069	9,430	22,662

http://earthquake.usgs.gov/earthquakes/eqarchives/year/info_1990s.php

Number of Earthquakes United States for 2000 - 2011 Located by the US Geological Survey National Earthquake Information Center												
Magnitude	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
8.0 to 9.9	0	0	0	0	0	0	0	0	0	0	0	0
7.0 to 7.9	0	1	1	2	0	1	0	1	0	0	1	1
6.0 to 6.9	6	5	4	7	2	4	7	9	9	4	8	3
5.0 to 5.9	63	41	63	54	25	47	51	72	85	58	79	51
4.0 to 4.9	281	290	536	541	284	345	346	366	432	288	642	347
3.0 to 3.9	917	842	1,535	1,303	1,362	1,475	1,213	1,137	1,486	1,492	3,585	1,838
2.0 to 2.9	660	646	1,228	704	1,336	1,738	1,145	1,173	1,573	2,379	4,131	2,941
1.0 to 1.9	0	2	2	2	1	2	7	11	13	26	39	47
0.1 to 0.9	0	0	0	0	0	0	1	0	0	1	0	1
No Magnitude	415	434	507	333	540	73	13	22	20	14	12	8
Total	2,342	2,261	3,876	2,946	3,550	3,685	2,783	2,791	3,618	* 4,262	* 8,497	* 5,237
Estimated Deaths	0	0	0	2	0	0	0	0	0	0	0	0

12/22/03: M 6.6 Paso Robles, CA - 2 deaths

<http://earthquake.usgs.gov/earthquakes/eqarchives/year/eqstats.php>

* Note: As of May 8, 2012

Number of Earthquakes in the United States for 1990 - 1999 Located by the US Geological Survey National Earthquake Information Center										
Magnitude	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
8.0 to 9.9	0	0	0	0	0	0	0	0	0	0
7.0 to 7.9	0	1+1	2	0	1	0	2	0	0	1+1
6.0 to 6.9	2	4	15	9	4	6	4	6	3	6
5.0 to 5.9	64	49	72	62	64	45	100	63	62	50
4.0 to 4.9	284	242	404	270	333	350	612	362	411	352
3.0 to 3.9	626	713	1,717	1,119	1,543	1,058	1,060	1,072	1,053	1,398
2.0 to 2.9	414	559	998	1,009	1,196	822	654	759	742	814
1.0 to 1.9	1	3	5	7	2	0	0	2	0	0
0.1 to 0.9	0	0	0	0	0	0	0	0	0	0
No Magnitude	877	599	368	457	444	444	375	575	508	381
Total	2,268	2,171	3,581	2,933	3,587	2,725	2,807	2,839	2,779	3,003
Estimated Deaths	0	2	3	2	60	1	0	0	0	0

http://earthquake.usgs.gov/earthquakes/eqarchives/year/info_1990s.php

Number of Earthquakes in the United States for 1980 - 1989 Located by the US Geological Survey National Earthquake Information Center										
Magnitude	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
8.0 to 9.9	0	0	0	0	0	0	0	0	0	0
7.0 to 7.9	1+1	1	0	1	0	0	1	2	1	1
6.0 to 6.9	8	2	4	8	3	5	10	11	2	4
5.0 to 5.9	72	42	62	66	68	60	182	100	96	73
4.0 to 4.9	525	308	289	313	306	306	599	426	388	378
3.0 to 3.9	1,321	513	493	800	731	643	801	699	606	647
2.0 to 2.9	61	69	90	60	76	235	233	222	251	274
1.0 to 1.9	2	2	1	0	1	3	24	15	14	6
0.1 to 0.9	0	0	0	0	0	0	0	0	1	0
No Magnitude	128	139	131	128	79	545	509	578	489	718
Total	2,119	1,076	1,070	1,376	1,264	1,797	2,359	2,053	1,848	2,101
Estimated Deaths	1	0	0	2	1	0	1	11	1	63

Red values indicate the earthquakes occurred in Alaska.

Blue values indicate the earthquakes occurred in California. Green values indicate the quake occurred in Idaho.

CALIFORNIA EARTHQUAKE INSURANCE					
DIRECT EARNED PREMIUMS AND INCURRED LOSSES **					
Year	Earthquakes	Direct Earned Premiums	Prem Change %	Dir Incurred Losses	Loss Ratio (IL/EP %)
1970		\$5,873,000		(\$137,025)	-2.3%
1971	San Fernando (6.6)	\$4,617,916	-21.370%	\$803,220	17.4%
1972		\$8,954,000	93.897%	\$2,076,000	23.2%
1973		\$10,897,000	21.700%	\$67,000	0.6%
1974		\$12,966,000	18.987%	\$444,000	3.4%
1975	Oroville (5.8)	\$13,842,000	6.756%	(\$81,835)	-0.6%
1976		\$17,130,000	23.754%	\$78,000	0.5%
1977		\$19,760,000	15.353%	\$141,000	0.7%
1978	Santa Barbara (5.1)	\$23,159,000	17.201%	\$357,000	1.5%
1979	Imperial Valley (6.5)	\$28,523,000	23.162%	\$431,000	1.5%
1980	Livermore (5.8) / Mammoth Lakes (6.2) / Mad River-Eureka area (7.2)	\$38,287,000	34.232%	\$2,013,000	5.3%
1981	Westmorland (6.0)	\$50,057,600	30.743%	\$474,450	0.9%
1982		\$58,435,829	16.737%	(\$42,917)	-0.1%
1983	Coalinga (6.4~6.7)	\$71,487,378	22.335%	\$2,354,678	3.3%
1984	Morgan Hill (6.4)	\$79,807,699	11.639%	\$4,097,384	5.1%
1985		\$135,545,515	69.840%	\$1,597,608	1.2%
1986	N PalmSprings (5.8), Oceanside (5.3) Chalfant Valley/Bishop (6.2 & 6.6)	\$180,420,975	33.107%	\$16,084,948	8.9%
1987	So Calif: WhittierNarrows (5.9) Imperial County: Elmore Ranch (6.2) / Superstition Hills (6.6)	\$209,265,158	15.987%	\$47,666,040	22.8%
1988		\$278,755,325	33.207%	\$31,305,149	11.2%
1989	Loma Prieta (7.1)	\$335,222,202	20.257%	\$433,108,542	129.2%
1990	Southern California (Upland: 5.5)	\$384,596,293	14.729%	\$181,480,824	47.2%
1991	No Calif: Honeydew (6.2) So Calif: Sierra Madre (5.8)	\$425,642,634	10.673%	\$70,107,557	16.5%
1992	Cape Mendocino region (7.2, 6.6, & 6.5) So Calif: Joshua Tree (6.1) / Landers (7.6) / Big Bear (6.6)	\$481,689,597	13.168%	\$61,762,604	12.8%
1993		\$524,936,856	8.978%	\$13,016,383	2.5%
1994	Northridge (6.7) Eureka (5.4)	\$623,780,445	18.830%	\$7,438,612,042	1192.5%
1995		\$742,716,047	19.067%	\$1,085,812,794	146.2%
1996	SW of Eureka (5.4)	\$936,594,646	26.104%	\$56,535,949	6.0%
(see next exhibit for CEA info)					
1997		\$723,103,276	-22.794%	\$333,615,686	46.1%
1998		\$397,090,870	-45.085%	\$94,369,920	23.8%
1999	Hector (7.1)	\$375,088,155	-5.541%	\$61,579,209	16.4%
2000	Yountville/Napa (5.2)	\$391,874,530	4.475%	\$204,923,313	52.3%
2001	Beverly Hills / West Hollywood (4.2)	\$457,989,704	16.872%	\$394,275,584	86.1%
2002	Gilroy (5.2)	\$483,188,159	5.502%	\$390,632,017	80.8%
2003	Big Bear City (5.4) / San Simeon (6.5)	\$484,454,425	0.262%	\$218,124,189	45.0%
2004	Parkfield (6.0)	\$501,155,594	3.447%	\$166,802,075	33.3%
2005	Anza (5.2) / Yucaipa (4.9) / Off the Coast of N. California (7.2)	\$502,998,475	0.368%	\$189,524,531	37.7%
2006		\$551,862,930	9.715%	(\$3,194,656)	-0.6%
2007	Alum Rock / Milpitas (5.4)	\$615,340,429	11.502%	(\$56,079,162)	-9.1%
2008	Chino Hills (5.4)	\$620,409,678	0.824%	(\$21,421,609)	-3.5%
2009		\$612,487,073	-1.277%	(\$1,202,374)	-0.2%
2010	Offshore: No. Calif./Humboldt County (6.5) / Northern Baja CA [Calxico/Imperial County] (7.2)	\$613,395,443	0.148%	(\$46,896,961)	-7.6%
2011		\$616,176,889	0.453%	(\$7,870,686)	-1.3%

Premium and Loss data are Annual Statement "Line 12" (Earthquake) data, and include all California "licensed" companies supplying premium and/or loss data. Not all of the Northridge earthquake insured losses were reported here, since some earthquake losses may have been included under commercial lines experience.

****Note:** This does not include California Earthquake Authority premium and loss data.

Exhibit 4 (con't)

Earthquake Premium and Loss Data, Including California Earthquake Authority Data

In September 1996, the State Legislature established the California Earthquake Authority (CEA) per California Insurance Code Sections 10089.5 through 10089.54.

Year		Direct Earned Premiums	Prem Change %	Dir Incurred Losses	Loss Ratio (IL/EP %)
1997	<i>Annual Statement Total</i>	\$723,103,276		\$333,615,686	46.14%
	California Earthquake Authority (CEA)	\$136,366,904		\$0	
	<i>GRAND TOTAL:</i>	\$859,470,180	-8.235%	\$333,615,686	38.82%
1998	<i>Annual Statement Total</i>	\$397,090,870		\$94,369,920	23.77%
	California Earthquake Authority (CEA)	\$393,874,333		\$0	
	<i>GRAND TOTAL:</i>	\$790,965,203	-7.971%	\$94,369,920	11.93%
1999	<i>Annual Statement Total</i>	\$375,088,155		\$61,579,209	16.42%
	California Earthquake Authority (CEA)	\$406,387,744		\$756,624	0.19%
	<i>GRAND TOTAL:</i>	\$781,475,899	-1.200%	\$62,335,833	7.98%
2000	<i>Annual Statement Total</i>	\$391,874,530		\$204,923,313	52.29%
	California Earthquake Authority (CEA)	\$435,801,207		(\$272,816)	-0.06%
	<i>GRAND TOTAL:</i>	\$827,675,737	5.582%	\$204,650,497	24.73%
2001	<i>Annual Statement Total</i>	\$457,989,704		\$394,275,584	86.09%
	California Earthquake Authority (CEA)	\$426,541,469		\$129,472	0.03%
	<i>GRAND TOTAL:</i>	\$884,531,173	6.869%	\$394,405,056	44.59%
2002	<i>Annual Statement Total</i>	\$483,188,159		\$390,632,017	80.84%
	California Earthquake Authority (CEA)	\$436,466,174		\$5,259	0.00%
	<i>GRAND TOTAL:</i>	\$919,654,333	3.971%	\$390,637,276	42.48%
2003	<i>Annual Statement Total</i>	\$484,454,425		\$218,124,189	45.02%
	California Earthquake Authority (CEA)	\$433,684,298		\$5,141,114	1.19%
	<i>GRAND TOTAL:</i>	\$918,138,723	-0.165%	\$223,265,303	24.32%
2004	<i>Annual Statement Total</i>	\$501,155,594		\$166,802,075	33.28%
	California Earthquake Authority (CEA)	\$448,360,668		(\$2,442,866)	-0.54%
	<i>GRAND TOTAL:</i>	\$949,516,262	3.418%	\$164,359,209	17.31%
2005	<i>Annual Statement Total</i>	\$502,998,475		\$189,524,531	37.68%
	California Earthquake Authority (CEA)	\$473,111,347		(\$10,340)	-0.002%
	<i>GRAND TOTAL:</i>	\$976,109,822	2.801%	\$189,514,191	19.42%
2006	<i>Annual Statement Total</i>	\$551,862,930		(\$3,194,656)	-0.58%
	California Earthquake Authority (CEA)	\$519,209,234		\$23,500	0.005%
	<i>GRAND TOTAL:</i>	\$1,071,072,164	9.729%	(\$3,171,156)	-0.30%
2007	<i>Annual Statement Total</i>	\$615,340,429		(\$56,079,162)	-9.11%
	California Earthquake Authority (CEA)	\$486,546,716		\$11,879	0.002%
	<i>GRAND TOTAL:</i>	\$1,101,887,145	2.877%	(\$56,067,283)	-5.09%
2008	<i>Annual Statement Total</i>	\$620,409,678		(\$21,421,609)	-3.45%
	California Earthquake Authority (CEA)	\$500,502,115		\$29,708	0.006%
	<i>GRAND TOTAL:</i>	\$1,120,911,793	1.727%	(\$21,391,901)	-1.91%
2009	<i>Annual Statement Total</i>	\$612,487,073		(\$1,202,374)	-0.20%
	California Earthquake Authority (CEA)	\$589,954,214		\$126,273	0.021%
	<i>GRAND TOTAL:</i>	\$1,202,441,287	7.273%	(\$1,076,101)	-0.09%
2010	<i>Annual Statement Total</i>	\$613,395,443		(\$46,896,961)	-7.65%
	California Earthquake Authority (CEA)	\$599,260,213		\$68,840	0.011%
	<i>GRAND TOTAL:</i>	\$1,212,655,656	0.849%	(\$46,828,121)	-3.86%
2011	<i>Annual Statement Total</i>	\$616,176,889		(\$7,870,686)	-1.28%
	California Earthquake Authority (CEA)	\$605,793,843		\$28,734	0.005%
	<i>GRAND TOTAL:</i>	\$1,221,970,732	0.768%	(\$7,841,952)	-0.64%

Source: NAIC I-site Annual Statement California State page data. California Earthquake Authority data, from CEA.

“Top 10” Largest Earthquakes in the World Since 1900

[http://earthquake.usgs.gov/earthquakes/world/10_largest_world.php Updated 2011 March 15]

Location	Date (UTC)	Magnitude	Latitude / Longitude
1. Chile	1960 May 22 19:11:14 UTC	M 9.5	-38.29 -73.05
<p><i>Losses: approximately 1,655 people killed; 3,000 injured; 2,000,000 homeless; \$550 million damage in southern Chile. The following tsunami caused: 61 deaths and approximately \$75 million damage in Hawaii; 138 deaths and \$50 million damage in Japan; 32 dead and missing in the Philippines; and \$500,000 damage to the west coast of the United States.</i></p>			
2. Prince William Sound, Alaska	1964 March 28 03:36 UTC / 1964 March 27 05:36 p.m. local time	M 9.2	61.02 -147.65
<p><i>Earthquake and ensuing tsunami took 128 lives (earthquake 15, tsunami 113), and caused approximately \$311 million in property loss. The earthquake damaged many Alaskan towns. Most severe damage occurred in Anchorage, about 120 kilometers northwest of the epicenter. The tsunami devastated many towns along the Gulf of Alaska, parts of Canada, along the West Coast of the United States (15 killed), and in Hawaii.</i></p>			
3. Off the West Coast of Northern Sumatra [250 km (155 miles) SSE of Banda Aceh, Sumatra, Indonesia]	2004 12 26 00:58:53 UTC / December 26, 2004 at 07:58:53 AM local time	M 9.1	3.30 95.78
<p><i>Losses: approximately 228,000 people were killed or missing & presumed dead. About 1.7 million people were displaced by the earthquake and subsequent tsunami in 14 countries in South Asia and East Africa. (In January 2005, the death toll was 286,000; however, Indonesia reduced its number of missing in April 2005.) The earthquake was felt the strongest at Banda Aceh, Sumatra. The tsunami caused more casualties than any other in recorded history. Lives were lost in Indonesia, Sri Lanka, India, Thailand, Myanmar (Burma), Malaysia, Maldives, Bangladesh, Seychelles, Yemen, Somalia, Tanzania, South Africa, and Kenya.</i></p>			
4. Near the East Coast of Honshu, Japan [129 km (80 miles) E of Sendai, Honshu, Japan]	2011 03 11 05:46:24 UTC / March 11, 2011 at 02:46:24 PM at epicenter	M 9.0	38.322 142.369
<p><i>Losses: at least 15,703 people were killed; 4,647 missing; 5,314 injured; and 130,927 displaced. At least 332,395 buildings, 2,126 roads, 56 bridges and 26 railways were destroyed/damaged by the earthquake and tsunami along the entire east coast of Honshu from Chiba to Aomori. Most casualties/damage occurred in Iwate, Miyagi and Fukushima from the tsunami. Total economic loss in Japan was estimated at \$309 billion (US). Electricity, gas and water supplies, telecommunications and railway service were disrupted, and several reactors at a Fukushima nuclear power plant were severely damaged. Tsunami also caused 1 death in Indonesia and 1 in California. Several boats and docks were destroyed/damaged at Crescent City and at Santa Cruz, California; in Oregon; and in Hawaii.</i></p>			
5. Kamchatka, Russia	1952 11 04 16:58:26.0 UTC	M 9.0	52.76 160.06
<p><i>This earthquake off the Kamchatka Peninsula was originally estimated as a magnitude 8.2, but was later recalculated to magnitude 9.0. The earthquake generated a tsunami that struck the Hawaiian Islands at 1:00 PM and caused estimated property damage of \$800,000 to \$1,000,000. No lives were lost. The tsunami wave also reached Alaska but caused little damage other than flooding.</i></p>			

Location	Date (UTC)	Magnitude	Latitude / Longitude	
6. Offshore Maule, Chile	[105 km (65 miles) NNE of Concepcion, Chile]			
	2010 02 27	M 8.8	-35.846	-72.719
	06:34:14 UTC / February 27, 2010 at 03:34:14 AM at epicenter			
<i>This earthquake occurred off the coast of central Chile, triggering a tsunami which devastated several coastal towns in south-central Chile and damaged the port at Talcahuano. Losses: at least 523 killed, 24 missing, about 12,000 injured, and 800,000 displaced. At least 370,000 houses, 4,013 schools, 79 hospitals and 4,200 boats were damaged/destroyed by the earthquake and tsunami in the Valparaiso-Concepcion-Temuco area.</i>				
<i>Total economic loss in Chile was estimated at \$30 billion (US). Electricity, telecommunications and water supplies were disrupted and the airports at Concepcion and Santiago had minor damage. The wave also caused minor damage in the San Diego, California area and in the Tōhoku region of Japan, where damage to the fisheries business was estimated at ¥6.26 billion (USD\$66.7 million).</i>				
7. Off the Coast of Ecuador	1906 01 31	M 8.8	1.0	-81.5
	15:35 UTC			
<i>The magnitude of this earthquake was recalculated from 8.2 to 8.8. This earthquake off the coast of Ecuador and Colombia generated a tsunami that killed around 500 to 1,500 people there. The tsunami wave later arrived in Hawaii about 12.5 hours after the earthquake, flooding the Hilo area.</i>				
8. Rat Islands, Alaska	1965 02 04	M 8.7	51.21	178.50
	05:01 and 08:40 UTC (local February 3)			
<i>Cracks occurred in prefabricated wood buildings on Adak Island and in an asphalt runway on Shemya Island. Hairline cracks also formed in the runways at the U.S. Coast Guard Station on Attu Island. The earthquake generated a tsunami reported to be about 10.7 meters high on Shemya Island, but losses caused by flooding on Amchitka Island was estimated at \$10,000.</i>				
9. Northern Sumatra, Indonesia	[205 km (125 miles) WNW of Sibolga, Sumatra, Indonesia]			
	2005 03 28	M 8.6	2.08	97.01
	16:09:36 UTC / March 28, 2005 at 11:09:36 PM at epicenter			
<i>Losses: at least 1,000 people killed, 300 injured and 300 buildings destroyed on Nias; 100 killed, many injured and several buildings damaged on Simeulue; 200 killed in Kepulauan Banyak; 3 people killed, 40 injured and some damage in the Meulaboh area. A 3-meter tsunami damaged the port and airport on Simeulue. At least 10 people were killed during evacuation of the coast of Sri Lanka.</i>				
10. Assam - Tibet	1950 08 15	M 8.6	28.5	96.5
	14:09 UTC			
<i>At least 780 people were killed and many buildings collapsed in the Nyingchi-Qamdo-Zhamo (Rima, Zayu) area of eastern Tibet. Sandblows, ground cracks and large landslides occurred in the area. Severe damage also occurred in the Sibsagar-Sadiya area of Assam, India and in the surrounding hills. About 70 villages were destroyed in the Abor Hills, mostly by landslides. Large landslides blocked the Subansiri River; when this dam broke 8 days later, it created a wave 7 m (23 ft) high which inundated several villages and killed 536 people. Sources call this the Assam-Tibet earthquake or the Assam earthquake, even though the epicenter was most likely in Tibet. The actual casualty toll may be much higher.</i>				

Historic United States Earthquakes, Sorted by Magnitude [M >= 6.0](Source: http://earthquake.usgs.gov/earthquakes/states/historical_mag.php)

Note: Per the USGS, these are “selected” earthquakes of general historic interest. Earthquake dates are UTC, not local time.
List is as of November 17, 2011

UTC Time/Date	Location	Magnitude	Fatalities
UTC = Universal Time Code			
1964 03 28	Prince William Sound, Alaska (03/27/1964 at 5:36 p.m. AST // 03:36, 3/28 UTC)	M 9.2	128
<i>Epicenter was about 75 miles E of Anchorage. Earthquake and ensuing tsunami took 128 lives (possibly 131) -- tsunami 113, earthquake 15, causing about \$311 million in property loss.</i>			
1700 01 26	Cascadia Subduction Zone	M 9.0	# not known
<i>This earthquake set off a tsunami that struck Cascadia's Pacific coast, then crossed the Pacific Ocean to Japan, where it damaged coastal villages. Written records of the damage in Japan pinpoint the earthquake to the evening of January 26, 1700.</i>			
1965 02 04	Rat Islands, Alaska	M 8.7	
1957 03 09	Andreanof Islands, Alaska	M 8.6	
1938 11 10	Shumagin Islands, Alaska	M 8.2	
1946 04 01	Unimak Island, Alaska (04/01/1946 at 12:28:56.0 UTC)	M 8.1	165
<i>Earthquake caused minor damage to buildings on Unimak Island and generated a tsunami that destroyed a U.S. Coast Guard lighthouse in Alaska, killing its 5 occupants. The tsunami caused much destruction along the Hawaiian shoreline, especially at Hilo, causing 159 deaths, destroying the city's waterfront and causing \$26 million property damage. In California, the waves struck the Half Moon Bay area damaging boats and structures and causing 1 death.</i>			
1899 09 10	Yakutat Bay, Alaska	M 8.0	
2002 11 03	Denali Fault, Alaska	M 7.9	
1996 06 10	Andreanof Islands, Alaska	M 7.9	
1986 05 07	Andreanof Islands, Alaska	M 7.9	
1899 09 04	Cape Yakataga, Alaska	M 7.9	
1868 04 03	Ka'u District, Island of Hawaii (1868 04 03 at 02:25 UTC // 04/02/1868 local)	M 7.9	77
<i>This earthquake caused 77 deaths (tsunami, 46; landslide, 31).</i>			
1857 01 09	Fort Tejon, California	M 7.9	1
<i>Earthquake occurred in a sparsely occupied area on the San Andreas fault, rupturing near Parkfield almost to Wrightwood (about 360 kms or 225 miles). One woman near Fort Tejon was killed by the collapse of an adobe house. Property loss was heaviest at Fort Tejon, an Army post about 7 kms from the San Andreas fault.</i>			
2003 11 17	Rat Islands, Aleutian Islands, Alaska	M 7.8	
1987 11 30	Gulf of Alaska	M 7.8	
1929 03 07	Fox Islands, Aleutian Islands, Alaska	M 7.8	
1906 04 18	San Francisco, California (April 18, 1906 at 05:12 am local time -- Ms 8.25, Mw 7.8)	M 7.8	3000+
<i>In 2005, the death count was raised from an original estimate of 478 to above 3,000; however, a final official number is not known. Number of injured: unknown, probably in the thousands. The earthquake and ensuing 3-day fire destroyed much of the city, leaving 250,000 homeless. Damage: direct quake losses of about \$24 million, as well as fire losses of about \$400 to \$500 million. Earthquake damage was extremely severe in SF; also throughout San Jose, Hollister, and cities throughout Sonoma County. Santa Rosa's downtown business district was destroyed as were many of its residences.</i>			
1892 02 24	Imperial Valley, California	M 7.8	
1988 03 06	Gulf of Alaska	M 7.7	
1958 07 10	Lituya Bay, Alaska	M 7.7	5
1900 10 09	Kodiak Island, Alaska	M 7.7	

1812 02 07	New Madrid Region /Missouri	M 7.7	
1811 12 16	New Madrid Region /Arkansas	M 7.7	Several fatalities
<i>New Madrid seismic zone of southeastern Missouri, northeastern Arkansas, and adjacent parts of Tennessee and Kentucky from December 1811 to February 1812: first major earthquake (est. M 7.7) occurred on 12/16/1811 at about 2:15 a.m. near present-day Blytheville, Arkansas; second major quake (est. M7.5) occurred on 01/23/1812 at about 9:15 a.m.; third quake (est. M 7.7) occurred on 02/07/1812, at about 3:00 a.m.</i>			
1975 02 02	Near Islands, Alaska	M 7.6	
1972 07 30	Sitka, Alaska	M 7.6	
1979 02 28	Mt. St. Elias, Alaska	M 7.5	
1812 01 23	New Madrid Region/Missouri	M 7.5	
1943 11 03	Skwentna, Alaska	M 7.4	
1872 03 26	Owens Valley, California	M 7.4	27 (+?)
<i>Most destruction occurred at Lone Pine, where 52 of 59 houses were destroyed and 27 people were killed. Other fatalities were reported in parts of Owens Valley, and damage occurred in other towns throughout Inyo County. Property loss estimated at \$250,000.</i>			
1992 06 28	Landers, California	M 7.3	3
<i>One person was killed at Yucca Valley and 2 people died of heart attacks. More than 400 people were injured and substantial damage occurred in the Landers - Yucca Valley area.</i>			
1965 03 30	Rat Islands, Alaska	M 7.3	
1959 08 18	Hebgen Lake, Montana (1959 08 18 at 06:37:15 UTC (local 08/17))	M 7.3	28
<i>Earthquake caused 28 deaths and about \$11 million in damage to highways and timber. The most disastrous effect of the earthquake was the huge avalanche of rock, soil and trees that cascaded from the south wall of the Madison River Canyon, forming a barrier that blocked the gorge and stopped the flow of the Madison River.</i>			
1958 04 07	Huslia, Alaska	M 7.3	
1952 07 21	Kern County, California	M 7.3	12
<i>Quake claimed 12 lives and caused property damage estimated at \$60 million</i>			
1937 07 22	Central Alaska	M 7.3	
1922 01 31	Eureka, California (Offshore)	M 7.3	
1904 08 27	Fairbanks, Alaska	M 7.3	
1886 09 01	Charleston, South Carolina	M 7.3	60
<i>This earthquake damaged/destroyed many buildings in the old city of Charleston and killed 60 people. Property damage was estimated at \$5-\$6 million.</i>			
1873 11 23	California - Oregon Coast (Offshore)	M 7.3	
2011 06 24	Fox Islands, Aleutian Islands, Alaska *	M 7.2	
2010 04 04	Baja California, Mexico *	M 7.2	2 (Mexico)
<i>(11 mi WSW from Guadalupe Victoria, Baja Calif Norte, Mexico; 30 mi SSE of Calexico, Imperial County in Southern California) In Mexicali, Mexico: earthquake caused 2 deaths, 233 injuries & left 25,000 residents homeless. Estimated economic damage: above \$12.3Billion MXN (\$1Billion USD). In Southern California, the worst affected area was Calexico. Economic losses across Imperial County estimated at over \$100 Million USD from damage to water treatment systems, schools, and businesses. At least 800 homes were severely damaged.</i>			
2007 12 19	Andreanof Islands, Aleutian Islands, Alaska	M 7.2	
2005 06 15	Off the Coast of Northern California (June 15, 2005 at 02:50:53 UTC // June 14, 2005 at 07:50:53 PM at epicenter)	M 7.2	

* This earthquake was added to the USGS list by the California Department of Insurance.

1992 04 25	Cape Mendocino, California	M 7.2	
(1992 04 25, 18:06 UTC - M 7.2 // Local: April 25 at 11:06 a.m. PDT); Followed by: M 6.5: 1992 04 26, 07:41 UTC (12:42 a.m. PDT on 04/26); M 6.7: 1992 04 26, 11:18 UTC (04:19 a.m. PDT) The M7.2 earthquake was located about 30 miles SSW of Eureka, injuring 95 people and causing considerable damage in southwestern Humboldt County (Northern California). A M6.5 aftershock caused further damage in Ferndale, Petrolia, and Fortuna. A fire from a broken gas main destroyed much of the business district of Scotia. Less than 4 hours after the second quake, a M6.7 quake shook the same area. Damage from the three quakes was estimated at \$66 million.			
1980 11 08	Humboldt County, California (Offshore)	M 7.2	
This earthquake injured 6 people and caused property damage estimated at \$2 million. Most of the damage occurred east of Fields Landing, where two sections of an overpass on U.S. Highway 101 collapsed onto the railroad tracks below.			
1975 11 29	Kalapana, Hawaii	M 7.2	2
(1975 Nov 29 14:47:40.1 UTC) This earthquake killed 2 people, injured several, and caused property damage estimated at \$4.1 million in Hawaii (including damage caused by the tsunami). Property damage from ground shaking included damaged walls, separated floors, structural and equipment damage, etc.			
1947 10 16	Wood River, Alaska	M 7.2	
1932 12 21	Cedar Mountain, Nevada	M 7.2	
1923 01 22	Humboldt County, California	M 7.2	
1912 07 07	Paxson, Alaska	M 7.2	
2003 03 17	Rat Islands, Aleutian Islands, Alaska	M 7.1	
1999 10 16	Hector Mine, California	M 7.1	
(47 miles ESE of Barstow; 32 miles N of Joshua Tree in the High Desert region near Lavic Lake). This earthquake occurred in a remote area of the Mojave Desert, and created a 25-mile long surface rupture, along what had been classified as an inactive fault. The quake derailed a passing Amtrak train, causing some injuries but none serious. Estimated damage was \$200,000.			
1957 03 14	Andreanof Islands, Alaska	M 7.1	
1957 03 09	Fox Islands, Alaska	M 7.1	
1954 12 16	Fairview Peak, Nevada	M 7.1	
1953 01 05	Near Islands, Alaska	M 7.1	
1949 04 13	Puget Sound, Washington	M 7.1	8
(1949 04 13 19:55:42 UTC) Epicenter was between Olympia and Tacoma, along the southern edge of Puget Sound. Eight people were killed and many injured. Property damage in Olympia, Seattle, and Tacoma was estimated at \$25 million.			
1940 05 19	Imperial Valley, California	M 7.1	9
The main earthquake took 9 lives and caused property damage estimated at \$6 million. The first shock damaged about 80% of the buildings in Imperial. The downtown business area at Brawley was damaged severely by the second shock, and about 25% of the houses in the residential area were damaged.			
1934 05 04	Chugach Mountains, Alaska	M 7.1	
1927 11 04	Lompoc, California	M 7.1	
1927 10 24	Southeast Alaska	M 7.1	
1915 10 03	Pleasant Valley, Nevada	M 7.1	
1901 12 31	Cook Inlet, Alaska	M 7.1	
1812 12 21	West of Ventura, California	M 7.1	1
1994 09 01	Cape Mendocino, California	M 7.0	
1991 08 17	Honeydew, California	M 7.0	
1966 08 07	Rat Islands, Alaska	M 7.0	
1957 03 16	Andreanof Islands, Alaska	M 7.0	
1957 03 12	Andreanof Islands, Alaska	M 7.0	
1910 09 09	Rat Islands, Aleutian Islands, Alaska	M 7.0	
1908 05 15	Gulf of Alaska	M 7.0	
1899 09 23	Copper River delta, Alaska	M 7.0	
1899 04 16	Eureka, California	M 7.0	
1868 03 29	Ka'u District, Island of Hawaii	M 7.0	
1823 06 02	South flank of Kilauea, Hawaii	M 7.0	

1811 12 16	New Madrid Region/Arkansas	M 7.0	
2003 06 23	Rat Islands, Aleutian Islands	M 6.9	
1989 10 18	Loma Prieta, California	M 6.9	63
1989 10 18 at 00:04:15 UTC // October 17, 1989 at 05:04:15 p.m. PDT local time (Epicenter in the Santa Cruz Mountains, about 16 kms NE of Santa Cruz / 7 kms S of Loma Prieta Mountains)			
Earthquake caused 63 deaths, 3,757 injuries, and an estimated \$6 billion in property damage. Most damage occurred in Oakland and San Francisco, about 100 kms north of the fault segment that slipped on the San Andreas. Liquefaction and fire caused heavy damage to houses and apartment buildings in SF's Marina District. The worst damage occurred with the collapse of part of the I-880 freeway in Oakland with 41 deaths and the San Francisco-Oakland Bay Bridge (1 death).			
1983 10 28	Borah Peak, Idaho	M 6.9	2
1983 October 28 14:06:06 UTC			
Earthquake caused 2 deaths in Challis and an estimated \$12.5 million in damage in the Challis-Mackay area. The quake caused spectacular surface faulting; rockfalls and landslides, water fountains and sand boils.			
1951 08 21	Kona, Hawaii	M 6.9	
1812 12 08	Southwest of San Bernardino County, California	M 6.9	40
2005 06 14	Rat Islands, Aleutian Islands, Alaska	M 6.8	
2004 06 28	Southeastern Alaska	M 6.8	
2001 02 28	Nisqually, Washington	M 6.8	1
(2001 02 28 18:54:32 UTC / 10:54 a.m. PST on February 28, 2001 local time)			
Epicenter of the earthquake was Anderson Island, about 11 miles NE of Olympia. One death from heart attack; about 400 injuries. Major damage in the Seattle-Tacoma-Olympia area. Damage estimates: \$1 to \$4 billion.			
1954 12 16	Dixie Valley, Nevada	M 6.8	
1954 08 24	Stillwater, Nevada	M 6.8	
1938 01 23	Maui, Hawaii	M 6.8	
1925 06 29	Santa Barbara, California	M 6.8	13
1918 04 21	San Jacinto, California	M 6.8	1
1910 08 05	Oregon	M 6.8	
1898 04 15	Mendocino County, California	M 6.8	
1872 12 15	Lake Chelan, Washington	M 6.8	
1871 02 20	Lanai, Hawaii	M 6.8	
1868 10 21	Hayward, California	M 6.8	30
1838 06	San Francisco area, California	M 6.8	
2007 08 02	Andreanof Islands, Aleutian Islands, Alaska	M 6.7	
2006 10 15	Hawaii region, Hawaii	M 6.7	
Earthquake caused minor injuries, and damage to at least 1,173 buildings. Damage estimated at \$73 million.			
2002 10 23	Denali, Alaska	M 6.7	
1994 01 17	Northridge, California	M 6.7	60
1994 01 17 12:30:55 UTC (local time: 4:30 a.m.) / 20 miles WNW of Los Angeles; 1 mile SSW of Northridge			
Earthquake caused 60 deaths, 9000+ injuries with 1,500+ of them serious. Property damage was estimated at \$13 to \$20 billion. By 1998, it was reported that insurers paid an estimated \$15.3 billion in losses. Combined economic loss was \$20-\$40 billion. Damage occurred in Los Angeles, Ventura, Orange and San Bernardino Counties. 25,000 dwellings were uninhabitable; 7,000 buildings red-tagged; 9 hospitals closed, and 9 parking garages collapsed. Major freeway damage occurred up to 32 km from the epicenter; section of the I-5 Fwy collapsed. One of the most significant incidents was the collapse of an apartment building causing 16 fatalities.			
1987 11 24	Superstition Hills, California	M 6.7	
1983 11 16	Kaoiki, Hawaii	M 6.7	
1899 12 25	San Jacinto, California	M 6.7	6
2008 05 02	Andreanof Islands, Aleutian Islands, Alaska	M 6.6	
2008 04 16	Andreanof Islands, Aleutian Islands, Alaska	M 6.6	
2005 06 17	Off the Coast of Northern California	M 6.6	
2003 02 19	Unimak Island Region, Alaska	M 6.6	

2003 12 22	San Simeon, California	M 6.6 (6.5)	2
19:15:56 UTC (11:15:56 am PST) / 6 miles NE from San Simeon; 24 miles WNW from Paso Robles Two people killed and 47 injured in the Paso Robles-Templeton area. 290 homes and 190 commercial structures were damaged. Estimated damage: \$20 million (to \$60 million) in "insured" losses. "Actual" losses estimates ranged to \$250 million.			
1971 02 09	San Fernando, California	M 6.6	65
1971 02 09 14:00 UTC (6:01 am PST) / occurred in a sparsely populated area of the San Gabriel Mountains, near northern San Fernando Valley; 6 miles NNE of Sylmar Earthquake caused 65 deaths, mostly at the V.A. Hospital where 49 people died; injured more than 2,000; and caused property damage estimated at more than \$505 million. Extensive property damage in the Los Angeles area included the collapse of structures at Olive View Hospital in Sylmar & the Veterans Administration Hospital at San Fernando; the collapse of several freeway overpasses; and damage to two dams.			
1954 07 06	Fallon-Stillwater area, Nevada	M 6.6	
1934 03 12	Kosmo, Utah	M 6.6	2
1925 06 28	Clarkston Valley, Montana	M 6.6	
1895 10 31	Charleston, Missouri	M 6.6	
1882 11 08	Denver, Colorado	M 6.6	
2010 01 10	Offshore Northern California	M 6.5	
2007 08 15	Andreanof Islands, Aleutian Islands, Alaska	M 6.5	
1992 06 28	Big Bear, California	M 6.5	
1987 11 24	Superstition Hills, California	M 6.5	2
M 6.5: 1987 Nov 24 UTC 01:54 (local: Nov 23) / West of Westmorland, CA M 6.7: 1987 Nov 24 UTC 13:15 These earthquakes caused estimated property damage of \$3 million in Imperial County. The earthquake sequence consisted of foreshocks, with the first main shock followed by a second bigger shock about 11 hours later. Damage in El Centro, Imperial, and Westmorland included fallen chimneys, broken pipes, broken windows and buckled highways & streets. Estimated damage to irrigation canal facilities was around \$750,000.			
1965 04 29	Puget Sound, Washington	M 6.5	7
1965 04 29 15:28:43.7 UTC Earthquake caused 7 deaths from falling debris, and about \$12.5 million in property damage. Damage included fallen chimneys in West Seattle, two damaged schools, cracked walls, ground/foundation movement.			
1959 08 18	Wyoming	M 6.5	
1954 12 21	Eureka, California	M 6.5	1
1934 01 30	Excelsior Mountains, Nevada	M 6.5	
1929 10 06	Holualoa, Hawaii	M 6.5	
1911 07 01	Calaveras fault, California	M 6.5	
1865 10 08	Santa Cruz Mountains, California	M 6.5	
1836 06 10	South San Francisco Bay region, California	M 6.5	
2007 12 26	Fox Islands, Aleutian Islands, Alaska	M 6.4	
1983 05 02	Coalinga, California	M 6.4	
1983 05 02 23:42 UTC / about 9 miles NE of Coalinga This earthquake injured about 200 people and caused an estimated \$31 million in property damage. Damage was most severe in Coalinga, where the downtown commercial district was almost completely destroyed.			
1979 10 15	Imperial Valley, Mexico - California Border	M 6.4	
1933 03 11	Long Beach, California	M 6.4	115
1933 March 11 01:54 UTC (local: 03/10 17:54 PST) / SE of Long Beach, centered near the border of Huntington and Newport Beach This earthquake caused serious damage to weak masonry structures on land fill from Los Angeles south to Laguna Beach. 115 people were killed and property damage was estimated at \$40 million; severe damage at Compton, Long Beach, and other towns in the area. Many schools were damaged, which led to the establishment of state standards for safer school design.			
1932 06 06	Eureka, California	M 6.4	1
1901 03 03	Parkfield, California	M 6.4	
1892 04 21	Winters, California	M 6.4	
1892 04 19	Vacaville, California	M 6.4	1
2003 01 16	Blanco Fracture Zone - Offshore Oregon	M 6.3	

1947 11 23	Southwest Montana	M 6.3	
1935 10 19	Helena, Montana 04:48 UTC (local 10/18)	M 6.3	2
<i>This is the main earthquake of the 1935 series of shocks at Helena. 2 people were killed by falling bricks, several were injured, and property damage was estimated at about \$3 million. 300 buildings were damaged</i>			
1915 06 23	Imperial Valley, California M 6.3: 1915 06 23 03:59 UTC (local time June 22) & M 6.3: 1915 06 23 04:56 UTC (local time June 22)	M 6.3	6 (Mexico)
<i>Two destructive earthquakes wrecked buildings, overturned chimneys, and knocked down walls in the Calexico-El Centro area. The second shock completed the destruction of already weakened buildings. This shock killed six people in Mexicali, Mexico. The area of heaviest property damage extended from Mexicali north to the US (Calexico, El Centro, & Heber), with almost every brick and adobe building damaged. Property loss was estimated at \$900,000 for both Mexico and the U.S. Damage at El Centro, the largest city in the Imperial Valley at this time, was estimated at \$600,000.</i>			
1898 03 31	Mare Island, California	M 6.3	
1897 06 20	Calaveras fault, California	M 6.3	
1890 02 24	Corralitos, California	M 6.3	
1843 01 05	Northeast Arkansas	M 6.3	
1992 04 23	Joshua Tree	M 6.2	
1986 07 21	Chalfant Valley, California	M 6.2	
1984 04 24	Morgan Hill, California	M 6.2	
1980 05 25	Mammoth Lakes, California M 6.2: 1980 May 25 16:33; M 5.9: 16:49; M 5.9: 19:44 UTC	M 6.2	
<i>Property damage to schools, other public buildings, highways, and store merchandise was estimated at \$1.5 million. 9 people injured, mainly from falling rocks. Landslides and rockfalls were common in this area and in Yosemite National Park.</i>			
1975 03 02	Eastern Idaho	M 6.2	
1973 04 26	Island of Hawaii, Hawaii	M 6.2	
1986 07 08	North Palm Springs, California	M 6.1	
1975 06 30	Yellowstone National Park, Wyoming	M 6.1	
1966 06 28	Parkfield, California	M 6.1	
1944 07 12	Sheep Mountain, Idaho	M 6.1	
1934 06 08	Parkfield, California	M 6.1	
1926 10 22	Monterey Bay, California	M 6.1	
1922 03 10	Parkfield, California	M 6.1	
2008 02 21	Nevada 14:16:02 UTC (Thurs, 02/21 at 06:16:02 AM local) / 5 miles ENE of Wells, NV	M 6.0	
<i>This quake caused 3 injuries, damaged more than 20 buildings heavily and almost 700 buildings slightly, and broke a water main at Wells.</i>			
2004 09 28	Central California 17:15:24 UTC (Local: 10:15 AM PDT on September 28, 2004)	M 6.0	
<i>This was the anticipated Parkfield earthquake on the San Andreas fault. It ruptured roughly the same segment of the fault that broke in 1966.</i>			
1993 09 21	Klamath Falls, Oregon 1993 Sept 21 03:28:55 UTC, M 6.0 and 1993 Sept 21 05:45:33 UTC, M 6.0	M 6.0	2
<i>The Klamath Falls earthquakes caused 2 deaths and approximately \$7.5 million in damage. More than 1,000 homes and commercial buildings were damaged.</i>			
1980 05 27	Mammoth Lakes, California	M 6.0	
1935 10 31	Helena, Montana	M 6.0	2
<i>This was an aftershock to the main tremor on October 19. Two people were killed at Helena, and about \$1 million in property damage occurred.</i>			

Other fatalities from smaller earthquakes:

1987 10 01	Whittier Narrows, California	M 5.9	Fatalities 8
1952 08 22	Kern County, California	M 5.8	Fatalities 2
1969 10 02	Santa Rosa, California	M 5.7	Fatalities 1
1987 10 04	Whittier Narrows, California	M 5.6	Fatalities 1
1991 06 28	Sierra Madre, California	M 5.6	Fatalities 2
1926 06 29	Santa Barbara, California	M 5.5	Fatalities 1
1955 10 24	Concord, California	M 5.4	Fatalities 1
1989 08 08	Santa Cruz County, California	M 5.4	Fatalities 1
1957 03 22	Daly City, California	M 5.3	Fatalities 1
1995 02 03	Wyoming	M 5.3	Fatalities 1

COMPILATION OF EARTHQUAKES IN THE UNITED STATES, excluding ALASKA ~ 2010-2011

All States except Alaska: Earthquake Magnitude 4.0 or Greater

Many people think that only California is earthquake country, but earthquakes occur throughout the United States. Here is a list of Magnitude 4.0+ earthquakes that occurred in the United States, excluding Alaska, during 2010 and 2011. Information on these quakes were compiled from the USGS' lists of "Latest Earthquakes in the World, last 7-days" and "Recent Earthquakes in CA-NV, last 7 days." Some of the earthquakes are aftershocks of larger earthquakes.

Magnitude	STATE / LOCATION	DATE-TIME (UTC)
M 4.0	YOUNGSTOWN-WARREN URBAN AREA, OHIO (2 miles NW from Youngstown, OH)	2011 Dec 31 20:05:01 UTC
M 4.1	OFF THE COAST OF OREGON (231 miles WNW of Coos Bay, OR)	2011 Dec 20 16:06:46 UTC
M 4.0	OFF THE COAST OF NORTHERN CALIFORNIA (69 miles W from Petrolia, CA)	2011 Dec 08 05:19:12 UTC
M 4.6	WASHINGTON (5 miles WSW from Riverside, WA)	2011 Nov 18 13:09:00 UTC
M 4.2	WESTERN MONTANA (13 miles SE from Clinton, MT)	2011 Nov 11 17:51:53 UTC
M 4.0	OFF THE COAST OF CALIFORNIA (188 miles SW from Point Reyes, CA)	2011 Nov 09 06:56:57 UTC
M 4.0	NEVADA (19 miles SE from Eureka, NV; 25 miles N from Duckwater, NV)	2011 Nov 09 06:40:23 UTC
M 4.7	OKLAHOMA (17 miles NNE of Shawnee, OK; 43 miles E of Oklahoma City)	2011 Nov 08 02:46:57 UTC
M 4.0	OKLAHOMA (12 miles NNE of Shawnee, OK; 36 miles E of Oklahoma City)	2011 Nov 06 09:39:57 UTC
M 5.6	OKLAHOMA (5 miles NW from Prague, OK; 44 miles E from Oklahoma City)	2011 Nov 06 03:53:10 UTC / Sat, 11/05 at 10:53:10 PM local
M 4.7	OKLAHOMA (20 miles NE of Shawnee, OK; 42 miles SSE of Stillwater, OK)	2011 Nov 05 07:12:45 UTC
M 4.1	SOUTHERN CALIFORNIA (5 mi NE from Ridgecrest, CA; 11 mil ENE from Inyokern)	2011 Nov 01 15:38:22 UTC
M 4.7	NORTHERN CALIFORNIA (9 miles SSE from Whitehawk, CA)	2011 Oct 27 06:37:09 UTC
M 4.0	SAN FRANCISCO BAY AREA, CA (2 mi SE from Berkeley; 2 mi NE from Emeryville)	2011 Oct 20 21:41:04 UTC
M 4.8	SOUTHERN TEXAS (37 miles NW of Beeville, TX; 47 miles SSE of San Antonio, TX)	2011 Oct 20 12:24:40 UTC
M 4.5	ISLAND OF HAWAII, HAWAII (13 miles SE from Waimea, HI)	2011 Oct 20 00:10:04 UTC
M 4.0	SOUTHERN CALIFORNIA (8 mi WSW of Ludlow; 41 mi NNW of Twentynine Palms, CA)	2011 Oct 17 20:05:57 UTC
M 4.0	CENTRAL CALIFORNIA (25 mi NNE of Toms Place, CA; 29 mi NE of Mammoth Lakes)	2011 Oct 15 11:42:29 UTC
M 5.3	OFF THE COAST OF OREGON (144 miles W of Coos Bay, OR)	2011 Oct 13 04:13:59 UTC
M 4.0	CENTRAL CALIFORNIA (11 miles WSW from Scottys Castle, CA)	2011 Oct 07 22:10:10 UTC
M 4.5	NEVADA (6 miles SE from Schurz, NV; 27 miles NNW from Hawthorne, NV)	2011 Oct 01 07:07:00 UTC
M 4.1	Greater LOS ANGELES AREA, CALIF. (6 miles SSW from Yucaipa, CA)	2011 Sept 14 14:44:51 UTC
M 4.0	NEW MEXICO (17 miles W of Raton, NM; 21 miles SW of Trinidad, CO)	2011 Sept 13 05:24:39 UTC
M 4.4	WESTERN TEXAS (11 miles NNE of Snyder, TX; 35 miles NW of Sweetwater, TX)	2011 Sept 11 12:27:45 UTC
M 4.2	Greater LOS ANGELES Area, CA (4 mi SE from Newhall; 4 mi NNW from San Fernando)	2011 Sept 01 20:47:07 UTC
M 4.6	CENTRAL CALIFORNIA (4 mi NNW from Pinnacles, CA; 13 mi NE from Soledad, CA)	2011 Aug 27 07:18:21 UTC
M 4.5	VIRGINIA (31 miles E of Charlottesville, VA; 32 miles SW of Fredericksburg, VA)	2011 Aug 25 05:07:50 UTC
M 4.2	CENTRAL CALIFORNIA (9 mi SE from Mammoth Lakes; 11 mi W from Toms Place)	2011 Aug 24 11:59:51 UTC
M 4.2	VIRGINIA (7 miles SSW from Mineral, VA; 8 miles SSE from Louisa, VA)	2011 Aug 24 00:04:36 UTC
M 5.8	VIRGINIA (5 miles SSW from Mineral, VA; 7 miles SSE from Louisa, VA; (38 miles NW from Richmond, VA; 84 miles SW from Washington, DC)	2011 Aug 23 17:51:04 UTC / Tues, 08/23 at 01:51:04 PM local
M 5.3	COLORADO (9 miles WSW of Trinidad, CO; 20 miles NW of Raton, New Mexico)	2011 Aug 23 05:46:19 UTC / Mon, 08/22 at 11:46:19 PM local
M 4.6	COLORADO (16 miles WSW of Trinidad, CO; 20 miles WNW of Raton, New Mexico)	2011 Aug 22 23:30:20 UTC
M 4.1	Offshore NORTHERN CALIF (54 miles W from Trinidad; 54 mi WNW from Humboldt Hill)	2011 Aug 14 19:27:06 UTC
M 4.5	OFF THE COAST OF OREGON (233 miles WNW of Coos Bay, OR)	2011 Aug 05 15:10:07 UTC
M 4.1	SOUTHERN CALIFORNIA (10 miles) WNW from Ocotillo, CA)	2011 July 11 01:58:54 UTC
M 4.1	OFF THE COAST OF OREGON (223 miles WNW of Coos Bay, OR)	2011 July 10 05:34:33 UTC
M 4.8	Off the COAST of NORTHERN CALIFORNIA (137 miles W of Crescent City, CA)	2011 June 18 10:49:11 UTC
M 4.2	Off the COAST of NORTHERN CALIFORNIA (126 miles WSW from Gold Beach, OR)	2011 June 18 02:41:16 UTC
M 4.4	SOUTHERN CALIFORNIA (9 miles SSW from Seeley; 13 miles WSW from Heber, CA)	2011 June 09 15:22:12 UTC
M 4.2	NEVADA (8 miles SW from Hawthorne, NV; 14 miles NW from Qualeys Camp, NV)	2011 May 27 19:45:48 UTC
M 4.6	OFF THE COAST OF OREGON (142 miles W of Coos Bay, OR)	2011 May 22 07:21:37 UTC
M 4.1	NEVADA (9 miles SW from Hawthorne, NV; 13 miles NW from Qualeys Camp, NV)	2011 May 12 16:23:48 UTC
M 4.5	CENTRAL CALIFORNIA (6 miles S from Keeler; 10 miles ENE from Cartago)	2011 May 03 21:41:49 UTC

M 4.3	NEVADA (9 miles SW from Hawthorne, NV)	2011 April 27 19:19:20 UTC
M 4.1	NEVADA (12 miles WNW from Qualeys Camp, NV; 12 miles SSW from Hawthorne, NV)	2011 April 17 00:55:46 UTC
M 4.6	NEVADA (11 miles SW from Hawthorne, NV; 13 miles WNW from Qualeys Camp, NV)	2011 April 17 00:45:37 UTC
M 4.1	NEVADA (5 miles WNW from Tonopah Junction, NV)	2011 April 16 09:46:32 UTC
M 4.0	NEVADA (12 miles SW from Hawthorne)	2011 April 15 18:21:31 UTC
M 4.0	NEVADA (11 miles SW from Hawthorne, NV)	2011 April 15 17:24:25 UTC
M 4.3	NEVADA (11 miles SW from Hawthorne, NV)	2011 April 15 13:33:55 UTC
M 4.3	OFF the COAST of NORTHERN CALIFORNIA (118 miles W of Eureka, CA)	2011 April 14 01:34:39 UTC
M 4.2	NEVADA (12 miles SW from Hawthorne, NV)	2011 April 13 22:16:08 UTC
M 4.4	NEVADA (13 miles SSW from Hawthorne, NV)	2011 April 13 22:10:08 UTC
M 4.3	OFF THE COAST OF OREGON (115 miles WNW of Brookings, OR)	2011 April 12 01:12:05 UTC
M 4.2	NEVADA (12 miles SSW from Hawthorne, NV)	2011 April 11 00:22:21 UTC
M 4.0	NEVADA (12 miles SSW from Hawthorne, NV)	2011 April 11 00:21:16 UTC
M 4.1	WESTERN MONTANA (18 miles NNE from Spencer, ID; 24 miles E from Lima, MT)	2011 April 05 07:05:25 UTC
M 4.1	WYOMING (26 miles WNW of Pinedale, WY; 36 miles NE of Afton, WY)	2011 April 01 12:56:28 UTC
M 4.4	Off the COAST of OREGON (123 mi WNW of Brookings; 130 mi WSW of Coos Bay, OR)	2011 March 25 23:19:04 UTC
M 4.6	OFF THE COAST OF OREGON (268 miles WNW of Coos Bay, OR)	2011 March 08 07:29:53 UTC
M 4.4	Off the COAST of OREGON (260 mi W of Newport, OR; 262 mi WNW of Coos Bay, OR)	2011 March 08 07:19:33 UTC
M 5.0	Off the COAST of OREGON (267 mi W of Newport, OR; 269 mi WNW of Coos Bay, OR)	2011 March 08 01:26:59 UTC
M 4.1	OFF THE COAST OF OREGON (247 miles W of Newport, OR)	2011 March 07 15:59:27 UTC
M 4.9	OFF THE COAST OF OREGON (269 miles W of Newport, OR)	2011 March 06 22:23:16 UTC
M 4.8	OFF THE COAST OF OREGON (262 miles W of Newport, OR)	2011 March 06 21:35:48 UTC
M 4.5	OFFSHORE NORTHERN CALIFORNIA (68 miles W of Fortuna, CA)	2011 March 06 13:46:38 UTC
M 4.5	NORTHERN CALIFORNIA (1 miles NNW from The Geysers, CA)	2011 March 01 02:19:47 UTC
M 4.7	ARKANSAS (4 mi NE from Greenbrier; 4 mi S from Guy; 6 mi SE from Twin Groves)	2011 Feb 28 05:00:50 UTC
M 4.2	NORTHERN CALIFORNIA (6 mi N from Lake Pillsbury; 16 mi SW from Alder Springs)	2011 Feb 23 04:50:14 UTC
M 4.3	NORTHERN CALIFORNIA (6 miles N from Lake Pillsbury, CA)	2011 Feb 23 04:49:41 UTC
M 4.1	ARKANSAS (3 mi NNE from Greenbrier; 4 mi SE from Twin Groves; 4 mi SSW from Guy)	2011 Feb 18 08:13:35 UTC
M 4.3	MOUNT ST. HELENS AREA, WA (6 miles NNW from Mount St. Helens Volcano, WA)	2011 Feb 14 18:35:25 UTC
M 5.2	OFF THE COAST OF OREGON (145 miles W of Coos Bay, OR)	2011 Feb 08 22:02:01 UTC
M 4.7	OFF THE COAST OF OREGON (180 miles W of Coos Bay, OR)	2011 Feb 08 07:44:36 UTC
M 4.0	SOUTHERN CALIFORNIA (8 miles) SE from Ocotillo, CA)	2011 Feb 06 23:56:00 UTC
M 4.1	OFF THE COAST OF OREGON (165 miles W of Coos Bay, OR)	2011 Jan 27 13:02:41 UTC
M 4.2	NEVADA (11 miles WNW from Luning, NV; 13 miles E from Hawthorne, NV)	2011 Jan 22 19:21:04 UTC
M 4.3	NEVADA (11 miles WNW from Luning, NV; 13 miles E from Hawthorne, NV)	2011 Jan 22 17:29:25 UTC
M 4.0	NEVADA (11 miles WNW from Luning, NV; 13 miles E from Hawthorne, NV)	2011 Jan 22 17:26:09 UTC
M 4.5	CENTRAL CALIFORNIA (6 miles SSE from San Juan Bautista, CA)	2011 Jan 12 08:51:03 UTC
M 4.1	NEVADA (10 miles NNW from Scottys Castle, CA; 11 miles SW from Tokop, NV)	2011 Jan 11 01:36:19 UTC
M 4.1	NORTHERN CALIFORNIA (10 mi E from Seven Trees; 11 mi ESE from Alum Rock, CA)	2011 Jan 08 00:10:16 UTC
M 4.6	UTAH (6 miles NW from Circleville, UT; 6 miles W from Junction, UT)	2011 Jan 03 12:06:36 UTC
M 4.2	SOUTHERN CALIFORNIA (11 mi ESE from Ocotillo, CA; 12 mi SW from Seeley, CA)	2010 Dec 18 07:04:42 UTC
M 4.4	SOUTHERN CALIFORNIA (4 mi N from Brawley, CA; 5 miles E from Westmorland, CA)	2010 Dec 15 19:16:47 UTC
M 4.0	OFFSHORE NORTHERN CALIFORNIA (52 miles W from Petrolia, CA)	2010 Dec 08 20:18:56 UTC
M 4.6	OFF THE COAST OF OREGON (210 miles WNW of Coos Bay, OR)	2010 Nov 25 02:04:40 UTC
M 4.7	MAUI REGION, HAWAII (30 mi SSW of Wailuku, Maui; 30 mi SE of Lanai City, Lana'i)	2010 Nov 24 04:34:09 UTC
M 4.6	OFF THE COAST OF OREGON (150 miles W of Coos Bay, OR)	2010 Nov 21 23:46:35 UTC
M 4.2	WASHINGTON (3 miles NE from Mossyrock, WA; 7 miles W from Morton, WA)	2010 Nov 16 15:51:08 UTC
M 4.2	OFF THE COAST OF WASHINGTON (220 miles W of Neah Bay, WA)	2010 Nov 15 12:19:15 UTC
M 4.4	OFF THE COAST OF OREGON (130 miles W of Coos Bay, OR)	2010 Nov 10 03:53:48 UTC
M 4.6	SOUTHERN CALIFORNIA (9 miles N of Ocotillo, CA; 25 miles W of El Centro, CA)	2010 Nov 04 19:39:59 UTC
M 4.3	CENTRAL CALIFORNIA (13 mi ESE of Markleeville; 30 mi SE of South Lake Tahoe, CA)	2010 Oct 31 01:02:06 UTC
M 4.2	OFF THE COAST OF OREGON (125 miles W of Coos Bay, OR)	2010 Oct 30 19:29:09 UTC
M 4.1	HAWAII REGION, HAWAII (40 mi NW of Hilo, Hawai'i; 45 mi NE of Kailua Kona, Hawai'i)	2010 Oct 30 01:09:25 UTC
M 4.4	WYOMING (20 miles ENE of Jackson, WY; 40 miles W of Dubois, WY)	2010 Oct 24 17:43:59 UTC
M 4.3	OKLAHOMA (5 miles ESE of Norman, OK; 20 miles SSE of Oklahoma City)	2010 Oct 13 14:06:30 UTC
M 4.4	OFF THE COAST OF NORTHERN CALIFORNIA	2010 Oct 13 10:50:24 AM
M 4.0	ARKANSAS (15 miles NNE of Conway, AR; 35 miles W of Searcy, Arkansas)	2010 Oct 11 13:33:40 UTC
M 4.1	NEVADA (9 miles NNW of Scottys Castle, CA; 40 miles WNW of Beatty, NV)	2010 Oct 05 21:22:46 UTC
M 4.4	OFFSHORE NORTHERN CALIFORNIA (35 miles WNW of Eureka, CA)	2010 Oct 05 15:15:27 UTC
M 4.4	Off the COAST of OREGON (280 mi W of Newport, OR; 290 mi WNW of Coos Bay, OR)	2010 Oct 02 07:51:53 UTC

M 4.4	NEVADA (8 miles NNW from Scottys Castle, CA; 13 miles SSW from Tokop, NV)	2010 Sept 30 08:37:35 UTC
M 4.4	Off the COAST of OREGON (290 mi W of Newport, OR; 300 mi WNW of Coos Bay, OR)	2010 Sept 20 04:05:07 UTC
M 5.0	BAJA CALIFORNIA, MEXICO (17 miles SSW of Guadalupe Victoria)	2010 Sept 14 10:52:18 UTC
M 4.0	WYOMING (25 miles S of Jackson, WY; 30 miles NNE of Afton, WY)	2010 Sept 12 22:20:30 UTC
M 4.1	WYOMING (25 miles SSE of Jackson, WY; 30 miles NNE of Afton, WY)	2010 Sept 12 20:09:44 UTC
M 4.5	OFF THE COAST OF OREGON (105 miles W of Coos Bay, OR)	2010 Sept 05 00:46:02 UTC
M 4.0	CHANNEL ISLANDS Region, CA (33 mi NE of San Nicolas Is., CA; 45 mi S of Oxnard)	2010 Aug 24 05:42:16 UTC
M 4.3	WYOMING (20 miles ENE of Jackson, WY; 40 miles W of Dubois, WY)	2010 Aug 17 02:49:56 UTC
M 4.4	OFFSHORE NORTHERN CALIFORNIA (48 miles WNW of Ferndale, CA)	2010 Aug 16 12:05:17 UTC
M 4.1	SOUTHERN CALIFORNIA (10 mi NNE of Palm Springs, CA; 20 miles NW of Indio, CA)	2010 Aug 06 17:39:31 UTC
M 4.2	WYOMING (20 miles ENE of Jackson, WY; 40 miles WNW of Dubois, WY)	2010 Aug 05 14:59:28 UTC
M 4.8	WYOMING (20 miles ENE of Jackson, WY; 40 miles W of Dubois, WY)	2010 Aug 05 00:04:17 UTC
M 4.2	NEVADA (25 miles SW of Gabbs, NV; 25 miles ENE of Hawthorne, NV)	2010 July 30 11:13:46 UTC
M 5.2	OFF THE COAST OF OREGON (85 miles WNW of Coos Bay, OR)	2010 July 28 16:12:05 UTC
M 4.0	SOUTHERN CALIFORNIA (25 miles W of El Centro, CA; 30 miles WSW of Brawley, CA)	2010 July 24 02:29:41 UTC
M 4.2	NEVADA (40 miles NNE of Reno, NV; 40 miles SSW of Gerlach, NV)	2010 July 20 21:48:29 UTC
M 4.0	NORTHERN CALIFORNIA (15 mi SW of Clearlake, CA; 25 mi NNW of Santa Rosa, CA)	2010 July 15 15:31:43 UTC
M 5.4	SOUTHERN CALIFORNIA (15 miles NNW of Borrego Springs, CA; 25 miles SW of Indio, CA; 30 miles S of Palm Springs, CA)	2010 July 07 23:53:33 UTC / Wed, July 07 at 04:53:33 PM
M 4.0	SOUTHERN CALIFORNIA (2 mi SE from Ocotillo, CA; 17 mi WSW from Seeley, CA)	2010 June 24 17:07:36 UTC
M 4.2	WASHINGTON (19 miles S from White Swan, WA; 21 mi N from Goldendale, WA)	2010 June 17 14:23:24 UTC
M 4.0	SOUTHERN CALIFORNIA (6 mi SE from Ocotillo, CA; 15 mi WSW from Seeley, CA)	2010 June 15 08:16:51 UTC
M 4.2	SOUTHERN CALIFORNIA (6 mi SE from Ocotillo, CA; 15 mi WSW from Seeley, CA)	2010 June 15 08:14:47 UTC
M 4.3	SOUTHERN CALIFORNIA (3 mi SE from Ocotillo, CA; 17 mi WSW from Seeley, CA)	2010 June 15 05:34:16 UTC
M 4.5	SOUTHERN CALIFORNIA (4 mi SE from Ocotillo, CA; 16 mi WSW from Seeley, CA)	2010 June 15 04:59:45 UTC
M 4.0	SOUTHERN CALIFORNIA (5 mi ESE from Ocotillo, CA; 14 mi WSW from Seeley, CA)	2010 June 15 04:36:07 UTC
M 5.7	SOUTHERN CALIFORNIA (5 miles ESE from Ocotillo, CA; 15 miles WSW from Seeley, CA; 22 miles WSW from El Centro, CA)	2010 June 15 04:26:58 UTC / Mon, 06/14 at 09:26:58 PM
M 4.2	SOUTHERN CALIFORNIA (10 miles N from Borrego Springs, CA)	2010 June 13 03:09:20 UTC
M 4.9	SOUTHERN CALIFORNIA (10 miles NNW from Borrego Springs)	2010 June 13 03:08:57 UTC
M 4.3	NEVADA (12 miles ENE of Sylvania, NV; 18 miles NW from Tokop, NV)	2010 June 12 15:29:25 UTC
M 4.4	OFF THE COAST OF OREGON (248 miles WNW from Bandon, OR)	2010 June 09 05:42:50 UTC
M 4.3	OFFSHORE NORTHERN CALIFORNIA (62 miles W from Petrolia, CA)	2010 June 05 09:05:26 UTC
M 4.1	SOUTHERN CALIFORNIA (6 miles ESE from Ocotillo, CA)	2010 June 03 18:10:04 UTC
M 4.0	SOUTHERN CALIFORNIA (3 miles SE from Ocotillo, CA)	2010 May 22 04:53:18 UTC
M 4.4	SOUTHERN CALIFORNIA (9 miles ESE from Ocotillo, CA)	2010 May 20 09:26:26 UTC
M 4.0	SOUTHERN CALIFORNIA (10 miles SSW from Seeley, CA)	2010 May 19 14:39:26 UTC
M 4.5	SOUTHERN CALIFORNIA (12 miles SE from Ocotillo, CA; 13 mi SW from Seeley, CA)	2010 May 19 00:38:59 UTC
M 4.0	OFF THE COAST OF OREGON (109 miles W from Gold Beach, OR)	2010 May 14 19:33:03 UTC
M 4.0	OFF THE COAST OF OREGON (123 miles W from Gold Beach, OR)	2010 May 14 19:10:22 UTC
M 4.0	SOUTHERN CALIFORNIA (8 miles ESE from Ocotillo, CA)	2010 May 14 05:11:07 UTC
M 4.1	OFF THE COAST OF OREGON (90 miles W from Gold Beach, OR)	2010 May 14 01:01:19 UTC
M 5.1	OFF THE COAST OF OREGON (106 miles W from Gold Beach, OR; 108 miles WSW from Port Orford, OR)	2010 May 13 05:35:11 UTC / Wed, 05/12 at 09:35:11 PM
M 4.1	SOUTHERN CALIFORNIA (12 miles ESE from Ocotillo, CA)	2010 May 09 03:33:43 UTC
M 4.3	CENTRAL CALIFORNIA (9 miles ESE from Maricopa, CA)	2010 May 08 19:23:06 UTC
M 4.7	SOUTHERN CALIFORNIA (12 miles ESE from Ocotillo, CA)	2010 May 08 18:46:26 UTC
M 4.8	SOUTHERN CALIFORNIA (11 miles SW from Seeley; 11 mi ESE from Ocotillo, CA)	2010 May 08 18:33:10 UTC
M 4.4	OFF THE COAST OF OREGON (262 miles W from Yachats, OR)	2010 May 07 20:02:19 UTC
M 4.3	OFF THE COAST OF OREGON (269 miles W from Yachats, OR)	2010 May 07 19:03:31 UTC
M 4.1	OFF THE COAST OF OREGON (264 miles W from Yachats, OR)	2010 May 07 18:55:09 UTC
M 4.2	OFF THE COAST OF OREGON (269 miles W from Yachats, OR)	2010 May 07 18:51:00 UTC
M 4.5	OFF THE COAST OF OREGON (262 miles W from Yachats, OR)	2010 May 07 18:43:08 UTC
M 4.4	OFF THE COAST OF OREGON (264 miles W from Yachats, OR)	2010 May 07 18:41:55 UTC
M 5.1	OFF THE COAST OF OREGON (264 miles W from Yachats, OR)	2010 May 07 17:46:14 UTC
M 4.2	SOUTHERN CALIFORNIA (7 miles ESE from Ocotillo, CA)	2010 May 06 09:01:41 UTC
M 4.8	SOUTHERN CALIFORNIA (10 miles ESE from Ocotillo, CA)	2010 April 27 10:55:35 UTC
M 4.0	SOUTHERN TEXAS (4 mi SSW from Rancho Banquete; 28 mi W from Corpus Christi)	2010 April 25 02:10:41 UTC
M 4.7	SOUTHERN CALIFORNIA (11 mi SW from Seeley, CA; 17 mi WSW from El Centro, CA)	2010 April 22 17:12:12 UTC

M 4.6	SOUTHERN CALIFORNIA (11 mi SW of Seeley, CA; 12 mi ESE of Ocotillo, CA)	2010 April 22 14:22:03 UTC
M 4.3	SOUTHERN CALIFORNIA (9 mi ESE of Ocotillo, CA; 19 mi WSW of El Centro, CA)	2010 April 19 04:26:08 UTC
M 4.4	Off the COAST of NORTHERN CALIFORNIA (152 miles W from Petrolia, CA)	2010 April 17 04:22:13 UTC
M 4.9	UTAH (5 miles ENE from Randolph, UT; 13 miles NNE from Woodruff, UT)	2010 April 15 23:59:39 UTC
M 4.1	SOUTHERN CALIFORNIA (10 mi SSW of Seeley, CA; 14 mi ESE of Ocotillo, CA)	2010 April 14 11:19:59 UTC
M 4.0	SOUTHERN CALIFORNIA (11 mi SW of Seeley, CA; 12 mi ESE of Ocotillo, CA)	2010 April 13 15:36:32 UTC
M 4.5	SOUTHERN CALIFORNIA (10 mi SSW of Seeley, CA; 14 mi ESE of Ocotillo, CA)	2010 April 10 09:12:28 UTC
M 4.2	OFF THE COAST OF OREGON (231 miles W from Yachats, OR)	2010 April 09 01:27:10 UTC
M 5.3	BAJA CALIFORNIA, MEXICO (11 miles WSW from Guadalupe Victoria)	2010 April 08 16:44:25 UTC
M 4.5	SOUTHERN CALIFORNIA (10 mi SSW of Seeley, CA; 14 mi WSW of Heber)	2010 April 08 02:47:56 UTC
M 4.0	CENTRAL CALIFORNIA (4 miles NW from Parkfield; 16 mi SSW from Coalinga)	2010 April 07 22:40:29 UTC
M 4.4	SOUTHERN CALIFORNIA (6 mi ESE of Ocotillo, CA; 13 mi WSW of Seeley)	2010 April 07 05:21:41 UTC
M 4.5	SOUTHERN CALIFORNIA (5 mi E of Ocotillo, CA; 13 mi WSW from Seeley, CA)	2010 April 07 05:21:25 UTC
M 5.1	BAJA CALIFORNIA, MEXICO (12 mi SSW from Seeley, CA; 71 mi E from Tijuana, BC)	2010 April 05 13:33:05 UTC
M 5.1	SOUTHERN CALIFORNIA (11 mi SW from Seeley, CA; 71 mi E from Tijuana, BC, Mex)	2010 April 05 11:14:14 UTC
M 5.0	BAJA CALIFORNIA, MEXICO (13 mi SSW from Seeley, CA; 71 mi E from Tijuana, BC)	2010 April 05 03:15:24 UTC
M 5.1	BAJA CALIFORNIA, MEXICO (8 mi S from Guadalupe Victoria, Baja CA Mexico)	2010 April 05 01:25:34 UTC
M 5.7	BAJA CALIFORNIA, MEXICO (8 mi SW of Guadalupe Victoria, Baja CA, Mexico)	2010 April 04 23:25:06 UTC
M 5.3	BAJA CALIFORNIA, MEXICO (19 mi SSW from Guadalupe Victoria, Baja CA, Mexico)	2010 April 04 23:15:10 UTC
M 7.2	BAJA CALIFORNIA, MEXICO (11 mi WSW from Guadalupe Victoria, BC, Mexico; 29 mi SSE from Mexicali, BC; 32 mi SSE from Calexico, CA)	2010 April 04 22:40:42 UTC / Sun, 04/04 at 03:40:42 PM
M 4.1	NEW MEXICO (18 mi WNW from Carlsbad North, NM; 24 mi SSE from Hope, NM)	2010 March 28 00:03:55 UTC
M 4.0	OFF THE COAST OF OREGON (270 miles WNW from Bandon, OR)	2010 March 18 07:16:22 UTC
M 4.4	Greater LOS ANGELES AREA, CALIF (1 km/0 mile ENE from Pico Rivera, CA; 2 miles SE from Montebello, CA; 10 miles ESE from Los Angeles Civic Center)	2010 March 16 11:04:00 UTC
M 4.6	Off the Coast of OREGON (254 mi WNW from Bandon, OR; 255 mi W from Yachats, OR)	2010 March 15 12:37:51 UTC
M 4.2	SOUTHERN CALIFORNIA (14 mi ESE from Julian; 17 mi SW from Ocotillo Wells, CA)	2010 March 13 16:32:32 UTC
M 4.2	Off the Coast of OREGON (258 mi W from Yachats; 258 mi WNW from Barview, OR)	2010 March 13 05:20:17 UTC
M 4.9	OFF THE COAST OF OREGON (255 miles W from Yachats, OR)	2010 March 13 04:53:41 UTC
M 4.3	Off the COAST of OREGON (250 mi W from Yachats, OR; 301 mi W from Eugene, OR)	2010 March 12 20:31:23 UTC
M 4.2	Off the COAST of OREGON (259 mi W from Yachats; 261 mi W from Depoe Bay, OR)	2010 March 12 18:29:57 UTC
M 4.4	ISLAND OF HAWAII, HAWAII (13 miles SW from Laupahoehoe, HI)	2010 March 09 04:29:57 UTC
M 4.0	SOUTHERN CALIFORNIA (14 mi ESE from Julian, CA; 17 mi SW from Ocotillo Wells)	2010 March 09 04:18:21 UTC
M 4.5	OFFSHORE NORTHERN CALIFORNIA (24 miles W from Petrolia, CA)	2010 March 06 08:46:23 UTC
M 4.1	OKLAHOMA (6 miles SE from Sparks, OK; 45 miles E from Oklahoma City, OK)	2010 Feb 27 22:22:27 UTC
M 4.1	CENTRAL CALIFORNIA (5 miles ENE from Coso Junction, CA)	2010 Feb 15 00:07:09 UTC
M 4.1	Greater LOS ANGELES Area, CA (4 mi S from Redlands; 5 mi SE from Loma Linda, CA)	2010 Feb 13 21:39:06 UTC
M 4.3	OFF THE COAST OF OREGON (164 miles WNW from Barview, OR)	2010 Feb 13 00:38:21 UTC
M 5.9	OFFSHORE NORTHERN CALIFORNIA (33 miles WNW from Punta Gorda, CA)	2010 Feb 04 20:20:21 UTC
M 4.3	ISLAND OF HAWAII, HAWAII (4 miles WNW from Pahala, HI;)	2010 Jan 18 23:01:35 UTC
M 4.3	OFF THE COAST OF OREGON (116 miles WNW from Bandon, OR)	2010 Jan 17 18:11:07 UTC
M 4.3	SOUTHERN CALIFORNIA (3 mi W from Beaumont, CA; 7 mi SSE from Yucaipa, CA)	2010 Jan 16 12:03:25 UTC
M 4.0	OKLAHOMA (2 mi ENE from Jones, OK; 17 mi ENE from Oklahoma City, OK)	2010 Jan 15 15:18:25 UTC
M 4.4	CENTRAL CALIFORNIA (6 miles E from Coso Junction, CA)	2010 Jan 15 08:23:27 UTC
M 4.3	SOUTHERN CALIFORNIA (3 mi NNE from Banning, CA; 6 mi ENE from Beaumont, CA)	2010 Jan 12 02:36:08 UTC
M 4.1	Offshore NORTHERN CALIF (31 mi WNW from Petrolia; 32 mi WSW from Ferndale)	2010 Jan 11 06:44:37 UTC
M 4.1	Offshore NORTHERN CALIF (18 mi W from Petrolia, CA; 27 mi SW from Ferndale, CA)	2010 Jan 10 06:32:17 UTC
M 4.0	OFFSHORE NORTHERN CALIFORNIA (23 miles W from Ferndale, CA)	2010 Jan 10 03:07:01 UTC
M 4.4	OFFSHORE NORTHERN CALIFORNIA (27 miles W from Ferndale, CA)	2010 Jan 10 02:21:39 UTC
M 6.5	OFFSHORE NORTHERN CALIFORNIA (23 miles WNW from Ferndale, CA; 26 miles WSW from Humboldt Hill, CA)	2010 Jan 10 00:27:39 UTC / Sat, 01/09 at 04:27:39 PM
M 4.1	SAN FRANCISCO BAY AREA, CALIFORNIA (6 miles ENE from Milpitas, CA)	2010 Jan 07 18:09:35 UTC
M 4.1	UTAH (7 miles SSE from Cedar City, UT; 9 miles ENE from Kanarraville, UT)	2010 Jan 04 16:24:03 UTC
M 4.1	NORTHERN CALIFORNIA (11 mi N from Redway; (20 mi NNE from Shelter Cove, CA)	2010 Jan 04 14:24:54 UTC

COMPILATION of MAGNITUDE 5 or GREATER EARTHQUAKES in ALASKA During 2010-2011

Here is a list of Magnitude 5.0+ earthquakes that occurred in Alaska during 2010-2011. These quakes were compiled from the USGS "Latest Earthquakes in the World, last 7-days" list. Some of the earthquakes are aftershocks of larger earthquakes.

Magnitude	REGION	DATE – TIME (UTC)
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 Dec 10 00:06:01 UTC
M 5.6	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 Nov 19 18:06:24 UTC
M 5.2	ALASKA PENINSULA	2011 Nov 06 10:41:03 UTC
M 5.3	ALASKA PENINSULA	2011 Nov 06 08:08:14 UTC
M 5.8	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Oct 31 07:16:21 UTC
M 5.5	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Oct 28 01:35:30 UTC
M 5.8	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Oct 25 03:24:52 UTC
M 5.6	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Oct 01 09:23:48 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 Sept 27 15:06:06 UTC
M 5.0	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Sept 27 06:46:17 UTC
M 5.2	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Sept 27 06:46:17 UTC
M 5.8	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Sept 19 08:14:15 UTC
M 5.4	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Sept 19 07:03:09 UTC
M 6.1	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>27 km (16 miles) NNW of Attu, Alaska; 87 km (54 miles) WNW of Shemya Island, Alaska</i>	2011 Sept 14 18:10:07 UTC
M 5.1	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Sept 03 01:25:38 UTC
M 6.8	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>45 km (27 miles) SW of Amukta Island, Alaska; 85 km (52 miles) SW of Yunaska Island, Alaska</i>	2011 Sept 02 10:55:54 UTC
M 5.3	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Aug 16 20:23:58 UTC
M 5.4	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 Aug 01 18:20:08 UTC
M 5.3	ALASKA PENINSULA	2011 July 23 06:28:35 UTC
M 5.2	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 July 18 22:48:26 UTC
M 5.6	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 July 18 22:38:38 UTC
M 6.1	ALASKA PENINSULA <i>70 km (43 miles) SW of Sand Point, Alaska; 98 km (60 miles) ESE of Cold Bay, Alaska</i>	2011 July 16 19:59:14 UTC
M 5.2	ALASKA PENINSULA	2011 July 04 21:01:31 UTC
M 5.2	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 28 16:13:32 UTC
M 5.1	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 28 07:32:27 UTC
M 5.3	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 28 06:54:01 UTC
M 5.8	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 28 06:48:34 UTC
M 5.6	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 27 23:27:33 UTC
M 7.2	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>162 km (101 miles) E from Atka, AK; 228 km (142 miles) WSW from Nikolski, AK</i>	2011 June 24 03:09:40 UTC
M 5.0	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 June 21 16:42:14 UTC
M 5.3	KENAI PENINSULA, ALASKA	2011 June 16 19:06:05 UTC
M 5.5	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 May 24 17:43:25 UTC
M 5.1	ALASKA PENINSULA	2011 May 09 19:04:59 UTC
M 5.8	ALASKA PENINSULA	2011 May 05 16:57:38 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 May 05 15:06:11 UTC
M 5.8	ALASKA PENINSULA	2011 May 05 14:13:01 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 May 05 02:44:52 UTC
M 5.4	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2011 March 01 12:50:00 UTC
M 5.9	ALASKA PENINSULA	2011 Feb 02 00:38:17 UTC
M 5.3	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 Jan 25 07:46:34 UTC
M 5.4	CENTRAL ALASKA	2011 Jan 23 02:50:04 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2011 Jan 19 04:59:52 UTC
M 5.3	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Dec 30 12:02:41 UTC
M 5.3	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Dec 30 06:56:36 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 27 11:36:32 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 27 03:38:28 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 26 12:24:18 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 26 06:32:38 UTC
M 5.2	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 25 20:20:36 UTC
M 5.3	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Dec 25 19:42:30 UTC
M 5.2	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Dec 24 00:39:22 UTC
M 6.2	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>135 km (85 miles) WNW of Attu, Alaska; 200 km (125 miles) WNW of Shemya Island, Alaska</i>	2010 Dec 23 14:00:33 UTC
M 5.2	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Dec 14 14:33:27 UTC

M 5.0	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Nov 30 08:42:25 UTC
M 5.2	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Nov 20 10:14:00 UTC
M 5.1	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Nov 12 09:46:14 UTC
M 5.3	NORTHERN ALASKA	2010 Nov 07 00:43:23 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Nov 03 23:59:20 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Nov 04 01:05:48 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Nov 03 23:59:20 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS.	2010 Oct 10 06:25:30 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Oct 10 06:08:15 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS.	2010 Oct 08 at 23:32:27 UTC
M 5.3	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Oct 08 04:19:18 UTC
M 6.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA <i>105 km (65 miles) ESE of Adak, Alaska; 105 km (65 miles) SW of Atka, Alaska</i>	2010 Oct 08 03:49:11 UTC
M 6.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA <i>100 km (60 miles) ESE of Adak, Alaska; 120 km (75 miles) SW of Atka, Alaska</i>	2010 Oct 08 03:26:13 UTC
M 5.7	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Sept 26 18:27:58 UTC
M 5.4	CENTRAL ALASKA	2010 Sept 25 12:05:59 UTC
M 5.6	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Sept 23 05:28:35 UTC
M 5.0	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Sept 23 03:53:30 UTC
M 5.3	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Sept 12 07:40:52 UTC
M 6.3	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA <i>45 km (30 miles) E of Adak, Alaska; 130 km (80 miles) WSW of Atka, Alaska</i>	2010 Sept 03 11:16:08 UTC
M 5.3	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Aug 20 16:40:33 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Aug 20 02:52:35 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Aug 08 12:04:28 UTC
M 5.0	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Aug 08 10:23:00 UTC
M 5.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Aug 04 21:51:25 UTC
M 6.4	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA <i>40 km (25 miles) ENE of Amatignak Island, Alaska; 60 km (40 miles) SSW of Tanaga Volcano, Alaska</i>	2010 Aug 04 12:58:24 UTC
M 5.0	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 28 12:07:43 UTC
M 5.5	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 28 11:31:46 UTC
M 5.1	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 20 12:53:50 UTC
M 5.0	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 19 14:24:41 UTC
M 5.5	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 19 08:23:14 UTC
M 5.8	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 July 19 08:20:31 UTC
M 6.0	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>52 km (33 miles) W from Nikolski, AK; 236 km (146 miles) WSW from Unalaska, AK</i>	2010 July 18 19:48:10 UTC
M 6.6	FOX ISLANDS, ALEUTIAN ISLANDS, ALASKA <i>60 km (40 miles) ENE of Yunaska Island, Alaska; 65 km (40 miles) W of Nikolski, Alaska</i>	2010 July 18 05:56:44 UTC
M 5.6	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 July 14 11:01:28 UTC
M 5.1	SOUTHERN ALASKA	2010 July 08 03:15:49 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 June 16 03:56:07 UTC
M 5.0	ALASKA PENINSULA	2010 June 12 15:56:54 UTC
M 5.0	UNIMAK ISLAND REGION, ALASKA	2010 May 28 10:09:53 UTC
M 5.3	UNIMAK ISLAND REGION, ALASKA	2010 May 28 10:07:46 UTC
M 5.5	SOUTH OF ALASKA	2010 May 03 14:04:19 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 May 02 21:10:39 UTC
M 5.6	ALASKA PENINSULA	2010 April 16 01:45:14 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 April 07 10:04:40 UTC
M 5.3	NEAR ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 March 23 15:23:39 UTC
M 5.1	SOUTH OF THE ALEUTIAN ISLANDS	2010 March 20 17:21:24 UTC
M 5.7	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 March 09 14:06:52 UTC
M 5.2	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Feb 25 08:03:40 UTC
M 5.1	ANDREANOF ISLANDS, ALEUTIAN IS., ALASKA	2010 Jan 25 23:09:01 UTC
M 5.5	RAT ISLANDS, ALEUTIAN ISLANDS, ALASKA	2010 Jan 16 20:08:17 UTC

Appendix II

1. General Instructions, Construction Classifications, Earthquake Zones and Maps

(The Instructions used for reporting 2010 data, as requested in 2011, is attached.)

2. Earthquake Zones & Subzones

(The Maps showing these Zones are at the end of this Appendix – see Figures 1 and 2.)

Zone A: San Francisco Bay Area and North Coast Counties

Subzone A-1: San Francisco and San Mateo Counties

Subzone A-2: Alameda and Contra Costa Counties

Subzone A-3: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, Solano, and Sonoma Counties

Zone B: Los Angeles/Orange Counties (see Figure 2)

Subzone B-1: Los Angeles County, west of Los Angeles downtown section
(west of Interstate 5 & south of Mulholland Drive (crest of the Santa Monica Mountains))

Subzone B-2: remainder of Los Angeles County, east of Los Angeles downtown section

Subzone B-3: Orange County

Zone C: Kern, San Luis Obispo, Santa Barbara, and Ventura Counties

Zone D: San Diego County

Zone E: South-East California

Alpine, Imperial, Inyo, Mono, Riverside, and San Bernardino Counties

Zone F: Central California

Fresno, Kings, Madera, Mariposa, Merced, and Tulare Counties

Zone G: North - Central California

Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, and Yuba Counties

Zone H: Northern California, except coastal

Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, and Trinity Counties

DEPARTMENT OF INSURANCE300 SOUTH SPRING STREET, SOUTH TOWER
LOS ANGELES, CA 90013

January 2011

TO: ALL INSURERS LICENSED TO TRANSACT PROPERTY AND CASUALTY INSURANCE
IN THE STATE OF CALIFORNIA AND OTHER INTERESTED PERSONS

SUBJECT: CALIFORNIA EARTHQUAKE ZONING AND PROBABLE MAXIMUM LOSS
EVALUATION PROGRAM

The enclosed California Earthquake PML Questionnaire as of December 31, 2010, will be due according to the following schedule:

Primary Carriers	-	June 30, 2011
Reinsurers	-	August 31, 2011
Retrocessionaires	-	September 30, 2011

This report is authorized by California Code of Regulations, Title 10, Chapter 5, Subchapter 3, Article 3, Section 2307. This will be the twenty-second year that the Questionnaire has been required. This report form can also be downloaded from the Department's website at: <http://www.insurance.ca.gov/0250-insurers/0300-insurers/0100-applications/rsb-forms/index.cfm>.

Companies which had no Earthquake Insurance in force under any form on December 31, 2010, may satisfy the reporting requirement by so indicating at our Signature Page. You can save/scan the completed Signature Page to a pdf file and e-mail it to: RSBeqpml@insurance.ca.gov.

For companies that have data to report on Form A or Form B, we ask that you download the Excel files of the forms from our website. If you have any problems downloading the files, please feel free to call my staff at (213) 346-6731. Fill out the form using the downloaded file, and the Signature Page and e-mail them to RSBeqpml@insurance.ca.gov. We are no longer requiring companies to print out the reporting forms.

If you are unable to scan the Signature Page back to a pdf file, you could mail it to:

**California Department of Insurance
Rate Specialist Bureau
300 South Spring Street, 14th Floor
Los Angeles, CA 90013**

There were no changes to the PML Percentages this year. In 1998, there were revisions in the PML percentages for residential structures. These revisions are discussed on Page 2 of the Instructions.

We again emphasize the importance of primary carriers supplying the necessary information to their reinsurers, and reinsurers supplying it to their retrocessionaires, to assure complete reporting by zone. The results of this form may be seriously impaired without the consolidation of reinsurance data by zone. Your cooperation on this matter is essential to the success of the program. To help in this regard, a Form "X" is included which should be used for reporting to reinsurers.

George Yen
Chief, Rate Specialist Bureau

CALIFORNIA EARTHQUAKE PROBABLE MAXIMUM LOSS QUESTIONNAIRE

SIGNATURE PAGE

CDI RSU-001 (REV 1/2011)

California Code of Regulations

Title 10, Chapter 5, Subchapter 3, Article 3, Section 2307

<i>Company or Group Name</i>	<i>Company NAIC Code</i>	<i>Group Code</i>
<i>Address</i>	<i>City, State, Zip Code</i>	

Please mark the appropriate box:

- ☐ Our Company did not have any Earthquake Insurance In-Force as of **December 31, 2010**
- ☐ Form **A** is hereby submitted (due no later than **June 30, 2011**)
- ☐ Form **B** is hereby submitted (due no later than **August 31, 2011**)

Under penalty of perjury, I declare that I have examined this report, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete.

<i>Signature of the Officer</i>	<i>Date</i>	
<i>Name of the Officer (Please print)</i>	<i>Phone Number</i>	<i>Fax Number</i>
<i>Title</i>	<i>E-Mail Address</i>	

<i>Name of the Contact Person (Please print)</i>	<i>Phone Number</i>	<i>Fax Number</i>
<i>E-Mail Address</i>		

CALIFORNIA EARTHQUAKE PROBABLE MAXIMUM LOSS QUESTIONNAIRE

California Administrative Code Title 10, Chapter 5, Subchapter 3, Article 3, Section 2307

General Instructions (Revised 12/2010)

Who Must Report:

All insurers licensed to transact property insurance in the State of California must report with respect to their earthquake liabilities written in this State.

When one or more companies writing earthquake exposure are members of a group, a group questionnaire must be submitted, separately for primary and reinsurance.

The questionnaires are due according to the following schedule:

Primary Carriers	-	June 30, 2011
Reinsurers	-	August 31, 2011
Retrocessionaires	-	September 30, 2011

Completed questionnaires should be sent to:

CA Department of Insurance
Rate Specialist Bureau - 14th Floor
Earthquake PML Questionnaire
300 South Spring Street
Los Angeles, California 90013
(Information: (213) 346-6774)

Reasons for the Questionnaire:

Part of the regulatory responsibility of the Department of Insurance is to monitor the financial capacity of the licensed insurance companies and to assure to the extent possible that the insurance companies will be able to pay all claims arising under their policies of insurance in this state. To this end, the Department held a public hearing and issued Ruling No. 226 in 1978 which authorized the collection of statistical information on the earthquake exposures. The Department publishes a report periodically containing an industry summary of this information.

This questionnaire enables each individual company to quantify approximately its own earthquake exposure with respect to its volume, location, and type of structure insured.

Besides the Department of Insurance, the aggregate industry summaries of PML (probable maximum loss) on earthquake exposures have been of great interest to reinsurance companies, investment analysts, and the press. Information on individual companies is not included in the published report.

Changes in the Questionnaire for Reporting in 1998:

Pursuant to California legislation AB 1366 (passed in 1995; amending California Insurance Code Section 10089, among others), insurers may offer a “mini” residential earthquake insurance policy in compliance with the statutory mandatory offer of earthquake insurance at the time of the sale of a homeowners fire policy. In the “mini” policy, there is a 15% deductible, but there is no Coverage B for appurtenant structures and there are restrictions on the contents and loss of use coverages. Therefore, the PML is much less for the “mini” policy than for a typical earthquake insurance policy with the same 15% deductible. Some insurers are offering a “wrap around” policy which covers a portion of the deductible and increases the contents and loss of use coverages. The combination of a “mini” policy and a “wrap around” policy would essentially be equivalent in coverage to the typical earthquake policy that had been sold prior to the Northridge earthquake in January 1994.

The California Earthquake Authority (CEA), a state agency, was in operation in 1997. Insurers which joined the CEA offered the “mini” policy which was then insured by the CEA. Such CEA policies are not to be included in the detail portions of Forms A or B. With respect to these CEA policies, there is only an interrogatory on Page 1B of Forms A and B.

In view of the large amount of residential losses after the Northridge earthquake, many structural engineers believe that the PML factors given in this questionnaire were too low. In addition, the scientific consulting firms using earthquake computer modeling have done extensive work in analyzing the potential losses under the CEA earthquake insurance policy. Therefore, the residential PML percentage factors have been changed in Form A to the factors shown below.

Class	Deductible	Zone A	Zone B	Zone C	Zone D	Zone E	Zone F	Zone G	Zone H
1A	1%	6.75	5.75	6.13	2.63	5.25	3.13	1.75	2.50
&	5%	3.63	3.00	3.13	1.19	2.38	1.88	1.00	1.50
1B	10%	2.13	1.63	1.75	0.56	1.13	1.13	0.63	0.88
	15%	1.38	1.00	1.13	0.31	0.63	0.63	0.38	0.50
	"Mini"	0.69	0.50	0.56	0.16	0.31	0.31	0.19	0.25
	"Wrap"	2.94	2.50	2.56	1.03	2.06	1.56	0.81	1.25

These factors are intended to give a general estimate of the impact of a large earthquake in the earthquake Zone. Therefore, these factors are not necessarily comparable to the loss costs used in ratemaking, which include the impact of small and medium size earthquakes and the probability of earthquakes.

There are no changes this year in the questionnaire to the reporting for commercial structures. The commercial PML factors look all right at this time.

Questionnaire Format

- (1) In order to achieve uniformity, the use of the attached standard report format is required (except as provided under Section 2307 relating to special situations) for all earthquake coverages written on California risks.

This Questionnaire is to be completed with respect to earthquake insurance in force at the end of the year, not in force at any time during the year.

- (2) Probable Maximum Loss (PML) is defined as the average monetary loss (after the specified deductible) which will be experienced by typical buildings in a given earthquake building class in the specified earthquake PML zone. This definition assumes a large magnitude earthquake, and the damage results only from vibratory motion. The following forms give the suggested PML percentages when the standard deductibles are being used. The given PML percentages were derived from an examination of the structural damage in past earthquakes, with engineering adjustments for the size of the earthquake, and the results averaged over the earthquake zone. Actual insured losses will vary due to poor soil conditions (including landslide) and close proximity to the fault line. In fact, the importance of soil conditions and proximity to the fault line may be greater than the type or condition of the structure. These PML percentages were derived with the intention that they be applied to the value of the structure plus contents plus time element exposures such as business interruption if any. The term "value" means the full actual cash value or replacement cost, as the policy may provide. If there is less than full insurance to value, meaning that if the policy was written for policy limits less than the full potential value of the earthquake loss, then applying the PML percentage to the policy limits will under-estimate the PML. If such is the case, companies are asked to adjust the reported PMLs to a higher level accordingly. This definition of PML does not include (and this Questionnaire does not ask for) monetary loss from workers' compensation, automobile damage, life and accident and health, general liability, crime, fire following an earthquake, or flood, wave or water damage (except for a specific coverage called "earthquake sprinkler leakage").
- (3) For convenience, the questionnaire is in two sections - Form "A" for primary insurance and Form "B" for reinsurance.
- (4) It is important to separate buildings into low rise (8 or less stories) and high rise (over 8 stories). In a great earthquake, the seismic motions will be both high frequency and low frequency. It turns out that high frequency motion principally affects low rise buildings and low frequency motion principally affects high rise buildings. High frequency motions tend to be damped and dispersed quickly, leaving the low frequency motions to dominate at large distances. So, in order to obtain the correct total PML by zone, the amount of high rise (over 8 stories) exposure in the neighboring zones must also be considered. The calculation of the total zone PML accounts for this in the form.
- (5) The Page 1 - Zone Summary includes provision for limiting the reported net PML by the provisions of a catastrophe reinsurance treaty. Each zone is to be considered separately when applying the provisions of the catastrophe treaty. We received a number of calls requesting us to do this, because some companies were reporting net PML amounts for Zone A and B which were larger than that which they would ever have to pay. Also, the California Legislature has specifically requested information on earthquake catastrophe reinsurance.

Form "A" - Primary Insurance

- (1) Primary business written with standard deductibles must be reported in detail by construction class, buildings 8 stories and under, over 8 stories, and by zone/subzone as defined in Table 4. Primary business written with different or large flat deductibles or self-insured retentions does not need to be reported by construction class, but may be reported under "Risks in above classes not written at standard deductible".

This category should also be used when the actual deductibles are higher than the standard deductible, and a lower PML percentage would be required than is given in Column 5.

- (2) Primary companies must provide their reinsurers a report covering the treaties, indicating liabilities ceded by zone/subzone, buildings 8 stories and under, and over 8 stories, using the report format provided herein. (Reinsurers usually have the required information on facultative risks already).
- (3) Column 1 - Earthquake class and standard percent deductible. See Table 1 attached for a description of the classes. These are the standard deductibles commonly used on most policies. If the deductible actually used is higher (or lower) then a lower (or higher) PML percentage (Column 5) should be used.
- (4) Column 2 - Aggregate direct liability. The term "direct" has the same meaning as it is used in the Annual Statement, namely the full liability, after deductibles, before reduction for reinsurance. See Note (14) below relating to homeowners policies.
- (5) Column 3 - Aggregate direct PML. This is the PML of the risks before reinsurance and should be equal to the PML percentage times the Aggregate Direct Liability, subject to the qualifications in Notes (6) and (7).
- (6) Column 4 - Aggregate liability net of reinsurance. The PML percentage is intended to be applied to the full monetary value of the building, contents, and business interruption. Therefore, if there is full insurance to value, then the face amount of the policy would be the appropriate "aggregate liability," subject to Note (14) below. If the reinsurance is pro rata, then the PML percentage applied to the aggregate net liability would give the correct net PML. If not pro rata, the company will have to use judgment accordingly. Also, if the company knows that often the policies are not issued at full insurance to value, judgment should be used to report a higher PML than would otherwise result from applying the given PML percentages.
- (7) Column 5 - Minimum PML Percentage. This percentage applied to the amount in Column 4 gives the "Estimated PML on net liability" (Column 6). The companies should use a higher PML percentage when:
 - (a) the particular risk justifies it,
 - (b) the reinsurance was written on an excess of loss basis,
 - (c) there is less than full insurance to value,
 - (d) the actual deductible is less than the deductible indicated in Column 2, or
 - (e) see Note (11) below relating to time element exposures.

If the primary business was written with large flat deductibles or deductibles different than the standard deductibles, then the company will have to use judgment accordingly to estimate the proper entry for Column 6. See Note (1) above.

- (8) Column 6 - Estimated PML on net liability. This is the net probable maximum loss to the company after deductible and reinsurance.
- (9) Part III, Line (4) - All Other Primary Business.

This line provides for such situations as excess or layered coverage, highly protected risks, stop loss contracts, and "earthquake sprinkler leakage" (EQSL). (Some companies estimate the PML for EQSL as: (100% of the property value) x (.005) minus the deductible minus reinsurance).
- (10) California FAIR Plan Liability and PML should be reported on line (3). Liabilities assumed from all pools and associations should be combined in one entry. (Report only your share of the FAIR Plan or pool liability.)
- (11) Time Element Exposures: Business interruption, rents, extra expense, etc. may require higher PMLs than the direct damage coverages, so primary companies may use a higher PML percentage than shown in column 5 to reflect time element exposures. A maximum period of one year of potential liability should be assumed. If time element coverages use different deductibles or PML than property coverages, report them under "Risks in above classes not written at standard deductible" of the applicable Part.
- (12) All earthquake liabilities (other than earthquake sprinkler leakage) at a single location should be given the earthquake class applying to the building. This includes all subjects of insurance and all types of coverages. If there are multiple buildings at a single location, use the highest ISO construction class. If the earthquake class is not known on a description-waived policy, assign the liability to the most likely class.
- (13) Policies with a single occurrence limit per policy (or a stop loss policy) (not per risk or location), covering risks in more than one earthquake sub-zone (A1, A2, A3, or B1, B2, B3) should be treated as one risk in the earthquake sub-zone. For instance, a chain of stores located in sub-zones A1, A2, and A3 is insured for \$5 million in the event of a single earthquake. Treat the chain of stores as a single risk and place it in the sub-zone with the highest PML. On another issue, assume two commercial buildings valued at \$10 million each and the PML percentages are 35% and 50%, giving a PML of \$8.5 million for both buildings. If the single occurrence limit is \$7.5 million, then the insured PML is \$7.5 million.
- (14) Contents. Under the EQ Class 1B Homeowners (excluding HO 4 and HO 6), the contents liability is 50% of the policy amount. Therefore, the aggregate liability is established as 1.5 times the face amount of the policy. If a higher percentage applies, that percentage should be used. Outbuilding and additional living expenses are to be ignored. For HO 4 and HO 6, use the face amount of the policies.

Form "B" - Reinsurance

- (1) A separate form is being provided for reinsurance liabilities. There is no requirement to report by construction class, but business assumed should be reported by high rise (over 8 stories) or low rise (8 stories or less) to the extent possible. (However, reinsurers would have to know the construction class in order to estimate the PML).
- (2) All of the comments with respect to Form "A" are applicable as well to reinsurers when completing Form "B".
- (3) Reinsurers must also report their experience to their retrocessionaires. (A retrocession is defined as a transaction under which a reinsurer cedes all or part of the reinsurance it has assumed to another carrier, regardless of the identity of the primary insurer.)
- (4) Retrocessionaires must report retrocessions as reinsurance on Form "B".
- (5) The questionnaire requests the "aggregate assumed liability" before retrocessions. This is because we do not believe that we are receiving full reporting from the retrocessionaires. Also, we would like to know the individual reinsurer's full exposure. We are well aware that the importance of the liability amount varies greatly depending on the layer of coverage.
- (6) On Page 1 of the Questionnaire, there is provision for limiting the estimated net PML amount by zone by any catastrophe reinsurance.
- (7) The primary companies should deduct only per risk reinsurance, and not aggregate or catastrophe reinsurance, in order to get net liability or net PML. To be consistent, therefore, the reinsurers should only report per risk exposures assumed when computing assumed liability and assumed PML, and not include any aggregate or catastrophe exposure. The objective is to make the reporting easier. The Department of Insurance will know the amount of such catastrophe PML exposure from page one of the Questionnaire, although not by company.

TABLE 1

CONSTRUCTION (BUILDING) CLASSIFICATIONS

Any building which fully qualifies under more than one definition should be placed in the lower numbered (i.e. best) classification.

Habitational (small)

- Class 1A: Single through four family dwellings. No limitations on story height, area, and construction materials.
- Class 1B: "Homeowners". In the "mini" policy, there is a 15% deductible, but there is no Coverage B for appurtenant structures and there are restrictions on the contents and loss of use coverages. Therefore, the PML is much less for the "mini" policy than for a typical earthquake insurance policy with the same 15% deductible. Some insurers are offering a "wrap around" policy which covers a portion of the deductible and increases the contents and loss of use coverages.
- Class 1E: Mobile homes and contents.

Wood Frame Buildings, including Habitational not Qualifying Above

Excluded are structures which are classed for fire as wood frame but have concrete supported floors and/or some walls of unit masonry or concrete.

- Class 1C: Habitational: Wood frame and frame stucco habitational buildings which do not exceed 2 stories in height, regardless of area.
- Non-habitational: Wood frame and frame stucco buildings, except: (1) buildings which are over 3 stories in height; and (2) buildings which are over 3,000 sq. ft. in ground floor area.
- Class 1D: Wood frame and frame stucco buildings not qualifying under Class 1C.

All-metal Buildings

- Class 2A: All-metal buildings which are one story in height and 20,000 sq. ft. or less in ground floor area. Wood or cement-asbestos are acceptable alternatives to metal roofing and/or siding.
- Class 2B: Buildings which would qualify as Class 2A except for exceeding area or height limitations.

Steel Frame Buildings

- Class 3A: Buildings with a complete steel frame carrying all loads. Floors and roofs must be of poured-in-place reinforced concrete or of concrete fill on metal decking welded to the steel frame (open web steel joists excluded). Exterior walls must be non-load bearing and of poured-in-place reinforced concrete or of reinforced unit masonry. Buildings having column-free areas greater than 2,500 sq. ft. (such as auditoriums, theaters, public halls, etc.) do not qualify.
- Class 3B: Buildings with a complete steel frame carrying all loads. Floors and roofs must be of poured-in-place reinforced concrete metal, or any combination thereof, except that roofs on buildings over three stories may be of any material. Exterior and interior walls may be of any non-load bearing material.
- Class 3C: Buildings having a complete steel frame with floors and roofs of any material (such as wood joist on steel beams) and with walls of any non-load bearing materials.

Reinforced Concrete Buildings

Combined Reinforced Concrete and Structural Steel Buildings

NOTE: Class 4A and 4B buildings must have all vertical loads carried by a structural system consisting of one or a combination of the following: (a) poured-in-place reinforced concrete frame, (b) poured-in-place reinforced concrete bearing walls, (c) partial structural steel frame with (a) and/or (b). Floors and roofs must be of poured-in-place reinforced concrete, except that materials other than reinforced concrete may be used for the roofs of buildings over 3 stories.

- Class 4A: Buildings with a structural system as defined by the note above with poured-in-place reinforced concrete exterior walls or reinforced unit masonry exterior walls. Not qualifying are buildings having column-free areas greater than 2,500 sq. ft. (such as auditoriums, theaters, public halls, etc.).
- Class 4B: Buildings having a structural system as defined by the note above with exterior and interior non-bearing walls of any material.
- Class 4C: Buildings having: (a) partial or complete load carrying system of precast concrete, and/or (b) reinforced concrete lift-slab floors and/or roofs, and (c) otherwise qualifying for Class 4A and 4B.
- Class 4D: Buildings having a reinforced concrete frame, or combined reinforced concrete and structural steel frame. Floors and roofs may be of any material (such as wood joist on reinforced concrete beams) while walls may be of any non-load bearing material.

Mixed Construction

- Class 5A: Buildings having load bearing exterior walls of (a) poured-in-place reinforced concrete, and/or (b) precast reinforced concrete (such as "tilt-up" walls), and/or (c) reinforced brick masonry, and/or (d) reinforced hollow concrete block masonry. Floors and roofs may be of wood, metal, poured-in-place concrete, precast concrete, or other material.

Interior bearing walls must be of wood frame or any one of a combination of the aforementioned wall materials.

EDITORIAL NOTE: No class distinction is made between newer highly earthquake resistive buildings and older moderate earthquake resistive buildings having these construction materials. ISO Classes 5A and 5AA shall be combined and considered as Class 5A.

Class 5B: Buildings having load bearing walls of unreinforced brick or other types of unreinforced solid unit masonry, excluding adobe.

Class 5C: Buildings having load bearing walls of hollow tile or other hollow unit masonry construction, adobe, and cavity wall construction. Also included are buildings not covered by any other class.

Earthquake Resistive Construction

Class 6: Any building with any combination of materials so designed and constructed as to be highly earthquake resistant and also with superior damage control features in addition to the minimum requirements of building codes.

Miscellaneous

Class 7: Bridges, tunnels, dams, piers, wharves, tanks, tank contents, towers of all types, and the like. Time-element coverages for these structures to be included.

TABLE 2
CONSTRUCTION CLASSES, PML, AND DEDUCTIBLES

Net PML (%)

Class	Deductible	Zone A	Zone B	Zone C	Zone D	Zone E	Zone F	Zone G	Zone H
1A	1%	6.75	5.75	6.13	2.63	5.25	3.13	1.75	2.50
&	5%	3.63	3.00	3.13	1.19	2.38	1.88	1.00	1.50
1B	10%	2.13	1.63	1.75	0.56	1.13	1.13	0.63	0.88
	15%	1.38	1.00	1.13	0.31	0.63	0.63	0.38	0.50
	"Mini"	0.69	0.50	0.56	0.16	0.31	0.31	0.19	0.25
	"Wrap"	2.94	2.50	2.56	1.03	2.06	1.56	0.81	1.25
1C	5%	3	3	3	3	3	3	3	3
1D	5%	10	10	10	10	10	10	10	10
1E	2%	5	5	5	5	5	5	5	5
2A	5%	2	2	2	2	2	2	2	2
2B	5%	10	10	10	10	10	10	10	10
3A	5%	15	15	15	15	15	15	15	15
3B	5%	25	25	25	25	25	25	25	25
3C	10%	25	25	25	25	25	25	25	25
4A	5%	20	20	20	20	20	20	20	20
4B	5%	35	35	35	35	35	35	35	35
4C	10%	50	50	50	50	50	50	50	50
4D	10%	45	45	45	45	45	45	45	45
5A	5%	25	25	25	25	25	25	25	25
5B	10%	60	60	60	60	60	60	60	60
5C	10%	75	75	75	75	75	75	75	75
6	5%	10	10	10	10	10	10	10	10
*7	0%	50	50	50	50	50	50	50	50
COC	**	**	**	**	**	**	**	**	**

*Includes special structures such as bridges, tunnels, dams, piers, wharves, tanks, tank contents, towers of all types, and the like. Time-element coverages for these structures are also to be included.

**Buildings in the course of construction (COC) are to be placed in the completed building class, using 50% of the completed PML and the full value of the usual deductible (Fire Forms where insurance is written at 80% of value or higher).

Buildings constructed of materials of more than one class shall be assigned to the Construction Class with the highest PML.

Earthquake liabilities on buildings, contents, time element, and other location coverages shall be included under the building Construction Class.

TABLE 3

COMMERCIAL INLAND MARINE ADDENDUM & EXCEPTIONS

Liabilities for the following Commercial Inland Marine classes shall be reported in accordance with the requirement of this regulation and included in each zone/subzone. The Company shall assign to each such risk, factors resulting in no less a Net PML than "Gross PML" less "Deductible" as shown on Table 2 for the containing building.

<u>Addendum Class</u>	ISO Classification <u>Code</u>
Bailee's customers - dryers and cleaners, laundry, rug cleaners	171
Bailee's customers - all others	172
Cold storage locker operators	200
Camera dealers	220, 221
Data processing equipment	225, 226-incl.
Differences in conditions	228
Equipment dealers	234, 235
Musical instruments dealers	240, 241-incl.
Marine supply dealers	283
Miscellaneous dealers not subject to ISO	320
Floor plan policies	328
Fine arts – dealers	332
Fine arts - museums, galleries, and institutions	333
Fine arts - Commercial (excl. dealers, museums, institutions)	334
Furriers block	352
Jewelers block	400 -423
Physicians and surgeons equipment	482
Processing risks	483
Stamp and coin dealers	516
Valuable papers and records	530
Garment contractors	600 - 624

NOTE: Property in the open shall be reported at the PML assigned by the company, but in no event shall the PML be less than 5% nor the net PML, considering deductible, less than 2%.

All Exception Classes to be reported in Part III

<u>Exception Class</u>	ISO Classification <u>Code</u>
Bridges	160
Bridges and tunnels time-element	161
Dams	
Builders risks	370-379
Installation floaters	382
Piers, wharves, and docks	484
Radio and TV broadcasting, equipment and towers	485-488 incl.
Tanks and storage	517

NOTE: These classes should be recorded in each zone at the PML established by the company for earthquake in the underwriting process.

TABLE 4

CALIFORNIA EARTHQUAKE ZONES and SUBZONES

The Zones and Subzones according to which all data reported in this call are classified are defined below, with references to the maps attached as Figures 1 & 2.

ZONE A

SUBZONE A1

San Francisco and San Mateo Counties

SUBZONE A2

Alameda and Contra Costa Counties

SUBZONE A3

Del Norte, Humbolt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, Solano and Sonoma Counties.

ZONE B

SUBZONE B1

Los Angeles Co. west of Interstate 5 and south of Mulholland Drive (crest of the Santa Monica Mountains). See Figure 2.

SUBZONE B2

Remainder of Los Angeles Co. not contained in Subzone B1. See Figure 2.

SUBZONE B3

Orange County

ZONE C

Kern, San Luis Obispo, Santa Barbara and Ventura Counties.

ZONE D

San Diego County.

ZONE E

Alpine, Imperial, Inyo, Mono, Riverside and San Bernardino Counties.

ZONE F

Fresno, Kings, Madera, Mariposa, Merced and Tulare Counties

ZONE G

Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, and Yuba Counties.

ZONE H

Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity Counties.



FIGURE 1 California Department of Insurance Earthquake Zones.

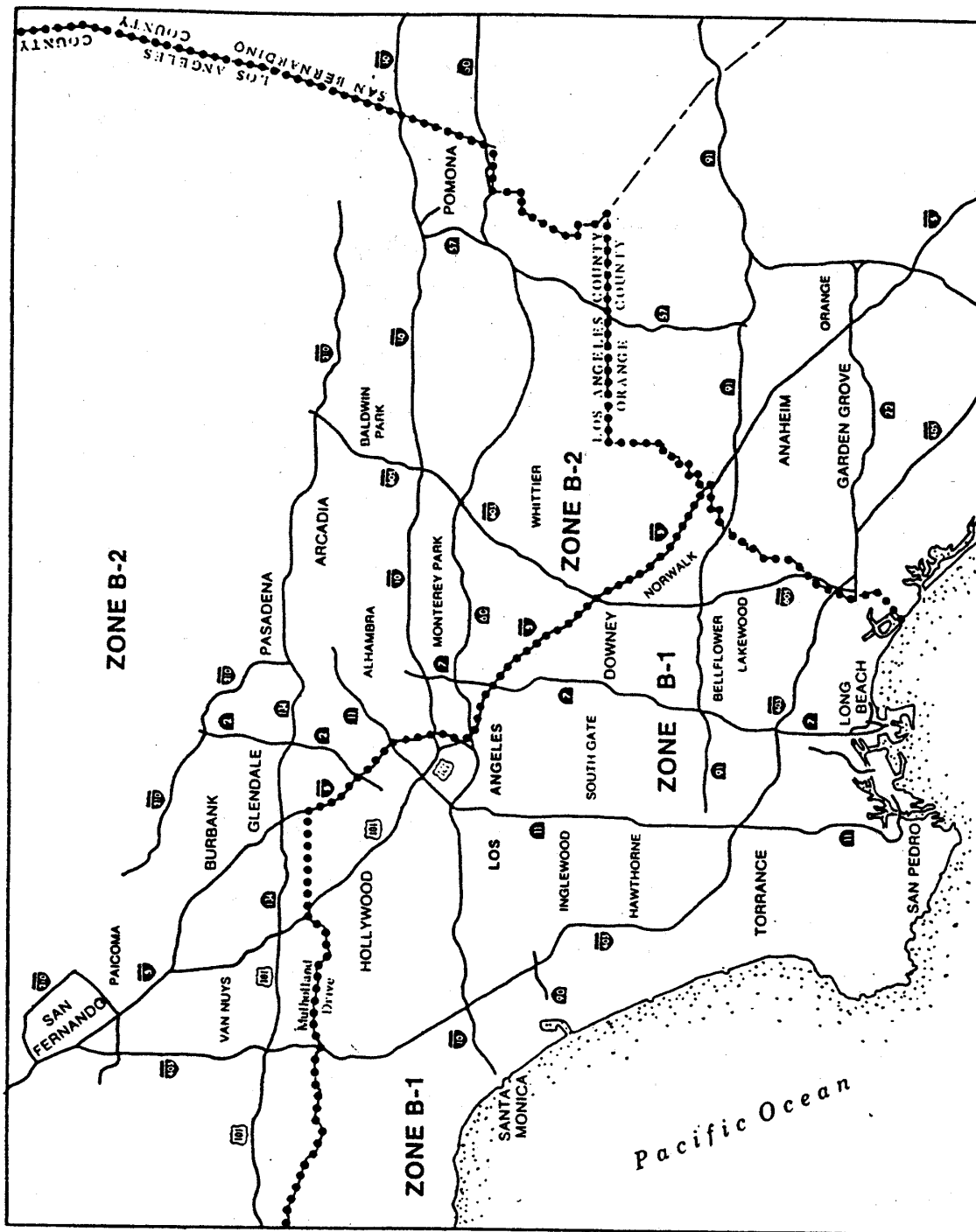


FIGURE 2. Los Angeles County divided into subzones B-1 and B-2.

Instructions

Aggregate Industry Responses – Form A (Primary Business)

- Exhibit 1:* California Earthquake Liability Questionnaire as of December 31, 2010
- Exhibit 2:* California Earthquake Liability Questionnaire as of December 31, 2009
- Exhibit 3:* California Earthquake Liability Questionnaire as of December 31, 2008
- Exhibit 4:* California Earthquake Liability Questionnaire as of December 31, 2007
- Exhibit 5:* California Earthquake Liability Questionnaire as of December 31, 2006
- Exhibit 6:* California Earthquake Liability Questionnaire as of December 31, 2005
- Exhibit 7:* California Earthquake Liability Questionnaire as of December 31, 2004
- Exhibit 8:* California Earthquake Liability Questionnaire as of December 31, 2003
- Exhibit 9:* California Earthquake Liability Questionnaire as of December 31, 2002
- Exhibit 10:* California Earthquake Liability Questionnaire as of December 31, 2001
(Revised in 2006)

All Co's		CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2010				
NAIC COMPANY OR GROUP CODE:		All Co's	Surplus =	199,046,288 x 1,000		
		(1)	(2)	(3)	(4)	(5)
		Aggregate	Aggregate	Aggregate	Estimated	Estimated Net
		Direct	Direct	Liability	Net	PML Amount
		Liability	PML	Net of	PML	Limited by
Zone	Area			Reinsurance	Amount	Catastrophe
						Reinsurance
A	San Francisco	250,199,219	19,047,860	90,033,249	15,008,997	10,969,758
B	Los Angeles/ Orange County	287,596,347	28,093,969	153,764,807	20,595,650	15,380,178
C	Santa Barbara	79,749,081	6,908,069	48,665,859	5,457,018	4,283,306
D	San Diego	84,523,077	8,608,878	41,348,959	6,828,726	5,205,994
E	South-East	106,669,821	14,353,547	77,949,751	11,968,655	9,991,289
F	Central	34,874,872	3,722,507	30,832,582	3,294,161	3,089,896
G	North-Central	101,307,980	14,860,185	89,894,143	14,036,444	8,047,671
H	North	3,872,604	578,658	2,621,253	388,770	399,454

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2010

(a) Direct premiums earned	7,579,217
(b) Assumed premiums earned	42,366
(c) Ceded premiums earned	3,718,228

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,221,167	1,815,377
U.S. Reinsurers - non CA	40,475	36,743
Lloyd's of London	689,232	1,049,293
Other U.K.	13,339	182,871
Western Europe	907,025,342	274,350
All Other	1,271,349	2,046,047
Totals	910,260,905	5,404,680

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	920,128	1,351,752
U.S. Reinsurers - non CA	33,191	33,243
Lloyd's of London	670,821	872,090
Other U.K.	119,623	194,964
Western Europe	907,677,817	1,050,609
All Other	1,344,338	1,663,854
Totals	910,765,918	5,166,512

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2010 subject to an occurrence or per event

0

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 470,800

What was the total liability (exposure or Coverage A) on these policies? 157,620,013

SUBZONE A-1 COUNTIES: San Francisco and San Mateo

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	28,301	481	27,226	6.75%	463
1A 1-4 Family 5%	2,784	101	2,718	3.63%	99
1A 1-4 Family 10%	143,400	12,396	143,340	2.13%	12,394
1B "Homeowners" - 1% or flat	1,844	125	1,844	6.75%	125
1B "Homeowners" 5%	225,411	25,162	212,248	3.63%	19,933
1B "Homeowners" 10%	1,168,446	28,243	1,038,160	2.13%	25,158
1B "Homeowners" 15% & up	22,839,386	260,202	2,190,767	1.38%	253,916
1B "Homeowners" 15% "Mini"	12,395,707	87,917	3,333,062	0.69%	25,393
1B "Homeowners" "Wrap"	2,046,946	60,180	0	2.94%	0
1C Wood Frame - small 5%	524,502	10,539	378,708	3.00%	7,601
1D Wood - other 5%	796,233	46,733	584,469	10.00%	34,911
1E Mobile Homes 2%	3,651	183	3,651	5.00%	183
2A Metal - small 5%	18,951	179	11,625	2.00%	108
2B Metal - other 5%	33,427	2,930	20,213	10.00%	1,674
3A Steel 5%	290,445	200,179	256,532	15.00%	178,368
3B Steel 5%	779,184	421,655	721,898	25.00%	373,653
3C Steel 10%	242,574	60,641	173,504	25.00%	43,374
4A Concrete 5%	261,692	187,436	229,705	20.00%	157,691
4B Concrete 5%	182,818	154,182	146,297	35.00%	118,039
4C Concrete 10 %	209,309	104,654	162,230	50.00%	81,115
4D Concrete 10 %	16,474	10,159	11,967	45.00%	8,131
5A Mixed 5%	361,196	175,005	256,734	25.00%	125,364
5B Mixed 10%	16,858	13,554	14,725	60.00%	12,274
5C Mixed 10%	178,147	133,907	133,255	75.00%	100,169
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	12,939,824	2,194,667	10,954,674	xxx	1,635,826
Sub-Totals:	55,707,511	4,191,412	21,009,553		3,215,963

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	857,423	456,361	727,850	15.00%	386,624
3B Steel 5%	679,862	445,441	582,568	25.00%	380,301
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	490,445	286,548	426,945	20.00%	238,942
4B Concrete 5%	153,317	142,127	134,497	35.00%	123,307
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	15,000	6,750	11,000	45.00%	4,950
5A Mixed 5%	188,287	116,916	154,643	25.00%	98,875
5B Mixed 10%	122	73	85	60.00%	51
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	123,319	12,332	95,582	10.00%	9,558
Risks in above classes not written at standard deductible	2,728,479	1,121,026	1,041,495	xxx	935,459
Sub-Totals:	5,236,255	2,587,574	3,174,666		2,178,067

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	784,550	418,067	637,278	348,279
(2) Commercial inland addenda	6,498	1,265	1,249	308
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	70,468,718	267,287	2,871,041	234,726
Sub-Totals:	71,259,766	686,619	3,509,567	583,313
ZONE TOTALS	132,203,532	7,465,604	27,693,786	5,977,343

SUBZONE A-2 COUNTIES: Alameda and Contra Costa

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	31,467	489	29,047	6.75%	461
1A 1-4 Family 5%	2,157	78	2,157	3.63%	78
1A 1-4 Family 10%	246,045	22,387	245,937	2.13%	22,376
1B "Homeowners" - 1% or flat	1,874	127	1,874	6.75%	127
1B "Homeowners" 5%	228,745	26,045	185,163	3.63%	21,267
1B "Homeowners" 10%	2,395,215	58,141	2,233,584	2.13%	52,667
1B "Homeowners" 15% & up	4,152,970	57,783	4,127,769	1.38%	57,437
1B "Homeowners" 15% "Mini"	16,312,646	112,994	3,279,714	0.69%	22,994
1B "Homeowners" "Wrap"	3,571,082	104,990	0	2.94%	0
1C Wood Frame - small 5%	1,163,083	23,409	616,340	3.00%	12,372
1D Wood - other 5%	327,887	25,858	223,291	10.00%	18,664
1E Mobile Homes 2%	16,913	846	16,913	5.00%	846
2A Metal - small 5%	51,929	12,368	50,379	2.00%	12,365
2B Metal - other 5%	22,892	2,117	19,690	10.00%	1,802
3A Steel 5%	288,203	139,700	242,872	15.00%	118,201
3B Steel 5%	567,183	367,351	513,427	25.00%	314,448
3C Steel 10%	334,670	83,668	270,675	25.00%	67,669
4A Concrete 5%	208,018	102,924	189,869	20.00%	95,756
4B Concrete 5%	141,331	110,393	107,792	35.00%	76,854
4C Concrete 10 %	346,553	173,277	286,136	50.00%	143,168
4D Concrete 10 %	12,689	12,576	10,089	45.00%	9,976
5A Mixed 5%	980,389	412,380	848,810	25.00%	365,068
5B Mixed 10%	1,392	835	1,392	60.00%	835
5C Mixed 10%	264,380	198,724	220,406	75.00%	165,666
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	10,156,283	971,626	9,127,302	xxx	787,937
Sub-Totals:	41,825,995	3,021,082	22,850,626		2,369,032

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	34,989	10,346	34,824	15.00%	10,322
3B Steel 5%	115,000	111,250	97,864	25.00%	94,114
3C Steel 10%	465	116	326	25.00%	81
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	5,000	5,000	5,000	35.00%	5,000
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	75,758	18,939	63,726	25.00%	15,931
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	186,800	18,680	157,132	10.00%	15,713
Risks in above classes not written at standard deductible	61,165	31,533	59,665	xxx	30,033
Sub-Totals:	479,178	195,865	418,536		171,194

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,845,663	1,054,350	1,535,878	888,196
(2) Commercial inland addenda	2,914	500	960	184
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,935,335	37,713	3,109,869	23,194
Sub-Totals:	5,783,912	1,092,563	4,646,707	911,574
ZONE TOTALS	48,089,084	4,309,510	27,915,870	3,451,800

All Co's

SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, Solano, Sonoma

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	100,066	1,496	83,013	6.75%	1,264
1A 1-4 Family 5%	1,736	63	1,736	3.63%	63
1A 1-4 Family 10%	241,754	19,826	240,901	2.13%	19,795
1B "Homeowners" - 1% or flat	4,625	313	4,625	6.75%	313
1B "Homeowners" 5%	777,372	43,620	665,747	3.63%	36,265
1B "Homeowners" 10%	3,924,256	92,038	3,515,486	2.13%	81,300
1B "Homeowners" 15% & up	5,167,493	74,120	5,072,158	1.38%	71,907
1B "Homeowners" 15% "Mini"	31,469,468	219,077	4,993,512	0.69%	36,490
1B "Homeowners" "Wrap"	9,313,037	273,803	0	2.94%	0
1C Wood Frame - small 5%	2,250,453	45,252	978,123	3.00%	19,663
1D Wood - other 5%	621,645	57,990	407,851	10.00%	37,623
1E Mobile Homes 2%	107,197	5,360	107,197	5.00%	5,360
2A Metal - small 5%	112,722	3,694	80,751	2.00%	3,091
2B Metal - other 5%	105,922	10,131	64,927	10.00%	6,082
3A Steel 5%	898,085	263,554	689,249	15.00%	218,736
3B Steel 5%	1,033,150	434,248	853,820	25.00%	379,609
3C Steel 10%	1,029,501	257,354	812,772	25.00%	203,178
4A Concrete 5%	390,425	192,418	281,324	20.00%	162,328
4B Concrete 5%	272,058	235,020	220,314	35.00%	195,745
4C Concrete 10 %	960,100	480,390	786,439	50.00%	393,456
4D Concrete 10 %	63	25	58	45.00%	23
5A Mixed 5%	1,411,189	568,551	1,118,898	25.00%	458,907
5B Mixed 10%	19,172	9,503	13,528	60.00%	7,088
5C Mixed 10%	678,668	508,975	552,896	75.00%	415,025
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	18,702,931	2,123,726	15,800,411	xxx	1,641,948
Sub-Totals:	79,593,087	5,920,548	37,345,735		4,395,260

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	48,500	44,360	34,276	15.00%	30,135
3B Steel 5%	29,000	25,309	18,225	25.00%	15,826
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	12,196	9,582	12,196	20.00%	9,582
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	493,747	122,142	406,818	25.00%	100,410
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	531,056	53,106	408,436	10.00%	44,325
Risks in above classes not written at standard deductible	128,850	28,380	117,490	xxx	27,130
Sub-Totals:	1,243,349	282,879	997,441		227,409

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	3,434,384	2,472,918	2,834,579	2,052,208
(2) Commercial inland addenda	4,382	414	2,146	206
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,262,822	45,741	4,416,632	35,842
Sub-Totals:	9,701,588	2,519,073	7,253,358	2,088,255
ZONE TOTALS	90,538,024	8,722,500	45,596,534	6,710,924

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	55,707,511	4,191,412	21,009,553	3,215,963
50% of sub-totals (p. 3, Part I)	20,912,997	1,510,541	11,425,313	1,184,516
100% of sub-totals (p. 4, Part I)	79,593,087	5,920,548	37,345,735	4,395,260
Totals	156,213,595	11,622,501	69,780,601	8,795,738
OR				
(2) 50% of sub-totals (p. 2, Part I)	27,853,756	2,095,706	10,504,777	1,607,981
100% of sub-totals (p. 3, Part I)	41,825,995	3,021,082	22,850,626	2,369,032
100% of sub-totals (p. 4, Part I)	79,593,087	5,920,548	37,345,735	4,395,260
Totals	149,272,837	11,037,337	70,701,138	8,372,273
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	5,236,255	2,587,574	3,174,666	2,178,067
100% of sub-totals (p. 3, Part II)	479,178	195,865	418,536	171,194
100% of sub-totals (p. 4, Part II)	1,243,349	282,879	997,441	227,409
Totals	6,958,781	3,066,317	4,590,643	2,576,670
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	281,577	60,786	252,373	53,447
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	163,453,954	14,749,605	74,623,617	11,425,855
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	71,259,766	686,619	3,509,567	583,313
(p. 3, Part III)	5,783,912	1,092,563	4,646,707	911,574
(p. 4, Part III)	9,701,588	2,519,073	7,253,358	2,088,255
Totals	86,745,265	4,298,255	15,409,632	3,583,142
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	250,199,219	19,047,860	90,033,249	15,008,997
Totals Check	270,830,640	20,497,615	101,206,189	16,140,066
Difference	(20,631,420)	(1,449,755)	(11,172,940)	(1,131,069)

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	70,320	904	63,643	5.75%	824
1A 1-4 Family 5%	2,471	74	2,471	3.00%	74
1A 1-4 Family 10%	238,788	19,755	238,297	1.63%	19,717
1B "Homeowners" - 1% or flat	2,130	122	1,855	5.75%	106
1B "Homeowners" 5%	622,835	34,086	457,847	3.00%	30,680
1B "Homeowners" 10%	5,226,613	87,547	4,119,751	1.63%	69,026
1B "Homeowners" 15% & up	9,811,229	104,591	9,441,053	1.00%	100,461
1B "Homeowners" 15% "Mini"	33,325,736	169,275	6,547,132	0.50%	35,480
1B "Homeowners" "Wrap"	14,217,453	355,436	0	2.50%	0
1C Wood Frame - small 5%	3,709,265	74,329	2,288,820	3.00%	45,910
1D Wood - other 5%	3,130,617	189,296	1,240,197	10.00%	83,042
1E Mobile Homes 2%	34,707	1,736	31,282	5.00%	1,565
2A Metal - small 5%	88,634	1,743	79,177	2.00%	1,481
2B Metal - other 5%	106,309	8,492	82,006	10.00%	6,795
3A Steel 5%	915,236	371,088	766,066	15.00%	330,303
3B Steel 5%	1,296,159	832,588	1,027,169	25.00%	696,969
3C Steel 10%	921,247	230,297	717,420	25.00%	179,348
4A Concrete 5%	776,972	440,202	598,181	20.00%	391,289
4B Concrete 5%	662,904	568,692	463,153	35.00%	421,001
4C Concrete 10 %	814,521	407,261	684,294	50.00%	342,147
4D Concrete 10 %	13,277	8,541	10,323	45.00%	6,735
5A Mixed 5%	1,854,077	886,112	1,015,761	25.00%	518,428
5B Mixed 10%	13,659	8,169	13,538	60.00%	8,101
5C Mixed 10%	685,527	518,069	575,092	75.00%	434,631
6 EQ resistive 5%	8	0	8	10.00%	0
Risks in above classes not written at standard deductible	45,907,436	5,958,446	39,287,194	xxx	4,416,116
Sub-Totals:	124,448,131	11,276,851	69,751,730		8,140,230

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	770,457	268,733	463,705	15.00%	227,973
3B Steel 5%	494,412	379,720	430,112	25.00%	343,499
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	201,984	106,314	179,018	20.00%	96,358
4B Concrete 5%	172,289	160,453	141,242	35.00%	132,529
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	60,007	27,003	50,413	45.00%	22,686
5A Mixed 5%	384,561	149,264	309,967	25.00%	111,924
5B Mixed 10%	2,702	1,621	1,891	60.00%	1,135
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	480,180	48,018	403,411	10.00%	40,341
Risks in above classes not written at standard deductible	1,027,039	470,552	857,551	xxx	402,239
Sub-Totals:	3,593,631	1,611,678	2,837,311		1,378,684

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	3,571,830	2,457,482	2,924,665	1,972,829
(2) Commercial inland addenda	4,582	589	2,396	237
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	12,349,036	76,695	9,932,731	69,745
Sub-Totals:	15,925,449	2,534,766	12,859,792	2,042,810
ZONE TOTALS	143,967,210	15,423,294	85,448,832	11,561,724

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	56,385	713	54,456	5.75%	695
1A 1-4 Family 5%	3,687	111	3,687	3.00%	111
1A 1-4 Family 10%	205,619	17,424	205,545	1.63%	17,398
1B "Homeowners" - 1% or flat	1,376	79	1,251	5.75%	72
1B "Homeowners" 5%	627,047	45,751	441,271	3.00%	41,481
1B "Homeowners" 10%	5,952,945	98,925	5,125,059	1.63%	84,803
1B "Homeowners" 15% & up	12,738,072	130,519	12,349,867	1.00%	125,967
1B "Homeowners" 15% "Mini"	35,099,585	175,929	3,986,452	0.50%	20,363
1B "Homeowners" "Wrap"	14,584,797	364,620	0	2.50%	0
1C Wood Frame - small 5%	4,699,190	94,147	2,156,278	3.00%	43,173
1D Wood - other 5%	1,865,954	112,394	753,863	10.00%	50,818
1E Mobile Homes 2%	78,902	3,945	78,902	5.00%	3,945
2A Metal - small 5%	192,350	4,813	98,574	2.00%	4,191
2B Metal - other 5%	616,072	60,784	491,118	10.00%	48,425
3A Steel 5%	550,753	221,544	474,166	15.00%	201,614
3B Steel 5%	774,550	405,727	543,488	25.00%	343,322
3C Steel 10%	1,002,022	250,366	694,326	25.00%	173,516
4A Concrete 5%	425,581	240,882	341,514	20.00%	212,637
4B Concrete 5%	730,812	607,943	469,945	35.00%	424,775
4C Concrete 10 %	5,091	2,546	3,055	50.00%	1,527
4D Concrete 10 %	16,860	10,818	12,197	45.00%	9,054
5A Mixed 5%	1,767,229	755,883	1,163,459	25.00%	504,406
5B Mixed 10%	53,137	32,634	46,238	60.00%	28,232
5C Mixed 10%	573,609	432,830	479,369	75.00%	361,019
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	25,300,813	2,378,377	22,406,100	xxx	1,598,671
Sub-Totals:	107,922,438	6,449,704	52,380,180		4,300,217

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	104,272	48,566	87,270	15.00%	40,619
3B Steel 5%	81,505	44,532	68,706	25.00%	41,334
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	36,170	34,131	28,199	20.00%	27,209
4B Concrete 5%	21,008	21,008	21,008	35.00%	21,008
4C Concrete 10 %	0	0	1	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	174,956	51,239	143,583	25.00%	39,646
5B Mixed 10%	0	0	1	60.00%	0
5C Mixed 10%	17,505	13,129	14,707	75.00%	11,031
6 EQ resistive 5%	498,022	49,802	418,397	10.00%	41,840
Risks in above classes not written at standard deductible	111,745	45,799	66,675	xxx	45,783
Sub-Totals:	1,045,182	308,206	848,548		268,470

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,476,573	1,900,400	2,130,638	1,635,947
(2) Commercial inland addenda	9,428	1,995	3,243	507
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	61	61	61	61
(4) All other (e.g., earthquake, sprinkler leakage)	4,232,561	29,967	3,900,523	22,486
Sub-Totals:	6,718,623	1,932,424	6,034,465	1,659,002
ZONE TOTALS	115,686,243	8,690,334	59,263,193	6,227,689

SUBZONE B-3: Orange County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	40,694	529	39,951	5.75%	519
1A 1-4 Family 5%	2,732	82	2,732	3.00%	82
1A 1-4 Family 10%	235,093	21,638	234,370	1.63%	21,616
1B "Homeowners" - 1% or flat	5,299	305	5,299	5.75%	305
1B "Homeowners" 5%	434,629	27,067	388,307	3.00%	25,004
1B "Homeowners" 10%	3,018,216	53,852	2,753,642	1.63%	48,275
1B "Homeowners" 15% & up	2,840,682	35,083	2,775,244	1.00%	34,404
1B "Homeowners" 15% "Mini"	28,003,574	140,724	3,443,637	0.50%	18,020
1B "Homeowners" "Wrap"	12,528,109	313,203	0	2.50%	0
1C Wood Frame - small 5%	4,204,080	84,172	1,310,083	3.00%	26,283
1D Wood - other 5%	494,782	38,728	258,404	10.00%	22,253
1E Mobile Homes 2%	61,490	3,074	61,490	5.00%	3,074
2A Metal - small 5%	39,801	766	36,256	2.00%	587
2B Metal - other 5%	115,829	11,246	45,741	10.00%	4,372
3A Steel 5%	270,565	156,422	251,493	15.00%	144,729
3B Steel 5%	977,089	574,567	832,936	25.00%	480,343
3C Steel 10%	658,222	164,489	341,976	25.00%	85,455
4A Concrete 5%	294,260	164,628	240,168	20.00%	150,536
4B Concrete 5%	400,753	320,221	308,911	35.00%	248,881
4C Concrete 10 %	194,917	97,459	156,807	50.00%	78,403
4D Concrete 10 %	6,084	2,712	5,922	45.00%	2,647
5A Mixed 5%	2,408,353	941,090	785,515	25.00%	376,891
5B Mixed 10%	14,304	8,582	5,069	60.00%	3,121
5C Mixed 10%	146,373	109,829	121,932	75.00%	91,522
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	15,179,452	1,956,472	13,450,333	xxx	1,391,005
Sub-Totals:	72,575,380	5,226,941	27,856,215		3,258,328

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	34,141	30,593	34,141	15.00%	30,593
3B Steel 5%	70,832	30,754	35,832	25.00%	19,231
3C Steel 10%	347	87	243	25.00%	61
4A Concrete 5%	115,893	106,243	103,156	20.00%	98,026
4B Concrete 5%	76,400	64,944	69,667	35.00%	64,302
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	81,811	20,453	68,108	25.00%	17,027
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	109,035	10,904	90,773	10.00%	9,077
Risks in above classes not written at standard deductible	29,635	19,932	22,948	xxx	14,736
Sub-Totals:	518,095	283,910	424,868		253,053

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,751,975	1,362,342	1,474,391	1,190,912
(2) Commercial inland addenda	3,943	771	2,104	481
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,876,896	36,046	4,555,687	32,363
Sub-Totals:	7,632,814	1,399,159	6,032,182	1,223,755
ZONE TOTALS	80,726,288	6,910,010	34,313,265	4,735,137

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	124,448,131	11,276,851	69,751,730	8,140,230
50% of sub-totals (p. 7, Part I)	53,961,219	3,224,852	26,190,090	2,150,108
100% of sub-totals (p. 8, Part I)	72,575,380	5,226,941	27,856,215	3,258,328
Totals	250,984,730	19,728,644	123,798,035	13,548,667
OR				
(2) 50% of sub-totals (p. 6, Part I)	62,224,066	5,638,425	34,875,865	4,070,115
100% of sub-totals (p. 7, Part I)	107,922,438	6,449,704	52,380,180	4,300,217
100% of sub-totals (p. 8, Part I)	72,575,380	5,226,941	27,856,215	3,258,328
Totals	242,721,884	17,315,070	115,112,260	11,628,660
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	3,593,631	1,611,678	2,837,311	1,378,684
100% of sub-totals (p. 7, Part II)	1,045,182	308,206	848,548	268,470
100% of sub-totals (p. 8, Part II)	518,095	283,910	424,868	253,053
Totals	5,156,908	2,203,794	4,110,727	1,900,207
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	317,189	61,811	274,829	54,248
50% of sub-totals (p. 11, Part II)	860,636	233,372	654,777	166,960
Totals	1,177,825	295,183	929,606	221,208
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	257,319,463	22,227,621	128,838,367	15,670,082
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	15,925,449	2,534,766	12,859,792	2,042,810
(p. 3, Part III)	6,718,623	1,932,424	6,034,465	1,659,002
(p. 4, Part III)	7,632,814	1,399,159	6,032,182	1,223,755
Totals	30,276,885	5,866,348	24,926,439	4,925,568
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	287,596,347	28,093,969	153,764,807	20,595,650
Totals Check	340,379,742	31,023,638	179,025,291	22,524,550
Difference	(52,783,394)	(2,929,669)	(25,260,484)	(1,928,900)

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	83,409	916	71,371	6.13%	801
1A 1-4 Family 5%	289	9	289	3.13%	9
1A 1-4 Family 10%	109,327	9,598	109,273	1.75%	9,593
1B "Homeowners" - 1% or flat	437	27	437	6.13%	27
1B "Homeowners" 5%	962,577	43,698	898,226	3.13%	39,992
1B "Homeowners" 10%	3,289,898	58,712	2,934,140	1.75%	51,819
1B "Homeowners" 15% & up	5,805,276	68,303	5,740,257	1.13%	67,240
1B "Homeowners" 15% "Mini"	19,154,186	108,240	3,335,479	0.56%	19,724
1B "Homeowners" "Wrap"	9,862,372	252,477	0	2.56%	0
1C Wood Frame - small 5%	1,856,986	37,319	667,303	3.00%	13,417
1D Wood - other 5%	528,515	46,255	315,447	10.00%	30,427
1E Mobile Homes 2%	130,668	6,533	128,511	5.00%	6,425
2A Metal - small 5%	48,953	1,547	43,883	2.00%	1,446
2B Metal - other 5%	114,777	11,220	97,868	10.00%	9,571
3A Steel 5%	562,907	185,560	464,520	15.00%	157,056
3B Steel 5%	466,999	186,245	403,895	25.00%	163,936
3C Steel 10%	638,349	159,579	525,572	25.00%	131,390
4A Concrete 5%	136,234	38,496	113,261	20.00%	34,470
4B Concrete 5%	164,037	104,801	132,437	35.00%	93,485
4C Concrete 10 %	599,430	299,715	517,330	50.00%	258,665
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	951,571	310,209	711,513	25.00%	237,174
5B Mixed 10%	23,921	18,342	21,503	60.00%	16,892
5C Mixed 10%	470,146	352,608	405,717	75.00%	304,286
6 EQ resistive 5%	28,836	2,884	8,488	10.00%	2,884
Risks in above classes not written at standard deductible	25,323,830	2,036,215	23,883,198	xxx	1,552,917
Sub-Totals:	71,313,929	4,339,507	41,529,919		3,203,647

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	16,000	13,203	16,000	15.00%	13,203
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	44,163	19,873	38,112	45.00%	17,151
5A Mixed 5%	220,834	55,208	190,579	25.00%	47,645
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	353,380	35,338	304,966	10.00%	30,497
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	634,377	123,622	549,657		108,496

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	2,138,244	1,304,219	1,937,414	1,161,935
(2) Commercial inland addenda	43,898	20,886	35,443	17,283
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,040,180	17,938	2,558,063	15,553
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	2,578,454	1,101,897	2,055,363	950,104
Sub-totals	7,800,775	2,444,940	6,586,283	2,144,874
ZONE TOTALS	79,749,081	6,908,069	48,665,859	5,457,018

ZONE D: San Diego County
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	23,463	259	23,336	2.63%	258
1A 1-4 Family 5%	611	7	611	1.19%	7
1A 1-4 Family 10%	150,683	12,747	150,453	0.56%	12,742
1B "Homeowners" - 1% or flat	34,648	6,878	19,999	2.63%	6,177
1B "Homeowners" 5%	1,553,025	24,602	1,501,587	1.19%	23,026
1B "Homeowners" 10%	2,351,726	13,285	2,119,311	0.56%	11,885
1B "Homeowners" 15% & up	2,886,075	7,203	2,835,060	0.31%	7,529
1B "Homeowners" 15% "Mini"	24,464,581	39,394	3,087,201	0.16%	5,229
1B "Homeowners" "Wrap"	14,925,500	153,733	0	1.03%	0
1C Wood Frame - small 5%	753,024	15,075	368,517	3.00%	7,385
1D Wood - other 5%	538,824	58,312	467,395	10.00%	47,164
1E Mobile Homes 2%	64,199	3,210	64,199	5.00%	3,210
2A Metal - small 5%	14,473	3,634	14,473	2.00%	3,634
2B Metal - other 5%	89,983	8,863	81,238	10.00%	7,989
3A Steel 5%	677,891	196,082	602,661	15.00%	183,688
3B Steel 5%	691,246	356,756	488,191	25.00%	274,835
3C Steel 10%	1,071,320	267,823	884,379	25.00%	221,087
4A Concrete 5%	208,195	73,362	169,724	20.00%	57,475
4B Concrete 5%	311,401	231,076	219,656	35.00%	173,256
4C Concrete 10 %	970,753	485,374	856,282	50.00%	428,138
4D Concrete 10 %	29	12	29	45.00%	12
5A Mixed 5%	1,669,875	608,966	1,341,644	25.00%	481,810
5B Mixed 10%	14,298	8,579	14,194	60.00%	8,516
5C Mixed 10%	761,419	571,063	671,650	75.00%	503,737
6 EQ resistive 5%	562,538	54,049	562,538	10.00%	54,049
Risks in above classes not written at standard deductible	15,525,683	1,784,252	14,598,130	xxx	1,437,952
Sub-Totals:	70,315,461	4,984,597	31,142,457		3,960,791

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	164,538	53,734	117,795	15.00%	45,370
3B Steel 5%	125,918	65,498	108,973	25.00%	59,265
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	280,276	120,689	55,276	20.00%	26,853
4B Concrete 5%	15,000	15,000	10,000	35.00%	10,000
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	433,962	107,241	383,376	25.00%	94,594
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	571,990	57,191	504,546	10.00%	50,447
Risks in above classes not written at standard deductible	129,589	47,391	129,589	xxx	47,391
Sub-Totals:	1,721,273	466,744	1,309,555		333,920

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	3,048,000	1,890,566	2,469,448	1,451,041
(2) Commercial inland addenda	2,961	594	1,021	230
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,228,326	38,293	3,852,683	33,947
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	2,578,454	1,101,897	2,055,363	950,104
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	628,602	126,187	518,433	98,693
Sub-totals	12,486,343	3,157,537	8,896,948	2,534,015
ZONE TOTALS	84,523,077	8,608,878	41,348,959	6,828,726

Questionnaire (Primary Insurance) -- Page 11

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	33,200	283	29,715	5.25%	252
1A 1-4 Family 5%	3,118	74	3,118	2.38%	74
1A 1-4 Family 10%	130,321	11,060	130,298	1.13%	11,054
1B "Homeowners" - 1% or flat	2,055	108	2,005	5.25%	105
1B "Homeowners" 5%	565,417	37,612	525,687	2.38%	34,314
1B "Homeowners" 10%	2,689,241	32,309	2,482,863	1.13%	29,146
1B "Homeowners" 15% & up	3,340,559	24,207	3,303,790	0.63%	23,973
1B "Homeowners" 15% "Mini"	19,430,718	60,753	4,335,895	0.31%	14,045
1B "Homeowners" "Wrap"	6,022,458	124,063	0	2.06%	0
1C Wood Frame - small 5%	20,773,202	606,973	19,727,380	3.00%	586,018
1D Wood - other 5%	513,994	51,551	393,687	10.00%	39,017
1E Mobile Homes 2%	223,143	11,157	223,143	5.00%	11,157
2A Metal - small 5%	173,627	14,488	146,608	2.00%	14,137
2B Metal - other 5%	97,171	9,459	84,634	10.00%	8,282
3A Steel 5%	1,051,274	355,353	744,371	15.00%	245,838
3B Steel 5%	879,025	398,527	686,866	25.00%	341,269
3C Steel 10%	1,156,692	289,149	956,248	25.00%	239,046
4A Concrete 5%	298,025	160,552	243,087	20.00%	142,951
4B Concrete 5%	2,948,050	1,409,687	2,742,105	35.00%	1,221,725
4C Concrete 10 %	999,505	499,753	906,545	50.00%	453,272
4D Concrete 10 %	5,066	5,026	3,259	45.00%	3,253
5A Mixed 5%	11,067,873	3,182,893	10,017,042	25.00%	2,758,230
5B Mixed 10%	10,159	6,096	6,042	60.00%	3,625
5C Mixed 10%	784,638	588,477	711,704	75.00%	533,777
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	19,313,263	2,436,641	17,576,511	xxx	1,874,019
Sub-Totals:	92,511,795	10,316,249	65,982,604		8,588,580

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	20,000	9,421	13,000	15.00%	5,704
3B Steel 5%	71,671	20,949	31,003	25.00%	10,516
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	105,000	24,437	34,688	20.00%	5,890
4B Concrete 5%	30,000	28,263	23,450	35.00%	21,713
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	441,674	110,418	400,612	25.00%	100,153
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	588,858	58,886	534,113	10.00%	53,411
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	1,257,203	252,373	1,036,865		197,387

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	3,305,938	2,352,895	2,840,835	1,979,494
(2) Commercial inland addenda	876	79	422	37
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,837,731	34,870	5,104,056	31,845
(5) 50% of amounts for over 8 stories for Zone B (P9, (3) totals):	2,578,454	1,101,897	2,055,363	950,104
(6) 50% of amounts for over 8 stories for Zone C (P10, sub-total for Part I)	317,189	61,811	274,829	54,248
(7) 50% of amounts for over 8 stories for Zone D (P 11, sub-total for Part I)	860,636	233,372	654,777	166,960
Sub-totals	12,900,823	3,784,925	10,930,282	3,182,688
ZONE TOTALS	106,669,821	14,353,547	77,949,751	11,968,655

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	22,179	150	20,459	3.13%	140
1A 1-4 Family 5%	607	11	607	1.88%	11
1A 1-4 Family 10%	11,683	675	11,018	1.13%	667
1B "Homeowners" - 1% or flat	1,331	42	1,331	3.13%	42
1B "Homeowners" 5%	157,759	3,240	152,759	1.88%	3,125
1B "Homeowners" 10%	149,954	1,694	110,814	1.13%	1,247
1B "Homeowners" 15% & up	107,059	676	106,180	0.63%	670
1B "Homeowners" 15% "Mini"	2,520,579	7,816	770,393	0.31%	2,418
1B "Homeowners" "Wrap"	710,072	11,077	0	1.56%	0
1C Wood Frame - small 5%	9,506,734	285,092	9,505,746	3.00%	285,072
1D Wood - other 5%	188,451	18,761	173,385	10.00%	17,218
1E Mobile Homes 2%	25,288	1,265	25,288	5.00%	1,265
2A Metal - small 5%	49,375	4,093	31,292	2.00%	1,996
2B Metal - other 5%	57,398	12,043	37,745	10.00%	10,778
3A Steel 5%	227,320	75,495	159,301	15.00%	69,233
3B Steel 5%	246,554	124,753	179,480	25.00%	98,193
3C Steel 10%	373,298	93,325	291,987	25.00%	72,997
4A Concrete 5%	123,334	24,260	84,586	20.00%	16,135
4B Concrete 5%	245,733	110,045	219,222	35.00%	90,204
4C Concrete 10 %	361,100	180,550	313,120	50.00%	156,560
4D Concrete 10 %	277	111	276	45.00%	111
5A Mixed 5%	2,825,409	764,027	2,520,781	25.00%	677,005
5B Mixed 10%	2,071	1,243	2,009	60.00%	1,205
5C Mixed 10%	283,212	212,406	238,581	75.00%	178,935
6 EQ resistive 5%	55,560	5,246	55,560	10.00%	5,246
Risks in above classes not written at standard deductible	14,092,732	1,032,106	13,643,801	xxx	918,566
Sub-Totals:	32,345,068	2,970,201	28,655,720		2,609,040

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	27,000	4,050	27,000	15.00%	4,050
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	85,169	21,292	70,083	25.00%	17,521
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	210,005	21,000	172,808	10.00%	17,281
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	322,174	46,342	269,891		38,852

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,155,184	698,555	1,006,410	640,058
(2) Commercial inland addenda	2,335	247	1,080	97
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	1,050,111	7,162	899,482	6,114
Sub-Totals:	2,207,630	705,964	1,906,972	646,269
ZONE TOTALS	34,874,872	3,722,507	30,832,582	3,294,161

All Co's

**ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	14,144	57	13,082	1.75%	53
1A 1-4 Family 5%	2,101	21	2,101	1.00%	21
1A 1-4 Family 10%	53,048	3,984	52,424	0.63%	3,980
1B "Homeowners" - 1% or flat	2,739	48	2,739	1.75%	48
1B "Homeowners" 5%	400,112	9,553	358,144	1.00%	8,951
1B "Homeowners" 10%	523,228	3,445	410,993	0.63%	2,711
1B "Homeowners" 15% & up	372,076	1,467	365,303	0.38%	1,441
1B "Homeowners" 15% "Mini"	7,362,439	14,021	1,630,035	0.19%	3,178
1B "Homeowners" "Wrap"	2,532,947	20,517	0	0.81%	0
1C Wood Frame - small 5%	39,849,747	1,194,786	39,806,728	3.00%	1,193,925
1D Wood - other 5%	544,358	53,097	456,308	10.00%	45,591
1E Mobile Homes 2%	70,493	3,524	70,493	5.00%	3,524
2A Metal - small 5%	96,836	4,089	85,042	2.00%	3,652
2B Metal - other 5%	69,112	6,923	63,375	10.00%	6,350
3A Steel 5%	524,409	179,719	410,274	15.00%	149,758
3B Steel 5%	577,049	319,405	489,409	25.00%	280,728
3C Steel 10%	843,456	211,052	739,441	25.00%	185,047
4A Concrete 5%	155,231	94,776	143,717	20.00%	87,030
4B Concrete 5%	19,499,227	6,976,026	19,464,397	35.00%	6,945,931
4C Concrete 10 %	911,148	455,574	810,023	50.00%	405,012
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	4,907,299	1,402,307	4,598,241	25.00%	1,308,846
5B Mixed 10%	734	440	729	60.00%	437
5C Mixed 10%	691,031	518,258	615,033	75.00%	461,264
6 EQ resistive 5%	243,943	24,472	243,943	10.00%	24,472
Risks in above classes not written at standard deductible	15,318,951	1,692,347	14,260,961	xxx	1,411,095
Sub-Totals:	95,565,859	13,189,907	85,092,935		12,533,044

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	75,588	24,005	73,588	15.00%	22,005
3B Steel 5%	25,000	13,750	19,850	25.00%	8,600
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	17,196	17,196	17,196	20.00%	17,196
4B Concrete 5%	12,500	12,500	12,500	35.00%	12,500
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	207,833	55,708	185,530	25.00%	50,132
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	500,137	50,014	445,142	10.00%	44,514
Risks in above classes not written at standard deductible	15,010	11,027	10,960	xxx	7,012
Sub-Totals:	853,264	184,200	764,766		161,959

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,096,361	1,458,606	1,810,280	1,319,308
(2) Commercial inland addenda	4,656	477	2,468	246
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	2,787,840	26,994	2,223,694	21,887
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	0	0	0	0
Sub-Totals:	4,888,857	1,486,078	4,036,442	1,341,441
ZONE TOTALS	101,307,980	14,860,185	89,894,143	14,036,444

ZONE H COUNTIES: Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	954	6	954	2.50%	6
1A 1-4 Family 5%	682	10	660	1.50%	10
1A 1-4 Family 10%	23,149	2,212	23,148	0.88%	2,212
1B "Homeowners" - 1% or flat	1,106	28	1,106	2.50%	28
1B "Homeowners" 5%	42,286	740	35,830	1.50%	741
1B "Homeowners" 10%	33,137	293	29,527	0.88%	260
1B "Homeowners" 15% & up	41,976	211	41,373	0.50%	208
1B "Homeowners" 15% "Mini"	765,268	1,916	93,121	0.25%	242
1B "Homeowners" "Wrap"	293,250	3,666	0	1.25%	0
1C Wood Frame - small 5%	4,850	113	4,690	3.00%	108
1D Wood - other 5%	40,091	3,976	32,559	10.00%	3,223
1E Mobile Homes 2%	14,143	708	14,143	5.00%	708
2A Metal - small 5%	35,615	712	35,615	2.00%	712
2B Metal - other 5%	8,000	799	6,516	10.00%	651
3A Steel 5%	56,429	8,964	45,016	15.00%	8,227
3B Steel 5%	8,634	7,917	7,549	25.00%	6,908
3C Steel 10%	101,854	25,463	82,918	25.00%	20,730
4A Concrete 5%	10,000	6,434	10,000	20.00%	6,434
4B Concrete 5%	2,486	1,520	1,372	35.00%	1,130
4C Concrete 10 %	104,605	52,303	85,158	50.00%	42,579
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	89,275	30,520	77,097	25.00%	27,475
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	82,061	61,544	66,811	75.00%	50,106
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	1,706,919	192,382	1,608,170	xxx	127,176
Sub-Totals:	3,466,771	402,436	2,303,332		299,873

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	46,226	11,557	37,632	25.00%	9,408
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	61,631	6,163	50,173	10.00%	5,017
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	107,857	17,720	87,805		14,425

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	179,248	127,523	115,152	73,324
(2) Commercial inland addenda	383	28	143	11
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	118,345	30,951	114,820	1,137
Sub-Totals:	297,976	158,502	230,115	74,472
ZONE TOTALS	3,872,604	578,658	2,621,253	388,770

All Co's		CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2009				
NAIC COMPANY OR GROUP CODE:		All Co's	Surplus =	209,776,852 x 1,000		
		(1)	(2)	(3)	(4)	(5)
		Aggregate	Aggregate	Aggregate	Estimated	Estimated Net
		Direct	Direct	Liability	Net	PML Amount
		Liability	PML	Net of	PML	Limited by
Zone	Area			Reinsurance	Amount	Catastrophe
						Reinsurance
A	San Francisco	156,176,642	16,632,451	84,904,060	12,119,022	8,714,614
B	Los Angeles/ Orange County	269,896,302	25,676,575	141,919,610	18,293,316	13,326,949
C	Santa Barbara	111,175,724	28,307,187	69,262,223	21,195,635	4,124,104
D	San Diego	73,713,118	7,385,934	33,625,676	5,490,692	4,332,674
E	South-East	70,651,676	10,569,415	40,391,459	7,398,080	5,855,390
F	Central	15,524,702	2,582,145	11,278,207	1,995,462	1,950,599
G	North-Central	32,746,975	9,368,608	19,237,701	6,318,257	5,768,640
H	North	2,645,889	512,245	1,444,597	355,488	367,610

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2009

(a) Direct premiums earned	53,372,936
(b) Assumed premiums earned	25,362
(c) Ceded premiums earned	787,044

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,349,932	2,064,241
U.S. Reinsurers - non CA	52,442	72,625
Lloyd's of London	639,075	925,572
Other U.K.	29,594	132,920
Western Europe	290,689	353,205
All Other	1,177,526	2,002,597
Totals	3,539,257	5,551,160

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	5,665,717	6,051,075
U.S. Reinsurers - non CA	32,836	38,008
Lloyd's of London	713,288	916,725
Other U.K.	147,935	282,564
Western Europe	776,825	997,625
All Other	1,271,792	1,620,443
Totals	8,608,393	9,906,440

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2009 subject to an occurrence or per event

0

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 344,973

What was the total liability (exposure or Coverage A) on these policies? 112,448,998 (in thousands)

SUBZONE A-1 COUNTIES: San Francisco and San Mateo

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	28,159	479	27,099	6.75%	461
1A 1-4 Family 5%	2,632	96	2,537	3.63%	92
1A 1-4 Family 10%	158,474	14,043	154,374	2.13%	13,959
1B "Homeowners" - 1% or flat	1,471	99	1,471	6.75%	99
1B "Homeowners" 5%	164,003	13,974	106,650	3.63%	11,306
1B "Homeowners" 10%	1,241,429	28,130	1,218,947	2.13%	27,788
1B "Homeowners" 15% & up	4,033,594	88,721	3,992,290	1.38%	87,626
1B "Homeowners" 15% "Mini"	12,593,477	86,896	3,502,593	0.69%	24,169
1B "Homeowners" "Wrap"	1,881,239	55,308	0	2.94%	0
1C Wood Frame - small 5%	835,952	17,952	642,494	3.00%	14,063
1D Wood - other 5%	1,287,547	72,383	909,936	10.00%	51,139
1E Mobile Homes 2%	3,873	193	3,873	5.00%	193
2A Metal - small 5%	18,645	462	14,419	2.00%	418
2B Metal - other 5%	45,329	3,755	28,539	10.00%	2,238
3A Steel 5%	291,681	134,020	234,627	15.00%	106,657
3B Steel 5%	802,275	464,931	493,422	25.00%	296,536
3C Steel 10%	327,061	81,760	220,451	25.00%	55,107
4A Concrete 5%	363,992	330,998	314,963	20.00%	294,558
4B Concrete 5%	130,340	95,337	97,285	35.00%	68,410
4C Concrete 10 %	271,475	135,738	200,530	50.00%	100,265
4D Concrete 10 %	9,565	4,295	7,309	45.00%	3,280
5A Mixed 5%	438,984	241,699	313,301	25.00%	169,703
5B Mixed 10%	6,687	4,026	4,675	60.00%	2,818
5C Mixed 10%	233,636	176,664	166,626	75.00%	126,355
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	6,786,702	1,444,705	5,627,261	xxx	985,024
Sub-Totals:	31,958,221	3,496,666	18,285,671		2,442,265

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	460,370	203,380	401,318	15.00%	152,386
3B Steel 5%	834,845	586,203	680,908	25.00%	498,380
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	308,023	231,742	265,223	20.00%	202,087
4B Concrete 5%	181,460	132,878	107,529	35.00%	92,713
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	52,796	1,584	52,796	45.00%	1,584
5A Mixed 5%	179,218	78,203	141,891	25.00%	64,390
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	159,946	15,995	118,147	10.00%	11,815
Risks in above classes not written at standard deductible	613,853	379,391	498,493	xxx	319,688
Sub-Totals:	2,790,511	1,629,377	2,266,305		1,343,043

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	533,559	365,849	336,989	179,506
(2) Commercial inland addenda	55,795	12,691	24,696	11,732
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	22,209	10,094	22,209	10,094
(4) All other (e.g., earthquake, sprinkler leakage)	4,596,415	76,879	3,142,414	76,231
Sub-Totals:	5,207,978	465,513	3,526,307	277,563
ZONE TOTALS	39,956,710	5,591,555	24,078,283	4,062,870

SUBZONE A-2 COUNTIES: Alameda and Contra Costa
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	36,827	562	30,549	6.75%	482
1A 1-4 Family 5%	2,688	98	2,688	3.63%	98
1A 1-4 Family 10%	274,679	25,304	273,169	2.13%	25,267
1B "Homeowners" - 1% or flat	2,224	150	2,224	6.75%	150
1B "Homeowners" 5%	263,728	30,105	188,254	3.63%	24,591
1B "Homeowners" 10%	2,591,378	61,939	2,551,991	2.13%	57,880
1B "Homeowners" 15% & up	6,343,911	115,508	6,321,190	1.38%	115,186
1B "Homeowners" 15% "Mini"	16,586,748	114,448	3,596,775	0.69%	24,818
1B "Homeowners" "Wrap"	3,394,771	99,806	0	2.94%	0
1C Wood Frame - small 5%	2,124,909	44,548	1,096,497	3.00%	23,974
1D Wood - other 5%	446,059	30,766	263,948	10.00%	19,590
1E Mobile Homes 2%	19,166	959	19,166	5.00%	959
2A Metal - small 5%	29,421	479	28,282	2.00%	470
2B Metal - other 5%	28,992	2,430	21,788	10.00%	1,811
3A Steel 5%	320,995	156,496	254,386	15.00%	130,179
3B Steel 5%	543,815	286,662	448,889	25.00%	230,675
3C Steel 10%	328,136	82,035	235,999	25.00%	59,000
4A Concrete 5%	232,528	120,403	203,274	20.00%	108,728
4B Concrete 5%	193,026	135,951	120,106	35.00%	88,799
4C Concrete 10 %	345,290	172,645	254,335	50.00%	127,168
4D Concrete 10 %	304	122	304	45.00%	122
5A Mixed 5%	570,093	251,071	433,904	25.00%	170,827
5B Mixed 10%	6,187	3,712	3,485	60.00%	2,091
5C Mixed 10%	270,600	202,631	196,898	75.00%	147,548
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	7,846,467	983,985	6,757,490	xxx	596,964
Sub-Totals:	42,802,942	2,922,815	23,305,592		1,957,377

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	3,000	2,230	3,000	15.00%	2,230
3B Steel 5%	107,000	97,001	78,507	25.00%	68,508
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	1,016	393	1,016	35.00%	393
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	78,904	21,601	58,258	25.00%	16,065
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	188,393	18,839	138,719	10.00%	13,872
Risks in above classes not written at standard deductible	57,227	28,694	46,287	xxx	18,820
Sub-Totals:	435,540	168,758	325,787		119,888

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,111,228	1,412,128	1,801,465	1,251,346
(2) Commercial inland addenda	202,292	49,563	61,151	28,435
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	60,135	28,110	60,135	28,110
(4) All other (e.g., earthquake, sprinkler leakage)	4,241,136	45,148	3,212,840	43,979
Sub-Totals:	6,614,790	1,534,949	5,135,590	1,351,871
ZONE TOTALS	49,853,271	4,626,522	28,766,969	3,429,136

All Co's

**SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito,
Santa Clara, Santa Cruz, Solano, Sonoma**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	102,520	1,585	85,603	6.75%	1,321
1A 1-4 Family 5%	4,257	155	3,743	3.63%	136
1A 1-4 Family 10%	1,433,981	49,134	1,433,396	2.13%	49,133
1B "Homeowners" - 1% or flat	12,503	844	12,503	6.75%	844
1B "Homeowners" 5%	766,060	41,246	586,938	3.63%	32,782
1B "Homeowners" 10%	4,410,415	99,702	4,231,967	2.13%	93,800
1B "Homeowners" 15% & up	5,875,156	88,801	5,810,175	1.38%	87,014
1B "Homeowners" 15% "Mini"	31,719,039	218,862	5,344,460	0.69%	36,878
1B "Homeowners" "Wrap"	8,609,966	253,133	0	2.94%	0
1C Wood Frame - small 5%	2,665,387	53,521	1,193,769	3.00%	24,036
1D Wood - other 5%	664,612	55,614	423,821	10.00%	33,957
1E Mobile Homes 2%	123,011	6,150	123,011	5.00%	6,151
2A Metal - small 5%	109,266	3,524	82,826	2.00%	2,997
2B Metal - other 5%	104,872	19,858	79,589	10.00%	15,554
3A Steel 5%	743,916	229,753	566,006	15.00%	175,134
3B Steel 5%	753,491	323,721	629,777	25.00%	257,929
3C Steel 10%	1,175,729	293,911	820,813	25.00%	205,188
4A Concrete 5%	255,290	104,797	216,569	20.00%	85,241
4B Concrete 5%	279,055	247,433	206,209	35.00%	185,194
4C Concrete 10 %	1,108,288	554,114	793,703	50.00%	396,852
4D Concrete 10 %	62	25	57	45.00%	23
5A Mixed 5%	1,264,152	430,107	969,688	25.00%	320,255
5B Mixed 10%	19,745	11,847	17,999	60.00%	10,799
5C Mixed 10%	784,065	587,793	556,739	75.00%	417,539
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	13,130,011	1,895,147	11,054,848	xxx	1,316,368
Sub-Totals:	76,114,849	5,570,778	35,244,209		3,755,125

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	55,000	33,547	32,136	15.00%	18,808
3B Steel 5%	59,000	56,231	57,750	25.00%	54,981
3C Steel 10%	87	22	28	25.00%	7
4A Concrete 5%	15,125	12,969	13,075	20.00%	10,919
4B Concrete 5%	20,000	16,871	12,000	35.00%	11,871
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	593,226	173,544	434,414	25.00%	133,841
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	565,241	56,524	404,820	10.00%	40,482
Risks in above classes not written at standard deductible	108,358	7,243	97,708	xxx	6,887
Sub-Totals:	1,416,037	356,950	1,051,931		277,797

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,226,731	1,719,696	1,821,894	1,369,615
(2) Commercial inland addenda	98,104	44,221	96,520	44,063
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	93,035	42,211	93,035	42,211
(4) All other (e.g., earthquake, sprinkler leakage)	7,461,408	61,558	5,126,942	60,298
Sub-Totals:	9,879,279	1,867,686	7,138,391	1,516,187
ZONE TOTALS	87,410,165	7,795,415	43,434,531	5,549,109

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	31,958,221	3,496,666	18,285,671	2,442,265
50% of sub-totals (p. 3, Part I)	21,401,471	1,461,408	11,652,796	978,689
100% of sub-totals (p. 4, Part I)	76,114,849	5,570,778	35,244,209	3,755,125
Totals	129,474,541	10,528,851	65,182,676	7,176,078
OR				
(2) 50% of sub-totals (p. 2, Part I)	15,979,111	1,748,333	9,142,836	1,221,132
100% of sub-totals (p. 3, Part I)	42,802,942	2,922,815	23,305,592	1,957,377
100% of sub-totals (p. 4, Part I)	76,114,849	5,570,778	35,244,209	3,755,125
Totals	134,896,901	10,241,926	67,692,636	6,933,634
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	2,790,511	1,629,377	2,266,305	1,343,043
100% of sub-totals (p. 3, Part II)	435,540	168,758	325,787	119,888
100% of sub-totals (p. 4, Part II)	1,416,037	356,950	1,051,931	277,797
Totals	4,642,087	2,155,085	3,644,023	1,740,727
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	357,967	80,367	277,073	56,595
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	134,474,595	12,764,303	69,103,772	8,973,401
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	5,207,978	465,513	3,526,307	277,563
(p. 3, Part III)	6,614,790	1,534,949	5,135,590	1,351,871
(p. 4, Part III)	9,879,279	1,867,686	7,138,391	1,516,187
Totals	21,702,047	3,868,148	15,800,289	3,145,621
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	156,176,642	16,632,451	84,904,060	12,119,022
Totals Check	177,220,146	18,013,492	96,279,783	13,041,115
Difference	(21,043,504)	(1,381,041)	(11,375,723)	(922,093)

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	80,280	1,033	71,376	5.75%	924
1A 1-4 Family 5%	2,274	68	2,274	3.00%	68
1A 1-4 Family 10%	450,693	41,396	446,590	1.63%	41,299
1B "Homeowners" - 1% or flat	2,320	133	2,320	5.75%	133
1B "Homeowners" 5%	639,636	31,201	356,244	3.00%	20,912
1B "Homeowners" 10%	5,384,737	89,237	5,183,438	1.63%	85,557
1B "Homeowners" 15% & up	10,706,065	147,293	10,535,152	1.00%	145,470
1B "Homeowners" 15% "Mini"	32,440,886	162,205	5,949,807	0.50%	29,748
1B "Homeowners" "Wrap"	13,394,369	334,859	75	2.50%	2
1C Wood Frame - small 5%	4,495,578	92,126	2,851,028	3.00%	59,221
1D Wood - other 5%	3,224,992	200,591	1,299,274	10.00%	85,600
1E Mobile Homes 2%	38,668	1,933	31,959	5.00%	1,598
2A Metal - small 5%	154,118	12,664	72,798	2.00%	12,428
2B Metal - other 5%	124,134	19,283	90,384	10.00%	14,722
3A Steel 5%	562,179	194,817	399,146	15.00%	151,386
3B Steel 5%	882,443	588,235	685,736	25.00%	451,542
3C Steel 10%	1,043,222	260,790	700,148	25.00%	175,029
4A Concrete 5%	564,574	360,584	444,111	20.00%	291,330
4B Concrete 5%	548,953	460,933	379,942	35.00%	315,462
4C Concrete 10 %	909,555	454,751	654,463	50.00%	327,205
4D Concrete 10 %	11,532	5,167	11,304	45.00%	5,076
5A Mixed 5%	1,370,151	570,526	905,317	25.00%	371,835
5B Mixed 10%	19,314	13,561	18,171	60.00%	12,481
5C Mixed 10%	740,282	556,726	527,229	75.00%	396,371
6 EQ resistive 5%	8	0	8	10.00%	0
Risks in above classes not written at standard deductible	34,832,151	6,001,639	30,820,230	xxx	4,623,332
Sub-Totals:	112,623,113	10,601,750	62,438,523		7,618,734

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	612,154	139,542	226,180	15.00%	126,376
3B Steel 5%	784,225	544,625	565,474	25.00%	421,244
3C Steel 10%	35	9	11	25.00%	3
4A Concrete 5%	291,250	241,923	234,789	20.00%	219,378
4B Concrete 5%	185,492	136,211	100,761	35.00%	104,192
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	66,970	30,136	48,177	45.00%	21,680
5A Mixed 5%	361,879	105,788	261,223	25.00%	79,078
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	535,876	53,588	385,499	10.00%	38,550
Risks in above classes not written at standard deductible	1,004,438	449,977	717,912	xxx	324,984
Sub-Totals:	3,842,319	1,701,798	2,540,027		1,335,484

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,320,182	1,708,078	1,950,243	1,421,942
(2) Commercial inland addenda	11,337	7,018	8,950	6,787
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	5,832	5,832	5,832	5,832
(4) All other (e.g., earthquake, sprinkler leakage)	15,020,381	88,504	11,619,650	85,475
Sub-Totals:	17,357,733	1,809,433	13,584,676	1,520,037
ZONE TOTALS	133,823,165	14,112,981	78,563,226	10,474,255

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	59,663	756	57,799	5.75%	48,204
1A 1-4 Family 5%	3,712	111	3,712	3.00%	111
1A 1-4 Family 10%	39,670	697	33,681	1.63%	573
1B "Homeowners" - 1% or flat	3,099	178	3,099	5.75%	178
1B "Homeowners" 5%	433,586	31,078	254,571	3.00%	27,089
1B "Homeowners" 10%	6,918,760	117,358	6,704,741	1.63%	112,339
1B "Homeowners" 15% & up	13,888,473	162,780	13,740,233	1.00%	159,915
1B "Homeowners" 15% "Mini"	34,620,449	173,102	4,008,180	0.50%	20,042
1B "Homeowners" "Wrap"	13,908,449	347,711	0	2.50%	0
1C Wood Frame - small 5%	5,426,751	110,450	2,598,911	3.00%	53,854
1D Wood - other 5%	2,039,783	123,077	780,244	10.00%	51,464
1E Mobile Homes 2%	84,805	4,241	84,805	5.00%	4,241
2A Metal - small 5%	199,238	7,586	103,983	2.00%	6,687
2B Metal - other 5%	656,900	64,580	473,443	10.00%	46,496
3A Steel 5%	789,655	188,587	467,915	15.00%	134,132
3B Steel 5%	939,953	553,772	787,012	25.00%	456,909
3C Steel 10%	1,165,406	291,216	709,609	25.00%	177,338
4A Concrete 5%	348,962	212,716	252,592	20.00%	172,346
4B Concrete 5%	468,522	419,707	318,443	35.00%	289,458
4C Concrete 10 %	10,433	4,696	2,834	50.00%	1,275
4D Concrete 10 %	5,348	4,764	3,614	45.00%	3,282
5A Mixed 5%	1,575,452	642,225	1,154,969	25.00%	454,239
5B Mixed 10%	76,554	46,683	60,345	60.00%	36,732
5C Mixed 10%	639,889	480,416	459,946	75.00%	345,313
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	18,724,339	2,000,175	16,050,426	xxx	1,149,345
Sub-Totals:	103,027,850	5,988,661	49,115,107		3,751,563

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	2,500	2,500	1,200	15.00%	1,200
3B Steel 5%	140,051	103,719	98,728	25.00%	76,882
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	38,500	36,461	31,373	20.00%	30,384
4B Concrete 5%	127,956	72,735	16,157	35.00%	36,797
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	184,097	46,024	132,436	25.00%	33,109
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	19,536	14,652	14,054	75.00%	10,540
6 EQ resistive 5%	555,811	55,581	399,840	10.00%	39,984
Risks in above classes not written at standard deductible	155,147	37,041	100,028	xxx	30,912
Sub-Totals:	1,223,599	368,713	793,816		259,807

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,059,031	1,645,237	1,650,909	1,287,484
(2) Commercial inland addenda	21,142	7,877	16,453	7,192
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	8,673	4,141	8,673	4,141
(4) All other (e.g., earthquake, sprinkler leakage)	4,878,110	303,735	4,529,138	287,567
Sub-Totals:	6,966,956	1,960,990	6,205,173	1,586,384
ZONE TOTALS	111,218,405	8,318,364	56,114,096	5,597,754

SUBZONE B-3: Orange County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	43,554	566	42,654	5.75%	555
1A 1-4 Family 5%	2,670	80	2,670	3.00%	80
1A 1-4 Family 10%	437,673	24,108	437,263	1.63%	24,091
1B "Homeowners" - 1% or flat	1,480	85	1,480	5.75%	85
1B "Homeowners" 5%	400,427	45,473	333,007	3.00%	39,329
1B "Homeowners" 10%	3,686,249	65,721	3,721,780	1.63%	63,506
1B "Homeowners" 15% & up	3,891,312	56,312	3,839,865	1.00%	55,768
1B "Homeowners" 15% "Mini"	27,427,910	135,348	3,068,371	0.50%	15,342
1B "Homeowners" "Wrap"	11,935,395	298,385	355	2.50%	9
1C Wood Frame - small 5%	4,615,171	93,691	1,598,159	3.00%	33,269
1D Wood - other 5%	367,817	25,817	208,744	10.00%	16,952
1E Mobile Homes 2%	71,047	3,552	71,047	5.00%	3,552
2A Metal - small 5%	56,018	10,830	42,287	2.00%	10,814
2B Metal - other 5%	108,114	10,367	84,731	10.00%	10,012
3A Steel 5%	297,613	101,844	190,508	15.00%	80,951
3B Steel 5%	669,476	418,193	522,826	25.00%	298,253
3C Steel 10%	578,577	144,570	299,541	25.00%	74,837
4A Concrete 5%	229,814	135,948	179,117	20.00%	120,796
4B Concrete 5%	347,075	288,928	259,773	35.00%	225,308
4C Concrete 10 %	176,180	88,090	143,025	50.00%	71,512
4D Concrete 10 %	5,284	2,351	5,137	45.00%	2,292
5A Mixed 5%	974,653	404,979	763,124	25.00%	297,388
5B Mixed 10%	17,068	10,948	11,854	60.00%	7,501
5C Mixed 10%	135,412	101,558	106,134	75.00%	79,602
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	9,596,175	1,791,851	7,685,029	xxx	1,095,847
Sub-Totals:	66,072,164	4,259,595	23,618,480		2,627,653

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	18,500	13,500	11,597	15.00%	11,250
3B Steel 5%	45,526	44,416	42,951	25.00%	41,841
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	85,000	59,700	74,638	20.00%	49,338
4B Concrete 5%	27,500	18,607	17,479	35.00%	14,367
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	88,306	23,636	68,252	25.00%	19,155
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	97,701	9,770	79,636	10.00%	7,964
Risks in above classes not written at standard deductible	100,516	41,779	77,139	xxx	36,241
Sub-Totals:	463,049	211,409	371,691		180,156

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,660,816	1,204,274	1,369,250	954,826
(2) Commercial inland addenda	303,937	143,447	202,069	55,982
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	299,878	142,295	199,878	55,345
(4) All other (e.g., earthquake, sprinkler leakage)	6,432,980	44,680	5,128,673	43,509
Sub-Totals:	8,697,612	1,534,697	6,899,871	1,109,662
ZONE TOTALS	75,232,825	6,005,701	30,890,042	3,917,471

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	112,623,113	10,601,750	62,438,523	7,618,734
50% of sub-totals (p. 7, Part I)	51,513,925	2,994,330	24,557,554	1,875,782
100% of sub-totals (p. 8, Part I)	66,072,164	4,259,595	23,618,480	2,627,653
Totals	230,209,202	17,855,676	110,614,556	12,122,169
OR				
(2) 50% of sub-totals (p. 6, Part I)	56,311,556	5,300,875	31,219,261	3,809,367
100% of sub-totals (p. 7, Part I)	103,027,850	5,988,661	49,115,107	3,751,563
100% of sub-totals (p. 8, Part I)	66,072,164	4,259,595	23,618,480	2,627,653
Totals	225,411,571	15,549,131	103,952,848	10,188,583
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	3,842,319	1,701,798	2,540,027	1,335,484
100% of sub-totals (p. 7, Part II)	1,223,599	368,713	793,816	259,807
100% of sub-totals (p. 8, Part II)	463,049	211,409	371,691	180,156
Totals	5,528,966	2,281,919	3,705,534	1,775,447
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	386,827	73,181	316,090	60,550
50% of sub-totals (p. 11, Part II)	749,006	160,679	593,710	119,069
Totals	1,135,833	233,860	909,800	179,618
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	236,874,002	20,371,455	115,229,890	14,077,234
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	17,357,733	1,809,433	13,584,676	1,520,037
(p. 3, Part III)	6,966,956	1,960,990	6,205,173	1,586,384
(p. 4, Part III)	8,697,612	1,534,697	6,899,871	1,109,662
Totals	33,022,301	5,305,120	26,689,720	4,216,083
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	269,896,302	25,676,575	141,919,610	18,293,316
Totals Check	320,274,394	28,437,046	165,567,364	19,989,480
Difference	(50,378,092)	(2,760,471)	(23,647,754)	(1,696,163)

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	105,274	1,156	80,007	6.13%	898
1A 1-4 Family 5%	276	9	276	3.13%	9
1A 1-4 Family 10%	2,531,494	51,917	2,528,892	1.75%	51,867
1B "Homeowners" - 1% or flat	769	47	769	6.13%	47
1B "Homeowners" 5%	907,780	30,662	828,247	3.13%	28,628
1B "Homeowners" 10%	4,227,622	75,982	4,121,433	1.75%	74,353
1B "Homeowners" 15% & up	7,176,398	106,046	7,145,522	1.13%	105,337
1B "Homeowners" 15% "Mini"	18,745,810	104,978	3,222,099	0.56%	18,044
1B "Homeowners" "Wrap"	9,235,777	236,436	0	2.56%	0
1C Wood Frame - small 5%	2,322,443	49,084	981,730	3.00%	22,196
1D Wood - other 5%	552,176	47,368	318,591	10.00%	30,193
1E Mobile Homes 2%	147,808	7,391	144,205	5.00%	7,211
2A Metal - small 5%	45,979	859	43,386	2.00%	823
2B Metal - other 5%	77,368	7,331	65,200	10.00%	6,165
3A Steel 5%	526,678	219,600	423,416	15.00%	185,527
3B Steel 5%	257,828	128,200	233,740	25.00%	109,027
3C Steel 10%	897,191	224,290	659,249	25.00%	164,810
4A Concrete 5%	144,454	52,213	118,421	20.00%	46,291
4B Concrete 5%	268,743	173,159	158,542	35.00%	101,095
4C Concrete 10 %	740,258	370,129	603,144	50.00%	301,572
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	989,947	272,627	834,649	25.00%	228,710
5B Mixed 10%	11,099	6,649	10,661	60.00%	6,387
5C Mixed 10%	599,352	449,512	482,931	75.00%	362,198
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	7,958,827	1,076,887	6,755,189	xxx	567,263
Sub-Totals:	58,471,352	3,692,531	29,760,300		2,418,652

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	5,000	5,000	5,000	25.00%	5,000
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	5,000	5,000	5,000	20.00%	5,000
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	54,538	24,542	44,434	45.00%	19,996
5A Mixed 5%	272,715	68,179	222,192	25.00%	55,548
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	436,401	43,640	355,553	10.00%	35,555
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	773,654	146,361	632,179		121,099

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	2,947,971	1,900,656	2,540,009	1,527,111
(2) Commercial inland addenda	42,183,706	20,670,948	30,982,276	15,490,942
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	100	15	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	4,034,458	755,716	3,494,692	750,107
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	2,764,483	1,140,960	1,852,767	887,723
Sub-totals	51,930,718	24,468,295	38,869,744	18,655,884
ZONE TOTALS	111,175,724	28,307,187	69,262,223	21,195,635

ZONE D: San Diego County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	18,088	195	17,975	2.63%	194
1A 1-4 Family 5%	583	7	583	1.19%	7
1A 1-4 Family 10%	676,701	11,808	676,173	0.56%	11,801
1B "Homeowners" - 1% or flat	30,937	10,734	22,865	2.63%	9,339
1B "Homeowners" 5%	1,710,078	32,523	1,487,800	1.19%	26,561
1B "Homeowners" 10%	3,092,648	17,429	3,153,659	0.56%	17,632
1B "Homeowners" 15% & up	3,821,576	42,124	3,810,888	0.31%	42,096
1B "Homeowners" 15% "Mini"	22,887,297	36,619	3,115,800	0.16%	5,031
1B "Homeowners" "Wrap"	12,984,267	133,738	180	1.03%	2
1C Wood Frame - small 5%	824,331	17,224	471,587	3.00%	10,136
1D Wood - other 5%	624,482	64,795	519,498	10.00%	51,770
1E Mobile Homes 2%	71,773	3,588	71,773	5.00%	3,588
2A Metal - small 5%	21,171	24	11,659	2.00%	18
2B Metal - other 5%	84,619	8,324	70,707	10.00%	6,934
3A Steel 5%	523,410	128,323	445,649	15.00%	104,071
3B Steel 5%	630,948	354,798	477,662	25.00%	264,964
3C Steel 10%	1,181,429	295,350	923,507	25.00%	230,867
4A Concrete 5%	238,727	126,103	178,015	20.00%	77,573
4B Concrete 5%	205,826	158,096	150,024	35.00%	116,601
4C Concrete 10 %	1,075,347	537,671	893,163	50.00%	446,579
4D Concrete 10 %	29	12	29	45.00%	12
5A Mixed 5%	1,377,640	440,964	1,094,091	25.00%	347,172
5B Mixed 10%	4,993	2,996	3,910	60.00%	2,526
5C Mixed 10%	852,059	639,044	702,142	75.00%	526,607
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	7,279,306	1,416,683	6,180,541	xxx	898,035
Sub-Totals:	60,218,263	4,479,171	24,479,879		3,200,115

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	121,756	25,528	93,208	15.00%	19,511
3B Steel 5%	71,250	20,125	71,250	25.00%	20,125
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	3,750	3,750	2,250	20.00%	2,250
4B Concrete 5%	60,000	60,000	17,603	35.00%	17,603
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	475,184	118,796	394,675	25.00%	98,669
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	633,535	63,354	526,197	10.00%	52,620
Risks in above classes not written at standard deductible	132,537	29,805	82,237	xxx	27,360
Sub-Totals:	1,498,012	321,358	1,187,420		238,137

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,617,800	1,180,518	1,197,360	936,787
(2) Commercial inland addenda	26,229	12,454	24,397	12,114
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	22,949	11,668	22,949	11,668
(4) All other (e.g., earthquake, sprinkler leakage)	6,845,589	46,641	4,260,318	44,052
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	2,764,483	1,140,960	1,852,767	887,723
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	719,794	193,164	600,586	160,095
Sub-totals	11,996,843	2,585,405	7,958,377	2,052,440

ZONE TOTALS

73,713,118 7,385,934 33,625,676 5,490,692

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	36,692	306	32,861	5.25%	274
1A 1-4 Family 5%	2,897	69	2,897	2.38%	69
1A 1-4 Family 10%	153,347	13,477	150,565	1.13%	13,439
1B "Homeowners" - 1% or flat	18,492	5,390	14,209	5.25%	4,952
1B "Homeowners" 5%	644,484	39,043	499,051	2.38%	33,315
1B "Homeowners" 10%	3,147,872	36,086	3,168,993	1.13%	35,827
1B "Homeowners" 15% & up	5,353,566	61,165	5,318,377	0.63%	61,003
1B "Homeowners" 15% "Mini"	19,648,923	60,912	4,387,621	0.31%	13,602
1B "Homeowners" "Wrap"	5,970,647	122,996	75	2.06%	2
1C Wood Frame - small 5%	2,701,709	56,015	927,226	3.00%	20,480
1D Wood - other 5%	602,799	136,292	536,363	10.00%	52,949
1E Mobile Homes 2%	253,400	12,670	253,400	5.00%	12,670
2A Metal - small 5%	96,382	2,070	75,408	2.00%	1,892
2B Metal - other 5%	140,545	25,548	105,178	10.00%	16,714
3A Steel 5%	907,082	319,244	632,141	15.00%	221,055
3B Steel 5%	728,465	430,609	571,007	25.00%	325,641
3C Steel 10%	1,339,166	334,749	1,034,887	25.00%	258,705
4A Concrete 5%	280,584	162,251	233,226	20.00%	147,757
4B Concrete 5%	684,071	515,196	459,269	35.00%	337,748
4C Concrete 10 %	1,130,730	565,365	964,730	50.00%	482,365
4D Concrete 10 %	5,066	5,026	3,009	45.00%	3,004
5A Mixed 5%	1,608,891	605,443	1,282,844	25.00%	401,966
5B Mixed 10%	16,351	7,488	13,151	60.00%	5,567
5C Mixed 10%	904,338	677,599	773,413	75.00%	579,945
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	10,417,211	2,027,557	8,907,359	xxx	1,266,612
Sub-Totals:	56,793,708	6,222,564	30,347,259		4,297,555

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	25,000	12,143	13,149	15.00%	7,303
3B Steel 5%	40,000	27,500	32,775	25.00%	20,875
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	43,750	11,750	32,250	20.00%	8,250
4B Concrete 5%	15,000	12,978	(2,970)	35.00%	(1,120)
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	499,664	124,916	426,324	25.00%	106,581
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	666,173	66,617	568,394	10.00%	56,839
Risks in above classes not written at standard deductible	150,000	130,425	131,250	xxx	121,462
Sub-Totals:	1,439,587	386,329	1,201,172		320,191

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	2,827,663	2,108,738	2,270,691	1,668,855
(2) Commercial inland addenda	12,995	6,594	12,650	6,568
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	12,000	6,343	12,000	6,343
(4) All other (e.g., earthquake, sprinkler leakage)	5,665,406	464,029	3,785,120	31,228
(5) 50% of amounts for over 8 stories for Zone B (P9, (3) totals):	2,764,483	1,140,960	1,852,767	887,723
(6) 50% of amounts for over 8 stories for Zone C (P10, sub-total for Part II):	386,827	73,181	316,090	60,550
(7) 50% of amounts for over 8 stories for Zone D (P 11, sub-total for Part II):	749,006	160,679	593,710	119,069
Sub-totals	12,418,381	3,960,523	8,843,028	2,780,335
ZONE TOTALS	70,651,676	10,569,415	40,391,459	7,398,080

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	21,557	147	20,238	3.13%	139
1A 1-4 Family 5%	562	11	562	1.88%	11
1A 1-4 Family 10%	1,685,342	19,782	1,684,550	1.13%	19,772
1B "Homeowners" - 1% or flat	762	24	762	3.13%	24
1B "Homeowners" 5%	229,464	14,095	206,736	1.88%	13,865
1B "Homeowners" 10%	139,766	1,585	125,605	1.13%	1,424
1B "Homeowners" 15% & up	138,100	1,536	137,416	0.63%	1,536
1B "Homeowners" 15% "Mini"	2,421,455	7,509	758,871	0.31%	2,353
1B "Homeowners" "Wrap"	596,128	9,300	0	1.56%	0
1C Wood Frame - small 5%	249,255	7,338	248,912	3.00%	7,329
1D Wood - other 5%	199,189	19,589	178,976	10.00%	17,765
1E Mobile Homes 2%	29,042	1,453	29,042	5.00%	1,453
2A Metal - small 5%	61,054	718	31,663	2.00%	335
2B Metal - other 5%	62,864	12,537	38,491	10.00%	10,860
3A Steel 5%	237,609	85,705	142,372	15.00%	66,537
3B Steel 5%	136,712	65,862	101,611	25.00%	50,399
3C Steel 10%	450,747	112,686	322,633	25.00%	80,659
4A Concrete 5%	105,206	49,008	96,844	20.00%	40,946
4B Concrete 5%	117,784	83,171	99,217	35.00%	70,442
4C Concrete 10 %	440,631	220,315	346,984	50.00%	173,492
4D Concrete 10 %	274	109	274	45.00%	109
5A Mixed 5%	582,404	147,531	342,156	25.00%	106,037
5B Mixed 10%	5,077	3,046	3,758	60.00%	2,255
5C Mixed 10%	348,069	261,050	264,383	75.00%	198,286
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	2,572,714	501,592	1,990,708	xxx	333,364
Sub-Totals:	10,831,768	1,625,697	7,172,762		1,199,393

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	103,927	25,982	77,663	25.00%	19,416
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	256,258	25,626	191,497	10.00%	19,150
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	360,185	51,608	269,160		38,566

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,033,744	658,978	869,813	513,407
(2) Commercial inland addenda	2,391	316	731	167
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,296,614	245,547	2,965,741	243,929
Sub-Totals:	4,332,749	904,840	3,836,285	757,503
ZONE TOTALS	15,524,702	2,582,145	11,278,207	1,995,462

All Co's

**ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	12,414	51	11,988	1.75%	50
1A 1-4 Family 5%	2,131	21	2,131	1.00%	21
1A 1-4 Family 10%	51,504	3,776	50,466	0.63%	3,769
1B "Homeowners" - 1% or flat	4,189	73	4,189	1.75%	73
1B "Homeowners" 5%	564,332	17,310	529,364	1.00%	17,220
1B "Homeowners" 10%	532,878	3,516	528,747	0.63%	3,455
1B "Homeowners" 15% & up	510,523	5,448	507,571	0.38%	5,446
1B "Homeowners" 15% "Mini"	7,247,227	13,769	1,697,162	0.19%	3,225
1B "Homeowners" "Wrap"	2,145,367	17,378	100	0.81%	1
1C Wood Frame - small 5%	92,308	1,974	49,926	3.00%	1,124
1D Wood - other 5%	643,472	64,544	507,984	10.00%	52,202
1E Mobile Homes 2%	81,060	4,053	81,060	5.00%	4,053
2A Metal - small 5%	65,847	1,084	47,228	2.00%	1,005
2B Metal - other 5%	69,605	6,952	59,458	10.00%	5,967
3A Steel 5%	566,409	215,923	405,433	15.00%	174,882
3B Steel 5%	630,326	339,626	447,972	25.00%	268,485
3C Steel 10%	977,485	244,372	811,624	25.00%	202,906
4A Concrete 5%	145,701	95,838	128,207	20.00%	83,041
4B Concrete 5%	113,431	102,364	78,021	35.00%	75,419
4C Concrete 10 %	1,059,904	529,952	888,861	50.00%	444,431
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	1,208,341	441,479	914,720	25.00%	308,735
5B Mixed 10%	5,761	3,457	4,073	60.00%	2,444
5C Mixed 10%	810,066	607,533	677,439	75.00%	508,067
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	4,553,165	972,974	3,508,219	xxx	718,959
Sub-Totals:	22,093,446	3,693,467	11,941,943		2,884,980

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	69,136	17,370	68,336	15.00%	17,170
3B Steel 5%	14,300	11,075	9,150	25.00%	5,925
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	47,000	47,000	3,325	20.00%	3,325
4B Concrete 5%	20,000	20,000	16,250	35.00%	16,250
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	346,307	86,576	248,946	25.00%	76,756
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	584,950	58,495	490,553	10.00%	49,055
Risks in above classes not written at standard deductible	3,055	3,019	3,055	xxx	3,019
Sub-Totals:	1,084,748	243,536	839,615		171,501

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,630,779	1,169,164	1,348,098	961,696
(2) Commercial inland addenda	85,452	59,362	83,091	59,095
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	80,646	58,852	80,646	58,852
(4) All other (e.g., earthquake, sprinkler leakage)	7,691,259	4,084,974	4,783,018	2,064,029
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	80,646	59,255	161,291	118,106
Sub-Totals:	9,568,780	5,431,606	6,456,144	3,261,777
ZONE TOTALS	32,746,975	9,368,608	19,237,701	6,318,257

ZONE H COUNTIES: Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	952	6	952	2.50%	6
1A 1-4 Family 5%	647	9	625	1.50%	9
1A 1-4 Family 10%	2,340	163	2,338	0.88%	164
1B "Homeowners" - 1% or flat	4	0	4	2.50%	0
1B "Homeowners" 5%	44,297	1,128	41,699	1.50%	1,128
1B "Homeowners" 10%	28,894	254	29,008	0.88%	255
1B "Homeowners" 15% & up	36,459	200	35,681	0.50%	199
1B "Homeowners" 15% "Mini"	736,350	1,842	102,307	0.25%	256
1B "Homeowners" "Wrap"	235,746	2,947	0	1.25%	0
1C Wood Frame - small 5%	5,032	110	4,953	3.00%	107
1D Wood - other 5%	56,243	5,592	42,504	10.00%	4,248
1E Mobile Homes 2%	15,757	788	15,757	5.00%	788
2A Metal - small 5%	34,432	689	34,432	2.00%	689
2B Metal - other 5%	9,266	926	6,579	10.00%	657
3A Steel 5%	75,037	16,773	61,141	15.00%	11,930
3B Steel 5%	5,000	4,406	5,000	25.00%	4,406
3C Steel 10%	118,186	29,547	83,899	25.00%	20,975
4A Concrete 5%	2,500	500	0	20.00%	0
4B Concrete 5%	1,479	518	148	35.00%	52
4C Concrete 10 %	121,199	60,599	86,986	50.00%	42,993
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	89,393	29,849	63,854	25.00%	21,289
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	95,074	71,304	67,459	75.00%	50,593
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	444,934	114,172	358,277	xxx	72,290
Sub-Totals:	2,159,219	342,322	1,043,601		233,033

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	53,559	13,390	37,998	25.00%	9,499
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	71,407	7,141	50,660	10.00%	5,066
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	124,966	20,531	88,658		14,565

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	211,921	134,002	160,538	88,355
(2) Commercial inland addenda	9,493	4,184	9,287	4,170
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	9,141	4,159	9,141	4,159
(4) All other (e.g., earthquake, sprinkler leakage)	131,149	7,047	133,371	11,206
Sub-Totals:	361,704	149,392	312,337	107,890
ZONE TOTALS	2,645,889	512,245	1,444,597	355,488

All Co's		CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2008				
NAIC COMPANY OR GROUP CODE:		All Co's	Surplus =	189,899,297 x 1,000		
		(1)	(2)	(3)	(4)	(5)
Zone	Area	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount	Estimated Net PML Amount Limited by Catastrophe Reinsurance
A	San Francisco	167,365,135	16,354,300	90,624,670	10,031,309	6,753,003
B	Los Angeles/ Orange County	277,705,987	23,979,812	153,963,184	14,083,026	9,281,392
C	Santa Barbara	64,607,591	5,753,815	34,435,744	3,636,948	2,953,758
D	San Diego	71,833,537	7,762,168	32,879,591	4,861,127	3,794,689
E	South-East	74,365,819	9,881,526	42,597,373	6,574,834	4,984,043
F	Central	14,299,163	2,375,160	9,757,968	1,662,213	1,597,848
G	North-Central	30,590,652	5,092,301	18,523,001	3,708,894	3,195,912
H	North	3,085,526	509,364	1,806,734	358,238	383,913

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2008

(a) Direct premiums earned	58,503,510
(b) Assumed premiums earned	26,405
(c) Ceded premiums earned	19,945,811

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,534,003	2,401,908
U.S. Reinsurers - non CA	124,378	285,491
Lloyd's of London	1,237,917	1,890,781
Other U.K.	260,975	419,589
Western Europe	549,193	652,393
All Other	1,936,260	3,057,220
Totals	5,642,726	8,707,383

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	568,395	867,479
U.S. Reinsurers - non CA	45,026	52,268
Lloyd's of London	710,569	1,094,732
Other U.K.	234,719	410,313
Western Europe	439,221	596,755
All Other	1,309,242	2,694,358
Totals	3,307,172	5,715,905

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2007 subject to an occurrence or per event limitation?

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 312,302

What was the total liability (exposure or Coverage A) on these policies? 99,705,967

SUBZONE A-1 COUNTIES: San Francisco and San Mateo
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	29,254	497	28,391	6.75%	483
1A 1-4 Family 5%	2,491	91	2,396	3.63%	87
1A 1-4 Family 10%	172,587	15,791	168,656	2.13%	15,709
1B "Homeowners" - 1% or flat	34,655	2,340	34,655	6.75%	2,340
1B "Homeowners" 5%	163,323	13,545	108,934	3.63%	7,340
1B "Homeowners" 10%	1,548,825	33,715	1,502,896	2.13%	32,810
1B "Homeowners" 15% & up	4,993,858	97,234	4,945,340	1.38%	96,345
1B "Homeowners" 15% "Mini"	11,978,628	82,653	3,667,879	0.69%	25,309
1B "Homeowners" "Wrap"	1,836,594	53,554	15,050	2.94%	1
1C Wood Frame - small 5%	851,105	18,797	654,041	3.00%	15,055
1D Wood - other 5%	1,408,725	79,685	996,077	10.00%	56,240
1E Mobile Homes 2%	56,613	2,831	55,560	5.00%	2,778
2A Metal - small 5%	29,568	951	24,182	2.00%	675
2B Metal - other 5%	52,824	4,379	33,784	10.00%	2,664
3A Steel 5%	719,356	462,505	296,318	15.00%	126,289
3B Steel 5%	563,776	353,884	364,862	25.00%	216,256
3C Steel 10%	372,427	93,101	234,122	25.00%	58,525
4A Concrete 5%	140,960	89,749	84,580	20.00%	49,139
4B Concrete 5%	244,461	132,504	155,655	35.00%	88,608
4C Concrete 10 %	301,569	150,785	208,006	50.00%	104,003
4D Concrete 10 %	2,743	2,597	2,743	45.00%	2,597
5A Mixed 5%	378,649	141,850	250,933	25.00%	86,979
5B Mixed 10%	13,503	8,498	11,309	60.00%	7,043
5C Mixed 10%	254,290	190,655	167,502	75.00%	125,591
6 EQ resistive 5%	5,000	500	5,000	10.00%	500
Risks in above classes not written at standard deductible	6,896,506	1,352,249	5,489,274	xxx	785,461
Sub-Totals:	33,052,288	3,384,941	19,508,145		1,908,827

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	348,674	211,168	275,502	15.00%	149,335
3B Steel 5%	739,307	487,579	518,272	25.00%	287,979
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	404,234	237,664	344,779	20.00%	188,765
4B Concrete 5%	241,928	138,384	190,126	35.00%	108,275
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	142,452	39,364	98,345	25.00%	26,267
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	177,677	17,768	122,552	10.00%	12,255
Risks in above classes not written at standard deductible	815,165	428,443	495,324	xxx	216,610
Sub-Totals:	2,869,438	1,560,370	2,044,900		989,485

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	790,119	638,498	284,806	194,386
(2) Commercial inland addenda	3,279	476	678	69
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,704,526	81,182	3,126,179	80,455
Sub-Totals:	6,497,924	720,157	3,411,663	274,910
ZONE TOTALS	42,419,650	5,665,468	24,964,708	3,173,222

SUBZONE A-2 COUNTIES: Alameda and Contra Costa

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	36,687	562	30,495	6.75%	483
1A 1-4 Family 5%	2,491	90	2,491	3.63%	90
1A 1-4 Family 10%	260,542	23,973	258,743	2.13%	23,928
1B "Homeowners" - 1% or flat	27,380	1,848	27,380	6.75%	1,848
1B "Homeowners" 5%	279,890	27,448	165,549	3.63%	20,917
1B "Homeowners" 10%	3,211,671	73,349	3,090,454	2.13%	69,303
1B "Homeowners" 15% & up	9,560,224	159,267	9,511,927	1.38%	158,490
1B "Homeowners" 15% "Mini"	15,711,136	108,336	3,624,742	0.69%	24,941
1B "Homeowners" "Wrap"	3,287,432	101,394	18,852	2.94%	3,661
1C Wood Frame - small 5%	2,075,921	52,933	1,091,963	3.00%	29,646
1D Wood - other 5%	501,591	36,912	285,918	10.00%	22,504
1E Mobile Homes 2%	331,991	16,600	328,297	5.00%	16,415
2A Metal - small 5%	25,965	1,286	6,645	2.00%	301
2B Metal - other 5%	28,681	2,484	20,160	10.00%	1,723
3A Steel 5%	488,354	223,292	334,946	15.00%	160,207
3B Steel 5%	897,685	655,584	376,529	25.00%	218,162
3C Steel 10%	378,371	94,593	244,548	25.00%	61,137
4A Concrete 5%	167,166	95,091	130,776	20.00%	72,556
4B Concrete 5%	296,588	234,076	179,655	35.00%	131,872
4C Concrete 10 %	369,271	184,636	252,014	50.00%	126,007
4D Concrete 10 %	291	116	291	45.00%	116
5A Mixed 5%	730,508	353,031	445,869	25.00%	181,150
5B Mixed 10%	1,260	756	955	60.00%	573
5C Mixed 10%	286,224	214,345	192,381	75.00%	144,158
6 EQ resistive 5%	3,700	370	3,700	10.00%	370
Risks in above classes not written at standard deductible	7,212,357	960,894	5,826,674	xxx	605,894
Sub-Totals:	46,173,377	3,623,266	26,451,954		2,076,451

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	21,000	3,150	21,000	15.00%	3,150
3B Steel 5%	57,500	35,000	42,000	25.00%	19,500
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	15,750	7,950	14,000	20.00%	7,600
4B Concrete 5%	5,993	2,148	5,993	35.00%	2,148
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	81,771	20,443	55,740	25.00%	13,935
5B Mixed 10%	6,000	6,000	3,110	60.00%	3,110
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	201,628	20,163	137,440	10.00%	13,744
Risks in above classes not written at standard deductible	174,027	42,543	156,777	xxx	26,255
Sub-Totals:	563,669	137,397	436,060		89,442

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,462,923	1,062,673	899,555	670,594
(2) Commercial inland addenda	1,790	186	682	75
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,869,978	44,832	2,867,566	43,782
Sub-Totals:	5,334,691	1,107,690	3,767,803	714,451
ZONE TOTALS	52,071,737	4,868,354	30,655,817	2,880,345

All Co's

**SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito,
Santa Clara, Santa Cruz, Solano, Sonoma**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	95,391	1,450	84,582	6.75%	1,294
1A 1-4 Family 5%	2,739	99	2,739	3.63%	99
1A 1-4 Family 10%	989,906	40,432	489,382	2.13%	29,781
1B "Homeowners" - 1% or flat	12,585	850	12,585	6.75%	850
1B "Homeowners" 5%	937,763	46,721	593,544	3.63%	31,693
1B "Homeowners" 10%	5,832,073	130,684	5,453,940	2.13%	121,151
1B "Homeowners" 15% & up	8,510,461	125,650	8,372,559	1.38%	123,160
1B "Homeowners" 15% "Mini"	30,638,237	211,404	5,196,513	0.69%	35,858
1B "Homeowners" "Wrap"	8,271,281	243,175	455	2.94%	13
1C Wood Frame - small 5%	2,775,504	57,545	1,372,803	3.00%	29,437
1D Wood - other 5%	715,955	59,706	457,514	10.00%	39,956
1E Mobile Homes 2%	1,106,546	55,327	1,078,647	5.00%	53,932
2A Metal - small 5%	147,129	5,355	67,452	2.00%	3,416
2B Metal - other 5%	115,424	10,983	84,810	10.00%	7,996
3A Steel 5%	698,544	204,849	528,996	15.00%	172,761
3B Steel 5%	611,531	344,919	484,808	25.00%	261,337
3C Steel 10%	1,246,693	311,653	815,799	25.00%	203,936
4A Concrete 5%	312,030	189,607	261,117	20.00%	155,285
4B Concrete 5%	477,716	284,338	276,260	35.00%	179,138
4C Concrete 10 %	1,198,067	599,034	796,271	50.00%	398,136
4D Concrete 10 %	1,459	653	1,454	45.00%	652
5A Mixed 5%	1,437,740	511,555	983,665	25.00%	342,419
5B Mixed 10%	9,200	5,520	8,872	60.00%	5,323
5C Mixed 10%	868,466	651,110	558,452	75.00%	418,796
6 EQ resistive 5%	7,500	750	7,500	10.00%	750
Risks in above classes not written at standard deductible	12,540,442	1,613,590	10,203,784	xxx	1,142,788
Sub-Totals:	79,560,382	5,706,961	38,194,502		3,759,957

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	4,161	624	4,161	15.00%	624
3B Steel 5%	9,000	7,725	7,075	25.00%	5,800
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	28,000	24,236	27,000	20.00%	24,036
4B Concrete 5%	20,406	20,142	13,656	35.00%	13,392
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	610,939	157,235	407,060	25.00%	105,515
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	639,706	68,753	408,630	10.00%	43,113
Risks in above classes not written at standard deductible	31,241	21,447	27,387	xxx	19,310
Sub-Totals:	1,343,453	300,162	894,969		211,791

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,787,444	1,391,770	1,154,658	859,253
(2) Commercial inland addenda	3,169	309	1,565	146
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,378,961	54,160	4,250,126	53,042
Sub-Totals:	8,169,574	1,446,239	5,406,350	912,440
ZONE TOTALS	89,073,409	7,453,361	44,495,821	4,884,188

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	33,052,288	3,384,941	19,508,145	1,908,827
50% of sub-totals (p. 3, Part I)	23,086,688	1,811,633	13,225,977	1,038,226
100% of sub-totals (p. 4, Part I)	79,560,382	5,706,961	38,194,502	3,759,957
Totals	135,699,358	10,903,536	70,928,624	6,707,009
OR				
(2) 50% of sub-totals (p. 2, Part I)	16,526,144	1,692,471	9,754,073	954,414
100% of sub-totals (p. 3, Part I)	46,173,377	3,623,266	26,451,954	2,076,451
100% of sub-totals (p. 4, Part I)	79,560,382	5,706,961	38,194,502	3,759,957
Totals	142,259,903	11,022,698	74,400,528	6,790,821
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	2,869,438	1,560,370	2,044,900	989,485
100% of sub-totals (p. 3, Part II)	563,669	137,397	436,060	89,442
100% of sub-totals (p. 4, Part II)	1,343,453	300,162	894,969	211,791
Totals	4,776,560	1,997,928	3,375,929	1,290,718
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	326,483	59,588	262,397	47,967
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	147,362,946	13,080,214	78,038,855	8,129,507
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	6,497,924	720,157	3,411,663	274,910
(p. 3, Part III)	5,334,691	1,107,690	3,767,803	714,451
(p. 4, Part III)	8,169,574	1,446,239	5,406,350	912,440
Totals	20,002,189	3,274,086	12,585,816	1,901,802
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	167,365,135	16,354,300	90,624,670	10,031,309
Totals Check Difference	183,564,796 (16,199,661)	17,987,183 (1,632,883)	100,116,346 (9,491,676)	10,937,755 (906,446)

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	83,420	1,088	72,097	5.75%	947
1A 1-4 Family 5%	12,290	369	12,290	3.00%	369
1A 1-4 Family 10%	394,276	36,053	391,801	1.63%	35,983
1B "Homeowners" - 1% or flat	233,456	15,725	233,456	5.75%	15,725
1B "Homeowners" 5%	765,181	35,140	501,415	3.00%	23,691
1B "Homeowners" 10%	6,132,185	100,916	5,918,066	1.63%	97,046
1B "Homeowners" 15% & up	12,107,542	156,090	11,993,035	1.00%	154,287
1B "Homeowners" 15% "Mini"	29,227,947	146,139	5,759,186	0.50%	28,795
1B "Homeowners" "Vwrap"	12,380,346	309,509	235	2.50%	6
1C Wood Frame - small 5%	4,306,980	87,619	2,771,303	3.00%	56,891
1D Wood - other 5%	3,200,761	200,084	1,337,044	10.00%	90,622
1E Mobile Homes 2%	176,088	8,805	163,257	5.00%	8,163
2A Metal - small 5%	89,208	2,105	63,492	2.00%	2,082
2B Metal - other 5%	115,812	9,557	80,276	10.00%	6,560
3A Steel 5%	783,356	243,986	544,677	15.00%	185,246
3B Steel 5%	824,994	464,470	596,491	25.00%	298,927
3C Steel 10%	1,074,278	268,555	691,708	25.00%	172,919
4A Concrete 5%	597,029	307,734	433,839	20.00%	235,491
4B Concrete 5%	1,127,536	577,437	699,763	35.00%	363,882
4C Concrete 10 %	967,646	483,799	655,924	50.00%	327,937
4D Concrete 10 %	4,156	1,847	3,945	45.00%	1,762
5A Mixed 5%	1,554,479	601,685	1,002,449	25.00%	366,576
5B Mixed 10%	43,057	27,808	42,968	60.00%	27,759
5C Mixed 10%	803,220	604,089	530,381	75.00%	398,882
6 EQ resistive 5%	20,264	2,026	20,264	10.00%	2,026
Risks in above classes not written at standard deductible	26,878,019	3,552,727	22,025,127	xxx	1,930,819
Sub-Totals:	103,903,525	8,245,363	56,544,491		4,833,394

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	548,399	296,539	265,914	15.00%	111,269
3B Steel 5%	681,769	448,148	548,480	25.00%	350,357
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	164,619	108,775	125,457	20.00%	83,804
4B Concrete 5%	271,692	141,441	183,068	35.00%	95,670
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	71,252	32,063	48,287	45.00%	21,729
5A Mixed 5%	385,792	107,193	264,031	25.00%	72,324
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	576,181	57,618	392,421	10.00%	39,242
Risks in above classes not written at standard deductible	1,317,848	615,845	936,266	xxx	357,904
Sub-Totals:	4,017,552	1,807,621	2,763,924		1,132,299

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,350,907	1,915,244	1,449,755	1,157,766
(2) Commercial inland addenda	4,017	422	1,945	195
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	33,083,430	193,510	29,601,328	189,101
Sub-Totals:	35,438,355	2,109,175	31,053,028	1,347,063
ZONE TOTALS	143,359,432	12,162,159	90,361,443	7,312,755

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	61,548	781	58,405	5.75%	747
1A 1-4 Family 5%	3,574	107	3,574	3.00%	107
1A 1-4 Family 10%	43,006	1,378	42,831	1.63%	1,349
1B "Homeowners" - 1% or flat	165,237	11,122	165,237	5.75%	11,122
1B "Homeowners" 5%	440,168	16,885	265,034	3.00%	11,645
1B "Homeowners" 10%	7,692,772	129,993	7,348,321	1.63%	122,538
1B "Homeowners" 15% & up	16,181,285	183,224	16,098,148	1.00%	181,298
1B "Homeowners" 15% "Mini"	31,591,667	157,958	3,913,447	0.50%	19,566
1B "Homeowners" "Wrap"	13,048,133	326,203	1,345	2.50%	33
1C Wood Frame - small 5%	5,584,709	117,659	2,989,365	3.00%	65,729
1D Wood - other 5%	2,133,596	130,103	797,941	10.00%	55,984
1E Mobile Homes 2%	432,517	21,626	427,758	5.00%	21,388
2A Metal - small 5%	115,089	11,973	74,103	2.00%	4,637
2B Metal - other 5%	692,222	68,184	469,552	10.00%	46,154
3A Steel 5%	348,957	150,358	273,288	15.00%	122,818
3B Steel 5%	736,283	351,919	537,971	25.00%	256,692
3C Steel 10%	1,164,140	290,910	693,926	25.00%	173,422
4A Concrete 5%	407,506	200,597	307,225	20.00%	160,385
4B Concrete 5%	591,484	438,105	411,072	35.00%	295,986
4C Concrete 10 %	49,146	24,085	36,039	50.00%	17,877
4D Concrete 10 %	1,530	618	615	45.00%	252
5A Mixed 5%	1,645,638	575,739	1,076,778	25.00%	368,581
5B Mixed 10%	101,801	61,081	77,616	60.00%	46,570
5C Mixed 10%	701,391	528,538	466,406	75.00%	351,428
6 EQ resistive 5%	6,714	671	6,714	10.00%	671
Risks in above classes not written at standard deductible	18,834,629	2,077,615	15,795,120	xxx	1,167,678
Sub-Totals:	102,774,742	5,877,430	52,337,831		3,504,658

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	74,750	32,250	42,375	15.00%	20,913
3B Steel 5%	270,855	219,255	119,391	25.00%	72,816
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	123,750	102,920	97,500	20.00%	78,597
4B Concrete 5%	110,272	51,345	85,022	35.00%	34,870
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	210,868	56,467	144,979	25.00%	37,925
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	20,785	15,589	14,086	75.00%	10,565
6 EQ resistive 5%	591,350	59,135	400,754	10.00%	40,075
Risks in above classes not written at standard deductible	138,516	55,559	130,775	xxx	49,810
Sub-Totals:	1,541,146	592,521	1,034,882		345,572

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,401,645	2,113,937	1,306,157	1,096,204
(2) Commercial inland addenda	105,601	7,456	2,542	412
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	240	144	139	139
(4) All other (e.g., earthquake, sprinkler leakage)	3,154,496	35,896	2,848,542	31,499
Sub-Totals:	5,661,982	2,157,432	4,157,379	1,128,253
ZONE TOTALS	109,977,870	8,627,383	57,530,091	4,978,483

SUBZONE B-3: Orange County
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	42,000	546	41,150	5.75%	535
1A 1-4 Family 5%	7,013	210	7,013	3.00%	210
1A 1-4 Family 10%	235,797	21,915	235,426	1.63%	21,897
1B "Homeowners" - 1% or flat	75,996	5,120	75,996	5.75%	5,120
1B "Homeowners" 5%	426,873	26,795	327,402	3.00%	20,928
1B "Homeowners" 10%	3,842,451	69,922	3,667,414	1.63%	64,083
1B "Homeowners" 15% & up	6,027,988	75,679	5,983,884	1.00%	75,267
1B "Homeowners" 15% "Mini"	25,137,524	125,690	2,773,370	0.50%	13,868
1B "Homeowners" "Wrap"	11,430,009	285,750	935	2.50%	23
1C Wood Frame - small 5%	4,540,734	92,119	1,590,283	3.00%	33,022
1D Wood - other 5%	371,703	25,282	201,447	10.00%	15,637
1E Mobile Homes 2%	495,631	24,782	489,679	5.00%	24,484
2A Metal - small 5%	53,963	817	32,498	2.00%	763
2B Metal - other 5%	46,077	4,227	38,625	10.00%	3,591
3A Steel 5%	410,010	109,367	268,494	15.00%	80,388
3B Steel 5%	498,829	304,588	359,381	25.00%	192,651
3C Steel 10%	390,143	97,464	210,487	25.00%	52,573
4A Concrete 5%	361,479	197,468	262,969	20.00%	158,513
4B Concrete 5%	673,755	605,924	301,389	35.00%	250,546
4C Concrete 10 %	162,832	81,416	120,457	50.00%	60,228
4D Concrete 10 %	784	326	647	45.00%	272
5A Mixed 5%	1,098,556	475,254	698,285	25.00%	282,825
5B Mixed 10%	16,628	9,976	15,486	60.00%	9,291
5C Mixed 10%	147,484	110,863	97,723	75.00%	73,455
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	10,170,482	1,717,947	7,507,331	xxx	859,799
Sub-Totals:	66,664,742	4,469,448	25,307,769		2,299,970

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	47,292	23,701	42,917	15.00%	22,176
3B Steel 5%	88,050	58,763	66,950	25.00%	37,662
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	97,000	51,803	78,240	20.00%	36,038
4B Concrete 5%	64,323	22,513	28,073	35.00%	9,826
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	90,347	22,586	72,274	25.00%	18,068
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	93,750	9,375	69,671	10.00%	6,966
Risks in above classes not written at standard deductible	187,426	71,031	142,228	xxx	52,105
Sub-Totals:	668,188	259,772	500,353		182,840

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,229,376	1,094,433	909,149	825,639
(2) Commercial inland addenda	3,938	659	1,902	223
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,929,454	47,923	4,548,356	46,130
Sub-Totals:	7,162,769	1,143,015	5,459,406	871,993
ZONE TOTALS	74,495,698	5,872,235	31,267,528	3,354,803

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	103,903,525	8,245,363	56,544,491	4,833,394
50% of sub-totals (p. 7, Part I)	51,387,371	2,938,715	26,168,915	1,752,329
100% of sub-totals (p. 8, Part I)	66,664,742	4,469,448	25,307,769	2,299,970
Totals	221,955,638	15,653,526	108,021,175	8,885,693
OR				
(2) 50% of sub-totals (p. 6, Part I)	51,951,763	4,122,682	28,272,246	2,416,697
100% of sub-totals (p. 7, Part I)	102,774,742	5,877,430	52,337,831	3,504,658
100% of sub-totals (p. 8, Part I)	66,664,742	4,469,448	25,307,769	2,299,970
Totals	221,391,247	14,469,560	105,917,845	8,221,325
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	4,017,552	1,807,621	2,763,924	1,132,299
100% of sub-totals (p. 7, Part II)	1,541,146	592,521	1,034,882	345,572
100% of sub-totals (p. 8, Part II)	668,188	259,772	500,353	182,840
Totals	6,226,886	2,659,914	4,299,159	1,660,711
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	411,442	86,590	302,996	60,550
50% of sub-totals (p. 11, Part II)	848,916	170,160	670,040	128,764
Totals	1,260,357	256,749	973,037	189,314
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	229,442,881	18,570,189	113,293,371	10,735,718
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	35,438,355	2,109,175	31,053,028	1,347,063
(p. 3, Part III)	5,661,982	2,157,432	4,157,379	1,128,253
(p. 4, Part III)	7,162,769	1,143,015	5,459,406	871,993
Totals	48,263,105	5,409,623	40,669,813	3,347,309
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	277,705,987	23,979,812	153,963,184	14,083,026
Totals Check	327,833,001	26,661,778	179,159,062	15,646,041
Difference	(50,127,014)	(2,681,966)	(25,195,879)	(1,563,015)

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	101,500	1,138	83,700	6.13%	938
1A 1-4 Family 5%	264	8	264	3.13%	8
1A 1-4 Family 10%	491,147	16,829	490,888	1.75%	16,823
1B "Homeowners" - 1% or flat	8,726	586	8,726	6.13%	586
1B "Homeowners" 5%	972,214	29,931	824,533	3.13%	25,422
1B "Homeowners" 10%	4,640,485	84,284	4,377,367	1.75%	79,371
1B "Homeowners" 15% & up	8,490,587	120,656	8,461,020	1.13%	120,027
1B "Homeowners" 15% "Mini"	17,517,209	98,097	2,972,745	0.56%	16,658
1B "Homeowners" "Wrap"	8,893,341	227,670	70	2.56%	2
1C Wood Frame - small 5%	2,051,519	42,251	780,786	3.00%	16,466
1D Wood - other 5%	598,008	49,823	363,489	10.00%	34,318
1E Mobile Homes 2%	792,856	39,644	774,195	5.00%	38,710
2A Metal - small 5%	45,335	907	41,984	2.00%	840
2B Metal - other 5%	77,959	7,471	61,817	10.00%	5,890
3A Steel 5%	437,460	99,434	330,895	15.00%	77,332
3B Steel 5%	373,744	181,023	277,454	25.00%	118,028
3C Steel 10%	828,719	207,177	581,958	25.00%	145,488
4A Concrete 5%	97,856	28,922	64,195	20.00%	17,394
4B Concrete 5%	245,806	117,421	176,631	35.00%	80,815
4C Concrete 10 %	752,838	376,419	558,372	50.00%	279,186
4D Concrete 10 %	2,978	1,340	2,978	45.00%	1,340
5A Mixed 5%	980,370	290,755	732,187	25.00%	215,181
5B Mixed 10%	22,903	6,743	22,239	60.00%	6,344
5C Mixed 10%	604,236	453,801	439,937	75.00%	330,441
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	7,766,561	1,093,332	6,262,168	xxx	565,483
Sub-Totals:	56,794,620	3,575,663	28,690,598		2,193,089

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	5,000	750	5,000	15.00%	750
3B Steel 5%	36,250	28,750	19,999	25.00%	12,499
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	5,000	5,000	5,000	20.00%	5,000
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	55,465	24,959	41,136	45.00%	18,511
5A Mixed 5%	277,350	69,338	205,698	25.00%	51,425
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	443,818	44,382	329,160	10.00%	32,916
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	822,883	173,179	605,993		121,101

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	853,958	653,468	610,781	471,770
(2) Commercial inland addenda	1,492	125	768	68
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,021,195	21,423	2,378,025	20,565
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	3,113,443	1,329,957	2,149,579	830,355
Sub-totals	6,990,088	2,004,973	5,139,153	1,322,758
ZONE TOTALS	64,607,591	5,753,815	34,435,744	3,636,948

ZONE D: San Diego County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	31,731	355	31,677	2.63%	355
1A 1-4 Family 5%	1,043	12	1,043	1.19%	12
1A 1-4 Family 10%	389,510	9,857	389,327	0.56%	9,851
1B "Homeowners" - 1% or flat	8,136	463	8,136	2.63%	463
1B "Homeowners" 5%	1,604,360	35,694	1,360,931	1.19%	26,030
1B "Homeowners" 10%	3,207,383	18,183	3,023,131	0.56%	16,925
1B "Homeowners" 15% & up	3,070,434	36,172	3,067,485	0.31%	36,161
1B "Homeowners" 15% "Mini"	22,108,750	35,374	4,026,617	0.16%	6,444
1B "Homeowners" "Wrap"	12,291,990	126,607	985	1.03%	10
1C Wood Frame - small 5%	804,209	16,671	436,591	3.00%	9,265
1D Wood - other 5%	667,430	59,324	530,661	10.00%	43,186
1E Mobile Homes 2%	678,144	33,909	664,652	5.00%	33,234
2A Metal - small 5%	39,252	484	36,255	2.00%	481
2B Metal - other 5%	93,351	9,684	71,338	10.00%	7,185
3A Steel 5%	525,076	131,324	429,310	15.00%	105,418
3B Steel 5%	737,296	342,239	609,390	25.00%	250,438
3C Steel 10%	1,204,642	301,144	892,232	25.00%	223,047
4A Concrete 5%	219,702	112,918	194,883	20.00%	100,336
4B Concrete 5%	457,799	239,412	261,604	35.00%	141,936
4C Concrete 10 %	1,154,559	577,277	883,227	50.00%	441,611
4D Concrete 10 %	28	11	28	45.00%	11
5A Mixed 5%	1,723,697	483,371	1,275,505	25.00%	351,719
5B Mixed 10%	4,789	1,809	4,063	60.00%	1,373
5C Mixed 10%	926,406	694,804	694,306	75.00%	520,729
6 EQ resistive 5%	36,852	2,943	2,500	10.00%	2,500
Risks in above classes not written at standard deductible	6,916,105	1,239,017	5,576,874	xxx	595,822
Sub-Totals:	58,902,674	4,509,060	24,472,751		2,924,542

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	67,503	26,975	54,768	15.00%	17,522
3B Steel 5%	98,000	30,567	93,000	25.00%	25,567
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	7,520	1,500	5,020	20.00%	1,000
4B Concrete 5%	80,000	34,500	39,500	35.00%	15,938
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	515,189	128,797	395,285	25.00%	98,821
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	680,206	68,021	520,344	10.00%	52,034
Risks in above classes not written at standard deductible	249,414	49,959	232,164	xxx	46,647
Sub-Totals:	1,697,832	340,319	1,340,080		257,528

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,681,969	1,404,497	916,173	710,995
(2) Commercial inland addenda	2,416	415	1,082	168
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,800,325	43,686	3,520,201	41,130
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	3,113,443	1,329,957	2,149,579	830,355
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	634,879	134,234	479,724	96,408
Sub-totals	11,233,031	2,912,789	7,066,759	1,679,056

ZONE TOTALS

71,833,537 7,762,168 32,879,591 4,861,127

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	38,087	323	34,733	5.25%	294
1A 1-4 Family 5%	3,468	83	3,468	2.38%	83
1A 1-4 Family 10%	138,546	12,447	138,270	1.13%	12,437
1B "Homeowners" - 1% or flat	16,345	1,079	16,345	5.25%	1,079
1B "Homeowners" 5%	755,550	32,356	585,675	2.38%	27,231
1B "Homeowners" 10%	3,939,469	45,167	3,603,236	1.13%	40,979
1B "Homeowners" 15% & up	6,516,931	67,445	6,483,906	0.63%	67,244
1B "Homeowners" 15% "Mini"	19,673,778	60,990	4,772,667	0.31%	14,816
1B "Homeowners" "Wrap"	6,466,523	133,210	435	2.06%	9
1C Wood Frame - small 5%	2,709,537	57,042	1,013,081	3.00%	23,029
1D Wood - other 5%	520,576	50,244	410,468	10.00%	39,832
1E Mobile Homes 2%	1,573,980	78,698	1,549,695	5.00%	77,484
2A Metal - small 5%	95,469	10,212	70,941	2.00%	5,473
2B Metal - other 5%	105,716	10,191	78,464	10.00%	7,632
3A Steel 5%	852,447	269,882	599,828	15.00%	200,212
3B Steel 5%	907,710	533,209	673,262	25.00%	376,290
3C Steel 10%	1,343,872	339,990	938,535	25.00%	236,644
4A Concrete 5%	429,756	293,443	311,811	20.00%	215,374
4B Concrete 5%	846,269	597,919	483,201	35.00%	394,088
4C Concrete 10 %	1,124,833	562,416	860,087	50.00%	430,044
4D Concrete 10 %	63	25	9	45.00%	4
5A Mixed 5%	1,494,600	519,655	1,064,023	25.00%	327,528
5B Mixed 10%	9,205	5,523	8,102	60.00%	4,861
5C Mixed 10%	930,621	697,963	702,117	75.00%	526,585
6 EQ resistive 5%	17,500	1,750	17,500	10.00%	1,750
Risks in above classes not written at standard deductible	10,974,232	2,040,161	8,498,728	xxx	1,194,473
Sub-Totals:	61,485,083	6,421,424	32,918,588		4,225,476

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	30,000	14,187	17,550	15.00%	8,299
3B Steel 5%	30,000	13,750	25,000	25.00%	8,750
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	15,000	15,000	6,325	35.00%	6,325
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	497,058	124,265	380,082	25.00%	95,020
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	662,699	66,270	506,741	10.00%	50,674
Risks in above classes not written at standard deductible	35,000	34,996	23,750	xxx	23,748
Sub-Totals:	1,269,757	268,468	959,448		192,816

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	2,027,247	1,567,196	1,512,365	1,099,981
(2) Commercial inland addenda	1,456	109	956	71
(3) Liabilities assumed: pools and associations (e.g., FAIR P	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,208,476	37,623	4,083,399	36,820
(5) 50% of amounts for over 8 stories for Zone B (P9, (3) totals	3,113,443	1,329,957	2,149,579	830,355
(6) 50% of amounts for over 8 stories for Zone C (P10, (3) totals	411,442	86,590	302,996	60,550
(7) 50% of amounts for over 8 stories for Zone D (P 11, sub-tot	848,916	170,160	670,040	128,764
Sub-totals	11,610,979	3,191,634	8,719,336	2,156,542
ZONE TOTALS	74,365,819	9,881,526	42,597,373	6,574,834

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	23,060	160	21,934	3.13%	153
1A 1-4 Family 5%	66,121	1,243	66,121	1.88%	1,243
1A 1-4 Family 10%	1,368,326	16,418	1,367,599	1.13%	16,410
1B "Homeowners" - 1% or flat	248	8	248	3.13%	8
1B "Homeowners" 5%	223,550	8,436	185,222	1.88%	6,297
1B "Homeowners" 10%	389,126	4,392	326,768	1.13%	3,684
1B "Homeowners" 15% & up	150,718	1,563	148,854	0.63%	1,554
1B "Homeowners" 15% "Mini"	2,294,285	7,112	717,958	0.31%	2,225
1B "Homeowners" "Wrap"	561,242	8,755	0	1.56%	0
1C Wood Frame - small 5%	106,510	3,089	105,862	3.00%	3,072
1D Wood - other 5%	212,476	19,421	193,354	10.00%	17,647
1E Mobile Homes 2%	193,679	9,684	191,867	5.00%	9,594
2A Metal - small 5%	116,888	1,930	53,312	2.00%	763
2B Metal - other 5%	42,530	4,253	25,365	10.00%	2,537
3A Steel 5%	197,157	84,087	98,789	15.00%	32,995
3B Steel 5%	128,708	59,568	92,352	25.00%	46,784
3C Steel 10%	466,699	116,675	335,711	25.00%	83,928
4A Concrete 5%	113,539	53,653	65,724	20.00%	27,321
4B Concrete 5%	145,192	90,640	74,653	35.00%	59,540
4C Concrete 10 %	459,358	229,679	362,451	50.00%	181,226
4D Concrete 10 %	763	330	761	45.00%	329
5A Mixed 5%	520,247	135,530	389,736	25.00%	97,939
5B Mixed 10%	4,552	2,731	3,450	60.00%	2,070
5C Mixed 10%	365,424	274,067	277,167	75.00%	207,873
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	2,790,799	497,481	1,902,129	xxx	271,272
Sub-Totals:	10,941,196	1,630,904	7,007,386		1,076,462

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	108,344	27,086	81,124	25.00%	20,281
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	267,149	26,715	200,033	10.00%	20,003
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	375,493	53,801	281,157		40,284

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,029,242	677,405	806,341	532,929
(2) Commercial inland addenda	1,863	204	560	54
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	1,951,368	12,845	1,662,524	12,484
Sub-Totals:	2,982,474	690,455	2,469,425	545,467
ZONE TOTALS	14,299,163	2,375,160	9,757,968	1,662,213

All Co's

**ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	13,926	58	13,593	1.75%	57
1A 1-4 Family 5%	1,353	14	1,353	1.00%	14
1A 1-4 Family 10%	46,368	3,429	45,705	0.63%	3,424
1B "Homeowners" - 1% or flat	1,467	26	1,467	1.75%	26
1B "Homeowners" 5%	595,749	12,438	547,840	1.00%	11,851
1B "Homeowners" 10%	1,407,951	9,017	1,210,282	0.63%	7,721
1B "Homeowners" 15% & up	591,244	5,541	576,243	0.38%	5,491
1B "Homeowners" 15% "Mini"	6,908,589	13,126	1,642,716	0.19%	3,121
1B "Homeowners" "Wrap"	2,013,859	16,313	456	0.81%	4
1C Wood Frame - small 5%	126,755	3,094	89,096	3.00%	2,328
1D Wood - other 5%	706,841	57,342	547,695	10.00%	43,590
1E Mobile Homes 2%	828,883	41,444	811,637	5.00%	40,582
2A Metal - small 5%	88,826	1,225	84,972	2.00%	1,136
2B Metal - other 5%	73,618	7,354	59,910	10.00%	5,983
3A Steel 5%	451,495	107,558	320,631	15.00%	78,745
3B Steel 5%	451,591	290,062	350,524	25.00%	216,518
3C Steel 10%	1,054,000	263,500	831,201	25.00%	207,801
4A Concrete 5%	151,386	88,686	107,029	20.00%	63,547
4B Concrete 5%	286,299	231,156	170,416	35.00%	139,854
4C Concrete 10 %	1,151,203	575,602	913,099	50.00%	456,550
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	1,337,729	391,747	1,005,807	25.00%	283,184
5B Mixed 10%	5,085	420	4,934	60.00%	329
5C Mixed 10%	885,581	664,172	695,971	75.00%	521,965
6 EQ resistive 5%	900	208	491	10.00%	113
Risks in above classes not written at standard deductible	5,331,556	1,067,333	4,096,514	xxx	643,330
Sub-Totals:	24,512,254	3,850,862	14,129,583		2,737,263

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	35,000	25,000	30,250	15.00%	20,250
3B Steel 5%	27,442	6,861	27,442	25.00%	6,861
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	20,000	20,000	16,250	35.00%	16,250
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	258,664	64,666	204,371	25.00%	51,093
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	635,337	63,534	503,929	10.00%	50,393
Risks in above classes not written at standard deductible	12,901	508	12,901	xxx	508
Sub-Totals:	989,344	180,569	795,143		145,355

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,285,711	1,008,203	1,001,797	774,777
(2) Commercial inland addenda	5,417	677	2,444	272
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,797,926	51,990	2,594,034	51,227
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	0	0	0	0
Sub-Totals:	5,089,054	1,060,869	3,598,275	826,276
ZONE TOTALS	30,590,652	5,092,301	18,523,001	3,708,894

ZONE H COUNTIES: Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	1,229	8	1,229	2.50%	8
1A 1-4 Family 5%	399	6	399	1.50%	6
1A 1-4 Family 10%	2,276	129	2,254	0.88%	130
1B "Homeowners" - 1% or flat	381	10	381	2.50%	10
1B "Homeowners" 5%	51,620	1,360	44,633	1.50%	1,070
1B "Homeowners" 10%	331,701	2,919	289,989	0.88%	2,552
1B "Homeowners" 15% & up	63,285	332	51,729	0.50%	280
1B "Homeowners" 15% "Mini"	730,419	1,827	96,035	0.25%	242
1B "Homeowners" "Wrap"	242,948	3,037	0	1.25%	0
1C Wood Frame - small 5%	7,604	190	7,527	3.00%	188
1D Wood - other 5%	68,138	6,383	54,768	10.00%	5,046
1E Mobile Homes 2%	190,205	9,510	184,945	5.00%	9,247
2A Metal - small 5%	18,613	372	18,613	2.00%	372
2B Metal - other 5%	11,766	1,176	9,036	10.00%	903
3A Steel 5%	57,279	15,353	42,361	15.00%	10,488
3B Steel 5%	24,080	12,870	23,413	25.00%	12,637
3C Steel 10%	150,011	37,503	115,172	25.00%	28,793
4A Concrete 5%	2,247	449	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	153,971	76,986	118,191	50.00%	59,095
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	121,768	32,670	94,640	25.00%	23,793
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	120,772	90,578	92,713	75.00%	69,533
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	396,985	98,234	291,700	xxx	49,855
Sub-Totals:	2,747,697	391,903	1,539,728		274,245

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	68,041	17,010	52,230	25.00%	13,057
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	90,716	9,072	69,635	10.00%	6,963
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	158,757	26,082	121,865		20,020

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	113,192	86,958	79,642	59,569
(2) Commercial inland addenda	362	26	124	9
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	65,519	4,396	65,375	4,395
Sub-Totals:	179,072	91,379	145,141	63,973
ZONE TOTALS	3,085,526	509,364	1,806,734	358,238

All Co's		CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2007					
NAIC COMPANY OR GROUP CODE:		All Co's		Surplus =			201,786,658 x 1,000
		(1)	(2)	(3)	(4)	(5)	
		Aggregate	Aggregate	Aggregate	Estimated	Estimated Net	
		Direct	Direct	Liability	Net	PML Amount	
		Liability	PML	Net of	PML	Limited by	
Zone	Area			Reinsurance	Amount	Catastrophe	
						Reinsurance	
A	San Francisco	151,523,764	14,367,782	79,828,164	9,067,936	5,947,421	
B	Los Angeles/ Orange County	239,825,312	22,290,437	122,112,991	13,576,675	9,137,638	
C	Santa Barbara	59,496,687	5,028,317	31,181,345	3,237,355	2,566,697	
D	San Diego	63,785,198	6,471,741	27,160,678	4,069,155	3,017,759	
E	South-East	69,017,886	8,259,785	36,677,290	5,395,720	4,050,312	
F	Central	11,935,959	2,067,682	7,220,172	1,330,772	1,254,409	
G	North-Central	26,245,131	4,136,845	14,858,504	2,968,635	2,505,131	
H	North	2,978,530	412,483	1,656,640	241,911	273,986	

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2007

(a) Direct premiums earned	133,011,312
(b) Assumed premiums earned	2,132,049
(c) Ceded premiums earned	(28,036,075)

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,264,412	9,642,473
U.S. Reinsurers - non CA	116,812	262,798
Lloyd's of London	975,172	1,722,896
Other U.K.	124,614	211,282
Western Europe	623,905	764,585
All Other	1,613,110	2,755,735
Totals	4,718,026	15,359,770

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	539,706	988,604
U.S. Reinsurers - non CA	47,192	115,823
Lloyd's of London	677,943	1,395,550
Other U.K.	171,125	436,913
Western Europe	355,070	634,619
All Other	1,377,424	2,409,436
Totals	3,168,460	5,980,946

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2001 subject to an occurrence or per event limitation?

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 433,202

What was the total liability (exposure or Coverage A) on these policies? 480,220,648

SUBZONE A-1 COUNTIES: San Francisco and San Mateo

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	29,496	521	28,628	6.75%	487
1A 1-4 Family 5%	3,556	99	3,529	3.63%	98
1A 1-4 Family 10%	213,471	16,394	199,168	2.13%	16,091
1B "Homeowners" - 1% or flat	35,447	2,393	35,447	6.75%	2,393
1B "Homeowners" 5%	159,744	30,872	93,514	3.63%	25,789
1B "Homeowners" 10%	1,519,036	37,319	1,476,336	2.13%	36,246
1B "Homeowners" 15% & up	4,680,996	87,685	4,604,628	1.38%	86,366
1B "Homeowners" 15% "Mini"	12,477,955	86,098	4,496,361	0.69%	31,026
1B "Homeowners" "Wrap"	1,754,724	51,589	125	2.94%	4
1C Wood Frame - small 5%	889,030	19,723	681,676	3.00%	15,774
1D Wood - other 5%	1,422,621	83,443	1,009,579	10.00%	57,716
1E Mobile Homes 2%	52,724	2,636	51,778	5.00%	2,589
2A Metal - small 5%	18,880	1,236	12,996	2.00%	917
2B Metal - other 5%	66,171	12,332	28,986	10.00%	2,831
3A Steel 5%	320,367	141,058	211,801	15.00%	94,662
3B Steel 5%	455,088	195,678	237,804	25.00%	125,153
3C Steel 10%	346,840	86,705	179,999	25.00%	44,994
4A Concrete 5%	139,804	54,424	112,980	20.00%	48,362
4B Concrete 5%	360,858	338,114	149,670	35.00%	132,195
4C Concrete 10 %	310,313	155,157	160,728	50.00%	80,364
4D Concrete 10 %	2,734	2,594	2,734	45.00%	2,594
5A Mixed 5%	389,194	164,335	223,970	25.00%	99,727
5B Mixed 10%	945,202	567,155	873,037	60.00%	523,855
5C Mixed 10%	261,195	195,830	126,402	75.00%	94,763
6 EQ resistive 5%	2,500	250	2,500	10.00%	250
Risks in above classes not written at standard deductible	5,968,258	977,181	4,583,635	xxx	692,513
Sub-Totals:	32,826,206	3,310,819	19,588,012		2,217,759

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	322,128	162,626	257,607	15.00%	117,602
3B Steel 5%	494,848	337,587	374,260	25.00%	261,674
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	285,716	217,549	250,385	20.00%	189,926
4B Concrete 5%	196,923	166,070	120,663	35.00%	102,180
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	288,480	134,548	207,128	25.00%	102,773
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	179,861	17,986	91,730	10.00%	9,173
Risks in above classes not written at standard deductible	717,110	282,175	565,488	xxx	219,611
Sub-Totals:	2,485,065	1,318,541	1,867,261		1,002,939

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	752,441	442,740	380,929	284,745
(2) Commercial inland addenda	19,265	1,922	17,301	1,670
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	4,131,024	40,862	1,984,052	39,800
Sub-Totals:	4,902,730	485,524	2,382,281	326,215
ZONE TOTALS	40,214,002	5,114,885	23,837,554	3,546,913

SUBZONE A-2 COUNTIES: Alameda and Contra Costa
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	36,969	566	30,886	6.75%	489
1A 1-4 Family 5%	2,582	94	2,582	3.63%	94
1A 1-4 Family 10%	281,807	25,048	278,035	2.13%	24,962
1B "Homeowners" - 1% or flat	26,709	1,803	26,709	6.75%	1,803
1B "Homeowners" 5%	420,876	58,424	179,249	3.63%	9,242
1B "Homeowners" 10%	3,121,225	66,015	3,018,931	2.13%	63,946
1B "Homeowners" 15% & up	8,886,919	146,519	8,807,141	1.38%	145,827
1B "Homeowners" 15% "Mini"	16,157,435	111,487	4,675,451	0.69%	32,264
1B "Homeowners" "Wrap"	3,149,304	92,590	95	2.94%	3
1C Wood Frame - small 5%	1,993,679	41,000	1,064,332	3.00%	22,403
1D Wood - other 5%	472,257	39,646	265,230	10.00%	24,897
1E Mobile Homes 2%	330,276	16,514	326,627	5.00%	16,332
2A Metal - small 5%	58,493	9,272	43,887	2.00%	9,104
2B Metal - other 5%	18,199	2,320	11,033	10.00%	876
3A Steel 5%	276,014	152,017	183,578	15.00%	105,543
3B Steel 5%	204,578	64,554	160,769	25.00%	46,212
3C Steel 10%	224,396	56,099	107,954	25.00%	26,988
4A Concrete 5%	111,004	82,677	73,940	20.00%	61,594
4B Concrete 5%	295,006	257,047	134,965	35.00%	115,705
4C Concrete 10 %	164,439	82,220	83,616	50.00%	41,808
4D Concrete 10 %	283	113	283	45.00%	113
5A Mixed 5%	575,427	285,480	326,027	25.00%	129,062
5B Mixed 10%	6,693	4,016	6,693	60.00%	4,016
5C Mixed 10%	133,039	99,450	64,668	75.00%	48,367
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	5,832,738	937,804	4,395,981	xxx	570,679
Sub-Totals:	42,780,349	2,632,776	24,268,662		1,502,328

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	12,500	12,500	12,500	15.00%	12,500
3B Steel 5%	238,773	74,693	231,573	25.00%	67,493
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	7,000	5,400	5,000	20.00%	5,000
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	80,320	37,499	62,444	25.00%	33,030
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	88,583	8,858	44,506	10.00%	4,460
Risks in above classes not written at standard deductible	93,711	14,691	71,121	xxx	13,040
Sub-Totals:	520,887	153,641	427,144		135,524

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,209,898	850,170	897,695	612,540
(2) Commercial inland addenda	34,475	3,437	33,383	3,327
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,081,946	30,668	2,011,986	27,929
Sub-Totals:	4,326,319	884,275	2,943,064	643,795
ZONE TOTALS	47,627,555	3,670,693	27,638,870	2,281,648

**SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito,
Santa Clara, Santa Cruz, Solano, Sonoma**

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	101,200	1,544	90,353	6.75%	1,397
1A 1-4 Family 5%	2,540	92	2,540	3.63%	92
1A 1-4 Family 10%	1,708,890	54,746	705,634	2.13%	33,395
1B "Homeowners" - 1% or flat	15,418	1,041	15,418	6.75%	1,041
1B "Homeowners" 5%	595,370	37,867	313,184	3.63%	23,533
1B "Homeowners" 10%	5,666,579	126,093	5,300,634	2.13%	117,368
1B "Homeowners" 15% & up	8,170,144	119,947	7,986,734	1.38%	117,841
1B "Homeowners" 15% "Mini"	30,576,459	210,977	6,156,989	0.69%	42,483
1B "Homeowners" "Wrap"	8,051,376	236,711	677	2.94%	20
1C Wood Frame - small 5%	2,728,976	55,325	1,301,430	3.00%	26,616
1D Wood - other 5%	636,081	56,129	373,068	10.00%	35,090
1E Mobile Homes 2%	1,068,310	53,416	1,044,593	5.00%	52,230
2A Metal - small 5%	301,990	31,914	185,747	2.00%	29,283
2B Metal - other 5%	110,891	16,136	53,202	10.00%	6,820
3A Steel 5%	551,327	180,264	380,911	15.00%	132,761
3B Steel 5%	464,143	231,043	330,648	25.00%	163,002
3C Steel 10%	890,844	222,691	432,465	25.00%	108,102
4A Concrete 5%	317,260	158,655	265,052	20.00%	139,591
4B Concrete 5%	401,235	359,384	167,119	35.00%	131,676
4C Concrete 10 %	822,721	411,361	395,307	50.00%	197,654
4D Concrete 10 %	150	61	145	45.00%	59
5A Mixed 5%	1,030,809	410,861	536,590	25.00%	207,896
5B Mixed 10%	7,547	4,528	7,547	60.00%	4,528
5C Mixed 10%	608,861	456,106	281,053	75.00%	210,568
6 EQ resistive 5%	20,000	2,000	20,000	10.00%	2,000
Risks in above classes not written at standard deductible	9,567,157	1,546,735	7,439,401	xxx	1,048,917
Sub-Totals:	74,416,279	4,985,628	33,786,441		2,833,965

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	7,500	0	3,750	15.00%	0
3B Steel 5%	29,107	11,027	7,527	25.00%	3,007
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	18,000	13,200	10,214	20.00%	8,887
4B Concrete 5%	40,000	40,000	33,300	35.00%	33,300
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	501,548	154,416	285,735	25.00%	100,463
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	418,848	41,884	200,850	10.00%	20,085
Risks in above classes not written at standard deductible	71,995	37,468	36,915	xxx	29,813
Sub-Totals:	1,086,998	297,994	578,290		195,554

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,945,454	1,525,290	1,161,938	887,315
(2) Commercial inland addenda	33,459	2,942	30,844	2,761
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	7,331,571	36,351	4,757,139	35,312
Sub-Totals:	9,310,483	1,564,582	5,949,921	925,387
ZONE TOTALS	84,813,760	6,848,205	40,314,653	3,954,907

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	32,826,206	3,310,819	19,588,012	2,217,759
50% of sub-totals (p. 3, Part I)	21,390,175	1,316,388	12,134,331	751,164
100% of sub-totals (p. 4, Part I)	74,416,279	4,985,628	33,786,441	2,833,965
Totals	128,632,660	9,612,836	65,508,784	5,802,889
OR				
(2) 50% of sub-totals (p. 2, Part I)	16,413,103	1,655,410	9,794,006	1,108,880
100% of sub-totals (p. 3, Part I)	42,780,349	2,632,776	24,268,662	1,502,328
100% of sub-totals (p. 4, Part I)	74,416,279	4,985,628	33,786,441	2,833,965
Totals	133,609,732	9,273,814	67,849,109	5,445,174
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	2,485,065	1,318,541	1,867,261	1,002,939
100% of sub-totals (p. 3, Part II)	520,887	153,641	427,144	135,524
100% of sub-totals (p. 4, Part II)	1,086,998	297,994	578,290	195,554
Totals	4,092,950	1,770,177	2,872,696	1,334,017
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	258,621	50,387	171,418	35,632
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	132,984,231	11,433,400	68,552,897	7,172,538
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	4,902,730	485,524	2,382,281	326,215
(p. 3, Part III)	4,326,319	884,275	2,943,064	643,795
(p. 4, Part III)	9,310,483	1,564,582	5,949,921	925,387
Totals	18,539,533	2,934,381	11,275,267	1,895,398
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	151,523,764	14,367,782	79,828,164	9,067,936

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	87,204	1,145	78,773	5.75%	975
1A 1-4 Family 5%	4,071	122	4,071	3.00%	122
1A 1-4 Family 10%	445,756	38,344	432,798	1.63%	38,105
1B "Homeowners" - 1% or flat	233,885	22,998	225,970	5.75%	15,210
1B "Homeowners" 5%	329,323	39,704	216,788	3.00%	34,108
1B "Homeowners" 10%	6,160,265	102,128	5,966,586	1.63%	99,104
1B "Homeowners" 15% & up	11,382,249	142,097	11,241,624	1.00%	141,034
1B "Homeowners" 15% "Mini"	29,783,782	148,917	7,187,857	0.50%	35,939
1B "Homeowners" "Wrap"	11,343,363	283,584	240	2.50%	6
1C Wood Frame - small 5%	4,164,734	84,354	2,676,393	3.00%	54,435
1D Wood - other 5%	3,070,905	189,588	1,261,914	10.00%	86,475
1E Mobile Homes 2%	165,148	8,257	151,226	5.00%	7,561
2A Metal - small 5%	194,569	48,988	155,059	2.00%	40,853
2B Metal - other 5%	104,685	18,295	56,029	10.00%	5,168
3A Steel 5%	670,493	283,087	407,102	15.00%	193,464
3B Steel 5%	702,988	372,925	474,671	25.00%	228,969
3C Steel 10%	830,014	207,489	419,288	25.00%	104,815
4A Concrete 5%	509,766	266,324	339,497	20.00%	212,750
4B Concrete 5%	822,062	647,592	506,507	35.00%	353,879
4C Concrete 10 %	741,714	370,834	374,758	50.00%	187,356
4D Concrete 10 %	10,376	8,425	10,153	45.00%	8,336
5A Mixed 5%	1,083,276	436,905	640,269	25.00%	269,226
5B Mixed 10%	978,439	587,429	913,264	60.00%	548,018
5C Mixed 10%	605,855	454,547	275,596	75.00%	206,767
6 EQ resistive 5%	12,743	1,274	12,743	10.00%	1,274
Risks in above classes not written at standard deductible	22,161,056	2,908,216	18,238,290	xxx	1,834,108
Sub-Totals:	96,598,722	7,673,568	52,267,467		4,708,053

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	212,704	101,683	124,883	15.00%	74,863
3B Steel 5%	665,435	467,880	498,623	25.00%	308,183
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	174,520	127,140	153,625	20.00%	114,818
4B Concrete 5%	164,048	116,242	97,969	35.00%	63,682
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	56,459	25,406	30,307	45.00%	13,638
5A Mixed 5%	381,820	141,112	251,049	25.00%	108,420
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	415,344	41,534	206,084	10.00%	20,608
Risks in above classes not written at standard deductible	1,235,236	389,300	917,309	xxx	283,133
Sub-Totals:	3,305,566	1,410,296	2,279,850		987,345

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,536,007	1,842,120	1,540,737	1,168,261
(2) Commercial inland addenda	45,557	4,465	39,224	3,867
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	13,356,703	67,938	9,088,918	62,830
Sub-Totals:	15,938,266	1,914,522	10,668,879	1,234,957
ZONE TOTALS	115,842,555	10,998,386	65,216,196	6,930,356

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	63,707	805	60,402	5.75%	770
1A 1-4 Family 5%	5,694	171	5,694	3.00%	171
1A 1-4 Family 10%	47,558	1,231	46,748	1.63%	1,195
1B "Homeowners" - 1% or flat	155,965	10,510	155,965	5.75%	10,510
1B "Homeowners" 5%	297,800	8,601	113,128	3.00%	3,551
1B "Homeowners" 10%	7,491,526	126,746	7,263,304	1.63%	119,800
1B "Homeowners" 15% & up	15,824,934	176,087	15,733,764	1.00%	173,494
1B "Homeowners" 15% "Mini"	31,697,047	158,484	5,391,162	0.50%	26,957
1B "Homeowners" "Wrap"	12,062,156	301,554	255	2.50%	6
1C Wood Frame - small 5%	5,188,201	107,812	2,787,217	3.00%	59,778
1D Wood - other 5%	2,028,468	127,012	727,874	10.00%	50,261
1E Mobile Homes 2%	417,651	20,883	413,308	5.00%	20,666
2A Metal - small 5%	297,507	40,725	198,411	2.00%	34,843
2B Metal - other 5%	503,028	49,327	253,809	10.00%	24,565
3A Steel 5%	405,842	195,619	278,050	15.00%	135,114
3B Steel 5%	495,240	264,642	335,307	25.00%	174,581
3C Steel 10%	833,615	208,290	397,066	25.00%	99,211
4A Concrete 5%	285,720	117,577	185,340	20.00%	96,284
4B Concrete 5%	638,005	550,035	263,041	35.00%	193,888
4C Concrete 10 %	67,328	33,197	35,425	50.00%	17,591
4D Concrete 10 %	86,276	41,854	50,933	45.00%	24,267
5A Mixed 5%	974,586	373,870	608,700	25.00%	242,564
5B Mixed 10%	88,620	54,172	68,336	60.00%	41,592
5C Mixed 10%	528,880	396,660	243,752	75.00%	182,812
6 EQ resistive 5%	5,200	520	5,200	10.00%	520
Risks in above classes not written at standard deductible	14,639,505	1,806,463	12,048,231	xxx	972,403
Sub-Totals:	95,130,057	5,172,847	47,670,423		2,707,395

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	35,167	19,300	30,561	15.00%	14,694
3B Steel 5%	146,323	90,241	132,894	25.00%	82,534
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	17,500	16,905	17,500	20.00%	16,905
4B Concrete 5%	39,187	26,715	21,687	35.00%	9,215
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	206,204	75,776	127,814	25.00%	51,304
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	15,011	11,258	7,382	75.00%	5,536
6 EQ resistive 5%	427,082	42,708	210,037	10.00%	21,003
Risks in above classes not written at standard deductible	223,632	59,255	179,632	xxx	55,358
Sub-Totals:	1,110,105	342,159	727,507		256,550

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,533,599	2,162,374	1,444,387	1,211,413
(2) Commercial inland addenda	51,450	6,065	40,981	4,245
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	185	185	185	185
(4) All other (e.g., earthquake, sprinkler leakage)	2,215,560	24,445	1,812,004	20,139
Sub-Totals:	4,800,794	2,193,069	3,297,557	1,235,982
ZONE TOTALS	101,040,957	7,708,074	51,695,487	4,199,926

SUBZONE B-3: Orange County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	41,901	545	41,073	5.75%	534
1A 1-4 Family 5%	4,996	150	4,996	3.00%	150
1A 1-4 Family 10%	240,240	21,460	238,088	1.63%	21,415
1B "Homeowners" - 1% or flat	72,339	4,859	72,339	5.75%	4,859
1B "Homeowners" 5%	313,660	16,369	230,431	3.00%	12,529
1B "Homeowners" 10%	3,529,710	61,018	3,400,559	1.63%	56,812
1B "Homeowners" 15% & up	5,444,553	69,015	5,380,755	1.00%	68,218
1B "Homeowners" 15% "Mini"	24,984,357	124,921	3,522,490	0.50%	17,612
1B "Homeowners" "Wrap"	10,571,817	264,296	1,035	2.50%	26
1C Wood Frame - small 5%	4,420,970	89,093	1,572,928	3.00%	32,107
1D Wood - other 5%	375,418	28,917	192,956	10.00%	17,443
1E Mobile Homes 2%	485,054	24,253	479,502	5.00%	23,975
2A Metal - small 5%	224,210	13,068	162,027	2.00%	12,683
2B Metal - other 5%	34,280	5,328	23,976	10.00%	4,391
3A Steel 5%	284,826	142,233	173,534	15.00%	93,535
3B Steel 5%	348,100	193,624	271,308	25.00%	153,035
3C Steel 10%	232,581	58,071	118,866	25.00%	29,664
4A Concrete 5%	310,049	126,044	254,306	20.00%	115,113
4B Concrete 5%	258,040	215,917	142,908	35.00%	115,884
4C Concrete 10 %	120,896	60,448	67,866	50.00%	33,933
4D Concrete 10 %	1,293	550	1,171	45.00%	501
5A Mixed 5%	916,083	367,615	506,215	25.00%	225,252
5B Mixed 10%	57,951	34,771	57,556	60.00%	34,534
5C Mixed 10%	122,352	92,702	57,898	75.00%	44,361
6 EQ resistive 5%	10,000	10,000	575	10.00%	575
Risks in above classes not written at standard deductible	8,346,840	2,701,650	5,933,921	xxx	1,594,500
Sub-Totals:	61,752,515	4,726,918	22,909,280		2,713,641

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	31,125	28,726	27,745	15.00%	25,841
3B Steel 5%	16,250	16,250	15,150	25.00%	15,150
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	67,000	26,453	62,498	20.00%	25,457
4B Concrete 5%	34,875	34,875	16,777	35.00%	16,777
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	108,547	50,105	85,779	25.00%	44,413
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	69,034	6,903	38,689	10.00%	3,868
Risks in above classes not written at standard deductible	128,736	59,408	77,223	xxx	29,851
Sub-Totals:	455,567	222,720	323,861		161,357

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,209,830	963,976	895,411	725,580
(2) Commercial inland addenda	30,964	3,312	29,086	2,927
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,136,048	34,481	4,237,842	32,055
Sub-Totals:	7,376,843	1,001,770	5,162,339	760,562
ZONE TOTALS	69,584,925	5,951,407	28,395,479	3,635,560

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	96,598,722	7,673,568	52,267,467	4,708,053
50% of sub-totals (p. 7, Part I)	47,565,029	2,586,423	23,835,212	1,353,697
100% of sub-totals (p. 8, Part I)	61,752,515	4,726,918	22,909,280	2,713,641
Totals	205,916,266	14,986,909	99,011,959	8,775,392
OR				
(2) 50% of sub-totals (p. 6, Part I)	48,299,361	3,836,784	26,133,734	2,354,027
100% of sub-totals (p. 7, Part I)	95,130,057	5,172,847	47,670,423	2,707,395
100% of sub-totals (p. 8, Part I)	61,752,515	4,726,918	22,909,280	2,713,641
Totals	205,181,934	13,736,549	96,713,437	7,775,063
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	3,305,566	1,410,296	2,279,850	987,345
100% of sub-totals (p. 7, Part II)	1,110,105	342,159	727,507	256,550
100% of sub-totals (p. 8, Part II)	455,567	222,720	323,861	161,357
Totals	4,871,239	1,975,174	3,331,217	1,405,252
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	310,750	77,466	195,829	53,348
50% of sub-totals (p. 11, Part II)	611,154	141,526	445,211	111,182
Totals	921,905	218,992	641,040	164,530
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	211,709,410	17,181,076	102,984,216	10,345,174
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	15,938,266	1,914,522	10,668,879	1,234,957
(p. 3, Part III)	4,800,794	2,193,069	3,297,557	1,235,982
(p. 4, Part III)	7,376,843	1,001,770	5,162,339	760,562
Totals	28,115,903	5,109,361	19,128,775	3,231,501
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	239,825,312	22,290,437	122,112,991	13,576,675

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	104,570	1,181	86,381	6.13%	988
1A 1-4 Family 5%	563	18	563	3.13%	18
1A 1-4 Family 10%	719,934	21,154	719,320	1.75%	21,142
1B "Homeowners" - 1% or flat	6,591	441	6,591	6.13%	441
1B "Homeowners" 5%	475,326	15,071	295,311	3.13%	10,389
1B "Homeowners" 10%	4,255,556	74,738	4,071,831	1.75%	71,400
1B "Homeowners" 15% & up	8,187,459	113,086	8,101,225	1.13%	112,718
1B "Homeowners" 15% "Mini"	17,262,138	96,667	3,246,731	0.56%	18,180
1B "Homeowners" "Wrap"	8,095,786	207,252	280	2.56%	7
1C Wood Frame - small 5%	2,042,559	42,454	871,288	3.00%	18,849
1D Wood - other 5%	556,144	47,030	306,062	10.00%	29,304
1E Mobile Homes 2%	778,271	38,913	762,284	5.00%	38,114
2A Metal - small 5%	52,883	3,067	30,880	2.00%	2,903
2B Metal - other 5%	58,561	5,541	41,557	10.00%	3,848
3A Steel 5%	345,161	88,781	248,090	15.00%	65,564
3B Steel 5%	222,504	64,030	201,245	25.00%	52,603
3C Steel 10%	572,075	143,010	328,091	25.00%	82,019
4A Concrete 5%	119,603	37,034	95,319	20.00%	32,471
4B Concrete 5%	91,536	48,634	48,188	35.00%	27,545
4C Concrete 10 %	522,318	261,159	309,345	50.00%	154,672
4D Concrete 10 %	2,978	1,340	2,978	45.00%	1,340
5A Mixed 5%	785,861	240,101	506,053	25.00%	153,077
5B Mixed 10%	449,228	269,528	433,996	60.00%	260,388
5C Mixed 10%	436,053	327,039	242,591	75.00%	181,943
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	6,407,232	900,645	5,318,952	xxx	468,728
Sub-Totals:	52,550,890	3,047,913	26,275,152		1,808,650

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	25,000	19,852	25,000	15.00%	19,852
3B Steel 5%	12,500	12,500	3,500	25.00%	3,500
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	38,481	17,316	22,789	45.00%	10,255
5A Mixed 5%	220,175	66,928	141,709	25.00%	47,311
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	307,920	30,792	182,358	10.00%	18,235
Risks in above classes not written at standard deductible	17,425	7,544	16,302	xxx	7,543
Sub-Totals:	621,501	154,933	391,658		106,697

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,053,040	819,316	784,908	601,543
(2) Commercial inland addenda	22,091	2,174	21,403	2,122
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	2,813,547	16,394	2,042,616	15,717
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	2,435,619	987,587	1,665,609	702,626
Sub-totals	6,324,297	1,825,471	4,514,536	1,322,008
ZONE TOTALS	59,496,687	5,028,317	31,181,345	3,237,355

ZONE D: San Diego County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	34,385	384	34,359	2.63%	384
1A 1-4 Family 5%	2,472	30	2,472	1.19%	30
1A 1-4 Family 10%	106,059	7,251	105,042	0.56%	7,240
1B "Homeowners" - 1% or flat	7,904	428	7,844	2.63%	426
1B "Homeowners" 5%	1,160,432	32,950	915,429	1.19%	24,777
1B "Homeowners" 10%	3,149,778	18,061	2,969,530	0.56%	16,822
1B "Homeowners" 15% & up	2,765,263	28,360	2,725,461	0.31%	28,320
1B "Homeowners" 15% "Mini"	21,354,938	34,167	4,057,163	0.16%	6,492
1B "Homeowners" "Wrap"	10,997,184	113,271	1,135	1.03%	12
1C Wood Frame - small 5%	1,106,048	24,647	664,647	3.00%	15,767
1D Wood - other 5%	624,759	82,784	499,576	10.00%	69,039
1E Mobile Homes 2%	636,950	31,986	622,398	5.00%	31,171
2A Metal - small 5%	67,784	7,651	62,301	2.00%	5,420
2B Metal - other 5%	65,312	5,978	44,650	10.00%	3,996
3A Steel 5%	589,652	202,051	442,730	15.00%	164,234
3B Steel 5%	378,466	156,917	282,352	25.00%	105,655
3C Steel 10%	832,946	208,219	528,030	25.00%	131,995
4A Concrete 5%	223,904	107,891	186,929	20.00%	92,209
4B Concrete 5%	159,806	98,458	101,988	35.00%	60,664
4C Concrete 10 %	758,431	379,213	501,586	50.00%	250,790
4D Concrete 10 %	27	11	27	45.00%	11
5A Mixed 5%	1,297,431	455,181	908,921	25.00%	293,180
5B Mixed 10%	446,427	267,856	292,962	60.00%	175,777
5C Mixed 10%	626,946	469,450	396,607	75.00%	296,697
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	5,593,194	1,032,529	4,182,793	xxx	472,135
Sub-Totals:	52,986,498	3,765,724	20,536,933		2,253,242

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	60,000	16,750	55,675	15.00%	15,925
3B Steel 5%	90,881	24,932	66,062	25.00%	14,810
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	8,125	6,125	5,000	20.00%	5,000
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	487,242	136,104	373,739	25.00%	107,728
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	445,346	44,534	294,019	10.00%	29,401
Risks in above classes not written at standard deductible	130,714	54,607	95,927	xxx	49,500
Sub-Totals:	1,222,308	283,052	890,423		222,364

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,535,028	1,285,564	969,840	776,091
(2) Commercial inland addenda	25,206	2,674	23,541	2,404
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,114,021	30,195	2,761,993	27,247
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	2,435,619	987,587	1,665,609	702,626
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	466,517	116,944	312,340	85,181
Sub-totals	9,576,392	2,422,964	5,733,322	1,593,549

ZONE TOTALS

63,785,198 6,471,741 27,160,678 4,069,155

Questionnaire (Primary Insurance) -- Page 11

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	41,597	355	38,314	5.25%	326
1A 1-4 Family 5%	3,221	77	3,221	2.38%	77
1A 1-4 Family 10%	1,078,367	21,749	577,424	1.13%	16,084
1B "Homeowners" - 1% or flat	15,550	1,024	15,550	5.25%	1,024
1B "Homeowners" 5%	375,292	22,381	233,209	2.38%	18,719
1B "Homeowners" 10%	3,684,030	41,671	3,447,394	1.13%	38,848
1B "Homeowners" 15% & up	5,861,373	58,956	5,775,182	0.63%	58,700
1B "Homeowners" 15% "Mini"	20,582,432	63,806	5,307,748	0.31%	16,454
1B "Homeowners" "Wrap"	6,704,265	138,108	490	2.06%	10
1C Wood Frame - small 5%	2,455,074	50,035	863,383	3.00%	18,111
1D Wood - other 5%	476,491	50,791	332,775	10.00%	36,334
1E Mobile Homes 2%	1,574,363	78,719	1,548,430	5.00%	77,423
2A Metal - small 5%	574,222	63,735	431,166	2.00%	53,118
2B Metal - other 5%	79,075	7,538	51,253	10.00%	4,914
3A Steel 5%	402,882	152,980	268,917	15.00%	102,606
3B Steel 5%	619,610	351,562	361,810	25.00%	171,818
3C Steel 10%	917,837	229,422	564,421	25.00%	141,086
4A Concrete 5%	305,845	181,103	261,568	20.00%	170,378
4B Concrete 5%	186,780	156,526	133,606	35.00%	107,263
4C Concrete 10 %	782,934	391,467	507,190	50.00%	253,595
4D Concrete 10 %	83	33	16	45.00%	6
5A Mixed 5%	1,292,447	574,319	907,166	25.00%	392,130
5B Mixed 10%	434,232	262,534	404,953	60.00%	244,146
5C Mixed 10%	619,584	464,686	396,762	75.00%	297,569
6 EQ resistive 5%	66,959	11,196	50,655	10.00%	8,823
Risks in above classes not written at standard deductible	8,308,055	1,730,236	6,360,209	xxx	941,748
Sub-Totals:	57,442,602	5,105,008	28,842,812		3,171,310

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	10,000	10,000	5,200	15.00%	5,200
3B Steel 5%	10,000	2,500	10,000	25.00%	2,500
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	383,666	117,496	261,932	25.00%	87,063
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	459,374	45,937	297,074	10.00%	29,707
Risks in above classes not written at standard deductible	69,994	57,956	50,473	xxx	45,893
Sub-Totals:	933,034	233,889	624,679		170,363

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	2,600,172	1,687,354	1,717,981	1,161,175
(2) Commercial inland addenda	24,141	2,355	23,206	2,282
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	4,660,413	24,600	3,161,962	23,435
(5) 50% of amounts for over 8 stories for Zone B (P9, (3) totals):	2,435,619	987,587	1,665,609	702,626
(6) 50% of amounts for over 8 stories for Zone C (P10, sub-total for Part II):	310,750	77,466	195,829	53,348
(7) 50% of amounts for over 8 stories for Zone D (P 11, sub-total for Part II):	611,154	141,526	445,211	111,182
Sub-totals	10,642,250	2,920,888	7,209,798	2,054,048
ZONE TOTALS	69,017,886	8,259,785	36,677,290	5,395,720

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	24,948	170	23,659	3.13%	161
1A 1-4 Family 5%	482	9	482	1.88%	9
1A 1-4 Family 10%	1,397,730	16,479	1,396,664	1.13%	16,468
1B "Homeowners" - 1% or flat	310	10	310	3.13%	10
1B "Homeowners" 5%	218,251	4,498	194,514	1.88%	3,991
1B "Homeowners" 10%	450,768	4,941	391,476	1.13%	4,293
1B "Homeowners" 15% & up	202,640	1,925	188,107	0.63%	1,916
1B "Homeowners" 15% "Mini"	2,258,771	7,003	746,316	0.31%	2,315
1B "Homeowners" "Wrap"	529,300	8,257	0	1.56%	0
1C Wood Frame - small 5%	67,602	1,825	59,738	3.00%	1,612
1D Wood - other 5%	168,655	17,409	111,721	10.00%	11,837
1E Mobile Homes 2%	183,770	9,188	182,445	5.00%	9,122
2A Metal - small 5%	108,532	2,228	51,385	2.00%	1,188
2B Metal - other 5%	32,983	6,873	14,291	10.00%	3,823
3A Steel 5%	150,392	59,107	84,009	15.00%	45,990
3B Steel 5%	126,254	73,076	92,337	25.00%	49,756
3C Steel 10%	371,692	92,923	181,485	25.00%	45,370
4A Concrete 5%	53,581	26,173	49,232	20.00%	25,303
4B Concrete 5%	36,240	25,463	26,303	35.00%	21,026
4C Concrete 10 %	352,542	176,271	187,464	50.00%	93,732
4D Concrete 10 %	250	100	250	45.00%	100
5A Mixed 5%	528,061	175,860	254,942	25.00%	88,232
5B Mixed 10%	258,934	155,360	191,654	60.00%	114,993
5C Mixed 10%	264,994	198,742	131,424	75.00%	98,567
6 EQ resistive 5%	2,500	250	2,500	10.00%	250
Risks in above classes not written at standard deductible	2,022,001	384,641	1,272,573	xxx	182,688
Sub-Totals:	9,812,183	1,448,781	5,835,282		822,753

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	8,827	1,324	8,827	15.00%	1,324
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	86,183	19,644	46,351	25.00%	9,686
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	193,396	19,339	95,181	10.00%	9,518
Risks in above classes not written at standard deductible	1,310	0	66	xxx	0
Sub-Totals:	289,716	40,307	150,425		20,528

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	782,396	571,163	654,837	480,395
(2) Commercial inland addenda	9,289	911	7,061	665
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	1,042,375	6,520	572,567	6,431
Sub-Totals:	1,834,059	578,594	1,234,465	487,491
ZONE TOTALS	11,935,959	2,067,682	7,220,172	1,330,772

**ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	14,966	64	14,782	1.75%	63
1A 1-4 Family 5%	1,260	13	1,260	1.00%	13
1A 1-4 Family 10%	55,634	3,751	54,968	0.63%	3,747
1B "Homeowners" - 1% or flat	1,350	25	1,350	1.75%	25
1B "Homeowners" 5%	399,041	9,692	357,039	1.00%	9,098
1B "Homeowners" 10%	1,396,281	9,566	1,210,769	0.63%	8,157
1B "Homeowners" 15% & up	697,109	5,935	637,384	0.38%	5,891
1B "Homeowners" 15% "Mini"	6,724,528	12,779	1,766,269	0.19%	3,356
1B "Homeowners" "Wrap"	1,788,182	14,485	556	0.81%	5
1C Wood Frame - small 5%	154,347	3,858	105,446	3.00%	2,798
1D Wood - other 5%	568,532	57,129	384,712	10.00%	40,858
1E Mobile Homes 2%	817,703	40,885	800,742	5.00%	40,037
2A Metal - small 5%	47,230	9,810	45,821	2.00%	9,781
2B Metal - other 5%	113,386	11,331	64,120	10.00%	6,405
3A Steel 5%	289,092	115,594	199,360	15.00%	84,483
3B Steel 5%	245,474	139,416	222,821	25.00%	133,512
3C Steel 10%	710,670	177,667	450,540	25.00%	112,635
4A Concrete 5%	132,514	99,840	115,228	20.00%	90,204
4B Concrete 5%	129,955	116,711	79,319	35.00%	67,956
4C Concrete 10 %	770,156	385,078	491,489	50.00%	245,744
4D Concrete 10 %	20,363	9,998	12,014	45.00%	5,899
5A Mixed 5%	1,024,915	350,615	721,983	25.00%	222,060
5B Mixed 10%	360,743	218,446	325,605	60.00%	195,564
5C Mixed 10%	592,767	444,562	375,056	75.00%	281,279
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	4,100,097	784,950	2,978,341	xxx	487,066
Sub-Totals:	21,156,294	3,022,201	11,416,974		2,056,638

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	40,900	24,672	34,273	15.00%	18,164
3B Steel 5%	25,000	5,000	23,000	25.00%	5,000
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	16,221	0	0	20.00%	0
4B Concrete 5%	12,500	12,500	5,550	35.00%	5,550
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	224,244	57,836	151,923	25.00%	42,243
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	425,041	42,504	271,247	10.00%	27,124
Risks in above classes not written at standard deductible	39,793	10,177	33,455	xxx	9,894
Sub-Totals:	783,699	152,689	519,448		107,975

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,401,048	920,829	1,105,170	769,406
(2) Commercial inland addenda	22,535	2,081	20,829	1,887
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	2,881,556	39,044	1,796,085	32,729
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	0	0	0	0
Sub-Totals:	4,305,139	961,955	2,922,083	804,022
ZONE TOTALS	26,245,131	4,136,845	14,858,504	2,968,635

ZONE H COUNTIES: Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	1,791	11	1,791	2.50%	11
1A 1-4 Family 5%	370	6	370	1.50%	6
1A 1-4 Family 10%	3,585	150	3,534	0.88%	151
1B "Homeowners" - 1% or flat	445	12	445	2.50%	12
1B "Homeowners" 5%	42,326	816	39,802	1.50%	778
1B "Homeowners" 10%	348,039	3,066	305,792	0.88%	2,693
1B "Homeowners" 15% & up	78,142	398	69,946	0.50%	371
1B "Homeowners" 15% "Mini"	929,041	2,322	313,928	0.25%	783
1B "Homeowners" "Wrap"	212,908	2,652	776	1.25%	10
1C Wood Frame - small 5%	4,702	104	4,633	3.00%	102
1D Wood - other 5%	35,383	3,509	17,360	10.00%	1,706
1E Mobile Homes 2%	173,824	8,692	169,067	5.00%	8,454
2A Metal - small 5%	21,456	429	18,163	2.00%	364
2B Metal - other 5%	6,906	690	3,225	10.00%	321
3A Steel 5%	40,864	13,106	25,377	15.00%	9,891
3B Steel 5%	13,510	6,003	13,510	25.00%	6,003
3C Steel 10%	90,495	22,624	42,040	25.00%	10,510
4A Concrete 5%	11,359	2,272	9,112	20.00%	1,822
4B Concrete 5%	7,500	7,500	7,500	35.00%	7,500
4C Concrete 10 %	90,293	45,146	42,061	50.00%	21,030
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	76,056	22,664	45,775	25.00%	14,365
5B Mixed 10%	47,898	28,739	45,648	60.00%	27,389
5C Mixed 10%	70,835	53,125	33,011	75.00%	24,757
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	376,289	84,595	263,592	xxx	44,691
Sub-Totals:	2,684,016	308,630	1,476,458		183,720

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	48,651	14,975	27,337	25.00%	9,646
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	53,198	5,319	24,781	10.00%	2,478
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	101,849	20,294	52,118		12,124

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	136,591	81,418	80,165	43,977
(2) Commercial inland addenda	1,071	95	842	79
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	55,003	2,046	47,057	2,011
Sub-Totals:	192,665	83,559	128,064	46,067
ZONE TOTALS	2,978,530	412,483	1,656,640	241,911

ALL Co's CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2006						
NAIC COMPANY OR GROUP CODE:		All Co's	Surplus =	192,691,251 x 1,000		
		(1)	(2)	(3)	(4)	(5)
Zone	Area	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount	Estimated Net PML Amount Limited by Catastrophe Reinsurance
A	San Francisco	184,398,964	11,949,802	83,265,027	7,236,174	4,743,539
B	Los Angeles/ Orange County	235,684,772	16,427,816	121,206,646	9,915,265	6,207,485
C	Santa Barbara	69,649,187	4,563,341	33,646,668	2,811,088	2,222,567
D	San Diego	61,833,381	5,132,559	26,569,441	3,209,928	2,586,761
E	South-East	67,728,085	6,031,918	34,574,651	3,607,698	2,786,563
F	Central	11,364,102	1,555,020	6,835,175	885,808	864,569
G	North-Central	28,068,076	3,557,054	15,277,289	2,255,144	1,932,217
H	North	3,258,905	417,932	1,597,644	263,716	284,997

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2006

(a) Direct premiums earned	98,973,788
(b) Assumed premiums earned	1,350,976
(c) Ceded premiums earned	(24,140,208)

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,675,675	12,145,840
U.S. Reinsurers - non CA	236,742	547,460
Lloyd's of London	656,426	1,124,358
Other U.K.	121,801	164,397
Western Europe	534,499	715,965
All Other	1,154,164	1,790,149
Totals	4,379,307	16,488,170

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	431,474	643,484
U.S. Reinsurers - non CA	31,063	69,118
Lloyd's of London	451,787	597,586
Other U.K.	71,770	134,643
Western Europe	268,834	397,211
All Other	1,035,207	1,487,857
Totals	2,290,136	3,329,898

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2006 subject to an occurrence or per event limitation?

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 424,302

What was the total liability (exposure or Coverage A) on these policies? 523,305,222

SUBZONE A-1 COUNTIES: San Francisco and San Mateo

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
1A 1-4 Family-1% or flat	29,124	522	28,350	6.75%	482
1A 1-4 Family 5%	8,135	296	8,108	3.63%	295
1A 1-4 Family 10%	305,050	15,211	245,593	2.13%	14,146
1B "Homeowners" - 1% or flat	47,574	3,211	47,574	6.75%	3,211
1B "Homeowners" 5%	1,352,099	49,153	1,337,535	3.63%	45,272
1B "Homeowners" 10%	13,169,332	234,375	2,084,946	2.13%	45,952
1B "Homeowners" 15% & up	3,153,994	45,444	3,090,352	1.38%	44,174
1B "Homeowners" 15% "Mini"	14,730,097	101,636	4,407,981	0.69%	30,416
1B "Homeowners" "Wrap"	125	4	125	2.94%	4
1C Wood Frame - small 5%	817,511	17,824	618,066	3.00%	13,920
1D Wood - other 5%	1,378,190	81,382	1,021,287	10.00%	57,289
1E Mobile Homes 2%	44,415	2,220	43,803	5.00%	2,190
2A Metal - small 5%	38,493	12,182	30,659	2.00%	11,261
2B Metal - other 5%	11,988	1,174	6,530	10.00%	628
3A Steel 5%	198,070	82,560	121,051	15.00%	49,813
3B Steel 5%	259,280	151,737	197,829	25.00%	114,325
3C Steel 10%	201,747	48,974	96,692	25.00%	23,857
4A Concrete 5%	138,582	77,690	111,701	20.00%	56,957
4B Concrete 5%	144,203	118,746	93,451	35.00%	71,518
4C Concrete 10 %	150,501	75,250	78,985	50.00%	39,492
4D Concrete 10 %	226	90	226	45.00%	90
5A Mixed 5%	375,176	171,851	247,578	25.00%	94,076
5B Mixed 10%	10,698	6,419	6,894	60.00%	4,523
5C Mixed 10%	126,575	94,862	67,287	75.00%	50,427
6 EQ resistive 5%	5,500	550	5,500	10.00%	550
Risks in above classes not written at standard deductible	8,642,240	1,053,895	3,693,779	xxx	594,257
Sub-Totals:	45,338,924	2,447,258	17,691,883		1,369,125

Part II: Insurance on structures of over 8 stories:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
3A Steel 5%	274,713	105,120	193,598	15.00%	75,275
3B Steel 5%	284,975	205,324	222,837	25.00%	152,126
3C Steel 10%	61	15	16	25.00%	4
4A Concrete 5%	149,667	125,475	114,714	20.00%	95,523
4B Concrete 5%	101,831	98,399	81,147	35.00%	77,874
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	124,529	42,592	90,635	25.00%	32,759
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	88,671	8,867	46,536	10.00%	4,654
Risks in above classes not written at standard deductible	597,618	245,042	452,342	xxx	131,196
Sub-Totals:	1,622,063	830,833	1,201,825		569,411

Part III: Other types of risks:

	Column 1	Column 2	Column 3	Column 4
	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	711,188	393,426	319,838	170,791
(2) Commercial inland addenda	16,249	1,679	14,253	1,422
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,277,031	43,775	3,161,219	42,682
Sub-Totals:	6,004,467	438,880	3,495,310	214,894
ZONE TOTALS	52,965,455	3,716,971	22,389,018	2,153,431

SUBZONE A-2 COUNTIES: Alameda and Contra Costa

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
1A 1-4 Family-1% or flat	14,894	187	9,089	6.75%	114
1A 1-4 Family 5%	8,254	300	8,254	3.63%	300
1A 1-4 Family 10%	337,279	25,772	320,635	2.13%	25,459
1B "Homeowners" - 1% or flat	70,671	2,717	59,895	6.75%	2,714
1B "Homeowners" 5%	1,456,344	74,338	1,437,989	3.63%	69,149
1B "Homeowners" 10%	12,187,396	222,469	3,729,440	2.13%	77,641
1B "Homeowners" 15% & up	7,004,301	98,572	6,951,847	1.38%	97,695
1B "Homeowners" 15% "Mini"	17,388,034	119,975	4,531,174	0.69%	31,265
1B "Homeowners" "Wrap"	95	3	95	2.94%	3
1C Wood Frame - small 5%	1,874,317	38,168	995,359	3.00%	20,442
1D Wood - other 5%	526,644	47,607	308,488	10.00%	26,054
1E Mobile Homes 2%	321,211	16,061	318,630	5.00%	15,932
2A Metal - small 5%	43,659	4,208	27,702	2.00%	2,667
2B Metal - other 5%	17,276	2,248	10,605	10.00%	851
3A Steel 5%	167,913	62,225	104,302	15.00%	41,758
3B Steel 5%	176,346	86,408	126,306	25.00%	55,643
3C Steel 10%	181,869	45,467	89,492	25.00%	22,373
4A Concrete 5%	109,706	58,618	97,384	20.00%	52,692
4B Concrete 5%	146,711	132,510	69,836	35.00%	56,363
4C Concrete 10 %	155,341	77,671	82,185	50.00%	41,093
4D Concrete 10 %	273	109	273	45.00%	109
5A Mixed 5%	431,592	225,028	261,349	25.00%	116,152
5B Mixed 10%	4,893	2,936	4,893	60.00%	2,936
5C Mixed 10%	121,878	91,095	63,085	75.00%	47,186
6 EQ resistive 5%	21,200	2,120	21,200	10.00%	2,120
Risks in above classes not written at standard deductible	4,741,206	1,035,045	3,449,087	xxx	603,788
Sub-Totals:	47,509,303	2,471,859	23,078,595		1,412,497

Part II: Insurance on structures of over 8 stories:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
3A Steel 5%	2,500	375	2,500	15.00%	375
3B Steel 5%	20,500	14,500	13,275	25.00%	7,275
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	4,500	4,500	1,000	35.00%	1,000
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	65,909	29,253	49,738	25.00%	25,210
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	83,563	8,356	43,688	10.00%	4,369
Risks in above classes not written at standard deductible	55,846	12,300	38,071	xxx	5,307
Sub-Totals:	232,818	69,284	148,272		43,536

Part III: Other types of risks:

	Column 1	Column 2	Column 3	Column 4
	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,372,786	887,115	1,007,837	627,163
(2) Commercial inland addenda	38,420	3,837	36,329	3,634
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,205,616	25,003	2,580,402	23,374
Sub-Totals:	4,616,822	915,955	3,624,567	654,171
ZONE TOTALS	52,358,943	3,457,099	26,851,435	2,110,204

**SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito,
Santa Clara, Santa Cruz, Solano, Sonoma**
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	45,476	586	36,891	6.75%	473
1A 1-4 Family 5%	14,710	534	14,710	3.63%	534
1A 1-4 Family 10%	2,524,377	69,531	1,501,082	2.13%	47,833
1B "Homeowners" - 1% or flat	67,020	1,805	65,881	6.75%	1,786
1B "Homeowners" 5%	721,489	28,044	650,339	3.63%	23,622
1B "Homeowners" 10%	29,321,108	525,887	7,232,075	2.13%	149,442
1B "Homeowners" 15% & up	7,258,514	102,745	7,145,020	1.38%	100,586
1B "Homeowners" 15% "Mini"	33,874,196	233,730	5,858,619	0.69%	40,424
1B "Homeowners" "Wrap"	677	20	677	2.94%	20
1C Wood Frame - small 5%	3,043,738	66,317	1,676,761	3.00%	37,775
1D Wood - other 5%	728,306	68,174	448,178	10.00%	44,942
1E Mobile Homes 2%	1,026,497	51,326	1,008,844	5.00%	50,444
2A Metal - small 5%	188,143	23,751	183,385	2.00%	23,626
2B Metal - other 5%	79,387	10,529	40,229	10.00%	3,731
3A Steel 5%	526,104	196,651	334,127	15.00%	130,280
3B Steel 5%	354,684	149,492	292,627	25.00%	103,857
3C Steel 10%	776,574	194,125	383,599	25.00%	95,887
4A Concrete 5%	148,124	79,991	126,974	20.00%	75,464
4B Concrete 5%	176,182	144,440	106,907	35.00%	79,960
4C Concrete 10 %	768,861	384,430	399,398	50.00%	199,699
4D Concrete 10 %	126	50	126	45.00%	50
5A Mixed 5%	983,501	433,173	627,805	25.00%	277,637
5B Mixed 10%	25,841	15,522	25,841	60.00%	15,522
5C Mixed 10%	525,176	393,410	261,893	75.00%	196,223
6 EQ resistive 5%	30,000	3,000	30,000	10.00%	3,000
Risks in above classes not written at standard deductible	7,801,609	1,217,281	6,429,487	xxx	871,298
Sub-Totals:	91,010,420	4,394,543	34,881,473		2,574,115

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	8,000	1,584	3,150	15.00%	1,584
3B Steel 5%	40,183	20,061	38,104	25.00%	18,119
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	30,050	4,875	16,911	20.00%	107
4B Concrete 5%	13,000	11,018	7,169	35.00%	6,415
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	426,566	109,845	240,013	25.00%	63,207
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	376,170	37,617	187,730	10.00%	18,773
Risks in above classes not written at standard deductible	69,697	35,505	47,694	xxx	21,150
Sub-Totals:	963,666	220,505	540,771		129,355

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,578,524	1,286,264	1,983,489	873,514
(2) Commercial inland addenda	27,356	2,690	26,112	2,589
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,950,477	49,579	5,309,134	49,187
Sub-Totals:	9,556,357	1,338,533	7,318,736	925,291
ZONE TOTALS	101,530,442	5,953,580	42,740,980	3,628,760

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	45,338,924	2,447,258	17,691,883	1,369,125
50% of sub-totals (p. 3, Part I)	23,754,652	1,235,930	11,539,298	706,249
100% of sub-totals (p. 4, Part I)	91,010,420	4,394,543	34,881,473	2,574,115
Totals	160,103,995	8,077,730	64,112,654	4,649,489
OR				
(2) 50% of sub-totals (p. 2, Part I)	22,669,462	1,223,629	8,845,941	684,563
100% of sub-totals (p. 3, Part I)	47,509,303	2,471,859	23,078,595	1,412,497
100% of sub-totals (p. 4, Part I)	91,010,420	4,394,543	34,881,473	2,574,115
Totals	161,189,185	8,090,031	66,806,010	4,671,175
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	1,622,063	830,833	1,201,825	569,411
100% of sub-totals (p. 3, Part II)	232,818	69,284	148,272	43,536
100% of sub-totals (p. 4, Part II)	963,666	220,505	540,771	129,355
Totals	2,818,547	1,120,622	1,890,868	742,302
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	213,587	45,781	129,536	28,341
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	164,221,318	9,256,434	68,826,414	5,441,818
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	6,004,467	438,880	3,495,310	214,894
(p. 3, Part III)	4,616,822	915,955	3,624,567	654,171
(p. 4, Part III)	9,556,357	1,338,533	7,318,736	925,291
Totals	20,177,646	2,693,368	14,438,613	1,794,356
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	184,398,964	11,949,802	83,265,027	7,236,174

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	2,233	23	938	5.75%	10
1A 1-4 Family 5%	14,642	439	14,642	3.00%	439
1A 1-4 Family 10%	393,521	34,019	385,386	1.63%	33,857
1B "Homeowners" - 1% or flat	299,232	24,367	278,383	5.75%	14,847
1B "Homeowners" 5%	1,604,436	64,192	1,561,030	3.00%	55,464
1B "Homeowners" 10%	6,351,875	105,548	6,128,810	1.63%	102,031
1B "Homeowners" 15% & up	9,273,021	94,966	9,124,703	1.00%	92,996
1B "Homeowners" 15% "Mini"	37,625,960	188,127	6,984,808	0.50%	34,923
1B "Homeowners" "Wrap"	315	8	315	2.50%	8
1C Wood Frame - small 5%	4,178,080	86,824	2,781,775	3.00%	58,203
1D Wood - other 5%	2,976,200	192,603	1,300,700	10.00%	94,189
1E Mobile Homes 2%	159,420	7,971	148,912	5.00%	7,447
2A Metal - small 5%	80,328	20,642	70,201	2.00%	20,477
2B Metal - other 5%	103,291	31,482	59,654	10.00%	13,890
3A Steel 5%	581,973	244,541	400,393	15.00%	162,367
3B Steel 5%	447,555	270,115	329,273	25.00%	183,241
3C Steel 10%	604,538	151,122	295,706	25.00%	73,920
4A Concrete 5%	311,239	164,025	230,726	20.00%	132,073
4B Concrete 5%	343,485	227,453	245,374	35.00%	143,801
4C Concrete 10 %	587,691	293,825	327,736	50.00%	163,847
4D Concrete 10 %	30,381	17,516	28,514	45.00%	16,304
5A Mixed 5%	947,039	424,798	561,803	25.00%	236,885
5B Mixed 10%	46,044	27,581	45,889	60.00%	27,496
5C Mixed 10%	425,460	319,541	213,447	75.00%	160,236
6 EQ resistive 5%	25,138	2,513	25,138	10.00%	2,513
Risks in above classes not written at standard deductible	17,127,115	2,609,973	14,546,950	xxx	1,558,953
Sub-Totals:	84,540,212	5,604,214	46,091,205		3,390,417

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	156,388	69,259	118,751	15.00%	53,804
3B Steel 5%	315,756	199,482	211,554	25.00%	116,139
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	121,840	81,469	92,178	20.00%	71,304
4B Concrete 5%	69,000	59,066	48,032	35.00%	38,163
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	48,567	21,855	29,415	45.00%	13,237
5A Mixed 5%	324,301	108,398	222,416	25.00%	78,337
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	311,736	31,174	158,493	10.00%	15,850
Risks in above classes not written at standard deductible	869,052	340,656	533,135	xxx	212,969
Sub-Totals:	2,216,641	911,359	1,413,975		599,803

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	3,316,465	1,660,500	2,401,664	988,268
(2) Commercial inland addenda	45,336	4,596	38,396	3,858
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	17,533,976	110,058	13,979,356	104,769
Sub-Totals:	20,895,777	1,775,154	16,419,416	1,096,895
ZONE TOTALS	107,652,630	8,290,728	63,924,596	5,087,116

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	5,821	56	4,169	5.75%	42
1A 1-4 Family 5%	5,933	178	5,933	3.00%	178
1A 1-4 Family 10%	170,335	2,998	152,185	1.63%	2,721
1B "Homeowners" - 1% or flat	218,895	10,797	211,927	5.75%	10,796
1B "Homeowners" 5%	822,896	31,366	796,465	3.00%	31,213
1B "Homeowners" 10%	25,660,632	378,468	8,381,194	1.63%	135,192
1B "Homeowners" 15% & up	14,523,576	147,436	14,350,167	1.00%	144,860
1B "Homeowners" 15% "Mini"	39,376,112	196,878	5,316,050	0.50%	26,579
1B "Homeowners" "Wrap"	255	6	255	2.50%	6
1C Wood Frame - small 5%	4,716,129	95,468	2,484,267	3.00%	48,910
1D Wood - other 5%	2,020,836	145,674	773,590	10.00%	61,940
1E Mobile Homes 2%	395,274	19,764	392,262	5.00%	19,613
2A Metal - small 5%	386,741	181,672	346,121	2.00%	180,960
2B Metal - other 5%	387,295	37,740	200,337	10.00%	19,199
3A Steel 5%	467,494	254,175	302,966	15.00%	168,075
3B Steel 5%	343,126	164,491	275,988	25.00%	123,454
3C Steel 10%	658,459	164,509	308,308	25.00%	77,025
4A Concrete 5%	257,840	107,281	195,262	20.00%	91,543
4B Concrete 5%	137,767	109,755	78,476	35.00%	57,589
4C Concrete 10 %	11,090	5,106	1,367	50.00%	635
4D Concrete 10 %	11,552	5,123	6,086	45.00%	2,702
5A Mixed 5%	1,042,447	459,431	664,511	25.00%	277,059
5B Mixed 10%	47,734	29,503	31,537	60.00%	19,825
5C Mixed 10%	368,154	276,116	187,252	75.00%	140,440
6 EQ resistive 5%	20,573	2,057	20,573	10.00%	2,057
Risks in above classes not written at standard deductible	11,511,952	1,711,820	9,940,037	xxx	920,015
Sub-Totals:	103,568,920	4,537,869	45,427,286		2,562,628

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	36,500	27,799	29,799	15.00%	21,099
3B Steel 5%	52,447	25,508	34,716	25.00%	15,724
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	7,000	7,000	6,400	20.00%	6,400
4B Concrete 5%	27,978	19,379	19,117	35.00%	11,007
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	163,018	44,168	108,872	25.00%	29,507
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	11,250	8,438	5,664	75.00%	4,248
6 EQ resistive 5%	320,080	32,008	161,136	10.00%	16,114
Risks in above classes not written at standard deductible	73,592	28,683	62,142	xxx	18,778
Sub-Totals:	691,865	192,983	427,846		122,878

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,634,555	1,008,830	1,160,338	643,177
(2) Commercial inland addenda	47,785	5,647	37,950	3,914
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	130	130	130	130
(4) All other (e.g., earthquake, sprinkler leakage)	3,843,055	30,739	3,590,024	27,700
Sub-Totals:	5,525,525	1,045,346	4,788,442	674,921
ZONE TOTALS	109,786,310	5,776,198	50,643,573	3,360,427

SUBZONE B-3: Orange County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	41,622	542	40,502	5.75%	527
1A 1-4 Family 5%	8,139	244	8,139	3.00%	244
1A 1-4 Family 10%	277,427	22,658	271,022	1.63%	22,555
1B "Homeowners" - 1% or flat	67,434	4,458	67,434	5.75%	4,458
1B "Homeowners" 5%	897,493	46,213	819,778	3.00%	38,162
1B "Homeowners" 10%	9,179,912	139,324	3,850,390	1.63%	63,935
1B "Homeowners" 15% & up	4,392,387	45,921	4,330,017	1.00%	45,372
1B "Homeowners" 15% "Mini"	32,069,891	160,348	3,600,329	0.50%	18,002
1B "Homeowners" "VWrap"	1,140	28	1,140	2.50%	28
1C Wood Frame - small 5%	4,173,934	83,885	1,560,940	3.00%	31,562
1D Wood - other 5%	443,940	58,078	248,253	10.00%	32,381
1E Mobile Homes 2%	476,502	23,825	471,678	5.00%	23,584
2A Metal - small 5%	102,839	48,305	94,671	2.00%	48,141
2B Metal - other 5%	18,008	3,671	12,738	10.00%	3,222
3A Steel 5%	295,471	177,417	208,960	15.00%	113,033
3B Steel 5%	378,386	201,036	250,713	25.00%	125,192
3C Steel 10%	206,320	51,513	95,994	25.00%	23,952
4A Concrete 5%	309,712	112,501	237,565	20.00%	97,947
4B Concrete 5%	197,557	159,703	121,397	35.00%	86,685
4C Concrete 10 %	109,355	55,829	55,853	50.00%	28,001
4D Concrete 10 %	10,767	4,814	10,653	45.00%	4,768
5A Mixed 5%	705,306	327,434	509,916	25.00%	231,214
5B Mixed 10%	10,037	6,023	9,983	60.00%	5,990
5C Mixed 10%	81,868	61,401	43,712	75.00%	32,784
6 EQ resistive 5%	5,000	500	5,000	10.00%	500
Risks in above classes not written at standard deductible	6,227,983	1,566,105	4,950,377	xxx	873,269
Sub-Totals:	60,688,430	3,361,777	21,877,154		1,955,511

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	25,900	15,458	18,669	15.00%	9,165
3B Steel 5%	42,850	27,983	37,483	25.00%	22,615
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	19,000	15,000	19,000	20.00%	15,000
4B Concrete 5%	14,250	8,344	7,503	35.00%	5,569
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	96,747	42,656	75,232	25.00%	37,277
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	61,503	6,150	32,829	10.00%	3,283
Risks in above classes not written at standard deductible	114,135	73,208	69,695	xxx	33,759
Sub-Totals:	374,385	188,799	260,411		126,669

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	1,149,994	843,246	731,906	481,149
(2) Commercial inland addenda	30,637	3,061	28,829	2,724
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,982,845	51,716	5,915,390	49,584
Sub-Totals:	8,163,477	898,023	6,676,124	533,457
ZONE TOTALS	69,226,291	4,448,599	28,813,689	2,615,637

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	84,540,212	5,604,214	46,091,205	3,390,417
50% of sub-totals (p. 7, Part I)	51,784,460	2,268,935	22,713,643	1,281,314
100% of sub-totals (p. 8, Part I)	60,688,430	3,361,777	21,877,154	1,955,511
Totals	197,013,101	11,234,926	90,682,002	6,627,243
OR				
(2) 50% of sub-totals (p. 6, Part I)	42,270,106	2,802,107	23,045,603	1,695,209
100% of sub-totals (p. 7, Part I)	103,568,920	4,537,869	45,427,286	2,562,628
100% of sub-totals (p. 8, Part I)	60,688,430	3,361,777	21,877,154	1,955,511
Totals	206,527,455	10,701,754	90,350,042	6,213,348
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	2,216,641	911,359	1,413,975	599,803
100% of sub-totals (p. 7, Part II)	691,865	192,983	427,846	122,878
100% of sub-totals (p. 8, Part II)	374,385	188,799	260,411	126,669
Totals	3,282,891	1,293,141	2,102,232	849,350
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	235,574	44,115	136,005	26,335
50% of sub-totals (p. 11, Part II)	568,427	137,111	402,426	107,064
Totals	804,001	181,225	538,430	133,399
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	201,099,993	12,709,293	93,322,664	7,609,992
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	20,895,777	1,775,154	16,419,416	1,096,895
(p. 3, Part III)	5,525,525	1,045,346	4,788,442	674,921
(p. 4, Part III)	8,163,477	898,023	6,676,124	533,457
Totals	34,584,779	3,718,523	27,883,982	2,305,273
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	235,684,772	16,427,816	121,206,646	9,915,265

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	82,962	889	68,476	6.13%	725
1A 1-4 Family 5%	629	20	629	3.13%	20
1A 1-4 Family 10%	4,246,743	81,792	3,739,343	1.75%	72,935
1B "Homeowners" - 1% or flat	32,684	1,121	31,541	6.13%	1,105
1B "Homeowners" 5%	1,547,401	48,033	1,475,876	3.13%	47,649
1B "Homeowners" 10%	16,593,975	247,473	5,198,387	1.75%	87,389
1B "Homeowners" 15% & up	6,559,741	74,818	6,540,332	1.13%	74,637
1B "Homeowners" 15% "Mini"	22,114,378	123,838	3,024,964	0.56%	16,938
1B "Homeowners" "Wrap"	435	11	435	2.56%	11
1C Wood Frame - small 5%	2,006,668	42,479	860,199	3.00%	18,828
1D Wood - other 5%	654,346	69,936	372,433	10.00%	43,419
1E Mobile Homes 2%	731,074	36,553	717,154	5.00%	35,857
2A Metal - small 5%	49,832	1,469	38,069	2.00%	1,064
2B Metal - other 5%	54,554	6,451	36,864	10.00%	3,515
3A Steel 5%	266,238	66,396	187,135	15.00%	50,254
3B Steel 5%	128,427	39,267	127,227	25.00%	38,967
3C Steel 10%	508,926	127,224	270,018	25.00%	67,501
4A Concrete 5%	113,539	28,177	83,628	20.00%	21,841
4B Concrete 5%	61,677	43,983	40,565	35.00%	27,428
4C Concrete 10 %	437,971	218,986	244,946	50.00%	122,473
4D Concrete 10 %	7,317	3,293	7,317	45.00%	3,293
5A Mixed 5%	636,057	199,113	430,983	25.00%	131,953
5B Mixed 10%	25,242	15,136	24,444	60.00%	14,657
5C Mixed 10%	354,156	265,615	202,752	75.00%	152,063
6 EQ resistive 5%	0	0	0	10.00%	0
Risks in above classes not written at standard deductible	5,445,058	905,947	4,727,350	xxx	470,346
Sub-Totals:	62,660,031	2,648,019	28,451,065		1,504,869

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	32,095	14,443	17,873	45.00%	8,043
5A Mixed 5%	177,238	46,129	106,122	25.00%	28,350
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	256,814	25,681	143,014	10.00%	14,301
Risks in above classes not written at standard deductible	5,000	1,977	5,000	xxx	1,977
Sub-Totals:	471,147	88,230	272,009		52,671

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,904,589	1,155,631	1,360,768	804,720
(2) Commercial inland addenda	21,449	1,880	18,422	1,829
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	(940)	(5)
(4) All other (e.g., earthquake, sprinkler leakage)	2,950,526	23,011	2,494,228	22,329
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	1,641,445	646,571	1,051,116	424,675
Sub-totals	6,518,009	1,827,093	4,923,594	1,253,548
ZONE TOTALS	69,649,187	4,563,341	33,646,668	2,811,088

ZONE D: San Diego County
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
1A 1-4 Family-1% or flat	9,459	87	9,459	2.63%	87
1A 1-4 Family 5%	26,225	312	26,225	1.19%	312
1A 1-4 Family 10%	143,019	7,551	136,243	0.56%	7,458
1B "Homeowners" - 1% or flat	50,397	1,182	50,139	2.63%	1,179
1B "Homeowners" 5%	2,146,671	53,439	2,056,726	1.19%	50,776
1B "Homeowners" 10%	9,518,379	99,756	3,643,142	0.56%	24,256
1B "Homeowners" 15% & up	1,868,968	6,164	1,845,226	0.31%	6,092
1B "Homeowners" 15% "Mini"	27,919,076	44,671	4,087,295	0.16%	6,540
1B "Homeowners" "Wrap"	1,335	14	1,335	1.03%	14
1C Wood Frame - small 5%	1,067,969	23,602	635,647	3.00%	14,635
1D Wood - other 5%	645,961	60,721	504,685	10.00%	47,515
1E Mobile Homes 2%	582,462	29,124	570,464	5.00%	28,524
2A Metal - small 5%	163,599	8,832	161,424	2.00%	8,788
2B Metal - other 5%	56,649	8,575	32,753	10.00%	3,482
3A Steel 5%	350,146	105,590	248,577	15.00%	73,159
3B Steel 5%	348,338	192,570	307,593	25.00%	154,493
3C Steel 10%	731,718	182,918	429,895	25.00%	107,468
4A Concrete 5%	205,811	101,858	175,609	20.00%	91,062
4B Concrete 5%	111,608	50,323	95,405	35.00%	36,416
4C Concrete 10%	656,642	328,319	404,715	50.00%	202,356
4D Concrete 10%	1,025	460	1,025	45.00%	460
5A Mixed 5%	1,026,701	322,486	742,396	25.00%	218,850
5B Mixed 10%	5,618	3,371	5,618	60.00%	3,371
5C Mixed 10%	512,984	384,738	316,188	75.00%	237,141
6 EQ resistive 5%	2,500	250	2,500	10.00%	250
Risks in above classes not written at standard deductible	4,302,226	1,000,323	3,497,334	xxx	425,505
Sub-Totals:	52,455,484	3,017,237	19,987,618		1,750,189

Part II: Insurance on structures of over 8 stories:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Earthquake class and standard deductible (See Instructions)	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Minimum PML Percentage	Estimated PML on Net Liability
3A Steel 5%	28,000	15,875	21,625	15.00%	9,500
3B Steel 5%	94,458	31,864	94,458	25.00%	31,864
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	57,500	41,500	54,750	20.00%	38,750
4B Concrete 5%	5,500	2,949	5,500	35.00%	2,949
4C Concrete 10%	0	0	0	50.00%	0
4D Concrete 10%	0	0	0	45.00%	0
5A Mixed 5%	378,676	105,846	267,779	25.00%	78,122
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	385,275	38,528	237,423	10.00%	23,742
Risks in above classes not written at standard deductible	187,446	37,659	123,317	xxx	29,200
Sub-Totals:	1,136,854	274,221	804,851		214,128

Part III: Other types of risks:

	Column 1	Column 2	Column 3	Column 4
	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,757,104	1,075,594	1,165,961	732,001
(2) Commercial inland addenda	23,311	2,287	21,235	1,962
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	4,429,572	41,492	3,290,079	39,236
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	1,641,445	646,571	1,051,116	424,675
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	389,610	75,156	248,581	47,737
Sub-totals	8,241,043	1,841,100	5,776,971	1,245,611
ZONE TOTALS	61,833,381	5,132,559	26,569,441	3,209,928

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	11,374	84	11,255	5.25%	83
1A 1-4 Family 5%	11,860	282	11,860	2.38%	282
1A 1-4 Family 10%	1,862,730	31,474	1,359,701	1.13%	25,791
1B "Homeowners" - 1% or flat	52,373	1,636	49,638	5.25%	1,611
1B "Homeowners" 5%	1,245,090	53,629	1,154,560	2.38%	49,237
1B "Homeowners" 10%	8,487,785	84,452	3,871,650	1.13%	42,185
1B "Homeowners" 15% & up	4,251,518	26,871	4,203,925	0.63%	26,648
1B "Homeowners" 15% "Mini"	25,872,219	80,203	5,235,051	0.31%	16,229
1B "Homeowners" "Wrap"	798	16	798	2.06%	16
1C Wood Frame - small 5%	2,432,106	50,555	812,749	3.00%	17,192
1D Wood - other 5%	522,689	75,174	332,408	10.00%	46,912
1E Mobile Homes 2%	1,497,392	75,440	1,477,451	5.00%	73,832
2A Metal - small 5%	302,329	17,105	283,487	2.00%	16,959
2B Metal - other 5%	59,218	7,828	36,117	10.00%	5,678
3A Steel 5%	483,453	216,089	338,752	15.00%	144,643
3B Steel 5%	431,383	255,478	220,068	25.00%	99,625
3C Steel 10%	922,550	230,618	503,187	25.00%	125,779
4A Concrete 5%	157,309	69,489	119,215	20.00%	60,039
4B Concrete 5%	112,696	89,487	68,601	35.00%	47,319
4C Concrete 10%	687,008	346,005	417,270	50.00%	208,849
4D Concrete 10%	97	39	34	45.00%	14
5A Mixed 5%	1,136,286	494,841	787,836	25.00%	330,349
5B Mixed 10%	29,858	19,915	25,331	60.00%	16,764
5C Mixed 10%	522,641	391,979	317,588	75.00%	238,190
6 EQ resistive 5%	32,500	3,250	32,500	10.00%	3,250
Risks in above classes not written at standard deductible	6,342,064	1,196,444	5,199,401	xxx	587,683
Sub-Totals:	57,467,325	3,818,383	26,870,432		2,185,161

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	14,000	8,250	10,233	15.00%	4,483
3B Steel 5%	25,000	6,250	25,000	25.00%	6,250
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	7,500	7,500	1,140	35.00%	1,140
4C Concrete 10%	0	0	0	50.00%	0
4D Concrete 10%	0	0	0	45.00%	0
5A Mixed 5%	328,107	86,100	212,705	25.00%	57,250
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	391,301	39,130	237,443	10.00%	23,744
Risks in above classes not written at standard deductible	13,313	3,081	10,641	xxx	2,608
Sub-Totals:	779,221	150,312	497,161		95,475

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	1,904,282	1,194,886	1,253,804	729,128
(2) Commercial inland addenda	22,313	2,042	20,536	1,956
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,109,499	38,499	4,343,172	37,904
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	1,641,445	646,571	1,051,116	424,675
(6) 50% of amounts for over 8 stories for Zone C (Page 10, sub-total for Part II):	235,574	44,115	136,005	26,335
(7) 50% of amounts for over 8 stories for Zone D (Page 11, sub-total for Part II):	568,427	137,111	402,426	107,064
Sub-totals	9,481,540	2,063,223	7,207,058	1,327,062
ZONE TOTALS	67,728,085	6,031,918	34,574,651	3,607,698

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	23,547	157	22,538	3.13%	149
1A 1-4 Family 5%	5,314	100	5,314	1.88%	100
1A 1-4 Family 10%	1,466,345	17,108	1,464,308	1.13%	17,086
1B "Homeowners" - 1% or flat	5,407	120	5,407	3.13%	120
1B "Homeowners" 5%	210,520	4,152	203,045	1.88%	4,127
1B "Homeowners" 10%	1,767,014	16,852	791,244	1.13%	7,943
1B "Homeowners" 15% & up	131,961	907	130,407	0.63%	900
1B "Homeowners" 15% "Mini"	2,426,630	7,522	716,664	0.31%	2,222
1B "Homeowners" "Wrap"	38	1	38	1.56%	1
1C Wood Frame - small 5%	82,655	2,288	63,191	3.00%	1,736
1D Wood - other 5%	204,174	25,055	139,594	10.00%	17,154
1E Mobile Homes 2%	166,014	8,301	164,707	5.00%	8,236
2A Metal - small 5%	165,984	4,712	103,507	2.00%	3,465
2B Metal - other 5%	30,843	2,679	14,197	10.00%	1,136
3A Steel 5%	173,039	78,159	90,327	15.00%	41,409
3B Steel 5%	127,487	83,750	110,099	25.00%	66,365
3C Steel 10%	347,027	86,757	171,993	25.00%	42,998
4A Concrete 5%	30,509	9,557	17,161	20.00%	3,667
4B Concrete 5%	31,550	24,651	8,094	35.00%	8,607
4C Concrete 10 %	305,622	152,811	168,230	50.00%	84,115
4D Concrete 10 %	235	94	235	45.00%	94
5A Mixed 5%	339,019	119,357	209,816	25.00%	71,286
5B Mixed 10%	1,568	941	1,221	60.00%	733
5C Mixed 10%	241,347	181,008	129,826	75.00%	97,369
6 EQ resistive 5%	20,000	2,000	20,000	10.00%	2,000
Risks in above classes not written at standard deductible	858,376	204,697	694,470	xxx	106,053
Sub-Totals:	9,162,225	1,033,734	5,445,633		589,069

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	83,834	19,032	49,404	25.00%	10,424
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	177,741	17,774	92,844	10.00%	9,284
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	261,575	36,806	142,248		19,708

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	889,958	476,338	535,933	269,486
(2) Commercial inland addenda	14,341	1,018	11,337	760
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	1,036,003	7,124	700,023	6,785
Sub-Totals:	1,940,303	484,480	1,247,293	277,031
ZONE TOTALS	11,364,102	1,555,020	6,835,175	885,808

**ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba**

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	11,693	46	11,586	1.75%	45
1A 1-4 Family 5%	1,432	14	1,432	1.00%	14
1A 1-4 Family 10%	511,675	6,964	508,106	0.63%	6,936
1B "Homeowners" - 1% or flat	12,669	162	12,669	1.75%	162
1B "Homeowners" 5%	580,270	16,148	544,601	1.00%	13,454
1B "Homeowners" 10%	5,289,044	43,857	1,905,224	0.63%	13,864
1B "Homeowners" 15% & up	470,774	2,189	459,547	0.38%	2,064
1B "Homeowners" 15% "Mini"	7,372,463	14,008	1,626,672	0.19%	3,092
1B "Homeowners" "Wrap"	606	5	606	0.81%	5
1C Wood Frame - small 5%	115,246	2,713	69,645	3.00%	1,722
1D Wood - other 5%	460,102	54,129	285,485	10.00%	36,813
1E Mobile Homes 2%	791,055	39,553	776,592	5.00%	38,830
2A Metal - small 5%	75,513	1,774	74,663	2.00%	1,757
2B Metal - other 5%	44,390	4,433	29,566	10.00%	2,951
3A Steel 5%	274,872	117,634	177,873	15.00%	73,467
3B Steel 5%	158,152	87,509	154,905	25.00%	84,762
3C Steel 10%	628,341	157,086	371,060	25.00%	92,766
4A Concrete 5%	105,839	81,615	97,607	20.00%	76,231
4B Concrete 5%	105,276	52,767	61,227	35.00%	25,893
4C Concrete 10 %	650,477	325,239	392,992	50.00%	196,496
4D Concrete 10 %	21,309	9,589	400	45.00%	180
5A Mixed 5%	759,016	289,975	547,310	25.00%	203,603
5B Mixed 10%	5,835	5,501	1,210	60.00%	926
5C Mixed 10%	495,928	371,933	299,755	75.00%	224,804
6 EQ resistive 5%	20,000	2,000	20,000	10.00%	2,000
Risks in above classes not written at standard deductible	2,928,909	683,340	2,246,818	xxx	421,577
Sub-Totals:	21,890,887	2,370,183	10,677,552		1,524,412

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	19,000	10,814	8,540	15.00%	4,086
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	38,721	19,246	16,761	20.00%	14,446
4B Concrete 5%	7,500	3,208	1,400	35.00%	1,400
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	193,358	53,414	130,816	25.00%	38,043
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	358,991	35,899	216,888	10.00%	21,689
Risks in above classes not written at standard deductible	29,862	16,150	18,128	xxx	6,219
Sub-Totals:	647,232	138,730	392,533		85,882

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	2,132,175	1,010,511	1,469,125	613,200
(2) Commercial inland addenda	18,511	1,868	17,090	1,715
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,379,272	35,762	2,720,990	29,934
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	0	0	0	0
Sub-Totals:	5,529,957	1,048,141	4,207,205	644,849
ZONE TOTALS	28,068,076	3,557,054	15,277,289	2,255,144

ZONE H COUNTIES: Lassen, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	2,011	11	2,011	2.50%	11
1A 1-4 Family 5%	351	5	351	1.50%	5
1A 1-4 Family 10%	9,825	156	9,800	0.88%	156
1B "Homeowners" - 1% or flat	1,713	37	1,713	2.50%	37
1B "Homeowners" 5%	36,459	785	35,922	1.50%	777
1B "Homeowners" 10%	585,460	5,202	394,219	0.88%	3,486
1B "Homeowners" 15% & up	64,397	329	58,455	0.50%	305
1B "Homeowners" 15% "Mini"	840,302	2,102	127,359	0.25%	320
1B "Homeowners" "Wrap"	0	0	0	1.25%	0
1C Wood Frame - small 5%	6,391	152	5,995	3.00%	140
1D Wood - other 5%	34,277	3,401	19,710	10.00%	1,944
1E Mobile Homes 2%	158,739	7,937	154,972	5.00%	7,749
2A Metal - small 5%	10,000	200	10,000	2.00%	200
2B Metal - other 5%	6,672	667	3,697	10.00%	369
3A Steel 5%	23,085	4,313	13,236	15.00%	2,836
3B Steel 5%	26,370	8,561	26,370	25.00%	8,561
3C Steel 10%	85,018	21,255	47,060	25.00%	11,766
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	5,039	5,014	5,039	35.00%	5,014
4C Concrete 10 %	87,235	43,617	48,251	50.00%	24,126
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	88,064	26,458	58,225	25.00%	17,851
5B Mixed 10%	54	32	54	60.00%	32
5C Mixed 10%	68,435	51,325	37,864	75.00%	28,397
6 EQ resistive 5%	2,500	250	2,500	10.00%	250
Risks in above classes not written at standard deductible	690,911	75,381	204,685	xxx	27,945
Sub-Totals:	2,833,309	257,190	1,267,489		142,279

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	42,300	9,637	25,073	25.00%	5,331
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	51,396	5,140	28,428	10.00%	2,843
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	93,696	14,777	53,501		8,174

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	250,889	144,450	196,305	111,762
(2) Commercial inland addenda	951	87	778	75
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	80,060	1,427	79,572	1,427
Sub-Totals:	331,900	145,965	276,655	113,263
ZONE TOTALS	3,258,905	417,932	1,597,644	263,716

<div> <div>All Co's</div> <div> CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE Form "A" - Primary Business As of December 31, 2005 </div> </div>						
NAIC COMPANY OR GROUP CODE:		All Co's		Surplus = 154,394,019 x 1,000		
		(1)	(2)	(3)	(4)	(5)
Zone	Area	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount	Estimated Net PML Amount Limited by Catastrophe Reinsurance
A	San Francisco	159,969,496	10,368,815	72,973,065	5,574,227	3,050,023
B	Los Angeles/ Orange County	223,909,550	14,618,240	109,569,747	7,698,104	4,175,841
C	Santa Barbara	65,668,250	3,758,389	32,600,441	2,132,554	1,623,811
D	San Diego	55,893,055	4,614,230	23,176,566	2,354,908	1,788,665
E	South-East	66,109,154	5,651,712	31,307,734	2,808,236	1,900,161
F	Central	10,018,023	1,074,567	6,750,961	684,353	670,616
G	North-Central	22,468,325	2,573,652	12,571,438	1,471,486	1,275,022
H	North	2,375,941	267,842	1,540,505	201,922	196,790

All Co's

CALIFORNIA EARTHQUAKE LIABILITY QUESTIONNAIRE

Form "A" - Primary Business

As of December 31, 2005

(a) Direct premiums earned	2,910,743
(b) Assumed premiums earned	5,823
(c) Ceded premiums earned	274,430

(2) Estimated PML on aggregate ceded liability (other than catastrophe coverage)

Estimated PML ceded to:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	1,490,608	3,414,242
U.S. Reinsurers - non CA	40,766	42,438
Lloyd's of London	545,107	737,819
Other U.K.	81,588	128,424
Western Europe	532,339	685,076
All Other	1,239,242	1,990,839
Totals	3,929,649	6,998,839

(3) Amounts recoverable from catastrophe reinsurance

Amounts recoverable from:	<u>Zone A</u>	<u>Zone B</u>
U.S. Reinsurers - CA licensed	399,821	571,444
U.S. Reinsurers - non CA	23,020	28,760
Lloyd's of London	519,162	676,424
Other U.K.	60,257	113,618
Western Europe	340,112	462,445
All Other	998,059	1,348,301
Totals	2,340,429	3,200,992

(4) Were most of your per risk treaties (on exposures ceded) in effect during 2005 subject to an occurrence or per event limitation?

Yes

No

California Earthquake Authority (CEA) Interrogatory

(1) Was your company a member of the CEA? Yes No

(2) If so, how many CEA policies that your company issued were outstanding at the end of the year? 425,778

What was the total liability (exposure or Coverage A) on these policies? 105,970,277,721

SUBZONE A-1 COUNTIES: San Francisco and San Mateo

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	29,430	531	28,671	6.75%	491
1A 1-4 Family 5%	1,974	71	1,951	3.63%	71
1A 1-4 Family 10%	291,609	14,910	248,784	2.13%	14,158
1B "Homeowners" - 1% or flat	68,485	4,623	68,485	6.75%	4,623
1B "Homeowners" 5%	1,330,041	46,353	1,259,185	3.63%	43,040
1B "Homeowners" 10%	10,836,967	195,304	2,017,600	2.13%	45,885
1B "Homeowners" 15% & up	3,186,423	41,882	3,093,353	1.38%	41,112
1B "Homeowners" 15% "Mini"	13,551,253	93,502	3,775,124	0.69%	26,047
1B "Homeowners" "Wrap"	125	4	125	2.94%	4
1C Wood Frame - small 5%	775,184	16,128	595,357	3.00%	12,335
1D Wood - other 5%	1,425,331	95,389	1,099,528	10.00%	72,328
1E Mobile Homes 2%	50,258	2,513	49,795	5.00%	2,490
2A Metal - small 5%	18,639	676	14,374	2.00%	188
2B Metal - other 5%	25,128	1,950	17,532	10.00%	1,254
3A Steel 5%	330,403	148,416	233,217	15.00%	85,960
3B Steel 5%	283,188	142,454	179,453	25.00%	64,699
3C Steel 10%	195,635	48,905	114,165	25.00%	28,536
4A Concrete 5%	227,333	98,392	138,636	20.00%	43,504
4B Concrete 5%	144,825	104,770	63,871	35.00%	25,153
4C Concrete 10 %	126,428	63,214	91,818	50.00%	45,909
4D Concrete 10 %	7,894	5,015	1,332	45.00%	595
5A Mixed 5%	367,556	155,359	197,052	25.00%	77,259
5B Mixed 10%	28,075	13,118	20,601	60.00%	8,077
5C Mixed 10%	116,406	87,237	85,631	75.00%	64,187
6 EQ resistive 5%	49,000	4,900	2,500	10.00%	250
Risks in above classes not written at standard deductible	6,059,222	1,155,626	4,677,641	xxx	762,842
Sub-Totals:	39,526,812	2,541,240	18,075,780		1,470,998

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	235,394	145,499	139,685	15.00%	56,457
3B Steel 5%	347,052	259,018	186,746	25.00%	85,159
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	173,430	143,524	104,950	20.00%	88,300
4B Concrete 5%	100,556	60,545	56,055	35.00%	21,705
4C Concrete 10 %	41	20	41	50.00%	20
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	145,370	64,678	114,320	25.00%	46,441
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	74,488	7,449	54,097	10.00%	5,410
Risks in above classes not written at standard deductible	441,333	273,645	211,838	xxx	92,267
Sub-Totals:	1,517,664	954,378	867,732		395,758

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	387,816	227,515	113,901	66,935
(2) Commercial inland addenda	26,421	2,941	24,167	2,437
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,677,577	26,518	2,068,972	25,968
Sub-Totals:	4,091,814	256,974	2,207,039	95,340
ZONE TOTALS	45,136,289	3,752,592	21,150,551	1,962,097

SUBZONE A-2 COUNTIES: Alameda and Contra Costa

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	36,262	572	31,104	6.75%	504
1A 1-4 Family 5%	2,959	107	2,959	3.63%	107
1A 1-4 Family 10%	324,451	24,648	314,824	2.13%	24,474
1B "Homeowners" - 1% or flat	36,800	2,483	36,795	6.75%	2,483
1B "Homeowners" 5%	1,206,420	44,148	1,129,385	3.63%	39,946
1B "Homeowners" 10%	8,615,645	160,646	3,519,720	2.13%	73,177
1B "Homeowners" 15% & up	6,602,763	88,991	6,527,031	1.38%	88,070
1B "Homeowners" 15% "Mini"	16,077,076	110,931	3,837,493	0.69%	26,478
1B "Homeowners" "Wrap"	170	5	170	2.94%	5
1C Wood Frame - small 5%	1,970,479	41,580	1,039,173	3.00%	22,026
1D Wood - other 5%	566,382	69,365	353,306	10.00%	37,722
1E Mobile Homes 2%	352,205	17,611	350,396	5.00%	17,521
2A Metal - small 5%	28,278	1,948	22,919	2.00%	1,882
2B Metal - other 5%	21,049	1,726	13,833	10.00%	1,092
3A Steel 5%	206,595	43,868	159,182	15.00%	25,341
3B Steel 5%	128,016	100,878	57,514	25.00%	36,672
3C Steel 10%	187,076	47,557	118,068	25.00%	30,305
4A Concrete 5%	357,986	97,359	79,995	20.00%	36,662
4B Concrete 5%	44,004	34,273	18,464	35.00%	11,515
4C Concrete 10 %	169,864	84,932	113,487	50.00%	56,744
4D Concrete 10 %	1,939	1,780	364	45.00%	205
5A Mixed 5%	798,643	416,573	323,332	25.00%	109,780
5B Mixed 10%	7,261	4,357	7,261	60.00%	4,357
5C Mixed 10%	126,936	94,895	82,794	75.00%	61,972
6 EQ resistive 5%	31,698	6,011	21,200	10.00%	3,541
Risks in above classes not written at standard deductible	4,745,997	971,247	2,663,343	xxx	426,267
Sub-Totals:	42,646,953	2,468,490	20,824,111		1,138,847

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	1,559	234	1,559	15.00%	234
3B Steel 5%	59,500	36,063	23,339	25.00%	5,802
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	4,500	4,500	1,113	35.00%	1,113
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	51,686	14,726	39,803	25.00%	11,755
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	87,326	8,773	58,028	10.00%	5,803
Risks in above classes not written at standard deductible	56,973	10,358	36,549	xxx	4,565
Sub-Totals:	261,544	74,653	160,390		29,271

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	638,375	407,677	421,648	287,479
(2) Commercial inland addenda	55,375	5,517	54,158	5,417
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IR)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	2,823,465	19,995	2,141,328	19,881
Sub-Totals:	3,517,216	433,189	2,617,134	312,777
ZONE TOTALS	46,425,713	2,976,332	23,601,635	1,480,894

**SUBZONE A-3 COUNTIES: Del Norte, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Benito,
Santa Clara, Santa Cruz, Solano, Sonoma**

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	98,057	1,486	88,675	6.75%	1,363
1A 1-4 Family 5%	2,578	93	2,558	3.63%	93
1A 1-4 Family 10%	4,867,729	121,513	3,350,039	2.13%	89,269
1B "Homeowners" - 1% or flat	30,681	1,771	30,681	6.75%	1,771
1B "Homeowners" 5%	1,012,736	54,218	817,564	3.63%	37,786
1B "Homeowners" 10%	21,811,806	402,121	7,011,813	2.13%	147,654
1B "Homeowners" 15% & up	6,965,000	95,762	6,829,395	1.38%	93,028
1B "Homeowners" 15% "Mini"	31,505,752	217,388	5,243,551	0.69%	36,178
1B "Homeowners" "Wrap"	677	20	677	2.94%	20
1C Wood Frame - small 5%	3,237,507	71,471	1,658,987	3.00%	37,378
1D Wood - other 5%	813,041	108,757	549,287	10.00%	74,470
1E Mobile Homes 2%	1,234,558	45,093	889,339	5.00%	44,468
2A Metal - small 5%	33,372	2,573	23,575	2.00%	568
2B Metal - other 5%	71,966	15,581	50,195	10.00%	6,934
3A Steel 5%	506,380	152,197	366,254	15.00%	114,376
3B Steel 5%	327,314	197,862	156,909	25.00%	73,828
3C Steel 10%	606,768	151,676	399,588	25.00%	99,885
4A Concrete 5%	262,888	89,892	111,345	20.00%	48,325
4B Concrete 5%	112,771	90,066	47,254	35.00%	33,516
4C Concrete 10 %	592,225	296,113	410,495	50.00%	205,248
4D Concrete 10 %	137	55	137	45.00%	55
5A Mixed 5%	1,315,067	565,436	619,413	25.00%	203,893
5B Mixed 10%	24,373	15,023	18,279	60.00%	10,967
5C Mixed 10%	417,014	312,252	274,518	75.00%	205,679
6 EQ resistive 5%	20,415	2,042	20,090	10.00%	2,009
Risks in above classes not written at standard deductible	6,589,440	1,205,776	4,611,501	xxx	631,720
Sub-Totals:	82,460,250	4,216,237	33,582,115		2,200,481

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	14,783	4,377	6,368	15.00%	623
3B Steel 5%	67,600	31,350	39,521	25.00%	20,096
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	45	9	45	20.00%	9
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	340,671	80,523	248,910	25.00%	57,582
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	288,106	28,811	195,416	10.00%	19,542
Risks in above classes not written at standard deductible	29,720	22,975	16,136	xxx	12,590
Sub-Totals:	740,925	168,045	506,396		110,441

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	635,954	412,385	516,221	328,073
(2) Commercial inland addenda	39,090	3,816	37,723	3,691
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	5,692,833	40,034	3,875,835	39,775
Sub-Totals:	6,367,877	456,234	4,429,779	371,538
ZONE TOTALS	89,569,052	4,840,516	38,518,290	2,682,460

Totals For Zone A

Composite of Zones A-1 (page 2), A-2 (page 3), and A-3 (page 4)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 2, Part I)	39,526,812	2,541,240	18,075,780	1,470,998
50% of sub-totals (p. 3, Part I)	21,323,477	1,234,245	10,412,056	569,423
100% of sub-totals (p. 4, Part I)	82,460,250	4,216,237	33,582,115	2,200,481
Totals	143,310,539	7,991,722	62,069,951	4,240,902
OR				
(2) 50% of sub-totals (p. 2, Part I)	19,763,406	1,270,620	9,037,890	735,499
100% of sub-totals (p. 3, Part I)	42,646,953	2,468,490	20,824,111	1,138,847
100% of sub-totals (p. 4, Part I)	82,460,250	4,216,237	33,582,115	2,200,481
Totals	144,870,610	7,955,347	63,444,117	4,074,826
PLUS				
(3) 100% of sub-totals (p. 2, Part II)	1,517,664	954,378	867,732	395,758
100% of sub-totals (p. 3, Part II)	261,544	74,653	160,390	29,271
100% of sub-totals (p. 4, Part II)	740,925	168,045	506,396	110,441
Totals	2,520,132	1,197,076	1,534,517	535,470
PLUS				
(4) 33% of sub-totals (p. 14, Part II)	161,919	33,619	114,646	18,199
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	145,992,590	9,222,418	63,719,114	4,794,571
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	4,091,814	256,974	2,207,039	95,340
(p. 3, Part III)	3,517,216	433,189	2,617,134	312,777
(p. 4, Part III)	6,367,877	456,234	4,429,779	371,538
Totals	13,976,906	1,146,397	9,253,952	779,656
(7) Totals for Zone A ((5) plus (6)) (Enter here and on Page 1)	159,969,496	10,368,815	72,973,065	5,574,227

SUBZONE B-1: Los Angeles County west of Interstate 5 and south of Mulholland Drive
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	65,703	849	57,237	5.75%	742
1A 1-4 Family 5%	8,091	243	8,091	3.00%	243
1A 1-4 Family 10%	2,080,848	62,914	1,576,809	1.63%	54,668
1B "Homeowners" - 1% or flat	231,981	16,411	230,541	5.75%	14,971
1B "Homeowners" 5%	1,715,285	77,453	1,455,075	3.00%	52,825
1B "Homeowners" 10%	9,335,908	157,482	7,831,020	1.63%	142,847
1B "Homeowners" 15% & up	8,827,659	85,674	8,574,762	1.00%	83,714
1B "Homeowners" 15% "Mini"	34,645,248	173,224	5,965,824	0.50%	29,826
1B "Homeowners" "VWrap"	415	10	415	2.50%	10
1C Wood Frame - small 5%	4,319,615	92,191	2,928,486	3.00%	63,007
1D Wood - other 5%	3,140,923	240,864	1,565,670	10.00%	130,407
1E Mobile Homes 2%	145,064	7,253	138,059	5.00%	6,902
2A Metal - small 5%	37,817	1,867	24,052	2.00%	1,815
2B Metal - other 5%	92,803	13,159	69,925	10.00%	10,732
3A Steel 5%	1,048,548	404,023	806,872	15.00%	201,836
3B Steel 5%	485,182	287,773	272,550	25.00%	98,199
3C Steel 10%	534,183	133,536	343,304	25.00%	85,821
4A Concrete 5%	834,137	282,295	309,325	20.00%	137,452
4B Concrete 5%	324,654	221,865	167,925	35.00%	79,161
4C Concrete 10 %	626,547	313,253	483,350	50.00%	241,655
4D Concrete 10 %	19,145	10,500	4,475	45.00%	2,276
5A Mixed 5%	1,572,434	708,304	801,925	25.00%	291,938
5B Mixed 10%	84,784	52,662	66,756	60.00%	39,478
5C Mixed 10%	393,815	298,208	266,731	75.00%	200,434
6 EQ resistive 5%	149,353	14,934	24,667	10.00%	2,465
Risks in above classes not written at standard deductible				xxx	
Sub-Totals:	16,294,258	2,562,152	12,721,238		1,300,516
	87,014,399	6,219,100	46,695,084		3,273,940

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	168,386	117,259	91,294	15.00%	40,996
3B Steel 5%	371,562	259,254	199,629	25.00%	134,550
3C Steel 10%	104	26	104	25.00%	26
4A Concrete 5%	63,820	36,841	37,786	20.00%	31,178
4B Concrete 5%	117,200	92,114	57,539	35.00%	41,131
4C Concrete 10 %	1,831	915	1,031	50.00%	515
4D Concrete 10 %	45,781	21,016	34,526	45.00%	15,753
5A Mixed 5%	297,242	108,472	219,332	25.00%	65,477
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	274,089	27,409	189,790	10.00%	18,979
Risks in above classes not written at standard deductible	621,680	282,123	361,042	xxx	134,285
Sub-Totals:	1,961,696	945,430	1,192,073		482,889

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	817,831	491,298	406,026	277,265
(2) Commercial inland addenda	62,195	6,291	60,455	6,060
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	16,609,938	92,508	12,269,148	91,311
Sub-Totals:	17,489,963	590,097	12,735,630	374,636
ZONE TOTALS	106,466,058	7,754,627	60,622,786	4,131,466

SUBZONE B-2: Remainder of Los Angeles County not part of Subzone B-1
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	58,517	738	56,656	5.75%	721
1A 1-4 Family 5%	5,178	155	5,178	3.00%	155
1A 1-4 Family 10%	174,155	3,367	161,564	1.63%	3,175
1B "Homeowners" - 1% or flat	140,602	9,228	140,602	5.75%	9,228
1B "Homeowners" 5%	1,014,082	29,816	830,963	3.00%	24,238
1B "Homeowners" 10%	29,360,608	435,868	9,346,383	1.63%	158,243
1B "Homeowners" 15% & up	13,388,934	133,797	13,021,173	1.00%	129,498
1B "Homeowners" 15% "Mini"	36,222,059	181,106	4,626,604	0.50%	23,128
1B "Homeowners" "Wrap"	340	9	340	2.50%	9
1C Wood Frame - small 5%	4,608,991	93,923	2,421,304	3.00%	49,509
1D Wood - other 5%	2,053,663	191,104	957,814	10.00%	96,125
1E Mobile Homes 2%	499,958	24,998	496,725	5.00%	24,837
2A Metal - small 5%	95,336	1,555	60,920	2.00%	966
2B Metal - other 5%	357,508	34,809	243,430	10.00%	23,529
3A Steel 5%	610,186	371,322	403,220	15.00%	175,387
3B Steel 5%	348,779	217,569	209,542	25.00%	109,448
3C Steel 10%	588,330	146,981	341,722	25.00%	85,371
4A Concrete 5%	460,931	191,113	236,823	20.00%	120,164
4B Concrete 5%	236,034	193,567	112,453	35.00%	57,657
4C Concrete 10 %	11,032	5,091	3,197	50.00%	1,475
4D Concrete 10 %	27,374	10,982	8,805	45.00%	3,520
5A Mixed 5%	1,638,016	773,291	859,296	25.00%	289,719
5B Mixed 10%	62,777	38,529	52,544	60.00%	32,044
5C Mixed 10%	325,907	244,429	225,604	75.00%	169,203
6 EQ resistive 5%	20,631	2,108	20,273	10.00%	2,072
Risks in above classes not written at standard deductible	8,533,388	1,583,388	5,440,545	xxx	669,363
Sub-Totals:	100,843,316	4,918,841	40,283,679		2,258,783

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	28,000	8,625	21,600	15.00%	4,625
3B Steel 5%	33,972	13,840	13,555	25.00%	5,948
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	19,000	16,000	13,160	20.00%	7,120
4B Concrete 5%	19,187	16,465	5,827	35.00%	3,105
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	139,867	30,014	110,906	25.00%	22,774
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	9,749	7,312	6,676	75.00%	5,007
6 EQ resistive 5%	277,787	27,779	190,352	10.00%	19,035
Risks in above classes not written at standard deductible	68,705	21,642	41,590	xxx	12,511
Sub-Totals:	596,266	141,677	403,666		80,125

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	844,538	561,310	645,931	426,280
(2) Commercial inland addenda	65,360	7,438	56,275	5,741
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IR)	267	267	267	267
(4) All other (e.g., earthquake, sprinkler leakage)	2,423,033	21,103	2,460,286	20,451
Sub-Totals:	3,333,198	590,118	3,162,759	452,739
ZONE TOTALS	104,772,780	5,650,636	43,850,104	2,791,647

SUBZONE B-3: Orange County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	42,572	786	42,051	5.75%	779
1A 1-4 Family 5%	3,810	114	3,810	3.00%	114
1A 1-4 Family 10%	277,895	22,596	273,988	1.63%	22,530
1B "Homeowners" - 1% or flat	63,091	4,142	63,066	5.75%	4,141
1B "Homeowners" 5%	1,207,365	52,431	1,015,839	3.00%	41,429
1B "Homeowners" 10%	8,072,162	125,966	3,984,532	1.63%	67,097
1B "Homeowners" 15% & up	3,998,270	40,566	3,924,120	1.00%	39,093
1B "Homeowners" 15% "Mini"	29,553,916	147,768	2,982,970	0.50%	14,914
1B "Homeowners" "VWrap"	1,240	31	1,240	2.50%	31
1C Wood Frame - small 5%	4,008,761	80,633	1,491,975	3.00%	30,203
1D Wood - other 5%	498,199	76,986	317,624	10.00%	50,425
1E Mobile Homes 2%	509,547	25,477	506,519	5.00%	25,326
2A Metal - small 5%	32,311	647	17,439	2.00%	349
2B Metal - other 5%	24,307	3,241	12,082	10.00%	1,009
3A Steel 5%	274,512	167,206	181,192	15.00%	89,762
3B Steel 5%	217,506	103,531	120,964	25.00%	45,456
3C Steel 10%	155,164	38,726	89,811	25.00%	22,408
4A Concrete 5%	272,810	114,009	155,183	20.00%	77,114
4B Concrete 5%	150,679	103,598	76,261	35.00%	38,737
4C Concrete 10 %	84,456	42,228	61,890	50.00%	30,845
4D Concrete 10 %	3,376	1,491	3,275	45.00%	1,450
5A Mixed 5%	1,157,240	542,738	605,478	25.00%	231,224
5B Mixed 10%	10,671	6,403	10,537	60.00%	6,322
5C Mixed 10%	68,359	51,269	50,505	75.00%	37,879
6 EQ resistive 5%	148,579	14,858	9,226	10.00%	923
Risks in above classes not written at standard deductible	4,663,926	1,214,118	3,475,508	xxx	586,624
Sub-Totals:	55,500,724	2,981,559	19,476,886		1,466,185

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	18,160	13,690	10,943	15.00%	7,411
3B Steel 5%	32,700	23,870	16,268	25.00%	5,018
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	35,000	33,168	25,240	20.00%	15,327
4B Concrete 5%	23,000	20,029	5,305	35.00%	5,008
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	77,842	23,109	67,774	25.00%	20,593
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	49,768	4,977	36,351	10.00%	3,635
Risks in above classes not written at standard deductible	47,982	28,624	34,772	xxx	20,436
Sub-Totals:	284,452	147,466	196,653		77,427

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	423,778	291,230	301,093	199,161
(2) Commercial inland addenda	47,070	4,844	45,552	4,503
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	6,155,323	43,627	4,755,747	42,028
Sub-Totals:	6,626,171	339,701	5,102,391	245,692
ZONE TOTALS	62,411,347	3,468,726	24,775,930	1,789,305

Totals For Zone B

Composite of Zones B-1 (page 6), B-2 (page 7), and B-3 (page 8)
(In thousands of dollars)

	Aggregate Direct Liability	Aggregate Direct PML	Aggregate Liability Net of Reinsurance	Estimated Net PML Amount
(1) 100% of sub-totals (p. 6, Part I)	87,014,399	6,219,100	46,695,084	3,273,940
50% of sub-totals (p. 7, Part I)	50,421,658	2,459,420	20,141,840	1,129,391
100% of sub-totals (p. 8, Part I)	55,500,724	2,981,559	19,476,886	1,466,185
Totals	192,936,781	11,660,079	86,313,810	5,869,517
OR				
(2) 50% of sub-totals (p. 6, Part I)	43,507,199	3,109,550	23,347,542	1,636,970
100% of sub-totals (p. 7, Part I)	100,843,316	4,918,841	40,283,679	2,258,783
100% of sub-totals (p. 8, Part I)	55,500,724	2,981,559	19,476,886	1,466,185
Totals	199,851,239	11,009,950	83,108,108	5,361,938
PLUS				
(3) 100% of sub-totals (p. 6, Part II)	1,961,696	945,430	1,192,073	482,889
100% of sub-totals (p. 7, Part II)	596,266	141,677	403,666	80,125
100% of sub-totals (p. 8, Part II)	284,452	147,466	196,653	77,427
Totals	2,842,413	1,234,573	1,792,392	640,441
PLUS				
(4) 50% of sub-totals (p. 10, Part II)	179,223	32,324	123,123	21,515
50% of sub-totals (p. 11, Part II)	501,801	171,347	339,643	93,563
Totals	681,024	203,671	462,766	115,078
(5) Greater of (1) or (2) (with respect to net PML) plus (3) and (4)	196,460,218	13,098,324	88,568,967	6,625,036
(6) Sub-totals for Other Types of Risks				
(p. 2, Part III)	17,489,963	590,097	12,735,630	374,636
(p. 3, Part III)	3,333,198	590,118	3,162,759	452,739
(p. 4, Part III)	6,626,171	339,701	5,102,391	245,692
Totals	27,449,332	1,519,916	21,000,780	1,073,068
(7) Totals for Zone B ((5) plus (6)) (Enter here and on Page 1)	223,909,550	14,618,240	109,569,747	7,698,104

ZONE C COUNTIES: Kern, San Luis Obispo, Santa Barbara, Ventura

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	92,217	1,057	82,428	6.13%	948
1A 1-4 Family 5%	3,188	100	3,188	3.13%	100
1A 1-4 Family 10%	6,768,570	125,907	5,739,601	1.75%	108,334
1B "Homeowners" - 1% or flat	10,207	638	9,937	6.13%	638
1B "Homeowners" 5%	2,176,006	76,430	1,955,977	3.13%	69,076
1B "Homeowners" 10%	14,776,286	225,003	5,395,436	1.75%	92,219
1B "Homeowners" 15% & up	5,701,556	67,649	5,590,045	1.13%	66,763
1B "Homeowners" 15% "Mini"	20,122,417	112,685	2,670,224	0.56%	14,950
1B "Homeowners" "Vwrap"	435	11	435	2.56%	11
1C Wood Frame - small 5%	2,027,845	44,249	894,789	3.00%	19,840
1D Wood - other 5%	943,485	146,021	591,494	10.00%	83,544
1E Mobile Homes 2%	891,112	44,556	883,947	5.00%	44,149
2A Metal - small 5%	73,175	1,174	41,539	2.00%	902
2B Metal - other 5%	47,259	10,770	29,228	10.00%	3,516
3A Steel 5%	193,191	58,218	136,587	15.00%	27,335
3B Steel 5%	118,149	32,336	81,637	25.00%	24,866
3C Steel 10%	375,994	93,989	240,705	25.00%	60,173
4A Concrete 5%	200,027	51,534	96,465	20.00%	26,423
4B Concrete 5%	78,863	54,812	42,763	35.00%	19,232
4C Concrete 10 %	329,419	164,709	225,901	50.00%	112,950
4D Concrete 10 %	6,701	3,016	431	45.00%	304
5A Mixed 5%	1,041,875	340,864	542,079	25.00%	147,280
5B Mixed 10%	19,075	11,436	16,921	60.00%	10,143
5C Mixed 10%	261,209	195,906	179,856	75.00%	134,891
6 EQ resistive 5%	12,843	1,284	12,500	10.00%	1,250
Risks in above classes not written at standard deductible	4,331,573	746,968	3,319,005	xxx	336,769
Sub-Totals:	60,602,677	2,611,320	28,783,119		1,406,604

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	2,384	476	2,384	20.00%	476
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	24,111	10,850	16,484	45.00%	7,418
5A Mixed 5%	132,317	31,380	94,177	25.00%	21,845
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	192,933	19,293	131,901	10.00%	13,190
Risks in above classes not written at standard deductible	6,700	2,649	1,300	xxx	100
Sub-Totals:	358,445	64,648	246,246		43,029

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	731,418	446,933	603,754	344,710
(2) Commercial inland addenda	34,386	3,377	33,658	3,300
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	2,520,117	14,824	2,037,468	14,690
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	1,421,207	617,287	896,196	320,221
Sub-totals	4,707,128	1,082,420	3,571,076	682,921
ZONE TOTALS	65,668,250	3,758,389	32,600,441	2,132,554

ZONE D: San Diego County

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	25,449	280	25,449	2.63%	280
1A 1-4 Family 5%	3,407	41	3,407	1.19%	41
1A 1-4 Family 10%	225,220	7,440	221,235	0.56%	7,384
1B "Homeowners" - 1% or flat	11,548	369	11,548	2.63%	369
1B "Homeowners" 5%	2,057,527	46,439	1,862,376	1.19%	38,715
1B "Homeowners" 10%	8,183,651	81,916	3,627,235	0.56%	23,941
1B "Homeowners" 15% & up	1,944,341	5,898	1,907,221	0.31%	5,666
1B "Homeowners" 15% "Mini"	25,766,424	41,224	3,221,870	0.16%	5,154
1B "Homeowners" "Wrap"	1,460	15	1,460	1.03%	15
1C Wood Frame - small 5%	1,059,439	23,664	658,412	3.00%	15,237
1D Wood - other 5%	588,061	77,770	473,106	10.00%	54,187
1E Mobile Homes 2%	956,092	47,805	946,313	5.00%	47,316
2A Metal - small 5%	34,747	1,356	21,451	2.00%	1,489
2B Metal - other 5%	52,678	14,205	30,148	10.00%	3,852
3A Steel 5%	331,064	122,983	208,931	15.00%	52,539
3B Steel 5%	227,850	112,344	149,564	25.00%	48,421
3C Steel 10%	599,927	149,971	386,389	25.00%	96,591
4A Concrete 5%	266,173	91,553	146,549	20.00%	48,128
4B Concrete 5%	99,368	79,536	55,095	35.00%	23,237
4C Concrete 10 %	544,710	272,353	367,414	50.00%	183,705
4D Concrete 10 %	4,964	2,230	4,964	45.00%	2,230
5A Mixed 5%	1,334,090	500,686	859,504	25.00%	248,831
5B Mixed 10%	5,414	3,248	5,414	60.00%	3,248
5C Mixed 10%	434,222	325,667	295,185	75.00%	221,389
6 EQ resistive 5%	26,166	2,616	2,503	10.00%	250
Risks in above classes not written at standard deductible	4,216,776	1,009,294	3,076,309	xxx	377,439
Sub-Totals:	49,000,768	3,020,903	18,569,053		1,509,654

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	43,000	33,771	18,840	15.00%	9,901
3B Steel 5%	89,350	53,763	56,120	25.00%	26,706
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	45,019	29,004	45,019	20.00%	29,004
4B Concrete 5%	145,180	105,576	77,868	35.00%	42,817
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	288,193	69,620	209,844	25.00%	50,033
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	320,902	32,090	216,443	10.00%	21,644
Risks in above classes not written at standard deductible	71,958	18,871	55,152	xxx	7,021
Sub-Totals:	1,003,602	342,694	679,285		187,126

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	911,091	512,596	455,955	264,648
(2) Commercial inland addenda	45,521	4,492	41,145	3,953
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	3,168,692	25,593	2,304,925	24,938
(5) 50% of amounts for over 8 stories for Zone E (Page 9, (3) totals):	1,421,207	617,287	896,196	320,221
(6) 50% of amounts for over 8 stories for Zone E (Page 12, sub-total for Part II):	342,174	90,665	230,008	44,368
Sub-totals	5,888,685	1,250,632	3,928,228	658,127
ZONE TOTALS	55,893,055	4,614,230	23,176,566	2,354,908

ZONE E COUNTIES: Alpine, Imperial, Inyo, Mono, Riverside, San Bernardino
(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	34,213	298	32,055	5.25%	278
1A 1-4 Family 5%	2,991	72	2,991	2.38%	72
1A 1-4 Family 10%	2,200,947	34,047	1,699,795	1.13%	28,384
1B "Homeowners" - 1% or flat	8,543	448	8,503	5.25%	446
1B "Homeowners" 5%	1,301,792	47,563	1,177,270	2.38%	40,514
1B "Homeowners" 10%	6,864,638	74,001	3,918,413	1.13%	43,928
1B "Homeowners" 15% & up	3,960,724	24,119	3,820,909	0.63%	23,209
1B "Homeowners" 15% "Mini"	24,259,750	75,203	4,443,140	0.31%	13,771
1B "Homeowners" "Wrap"	858	18	858	2.06%	18
1C Wood Frame - small 5%	2,245,111	46,245	788,252	3.00%	16,413
1D Wood - other 5%	819,276	137,680	573,081	10.00%	84,364
1E Mobile Homes 2%	1,594,341	79,717	1,577,748	5.00%	78,888
2A Metal - small 5%	81,755	5,556	48,386	2.00%	1,818
2B Metal - other 5%	80,136	25,460	50,612	10.00%	10,765
3A Steel 5%	432,822	202,802	279,752	15.00%	99,485
3B Steel 5%	403,217	225,107	216,701	25.00%	87,881
3C Steel 10%	687,656	171,896	430,622	25.00%	107,637
4A Concrete 5%	941,396	238,050	118,011	20.00%	38,331
4B Concrete 5%	93,775	79,472	36,625	35.00%	28,798
4C Concrete 10 %	539,582	269,791	375,346	50.00%	187,673
4D Concrete 10 %	3,243	1,456	2,833	45.00%	1,274
5A Mixed 5%	1,745,924	742,694	955,631	25.00%	333,975
5B Mixed 10%	28,237	16,943	26,135	60.00%	14,970
5C Mixed 10%	428,694	321,518	299,657	75.00%	224,739
6 EQ resistive 5%	30,000	3,000	30,000	10.00%	3,000
Risks in above classes not written at standard deductible	9,452,126	1,424,850	4,898,541	xxx	549,365
Sub-Totals:	58,241,748	4,248,005	25,811,866		2,019,999

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	35,000	22,070	16,090	15.00%	5,995
3B Steel 5%	30,000	30,000	16,800	25.00%	4,200
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	3,000	3,000	1,560	20.00%	1,560
4B Concrete 5%	25,000	25,000	3,540	35.00%	3,540
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	261,652	66,743	189,082	25.00%	48,600
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	1,800	1,350	1,800	75.00%	1,350
6 EQ resistive 5%	317,896	31,790	221,144	10.00%	22,114
Risks in above classes not written at standard deductible	10,000	1,377	10,000	xxx	1,377
Sub-Totals:	684,348	181,330	460,016		88,736

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland "Exceptions"	757,388	373,493	544,047	238,572
(2) Commercial inland addenda	30,950	2,965	29,698	2,891
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	4,292,490	24,962	3,103,146	22,741
(5) 50% of amounts for over 8 stories for Zone B (Page 9, (3) totals):	1,421,207	617,287	896,196	320,221
(6) 50% of amounts for over 8 stories for Zone C (Page 10, sub-total for Part II):	179,223	32,324	123,123	21,515
(7) 50% of amounts for over 8 stories for Zone D (Page 11, sub-total for Part II):	501,801	171,347	339,643	93,563
Sub-totals	7,183,059	1,222,377	5,035,852	699,502
ZONE TOTALS	66,109,154	5,651,712	31,307,734	2,808,236

ZONE F COUNTIES: Fresno, Kings, Madera, Mariposa, Merced, Tulare

(In thousands of dollars)

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	24,647	170	24,177	3.13%	167
1A 1-4 Family 5%	5,011	94	5,011	1.88%	94
1A 1-4 Family 10%	1,938,180	22,763	1,937,175	1.13%	22,752
1B "Homeowners" - 1% or flat	1,409	44	1,409	3.13%	44
1B "Homeowners" 5%	194,912	4,117	159,541	1.88%	2,520
1B "Homeowners" 10%	1,295,050	12,732	779,073	1.13%	7,970
1B "Homeowners" 15% & up	360,191	1,540	357,505	0.63%	1,526
1B "Homeowners" 15% "Mini"	2,046,027	6,342	420,315	0.31%	1,304
1B "Homeowners" "Wrap"	38	1	38	1.56%	1
1C Wood Frame - small 5%	73,680	2,021	61,780	3.00%	1,740
1D Wood - other 5%	191,800	19,871	148,814	10.00%	15,666
1E Mobile Homes 2%	206,345	10,317	205,588	5.00%	10,279
2A Metal - small 5%	90,543	1,951	50,132	2.00%	1,055
2B Metal - other 5%	20,751	2,075	11,814	10.00%	1,181
3A Steel 5%	84,364	17,756	41,425	15.00%	6,664
3B Steel 5%	59,565	34,348	27,550	25.00%	9,813
3C Steel 10%	254,203	63,551	168,275	25.00%	42,069
4A Concrete 5%	91,247	28,957	15,679	20.00%	3,279
4B Concrete 5%	17,086	8,781	12,160	35.00%	4,220
4C Concrete 10 %	220,834	110,417	169,441	50.00%	84,720
4D Concrete 10 %	231	92	231	45.00%	92
5A Mixed 5%	340,543	132,500	182,652	25.00%	61,111
5B Mixed 10%	6,169	3,701	5,569	60.00%	3,342
5C Mixed 10%	174,916	131,184	130,389	75.00%	97,789
6 EQ resistive 5%	20,183	2,018	20,000	10.00%	2,000
Risks in above classes not written at standard deductible	1,097,065	191,227	901,780	xxx	85,395
Sub-Totals:	8,814,990	808,569	5,837,520		466,791

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	0	0	0	15.00%	0
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	0	0	0	20.00%	0
4B Concrete 5%	0	0	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	64,836	13,856	50,675	25.00%	10,316
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	128,430	12,843	93,513	10.00%	9,351
Risks in above classes not written at standard deductible	0	0	0	xxx	0
Sub-Totals:	193,266	26,699	144,188		19,667

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	477,879	234,741	349,409	193,635
(2) Commercial inland addenda	12,724	1,073	10,827	811
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	519,164	3,486	409,017	3,450
Sub-Totals:	1,009,768	239,299	769,253	197,895
ZONE TOTALS	10,018,023	1,074,567	6,750,961	684,353

ZONE G COUNTIES: Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Nevada, Placer
 Sacramento, San Joaquin, Stanislaus, Sutter, Tuolumne, Yolo, Yuba
 (In thousands of dollars)

Using Revised #s

Part I: Insurance on structures of 8 stories or less:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
1A 1-4 Family-1% or flat	15,321	66	15,287	1.75%	66
1A 1-4 Family 5%	15,895	159	15,895	1.00%	159
1A 1-4 Family 10%	497,664	6,560	495,974	0.63%	6,547
1B "Homeowners" - 1% or flat	6,947	286	6,947	1.75%	293
1B "Homeowners" 5%	641,787	13,808	545,481	1.00%	8,979
1B "Homeowners" 10%	3,460,325	27,756	1,777,162	0.63%	13,019
1B "Homeowners" 15% & up	534,252	1,952	528,334	0.38%	1,937
1B "Homeowners" 15% "Mini"	6,778,891	12,880	1,384,445	0.19%	2,631
1B "Homeowners" "Wrap"	606	5	606	0.81%	5
1C Wood Frame - small 5%	89,326	1,974	52,453	3.00%	1,223
1D Wood - other 5%	556,829	60,099	440,532	10.00%	47,769
1E Mobile Homes 2%	1,017,303	50,865	1,005,556	5.00%	50,277
2A Metal - small 5%	20,994	2,870	13,380	2.00%	2,717
2B Metal - other 5%	40,232	8,517	31,599	10.00%	7,653
3A Steel 5%	275,526	125,620	195,034	15.00%	74,307
3B Steel 5%	122,045	85,257	89,690	25.00%	56,083
3C Steel 10%	470,963	117,741	319,021	25.00%	79,756
4A Concrete 5%	192,813	47,779	25,551	20.00%	14,684
4B Concrete 5%	86,887	66,828	35,011	35.00%	14,833
4C Concrete 10 %	490,958	245,479	341,002	50.00%	170,501
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	787,608	346,967	415,443	25.00%	157,176
5B Mixed 10%	615	369	449	60.00%	269
5C Mixed 10%	374,381	280,775	260,133	75.00%	195,088
6 EQ resistive 5%	32,511	3,251	20,000	10.00%	2,000
Risks in above classes not written at standard deductible	2,764,733	596,681	2,116,733	xxx	276,939
Sub-Totals:	19,275,411	2,104,540	10,131,718		1,184,912

Part II: Insurance on structures of over 8 stories:

Column 1 Earthquake class and standard deductible (See Instructions)	Column 2 Aggregate Direct Liability	Column 3 Aggregate Direct PML	Column 4 Aggregate Liability Net of Reinsurance	Column 5 Minimum PML Percentage	Column 6 Estimated PML on Net Liability
3A Steel 5%	25,000	18,825	14,956	15.00%	8,782
3B Steel 5%	0	0	0	25.00%	0
3C Steel 10%	0	0	0	25.00%	0
4A Concrete 5%	20,000	20,000	12,300	20.00%	4,460
4B Concrete 5%	2,500	2,500	0	35.00%	0
4C Concrete 10 %	0	0	0	50.00%	0
4D Concrete 10 %	0	0	0	45.00%	0
5A Mixed 5%	132,887	33,088	97,354	25.00%	22,727
5B Mixed 10%	0	0	0	60.00%	0
5C Mixed 10%	0	0	0	75.00%	0
6 EQ resistive 5%	270,954	27,095	188,196	10.00%	18,820
Risks in above classes not written at standard deductible	39,323	368	34,605	xxx	360
Sub-Totals:	490,664	101,877	347,411		55,149

Part III: Other types of risks:

	Column 1 Aggregate Direct Liability	Column 2 Aggregate Direct PML	Column 3 Aggregate Liability Net of Reinsurance	Column 4 Estimated PML on Net Liability
(1) Class 7 and commercial inland Exceptions	765,269	339,277	476,463	209,194
(2) Commercial inland addenda	27,725	2,768	26,859	2,651
(3) Liabilities assumed: pools and associations (e.g., FAIR Plan, IRI)	0	0	0	0
(4) All other (e.g., earthquake, sprinkler leakage)	1,909,256	25,191	1,588,987	19,580
(5) 100% of amounts for over 8 stories: Carson City and County, plus Douglas and Washoe counties, all in Nevada:	0	0	0	0
Sub-Totals:	2,702,250	367,236	2,092,309	231,425
ZONE TOTALS	22,468,325	2,573,652	12,571,438	1,471,486