



CALIFORNIA EARTHQUAKE AUTHORITY (CEA)

ANNUAL REPORT TO THE LEGISLATURE AND THE CALIFORNIA INSURANCE COMMISSIONER ON CEA PROGRAM OPERATIONS

Report for Calendar Year 2019

(Pursuant to California Insurance Code section 10089.13, subdivision (a))

Date of Report: August 1, 2020

Brief Background: California Earthquake Authority

The California Earthquake Authority (CEA) was formed through legislation in 1995 and 1996 to address primarily a homeowners-insurance-availability crisis that followed the 1994 Northridge earthquake. After that earthquake, many homeowners found it difficult, and in some cases impossible, to find basic homeowners insurance. Many others were faced with the prospect of having their homeowners insurance non-renewed as insurance companies tried to shed their exposure to earthquake risk.

Because state law required (and still requires) insurers to offer earthquake insurance to both residential policy applicants and current residential policyholders, the insurers' retreat from the California market resulted in an availability crisis for homeowners earthquake insurance. The California Department of Insurance ("CDI") reported in summer 1996, at the height of the crisis, that 95 percent of the homeowners-insurance market had either stopped or severely restricted sales of new homeowners policies.

After CEA began operations on December 2, 1996, the recovery of the California homeowners-insurance market was dramatic and swift. A Department of Insurance report noted that at the peak of the availability crisis, 82 insurers had restricted the sale of new homeowners policies—by contrast, by October 1997 and with CEA operations in full swing, only three insurers were restricting the sale of new homeowners policies.

Today, CEA is the largest earthquake insurer in California with over 65% of the residential-earthquake-insurance market. CEA participating insurers are responsible for almost 80% of California's residential property insurance.

Current Market Conditions

California's Residential Property Insurance Market

The CDI year-end-2019 data indicate a decrease in policy numbers in the statewide residential property insurance market: In 2019, insurers sold 11.9 million homeowners policies, which is a slight reduction of the previous year's 12 million. (See Attachment A: *California Department of Insurance, Summary of 2019 Residential Market Totals.*)

Statewide totals, for all insurers that wrote residential property insurance in California in 2019:

- Residential Single-Family Dwelling Policies: 6,093,914
- Residential Condominium Policies: 924,066
- Mobilehome Policies: 278,941
- Residential Rental Policies: 2,628,763
- Dwelling Fire Policies: 2,008,775

California's Residential Earthquake Insurance Market – 2019

Based on the total number of residential earthquake insurance policies written in 2019, CEA and non-CEA companies together accounted for 1.66 million earthquake insurance policies statewide—an increase from 2018's 1.58 million.

CEA Earthquake Response in 2019

Millions felt the shaking from the 6.4 magnitude earthquake that struck Southern California on the morning of the Fourth of July, which jolted the Kern County community of Ridgecrest/Searles Valley. Thousands of aftershocks followed and the next night a magnitude 7.1 earthquake struck the same area. The 2019 Ridgecrest Earthquakes were California's biggest in nearly two decades. Damage estimates for the Ridgecrest earthquakes topped \$1 billion according to U.S. Geological Survey. There were several other smaller earthquakes resulting in very few claims and damages reported. In total, CEA received a total of 722 claims, with paid claims totaling \$1,175,799, and remaining loss reserves totaling slightly over \$385,000.

CEA held its annual meeting and seminar for CEA Participating Insurer Claim and Operations Liaisons on May 7, 2019. The morning session covered updates from the CEO, marketing activities at the CEA, and CEA research and mitigation. The Insurance and Claim Director led the group with claim scenarios using the enhancements and features of the deductible and claim payment calculator, in addition to an exercise on how to recognize and evaluate earthquake damage. The attendees spent the remainder of the afternoon receiving an update from Team ATC 143 on CUREE General Guidelines refresh and a sneak peek at the new Engineering Guidelines.

CEA Operational Developments in 2019

CEA Policy Growth and Development

CEA ended 2019 with 1,111,664 policies in force, a 5.79% increase over year-end 2018.

The first half of 2019 CEA gained a total of 6,289 policies. After the Ridgecrest earthquakes in July, CEA gained 23,861 earthquake insurance policies, the second-largest monthly net increase in CEA's 23-year history.

At year-end 2019:

- There were 144,688 Homeowners Choice¹ policyholders, an increase of 30.62%.
- There were 3,798 Mobilehome Choice policyholders, an increase of 26%.
- The 5% Deductible option has seen the following increases:
 - 27% for Homeowners Standard
 - 52% for Homeowners Choice
 - 24% for Mobilehome Standard
 - 42% Mobilehome Choice
- More policyholders continue to select higher coverage limits on their personal-property coverage.
- Additional living expense (ALE) coverage, also known as Loss of Use coverage, is seeing an increase in higher coverage limits:
 - \$50K - 38% increase
 - \$75K - 45% increase
 - \$100K – 54% increase
- The purchase of coverage for breakage of personal property and for damage to exterior masonry veneer increased by over 32%.

Communications

CEA marketing and advertising in 2019 responded through many outlets, reaching out to California consumers, a majority of whom say they want more information about earthquake risk and earthquake insurance:

- CEA delivered over 1.6 billion media impressions in English, Spanish, and Chinese through 42 TV stations, 66 radio stations, an email/direct-mail program to highly targeted prospects, outdoor transit posters, and online platforms.
- CEA sponsored the Disaster Preparedness Guides for the *San Francisco Chronicle* and the *San Diego Union Tribune*, as well as the **San Diego Association of Realtors Expo** and the Bay Area's **Sing Tao Expo**.

¹ CEA earthquake insurance for homeowners allows you to choose between two policies. The standard Homeowners bundled coverage or the Homeowners Choice where you can purchase separate policy options.

- For the 30th Anniversary of the October 17, 1989 Loma Prieta Earthquake, CEA ran print advertising in 11 San Francisco Bay Area newspapers, and sponsored anniversary television specials on the following San Francisco TV stations: KRON, KSBW, KTVU, KSTS, and KNTV.

Annual Direct Mail

- 11,915 pieces of direct mail delivered to CEA policyholders
- 597,532 pieces of direct mail through agents to earthquake-insurance prospects
- 3.9 million emails and 517,000 pieces of direct mail through an email trigger campaign
- 784,372 Mandatory Marketing Documents

It Could Happen Today

In 2019, CEA continued its advertising/creative approach of “It Could Happen Today,” adding a new TV commercial that focused on additional product elements, as well an additional commercial with a testimonial from a San Diego-area couple.

Marketing Value Program

CEA’s Marketing Value Program (MVP), which delivered about 597,532 pieces of direct mail through agents trained to sell CEA policies, completed its ninth year of operation in 2019.

Custom-fulfilled direct mail in the name of CEA participating-insurance-company agents focused on generating new CEA-policy sales and renewal of existing CEA policies. CEA offered agent training in-person, online, and through webinars, training a total of 1,855 agents (1,592 licensed and 263 unlicensed) and increasing the number of agents engaged enrolled in MVP to 1,240 agents.

Supporting the *Great California ShakeOut*TM

CEA continued its significant role in promoting participation in the *Great California ShakeOut*TM statewide earthquake drill, which saw 10.8 million Californians participate in 2019.

Get Prepared, California!

CEA joined forces with the American Red Cross again in 2019 to promote its eighth annual statewide auction at GetPreparedCalifornia.org, which delivered more than 32 million media impressions promoting earthquake preparedness and generated \$175,882 to benefit Red Cross and earthquake-preparedness in California. Total money raised by the *Get Prepared, California!* Auction over the eight years now exceeds \$1,405,000.

Stakeholder Outreach

Results from CEA’s 2019 stakeholder outreach include:

- 114 civic events and presentations, in 68 cities, to Chambers of Commerce, Rotary Clubs, Kiwanis Clubs, real estate agents, homeowner associations, neighborhood councils, rental-housing associations, and various preparedness fairs.
- Distributing news releases, media advisories, and public-service announcements.
- Coordinating statewide media spokespersons and a media database.
- Hosting press availabilities for preparedness stakeholders.
- Distributing direct mail in English, Spanish, and Chinese.
- Hosting information booths at ethnic-community festivals.
- Sponsoring a “preparedness team” at community events.

Mitigation Program Development

The CEA law directs the CEA Governing Board to annually set aside five percent of the CEA’s investment income (as long as the set-aside is actuarially sound) up to five million dollars, to be used for activities that mitigate seismic risks of vulnerable residential structures in California. This includes programs to provide financial assistance to those who mitigate their homes against seismic risk.

In 2019, the CEA mitigation program coordinated projects in three focused areas:

1. Guidelines Development

The ATC 110 earthquake-guidelines-development project, first phase, completed on June 20, 2018. Now called FEMA P-1100, Vulnerability-Based Seismic Assessment and Retrofit of One- and Two-Family Dwellings, the bulk publication consists of three volumes:

- Volume 1, Prestandard publication (published October 2019)
- Volume 2, FEMA plan set (published November 2019)
- Volume 3, background documents (completed November 2019)

The second phase of this project consists of developing a training program for Contractors, Building Officials, and Engineers. A training outline has been drafted and the program is currently being developed. This phase is estimated to be completed in Q4 2020.

The third phase will involve CEA working closely with FEMA and the International Code Council (ICC) to adopt the guidelines as industry standards, which paves the way for adoption into California’s building code. Additionally, by creating a uniform seismic-retrofit-design method for homeowners, contractors, and engineers, the new guidelines will help the CEA and others (1) establish and expand incentive programs to encourage seismic retrofits, such as that of the California Residential Mitigation Program, and (2) enhance the CEA’s ability to develop and provide suitable mitigation discounts for CEA-insured homeowners.

2. Earthquake Brace + Bolt Program (EBB)

The EBB program was developed to help homeowners lessen the potential for damage on their houses during an earthquake. A residential seismic retrofit strengthens an existing older house, making it more resistant to earthquake activity. The seismic retrofit involves bolting the house to its foundation and adding bracing around the perimeter of the crawl space. EBB offers eligible Californians a grant of up to \$3,000 to help pay for a seismic retrofit.

In 2013, the EBB pilot program randomly selected houses in two ZIP Codes in Los Angeles and two ZIP Codes in Oakland. Between the two areas, eight houses completed seismic retrofits by April 2014, in whole or in part using EBB grants. By 2019, the program had expanded to 255 ZIP Codes and by year end had completed 8,500 retrofits.

In addition to CEA's mitigation funding, EBB has received \$6 million (provided through two appropriations from the State of California) and a \$300,000 grant (provided through FEMA's Hazard Mitigation Grant Program). This federal grant was directed to 100 "Napa EBB" retrofits: code-based mitigation measures for houses specifically located within the City of Napa. The Napa program closed in June 2018 with 84 completed retrofits. CEA also has applied for several more federal grants and have been awarded \$23 million in two grants to retrofit up to 7,600 houses statewide.

In October 2016, CEA piloted the CEA Brace + Bolt (CEA BB) program, which is available solely to CEA policyholders and is funded directly from CEA capital. Ninety-eight policyholders completed the 2016 program. A new CEA BB program began in 2019 and by the end of the year an additional 178 CEA policyholders had completed retrofits.

3. Research Program Development

Annual Research Forum

On September 17, 2019, experts from academic, government, and private organizations met at the CEA's third annual research forum to discuss how best to collect information about earthquakes and the damage they cause, so that findings can be used to improve building safety faster.

The forum, held in Sacramento, featured round-table discussions about how data was collected following the 1994 Northridge earthquake and how methods then differed, both in timing and sophistication, from how the engineering and scientific communities are evaluating the July 2019 Ridgecrest earthquakes today.

The afternoon session of the forum featured presentations from the Pacific Earthquake Engineering Research Center and California Geological Survey on studying and collecting data about ground motion for the Ridgecrest earthquakes, with round-table discussions among the approximately 50 attendees following the presentations.

Cripple-Wall-Performance Effects

The CEA contracted with the Pacific Earthquake Engineering Research (PEER) Center in September 2016 to lead CEA’s research project, “Quantifying the Performance of Retrofit of Cripple Walls and Sill Anchorage in Single Family Wood-frame Buildings.” With this project, CEA will have refined scientific data to inform CEA rate levels and premium discounts. This project is scheduled to be completed in Q3 2020.

CEA Damage-Assessment Guidelines

In 2007, CEA provided major funding for the Consortium of Universities for Research in Earthquake Engineering (CUREE), whose work produced the “Assessment and Repair of Earthquake Damage” project—a set of guidelines for “...a sound technical basis for use by engineers, contractors, owners, the insurance industry, building officials, and others in the post-earthquake context. Based on experimental and analytical research and a broad discussion of the issues involved, the guidelines... facilitate improved consistency in the evaluation of building damage and the associated need for repairs.”

CUREE disbanded in December 2016, leaving a void in maintaining and updating the Guidelines. To ensure Guidelines continuity, CEA contracted with Applied Technology Council in May 2018 to update the existing CUREE Guidelines (renaming them to the “Earthquake Damage Assessment and Repair Guidelines for Residential Wood-Frame Buildings”) and to develop companion engineering guidelines.

The new guidelines are being finalized and are expected to be available in Q2 2020.

UCERF 3 Analysis

The UCERF3 model represents a substantial advancement in science. It is also complex, yielding more than 250,000 fault-based ruptures—25 times more than the UCERF2 model. To deal with the complexity, work is required to identify which of the UCERF3 model’s “branches” most influence modeled results.

The CEA contracted with the Southern California Earthquake Center (SCEC) to manage and carry out the further efforts and collaboration of the UCERF3 research participants. USGS and SCEC have leading roles in the development, progress, and quality control of the project, with oversight and appropriate management provided by the CEA Research Department. The project is scheduled to be completed December 2020.

Financial Report

Revenue Bonds

In 2014 the CEA issued \$350,000,000 in investment-grade (non-full-faith-and-credit of the State of California) revenue bonds, with varying maturities.

- On July 1, 2016, the two-year bond (in the amount of \$40,000,000) matured, leaving an outstanding balance of \$310,000,000.
- On July 1, 2017, the three-year bond (in the amount of \$60,000,000) matured, and the CEA reduced the principle balance on the five-year bond by \$40,000,000. This left an outstanding balance of \$210,000,000.
- On July 1, 2018, the CEA reduced the principle balance of the five-year bond by \$105,000,000, leaving an outstanding balance of \$105,000,000.
- On July 1, 2019, the CEA reduced the principle balance of the five-year bond by \$105,000,000. The bonds were paid in full.

On March 17, 2020 CEA issued Series 2020A revenue bonds totaling \$400,000,000, summarized as follows:

<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Price or Yield</u>	<u>Maturity Date</u>
\$400,000,000	1.300%	1.300%	July 1, 2020

CEA made a debt service deposit for the Series 2020A bonds that will pre-fund principal and interest payments due upon maturity and are invested in Treasury money market funds. The Series 2020A bonds will be repaid by pledged revenues, which consist of pledged policyholder premiums (defined as premiums for basic residential earthquake policies net of participating insurer costs) and interest and other income from investment of funds held by the trustee and debt service deposits. The proceeds of the revenue bonds were deposited in the 2020A claims paying account and the interest earnings will help to offset the interest costs on the revenue bonds.

Financial-Stability Ratings

During 2019, CEA continued to be rated by the A. M. Best Co. as “A-Minus (Excellent), with a stable outlook.”

Best’s rating framework continues to recognize the CEA’s “excellent risk-adjusted capitalization, financial flexibility, extensive risk modeling capabilities, sophisticated management practices, and conservative investment policy.”

Attachment A: California Department of Insurance Summary: 2019 Residential Market Totals

EARTHQUAKE PREMIUM AND POLICY COUNT DATA CALL

SUMMARY OF 2019 RESIDENTIAL MARKET TOTALS

2019 Experience Year	Written Premiums Excluding EQ	No. of Policies Excluding EQ	Exposure Excluding EQ	Avg Prem Per Policy Non-EQ	Avg Rate Per \$1,000 Insurance Non-EQ	Market Share* Non-EQ	Written Premiums EQ	No. of Policies EQ	Exposure EQ Including CEA	Avg Prem Per Policy EQ	Avg Rate Per \$1,000 Insurance EQ	Market Share* EQ	% with EQ**
Insurers with EQ coverage provided by California Earthquake Authority (CEA)	\$ 7,448,088,823	9,075,692	\$ 2,904,060,024,115	\$ 820.66	\$ 2.56	76.05%	\$ 809,028,617	1,111,665	\$ 527,602,015,888	\$ 727.76	\$ 1.53	67.05%	12.25%
Insurers with EQ coverage provided by Non-CEA	2,428,895,716	2,858,767	1,051,160,728,002	849.63	2.31	23.95%	477,645,953	546,185	241,672,625,989	874.51	1.98	32.95%	19.11%
Total Residential Market	\$ 9,876,984,539	11,934,459	\$ 3,955,220,752,117	\$ 827.60	\$ 2.50	100.00%	\$ 1,286,674,570	1,657,850	\$ 769,274,641,877	\$ 776.11	\$ 1.67	100.00%	13.89%
Total Homeowners Market	\$ 7,539,100,753	6,093,914	\$ 3,086,550,356,669	\$ 1,237.15	\$ 2.44	51.06%	\$ 1,122,610,237	1,005,842	\$ 697,854,404,134	\$ 1,116.09	\$ 1.61	60.67%	16.51%
Total Renters Market	439,339,368	2,628,763	77,179,731,062	167.13	5.69	22.03%	28,212,426	370,905	12,212,320,724	76.06	2.31	22.37%	14.11%
Total Condominium Market	543,635,174	924,066	52,346,113,063	588.31	10.39	7.74%	72,473,112	147,640	19,213,242,981	490.88	3.77	8.91%	15.98%
Total Dwelling Fire Market	1,156,667,067	2,008,775	709,855,653,553	575.81	1.63	16.83%	51,916,266	76,780	32,584,330,733	676.17	1.59	4.63%	3.82%
Total Mobilehome Market	198,242,178	278,941	29,288,897,770	710.70	6.77	2.34%	11,462,529	56,683	7,410,343,305	202.22	1.55	3.42%	20.32%
Total Residential Market	\$ 9,876,984,539	11,934,459	\$ 3,955,220,752,117	\$ 827.60	\$ 2.50	100.00%	\$ 1,286,674,570	1,657,850	\$ 769,274,641,877	\$ 776.11	\$ 1.67	100.00%	13.89%
California FAIR Plan	\$ 201,511,809	167,105	\$ 86,240,034,019	\$ 1,205.90	\$ 2.34	8.32%	\$ 3,999,764	4,094	\$ 2,348,248,482	\$ 976.98	\$ 1.70	5.33%	2.45%
Total Dwelling Fire (Excluding CA FAIR Plan)	955,155,258	1,841,670	623,615,619,534	518.64	1.53	91.68%	47,916,502	72,686	30,236,082,251	659.23	1.58	94.67%	3.95%
Total Dwelling Fire Market	\$ 1,156,667,067	2,008,775	\$ 709,855,653,553	\$ 575.81	\$ 1.63	100.00%	\$ 51,916,266	76,780	\$ 32,584,330,733	\$ 676.17	\$ 1.59	100.00%	3.82%

* Market share represents the percentage of policies to total residential market.

** Percent with EQ represents the percentage of policies that also have EQ coverage.

**Attachment B: Financial Statement
California Earthquake Authority: Annual Financial Report**

In accordance with California Insurance Code sec. 10089.13, subdivision (b), the California Earthquake Authority reports its finances as of December 2019:

**Balance Sheet
As of December 31, 2019**

	2019
Assets and Deferred Outflows of Resources	
Current assets:	
Cash and investments:	
Cash and cash equivalents	\$ 128,649,686
Restricted cash and equivalents	8,675,765
Investments	<u>6,880,260,755</u>
Total cash and investments	7,017,586,206
Premiums receivable, net of allowance for doubtful accounts of \$ 6,156,102 and \$ 5,346,462	73,539,876
Interest receivable	27,711,837
Prepaid reinsurance premium	20,840,283
Prepaid transformer maintenance premium	3,783,920
Other current assets	<u>1,825,307</u>
Total current assets	7,145,287,429
Noncurrent assets:	
Capital assets, net	<u>152,485</u>
Total assets	<u>7,145,439,914</u>
Deferred Outflows of Resources	
Related to pensions	<u>3,170,535</u>
Total assets and deferred outflows of resources	<u>\$ 7,148,610,448</u>
Liabilities and Deferred Inflows of Resources	
Current liabilities:	
Unearned premiums	\$ 423,593,078
Accounts payable and accrued expenses	15,006,680
Loss and loss expense reserves	3,815,000
Compensated absences - current portion	546,259
Securities payable	3,120,551
SB 84 loan payable - current portion	<u>164,497</u>
Total current liabilities	446,246,065
Noncurrent liabilities:	
SB 84 loan payable	926,503
Net pension liability	9,621,334
Compensated absences	<u>519,479</u>
Total liabilities	457,313,381
Deferred Inflows of Resources	
Related to pensions	<u>386,030</u>
Total liabilities and deferred inflows of resources	<u>457,699,411</u>
Net Position	
Net investment in capital assets	152,485
Restricted, expendable	13,315,861
Unrestricted	<u>6,677,442,691</u>
Total net position	<u>6,690,911,037</u>
Total liabilities and deferred inflows of resources, and net position	<u>\$ 7,148,610,448</u>

Attachment B: Financial Statement (Continued)
California Earthquake Authority: Annual Financial Report

Statement of Revenues, Expenses, and Changes in Net Position
For the Year Ended December 31, 2019

	2019
Underwriting income:	
Premiums written	\$ 816,640,879
Less premiums ceded - reinsurance	(373,457,574)
Net premiums written	443,183,305
Change in unearned premiums	(6,144,877)
Net premiums earned	437,038,428
Operating expenses:	
Loss and loss adjustment expenses	4,875,685
Participating insurer commissions	81,673,616
Participating insurer operating costs	26,346,131
Reinsurance broker commissions	2,800,000
Premium taxes	19,202,293
Other underwriting expenses	64,133,748
Total operating expenses	199,031,473
Underwriting profit	238,006,955
Non-operating income and expenses:	
Net investment income	248,719,233
Other income	478,489
Grant revenue	746,215
Grant expenses	(746,215)
Investment income on bond proceeds, net of related expenses	1,680,322
Mitigation Fund expenses	(1,665,700)
California Residential Mitigation Program contribution	(6,300,000)
State of California premium tax contribution	19,202,293
Total of non-operating income and expenses	262,114,637
Increase in net position	500,121,592
Net position, beginning of year	6,190,789,445
Net position, end of year	\$ 6,690,911,037

Attachment C: Summary of CEA Claim-Paying Capacity

In accordance with California Insurance Code sec. 10089.13, subdivision (c), the California Earthquake Authority reports this separate financial summary of its claim-paying capacity as of June 30, 2020.

Available Capital

	Base
Cash & Investments	\$ 7,727,109,132
Earthquake Loss Mitigation Fund Cash & Investments	(8,555,348)
Interest, Securities & Restricted Securities Receivable	26,662,222
Premiums Receivable	96,225,078
Other Assets + California Wildfire Fund (AR) + FEMA (AR)	4,681,840
Revenue Bonds and Restricted Receivables	(1,147,190,253)
Debt Service (Interest, Principal & Debt Service (Min. Bal.))	(401,495,890)
Unearned Premium Collected	(307,156,393)
Accounts & Securities Payable, and Accrued Expenses	(17,311,180)
Loss Reserve	(1,143,253)
Total Available Capital	5,971,825,954

Assessments

Available for assessment in 2nd IA Layer	1,663,000,000
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Reinsurance

Risk Transfer - Available in all layers	8,525,000,000
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Bonds

Revenue Bond Proceeds	1,147,000,000
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Policyholder Surcharges

Surcharges assessed	1,000,000,000
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Total Capacity	\$ 18,306,825,954
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