



**GOVERNING BOARD MEETING
WEDNESDAY, DECEMBER 11, 2019
9:00 A.M.**

**California Earthquake Authority
Main Conference Room
801 K Street, Suite 1000
Sacramento, California 95814**



Date of Notice: Tuesday, November 26, 2019

PUBLIC NOTICE

A PUBLIC MEETING OF THE GOVERNING BOARD OF THE CALIFORNIA EARTHQUAKE AUTHORITY

NOTICE IS HEREBY GIVEN that the Governing Board of the California Earthquake Authority (“CEA”) will meet in Sacramento, California. Pursuant to California Insurance Code §10089.7, subdivision (j), the Bagley-Keene Open Meeting Act applies generally to meetings of the Board, and the meeting is open to the public—public participation, comments, and questions will be welcome for each agenda item. All items are appropriate for action if the Governing Board wishes to take action. Agenda items may be taken out of order. **Pursuant to Insurance Code §10089.55, please take further notice that this meeting relates to the business of earthquake insurance conducted by CEA.**

LOCATION: California Earthquake Authority
801 K Street, Suite 1000
Sacramento, California

DATE: Wednesday, December 11, 2019

TIME: 9:00 a.m.

This meeting of the Governing Board will be broadcast live on the Internet. Please wait until the official start time of the meeting before clicking the icon:



Or please use +1 323-886-4439
Conference ID number 214 039 547#
For a telephonic audio feed

If you are unable to hear the meeting, please call CEA directly at (916) 661-5001 for assistance.

*** Because of facility limitations at this location, this Governing Board meeting will not be available as streaming video on the Internet, but may be listened to remotely as noted above. Please note that Public participation and comments will be available only at the meeting location.**

AGENDA:

Preliminary Matters

1. Call to order and member roll call:

Governor
Treasurer
Insurance Commissioner
Speaker of the Assembly
Chair of the Senate Rules Committee

Establishment of a quorum

2. Consideration and approval of the minutes of the September 25, 2019, CEA Governing Board meeting.
3. Consideration and approval of the 2020 Governing Board meeting calendar.

CEA Enterprise – Executive and Operations Reports

4. Executive Report by Chief Executive Officer Glenn Pomeroy, which will include among other things a report on legislative activities of interest to CEA, and CEA's quantitative business metrics.
5. Chief Financial Officer & Chief Insurance Operations Officer Tom Hanzel will present to the Board the CEA financial and insurance operations report.
6. Mr. Pomeroy and Mr. Hanzel will present the proposed 2020 CEA insurance-services budget for Board consideration and approval.
7. Mr. Hanzel will seek approval to contract with a financial auditor firm.
8. Mr. Hanzel will present to the Board the CEA staff's proposed 2020 Risk-Transfer Strategy.
9. Enterprise & Strategic Risk Advisor Dr. Laurie Johnson will deliver a quarterly report to the Board on the CEA enterprise-risk-management-program, staffing of ERM functions in 2020, and activities related to post-event planning.
10. Mr. Pomeroy will propose, for Board approval, a proposal to revise CEA's contract with its Chief Actuary to expand and upgrade duties and title to that of Chief Risk Officer.

Insure – Matters Related to CEA's Insurance Business

11. Mr. Hanzel and Chief Information Officer Michael Melavic will provide a status report on CEA's Centralized Policy Processing program (CPP).
12. Mr. Hanzel will seek Board approval to renew and extend the term of CEA's existing contract with catastrophe-loss modeling firm, AIR-Worldwide.
13. Mr. Hanzel will present for Board approval the first annual risk-capital surcharge for CEA participating insurer AMICA Mutual Insurance Company.

Mitigate – Matters Related to CEA’s Mitigation & Research Missions

- 14. Mr. Hanzel will recommend to the Board transferring money from the CEA Earthquake Loss Mitigation Fund to the California Residential Mitigation Program (“CRMP”), a joint powers authority whose members are the California Governor’s Office of Emergency Services and CEA.
- 15. Chief Mitigation Officer Janiele Maffei will update the Board on 2019 developments in the CEA mitigation programs (CRMP Earthquake Brace+Bolt, and CEA Brace+Bolt) and the CEA Research Program.
- 16. Mr. Hanzel and Ms. Maffei will present for Board consideration and approval the proposed 2020 CEA mitigation-program budget.

Educate – Matters Related to CEA’s Educate Mission

- 17. Chief Communications Officer Chris Nance will provide 2019 Communications & External Affairs programming results.

CONCLUSION

- 18. The Board will meet in closed session to discuss personnel matters and litigation matters, as permitted by California Government Code section 11126, subdivisions (a) and (e).
- 19. Public comment on matters that do not appear on this agenda and requests by the public that those matters be placed on a future agenda.
- 20. Adjournment.

For further information about this notice or its contents:

General Information:

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To view this notice on the CEA website or to learn more about CEA, please visit www.EarthquakeAuthority.com.

Persons with disabilities may request special accommodations at this or any future Governing Board meeting or may request the accommodation necessary to receive agendas or materials CEA prepares for its Board meetings. Please contact Shannon McEuen by telephone, toll free, at (877) 797-4300 or by email at CEABoardLiaison@calquake.com. We would appreciate hearing from you at least five days before the meeting date to best allow us to meet your needs.

NOTE: If in the future you do not wish to receive public notices pertaining to CEA, please send your request by email to CEABoardLiaison@calquake.com.

DRAFT

CALIFORNIA EARTHQUAKE AUTHORITY GOVERNING BOARD MEETING MINUTES

**Wednesday, September 25, 2019
9:00 a.m.**

Location: California Earthquake Authority
Main Conference Room
801 K Street, Suite 1000
Sacramento, California

Members of the Governing Board in attendance:

Mark Ghilarducci, designee of Governor Gavin Newsom, Board Chair
Kasey O'Connor, designee of State Treasurer Fiona Ma
Michael Martinez, designee of Insurance Commissioner Ricardo Lara
Jeffrey Wood, designee of Speaker of the Assembly Anthony Rendon
Craig Fry, designee of Chair of the Senate Rules Committee Toni Atkins

Members of the CEA Staff in attendance:

Glenn Pomeroy, Chief Executive Officer
Tom Hanzel, Chief Financial Officer and Chief Insurance Operations Officer
Laurie Johnson, PhD, Enterprise & Strategic Risk Advisor
Shannon McEuen, Governing Board Liaison
Michael Melavic, Chief Information Officer
Kellie Schneider, Chief Operations Officer
Tom Welsh, General Counsel

Also present:

No members of the public addressed the Governing Board

Preliminary Matters

1. Call to order and member roll call.

Chair Mark Ghilarducci called the meeting to order at 9:05 a.m. A quorum was achieved.

2. Consideration and approval of the minutes of the June 12, 2019, CEA Governing Board meeting.

MOTION: Mr. Martinez moved approval of the June 12, 2019, California Earthquake Authority Governing Board Meeting Minutes as presented. Ms. O'Connor seconded. Motion carried unanimously.

3. Consideration and approval of the minutes of the July 15, 2019, CEA Governing Board meeting.

MOTION: Ms. O'Connor moved approval of the July 15, 2019, California Earthquake Authority Governing Board Meeting Minutes as presented. Mr. Martinez seconded. Motion carried unanimously.

CEA Enterprise – Executive and Operations Reports

4. Executive Report by Chief Executive Officer Glenn Pomeroy, which will include an update for the Board on legislative activities of interest to the CEA.

Glenn Pomeroy, Chief Executive Officer, provided an overview, with a slide presentation, of the impact of the Ridgecrest Earthquakes, growth in policies in force over the years, CEA Advisory Panel, federal legislation, and community outreach efforts since the last meeting. He stated the top candidate has been selected for the Chief Information Security Officer position and is close to being finalized.

Questions and Discussion

Mr. Martinez asked for a presentation at a future Board meeting on the CEA Annual Culture Survey results. It is good for the Board to better understand the health of the organization.

Ms. O'Connor asked if the increase in policies was a response to the Ridgecrest earthquakes and how the number of policies compared north and south. Mr. Hanzel stated it is difficult to say if the increase was due to the Ridgecrest earthquakes or to the new Rate and Form Filing a few days prior to the earthquakes. Better insight of the trends will be presented at the December Board meeting.

Mr. Pomeroy added that the greater growth was seen in Southern California.

Mr. Wood asked to see the policy increase by ZIP Code, region, or county. He stated it would be interesting to note the number of new policies following a major marketing campaign.

Mr. Wood asked for clarification on the claims submitted from renters for the Ridgecrest earthquakes. Mr. Pomeroy stated renter's earthquake policies are for contents only.

Mr. Wood asked about the two vacancies on the CEA Advisory Panel. Mr. Pomeroy stated they are gubernatorial appointees that have yet to be filled.

Mr. Wood asked who would be an ideal Advisory Panel member. Mr. Pomeroy stated besides insurance companies and agents, the Legislature envisions a voice of the consumer on the Advisory Panel, such as a teacher or a fire district official.

Mr. Wood suggested no-cost emergency management training for individuals in the insurance field.

Mr. Martinez suggested considering the Advisory Panel's background categories and ability to provide the original intent of why it was initially created in statute to provide a heightened or repurposed role for the Advisory Panel.

Mr. Wood suggested a joint meeting with the Board and the Advisory Panel so Advisory Panel members could see the bigger picture. He suggested that the Chair or members of the Board attend an Advisory Panel meeting. Mr. Pomeroy stated the anti-trust consideration is a challenge for the Advisory Panel; it constrains their ability to offer much.

Mr. Martinez asked about the CEA-supported Assembly Bill (AB) 548, which was recently signed by the governor. Mr. Welsh stated AB 548 directs the CEA to target disadvantaged communities when money is appropriated by the Legislature to fund mitigation programs; and modifies a pre-existing provision of the statute that puts a cap on the grant amount and funds 75 percent of the retrofit project. Staff is working on a program to implement this, which will have carryover effects for residual funding previously appropriated by the Legislature and will help inform the California Residential Mitigation Program (CRMP) and the Earthquake Brace + Bolt (EBB) program about how to target communities to achieve the Legislature's directive to focus on vulnerable communities.

5. Chief Operations Officer Kellie Schneider will present to the Board the quantitative business metrics report.

Kellie Schneider, Chief Operations Officer, reviewed the Business Metrics Report, which was included in the meeting packet. She noted that a new metric was added July 1st tied to the CEA Finance Department in issuing financial statements and ensuring that they are completed by the 10th business day of the month.

Questions and Discussion

Chair Ghilarducci asked how staff assures the metrics stay green. Ms. Schneider stated the metrics are assessed quarterly and are tied to the strategic plan.

6. Ms. Schneider will report on the status of the procurement of a Human Resource Management System software.

Ms. Schneider stated staff is finalizing the process of bringing a human resources management system into CEA to centralize payroll and processes and is planning to ask for Board approval at the December meeting to execute a contract for the software. She stated staff is also finalizing a Request for Proposal (RFP) for a ticketing system for the Centralized Policy Processing Platform (CPP). This will not require Board approval.

Questions and Discussion

Chair Ghilarducci asked for verification that this resource management system is being designed to track employees from different aspects. Ms. Schneider stated that is correct.

Mr. Fry asked if Dr. Johnson had been consulted about including in the RFP the continuity of management operations during a crisis situation. Ms. Schneider stated the RFP will ensure that the vendors are cloud-based and secure and that employees can continue to operate post-event.

Mr. Melavic stated the need for the IT system to maintain high-availability.

Chair Ghilarducci asked if the CEA has a business continuity plan.

Ms. Schneider stated it does and, in fact, will be doing a tabletop exercise tomorrow on a reconstitution plan.

Chair Ghilarducci asked if every employee participates in these exercises, including executive-level employees. Ms. Schneider stated the exercises

are currently for internal operations but will be rolled out to the executive team in the future.

Mr. Martinez asked if the resource management system has much interaction with Fi\$Cal. Ms. Schneider stated Fi\$Cal is on the finance side and is tied to state agencies and budgets. CEA is not part of the state's budget and, as such, does not participate in Fi\$Cal.

7. Chief Financial Officer & Chief Insurance Operations Officer Tom Hanzel will present to the Board the CEA financial and insurance operations report.

Mr. Hanzel provided an overview, with a slide presentation, of the CEA financial information as of July 31, 2019. He noted that the net premiums earned continues to sit in the high 40 percent range. Nearly 50 cents of every dollar brought in goes to risk-transfer partners to help build the claims-paying tower.

Questions and Discussion

Chair Ghilarducci asked if the CEA can increase the net premiums earned. Mr. Hanzel stated the CEA currently needs to leverage to get to that 1-in-400-year event level. The CEA is required to meet that 400-year level and so must find ways to build the claims-paying capacity. Mr. Pomeroy's idea of Senate Bill (SB) 254 would be a way for net premiums earned to increase.

Mr. Pomeroy stated SB 254 would allow the CEA to manage to a 1-in-250-year event level, which is what most insurance companies do when they take on earthquake risk. The current system requires the CEA to get its claims-paying capacity from global reinsurance markets.

Chair Ghilarducci suggested adding that as a metric for the CEA to achieve. It will require education to broaden the discussion and bring more individuals to the table to build a stronger coalition.

Ms. O'Connor stated SB 254 was made a two-year bill. She stated the importance of having conversations with the Legislature in the interim to help them better understand and give them time to process and prepare for when SB 254 comes back before them.

Mr. Hanzel stated the need for diversification to continue to grow, which will require more claims-paying capacity, which is the primary driver of risk-transfer.

Presentation, continued

Mr. Hanzel reviewed the policies in-force by category and reviewed deductible options. He noted that policyholders are choosing to spend a little more money but have a materially lower deductible when an event happens.

Questions and Discussion

Chair Ghilarducci suggested including a narrative on areas that do not have an increase in the number of policyholders, areas that are more disadvantaged but equally at risk, and populations who are on fixed incomes, such as the senior population. He suggested getting a better understanding of demographics to help target populations throughout the state. Mr. Hanzel agreed that looking at the social dynamics is important.

8. Mr. Hanzel will propose for Board approval mid-year revisions to the 2019 CEA budget, which will take into account a budget augmentation.

Mr. Hanzel provided an overview, with a slide presentation, of the proposed 2019 Insurance Services mid-year revised budget, including proposed budget augmentations of \$2,118,362, to meet policy acquisition expenses due to an increase in projected 2019 written premium. He stated the mid-year analysis showed an approximate \$12 million under-spend in certain categories. That savings is proposed to be spent in other categories.

Questions and Comments

Mr. Fry asked about staff capacity. Mr. Hanzel stated there have been requests for additional staff based on growth related to policies and the additional responsibilities created by the Wildfire Fund. He stated the CEA is actively in the budget process and will provide an update at the December meeting.

Staff recommendations:

- Approve the proposed 2019 Insurance Services mid-year revised budget, including proposed budget augmentations of \$2,118,362, to meet policy acquisition expenses due to an increase in projected 2019 written premium; and

- Direct staff to operate CEA business operations within the total, approved, revised budgets for Insurance Services and Mitigation Services.

MOTION: Ms. O'Connor moved approval of the staff recommendations as presented. Mr. Martinez seconded. Motion carried unanimously.

9. Enterprise & Strategic Risk Advisor Dr. Laurie Johnson will deliver a quarterly report to the Board on the CEA enterprise-risk-management-program.

Laurie Johnson, Ph.D., Enterprise and Strategic Risk Advisor, reviewed the 12 priority risks in the CEA Enterprise-Risk-Management (ERM) Program, the ERM Quarterly Report as of September 6, 2019, and the 2019-2020 Program Plan. She reported the following:

This quarter, one risk checkpoint was approached or reached:

- Legislative/Regulatory
 - SB 254 remains in a watch standpoint. This is an open piece of legislation that could materially affect the organizational structure and responsibilities of the CEA.
 - Assembly Bill 1054 and the setup of the California Wildfire Fund - the ERM team is considering whether to add this to the 12 priority risks.

This quarter, one risk limit was approached or reached:

- IT Systems and Data Security – This item continues to be red because of an ongoing contracting matter for data security. This matter is now close to being resolved - a cyber-data insurance contract is expected to be in place by the end of the year.

Dr. Johnson stated an in-depth earthquake response assessment was completed following the Ridgecrest earthquakes. No risk checkpoints or limits were approached or reached.

Insure – Matters Related to CEA’s Insurance Business

10. Mr. Hanzel and Chief Information Officer Michael Melavic will provide a status report on CEA’s Centralized Policy Processing program (CPP), including a request to ratify CEA’s amended and restated software development agreement with Insuresoft, the vendor supporting CPP.

Mr. Melavic provided an overview, with a slide presentation, of the benefits, evolution, and current state of the CEA's CPP.

Mr. Welsh stated, due to the evolution and changes in the underlying architecture of the CPP program, the license agreement and the master service agreement were updated to reflect those changes.

Mr. Welsh reviewed the CPP Diamond Budget and Spending Tracking tool, which was included in the meeting packet. He stated this tool will track the progression of this project as it continues to evolve.

Questions and Discussion

Chair Ghilarducci stated 22 verticals will be difficult to manage. He asked if staff has looked at other technologies to assist with that.

Mr. Melavic stated they have and agreed that Insuresoft will be kept busy managing that piece and keeping it consistent throughout. Different technologies have been considered for the data component so, when making a change to the data layer, it can be made on the top layer and it will float down to all 22 verticals. This will save time.

Chair Ghilarducci stated big data analytic and IT projects like this can be challenging, particularly with many third and fourth parties, requirements, and legal reviews. He asked Dr. Johnson if these technologies could assist her in her ERM work. Dr. Johnson stated checkpoints and limits have already been built in and the departments meet monthly.

Ms. O'Connor asked how the timeframe would change with this new CPP system. She noted that the current system takes 12 to 18 months for rate and form filing updates. Mr. Melavic estimated a 50 percent reduction in the process time due to the CPP's many efficiencies.

Ms. O'Connor stated the need to continue to look for ways to streamline and increase efficiency to positively affect policyholders and participating insurers. She offered an amendment to the second staff recommendation to increase the updates to the Board from "not less than annually" to "quarterly."

Mr. Melavic stated he will include the CPP update in his quarterly presentations to the Board.

Staff recommendations:

- Approve and ratify the Restated Software License and Services Agreement, and the Master Services Agreement (as amended), each between CEA and Insuresoft; and
- Approve the adopt CEA's consolidated budget and cost tracking protocol for the CPP project, as reflected on Attachment A to this Memorandum, and instruct CEA to continue tracking CPP project costs to the Governing Board quarterly.

MOTION: Ms. O'Connor moved approval of the staff recommendations as revised. Mr. Martinez seconded. Motion carried unanimously.

Mitigate – Matters Related to CEA's Mitigation and Research Missions

11. Chief Mitigation Officer Janiele Maffei will update the Board on CEA-mitigation-program projects, including the California Residential Mitigation Program incentive program (CRMP Earthquake Brace + Bolt), CEA's financial-incentive and mitigation program (CEA Brace + Bolt), and ongoing mitigation-related research projects.

Mr. Pomeroy stated Janiele Maffei, Chief Mitigation Officer, was unable to be in attendance at today's meeting. He provided an overview, with a slide presentation, of the goals and status of the CRMP Earthquake Brace + Bolt (EBB) program, the Hazard Mitigation Grant Program (HMGP) awards, and 2019 CEA Brace + Bolt (CEA BB) expansion program.

Mr. Pomeroy stated 8,600 applications were accepted into the 2019 EBB program. Historically, half drop out of the program.

Questions and Discussion

Chair Ghilarducci stated there will be \$600 million nationwide for pre-disaster mitigation under the new Disaster Recovery Act. He stated all mitigation funding will come to the state through his organization, which has been tasked with evaluating the applications submitted by local government entities and awarding funding.

12. Ms. Maffei will update the Board on the CEA Research Program.

Mr. Pomeroy reviewed the Staff Memo on the CEA Research Program update, prepared by Ms. Maffei, which was included in the meeting packet. He deferred to Mr. Hanzel to provide a summary of the CEA September 17, 2019, Research Forum on Post-Earthquake Data Collection event.

Mr. Hanzel stated the event was well attended and included a diverse audience. The forum included panel and roundtable discussions. Participants agreed to continue these dialogues and partnerships with the industry to increase knowledge and awareness.

Questions and Discussion

Mr. Fry asked if Ms. Maffei has more forums planned. Mr. Welsh stated Ms. Maffei hosts the forum every fall.

Chair Ghilarducci suggested inviting the California Governor's Office of Emergency Services (Cal OES) to these forums because they are a driver of mitigation programs and funding.

Mr. Fry stated Dr. Johnson has been invited to Japan to speak at one of the first city-led forums. They will be doing a series of symposia for the public in Kobe, Japan, to celebrate the 25th anniversary of the Kobe earthquake. Dr. Johnson will speak about her long-term research of the rebuilding in Kobe.

Mr. Fry asked Dr. Johnson to report back on what Japan is doing differently, what they are doing better, and how they are reaching out to people. He asked her to update the Board on lessons learned at a future Board meeting.

13. Public comment on items that do not appear on this agenda and public requests that those matters be placed on a future agenda.

There was no public comment.

14. Adjournment.

There being no further business, the meeting was adjourned at 11:15 a.m.

Governing Board Memorandum

11 December 2019

Agenda Item 3: (Proposed) 2020 CEA Governing Board Quarterly Meeting Schedule

Recommended Action: Approve 2020 CEA Governing Board Quarterly Meeting Schedule

Staff recommends approval of the following dates for the CEA Governing Board’s 2020 regular business meetings:

All meetings are on Thursdays and will begin at 1:00 p.m.

2020 MEETING DATES
January 30
March 12
June 11
September 10
December 10

2020																				
January				February				March												
		1	2	3	4					1		1	2	3	4	5	6	7		
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April				May				June												
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July				August				September												
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19	20	21	22	23	24	25	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28	29	27	28	29	30			
October				November				December												
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11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30					27	28	29	30	31			

Governing Board Memorandum

11 December 2019

Agenda Item 4: Executive Report by Chief Executive Officer Glenn Pomeroy

Recommended Action: No action required—information only

Chief Executive Officer Glenn Pomeroy will present his Executive Report to the Board, which will include an update on legislative activities of interest to the CEA and CEA's quantitative business metrics.

Governing Board Memorandum

11 December 2019

Agenda Item 5: Financial and insurance operations report

Recommended Action: No action required—information only

Chief Financial Officer Tom Hanzel will present the CEA financial and insurance operations report to the Board.



FINANCIAL REPORT

October 31, 2019

Financial Report Table of Contents

	Page
Financial Statements	
Balance Sheet as of October 31, 2019 and as of October 31, 2018	1
Statement of Revenues, Expenses and Changes in Net Position Period Ended October 31, 2019 and October 31, 2018	2
Investments	
Investment Distribution at Market Value CEA Liquidity & Primary Funds, Claim(s)-Paying Funds, Mitigation Funds as of October 31, 2019	3
Debt	
Debt Issuance Update as of October 31, 2019	4
Claim-Paying Capacity	
Statement of Available Capital as of October 31, 2019	5
Claim-Paying Capacity as of October 31, 2019	6
Risk-Transfer Programs	
Current Risk-Transfer Program Summary as of October 31, 2019	7

Note: See Fact Sheets for Policies In Force, Written Premiums, and Exposures.

Financial Statements

California Earthquake Authority
Balance Sheet
as of October 31, 2019 and 2018

Assets

	2019	2018
Cash and investments:		
Cash and cash equivalents	\$ 87,214,011	\$ 82,942,900
Restricted cash and equivalents	8,785,734	23,596,531
Restricted investments	-	383,629,570
Investments	6,847,254,749	5,965,135,511
Total cash and investments	<u>6,943,254,494</u>	<u>6,455,304,512</u>
Premiums receivable, net of allowance for doubtful accounts of \$ 6,008,275 and \$ 4,916,751	90,175,704	81,918,933
Capital contributions receivable	-	9,954,000
Due from California Wildfire Fund	665,074	-
Interest receivable	28,785,649	27,606,757
Prepaid reinsurance premium	39,894,407	39,896,580
Prepaid transformer maintenance premium	154,217	1,442,646
Equipment, net	161,615	217,330
Other assets	98,905	9,680
Total assets	<u>\$ 7,103,190,065</u>	<u>\$ 6,616,350,438</u>
Unearned premiums	\$ 443,846,781	\$ 421,623,409
Accounts payable and accrued expenses	5,432,196	5,062,007
Loss and loss adjustment expense reserves	4,905,000	139,092
Revenue bond payable	-	105,000,000
Revenue bond interest payable	-	981,750
Total liabilities	<u>454,183,977</u>	<u>532,806,258</u>
Net position:		
Restricted, expendable	13,650,923	288,439,339
Unrestricted, participating insurer contributed capital	790,656,797	790,656,797
Unrestricted, State of California contributed capital	290,950,982	271,896,212
Unrestricted, all other remaining	5,553,747,386	4,732,551,832
Total net position	<u>6,649,006,088</u>	<u>6,083,544,180</u>
Total liabilities and net position	<u>\$ 7,103,190,065</u>	<u>\$ 6,616,350,438</u>

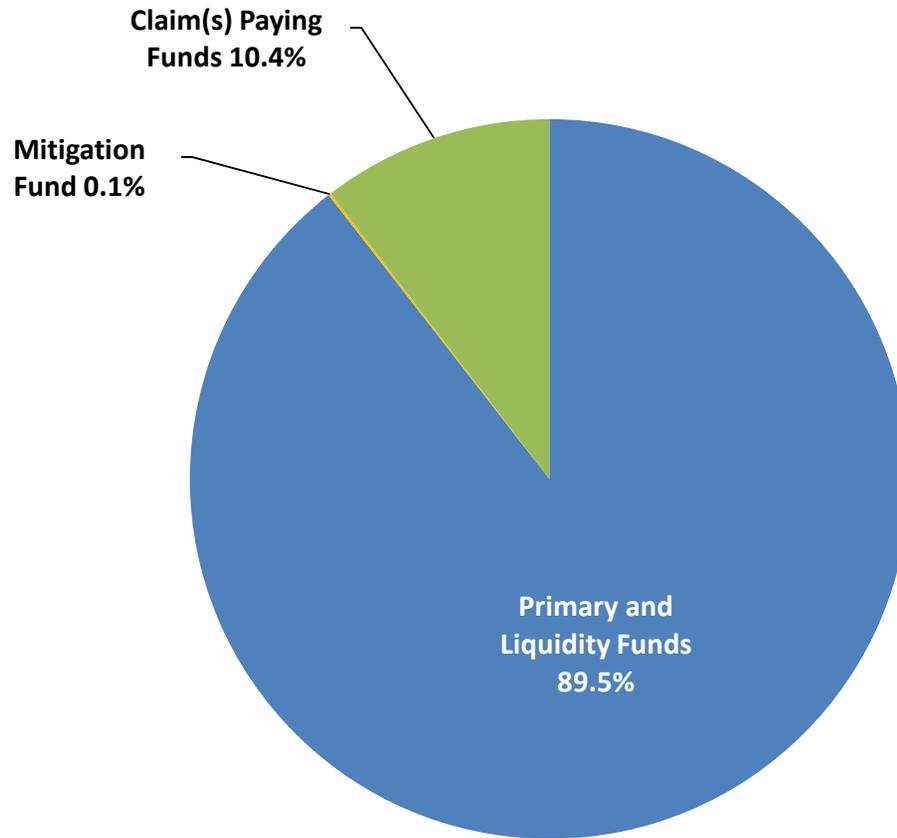
California Earthquake Authority
Statement of Revenues, Expenses and Changes in Net Position
Year-to-Date Ended October 31, 2019 and 2018

	2019	2018
Underwriting income:		
Premiums written	\$ 695,676,554	\$ 663,649,696
Less premiums ceded - reinsurance	<u>(308,863,165)</u>	<u>(305,669,950)</u>
Net premiums written	<u>386,813,389</u>	<u>357,979,746</u>
Change in unearned premiums	<u>(26,398,580)</u>	<u>(48,167,393)</u>
Net unearned premiums	<u>(26,398,580)</u>	<u>(48,167,393)</u>
Net premiums earned	<u>360,414,809</u>	<u>309,812,353</u>
Expenses:		
Losses and loss adjustment expenses	5,495,159	85,981
Participating Insurer commissions	69,575,387	66,368,416
Participating Insurer operating costs	22,466,944	21,555,476
Reinsurance broker commissions	2,333,333	2,333,333
Pro forma premium taxes equivalent	16,357,814	15,604,997
Other underwriting expenses	<u>46,414,814</u>	<u>38,720,970</u>
Total expenses	<u>162,643,451</u>	<u>144,669,173</u>
Underwriting profit	197,771,358	165,143,180
Net investment income	240,824,726	1,424,985
Other income	400,640	395,578
Grant revenue	62,980	4,050
Financing expenses, net	1,680,322	766,441
Earthquake Loss Mitigation Fund expenses	(7,670,964)	(7,838,550)
Participating Insurer Contributed Capital	-	13,272,000
State of California premium tax contribution equivalent	<u>16,357,814</u>	<u>15,604,997</u>
Increase in net position	449,426,876	188,772,681
Net position, beginning of year	<u>6,199,579,212</u>	<u>5,894,771,499</u>
Net position, end of year to date	<u>\$ 6,649,006,088</u>	<u>\$ 6,083,544,180</u>

Investments

**California Earthquake Authority
Investment Distribution at Market Value
as of October 31, 2019**

Market Value	\$6,931,259,505*
Primary and Liquidity Funds	89.5%
Mitigation Fund	0.1%
Claim(s) Paying Funds	10.4%
Total:	100.0%



*Market Value does not include uninvested cash value

Debt

**California Earthquake Authority
Debt Issuance Update**

2020 Bond Issuance Update

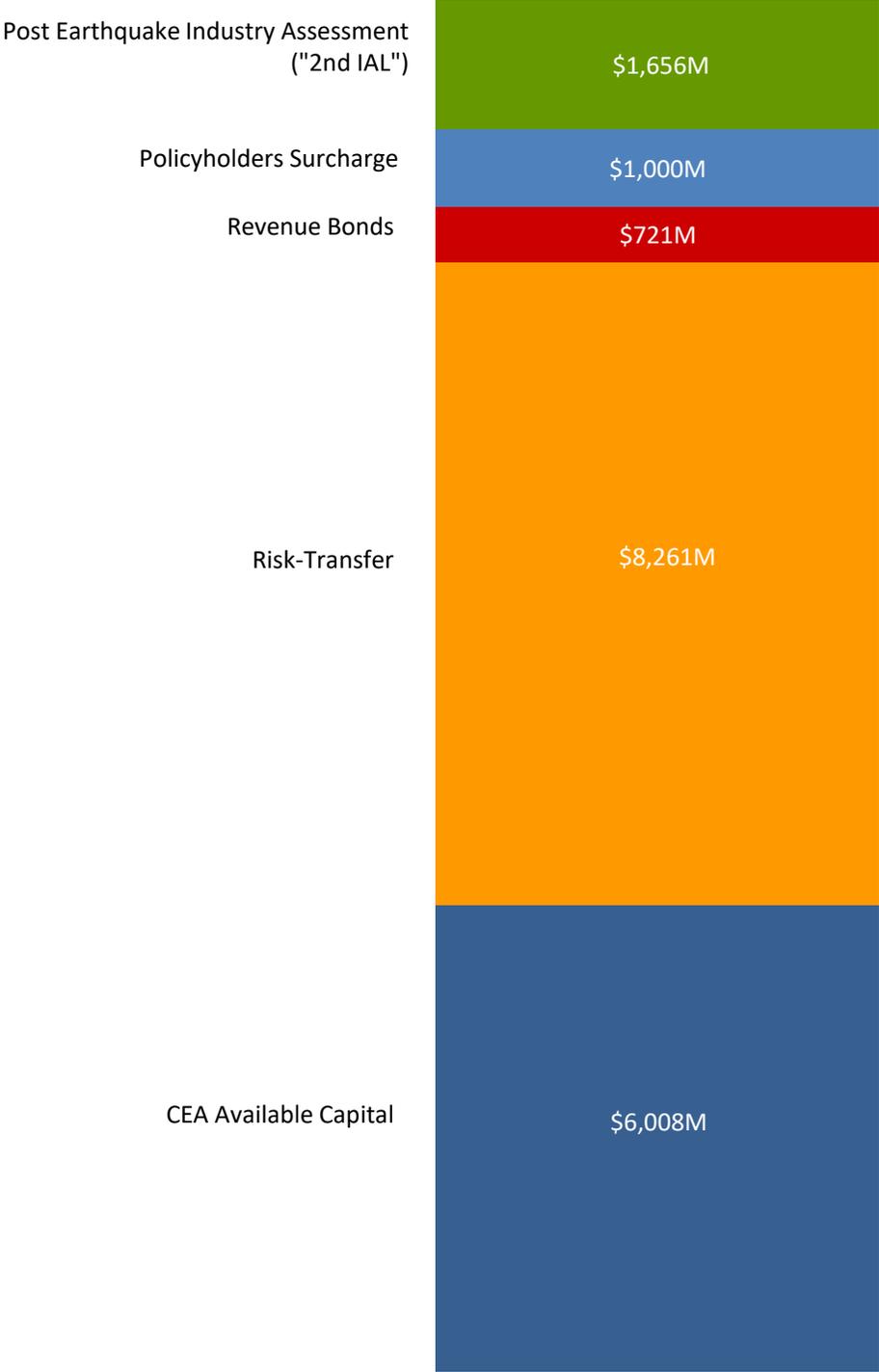
On Tuesday, November 12, the CEA and the Treasurer's Office kicked-off the CEA's 2020 revenue bond process with a working group meeting. In attendance were representatives from the CEA, Treasurer's Office, Raymond James (CEA's Municipal Advisor), underwriters (Citibank, JP Morgan and Goldman Sachs), bond counsel (Orrick), disclosure counsel (Hawkins) and underwriters counsel (Norton). The group reviewed the goal of the bonds, potential structure, market conditions, roles/responsibilities, documents, logistics and execution. The goal is to close an approximately \$300 million bond sale in late February, which enhances our ability to pay claims after a major earthquake.

Claim-Paying Capacity

California Earthquake Authority
Available Capital Report
as of October 31, 2019

Cash & Investments (includes capital contributions and premiums)	\$	6,943,254,494
Earthquake Loss Mitigation Fund cash and investments	\$	(8,785,734)
Interest & Securities Receivable	\$	28,785,649
Premium Receivable	\$	90,175,704
Risk Capital Surcharge & Capital Contributions Receivable	\$	-
Other Assets & Due from California Wildfire Fund	\$	763,979
Revenue Bonds	\$	(720,885,370)
Debt Service (Interest, Principal & Debt Service (Min. Bal.))	\$	-
Unearned Premium Collected	\$	(314,479,690)
Accrued Reinsurance Premium Expense	\$	-
Accounts and Securities Payable, and Accrued Expenses	\$	(5,432,196)
Loss Reserves	\$	(4,905,000)
CEA Available Capital	\$	6,008,491,837

**California Earthquake Authority
Claim-Paying Capacity
as of October 31, 2019**



Total Capacity \$17,646M

Note: Not drawn to scale

Risk-Transfer Programs

**California Earthquake Authority
Current Risk-Transfer Program Summary
as of October 31, 2019**

Traditional Reinsurance Contracts	Contract Period	Reinsurance Limit
2019 January Program Contract 1	January 1, 2019 - December 31, 2019	1,027,774,800
2019 January Program Contract 2	January 1, 2019 - December 31, 2019	306,100,000
2019 January Program Contract 3	January 1, 2019 - December 31, 2019	75,000,000
2019 January Program Contract 4	January 1, 2019 - December 31, 2019	40,000,000
2019-2020 January Program Contract 1	January 1, 2019 - December 31, 2020	333,800,000
2019-2020 January Program Contract 2	January 1, 2019 - December 31, 2020	92,550,000
2019-2020 January Program Contract 3	January 1, 2019 - December 31, 2020	125,000,000
2019-2020 January Program Contract 4	January 1, 2019 - December 31, 2020	300,000,000
2018-2019 January Program Contract 1	January 1, 2018 - December 31, 2019	165,337,440
2018-2019 January Program Contract 2	January 1, 2018 - December 31, 2019	74,623,680
2018-2019 January Program Contract 3	January 1, 2018 - December 31, 2019	120,004,990
2018-2019 January Program Contract 4	January 1, 2018 - December 31, 2019	50,000,000
2019-2020 April Program Contract 1	April 1, 2019 - March 31, 2020	802,823,400
2017-2020 August Program Contract 2	August 1, 2017 - July 31, 2020	200,000,000
2015-2020 August Program Contract 1	August 1, 2015 - July 31, 2020	267,000,000
2019-2020 October Program Contract 1	October 1, 2019 - September 30, 2020	139,000,000
2019-2020 October Program Contract 2	October 1, 2019 - September 30, 2020	368,819,280
2019-2021 October Program Contract 1	October 1, 2019 - September 30, 2021	240,100,000
2019-2021 October Program Contract 2	October 1, 2019 - September 30, 2021	12,999,960
2018-2019 December Program Contract 1	December 1, 2018 - November 30, 2019	5,000,000
2018-2019 December Program Contract 2	December 1, 2018 - November 30, 2019	60,000,000
2019 January Program Contract 5	January 1, 2019 - December 31, 2019	80,000,000
2018-2019 January Program Contract 5	January 1, 2018 - December 31, 2019	140,000,000
2018-2019 January Program Contract 6	January 1, 2018 - December 31, 2019	164,999,800
2018-2020 June Program Contract 1	June 1, 2018 - May 31, 2020	279,999,840
2017-2020 August Program Contract 1	August 1, 2017 - July 31, 2020	69,999,990
2017-2019 December Program Contract 1	December 1, 2017 - November 30, 2019	93,750,000
2018-2019 December Program Contract 3	December 1, 2018 - November 30, 2019	124,999,994
2018-2021 August Program Contract 1	August 1, 2018 - July 31, 2021	49,999,950
2019-2022 August Program Contract 2	August 1, 2019 - July 31, 2022	93,750,000
2019-2020 August Program contract 1	August 1, 2019 - July 31, 2020	118,750,000
2019-2022 August Program Contract 1	August 1, 2019 - July 31, 2022	93,750,000
2019-2021 July Program Contract 1	July 1, 2019 - June 30, 2021	70,000,000
Total Traditional Reinsurance		6,185,933,124
Transformer Reinsurance Contracts	Contract Period	Reinsurance Limit
2016 - 2019 Transformer Reinsurance Contract 1	December 1, 2016 - November 30, 2019	500,000,000
2017 - 2020 Transformer Reinsurance Contract 2	May 16, 2017- May 15, 2020	425,000,000
2017 - 2020 Transformer Reinsurance Contract 1	May 16, 2017- May 15, 2020	500,000,000
2017 - 2020 Transformer Reinsurance Contract 4	December 1, 2017 - November 30, 2020	200,000,000
2017 - 2020 Transformer Reinsurance Contract 3	December 1, 2017 - November 30, 2020	200,000,000
2018-2021 Transformer Reinsurance Contract 1	September 14, 2018 - September 13, 2021	250,000,000
Total Transformer Reinsurance		2,075,000,000
Total Risk-Transfer Program		\$ 8,260,933,124

Governing Board Memorandum

11 December 2019

Agenda Item 6: 2020 CEA Budget: Insurance Services

Recommended Action: Approve 2020 CEA Insurance Services Budget

Background:

Each year, CEA staff prepares and submits to the Governing Board a proposed annual budget, based on all anticipated expenses for the next calendar year.¹

Analysis:

2020 Insurance Services Budget

Staff has prepared two attachments to assist the Board in comparing and analyzing the 2019 and proposed 2020 budgets for Insurance Services.

- **Attachment A: Budgeted Expenditures and Actual Expenditures – 2019 Budget Year**
 - This attachment shows:
 - a. The December (2018) Board-approved budget for 2019;
 - b. 2019 budget adjustments throughout the year;
 - c. 2019 budget augmentations throughout the year;
 - d. augmented/adjusted approved 2019 budget;
 - e. actual expenses through October 31, 2019;
 - f. projected expenses for the months of November and December 2019;
 - g. actual and projected expenses at December 31, 2019;
 - h. comparison of augmented, adjusted, approved budget to actual and projected expenses at December 31, 2019; and
 - i. percentage of used augmented and adjusted approved 2019 budget.

¹ The CEA fiscal year is the calendar year.

- **Attachment B: Approved 2019 Insurance Services Budget after Augmentations and Adjustments Compared to Proposed 2020 Insurance Services Budget**
 - Attachment B compares the 2019 Insurance Services Budget after Augmentations and Adjustments to the proposed 2020 Insurance Services Budget

Summary of Proposed 2020 CEA Statutory Expenses/Expense Cap [projected statutory expense compared to projected statutory cap]	
The projected statutory-expense portion of the proposed 2020 budget is \$39,710,422, which is less than the projected 6% cap of \$51,000,000:	
Projected 2020 written premium:	\$850,000,000
Statutory operating-expense cap 2020 (percentage)	6%
Statutory operating-expense cap 2020 (dollars)	\$51,000,000
Proposed 2020 operating expense budget	\$39,710,422
Amount by which 6% cap exceeds proposed budget	\$11,289,578

Recommendation:

CEA staff recommends the following Board actions:

- Approve the proposed 2020 Insurance Services budget; and
- Direct staff to operate CEA business operations within the total approved budget amounts.

CALIFORNIA EARTHQUAKE AUTHORITY
Insurance Services
Budgeted-Actual-Projected Expenditures
as of October 31, 2019

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f)	(g) (g=e+f)	(h) (h=d-g)	(i) (i=g/d)
	Approved 2019 Budget 1/1/2019	Adjustments^A	Augmentations	2019 Budget after Augmentations and Adjustments	Actual Expenditures as of 10/31/2019	Projected Expenditures 11/1/19 to 12/31/19	Actual and Projected Expenditures as of 12/31/19	Augmented & Adjusted Approved Budget vs. Actual and Projected Expenditures	Percentage used of Augmented & Adjusted 2019 Budget
Human Resources:									
Compensation and Benefits	\$ 29,283,828	\$ (750,002)	\$ -	\$ 28,533,826	\$ 22,386,805	\$ 5,059,748	\$ 27,446,553	\$ 1,087,273	96.2%
Travel	685,314	(250,297)	-	435,017	277,429	104,880	382,309	52,708	87.9%
Other	469,030	(48,899)	-	420,131	275,636	105,901	381,537	38,594	90.8%
Board Meeting	24,800	(4,999)	-	19,801	8,420	7,034	15,454	4,347	78.0%
Administration & Office	1,023,627	(397,508)	-	626,119	335,631	189,284	524,915	101,204	83.8%
EDP Hardware	1,694,063	(9,493)	-	1,684,570	630,917	791,521	1,422,438	262,132	84.4%
EDP Software	1,765,873	(29,223)	-	1,736,650	1,379,205	256,171	1,635,376	101,274	94.2%
Information Technology	3,072,201	(899,623)	-	2,172,578	1,895,950	286,012	2,181,962	(9,384)	100.4%
Telecommunications	371,980	(92,936)	-	279,044	240,738	45,345	286,083	(7,039)	102.5%
Rent/Lease	1,419,718	(20,614)	-	1,399,104	1,134,009	243,978	1,377,987	21,118	98.5%
Compliance	30,000	(6,000)	-	24,000	-	24,000	24,000	-	100.0%
Government Affairs	2,256,000	(1,563,122)	-	692,878	493,878	100,000	593,878	99,000	85.7%
Insurance	268,336	(26,356)	-	241,980	122,536	107,556	230,092	11,888	95.1%
Internal Audit	30,000	(7,500)	-	22,500	-	22,500	22,500	-	100.0%
Other	75,450	(26,675)	-	48,775	19,225	15,500	34,725	14,050	71.2%
Regulatory Expenses	354,500	92,182	-	446,682	441,682	0	441,682	5,000	98.9%
Risk Management	69,600	(12,800)	-	56,800	49,644	9,600	59,244	(2,444)	104.3%
California Wildfire Fund Allocation ³	-	(862,151)	-	(862,151)	(426,052)	(280,000)	(706,052)	(156,099)	81.9%
Total Statutory Expenditures¹	\$ 42,894,320	\$ (4,916,016)	\$ -	\$ 37,978,304	\$ 29,265,653	\$ 7,089,028	\$ 36,354,681	\$ 1,623,622	77.1%
Audit Services	139,500	-	-	139,500	119,500	20,000	139,500	-	100.0%
Capital Market	1,924,105	(23,617)	-	1,900,488	1,772,788	26,080	1,798,868	101,620	94.7%
Claims	134,000	680,007	-	814,007	62,734	707,000	769,734	44,273	94.6%
Grants	100,000	502,924	-	602,924	394,306	201,400	595,706	7,218	98.8%
Investment Services	3,426,928	(46,216)	-	3,380,712	2,839,021	552,728	3,391,749	(11,037)	100.3%
Legal Services	4,303,600	(3,022,499)	-	1,281,101	454,813	664,400	1,119,213	161,888	87.4%
Loss-Modeling	1,085,700	(17,098)	-	1,068,602	1,164,102	0	1,164,102	(95,500)	108.9%
Marketing Services	16,810,515	(1,976,493)	-	14,834,022	7,008,023	7,800,383	14,808,406	25,616	99.8%
Producer Compensation ²	80,000,000	-	1,500,000	81,500,000	68,719,496	12,780,504	81,500,000	-	100.0%
Participating Insurer Operating Costs ²	35,206,400	-	618,362	35,824,762	27,773,811	7,726,189	35,500,000	324,762	99.1%
Seismic Related Research	380,000	(330,000)	-	50,000	-	50,000	50,000	-	100.0%
Engineering Related Research	3,910,000	(1,571,605)	-	2,338,395	901,755	1,156,000	2,057,755	280,640	88.0%
Risk Transfer	353,013,800	10,720,613	-	363,734,413	311,382,298	52,317,702	363,700,000	34,413	100.0%
Total Non-Statutory Expenditures	\$ 500,434,548	\$ 4,916,016	\$ 2,118,362	\$ 507,468,926	\$ 422,592,647	\$ 84,002,386	\$ 506,595,033	\$ 873,893	99.8%
Total Budget Expenditures	\$ 543,328,868	\$ -	\$ 2,118,362	\$ 545,447,230	\$ 451,858,300	\$ 91,091,414	\$ 542,949,714	\$ 2,497,515	99.5%

¹ Total 2019 Statutory Expenditures of \$29.3 million were 4.2% of written premium. This is in compliance with the maximum permitted ratio of 6.0%.

² Proposed augmentation for increased projection of premiums written for 2019.

³ Reimbursement to CEA from the California Wildfire Fund for incurred expenses.

^A Adjustments to meet insurance services end of year projections.

CALIFORNIA EARTHQUAKE AUTHORITY
Insurance Services
Budget Comparison
2020 Budget to 2019 Budget

	(a)	(b)	(c)	(d)
		Budget after Augmentation and Adjustments	(c=a-b)	(d=c/b)
	Proposed Budget 2020	2019	Difference	% Change
Statutory Expenses				
Human Resources:				
Compensation and Benefits	\$ 30,892,048	\$ 28,533,826	\$ 2,358,222	8.3%
Travel	764,236	435,017	329,219	75.7%
Other	524,481	420,132	104,349	24.8%
Board Meeting	25,000	19,801	5,199	26.3%
Administration & Office	1,182,613	626,119	556,494	88.9%
EDP Hardware	773,995	1,684,570	(910,575)	(54.1%)
EDP Software/Information Tech	3,791,752	3,909,228	(117,476)	(3.0%)
Telecommunications	396,008	279,042	116,966	41.9%
Rent/Lease	1,569,529	1,399,105	170,424	12.2%
Compliance	30,000	24,000	6,000	25.0%
Government Affairs	600,000	692,878	(92,878)	(13.4%)
Insurance	232,560	241,980	(9,420)	(3.9%)
Internal Audit	30,000	22,500	7,500	33.3%
Other	20,600	48,775	(28,175)	(57.8%)
Regulatory Expenses	10,000	446,682	(436,682)	(97.8%)
Risk Management	67,600	56,800	10,800	19.0%
CWF Allocation	(1,200,000)	(862,151)	(337,849)	39.2%
Total Statutory Expenses	39,710,422	37,978,304	1,732,118	4.6%
Non-Statutory Expenses				
Audit Services	121,500	139,500	(18,000)	(12.9%)
Capital Market	212,000	1,900,488	(1,688,488)	(88.8%)
Claims	473,000	814,077	(341,077)	(41.9%)
Grants	9,210,000	602,924	8,607,076	1,427.6%
Investment Services	3,560,500	3,380,712	179,788	5.3%
Legal Services	2,324,934	1,281,101	1,043,833	81.5%
Loss-Modeling	1,097,806	1,068,602	29,204	2.7%
Marketing Services	15,748,750	14,834,022	914,728	6.2%
Producer Compensation	85,000,000	81,500,000	3,500,000	4.3%
Participating Insurer Operating Costs	34,654,662	35,824,762	(1,170,100)	(3.3%)
Seismic Related Research	850,000	50,000	800,000	1,600.0%
Engineering Related Research	2,347,000	2,338,395	8,605	0.4%
Risk Transfer	363,648,800	363,734,413	(85,613)	(0.0%)
Total Non-Statutory Expenses	519,248,954	507,468,996	11,779,958	2.3%
Total Budgeted Expenditures	\$ 558,959,375	\$ 545,447,300	\$ 13,512,075	2.5%

Governing Board Memorandum

11 December 2019

Agenda Item 7: Selection of a new independent financial auditor for the CEA

Recommended Action: Approve selection of the firm Plante & Moran, PLLC, to conduct the annual CEA financial audit for 2019–2023

Background:

CEA's financial statements are required by law to be audited annually by a qualified independent auditor. CEA's contract with the independent accounting firm, Plante & Moran, PLLC, has expired.

Analysis:

The RFP Process

CEA issued a Request for Proposals ("RFP") in July 2019 and solicited qualified candidates through an advertisement in the AICPA Daily Newsletter and on the Contracting & Employment Opportunities page of CEA's website.

CEA considered only certified public accounting firms, from which CEA received a total of five proposals.

Evaluation and Rating

The RFP selection panel consisted of:

- Ben Kirwan, CEA Controller
- Trudi Miller, CEA Accounting Supervisor
- Andrea Wheeler, CEA Governance Risk & Reporting Manager
- Anthony Tassone, CEA Financial Reporting Supervisor

After reviewing and assigning preliminary scores to the proposals, the selection panel interviewed the three firms with the highest scores.

Selection

The firm of Plante & Moran, PLLC, received the highest scores of the three finalist firms.

Consistent with California Insurance Code section 10089.13(d), the proposed selection was presented to the Insurance Commissioner on November 18, 2019.

After receipt of the Insurance Commissioner’s approval, the proposed selection was presented to the Department of Finance, also under California Insurance Code section 10089.13(d), and was approved on November 26, 2019. .

Anticipated Annual Fees and Costs

Plante & Moran’s fees for regularly recurring audit services, including out-of-pocket expenses, for each audit year through December 31, 2023:

2019	2020	2021	2022	2023
\$109,500	\$122,000	\$122,000	\$125,500	\$128,600

Recommendation:

1. Staff recommends the Board approve the selection of Plante & Moran, PLLC, to conduct the legally required independent annual audit of CEA’s GASB and statutory financial statements for each of the years 2019 through 2023.
2. If the Board approves the staff recommendation, CEA staff will proceed to negotiate a contract with the firm. Assuming the negotiation is successful, and a contract is executed, staff will notify the Board that the audit engagement has been successfully finalized by contract.

Governing Board Memorandum

11 December 2019

Agenda Item 8: Proposed 12-month CEA Risk-Transfer Strategy for 2020

Recommended Action: Approve proposed 12-month CEA Risk-Transfer Strategy for 2020

Background:

At its December 11, 2012, Governing Board meeting, CEA staff proposed to the Board new guidelines for procuring risk-transfer and other claim-paying capacity, including traditional reinsurance and alternative risk-transfer methods. At the same meeting, the Board approved a resolution adopting *Guidelines for Securing Risk Transfer: Traditional Reinsurance and Alternative Risk Transfer* (the *Guidelines*), which was later revised and then approved by the Board on March 15, 2017.

In accordance with the *Guidelines*, CEA staff provides the Board for review and approval, on at least an annual basis, a comprehensive risk-transfer strategy that sets forth the CEA's basic risk-transfer goals and benchmarks for the following year.

In its search for optimal sources of claim-paying capacity, staff has balanced the following objectives:

1. CEA must remain financially sound, by securing and maintaining claim-paying capacity sufficient for policyholder claims in the event of an earthquake while retaining essential financial strength and credit ratings.
2. CEA must honor its value proposition with its customers, by establishing a financial structure that makes CEA insurance as affordable as possible and while supporting the claim-paying capacity that is both necessary and appropriate to providing secure earthquake coverage to existing policyholders while providing for reasonable growth.
3. Generate stability and longevity for CEA through a financial structure that ensures CEA's continuation and enhances its ability to serve policyholders after a significant earthquake or series of earthquakes.

The staff analysis and recommendations, below, focus on these priorities.

Analysis:

Historically, CEA has relied on reinsurance—predominantly, traditional reinsurance—for about a third of its total claim-paying capacity. The cost of CEA’s risk-transfer purchases (both traditional and non-traditional reinsurance, such as transformer arrangements) that are required to meet CEA’s capacity needs is a significant periodic expense that, according to principles of actuarial soundness followed by CEA, must be accounted for as an expense in the premium rates charged CEA policyholders.

CEA has worked hard to reduce the premium rates charged its customers, in the face of rising reconstruction costs, an unpredictable risk-transfer marketplace, and the statutory call to use actuarially sound rates that embody the best available science.

When CEA buys risk-transfer from the reinsurance marketplace or by accessing the global capital markets, it pays a premium to obtain that cover. CEA’s current risk-transfer rates are quite low. In fact, they are historically low—on average, less than a third of the rate CEA was able to obtain 20 or so years ago. So, while insuring catastrophe loss in a responsible manner involves considerable expense, CEA’s risk-transfer programs and pricing assure that CEA customers pay no more than is necessary for dependable CEA earthquake insurance policies.

Available risk-transfer capacity and price are subject to wide swings—potentially upward or downward—caused by market conditions, global catastrophes, and other factors beyond CEA’s control.

- For example, since 2013, reinsurance-market capacity has expanded, so buyers such as CEA have demanded and received lower pricing.
- Multiyear reinsurance contracts (such as CEA’s transformer-reinsurance transactions) relieve CEA of some year-to-year capacity and pricing uncertainty, but there remain significant risks.

So, while staff believes the risk-transfer limits CEA is likely to require for the next 12 months should be obtainable at an acceptable price and on reasonable terms, there is no guarantee that the capacity CEA requires in the future will be obtainable at CEA’s desired pricing and on CEA’s desired terms.

Because CEA has a relatively rigid financial structure that depends heavily on risk-transfer, any potential limits on traditional and transformer reinsurance-market capacity

will affect, and may constrain, the overall claim-paying capacity of CEA—and that, in turn, could hinder CEA’s ability to provide reasonably priced earthquake insurance.

As has been discussed frequently and at length with the Board in connection with its approvals of past risk-transfer proposals and transactions, the risk-transfer market is dynamic: Coordinating CEA’s risk-transfer needs with current market conditions is crucial, meaning CEA must be positioned to execute risk-transfer transactions efficiently and effectively, when market conditions in the reinsurance and capital markets are—in the judgment of CEA financial staff and CEA’s retained professional financial, legal, reinsurance, and risk-transfer experts—likely to be receptive to CEA’s participation and unique requirements.

The Board has recognized these needs by taking action: On December 13, 2012, it authorized CEA staff to accomplish these ends in a flexible, yet prudent, manner. Board action allowed CEA to act quickly when market conditions are favorable to meet the tight time limits and deadlines inherent in highly time-sensitive risk-transfer transactions, in amounts and at pricing according to the staff’s discretion, so long as they are conducted in full compliance with the *Guidelines* and under documented conditions.

Results of the 2019 Risk-Transfer Strategy (Board approved in 2018)

During 2019, CEA was able to obtain sufficient capacity to maintain the approved minimum claim-paying capacity of a 1-in-400-year level.

Reinsurance capacity in both traditional reinsurance markets and the broader capital markets remains strong and well capitalized, which should allow CEA the continued ability to obtain desired capacity levels by purchasing risk-transfer at competitive pricing.

The 2019 CEA risk-transfer program (as of December) is represented below:

Risk Transfer Contracts as of 12/1/2019	Contracts Period		Limit Filled
2019 January Program Contract 1	1/1/2019	12/31/2019	1,027,774,800
2019 January Program Contract 2	1/1/2019	12/31/2019	306,100,000
2019 January Program Contract 3	1/1/2019	12/31/2019	75,000,000

2019 January Program Contract 4	1/1/2019	12/31/2019	40,000,000
2019 January Program Contract 5	1/1/2019	12/31/2019	140,000,000
2019-2020 January Program Contract 1	1/1/2019	12/31/2020	333,800,000
2019-2020 January Program Contract 2	1/1/2019	12/31/2020	92,550,000
2019-2020 January Program Contract 3	1/1/2019	12/31/2020	125,000,000
2019-2020 January Program Contract 4	1/1/2019	12/31/2020	300,000,000
2018-2019 January Program Contract 1	1/1/2018	12/31/2019	165,337,440
2018-2019 January Program Contract 2	1/1/2018	12/31/2019	74,623,680
2018-2019 January Program Contract 3	1/1/2018	12/31/2019	120,004,990
2018-2019 January Program Contract 4	1/1/2018	12/31/2019	50,000,000
2018-2019 January Program Contract 5	1/1/2018	12/31/2019	164,999,800

Risk Transfer Contracts as of 12/1/2019	Contracts Period		Limit Filled
2018-2019 January Program Contract 6	1/1/2018	12/31/2019	279,999,840
2019-2020 April Program Contract 1	4/1/2019	3/31/2020	802,823,400
2017-2020 August Program Contract 2	8/1/2017	7/31/2020	200,000,000
2015-2020 August Program Contract 1	8/1/2015	7/31/2020	139,000,000
2019-2020 October Program Contract 1	10/1/2019	9/30/2020	368,819,280
2019-2020 October Program Contract 2	10/1/2019	9/30/2020	240,100,000
2019-2021 October Program Contract 1	10/1/2019	9/30/2021	12,999,960

2019-2021 October Program Contract 2	10/1/2019	9/30/2021	5,000,000
2019-2020 December Program Contract 1	12/1/2019	11/30/2020	60,000,000
2019-2020 December Program Contract 2	12/1/2019	11/30/2020	80,000,000
2019-2021 December Program Contract 1	12/1/2019	11/30/2021	125,000,000
2019-2021 December Program Contract 2	12/1/2019	11/30/2021	50,000,000
2018-2020 June Program Contract 1	6/1/2018	5/31/2020	69,999,990
2017-2020 August Program Contract 1	8/1/2017	7/31/2020	93,750,000
2018-2021 August Program Contract 1	8/1/2018	7/31/2021	93,750,000
2019-2020 August Program contract 1	8/1/2019	7/31/2020	118,750,000
2019-2022 August Program Contract 1	8/1/2019	7/31/2022	93,750,000
2019-2022 August Program Contract 2	8/1/2019	7/31/2022	267,000,000
2019-2021 July Program Contract 1	7/1/2019	6/30/2021	70,000,000
2019-2022 Transformer Reinsurance Contract 1	12/1/2019	11/30/2022	400,000,000

Risk Transfer Contracts as of 12/1/2019	Contracts Period		Limit Filled
2017-2020 Transformer Reinsurance Contract 2	5/16/2017	5/15/2020	425,000,000
2017-2020 Transformer Reinsurance Contract 1	5/16/2017	5/15/2020	500,000,000
2017-2020 Transformer Reinsurance Contract 4	12/1/2017	11/30/2020	200,000,000
2017-2020 Transformer Reinsurance Contract 3	12/1/2017	11/30/2020	200,000,000
2018-2021 Transformer Reinsurance Contract 1	9/14/2018	9/13/2021	250,000,000

Total Risk Transfer in effect as of 12/1/2019	8,160,933,180
Contracts effective in 2019	

The program diversity portrayed in the table immediately above serves to minimize risks of adverse economic conditions having negative effects on pricing. And because it buys throughout the year, CEA is well positioned to acquire risk-transfer products to respond to exposure changes that require capacity adjustments.

CEA entered into 23 new risk-transfer contracts in 2019, of which 12 were multi-year: multi-year reinsurance contracts diversify the CEA risk-transfer program, providing uninterrupted, long-term financing at lower prices. Multi-year contracts also reduce the risk that a single year's market conditions would prevent CEA from obtaining risk-transfer capacity at suitable pricing, on favorable terms.

12-Month Risk-Transfer Strategy

Staff proposes a 2020 risk-transfer strategy that will include risk-transfer programs of both traditional and transformer reinsurance, contributing appropriately and efficiently to CEA's claim-paying capacity. In determining total 2020 claim-paying capacity, CEA will be making a transition to earthquake models modified by application of new science and will maintain its claim-paying capacity at no less than a 1-in-400-year level and no greater than a 1-in-550-year level.

CEA staff will strive in each 2020 transaction to obtain the most advantageous pricing and contract terms (extending over multiple years, as appropriate), accessing both the worldwide reinsurance market and the other capital markets for reliable, secure risk transfer.

In keeping with past practices and Board preferences, staff will report each transaction to the Board at the first Board meeting following the effective date of each transaction.

Recommendation:

CEA staff recommends that the Governing Board approve the proposed 12-month CEA Risk-Transfer Strategy, as described above.

Governing Board Memorandum

11 December 2019

Agenda Item 9: Enterprise and Strategic Risk Advisor Laurie Johnson will update the Board on the CEA Enterprise Risk Management Program.

Recommended Action: No action required—information only

The CEA Enterprise Risk Management (ERM) Program is focused on monitoring and managing 12 priority risks:

Financial Risks	Insurance Risks	Operational Risks	Strategic Risks
<ul style="list-style-type: none">• Risk Transfer• Financial Management – Investments and Accounting	<ul style="list-style-type: none">• Policy Contracting and Servicing• Claim Handling• Earthquake Science and Modeling• CEA Residential Mitigation programs	<ul style="list-style-type: none">• Business Continuity• IT Systems and Data Security• Legal – Compliance and Litigation• Workforce	<ul style="list-style-type: none">• Legislative/Regulatory• Reputation

The following scorecard represents CEA ERM risk-reporting on these priority risks for 4th quarter 2019 and includes all activity since the immediately past CEA Governing Board meeting. The column “Q4 2019” indicates risk status and whether a risk escalation occurred during the preceding months. The column named Outlook indicates the potential future direction of the risk status—as either positive, negative, or stable—until the CEA Governing Board next meets. The final column is a brief summary of actions taken and risk-escalation status.

ERM Quarterly Report	Status		2-Dec-19
Priority Risk	Q4 2019	Outlook	Activity Last Quarter / Comments
Risk Transfer	●	Stable	
Financial Management - Investments and Accounting	●	Stable	
Policy Sales and Servicing	●	Stable	
Business Continuity	●	Stable	
IT Systems and Data Security	◆	Positive	A cross-organizational committee, including the CEA's new Chief Information Security Officer, is engaged in exploring options to appropriately resolve this matter.
Legislative/Regulatory	▲	Positive	Proposed state legislation that could enhance the CEA's claim-paying capacity and ensure the availability of future additional capacity to meet growth needs and accomplish other program goals has been tabled until the 2020 legislative session. Also, state legislation passed in July 2019 has materially affected the CEA's core responsibilities, at least on an interim basis. Both legislative processes have triggered ERM-related monitoring, outreach, and documentation controls.
Claim Handling	▲	Positive	Checkpoint triggered by a delay in submission of a report on CEA program operations following the July 4 and 5, 2019 earthquakes to the State Legislature within the statutory timeframe. The report has since been submitted.
Legal - Compliance and Litigation	●	Stable	
Reputation	●	Stable	
Earthquake Science and Modeling	●	Stable	
Workforce	●	Stable	
Residential Mitigation Programs	●	Stable	

Legend	
●	No risk checkpoints or limits reached.
▲	Approaching or reached a risk checkpoint.
◆	Approaching or reached a risk limit.

There are two continuing issues from prior reports which both have a positive outlook for Q1 2020:

- The IT Systems and Data Security priority-risk remains at “red” status while a cross-organizational committee, including CEA’s new Chief Information Security Officer, explore options to appropriately resolve this matter.
- The Legislative-Regulatory priority-risk remains at “yellow” status to reflect the on-going legislative process to enhance CEA’s claim-paying capacity that has been tabled until 2020. Also, the wildfire-related legislation passed in July 2019 has impacted CEA core responsibilities, at least on an interim basis, triggering a “yellow” status as well. The ERM Committee is continuing its enterprise-risk

assessment process for CEA while it serves as interim administrator of the California Wildfire Fund.

There is one new issue that also has a positive outlook for Q1 2020:

- A priority-risk checkpoint for Claim Handling was triggered by a short delay in submission of a statutorily required report to the State Legislature on CEA operations following the July 4 and 5, 2019 earthquakes in Ridgecrest. The report has since been submitted.

Since a major, damaging earthquake occurring in California is an overarching risk consideration for the CEA, each priority risk in the CEA's ERM program is assessed from both a "steady-state" perspective and a post-earthquake perspective.

It has been a little more than three years since the CEA engaged an Enterprise & Strategic Risk Advisor and began development of an enterprise-wide risk-management framework, in accordance with principles of the Own Risk and Solvency Assessment ("ORSA") guidance of the National Association of Insurance Commissioners; and it's been about 18 months since the CEA ERM framework became operational with cross-organizational monitoring and reporting on risk management. The ERM Committee meets monthly to review priority-risks and corresponding risk control summaries, consider potential emerging risks, and enhance the ERM program management, tools and approaches. To continue to advance the risk culture and ERM awareness within CEA and formally bring consideration of risk into the strategic decision-making of the organization, as recommended during the most recent CDI audit, it is recommended that the position of Chief Risk Officer be established.

Governing Board Memorandum

11 December 2019

Agenda Item 10: Proposal to revise Chief Actuary's position and contract to expand and upgrade duties to that of Chief Risk Officer

Recommended Action: Authorize the CEO to negotiate revisions to Chief Actuary's agreement to include duties and title of Chief Risk Officer

Background:

CEA's Chief Actuary, Shawna Ackerman, has agreed to take on additional responsibilities for CEA, including responsibility for long term administration of CEA's Enterprise Risk Management (ERM) program and other aspects of CEA's internal and assumed risks. Ms. Ackerman Chief Actuary duty will continue.

Analysis:

Three years ago CEA began development of an ERM framework, in response to a recommendation from the Department of Insurance that CEA apply the principles of the Own Risk and Solvency Assessment ("ORSA") guidelines of the National Association of Insurance Commissioners. The CEA ERM framework became operational with cross-organizational monitoring and reporting on risk management more than 18 months ago, and has materially improved CEA's ability to identify, mitigate and manage the risks that impact the organization.

The ERM program was developed and has been managed by a Consultant, Dr. Laurie Johnson, who has functioned as a key member of CEA's Executive Team. To continue to advance the risk culture and ERM awareness within CEA and formally bring consideration of risk into the strategic decision-making of the organization, as recommended during the most recent CDI audit, it is recommended that ERM function be folded into the duties of CEA's Chief Actuary, and that the position be upgraded to Chief Risk Officer. This change will ensure continuity of CEA's ERM program, and aligns with the core capabilities of the Chief Actuary.

Recommendation:

CEA recommends that the Governing Board Authorize the CEO to negotiate revisions to Chief Actuary's agreement to include duties and title of Chief Risk Officer.

Governing Board Memorandum

11 December 2019

Agenda Item 11: CEA Centralized Policy Processing (CPP) – Quarterly Update

Recommended Action: No action required—information only

The CEA CIO and CFO will present the current status of the Centralized Policy Processing (CPP) initiative. Status includes:

- The onboarding of an affiliate of Farmers Insurance, 21st Century Premier Insurance Company is generally on track. Toggle has received CDI approval and will begin CPP implementation during Q1 2020.
- Both State Farm and Farmers continue moving through the Discovery phase. State Farm is tentatively scheduled to begin the onboarding process in June 2020, pending execution of the CPP agreement. Farmers has not yet set a tentative schedule.
- A total of four CEA participating insurers (PIs) are engaged in exploring future CPP implementations.
- CEA successfully conducted an earthquake response drill with Insuresoft.
- Four CPP process improvement projects are currently underway and on schedule.
- The CPP budget burn down will be discussed, including a correction of the projected Insuresoft Master Services Agreement (MSA) budget amount from the \$2.9 million reported in September (this number represented the actual spend amount) to the \$5,000,000 not-to-exceed amount listed in the MSA. CEA intends to extend the existing MSA with no changes to align with the term of the Insuresoft Software Licensing Agreement.
- CEA will report on the recent acquisition of Insuresoft and its affiliates by Volaris Group, which is part of Constellation Software, a publicly-traded company that owns Variety of technology companies.

Governing Board Memorandum

11 December 2019

Agenda Item 12: AIR-Worldwide Earthquake-Loss Modeling – Contract Renewal

Recommended Action: Approve renewal of AIR-Worldwide contract

Background:

There are three widely recognized, commercially available catastrophe-loss models/modelers: AIR-Worldwide (<http://www.air-worldwide.com/Home/AIR-Worldwide/>), CoreLogic (<http://www.corelogic.com/>), and Risk Management Solutions (<http://www.rms.com/>).

Since 2004, and with the Governing Board’s support and approval, CEA has worked uninterrupted, and under individual contracts, with all three of those firms. By that arrangement, CEA is confident that its earthquake-loss modeling is always provided by widely used, tested models at their highest level of development—a critical factor for support and acceptance of CEA’s sophisticated operational and financial needs.

Analysis:

In part because of its collaboration with the three earthquake modelers, CEA broadens its understanding of California earthquake risk and the relevant, respective modeling methodologies. This CEA-centric collaboration enables CEA to view the broadest range of modeling results, for planning purposes and project and product development. For example, AIR model output is a key component of CEA’s capacity calculation, which informs the CEA Governing Board and management of the level of risk-financing needed to achieve target claim-paying capacity each year.

In addition, California Insurance Commissioner regulations require CEA to estimate and project losses within seven days following a major earthquake. With the Board’s approval, CEA established its CEA-proprietary “EARLE” (for Earthquake Loss Estimation) system to enable CEA to meet this regulatory requirement. All three contracted

modelers now serve as key contributors to the EARLE system, providing CEA with timely delivery of post-event loss estimations.

Staff is negotiating a three-year contract renewal with AIR, to take effect January 1, 2020. Under the renewal contract, AIR will provide substantially the same services as under the current contract, which has functioned well.

The annual fee payable to AIR under the proposed contract renewal—\$335,000—is in the proposed 2020 CEA budget and comprises compensation for two components:

- Two full earthquake-loss analyses of CEA's insured-risk portfolio.
- Services in support of the CEA EARLE system.

By comparison the contractual fees for the two components in the expiring contract that correspond to the two components described immediately above total \$316,000. Those amounts had remained flat from January 1, 2017, through December 31, 2019.

Recommendation:

Staff recommends that the Governing Board approve CEA's renewal of the contract with AIR, as described, and authorize CEO Glenn Pomeroy to execute that contract renewal on CEA's behalf.

Governing Board Memorandum

11 December 2019

Agenda Item 13: First Annual Risk-Capital Surcharge for Amica Mutual Insurance Company

Recommended Action: Approve a risk-capital surcharge in the amount of \$112,651 for Amica Mutual Insurance Company

Background:

Amica Mutual Insurance Company (“Amica”) is a participating insurer of the California Earthquake Authority that began offering CEA earthquake insurance coverage for policies effective on or after August 15, 2018.

Amica is the third insurer with an existing book of residential earthquake insurance policies to apply to become a CEA participating insurer since Insurance Code §10089.16(d) became law effective July 1, 2008. As part of the CEA participating insurer application process, and as required by that law, Amica submitted to CEA policy data for its earthquake insurance book of business. CEA staff analyzed Amica’s earthquake insurance risk profile.

Based on Amica’s earthquake insurance risk profile and resulting staff recommendation, the Governing Board on March 14, 2018, unanimously approved Amica’s participation application and authorized CEA’s CEO Glenn Pomeroy to negotiate and execute on CEA’s behalf an Insurer Participating Agreement with Amica, conditioned on Amica’s paying up to five annual risk-capital surcharges in addition to its required capital contribution¹ and any required loss assessments.²

On December 9, 2010, the Governing Board unanimously approved the method for calculating the annual risk-capital surcharge for new participating insurers with an existing book of residential earthquake insurance policies.

¹ As required by Insurance Code §10089.15

² As required by Insurance Code §10089.23, §10089.30 and §10089.31

Analysis:

Under the law, the Board must calculate the first risk-capital surcharge one year after the date the new participating insurer first placed or renewed business into the CEA; in addition, the Board must recalculate the risk-capital surcharge for each of up to four years after the first calculation and, for each such year, impose the resulting recalculated surcharge. Once the insurer's earthquake insurance risk profile becomes substantially similar to the CEA's average risk profile for a CEA book of business of similar size, the Board must relieve the insurer of further obligation to pay risk-capital surcharges.

The law also provides that each annual risk-capital surcharge must equal CEA's increased cost of providing or securing capacity to insure the new participant's excess earthquake insurance risk.

The law requires full payment of a noticed risk-capital surcharge within 30 days.

CEA staff has analyzed Amica's earthquake insurance risk profile as of August 31, 2018, and has determined that the addition of Amica's business is more likely to produce losses for CEA, or is likely to produce greater losses for CEA, than would a book of existing CEA business of similar size. CEA staff therefore recommends that the Board require Amica to pay a first annual risk-capital surcharge in the amount of \$112,651, which represents the increased cost to CEA of providing capacity to insure Amica's excess earthquake insurance risk for that one-year period.

Collectively, exhibits 1, 2 and 3 detail the first annual risk-capital surcharge calculation for Amica.

Recommendation:

In accord with the written resolution presented to the Board at this meeting, (1) approve the amount calculated for Amica's first annual risk-capital surcharge and authorize staff duly to notify Amica of the payment amount and its due date, and (2) direct staff to take any and all steps it deems necessary to accomplish the actions described above.

AMICA FIRST ANNUAL RISK-CAPITAL SURCHARGE CALCULATION

	(A)	(B)	
	With Amica	Without Amica	
(1) Total Capacity	17,713,148,895	17,685,323,376	
(2) Risk Transfer	8,386,849,444	8,372,295,925	
(3) Risk Transfer E(L)	201,351,000	200,944,000	
(4) E(L) / Limit	2.40%	2.40%	
(5) SD(Loss) / Limit	13.40%	13.40%	
(6) Capital Multiplier	0.635	0.635	
(7) Capital Charge	8.50%	8.51%	
(8) Reinsurer Target ROE	20.0%	20.0%	
(9) Reinsurer Non-Brokerage Expense	9%	9%	
(10) Technical Price	4.51%	4.51%	
(11) Risk Transfer Cost	378,030,667	377,334,589	
(12) Risk Capital Surcharge			696,078
(13) First Year Risk Capital Surcharge before investment income offset			348,039
(14) Investment Income Offset			235,388
(15) First Year Risk Capital Surcharge			112,651

Notes:

- (A) Values in column A are based on the 8/31/2019 CEA portfolio modeled results, including Amica
- (B) Values in column B are based on the 8/31/2019 CEA portfolio excluding Amica, adjusted for an increase in exposure equal to the exposure increase from Amica of 0.91% (see Exhibit 2) to create a "same-sized" CEA excluding Amica.
- (1) (A) CEA claim-paying capacity at 8/31/2019. (B) Modeled capacity for a same-sized CEA excluding Amica.
- (2) (A) Risk Transfer Capacity purchased. (B) Line 1 less other sources of claim-paying capacity, reflecting that Amica Capital Contribution would not be available capital.
- (3) Estimated expected loss based on modeled exceedence curves and risk transfer program at 8/31/2019.
- (4) (3) / (2)
- (5) Standard deviation of loss to reinsurers expressed as a percentage of the limit.
- (6) Selection, calibrated to average price for risk transfer program
- (7) (5) x (6)
- (8) Selection, calibrated to average price for risk transfer program (Column A - line 10)
- (9) Selection, based on review of historical reinsurer expense levels
- (10) (A) Average price for risk transfer program (B) Calculated $[(7) \times (8) + (4)] / [1.0 - (9)]$
- (11) (2) x (10)
- (12) (A11) - (B11); Zero, if negative
- (13) (12) * 50% to recognize roll-on of risk in first year
- (14) Investment income attributable to Amica's capital contribution, Exhibit 3 - line 6.
- (15) (13) - (14)

AMICA EXPOSURE CONTRIBUTION

	CEA		CEA excluding Amica		Comparison	
	(1)	(2)	(3)	(4)	(5)	(6)
Policy Type	Number of Policies	Total Exposure (\$000s)	Number of Policies	Total Exposure (\$000s)	Policies	Exposure
Homeowners	857,012	485,588,202	851,568	481,195,247	0.64%	0.91%
Mobilehomes	28,914	4,308,281	28,914	4,308,281	0.00%	0.00%
Condos	119,014	14,945,126	117,881	14,800,452	0.96%	0.98%
Renters	85,606	3,519,944	84,745	3,483,597	1.02%	1.04%
TOTAL	1,090,546	508,361,552	1,083,108	503,787,578	0.69%	0.91%

Notes:

- (1) 8/31/2019 CEA portfolio including Amica policies
- (2) Sum of Coverage A - F limits including Amica
- (3) 8/31/2019 CEA portfolio excluding Amica policies
- (4) Sum of Coverage A - F limits excluding Amica
- (5) (1) / (3) percentage increase in policies with Amica
- (6) (2) / (4) percentage increase in exposure with Amica

AMICA INVESTMENT INCOME OFFSET

CEA Investment Income Return

	<u>2018</u>	<u>2019</u>
(1) Net Investment Income	92,745,187	228,161,625
(2) Cash and Invested Assets, Current Year	6,610,077,544	6,887,872,602
(3) Cash and Invested Assets, Prior Year	6,317,362,817	6,610,077,544
(4) Net Investment Income percentage	1.43%	3.38%

Amica Capital Contribution - Schedule of Payments

		<u>Investment Income Attributable</u>	
		<u>2018</u>	<u>2019</u>
8/18/2018	1,106,000	(5) 5,870	24,922
9/18/2018	1,106,000	4,522	24,892
10/19/2018	1,106,000	3,174	24,861
11/19/2018	1,106,000	1,826	24,831
12/19/2018	1,106,000	522	24,802
1/20/2019	1,106,000		22,844
2/20/2019	1,106,000		19,668
3/20/2019	1,106,000		16,800
4/20/2019	1,106,000		13,624
5/20/2019	1,106,000		10,551
6/20/2019	1,106,000		7,376
7/20/2019	1,106,000		4,302
Total	13,272,000	(6) 235,388	

(1) 2018 - CEA audited GASB financial statement; 2019 values from 8/31/2019 Statement of Revenue, net investment income

(2) 2018 - CEA audited GASB financial statement; ; 2019 values from 8/31/2019 Balance Sheet, total cash and investments

(3) 2018 CEA audited GASB financial statement

(4) (1) / [Average of (2) and (3)]

(5) Investment income calculated based on yearly return, amount and time invested.

(6) Total of 2018 and 2019 columns

Governing Board Memorandum

11 December 2019

Agenda Item 14: Recommendation to transfer money from CEA's Earthquake Loss Mitigation Fund to the California Residential Mitigation Program (CRMP)

Recommended Action: Approve recommended updated 2020 budget

Background:

CRMP operates the highly successful Earthquake Brace + Bolt program (EBB), which provides grants of up to \$3,000 to California homeowners whose houses are in areas of higher seismic risk to assist in paying for a code-based seismic retrofit.

CEA staff periodically asks that funds be transferred from the CEA Earthquake Loss Mitigation Fund to the CRMP—those funds constitute a primary means of funding and operating CRMP mitigation programs.

To date, the following transfers have been approved by CEA to the CRMP—all to support, and fund grants awarded by, the EBB program:

- December 2010 \$500,000 (initial funding)
- May 2013 \$1,000,000 (to complete EBB pilot program; begin expansion)
- December 2014 \$3,000,000 (to expand EBB in 2015)
- June 2016 \$1,000,000 (to expand EBB in 2016)
- March 2017 \$5,400,000 (to expand EBB in 2017)
- March 2018 \$5,600,000 (to expand EBB in 2018)
- July 2018 \$3,300,000 (to allow additional 2018 EBB retrofits)
- Various 2019 \$6,300,000 (to expand EBB in 2019)

Analysis:

In December 2019, staff will ask the CRMP Governing Board to approve the 2020 CRMP budget, which would provide approximately \$22 million for 2020 EBB-program grants to homeowners.

A majority of the \$22 million in program grants will be funded by federal grant money from FEMA, through direct reimbursement based on actual program grant expenditures. However, given the volume of transactions, CRMP will need additional contributions from the CEA to ensure no cash flow issues while awaiting reimbursement.

As of October 31, 2019, CRMP has approximately \$3.6 million in cash. CEA and CRMP staff have determined that a contribution of \$3 million would likely be sufficient to avoid any cash flow issues that would require interruption of the program. This amount is estimated on a 60 day reimbursement turnaround on the monthly requests. If the actual reimbursement period takes longer than 60 days, CEA may need to ask for additional funding from the Board.

In addition to grant payments to homeowners, EBB expenses include ongoing administrative and operational costs, marketing, and third-party-evaluation services. These costs are not reimbursed by the FEMA grants. Based on the 2020 CRMP budget, a contribution of \$1 million would be considered sufficient to cover these expenditures.

As of October 31, 2019, the CEA Earthquake Loss Mitigation Fund had a balance of approximately \$8.8 million.

By continuing agreement with Cal OES, CEA remains, as between those two entities, the sole (non-federal) funder of CRMP programs and activities.

Recommendation:

CEA staff recommends the Governing Board approve a 2020 fiscal year transfer to CRMP of funds from the CEA Earthquake Loss Mitigation Fund in the amount of \$4.0 million to fund CRMP EBB programs and cash flow needs in 2020.

Governing Board Memorandum

11 December 2019

Agenda Item 15 (a): CEA Research Program: Projects

Recommended Action: No action required – informational only

Background:

With Governing Board support and approval, CEA launched a new Research Program in 2017. The program provides for three tiers of grant funding for multiple disciplines of research, all relevant to CEA's mission to provide affordable, accessible earthquake insurance for those who own or rent residences in California.

1. Grant Program

Grants for professional and academic development comprise two of the tiers of the grant program. Projects must be related to earthquake studies, regardless of discipline, and meet program specifications for focus areas. The grant recipients will most likely be research specialists, possibly private sector but more likely faculty employed in public and private universities, within and outside California. In addition to generating research to inform CEA in its mission and inform the earthquake community in general, the grants are intended to support and build a new generation of earthquake-science specialists from many disciplines, including graduate students and professionals establishing themselves in the field.

Grant contracts would be made with the university, which distributes grant funds to the ultimate recipient. NOTE: Universities often add substantial overhead costs, reducing net funds to the researcher—this may have impacts on the grant awards.

CEA Research and Legal Department staff have collaborated on (draft) program policies and procedures, including best options for contracting with university faculty who may be awarded a CEA grant, and are finding the goal more complex than anticipated.

In addition to the CEA Legal Department, input from CEA Finance and Accounting will ensure funding requests and distribution meet audit requirements. Additionally, clear contracting criteria and a process to administer the contracts and distribute funds must be set before program launch. As a result, the grant program is projected to launch in 2020.

2. Research Projects

Cripple-Wall-Performance Effects

CEA contracted with the Pacific Earthquake Engineering Research (PEER) Center in September 2016 to lead the CEA's research project, "Quantifying the Performance of Retrofit of Cripple Walls and Sill Anchorage in Single Family Wood-frame Buildings."

Progress to date on the seven project tasks:

1. Literature Review. **Completed**
2. Analysis of Building Inventory and Defining Representative "Index Buildings." **Completed**
3. Selecting Ground-Motion Records and Developing Loading Protocols. **Completed**
4. Experimental Program. **Completed**
5. Analytical modeling. **Completed**
6. Loss Model Calibration Framework. **In Progress**
7. Reporting, including regular progress reports. **Three reports have been received, and the project is on track.**

With this project, CEA will have refined scientific data to inform CEA rate levels and premium discounts. Schedule to be completed Q2 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.”

The guidelines were last updated in 2010. As part of CEA’s funding agreement with CUREE, the guidelines were made available for free PDF download and have been widely distributed as part of the California Department of Insurance-required earthquake training for adjusters.

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 and to develop companion engineering guidelines. (“Damage Assessment and Repair Guidelines for Residential Wood-Frame Buildings. Vol. 1 – General, Vol. 2 – Engineering.”)

Drafting of these guidelines is currently underway and is expected to be completed December 2019.

UCERF3 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.

Although CEA is not legally obligated to advance the scientific understanding of seismic risk in California, staff continues to believe that it is in CEA’s best interests to do so, on a voluntary basis. Seismic research underpins many of CEA’s actions, such as:

- Developing the structure and cost of innovative insurance products, using the best available science.

- Understanding the amounts of risk-transfer CEA requires to ensure coverage needs and policyholder claims.
- Measuring the effects of risk-reduction features on expected policyholder losses (e.g., to support a more robust hazard-reduction discount).
- Effectively communicating risk to CEA policyholders and other stakeholders.
- Quantifying the anticipated total cost of a damaging earthquake, using the CEA's proprietary EARLE process.

The Governing Board agreed and approved an earlier request that CEA contract 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 will have leading roles in the development, progress, and quality control of the project, with oversight and appropriate management to be provided by the CEA Research Department.

CEA has finalized the contract and the project is underway. A workshop is planned to be held in Q1 2020.

Recommendation:

No action required—information only.

Governing Board Memorandum

11 December 2019

Agenda Item 15 (b): Mitigation Programs Update

Recommended Action: No action required—information only

CRMP Earthquake Brace + Bolt (EBB) Programs

With the acceptance of all applicants that registered for the program late last year into either the CRMP-funded or FEMA-funded programs, EBB staff have been busy processing applications and, as appropriate, submitting them to FEMA for review. The CRMP-funded program will likely close early next year with more than 600 completed retrofits. EBB expects that all 1,000 grants available under the FEMA-funded HMGP DR-4308 grant will be filled by the end of November and then EBB will begin processing applications (7,600 grants available) for Phase I of the \$20M HMGP DR-4344 program. With more grants available than current registrants, EBB will open registration for the 2020 program during the first quarter of 2020 with approximately 3,500 grants to be funded under the HMGP DR-4344 program.

CRMP Earthquake Brace + Bolt Program (11/15/2019)			
Program	Completed	In Progress	Status
2014-2017 EBB	4,285	N/A	Closed
2018 EBB	3,349	N/A	Closed
CRMP 2019 EBB	427	136	984 transfers 1 accepted 79 extensions
FEMA Napa EBB	84	N/A	Closed
FEMA-funded 2019 EBB (HMGP DR-4308 and DR- 4344 grants)	19	1,089	8,688 registered 5,450 accepted 356 extensions
Total	8,164	1,225	N/A

Future Funding Opportunities

CRMP continues to look beyond present funding sources—the primary source has been the CEA Earthquake Loss Mitigation Fund—for additional funding sources, including available FEMA HMGP grants.

Current HMGP applications include:

FEMA – Hazard Mitigation Grant Program (HMGP)

- DR-4407 0104 - \$20M – (EBB Soft Story, 3 counties) The application has been submitted to Cal OES.
- DR-4407 0105 - \$20M – (EBB 23 counties) The application has been submitted to Cal OES.

DHS – 2019 Pre-Disaster Mitigation (PDM) Program

- \$10M – Resilient Infrastructure Grant for Earthquake Brace + Bolt – (Statewide) NOI accepted, application due 1/20
- \$ 4M – Pre-Disaster Mitigation for Earthquake Brace + Bolt – (Statewide) NOI accepted, application due 1/20

CEA Brace + Bolt Program (CEA BB)

CEA BB Program (11/25/19)		
Completed	In Progress	Status
129	311	460 accepted 148 extensions

Since the September 25, 2019, Governing Board meeting, staff has reached out to the remaining policyholders identified as eligible for CEA BB, began a comprehensive agent support campaign, and continues to engage with participating insurers (PIs) to build an additional layer of outreach.

Outreach to Policyholders

Since the last Board meeting, CEA has sent a letter, via first-class mail, to the approximately 8,000 eligible policyholders who had yet to receive an invitation, inviting them into the retrofit program. Policyholders received the letters between November 19 and 21.

Outreach to Agents

Currently, four PIs (California FAIR Plan, CSAA, Farmers, and Mercury) have appended policyholder data with varying levels of agent contact information for 8,352 policies (California Fair Plan = 99, CSAA = 3,650, Farmers = 3,859, Mercury = 744).

CEA's Agent Outreach team is using the data mentioned above to meet with approximately 21 agent offices each week. This combined effort benefits CEA BB, and CEA, in three ways:

1. Allows our outreach team to educate agents on CEA BB, CEA in general, and our offerings such as the Marketing Value Program, face-to-face. Additionally, many of these visits produce training requests.
2. Showing we value building direct rapport and relationships with agents while providing exceptional customer service.
3. We gather data while sitting down and talking with agents/staff, which gives us invaluable insight as to how well we support agents, learn if we are equipping them with what they actually need to be successful, and opening a dialogue whereby we can continue to pay attention to agents' reasonable wants and needs concerning earthquake insurance and support for them and their insureds.

Additionally, Agent Outreach is providing agents with two new resources:

- Explaining the Science
Regionally specific document with maps, narrative, and data that explains the latest seismology/risk research results behind increases in premium rates and earthquake risk, so both agents and insureds understand the importance and benefit of a code-compliant retrofit. Currently, these documents cover three overall areas: Northern Coast, Greater Bay Area, and Greater Los Angeles Area. (See Attachment 1: Explaining the Science – Greater Bay Area)
- Retrofit Costs
At the request of agents, this document shows Program Year and Total Retrofits, Average and Median Cost, and Minimum and Maximum Cost of code-compliant retrofits for both Northern and Southern California. (See Attachment 2: Retrofits and Cost)

Outreach to Participating Insurers

Agent Outreach continues to create inroads and build support for the overall outreach effort for CEA BB. Our primary ask remains that PIs append our policyholder data with the agent that owns that relationship. Agent Outreach can then directly engage with that agent to enlist their aid in promoting CEA BB to their insureds. Based on feedback

from our PIs, CEA is continuing to make progress as well as adjustments to the programming.

Guidelines Development Project

The ATC 110 earthquake-guidelines-development project, first phase, was completed on June 20, 2018. Now called FEMA P-1100, Vulnerability-Based Seismic Assessment and Retrofit of One- and Two-Family Dwellings, the document is currently under review by FEMA. 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)

Work yet to be completed and for which the current contract will be amended includes development of training materials for the guidelines and archiving data used in developing the guidelines.¹

CEA is working 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 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 CEA's ability to develop and provide suitable mitigation discounts for CEA-insured homeowners.

¹ As discussed in CEA's memorandum regarding the 2020 Mitigation Program Budget, the scope of work under the contract for ATC 110 was revised to expand the deliverables from ACT 110 during 2019. The 2019 Mitigation budget utilizes \$171,000 of unspent monies to fund an expanded scope of the ATC 110 earthquake-guidelines-development project, which includes the development of training materials for the guidelines and archiving data used in developing the guidelines.

Governing Board Memorandum

11 December 2019

Agenda Item 16: 2020 CEA Budget: Mitigation Program

Recommended Action: Approve 2020 CEA Mitigation Program Budget

Background:

CEA staff has prepared for the Governing Board the annual CEA mitigation budget, based on all anticipated mitigation-related expenses for the 2020 calendar year.¹

Analysis:

2020 Mitigation Budget

Staff has prepared two attachments to assist the Board in analyzing the proposed 2020 Mitigation budget and comparing it to the 2019 Mitigation budget:

- **Attachment A: Budgeted Expenditures and Actual Expenditures – 2019 Budget Year**
 - This attachment shows:
 - a. the December 2018 Board-approved budget for calendar year 2019;
 - b. 2019-budget adjustments during the year;
 - c. 2019-budget augmentations during the year;
 - d. the 2019 mitigation budget, as adjusted and approved;
 - e. actual 2019 mitigation expenses (through October 31, 2019 (latest available figures));
 - f. projected expenses for November and December 2019;
 - g. total actual and projected expenses at December 31, 2019;
 - h. comparison of augmented, adjusted, approved budget to actual and projected expenses at December 31, 2019; and
 - i. percentages spent of augmented, adjusted, approved 2019 budget.

¹ The CEA fiscal year for both insurance services and the mitigation program is the calendar year.

- **Attachment B: Approved 2019 Mitigation Budget after Augmentations and Adjustments Compared to Proposed 2020 Mitigation Budget**
 - This attachment shows the approved 2019 Mitigation budget after augmentations and adjustments and compares it to the proposed 2020 budget, constructed as necessary to fulfill mitigation-related business responsibilities and operations.²

Recommendation:

CEA staff recommends that the Board take the following actions:

- Approve the proposed 2020 Mitigation budget.
- Direct staff to operate the CEA's mitigation-related business activities within the approved budget.

² As discussed in CEA's memorandum reporting on the 2019 Mitigation programs, the contract of one of CEA's research vendors, ATC 110, was expanded to provide more deliverables. This expansion of scope of work for ACT 110 continues into 2020. The 2020 Mitigation budget includes \$100,000 for new deliverables under the ATC 110 earthquake-guidelines-development project for assistance from the International Code Council in the adoption of FEMA P-1100 guidelines as industry standards, which will pave the way for adoption into the California Existing Building Code.

CALIFORNIA EARTHQUAKE AUTHORITY
Mitigation
Budgeted-Actual-Projected Expenditures
as of October 31, 2019

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f)	(g)	(h) (f=d-g)	(i) (i=g/d)
	Approved 2019 Budget 1/1/2019	Adjustments^A	Augmentations	2019 Budget after Augmentations and Adjustments	Actual Expenditures as of 10/31/2019	Projected Expenditures 11/1/19 to 12/31/19	Actual and Projected Expenditures as of 12/31/19	Augmented & Adjusted Approved Budget vs. Actual and Projected Expenditures	Percentage used of Augmented & Adjusted 2019 Budget
Human Resources:									
Compensation and Benefits	\$ 1,232,992	\$ 118,540	\$ -	\$ 1,351,532	\$ 1,126,064	\$ 227,356	\$ 1,353,420	\$ (1,888)	100.1%
Travel	50,544	(35,479)	-	15,065	16,715	700	17,415	(2,349)	115.6%
Other	24,565	(1,760)	-	22,805	15,555	5,050	20,605	2,200	90.4%
Administration & Office	64,649	(55,802)	-	8,847	3,820	4,347	8,167	681	92.3%
Information Technology	840	(70)	-	770	630	140	770	-	100.0%
Telecommunications	32,400	(15,702)	-	16,698	13,171	3,000	16,171	527	96.8%
Rent/Lease	111,900	3,003	-	114,903	90,613	20,650	111,263	3,640	96.8%
Other	200,000	(200,000)	-	-	-	-	-	-	0.0%
Total Operating Expenditures	\$ 1,717,890	\$ (187,269)	\$ -	\$ 1,530,621	\$ 1,266,569	\$ 261,242	\$ 1,527,811	\$ 2,810	99.8%
CRMP Contribution	6,300,000	-	-	6,300,000	6,300,000	-	6,300,000	-	100.0%
Investment Services	12,400	(3,299)	-	9,101	6,732	1,670	8,402	699	92.3%
Marketing	4,500	2,945	-	7,445	5,445	2,000	7,445	-	100.0%
Engineering - Related	400,000	(157,612)	-	242,388	35,488	206,900	242,388	-	100.0%
Total Other Expenditures	\$ 6,716,900	\$ (157,966)	\$ -	\$ 6,558,934	\$ 6,347,664	\$ 210,570	\$ 6,558,235	\$ 699	100.0%
Total Expenditures	\$ 8,434,790	\$ (345,235)	\$ -	\$ 8,089,555	\$ 7,614,233	\$ 471,813	\$ 8,086,046	\$ 3,509	100.0%

^AAdjustments to meet mitigation end of year projections.

CALIFORNIA EARTHQUAKE AUTHORITY
Mitigation
Budget Comparison
2020 Budget to 2019 Budget

	(a)	(b)	(c)	(d)
			(c=a-b)	(d=c/b)
	Proposed Budget	Budget after		
	2020	Augmentation		
		and Adjustments	Difference	% Change
	2020	2019		
Operating Expenses				
Human Resources:				
Compensation and Benefits	\$ 1,501,398	\$ 1,351,532	\$ 149,866	11.1%
Travel	35,560	15,066	20,494	136.0%
Other	19,365	22,805	(3,440)	(15.1%)
Administration & Office	70,449	8,848	61,601	696.2%
Information Technology	840	770	70	9.1%
Telecommunications	20,500	16,698	3,802	22.8%
Rent/Lease	103,600	114,903	(11,303)	(9.8%)
Other	200,000	-	200,000	100.0%
Total Operating Expenses	1,951,712	1,530,622	421,090	27.5%
Other Expenses				
CRMP Contribution	4,000,000	6,300,000	(2,300,000)	(36.5%)
Investment Services	9,600	9,100	500	5.5%
Marketing Services	500	7,445	(6,945)	(93.3%)
Engineering Related Research	100,000	242,388	(142,388)	(58.7%)
Total Other Expenses	4,110,100	6,558,933	(2,448,833)	(37.3%)
Total Budgeted Expenditures	\$ 6,061,812	\$ 8,089,555	\$ (2,027,743)	(25.1%)

Governing Board Memorandum

11 December 2019

Agenda Item 17: Communications & External Affairs 2019 Results

Recommended Action: No action required—information only

Californians received a sudden reminder this year that big earthquakes are possible in our state. Though recent earthquakes in Ridgecrest during the 4th of July holiday were high in magnitude, California was fortunate those earthquakes struck beneath areas that were not heavily populated. Despite limited damage, CEA experienced surging policy sales after the shaking stopped.

CEA also knows that policy improvements and rate reductions can attract more interest, and that damage caused by other types of natural disasters dominating the news can motivate more people to buy earthquake coverage. In addition, when a new participating insurer joins CEA, those home insurance companies transfer their earthquake policies to CEA's book-of-business.

As a result, combined with a decade of evolving sophistication in strategic advertising and marketing from CEA, many more Californians now have CEA policies.

Advertising plays a key role in driving CEA policy sales. With limited, to no advertising from September 1999 through September 2008, total CEA policies-in-force dropped by just under 12 percent. Since July 2008 when CEA kicked-off annualized advertising and marketing, however, its total policies-in-force increased by just over 40 percent.

Background:

In 2019, CEA continued to build upon the "It could happen today" advertising campaign through its second year, promotion of its *Get Prepared, California!* Auction that has raised more than \$1.4 million for American Red Cross through eight years, and statewide sponsorship of the *Great California ShakeOut* that helped to prompt participation from a record 10.8 million Californians during its 12th year. CEA also continued innovating in 2019 through implementation of:

- A landing page (EQHeadquarters.com) offering official earthquake resources from CEA on 17 TV news stations, 58 radio stations, and 91 newspapers, with in-person media briefings with seven earthquake partners for 15 news outlets in three markets;
- Creation of *Earthquake News* showing earthquake preparedness through six video stories in a TV news format for both CEA and partner websites; and
- TV ads and CEA website pages in both Spanish and Chinese.

CEA also tested a new strategy for delivery of paid media throughout its primary markets. In the past, CEA's paid media outreach primarily was wrapped around two events each year. The first was the *Get Prepared, California!* Auction in April when CEA strategically would integrate TV, radio, email, direct mail and digital advertising. The second was the *Great California ShakeOut* in October when CEA similarly would implement integrated media planning.

For 2019, CEA decided to redirect its efforts through a regionally, quarterly focused strategy, with only digital advertising running statewide, year-round:

- First-quarter programming focused on the greater Los Angeles area where CEA strategically integrated TV, radio, email, and direct-mail advertising.
- Similar second-quarter programming focused on the Bay Area, with the addition of transit-shelter advertising. At the same time, the *Get Prepared, California!* Auction was promoted through statewide radio, without concurrent TV ads that ran during the previous month.
- Integrated paid media planning focused on San Diego was implemented through third-quarter programming without statewide radio promotion of the Auction.
- During the fourth quarter, CEA integrated TV, radio, email, direct mail, ethnic, outdoor and digital advertising statewide alongside promotion of the *Great California ShakeOut*.

The Ridgecrest earthquakes in July prompted CEA also to run TV and radio ads featuring CEO Glenn Pomeroy who delivered information statewide for several weeks on how to file a claim, and where to go for additional information about future earthquake preparedness.

Analysis:

Annual paid media impressions:

Total – 1,550,875,684 (increased year-over-year by 69 percent)

- Digital – 1,001,813,391

- Email / Direct Mail – 4,394,633
- Radio – 206,782,854
- TV – 149,459,430
- Ethnic – 38,853,978
- Outdoor – 119,222,349
- Print – 30,349,049

Annual earned media results:

- News coverage: CEA was mentioned in at least 611 news stories between Jan. 1 and Oct. 31, of which about 63 were “added value” coverage of CEA. *(Note this count does not reflect EBB/CRMP stories unless they also mentioned CEA, Wildfire Fund stories that did not also mention CEA, or any stories labeled as sponsored/advertorial etc. Also, this is a count of individual stories, so if an NBC LA story also ran on the NBC San Diego and NBC San Francisco websites, CEA counted as three stories running.)*
- Where coverage ran: CEA appeared in coverage from all major TV networks in California’s top metropolitan areas (ABC, CBS, NBC, FOX and other stations in Los Angeles, San Diego and the Bay Area), plus TV networks in other regions (Palm Springs, Bakersfield, etc.); radio in all major metropolitan areas; daily newspapers for all major metropolitan areas (the Los Angeles Times, San Diego Union-Tribune, San Francisco Chronicle, The Mercury News, The Press-Enterprise, The Desert Sun, San Bernardino Sun, Redlands Daily Facts, The Napa Valley Register, The Sacramento Bee, Vacaville Daily Reporter, The Chico Enterprise Record, and so on). CEA also appeared in news coverage from major national outlets (The New York Times, The Wall Street Journal, USA Today, The Associated Press, Thomson Reuters, CNN, National Public Radio, FOX Business News, NBC Universal, CBS News, Telemundo and Univision, etc.) and from trade press (Insurance Journal, A.M. Best, Artemis, Business Insider, Business Insurance, Property Casualty 360, and many others).
- Ridgecrest coverage: In July 2019 alone (the month of the Ridgecrest earthquakes), CEA was mentioned in 274 news stories (most focused on Ridgecrest, but some also focused on CEA’s rate change and CEA BB grants). An example from Ridgecrest is this interview with CEA CEO Glenn Pomeroy on NPR’s All Things Considered: <https://www.npr.org/2019/07/09/739999709/why-only-13-of-california-homeowners-have-earthquake-insurance>.
- ShakeOut coverage: In October 2019, CEA was mentioned in at least 58 ShakeOut news stories (24 earned-media stories related to ShakeOut and 34 added-value stories related to ShakeOut; there were at least another 24 earned stories unrelated to ShakeOut in October, for a total count of 82 stories in October).

- Press releases: CEA distributed 10 press releases between Jan. 1 and Oct. 31. The one with the highest open rate was the July 4 press release about the first Ridgecrest earthquake. It had a 22 percent open rate, with 798 media contacts opening the release email. CEA also provided distribution assistance for releases and/or advisories from several others (the Earthquake Country Alliance, U.S Rep. Thompson, State Sen. Hertzberg, etc.). And CEA included releases from other organizations within its online press room if they mentioned CEA (e.g., Fitch, EBB, California Department of Insurance, American Academy of Actuaries, U.S. Rep. Thompson, State Sen. Hertzberg).
- Inquiries/interviews: CEA spokespersons assisted more than 370 individual media contacts through October 31.

Annual social media engagement:

CEA offered customer-service support for consumers and PI agents through posts, comments, and messages on Facebook, Twitter, Instagram, and LinkedIn:

- Generated a 53 percent increase in likes and 54 percent increase in followers on Facebook.
- Nearly doubled followers on Twitter organically, earning more than 18 followers per week.
- Launched an Instagram page and currently is achieving 106 percent of goal for followers.
- Expanded business-to-business outreach by revamping CEA's LinkedIn page, along with a monthly newsletter to encourage agent training and participation in CEA's Marketing Value Program (MVP).
- Participated in branded content posts with CBS, FOX, NBC affiliates, and independent stations, along with NBC Sports Bay Area, iHeart radio stations, the San Francisco Chronicle, and the San Diego Tribune to promote earthquake risk and preparedness.
- During the *Great California ShakeOut*, organically reached more than 42,000 people on Facebook and earned more than 59,000 organic impressions on Twitter.* Also organically earned more than 2,700 impressions on Instagram, more than 1,800 on LinkedIn, and more than 300 on YouTube.

**ShakeOut 2019 landed on the same day as the 30th anniversary of the Loma Prieta earthquake. Because of this, CEA's posts were split between the two events so the number of posts for ShakeOut was lower than last year. Even with the reduced number of posts for ShakeOut, CEA still reached 62 percent of the number of people reached last year on Facebook, while also generating a 147 percent increase in organic impressions on Twitter.*

Annual research results:

Wizer Ad Campaign Evaluation

In April 2019, CEA compared effectiveness of its previous advertising campaigns through an online survey conducted by Wizer Research. Results from that study came from 1,666 California residents living in Los Angeles, San Francisco, and San Diego.

Each respondent was randomly assigned to watch and answer questions about one 30-second TV ad. The seven ads from four different CEA advertising campaigns tested were:

- Blueprint
- California Rocks
- Risk is Real – More, More, More
- Risk is Real – Pressure
- It Could Happen Today – Anthem
- It Could Happen Today – Product
- CEA Policyholder Testimonial

Before watching one of CEA's TV ads they were asked "How likely are you to renew or purchase an earthquake insurance policy this year?" After watching one of CEA's TV ads, they were asked the following questions:

- Emotional Reaction – How did CEA's ad make you feel?
- Likability – Did you like or dislike CEA's ad?
- Engagement – How engaged were you throughout CEA's ad?
- Relevance – How relevant is CEA's ad for you and your needs?
- Effect on Purchase – How likely are you to renew or purchase a CEA policy this year?

For emotional reaction and likeability, the ads that scored best were CEA Policyholder Testimonial, California Rocks, and Blueprint. Risk is Real – Pressure scored lowest. All seven ads produced similar scores for Engagement and Relevance.

For the question, "How likely are you to renew or purchase an earthquake insurance policy this year," the following ads showed the biggest gains from respondents who answered that question before, and then again after watching the ads:

- CEA Policyholder Testimonial
- Risk is Real – Pressure
- It Could Happen Today – Product
- California Rocks

As a result of the Wizer Research study, CEA is now modifying its 2020 advertising campaign to feature policyholder testimonials.

Search Engine Optimization (SEO)

CEA pursued a more focused, tactical approach to boost traffic to its website in 2019 by growing its organic visibility through Search Engine Optimization (SEO).

- What is SEO? It’s changing website coding and content to improve Google search results when a person types in a related search word or phrase.
- What is organic traffic? When visitors arrive CEA’s website because its web address appears at the top of Google search results, that traffic is known to have arrived organically, and is free to CEA because no keywords or online ads were purchased to attract those site visitors.
- What is visibility? It’s a metric showing how often a website is found on the Internet.

CEA met each of its two SEO goals for 2019:

- Goal 1: Discover and incorporate key words and phrases that will produce a higher-level ranking for CEA in Google searches for people seeking earthquake information, thus organically driving more people to visit CEA’s website.
- Goal 2: Continue to optimize the coding behind the website by updating tags and other elements to further increase CEA’s organic site traffic.

Year-over-year results:

- Increased visibility score by 11.5 percent
- Increased number of keywords in top position by 20 percent
- Increased keyword traffic-per-day by 73 percent
- Increased value of free, organic traffic through search, not advertising, by 18 percent – value of free, organic traffic in 2018 was \$815,700, and so far in 2019 is \$963,700
- Based on SEO research results, CEA updated its website content with new keywords and phrases prompting increases in respective page traffic by percentages below:

Page on CEA Website	Organic Growth
www.earthquakeauthority.com/california-earthquake-risk/faults-by-county	756%
www.earthquakeauthority.com/california-earthquake-insurance-policies/earthquake-insurance-premium-calculator	71.5%
www.earthquakeauthority.com/	16%
www.earthquakeauthority.com/california-earthquake-insurance-policies/homeowners	110%

www.earthquakeauthority.com/california-earthquake-insurance-policies	35%
www.earthquakeauthority.com/california-earthquake-risk/personal-preparedness/seven-steps-to-earthquake-safety	784%
www.earthquakeauthority.com/california-earthquake-insurance-policies/how-to-buy-earthquake-insurance-california	200%
www.earthquakeauthority.com/california-earthquake-risk/personal-preparedness	43%

CEA plans to continue this successful strategy throughout 2020 by keeping current with Google search trends, and aligning with those trends through delivery of additional, timely content and coding updates to the EarthquakeAuthority.com website.

Awareness/Attitudes Baseline Research to Kick-Off Annual Tracking

CEA kicked-off research in 2019 to establish baseline numbers that could be compared to ongoing annual results for the same survey questions about whether awareness of, and attitudes about CEA were improving as a result of CEA programming.

More specifically, quarterly CEA surveys tracked:

- Familiarity with the category
- Familiarity with CEA
- Attitudes regarding earthquakes
- Favorability toward CEA
- Perceptions of vulnerability
- Likelihood of purchase
- Sources of influence and recommendation
- Advertising sources and influence

CEA’s awareness/attitudes research produced the following results:

- Measures across all four quarters were relatively stable
- Perceived cost of earthquake insurance remains as top barrier
- Category familiarity just over 70 percent
- CEA favorability and familiarity 40-60 percent
- Agent recommendations less than 50 percent
- Seen/heard category ads 30-40 percent
- Residents who reported they had earthquake insurance 25-35 percent

Most importantly, a combined 84 percent of survey respondents were either much more, or somewhat more favorable to CEA as a result of CEA advertising. In addition, a combined 76 percent of survey respondents were either much more, or somewhat more likely to purchase a CEA policy as a result of CEA advertising.

Those numbers represent a stark contrast to favorability for CEA back in 2010 when advertising projects were delivering fewer than 50 million advertising impressions, and with research at that time revealing that both consumers and agents “perceived no relationship” with CEA.

Yet through a collaborative relationship between staff and its Governing Board, CEA’s devotion to innovating, developing and deploying during the last decade has produced important peace-of-mind for more CEA policyholders, along with a positive market position for prompting more Californians to get ready to recover before the state’s next damaging earthquake strikes.

Recommendation:

No action required—information only.

California Earthquake Authority

Losses & Loss Adjustment Expenses (LAE) Paid - Cumulative to October 31, 2019

Event Code	Event Name	Date of Event	Magnitude	Location	# of Paid Claims	Losses Paid	LAE Paid	Total Paid Losses & LAE
98010	Chino	1/5/1998	4.3	3 mi. W of Chino	1	\$1,385.72	\$124.71	\$1,510.43
98050	San Juan Bautista	8/12/1998	5.3	7 mi. SSE of San Juan Bautista	1	161,204.93	13,643.13	\$174,848.06
98070	Redding	11/26/1998	5.2	3 mi. NNW of Redding	1	4,029.72	362.67	\$4,392.39
	1998 Minor Quakes				2	4,199.20	377.93	\$4,577.13
99050	Hector Mine	11/16/1999	7.0	28 mi. N of Joshua Tree (near Palm Springs)	25	137,361.81	12,362.47	\$149,724.28
	1999 Minor Quakes				1	4,037.26	363.35	\$4,400.61
00030	Napa	9/3/2000	5.2	17 mi. ESE of Santa Rosa; 6 mi. NNE of Sonoma; 3 mi. WSW of Yountville	15	278,130.07	25,031.71	\$303,161.78
01010	Ferndale	1/13/2001	5.4	53 mi. WNW of Ferndale	1	34,764.54	3,128.79	\$37,893.33
	2001 Minor Quakes				1	52,896.82	4,760.70	\$57,657.52
01040	West Hollywood	9/9/2001	4.2	West Hollywood	10	67,044.15	6,033.94	\$73,078.09
	2002 Minor Quakes				1	8,361.24	752.51	\$9,113.75
03090	San Simeon	12/22/2003	6.4	7 mi. NE of San Simeon	86	2,692,628.02	242,339.74	\$2,934,967.76
04120	Parkfield	9/28/2004	6.0	7 mi SSE of Parkfield	1	7,032.59	632.93	\$7,665.52
07240	Chatsworth	8/9/2007	4.5	4 mi NNW of Chatsworth	1	7,813.88	703.24	\$8,517.12
07250	Alum Rock	10/30/2007	5.6	5 mi NNE of Alum Rock	1	6,149.20	553.42	\$6,702.62
08280	Chino Hills	7/29/2008	5.4	5.5 mi SE of Diamond Bar	8	145,967.19	13,089.08	\$159,056.27
09320	Calexico	12/30/2009	5.9	22.7 mi SE of Calexico	1	275.88	24.83	\$300.71
	2009 Minor Quakes				2	8,627.67	776.49	\$9,404.16

California Earthquake Authority

Losses & Loss Adjustment Expenses (LAE) Paid - Cumulative to October 31, 2019 (continued)

Event Code	Event Name	Date of Event	Magnitude	Location	# of Paid Claims	Losses Paid	LAE Paid	Total Paid Losses & LAE
10330	Ferndale	1/9/2010	6.5	27 mi W of Ferndale	3	23,901.50	2,151.13	\$26,052.63
10360	Baja California Mexico	4/4/2010	7.2	16 mi SW from Guadalupe Victoria, Mexico	17	81,066.58	7,296.00	\$88,362.58
	2010 Minor Quakes				1	225,000.00	0.00	\$225,000.00
12410	Brawley	8/26/2012	5.3	4 mi North of Brawley, CA	2	23,833.24	2,145.00	\$25,978.24
	2012 Minor Quakes				3	146,471.18	13,182.41	\$159,653.59
13430	Greenville	5/23/2013	5.7	7 mi WNW of Greenville, CA	1	1,500.00	135.00	\$1,635.00
14460	Westwood	3/17/2014	4.4	6mi NNW of Westwood, CA	6	67,989.89	6,119.09	\$74,108.98
14470	La Habra	3/28/2014	5.1	1mi S of La Habra, CA	84	458,354.56	41,251.91	\$499,606.47
14480	American Canyon	8/24/2014	6.0	4mi NW of American Canyon, CA	195	3,533,174.00	317,985.66	\$3,851,159.66
	2014 Minor Quakes				3	18,859.35	1,697.34	\$20,556.69
	2015 Minor Quakes				2	5,877.69	529.00	\$6,406.69
	2018 Minor Quakes				3	6,058.71	545.28	\$6,603.99
19520	Searles Valley	7/4/2019	6.4	SW of Searles Valley, CA	32	566,374.75	54,532.24	\$620,906.99
19530	Pleasant Hill	10/14/2019	4.7	.7 mi SSE of Pleasant Hill, CA	1	1,385.63	124.71	\$1,510.34
	2019 Minor Quakes				2	1,835.35	165.18	\$2,000.53
Total					514	\$8,783,592.32	\$772,921.59	\$9,556,513.91

Claims History Report Glossary

Event Code: A 5 digit code that the CEA assigns to all earthquakes expected to produce paid losses. This code is used to track statistics for a particular earthquake.

Event Name: This is generally the name given to the earthquake by the USGS (United States Geological Survey).

Date of Event: Date that the earthquake occurred.

Magnitude: Richter scale magnitude assigned by USGS.

Location: This is assigned by USGS and is usually a city close to the earthquake.

of Paid Claims: A numeric count of the claims that received a payment for damage caused by a particular earthquake.

Losses Paid: Total dollar amount of all claims paid to the policyholders for a particular earthquake.

LAE Paid: "LAE" stands for Loss Adjustment Expense which is always 9% of paid losses. This is the amount paid to the Participating Insurers for handling the claim.

Total Paid Losses and ALE: The sum of Losses Paid and LAE Paid.

Minor Quakes: Losses paid for damage from minor earthquakes that were initially not expected to generate a claim and therefore were not issued a CEA event code.

CEA Project Portfolio

Schedule	Scope	External Resources	Project Cost	Overall Score	Portfolio #	Project Name	PM	Status	Target Start Date	Start Date	Project % Complete	Target End Date	End Date
✔	✔	✔	✔	✔	2017-03	Business Continuity Program	Paul Stubbles	Active	01/03/17	01/03/17	60%	12/31/19	
✔	✔	✔	✔	✔	2017-05	Enterprise Resource Planning	Terri Kletzman	Active	02/01/17	02/01/17	15%	12/31/19	
⚠	✔	✔	✔	⚠		eDiscovery	Vernon Miller	Active	05/01/19	05/01/19	73%	01/30/20	
✔	✔	✔	✔	✔	2017-13	Rate and Form Filing Project 2019	Terri Kletzman	Completed	06/05/17	06/05/17	100%	07/01/19	07/01/19
⚠	✔	✔	✔	⚠	2018-02	EBB Redesign	Paul Stubbles	Active	08/27/18	03/31/20	40%	04/30/20	
✔	✔	✔	✔	✔	2019-01	CPP Ticketing System	Paul Stubbles	Active	03/04/19	12/31/19	60%	06/30/20	
✔	✔	✔	✔	✔	2019-02	CEA BB Outreach	Danica Wallin	Active	07/01/19	07/01/19	70%	04/01/20	

Legend	
●	Project Status is at 0 - 2
●	Project Status is at 3 - 5
●	Project Status is at 6 - 7
●	Project Status is at 8 - 10



CEA GOVERNING BOARD MEETING DATES FOR - 2019

~~March 13, 2019~~ — ~~Wednesday~~ (**Rescheduled**)

March 20, 2019 – Tuesday (**Added**)

April 12, 2019 – Friday (**Added**)

June 12, 2019 – Wednesday

July 15, 2019 – Monday (**Added**)

~~September 11, 2019~~ — ~~Wednesday~~ (**Rescheduled**)

September 25, 2019 – Wednesday (**Added**)

November 18, 2019 – Monday (**Added**)

December 11, 2019 – Wednesday

[IMPORTANT NOTE: *This schedule is for future meetings that have been proposed and approved by the respective bodies named. Meeting dates, times, and locations are subject to change. The final dates, times, and locations will be announced on official Public Notice, issued by the CEA 10 or more days before the date of the meeting. Public Notices are also posted on the CEA Web site www.EarthquakeAuthority.com]*



CEA ADVISORY PANEL MEETING DATES FOR - 2019

~~May 14, 2019~~ — Tuesday (Cancelled)

August 13, 2019 – Tuesday (Added)

~~November 19, 2019~~ — Tuesday (Cancelled)

[IMPORTANT NOTE: *This schedule is for future meetings that have been proposed and approved by the respective bodies named. Meeting dates, times, and locations are subject to change. The final dates, times, and locations will be announced on official Public Notice, issued by the CEA 10 or more days before the date of the meeting. Public Notices are also posted on the CEA Web site www.EarthquakeAuthority.com]*