Date of Notice: Friday, August 31, 2018

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.

LOCATION: **CalSTRS Headquarters Building**
Boardroom (Lobby: E-124)
100 Waterfront Place
West Sacramento, California

DATE: **Wednesday, September 12, 2018**

TIME: **1:00 p.m.**

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

Video (with audio)

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

AGENDA:

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 July 19, 2018, CEA Governing Board meeting.

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

4. Mr. Pomeroy will propose, for Board approval, routine updates to the CEA Retirement Plan and the CEA Deferred Compensation Plan.

5. Chief Financial Officer Tim Richison will present to the Board the CEA financial report.

6. Mr. Richison will propose for Board approval mid-year revisions to the 2018 CEA budget, which will take into account a budget augmentation approved during this Board meeting.

7. Mr. Richison will seek Board approval to negotiate the licensing of reinsurance-processing software from DataCede.

8. Mr. Richison will present, and recommend for Board approval, revisions and clarifications to the CEA Investment Policies.

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

10. 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.

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

12. Chief Insurance and Technology Officer Todd Coombes will report to the Board on CEA insurance and information technology initiatives.

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

14. 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), respectively.

15. 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.

16. Adjournment.

For further information about this notice or its contents:

General Information:
Shannon McEuen
CEABoardLiaison@calquake.com
(916) 661-5430 (Direct)

Toll free: (877) 797-4300

Media Contact:
Sarah Sol
Media Relations Manager
(916) 661-5502 (Direct)
ssol@calquake.com

California Earthquake Authority
801 K Street, Suite 1000
Sacramento, CA 95814
Toll free: (877) 797-4300

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

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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 the 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.

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NOTE: You might have received this notice because your name, or that of your organization, appears on a public-notice list maintained by the California Earthquake Authority. If in the future you do not wish to receive public notices pertaining to the California Earthquake Authority, please send your request by email to CEABoardLiaison@calquake.com.

DRAFT

CALIFORNIA EARTHQUAKE AUTHORITY
GOVERNING BOARD MEETING
MINUTES

Thursday, July 19, 2018
12:15 p.m.

Location: Sacramento City Hall
Council Chamber, 1st Floor
915 I Street
Sacramento, California

Members of the Governing Board in attendance:
Mark Ghilarducci, designee of Governor Jerry Brown, Board Chair
Vincent Brown, designee of State Treasurer John Chiang
Kenneth Schnoll, designee of Insurance Commissioner Dave Jones
Jeffrey Wood, designee of Speaker of the Assembly Anthony Rendon

Members of the CEA staff in attendance:
Glenn Pomeroy, Chief Executive Officer
Shawna Ackerman, Chief Actuary
Todd Coombes, Chief Insurance and Technology Officer
Laurie Johnson, Ph.D., Enterprise and Strategic Risk Advisor
Janiele Maffei, Chief Mitigation Officer
Shannon McEuen, Governing Board Liaison
Chris Nance, Chief Communications Officer
Tim Richison, Chief Financial Officer
Kellie Schneider, Chief Operations Officer
Danny Marshall, General Counsel

Also present:
Ross Buckley, Personal Insurance Federation of California
Annde Ewertsen, Managing Director, California Residential Mitigation Program (CRMP)
Kevin Krause, Plante Moran, PLLC
Dan VanDreumel, Plante Moran, PLLC

1. Call to order and member roll call.

Mr. Ghilarducci called the meeting to order at 12:19 p.m. A quorum was achieved.

2. **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), respectively.**

   The Board entered closed session at 12:20 p.m. and resumed its proceedings in open session at 1:38 p.m. No action was announced as having been taken.

3. **Consideration and approval of the minutes of the March 14, 2018, CEA Governing Board meeting.**

   > **MOTION**: A motion was made and seconded to approve the March 14, 2018, California Earthquake Authority Governing Board meeting minutes, as presented. Motion carried unanimously.

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.**

   Mr. Pomeroy provided a summary of CEA policies in force, policy growth, claim-paying capacity, mitigation retrofits, federal legislation, and community-outreach efforts in 2018. He said that Assembly Bill 2927, which will afford CEA an additional $1 billion layer in claim-paying capacity, has passed unanimously in the Assembly and will go before the Senate in August.

   Discussing AB 2927, Mr. Pomeroy added that the bill's $1 billion layer of non-risk-transfer capacity would be supported by a post-event surcharge on CEA policyholders only—a surcharge that could occur only after an extremely large earthquake, one causing more than double the losses of Northridge. But each and every year the layer is in the CEA structure, the CEA would reduce its annual risk-transfer expense by at least $30 million.

   Mr. Pomeroy announced that Tim Richison, Chief Financial Officer, and Danny Marshall, General Counsel, will retire in December 2018. A national search will begin soon to find their replacements.

5. **Mr. Pomeroy will seek Board authorization to extend agreements for government affairs contractors presently assisting CEA in legislation-related activities.**

   Mr. Pomeroy provided a summary of the CEA risk-transfer and CEA's need to find additional forms of capacity to diversify its portfolio, and in connection with those capacity needs, the continued advisability of contracting with the CEA's present team of government-affairs advisors and lobbyists, to help the CEA continue making progress and grow at rates consumers can afford.

   Staff recommendations:

   - Authorize the following contract adjustments:
     - Extend lobbying agreement with Third House, LLC to August 31, 2020, and set annual contract funding at $120,000 per year.
     - Extend lobbying agreement with Manatt, Phelps & Phillips, LLP to August 31, 2020, and set annual contract funding at $300,000 per year.

- Extend lobbying agreement with Orrick, Herrington & Sutcliffe LLC to August 31, 2020, and set annual contract funding at $240,000 per year; for the Orrick legal services agreement, regarding CEA legislation, set annual contract funding at (not to exceed) $600,000 per year.
- Extend lobbying agreement with Townsend Calkin Tapio Inc. to August 31, 2020, and set annual contract funding at $240,000 per year.

MOTION: Mr. Brown moved approval of the staff recommendations as presented. Mr. Schnoll seconded. Motion carried unanimously.

6. Chief Financial Officer Tim Richison will present to the Board the CEA financial report.

Mr. Richison provided an overview of CEA financial information as of March 31, 2018. He said that at the September 2018 Board meeting, he would again bring the Board the mid-year CEA budget adjustment.

7. Mr. Richison will seek Board approval to set the CEA participating insurers' respective maximum earthquake-loss-funding-assessment levels, effective July 19, 2018.

Mr. Richison discussed the annual CEA participating insurer (PI) maximum earthquake-loss-funding-assessment levels and stated there had been an error in the industry-assessment calculations presented to the Board at its March 14, 2018, meeting. He presented revised market share percentages and assessment levels and asked for the Board's approval of those revisions.

Staff recommendation:

- Adopt the revised CEA market-share percentages shown in Attachment B, which are to be used to determine the maximum earthquake loss funding assessment levels for CEA participating insurers, effective April 2, 2018.
- Authorize CEA staff to notify each participating insurer of its respective April 2, 2018, revised maximum earthquake-loss-funding-assessment level responsibility.

MOTION: Mr. Schnoll moved approval of the staff recommendation as presented. Mr. Brown seconded. Motion carried unanimously.

8. CEA independent financial auditor Plante & Moran, PLLC, will present to the Board the results of its most recent audit of the CEA, conducted pursuant to standards of the Governmental Accounting Standards Board (GASB).

Andrew Rouse, Senior Manager, Plante & Moran, PLLC, provided an overview of the audit process.

Dan VanDreumel, Assurance Manager, Plante & Moran, PLLC, provided an overview and a slide presentation of the background, analysis, and timeline of the 2017 CEA audited financial statements.

He stated there were no significant findings or issues.

Plante & Moran has issued a clean, unmodified opinion of the 2017 financial statements.

9. Mr. Richison will seek the Board's approval for the annual set-aside of a statutory portion of CEA investment income for transfer into the CEA Earthquake Loss Mitigation Fund.

Mr. Richison provided an overview of the background and analysis for the annual set-aside for the CEA Earthquake Loss Mitigation Fund. He stated that staff's proposal had been reviewed by CEA Chief Actuary Shawna Ackerman, as required by law, and Ms. Ackerman had concluded in a written letter that the proposed set-aside is actuarially sound; her letter with that conclusion was included as *Attachment A* in the meeting packet.

Staff recommendation:

- Authorize a 2018 set-aside of $4,088,500 for the CEA Earthquake Loss Mitigation Fund (in accordance with the calculation on Attachment B).

MOTION: Mr. Brown moved approval of the staff recommendation; seconded by Mr. Schnoll. Motion passed unanimously.

10. Mr. Richison 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 the CEA, to fund additional CRMP retrofit grants and related program services.

Mr. Richison reviewed the historical transfers that have been made by the CEA to CRMP to date to support and fund grants and operations of CRMP. He told the Board that the CRMP governing board had approved an updated budget on July 16, 2018, and thereby consented to receipt by CRMP of a transfer of funds from the CEA Earthquake Loss Mitigation Fund of $3.3 million, to fund additional retrofit grants and expand the CRMP EBB program in 2018.

Staff recommendation:

- Approve a transfer to the CRMP of funds from the CEA Earthquake Loss Mitigation Fund in the amount of $3.3 million to fund additional retrofit grants and expand the CRMP EBB program in 2018, as fully described in the staff memorandum.

MOTION: Mr. Brown moved approval of the staff recommendation as presented. Mr. Schnoll seconded. Motion carried unanimously.

11. Chief Actuary Shawna Ackerman will seek Board approval to renew and extend the term of CEA's existing CoreLogic software license.

Ms. Ackerman asked the Board for approve renewing, and extend the term of, the existing CoreLogic software contract to allow the CEA to continue to use the CoreLogic modeling capabilities that CEA has developed for in-house use. The proposed three-year contract reflects licensing fees five percent lower than past years.

Staff recommendation:

- Approve CEA's renewing the EQECAT "RQE" licensing agreement as proposed and authorize CEO Glenn Pomeroy to execute the renewal on the CEA's behalf.

MOTION: Mr. Schnoll moved approval of the staff recommendation as presented. Mr. Brown seconded. Motion carried unanimously.

12. Enterprise & Strategic Risk Advisor Laurie Johnson will update the Board on CEA enterprise-risk-management-program planning and progress.

Dr. Johnson, Enterprise and Strategic Risk Advisor, provided an overview of the Enterprise Risk Management (ERM) framework and progress to date, risk-management process completion, the ERM quarterly report, and commentary on the CEA's ERM framework development and next steps. She stated the ERM quarterly reports will replace the risk-management process-completion charts, going forward.

13. 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.

Ms. Maffei presented her report:

- The ATC 110 prestandard to provide simplified and cost-effective means to analyze and retrofit single family dwellings is complete and will be published this fall as FEMA P-1100.
- The CRMP Earthquake Brace + Bolt Program (EBB) has retrofitted over 5,000 houses over the five years the program has operated.
- The 2017 EBB program retrofitted 2,182 homes, four permits still outstanding.
- The 2018 EBB program has retrofitted 944 homes and has 1,491 permits outstanding, as of July 10, 2018.

14. Ms. Maffei will seek Board approval to bring to an end the existing risk-reduction (pilot) program for CEA policyholders and roll out a new program providing financial incentives to CEA policyholders who own, and live in, vulnerable houses in designated higher-seismic-risk areas and wish to benefit from structural retrofits and resulting CEA-premium discounts.

Ms. Maffei explained that the CEA Brace + Bolt Program received a small response from CEA policyholders approached to participate, with 89 houses retrofitted and 15 permits outstanding.

But she also said that CEA staff has learned much since establishing the EBB programs, and staff is now prepared to propose a new CEA Brace + Bolt program to help make CEA policyholders' houses in high seismic areas more resilient for earthquakes. She proposed revamping and operating the program, for the same cripple-wall-type house and the same three-year persistency criterion, but aim program benefits specifically at those policyholders who will see a premium increase greater than 15 percent as a result of the CEA's latest rate and form filing, now pending with the Department of Insurance.

Mr. Richison suggested that the Board add to the list of staff recommendations, a direction to staff to reallocate any remaining funds from the CEA Brace + Bolt pilot program to the new CEA Brace + Bolt Program.

Staff recommendations:

- Approve and authorize CEA staff to develop and implement a new CEA-BB program, with a goal of commencing implementation by the end of the third quarter of 2018:
    - Phase out pilot risk reduction and reallocate remaining funds to the new CEA-BB program.
    - Support the following eligibility parameters for policyholders participating in the new CEA-BB program:
        - Three or more years with the CEA;
        - pre-1940 wood-frame construction on a raised foundation, lacking adequate bolting or bracing (or lacking both); and
        - located in ZIP Codes where policyholders will have a 15 percent or greater increase in premium, based on the pending CEA RFF filing.
    - Direct staff to develop an implementation plan, to be reported to the Board, and program rules.

MOTION: Mr. Brown moved approval of the staff recommendations, including reallocating any remaining funds from the pilot program to the new CEA Brace + Bolt Program. Mr. Schnoll seconded. Motion carried unanimously.

15. Ms. Maffei will seek Board authorization to enter into an agreement with Risk Management Solutions, Inc. (RMS), to develop fragility-function-modification factors in collaboration with CEA and Pacific Earthquake Engineering Research Institute (PEER), which is an existing CEA contractor on a multi-year project.

Ms. Maffei stated the CEA has received a proposal from RMS for portfolio-modeling services for the CEA-PEER research project. RMS's participation in the PEER project will ensure the project produces vulnerability functions that are fit for the desired purpose, which is to quantify the risk presented by the insured structure before and after mitigation.

Staff recommendation:

- Approve contracting with RMS in connection with the PEER project and authorize CEO Glenn Pomeroy to execute the negotiated contracts on behalf of the CEA.

MOTION: Mr. Brown moved approval of the staff recommendation, with the parameters of 36 months and $432,000. Mr. Schnoll seconded. Motion carried unanimously.

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

Ms. Maffei stated the Research Department is managing two special projects: the update to the CUREE Guidelines document and the CEA-PEER project. The CEA and the

Applied Technology Council (ATC), the contractor for the update to the CUREE document, held a kick-off meeting in June. The project is scheduled for 18 months.

Ms. Maffei stated the CEA-PEER project tests the performance of seismic retrofits. She stated claim adjusters who are knowledgeable in hurricane and wind damage are usually called into California, since California does not often have earthquakes, but wind and flood issues are slightly different and forensic engineers require additional information.

17. Chief Communications Officer Chris Nance will update the Board on the current CEA marketing and advertising campaign and discuss CEA's recent participation in support of the April 2018 *Get Prepared, California!* Auction to benefit American Red Cross.

Mr. Nance provided an overview of past CEA advertising campaigns and the television, radio, digital, newspaper, direct-mail, and station vignette advertising impressions of the 2018 CEA statewide advertising campaign, entitled "It could happen to you."

He showed a video clip of sample TV advertising in Spanish, which is part of the ethnic advertising component of the 2018 campaign.

Mr. Nance stated the CEA joined the Red Cross in promoting the seventh annual *Get Prepared, California!* auction. He stated approximately $175,000 is raised annually through CEA's auction-related efforts, and that as of 2018, efforts have helped raise a total of $1.2 million for disaster relief in California. Ryan Seacrest, radio personality, television host, and producer, participated in the announcement of the annual commitment and delivery of the check at a concert in Los Angeles.

Mr. Wood stated people talk about preparedness but may not do anything about it. The first thing people tell him when talking about earthquake insurance is that it is too expensive. He asked what the CEA is planning to show the public that it is not that expensive.

Mr. Nance stated there are 30-second TV spots, digital advertising, and weekly speaking engagements statewide, all promoting visits by individuals to come to the CEA website and use the premium calculator. That is complemented with CEA's staff's visits with the public throughout the state and conducting useful conversations.

18. Chief Insurance and Technology Officer Todd Coombes will give a report to the Board on CEA insurance and information technology initiatives.

Mr. Coombes provided an overview of the performance reports of CEA's insurance-education and sales-support activities, insurance operations, and information technology in a new dashboard format. He reported that there had been no cybersecurity incidents since the immediately past Governing Board meeting.

<u>Public Comment</u>

Ross Buckley, Personal Insurance Federation of California (PIFC), stated his member companies continue to be concerned with the effective date of the CEA's pending rate and form filing. He noted that CEA's previous estimate had been January 1, 2019, and he said PIFC would like an effective date that would work for both the CEA and PIFC's member insurance companies.

Mr. Coombes noted that CEA staff is monitoring this and is in contact with all PIs on this issue. The CEA is currently awaiting approval of the filing from the Department of Insurance, and, as the January 1, 2019, date approaches, the effective date could potentially be moved back.

19. Chief Operations Officer Kellie Schneider will update the Board on the quantitative business metrics report.

Ms. Schneider provided an overview of the four strategic goals, the performance metrics to accomplish in 2018, and the Business Metrics Report. She stated the operational metrics are on track.

20. 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.

There was no public comment.

21. Adjournment.

There being no further business, the meeting was adjourned at 3:20 p.m.

Governing Board Memorandum

September 12, 2018

Agenda Item 3:	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.

Governing Board Memorandum

September 12, 2018

Agenda Item 4:	Updates to CEA Retirement Plan and CEA Deferred Compensation Plan
Recommended Action:	Approve Resolution in Support of Routine Trustee Change for CEA Retirement Plan and CEA Deferred Compensation Plan

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Background:

The CEA has a retirement plan that was filed and approved by the Internal Revenue Service in 1997—CEA contract employees are plan participants as part of their CEA-employment benefits. The CEA also has a Deferred Compensation Plan that is available to eligible employees, who may use the plan to defer a portion of their compensation. Each plan has a trustee.

Laws governing retirement plans have changed over the years, and CEA periodically has amended and restated both plan documents, as required.

Analysis:

CEA Chief Financial Officer Tim Richison presently serves as trustee for the CEA Retirement Plan and the CEA Deferred Compensation Plan (collectively, the "Plans"). Mr. Richison has announced his retirement from employment with the CEA and will resign as trustee for the Plans.

The Board is asked today to:

- Approve the appointment of Kellie Schneider, Chief Operations Officer, as trustee for each of the Plans.
- Delegate and direct CEO Glenn Pomeroy, as and when necessary, to execute the documents necessary to appoint Ms. Schneider as trustee for the Plans and to identify an additional trustee for the Plans.
- Authorize and direct Mr. Pomeroy, as and when necessary—and assisted by appropriate legal and compliance staff—to take all necessary actions to identify, cause to be drafted, and execute trustee designations, and cause to be executed any required, related operational documentation for the Plans.

Provided to the Board today is *Attachment A*, a form of resolution that provides for authorization of the actions listed immediately above.

Recommendation:

Staff recommends that the Governing Board approve the resolution pertaining to appointing new trustees for the CEA Retirement Plan and the CEA Deferred Compensation Plan, as described in this memorandum and the resolution.

FINANCIAL REPORT

June 30, 2018

Financial Report Table of Contents

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

Financial Statements
&
Budgets

California Earthquake Authority
Balance Sheet
as of June 30, 2018

Assets

Cash and investments:		
Cash and cash equivalents	$	152,425,803
Restricted cash and equivalents		14,544,676
Restricted investments		354,785,171
Investments		5,843,495,499
Total cash and investments		6,365,251,149
Premiums receivable, net of allowance for doubtful accounts of $4,903,438		75,569,993
Capital contributions receivable		-
Risk capital surcharge receivable		-
Interest receivable		23,017,536
Securities receivable		51,856,428
Restricted securities receivable		112,186,504
Prepaid reinsurance premium		20,222,685
Transformer reinsurance premium deposit		-
Prepaid transformer maintenance premium		1,299,512
Equipment, net		235,947
Other assets		16,358
Total assets	$	6,649,656,112

Liabilities and Net Position

Unearned premiums	$	402,932,882
Accounts payable and accrued expenses		3,547,487
Deferred grant revenue		-
Accrued reinsurance premium expense		-
Loss and loss adjustment expense reserves		99,939
Securities payable		51,894,155
Revenue bond payable		210,000,000
Revenue bond interest payable		2,945,250
Total liabilities		671,419,713
Net position:		
Restricted, expendable		276,495,427
Unrestricted, participating insurer contributed capital		777,384,796
Unrestricted, State of California contributed capital		265,283,110
Unrestricted, all other remaining		4,659,073,066
Total net position		5,978,236,399
Total liabilities and net position	$	6,649,656,112

California Earthquake Authority
Statement of Revenues, Expenses and Changes in Net Position
Year-to-Date June 30, 2018

Underwriting income:	
Premiums written	$ 382,402,166
Less premiums ceded - reinsurance	(182,530,781)
Less risk capital surcharge	-
Net premiums written	199,871,385
Change in unearned premiums	(29,476,866)
Net premiums earned	170,394,519
Expenses:	
Losses and loss adjustment expenses	36,801
Participating Insurer commissions	38,242,292
Participating Insurer operating costs	12,419,792
Reinsurance broker commissions	1,400,000
Pro forma premium taxes equivalent	8,991,893
Other underwriting expenses	19,455,584
Total expenses	80,546,362
Underwriting profit	89,848,157
Net investment income	(11,590,229)
Other income	234,370
Grant revenue	4,050
Financing expenses, net	(191,208)
Earthquake Loss Mitigation Fund expenses	(3,832,133)
Participating Insurer Contributed Capital	-
State of California premium tax contribution equivalent	8,991,893
Increase in net position	83,464,900
Net position, beginning of year	5,894,771,499
Net position, end of year to date	$ 5,978,236,399

CALIFORNIA EARTHQUAKE AUTHORITY
Insurance Services
Budgeted and Actual Expenditures
2018 Budget Year
as of June 30, 2018

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2018 Budget 1/1/2018	**Adjustments**	**Augmentations**	**2018 Budget after Augmentations and Adjustments**	**Actual Expenditures**	**Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)**	**Percentage used of Augmented & Adjusted Approved 2018 Budget**
Human Resources:							
Compensation and Benefits	$ 27,292,438	$ -	$ -	$ 27,292,438	$ 11,170,938	$ 16,121,500	40.93%
Travel	709,346	-	-	709,346	158,397	550,949	22.33%
Other	692,667	-	-	692,667	139,929	552,738	20.20%
Board Meeting	24,480	-	-	24,480	4,599	19,881	18.79%
Administration & Office	807,975	-	-	807,975	283,234	524,741	35.05%
EDP Hardware	205,500	-	-	205,500	135,526	69,974	65.95%
EDP Software	2,050,188	-	-	2,050,188	416,957	1,633,231	20.34%
Information Technology	1,613,106	-	-	1,613,106	414,722	1,198,384	25.71%
Telecommunications	418,000	-	-	418,000	128,387	289,613	30.71%
Rent/Lease	1,446,842	-	-	1,446,842	655,124	791,718	45.28%
Compliance	30,000	-	-	30,000	-	30,000	0.00%
Government Affairs	146,000	-	-	146,000	163,299	(17,299)	111.85%
Insurance	215,000	-	-	215,000	90	214,910	0.04%
Internal Audit	30,000	-	-	30,000	-	30,000	0.00%
Other	71,450	-	-	71,450	5,748	65,702	8.04%
Regulatory Expenses	330,000	-	-	330,000	-	330,000	0.00%
Risk Management	139,500	-	-	139,500	25,296	114,204	18.13%
Total Statutory Expenditures	**$ 36,222,492**	**$ -**	**$ -**	**$ 36,222,492**	**$ 13,702,246**	**$ 22,520,246**	**37.83%**
Audit Services	119,500	-	-	119,500	30,534	88,966	25.55%
Capital Market	4,864,855	-	-	4,864,855	3,021,562	1,843,293	62.11%
Claims	164,000	-	-	164,000	4,054	159,946	2.47%
Grants	11,700,000	-	-	11,700,000	51,800	11,648,200	0.44%
Investment Services	3,436,588	-	-	3,436,588	1,619,183	1,817,405	47.12%
Legal Services	2,043,650	-	-	2,043,650	333,847	1,709,803	16.34%
Loss-Modeling	1,156,500	-	-	1,156,500	293,500	863,000	25.38%
Marketing Services	14,705,465	-	-	14,705,465	2,565,508	12,139,957	17.45%
Producer Compensation	69,000,000	-	-	69,000,000	38,242,292	30,757,708	55.42%
Participating Insurer Operating Costs	26,672,800	-	-	26,672,800	13,747,575	12,925,225	51.54%
Seismic Related Research	380,000	-	-	380,000	-	380,000	0.00%
Engineering Related Research	1,920,000	-	-	1,920,000	461,901	1,458,099	24.06%
Risk Transfer	315,600,000	-	-	315,600,000	183,930,781	131,669,219	58.28%
Total Non-Statutory Expenditures	**$ 451,763,358**	**$ -**	**$ -**	**$ 451,763,358**	**$ 244,302,537**	**$ 207,460,821**	**54.08%**
Total Budget Expenditures	**$ 487,985,850**	**$ -**	**$ -**	**$ 487,985,850**	**$ 258,004,783**	**$ 229,981,067**	**52.87%**

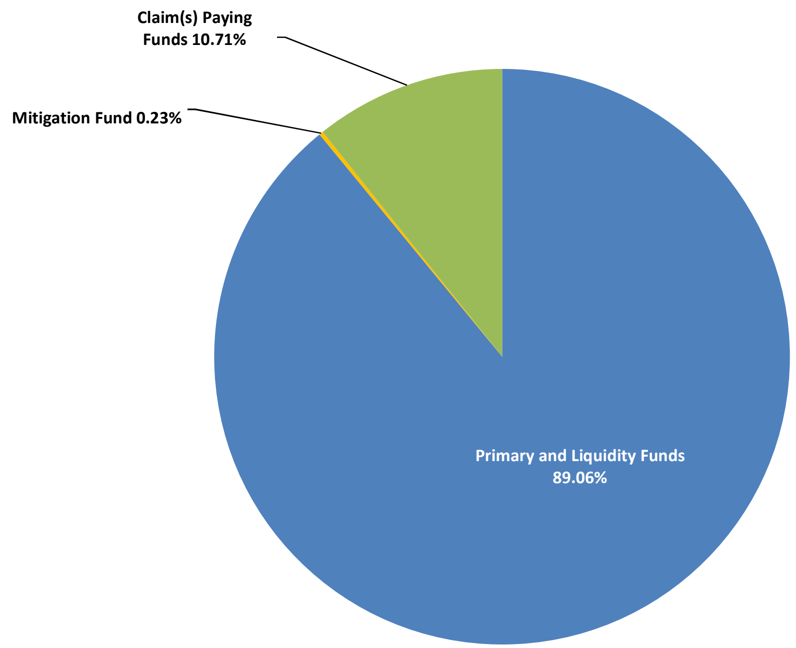
CALIFORNIA EARTHQUAKE AUTHORITY
Mitigation
Budgeted Expenditures and Actual Expenditures
2018 Budget Year
as of June 30, 2018

	(a) Approved 2018 Budget 1/1/2018	(b) Adjustments	(c) Augmentations	(d) (d=a+b+c) 2018 Budget after Augmentations and Adjustments	(e) Actual Expenditures	(f) (f=d-e) Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)	(g) (g=e/d) Percentage used of Augmented & Adjusted Approved 2018 Budget
Human Resources:							
Compensation and Benefits	$ 1,378,515	$ -	$ -	$ 1,378,515	$ 623,629	$ 754,886	45.24%
Travel	54,594	-	-	54,594	15,434	39,160	28.27%
Other	19,515	-	-	19,515	11,192	8,323	57.35%
Administration & Office	68,803	-	-	68,803	10,436	58,367	15.17%
Information Technology	840	-	-	840	350	490	41.67%
Telecommunications	33,400	-	-	33,400	8,358	25,042	25.02%
Rent/Lease	109,700	-	-	109,700	52,219	57,481	47.60%
Total Operating Expenditures	**$ 1,665,367**	**$ -**	**$ -**	**$ 1,665,367**	**$ 721,618**	**$ 943,749**	**43.33%**
Investment Services	11,200	-	-	11,200	5,008	6,192	44.71%
Legal Services	10,000	-	-	10,000	-	10,000	0.00%
Marketing	4,500	-	-	4,500	1,894	2,606	42.09%
Engineering - Related	1,140,000	-	-	1,140,000	(14,771)	1,154,771	-1.30%
Total Other Expenditures	**$ 1,165,700**	**$ -**	**$ -**	**$ 1,165,700**	**$ (7,869)**	**$ 1,173,569**	**-0.68%**
Total Expenditures	**$ 2,831,067**	**$ -**	**$ -**	**$ 2,831,067**	**$ 713,749**	**$ 2,117,318**	**25.21%**

Investments

California Earthquake Authority
Investment Distribution at Market Value
as of June 30, 2018

Market Value	**$6,358,323,216**
Primary and Liquidity Funds	89.06%
Mitigation Fund	0.23%
Claim(s) Paying Funds	10.71%
Total:	**100.00%**



Debt

California Earthquake Authority
Schedule of Outstanding Debt

DEBT	ISSUANCE AMOUNT	INTEREST RATE	NET PROCEEDS	OUTSTANDING PRINCIPAL	AS OF DATE	MOODY'S RATING*	FITCH RATING**
Series 2014 Revenue Bonds **5 year bond CUSIP 13017HAE6**	**$ 250,000,000**	**2.805%**	**$ 247,910,261**	**$ 210,000,000**	**30-Jun-2018**	**A3** **Outlook Stable**	**A** **Outlook Stable**

DEBT-SERVICE SCHEDULE

Debt	Payment Date	Outstanding Principal	Principal	Interest	Debt Service	Annual Debt Service
Series 2014 Revenue Bonds	1-Jan-17	$250,000,000	$0	$3,506,250	$3,506,250	
5 year bond	1-Jul-17	$210,000,000	$40,000,000	$3,506,250	$43,506,250	
	2017					$47,012,500
	1-Jan-18	$210,000,000	$0	$2,945,250	$2,945,250	
	1-Jul-18	$105,000,000	$105,000,000	$2,945,250	$107,945,250	
	2018					$110,890,500
	1-Jan-19	$105,000,000	$0	$1,472,625	$1,472,625	
	1-Jul-19	$0	$105,000,000	$1,472,625	$106,472,625	
	2019					$107,945,250

*Moody's rating since May 2015.

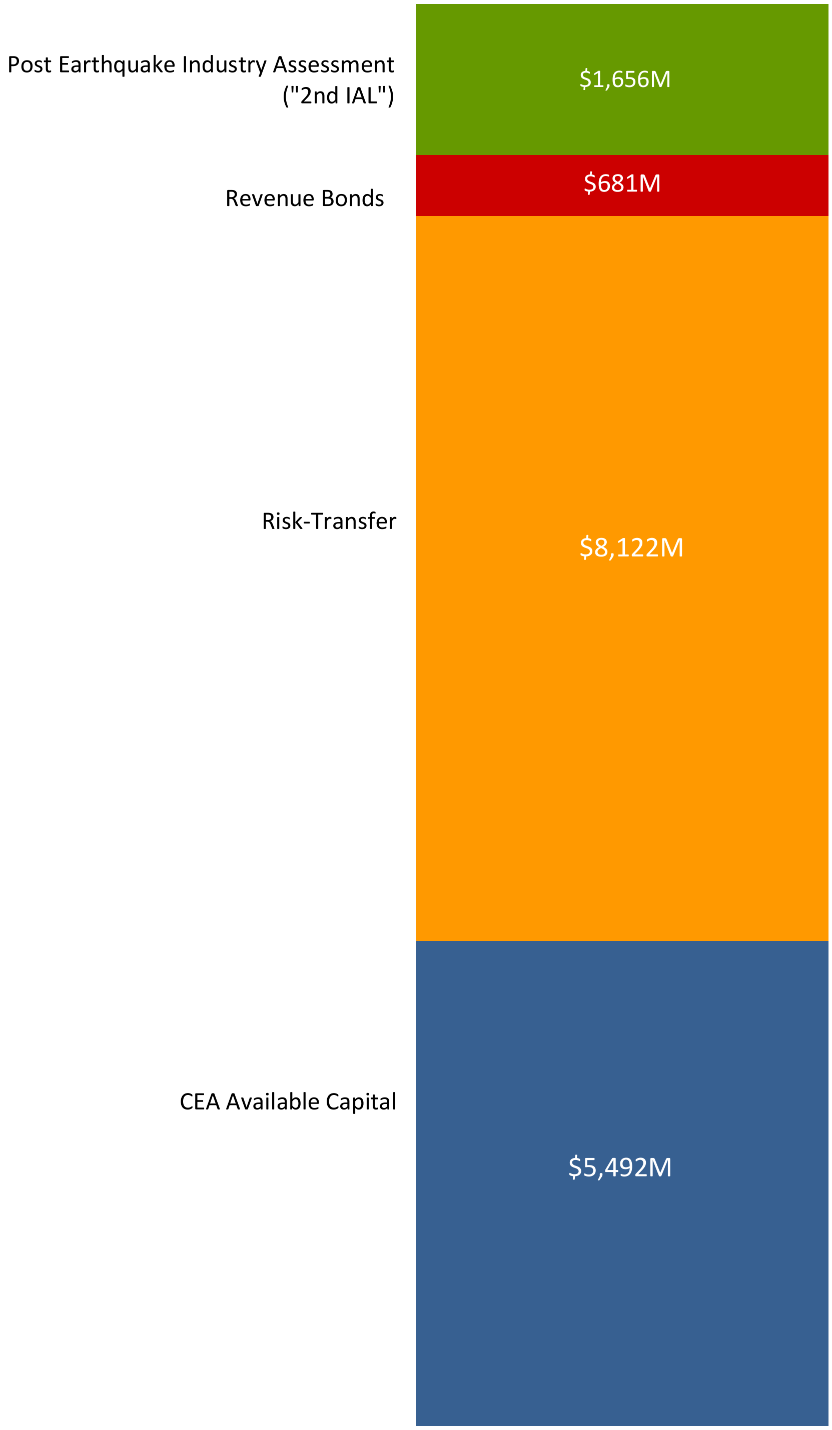
**Fitch rating affirmed December 2017.

Claim-Paying Capacity

California Earthquake Authority
Available Capital Report
as of June 30, 2018

Cash & Investments (includes capital contributions and premiums)	$	6,365,251,149
Earthquake Loss Mitigation Fund Cash and Investments	$	(14,530,084)
Interest & Securities Receivable	$	183,964,663
Premium Receivable	$	75,569,993
Risk Capital Surcharge & Capital Contributions Receivable	$	-
Other Assets	$	16,358
Revenue Bonds	$	(680,883,704)
Debt Service (Interest, Principal & Debt Service (Min. Bal.))	$	(107,945,250)
Unearned Premium Collected	$	(273,456,078)
Accrued Reinsurance Premium Expense	$	-
Accounts and Securities Payable, and Accrued Expenses	$	(55,441,639)
Loss Reserves	$	(99,939)
CEA Available Capital	**$**	**5,492,445,469**

California Earthquake Authority
Claim-Paying Capacity
as of June 30, 2018



Total Capacity $15,951M

Note: Not drawn to scale

Risk-Transfer Programs

California Earthquake Authority
Current Risk-Transfer Program Summary
as of June 30, 2018

Traditional Reinsurance Contracts	Contract Period	Reinsurance Limit	12-Month Rate-on-Line	12-Month Premium
2018 January Program Contract 1	January 1, 2018 - December 31, 2018	884,725,560	4.75%	42,024,464
2018 January Program Contract 2	January 1, 2018 - December 31, 2018	274,324,320	2.90%	7,955,405
2018 January Program Contract 3	January 1, 2018 - December 31, 2018	75,000,000	2.45%	1,837,500
2018 January Program Contract 4	January 1, 2018 - December 31, 2018	21,250,000	6.35%	1,349,375
2018 January Program Contract 5	January 1, 2018 - December 31, 2018	8,850,000	5.60%	495,600
2018-2019 January Program Contract 1	January 1, 2018 - September 30, 2019	89,899,920	4.85%	4,360,146
2018-2019 January Program Contract 2	January 1, 2018 - September 30, 2019	23,700,000	3.00%	711,000
2018-2019 January Program Contract 1	January 1, 2018 - December 31, 2019	165,337,440	4.90%	8,101,535
2018-2019 January Program Contract 2	January 1, 2018 - December 31, 2019	74,623,680	3.05%	2,276,022
2018-2019 January Program Contract 3	January 1, 2018 - December 31, 2019	120,004,990	5.70%	6,840,284
2018-2019 January Program Contract 4	January 1, 2018 - December 31, 2019	50,000,000	2.60%	1,300,000
2017-2018 January Program Contract 1	January 1, 2017 - December 31, 2018	472,170,373	4.59%	21,672,620
2017-2018 January Program Contract 2	January 1, 2017 - December 31, 2018	240,999,850	3.39%	8,169,895
2017-2018 January Program Contract 3	January 1, 2017 - December 31, 2018	135,000,000	6.35%	8,572,500
2017-2018 January Program Contract 4	January 1, 2017 - December 31, 2018	5,000,000	5.72%	286,000
2018-2019 April Program Contract 1	April 1, 2018 - March 31, 2019	820,323,400	3.00%	24,609,702
2017-2019 April Program Contract 1	April 1, 2017 - March 31, 2019	186,780,000	3.21%	5,995,638
2018-2019 April Program Contract 1	April 1, 2018 - September 30, 2019	280,130,000	3.10%	8,684,030
2016-2019 April Program Contract 1	April 1, 2016 - March 31, 2019	124,999,920	3.42%	4,274,997
2016-2019 August Program Contract 1	August 1, 2016 - July 31, 2019	200,000,000	4.15%	8,300,000
2017-2020 August Program Contract 2	August 1, 2017 - July 31, 2020	200,000,000	3.60%	7,200,000
2015-2020 August Program Contract 1	August 1, 2015 - July 31, 2020	139,000,000	4.25%	5,907,500
2017-2018 December Program Contract 1	December 1, 2017 - November 30, 2018	80,000,000	4.95%	3,960,000
2017-2018 December Program Contract 2	December 1, 2017 - November 30, 2018	50,000,000	6.25%	3,125,000
2018 January Program Contract 6	January 1, 2018 - December 31, 2018	165,000,000	5.55%	9,157,500
2018-2019 January Program Contract 5	January 1, 2018 - December 31, 2019	164,999,800	6.10%	10,064,988
2018-2019 January Program Contract 6	January 1, 2018 - December 31, 2019	279,999,840	5.40%	15,119,991
2018-2020 June Program Contract 1	June1, 2018 - May 31, 2020	69,999,990	5.55%	3,884,999
2017-2018 August Program Contract 1	August 1, 2017 - July 31, 2018	93,750,000	5.57%	5,221,875
2017-2020 August Program Contract 1	August 1, 2017 - July 31, 2020	93,750,000	5.87%	5,503,125
2016-2018 December Program Contract 1	December 1, 2016 - November 30, 2018	74,998,000	5.67%	4,252,387
2017-2019 December Program Contract 1	December 1, 2017 - November 30, 2019	124,999,994	6.15%	7,687,500
2015-2018 August Program Contract 1	August 1, 2015 - July 31, 2018	93,750,000	5.87%	5,503,125
2016-2019 August Program Contract 2	August 1, 2016 - July 31, 2019	93,750,000	5.87%	5,503,125
2017-2019 July Program Contract 1	July 1, 2017 - June 30, 2019	70,000,000	5.65%	3,955,000
Total Traditional Reinsurance		**6,047,117,077**		

Transformer Reinsurance Contracts	Contract Period	Reinsurance Limit	12-Month Rate-on-Line	12-Month Premium
2015-2018 Transformer Reinsurance Contract 1	September 16, 2015 - September 15, 2018	250,000,000	5.05%	6,883,219
2016-2019 Transformer Reinsurance Contract 1	December 1, 2016 - November 30, 2019	500,000,000	4.04%	20,308,929
2017-2020 Transformer Reinsurance Contract 2	May 16, 2017- May 15, 2020	425,000,000	3.54%	15,080,011
2017-2020 Transformer Reinsurance Contract 1	May 16, 2017- May 15, 2020	500,000,000	6.06%	30,363,070
2017-2020 Transformer Reinsurance Contract 4	December 1, 2017 - November 30, 2020	200,000,000	4.04%	8,100,958
2017-2020 Transformer Reinsurance Contract 3	December 1, 2017 - November 30, 2020	200,000,000	5.30%	10,625,958
Total Transformer Reinsurance		**2,075,000,000**		
Total Risk-Transfer Program		**$ 8,122,117,077**		

California Earthquake Authority
Total Risk-Transfer Program Premiums
as of June 30, 2018

Traditional Reinsurance Contracts	Contract Period	Reinsurance Limit	12-Month Rate-on-Line	2018 Premium
2018 January Program Contract 1	January 1, 2018 - December 31, 2018	884,725,560	4.75%	42,024,464
2018 January Program Contract 2	January 1, 2018 - December 31, 2018	274,324,320	2.90%	7,955,405
2018 January Program Contract 3	January 1, 2018 - December 31, 2018	75,000,000	2.45%	1,837,500
2018 January Program Contract 4	January 1, 2018 - December 31, 2018	21,250,000	6.35%	1,349,375
2018 January Program Contract 5	January 1, 2018 - December 31, 2018	8,850,000	5.60%	495,600
2018-2019 January Program Contract 1	January 1, 2018 - September 30, 2019	89,899,920	4.85%	4,360,146
2018-2019 January Program Contract 2	January 1, 2018 - September 30, 2019	23,700,000	3.00%	711,000
2018-2019 January Program Contract 1	January 1, 2018 - December 31, 2019	165,337,440	4.90%	8,101,535
2018-2019 January Program Contract 2	January 1, 2018 - December 31, 2019	74,623,680	3.05%	2,276,022
2018-2019 January Program Contract 3	January 1, 2018 - December 31, 2019	120,004,990	5.70%	6,840,284
2018-2019 January Program Contract 4	January 1, 2018 - December 31, 2019	50,000,000	2.60%	1,300,000
2017-2018 January Program Contract 1	January 1, 2017 - December 31, 2018	472,170,373	4.59%	21,672,620
2017-2018 January Program Contract 2	January 1, 2017 - December 31, 2018	240,999,850	3.39%	8,169,895
2017-2018 January Program Contract 3	January 1, 2017 - December 31, 2018	135,000,000	6.35%	8,572,500
2017-2018 January Program Contract 4	January 1, 2017 - December 31, 2018	5,000,000	5.72%	286,000
2017-2018 April Program Contract 1	April 1, 2017 - March 31, 2018	738,633,400	3.00%	5,539,751
2018-2019 April Program Contract 1	April 1, 2018 - March 31, 2019	820,323,400	3.00%	16,406,468
2018-2019 April Program Contract 1	April 1, 2018 - September 30, 2019	280,130,000	3.10%	5,789,353
2017-2019 April Program Contract 1	April 1, 2017 - March 31, 2019	186,780,000	3.21%	5,995,638
2016-2018 April Program Contract 1	April 1, 2016 - March 31, 2018	259,876,500	3.10%	2,014,043
2016-2019 April Program Contract 1	April 1, 2016 - March 31, 2019	124,999,920	3.42%	4,274,997
2016-2019 August Program Contract 1	August 1, 2016 - July 31, 2019	200,000,000	4.15%	8,300,000
2017-2020 August Program Contract 2	August 1, 2017 - July 31, 2020	200,000,000	3.60%	7,200,000
2015-2020 August Program Contract 1	August 1, 2015 - July 31, 2020	139,000,000	4.25%	5,907,500
2017-2018 December Program Contract 1	December 1, 2017 - November 30, 2018	80,000,000	4.95%	3,630,000
2017-2018 December Program Contract 2	December 1, 2017 - November 30, 2018	50,000,000	6.25%	2,864,583
2018 January Program Contract 6	January 1, 2018 - December 31, 2018	165,000,000	5.55%	9,157,500
2018-2019 January Program Contract 5	January 1, 2018 - December 31, 2019	164,999,800	6.10%	10,064,988
2018-2019 January Program Contract 6	January 1, 2018 - December 31, 2019	279,999,840	5.40%	15,119,991
2016-2018 June Program Contract 1	June 1, 2016 - May 31, 2018	49,999,980	5.40%	1,125,000
2018-2020 June Program Contract 1	June1, 2018 - May 31, 2020	69,999,990	5.55%	1,942,500
2017-2018 August Program Contract 1	August 1, 2017 - July 31, 2018	93,750,000	5.57%	3,046,094
2017-2020 August Program Contract 1	August 1, 2017 - July 31, 2020	93,750,000	5.87%	5,503,125
2016-2018 December Program Contract 1	December 1, 2016 - November 30, 2018	74,998,000	5.67%	3,898,021
2017-2019 December Program Contract 1	December 1, 2017 - November 30, 2019	124,999,994	6.15%	7,687,500
2015-2018 August Program Contract 1	August 1, 2015 - July 31, 2018	93,750,000	5.87%	3,210,156
2016-2019 August Program Contract 2	August 1, 2016 - July 31, 2019	93,750,000	5.87%	5,503,125
2017-2019 July Program Contract 1	July 1, 2017 - June 30, 2019	70,000,000	5.65%	3,955,000
2017-2018 July Program Contract 1	July 1, 2017 - June 30, 2018	20,000,000	4.15%	415,000
Total Traditional Reinsurance Premium				**254,502,679**
Transformer Reinsurance Contracts	**Contract Period**	**Reinsurance Limit**	**12-Month Rate-on-Line**	**2018 Premium**
2015-2018 Transformer Reinsurance Contract 1	September 16, 2015 - September 15, 2018	250,000,000	5.05%	8,942,708
2016-2019 Transformer Reinsurance Contract 1	December 1, 2016 - November 30, 2019	500,000,000	4.040%	20,200,000
2017-2020 Transformer Reinsurance Contract 2	May 16, 2017- May 15, 2020	425,000,000	3.54%	15,023,750
2017-2020 Transformer Reinsurance Contract 1	May 16, 2017- May 15, 2020	500,000,000	6.060%	30,300,000
2017-2020 Transformer Reinsurance Contract 4	December 1, 2017 - November 30, 2020	200,000,000	4.04%	8,080,000
2017-2020 Transformer Reinsurance Contract 3	December 1, 2017 - November 30, 2020	200,000,000	5.3025%	10,605,000
Total Transformer Reinsurance Premium				**93,151,458**
Total Risk-Transfer Program Premium				**347,654,137**

Governing Board Memorandum

September 12, 2018

Agenda Item 6:	2018 CEA Budget: Insurance Services Mid-Year Revision and Mitigation Mid-Year Revision
Recommended Action:	Approve 2018 CEA Insurance Services Mid-Year Budget Revision (no action requested on 2018 Mitigation budget)

Background:

CEA staff prepared and submitted to the Governing Board (which approved) annual budgets for Insurance Services and Mitigation based on all anticipated expenses for the 2018 CEA fiscal year[1] at the December 2017 Board meeting.

Analysis:

2018 Insurance Services Budget

Staff has prepared an attachment to assist the Board in analyzing the 2018 mid-year budget for Insurance Services.

- **Attachment A: 2018 Insurance Services Budget Mid-Year Revision**
  Attachment A shows the originally approved 2018 insurance services budget; actual expenditures through June 30, 2018; proposed revisions to certain budget categories for the remainder of 2018, based on anticipated expenditures; and a proposed augmentation to the 2018 budget.

Budget-category-level revisions are proposed, based on anticipated expenditures for the remainder of 2018, which in the aggregate would cause a reduction of $ 3,005,780 in total 2018 budget expenditures.

To maintain CEA's 1-in-400 year financial-strength level (as approved by the Board at its December 2017 meeting), staff has moved to increase CEA risk-transfer purchases, the added premium for which results in an increase in the Risk-Transfer budget of $37,200,000.

Reductions in non-risk-transfer-budget categories totaling $3,005,780 partially offset the budget shortfall caused by those additional risk-transfer premium payments, resulting in a net budget increase request of $34,194,220 for the remainder of 2018.

After analyzing CEA written-premium collections as of June 30, 2018, the 2018 annual-written-premium estimate is revised upward from $690,000,000 to $730,000,000. Comparing the revised

[1] The CEA fiscal year is the calendar year.

mid-year 2018 budget to the revised written-premium estimate, the amount by which the CEA's "Statutory Expense Cap" exceeds the 2018 annual aggregate budget is up from $5,117,509 to $8,330,645 (an increase of $3,153,136). Below is a comparison of the original (December 2017) Statutory Expense Cap calculation and the newly revised Statutory Expense Cap calculation.

ORIGINAL
Summary of Proposed 2018 CEA Statutory Expenses/Expense Cap [projected statutory expense compared to projected statutory cap presented to Governing Board at December 2017 meeting]

The projected statutory-expense portion of the proposed 2018 budget is $36,222,491, which is less than the projected 6% cap of $41,400,000:

Projected 2018 written premium:	$690,000,000
Statutory operating-expense cap 2018 (percentage)	6%
Statutory operating-expense cap 2018 (dollars)	$41,400,000
Approved 2018 operating expense budget	$36,222,491
Amount by which 6% cap exceeds proposed budget	$5,177,509

REVISED
Summary of Proposed 2018 CEA Statutory Expenses/Expense Cap [projected statutory expense compared to projected statutory cap presented to Governing Board at September 2018 meeting]

The projected statutory-expense portion of the proposed 2018 budget is $35,469,355, which is less than the projected 6% cap of $43,800,000:

Revised Projected 2018 written premium:	$730,000,000
Statutory operating-expense cap 2018 (percentage)	6%
Statutory operating-expense cap 2018 (dollars)	$43,800,000
Revised Proposed 2018 operating expense budget	$35,469,355
Amount by which 6% cap exceeds proposed budget	$8,330,645

2018 Mitigation Services Budget

Attachment B is offered to support analysis of the 2018 mid-year Mitigation Services Budget.

- **Attachment B: 2018 Mitigation Budget Mid-Year Revision**
  Attachment B shows the Board-approved 2018 mitigation budget; actual expenditures through June 30, 2018; and proposed revisions to certain budget categories for the remainder of 2018, based on anticipated expenditures.

For the remainder of 2018, staff proposes reducing total budget expenditures by $751,093, for a total Mitigation Services Budget expenditure of $2,079,974.

Recommendation:

Staff recommends these Board actions:

- Approve the proposed 2018 Insurance Services mid-year revised budget, including two proposed budget augmentations of $ 34,194,220 to meet Risk-Transfer responsibilities and $5,170,105 to meet policy acquisition expenses due to an increased in projected 2018 written premium; and
- Direct staff to operate CEA business operations within the total, approved, revised budgets for Insurance Services and Mitigation Services.

CALIFORNIA EARTHQUAKE AUTHORITY
Insurance Services
Budgeted and Actual Expenditures
as of June 30, 2018

	(a)	(b)	(b2)	(c)	(d) (d=a+b+b2+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2018 Budget 1/1/2018	**Adjustments [A]**	**Adjustments 2 [A]**	**Augmentations**	**2018 Budget after Augmentations and Adjustments**	**Actual Expenditures**	**Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)**	**Percentage used of Augmented & Adjusted 2018 Budget**
Human Resources:								
Compensation and Benefits	$ 27,292,437	$ (1,616,629)		$ -	$ 25,675,808	$ 11,170,938	$ 14,504,870	43.51%
Travel	709,346	(237,294)		-	472,052	158,397	313,655	33.55%
Other	692,667	(14,605)		-	678,062	139,929	538,133	20.64%
Board Meeting	24,480	(7,397)		-	17,083	4,599	12,484	26.92%
Administration & Office	807,975	(269,862)		-	538,113	283,234	254,879	52.63%
EDP Hardware	205,500	67,199		-	272,699	135,526	137,173	49.70%
EDP Software	2,050,188	(483,242)		-	1,566,946	416,957	1,149,989	26.61%
Information Technology	1,613,106	1,356,387		-	2,969,493	414,722	2,554,770	13.97%
Telecommunications	418,000	(25,799)		-	392,201	128,387	263,814	32.74%
Rent/Lease	1,446,842	(54,380)		-	1,392,462	655,124	737,338	47.05%
Compliance	30,000	(17,500)		-	12,500	-	12,500	0.00%
Government Affairs [1]	146,000	-		842,000	988,000	163,299	824,701	16.53%
Insurance	215,000	(28,000)		-	187,000	90	186,910	0.05%
Internal Audit	30,000	(17,500)		-	12,500	-	12,500	0.00%
Other	71,450	(2,202)		-	69,248	5,748	63,500	8.30%
Regulatory Expenses	330,000	(192,487)			137,514	-	137,514	0.00%
Risk Management	139,500	(51,824)		-	87,676	25,296	62,380	28.85%
Total Statutory Expenditures	**$ 36,222,491**	**$ (1,595,136)**	**$ -**	**$ 842,000**	**$ 35,469,355**	**$ 13,702,246**	**$ 21,767,109**	**38.63%**
Audit Services	119,500	-		-	119,500	30,534	88,966	25.55%
Capital Market	4,864,855	(6,928)		-	4,857,927	3,021,562	1,836,364	62.20%
Claims	164,000	4,925		-	168,925	4,054	164,871	2.40%
Grants	11,700,000	(525,000)		-	11,175,000	51,800	11,123,200	0.46%
Investment Services	3,436,588	(208,312)		-	3,228,276	1,619,183	1,609,093	50.16%
Legal Services	2,043,650	(468,986)		-	1,574,664	333,847	1,240,817	21.20%
Loss-Modeling	1,156,500	(311,000)		-	845,500	293,500	552,000	34.71%
Marketing Services	14,705,465	(207,244)		-	14,498,221	2,565,508	11,932,714	17.70%
Producer Compensation [2]	69,000,000	-		4,000,000	73,000,000	38,242,292	34,757,708	52.39%
Participating Insurer Operating Costs [2]	26,672,800	-		1,170,105	27,842,905	13,747,575	14,095,329	49.38%
Seismic Related Research	380,000	(230,000)		-	150,000	-	150,000	0.00%
Engineering Related Research	1,920,000	541,901		-	2,461,901	461,901	2,000,000	18.76%
Risk Transfer [3]	315,600,000	-	3,005,780	34,194,220	352,800,000	183,930,781	168,869,219	52.13%
Total Non-Statutory Expenditures	**$ 451,763,358**	**$ (1,410,644)**	**$ 3,005,780**	**$ 39,364,325**	**$ 492,722,819**	**$ 244,302,537**	**$ 248,420,282**	**49.58%**
Total Budget Expenditures	**$ 487,985,849**	**$ (3,005,780)**	**$ 3,005,780**	**$ 40,206,325**	**$ 528,192,173**	**$ 258,004,783**	**$ 270,187,390**	**48.85%**

[1] Augmentation for addition contract adjustments for lobbying agreements from July 19, 2018 Governing Board Meeting Agenda Item 5.
[2] Proposed augmentation to account for increased projection of premiums written for 2018.
[3] Proposed augmentation for additional risk transfer needs.
[A] Adjustments to meet insurance services end of year projections.

CALIFORNIA EARTHQUAKE AUTHORITY
Mitigation
Budgeted Expenditures and Actual Expenditures
as of June 30, 2018

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2018 Budget 1/1/2018	**Adjustments [A]**	**Augmentations**	**2018 Budget after Augmentations and Adjustments**	**Actual Expenditures**	**Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)**	**Percentage used of Augmented & Adjusted 2018 Budget**
Human Resources:							
Compensation and Benefits	$ 1,378,515	$ (95,000)	$ -	$ 1,283,515	$ 623,629	$ 659,886	48.59%
Travel	54,594	(22,620)	-	31,974	15,434	16,540	48.27%
Other	19,515	147	-	19,662	11,192	8,470	56.92%
Administration & Office	68,803	(28,389)	-	40,414	10,436	29,978	25.82%
Information Technology	840	(70)	-	770	350	420	45.45%
Telecommunications	33,400	(9,813)	-	23,587	8,358	15,229	35.44%
Rent/Lease	109,700	(2,030)	-	107,670	52,219	55,451	48.50%
Total Operating Expenditures	**$ 1,665,367**	**$ (157,775)**	**$ -**	**$ 1,507,592**	**$ 721,618**	**$ 785,974**	**47.87%**
Investment Services	11,200	(940)	-	10,260	5,008	5,252	48.81%
Legal Services	10,000	(10,000)	-	-	-	-	0.00%
Marketing	4,500	2,394	-	6,894	1,894	5,000	27.47%
Engineering - Related	1,140,000	(584,771)	-	555,229	(14,771)	570,000	-2.66%
Total Other Expenditures	**$ 1,165,700**	**$ (593,318)**	**$ -**	**$ 572,382**	**$ (7,870)**	**$ 580,252**	**-1.37%**
Total Expenditures	**$ 2,831,067**	**$ (751,093)**	**$ -**	**$ 2,079,974**	**$ 713,748**	**$ 1,366,226**	**34.32%**

[A] Adjustments to meet mitigation end of year projections.

Governing Board Memorandum

September 12, 2018

Agenda Item 7:	Request approval of contracting and expenditure for licensing reinsurance-processing software
Recommended Action:	Approve reinsurance-processing software and services contract, execution of the agreement by CEO Glenn Pomeroy, and the related expenditure

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Background:

In April 2018, the CEA began a formal process of seeking an integrated, off-the-shelf, packaged Enterprise Resource Planning (ERP) solution that will (a) meet core requirements, out of the box, with minimal modifications, (b) minimize or eliminate manual processes, and (c) centralize and streamline current systems and processes from single or multiple vendors.

This memorandum describes those processes and the decisions and results relating solely to reinsurance-processing-software.

Analysis:

CEA is one of the leading purchasers of catastrophe reinsurance in the world, with over $8 billion of risk-transfer in effect, both traditional and transformer reinsurance.

CEA staff identified the need, from a best-practices standpoint, to replace its current method for tracking and managing its reinsurance activities (using spreadsheets and databases), to a comprehensive software solution that would be an off-the-shelf product.

On April 6, 2018, the CEA issued a Request for Proposals and Qualifications for Enterprise Resource Planning Software #1-18v2.

CEA received proposals from five firms for the reinsurance software solution.

The responses were evaluated by a selection panel of:

Tim Richison: CEA Chief Financial Officer
Todd Coombes: CEA Chief Insurance and Technology Officer
Kellie Schneider: CEA Chief Operations Officer
Tracy Palombo: CEA Reinsurance and Risk-Transfer Director
Andrea Wheeler: CEA Governance, Risk, and Reports Manager

The selection panel ranked the firms that responded to the RFP/Q based on their proposals and selected the top three to provide an on-site demonstration of their reinsurance software solution and reached a scored, consensus recommendation: If the Board approves the group's recommendation, DataCede, LLC, will be invited to negotiate a contract with the CEA.

Below is a summary of key reinsurance-processing software terms:

- Contract term: Three years, with an annual option by CEA to extend for an additional year, to continue until CEA cancels the agreement.
- The subscription fee includes the following charges:
  - License
  - Maintenance fees
  - Upgrades and versioning
  - Training for 10 concurrent users
  - Hosting through Amazon Web Services (AWS)
  - Managed services

Initial and annual costs are:

• Implementation services	$ 40,000
• Implementation activities	$ 25,000
• Annual subscription fee for CedeRight	$148,800

The maximum compensation for the initial implementation and the annual subscription will be no more than $213,800, including the annual subscription fee of $148,800.

<u>Recommendation</u>:

Staff recommends that the Board:

1. Approve staff's recommendation to negotiate for a reinsurance-processing-software solution, CedeRight, with DataCede, LLC.
2. Authorize CEO Glenn Pomeroy to execute resulting, final negotiated contracts on behalf of the CEA.

Governing Board Memorandum

September 12, 2018

Agenda Item 8: Proposed new CEA Investment Policy format

Recommended Action: Approve new format for CEA's Investment Policy

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Background:

The CEA's Investment Policies and Guidelines (Old Policy) (with associated memoranda (Attachment A)) was first adopted by the CEA Governing Board in 1997. At that time, total CEA claim-paying capacity was $7.1 billion, which included just $600 million in capital. Over the years, the format of the Old Policy was unchanged and now needs updating.

Analysis:

CEA Investment Compliance Committee worked with outside counsel and CEA's independent financial advisor, Raymond James, Inc., in updating the format of the policy for ease of use. There has been no change to any investment policy with this revision. Only the format has changed.

The title of the new, reformatted document has changed; The current title is "CEA's Investment Policies and Guidelines"; the new title is "CEA Investment Policy."

Major format changes are:

- Inclusion in the policy of the full text of Government Code section 16430
- Clear charts showing permissible investments for each fund
- Definitions of key terms in the policy
- Addition of the following sections:
  - Prudent Investor Standard
  - Ethics, avoidance of conflict of interests, and compliance with Investment Advisers Act of 1940
  - Investment goals

See *Attachment B* for the proposed "CEA Investment Policy" in the new format.

Recommendation:

Staff recommends that the Governing Board approve the newly reformatted "CEA Investment Policy."

CALIFORNIA EARTHQUAKE AUTHORITY

INVESTMENT POLICIES

California Earthquake Authority

Investment Policies and Guidelines

INVESTMENTS

Revised: 12/15/2015 (changed modified duration from 1.75 to 3.00)
Revised: 12/31/02 (change for expatriate investments approved 12/19/02)
Adopted: 08/01/02
Revised: 06/20/02
Revised: 10/28/99
Revised: 05/28/98
Revised: 10/09/97
Revised: 11/01/96
Adopted: 10/07/96

PHILOSOPHY

The California Earthquake Authority (CEA) operates in a complex social-economic milieu, providing substantial disclosure of operations and investment activity, which places the CEA in a position where the integrity of investment activities should be above that of the private sector in socially responsible activities. The CEA has the social and ethical obligation to require that corporations in which securities are held meet a high standard of conduct in their operations. The act of investment in the securities of a corporation predominantly reflects a judgment that the ownership will produce a rate of return that will make it an attractive investment. Investments will not be made in companies that meet the criteria for expatriate companies. Expatriate companies are U.S. corporations that relocate, on paper, to offshore tax havens.

PRINCIPLES

The preservation of principal and maximization of income will clearly be the primary and underlying criteria for the selection and retention of securities. Non-economic factors will supplement profit factors in making investment decisions. Non-economic factors are defined as those considerations not directly related to the maximization of income and preservation of principal. The consideration of non-economic factors is for the purpose of ensuring that the CEA, either through action or inaction, does not promote, condone, or facilitate social injury.

Social injury will be said to exist when the activities of a corporation serve to undermine basic human rights and dignities. Social injury may also be said to exist when the CEA perceives the practices of a corporation result in undesirable side effects for others, and that the side effects are grave in nature. Side effects that may be deemed grave in nature shall include, but are not limited to the following.

A. Practices which are known to endanger the environment, subject to current federal, state, and local law, including:

   1) Unsafe nuclear waste disposal;

   2) Ineffective or inadequate pollution control;

   3) Improper use of chemicals and contaminants; and

   4) Any practice which directly or indirectly endangers human health or the environment.

B. Practices which result in the suppression of human rights including:

   1) The sale of weapons and technology to governments known to engage in the systematic suppression of human rights; and

   2) The sale or purchase of goods from countries known to employ forced labor.

C. Practices which endanger human health including:

   1) Sale and distribution of known contaminated products;

   2) Sale and distribution of dangerous drugs; and

   3) Purchasing goods from or selling goods to companies known to disregard worker safety.

Investments shall not be selected or rejected based solely on social responsibilities. In general, social criteria, to the extent available, should be considered after all financial criteria have been satisfied.

The CEA portfolio consists of two funds, Liquidity Fund and Primary Reserve Fund. The following details the investment policy for each fund. The investments made in the two funds will have a combined maximum modified duration of 3.00 years.

LIQUIDITY FUND
INVESTMENT POLICY

FOREWORD

The "Liquidity Fund" will consist of $750 million in funds that will be utilized to pay the operating expenses and initial claims from an earthquake of the California Earthquake Authority (CEA).

GOAL I. PORTFOLIO SAFETY/DIVERSIFICATION

The pool will be managed to insure the safety of the portfolio by investing in high quality securities and by maintaining a mix of securities that will provide reasonable assurance that no single investment or class of investments will have a disproportionate impact on the total portfolio.

OBJECTIVE: In addition to the safety provided by investing in high quality securities, the safety of the portfolio is enhanced three ways by maintaining a prudent mix (i.e., diversity) of investments: 1) Spreading investments over different investment types minimizes the impact any one industry/investment class can have on the portfolio; 2) Spreading investments over multiple credits/issuers within an investment type minimizes the credit exposure of the portfolio to any single firm/institution; and 3) Spreading investments over various maturities minimizes the risk of portfolio depreciation due to a rise in interest rates.

POLICY: The portfolio shall contain a sufficient number and diversity of marketable securities so that a reasonable portion of the portfolio can be readily converted to cash without causing a material change in the value of the portfolio. Approved investments are only those specifically authorized in this policy. All trades except direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes will be conducted through "primary dealers". Direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes may be purchased directly from the issuer as long as these instruments otherwise meet the investment criteria outlined in the appropriate sections of this policy.

GOAL II. LIQUIDITY

The pool will be managed to ensure that normal cash needs, as well as scheduled extraordinary cash needs can be met. Further, adequate liquidity shall be maintained to meet any unforeseen cash needs, whether ordinary or extraordinary.

***OBJECTIVE*:** The "Liquidity Fund" will be managed so that 100% of the principal value of the Fund will be available within 181 days at par. This Fund consists of the monies that are utilized to pay the expenses of the California Earthquake Authority.

***POLICY*:** First priority is given to maintaining specific calendar liquidity. While operating expenses can be reasonably forecast, this Fund may also be used for other purposes. Therefore, the portfolio should have laddered maturities to mitigate the necessity of liquidating securities before their maturity.

GOAL III. RATE OF RETURN

Investments shall be made in such a way as to realize the maximum return consistent with safe and prudent treasury management**.**

***OBJECTIVE*:** The rate of return will be maintained on a consistent level representative of current market yield direction.

***POLICY*:** Sales gains/losses will not be incurred to the point of radically altering the final income from the portfolio. Significant sales gains will be offset for restructuring purposes to maintain consistent current return, as well as maximizing future portfolio performance. This portfolio is to be managed as a "par" portfolio. It is not expected that sales will generate significant gains or losses.

CONFORMANCE

All of the foregoing goals, objective and policies shall be observed by the Investment Advisor**,** and will be monitored and reviewed continually by the Chief Financial Officer.

LIQUIDITY FUND
MANAGEMENT GUIDELINES

The California Earthquake Authority has set forth a general declaration of portfolio goals, objectives and policies. Following are various guidelines necessary to the good faith observance of these policies.

I. GUIDELINES FOR MAINTAINING SAFETY/DIVERSIFICATION

There are few statutory limitations placed on individual categories of authorized investments. However, this does not entitle the Investment Advisor to "carte blanche" participation in these security types. In the absence of direct statutory limitations, the "prudent person rule" shall be utilized by the investment staff. As market conditions change altering credit risk, marketability, yield spreads, and securities availability, application of this rule shall govern any investment decision.

Compliance with investment policy should be measured on the date a security is purchased. If market fluctuation or reduction in portfolio size cause existing investments to exceed concentration limits, the portfolios should be returned to compliance when new investments are made. Following are various considerations/limitations as they pertain to specific investment types:

A. U.S. Treasury Securities

1) Maximum maturity: Statutory: 30 years.
   Policy: 181 days

2) Maximum par value, total portfolio: None.

3) Maximum par value per name: None.

4) Maximum par value per maturity: None.

5) Credit: Full faith and credit of the Federal Government.

B. Federal Agency Securities

1) Maximum maturity: Statutory: 30 years.
   Policy: 181 days

2) Maximum par value, total portfolio: 50%.

3) Maximum par value per name: 25%.

4) Maximum par value per maturity: None.

5) Credit: Despite the implied government guarantee, prudent investment practice necessitates constant credit analysis of certain issuing agencies. Market perception often limits the liquidity of these issues.

C. Bankers Acceptances (BA)-Domestic/Foreign

1) Maximum maturity: Statutory: None.
Policy: 181 days

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) The history of the acceptance market is spotless on "Failures to redeem." This was true even through the years of WW II.

b) Geopolitical location is of prime concern when considering potential candidates. Internal, as well as border political and economic stability of the host country is of prime concern.

c) Liquidity as far as both credit risk and marketability in the secondary level are addressed.

d) The issuer of the BA will be rated in the highest rating category by all rating agencies that rate the issuer.

D. Certificates of Deposits (CDs)

1) Maximum maturity: Statutory: None.
Policy: 181 days

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) Criteria concerning loan make-up, Less Developed Countries (LDC) exposure, geographic location, market perceptions, and financial condition all serve to eliminate lesser names.

b) Liquidity as far as both credit risk and marketability in the secondary level are addressed. There must be a market for the name in which at least three major dealers will bid or offer at a given moment.

c) The issuer will be rated in the top short-term rating category by all rating agencies that rate the issuer.

E. Commercial Paper (CP)

1) Maximum maturity: Statutory: 180 days.
Policy: 180 days.

2) Maximum par value, total portfolio: Statutory: 30% of the current portfolio.
Policy: 25%.

a) If over 15% of the portfolio is invested in commercial paper, the dollar-weighted average maturity of the entire portfolio amount cannot exceed 31 days. Dollar-weighted average maturity means the sum of the amount of each outstanding commercial paper investment multiplied by the days to maturity, divided by the total amount of outstanding commercial paper.

3) Maximum par value per name: Statutory: 10% of outstanding.
Policy: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) Rated A1/P1 or equivalent quality as defined by a nationally recognized organization that rates such securities.

b) Organized and operating with the United States.

c) Have total assets in excess of five hundred million dollars ($500,000,000).

F. Corporate Bonds/Notes

1) Maximum maturity: Statutory: None.
Policy: 181 days

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit: Securities eligible for investment under this subdivision must be issued by corporation (including banks) organized and operating within the United States and shall be within the top three ratings of a nationally recognized rating service.

G. Repurchases (RP)

1) Maximum maturity: Statutory: None.
Policy: 181 days

2) Maximum par value, total portfolio: Statutory: None.
Policy: 50%.

Exception: Substantial cash disbursements may require the amount in overnight repurchase agreements to exceed the maximum par value. This exception may be in effect for no more than 10 days.

3) Maximum par value per counterparty: 10%.

4) Maximum par value per term maturity: 10%.

5) Credit:

a) Must have on file a signed Public Securities Association (PSA) Agreement.

b) Acceptable collateral includes Governments, Agencies (including Agency Mortgage-Backed Security (MBS), AAA-rate Asset Backed Securities (ABS), investment grade corporates and A1/P1 money market securities.

c) Acceptable collateral must be equal to 105% of the securities value (U.S. Treasuries are 102% collateralized).

H. Reverse Repurchase Agreements (RRP)

Reverse Repurchase Agreements are prohibited.

I. Money Market Mutual Funds

Shares of beneficial interest issued by diversified management companies, otherwise known as mutual funds, as defined in Section 23701(m) of the Revenue and Taxation Code. Mutual funds must consist of securities and obligations of the U.S. government authorized by Section 53601 of the California Government Code as amended. Said companies shall either:

1) Attain the highest ranking or the highest letter and numerical rating provided by not less than two of the three largest nationally recognized rating services; or

2) Have an investment adviser registered with the Securities and Exchange Commission with not less than five year's experience investing in the securities and obligations as authorized above, and with assets under management in excess of $ 500,000,000. The price of shares of beneficial interest (mutual funds) shall not include any commission that these companies may charge at the time of purchase or redemption. No more than 15% of the fund may be invested in mutual funds except when large expense payments are anticipated (i.e., reinsurance premium payments).

3) Mutual Fund investments will be limited to Money Market Mutual Funds with a par value of $1.00.

II. GUIDELINES FOR MAINTAINING LIQUIDITY

The "Liquidity Fund" contains the Funds that will be utilized to pay ongoing operating and financing expenses. However, this Fund may be used to fund other purposes. Therefore, the portfolio must be managed so that all Funds can be converted to cash within 181 days. Maturities should be laddered within the 181 days allowed as the maximum investment. At least 10% of the Fund must be kept in cash or cash equivalents. A minimum of 25% of the portfolio will be invested in securities that mature overnight.

III. GUIDELINES FOR MAINTAINING RATE OF RETURN

Safety of principal and adequate liquidity will be the overriding principles guiding the management of the Fund. After these two goals are met, rate of return can be considered. Trading for gains in the portfolio is not permitted. Securities in the Fund may be sold to furnish liquidity, because of a deterioration in credit quality of an issuer, or to purchase a security that better fits the current needs of the Fund.

Issued securities may be purchased only to the extent that there is adequate cash, maturities, or pending sales to fund the purchase. Short positions will not be taken at any time.

IV. REPORTING

The Investment Advisor will provide a monthly report on the portfolio to the Chief Financial Officer. The report as a minimum will include:

1) All securities currently held by the Fund with their book and market values.

2) All securities bought and sold by the Fund for the reporting period.

3) The average maturity and modified duration of the portfolio.

4) The credit rating of each security.

5) The book and market yield of each security.

6) Other information as requested by the Chief Financial Officer.

PRIMARY RESERVE FUND
INVESTMENT POLICY

FOREWORD

The "Primary Reserve Fund" will consist of funds in excess of the Liquidity Fund maximum up to a combined $2 billion, which represents the entire CEA portfolio. These funds will be utilized to pay claims following an earthquake. As such, the Primary Reserve Fund will not be managed like a normal insurance reserve fund. It will be managed as a short-term, liquidity Fund.

GOAL I. PORTFOLIO SAFETY/DIVERSIFICATION

The pool will be managed to insure the safety of the portfolio by investing in high quality securities and by maintaining a mix of securities that will provide reasonable assurance that no single investment or class of investments will have a disproportionate impact on the total portfolio.

OBJECTIVE: In addition to the safety provided by investing in high quality securities, the safety of the portfolio is enhanced three ways by maintaining a prudent mix (i.e., diversity) of investments: 1) Spreading investments over different investment types minimizes the impact any one industry/investment class can have on the portfolio; 2) Spreading investments over multiple credits/issuers within an investment type minimizes the credit exposure of the portfolio to any single firm/institution; and 3) Spreading investments over various maturities minimizes the risk of portfolio depreciation due to a rise in interest rates.

POLICY: The portfolio shall contain a sufficient number and diversity of marketable securities so that a reasonable portion of the portfolio can be readily converted to cash without causing a material change in the value of the portfolio. Approved investments are only those specifically authorized in this policy. All trades, except direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes will be conducted through "primary dealers". Direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes may be purchased directly from the issuer as long as these instruments otherwise meet the investment criteria outlined in the appropriate sections of this policy.

GOAL II. LIQUIDITY

The pool will be managed to ensure that normal cash needs, as well as scheduled extraordinary cash needs can be met. Further, adequate liquidity shall be maintained to meet any unforeseen cash needs, whether ordinary or extraordinary.

***OBJECTIVE*:** The “Primary Reserve Fund” will be managed so that 100% of the principal value of the Fund will be available when necessary after an earthquake. This Fund consists of the monies that are in the first payout position in the event of an earthquake.

***POLICY*:** First priority is given to maintaining specific calendar liquidity. Claims when they occur will be paid out rapidly. Therefore, the portfolio should have laddered maturities to mitigate the necessity of liquidating securities before their maturity.

GOAL III. RATE OF RETURN

Investments shall be made in such a way as to realize the maximum return consistent with safe and prudent treasury management.

***OBJECTIVE*:** The rate of return will be maintained on a consistent level representative of current market yield direction.

***POLICY*:** Sales will not be incurred to the point of radically altering the final income due to gain/loss from the portfolio. Significant sales gains will be offset for restructuring purposes to maintain consistent current return, as well as maximizing future portfolio performance. This portfolio is to be managed as a “par” portfolio. It is not expected that sales will generate significant gains or losses.

CONFORMANCE

All of the foregoing goals, objective and policies shall be observed by the Investment Advisor or Asset Managers, and will be monitored and reviewed continually by the Chief Financial Officer.

PRIMARY RESERVE FUND
MANAGEMENT GUIDELINES

The California Earthquake Authority has set forth a general declaration of portfolio goals, objectives and policies. Following are various guidelines necessary to the good faith observance of these policies.

I. GUIDELINES FOR MAINTAINING SAFETY/DIVERSIFICATION

There are few statutory limitations placed on individual categories of authorized investments. However, this does not entitle the Investment Advisor or Asset Managers to "carte blanche" participation in these security types. In the absence of direct statutory limitations, the "prudent person rule" shall be utilized by the investment staff. As market conditions change altering credit risk, marketability, yield spreads, and securities availability, application of this rule shall govern any investment decision.

Compliance with investment policy should be measured on the date a security is purchased. If market fluctuation or reduction in portfolio size cause existing investments to exceed concentration limits, the portfolios should be returned to compliance when new investments are made. Following are various considerations/limitations as they pertain to specific investment types:

A. U.S. Treasury Securities

1) Maximum maturity: Statutory: 30 years.
   Policy: 5 years

2) Maximum par value, total portfolio: None.

3) Maximum par value per name: None.

4) Maximum par value per maturity: None.

5) Credit: Full faith and credit of the Federal Government.

B. Money Market Mutual Funds

Shares of beneficial interest issued by diversified management companies, otherwise known as mutual funds, as defined in Section 23701(m) of the Revenue and Taxation Code. Mutual funds must consist of securities and obligations of the U.S. government authorized by Section 53601 of the California Government Code as amended. Said mutuals shall either:

1) Attain the highest ranking or the highest letter and numerical rating provided by not less than two of the three largest nationally recognized rating services; or

2) Have an investment adviser registered with the Securities and Exchange Commission with not less than five year's experience investing in the securities and obligations as authorized above, and with assets under management in excess of $ 500,000,000. The price of shares of beneficial interest (mutual funds) shall not include any commission that these companies may charge at the time of purchase or redemption. No more than 15% of the CEA portfolio may be invested in mutual funds. Exceptions to the 15% limitation are when the Primary Fund Asset Managers receive periodic funding for investments or are liquidating investments for claims payments.

3) Mutual Fund investments will be limited to Money Market Mutual Funds with a par value of $1.00.

C. Reverse Repurchase Agreements (RRP)

Reverse Repurchase Agreements are prohibited.

D. Federal Agency Securities

Federal Agency Securities are not permitted.

E. Bankers Acceptances (BA)-Domestic/Foreign

Bankers Acceptances are not permitted.

F. Certificates of Deposits (CDs)

Certificates of Deposits are not permitted.

G. Commercial Paper (CP)

Commercial Paper is not permitted.

H. Corporate Bonds/Notes

Corporate Bonds/Notes are not permitted.

I. Repurchases (RP)

Repurchases are not permitted.

II. GUIDELINES FOR MAINTAINING LIQUIDITY

The "Primary Reserve Fund" contains the funds that will be paid out first in the event of earthquake claims. Therefore, the portfolio must be managed so that all Funds can be converted to cash when necessary after an earthquake. Maturities should be laddered, not exceed 5 years, so that funds will be available when necessary after an earthquake. Claims could be required to be paid as early as 6 (six) days after a catastrophic event.

III. GUIDELINES FOR MAINTAINING RATE OF RETURN

Safety of principal and adequate liquidity will be the overriding principles guiding the management of the Fund. After these two goals are met, rate of return can be considered. Trading for gains in the portfolio is not permitted. Securities in the Fund may be sold to furnish liquidity, because of deterioration in the credit quality of an issuer, or to purchase a security that better fits the then current needs of the Fund.

Issued securities may be purchased only to the extent that there is adequate cash, maturities or pending sales to fund the purchase. Short positions will not be taken at any time.

IV. REPORTING

The Investment Advisor or Asset Managers will provide a monthly report on the portfolio to the Chief Financial Officer. The report as a minimum will include:

1) All securities currently held by the Fund with their book and market values.

2) All securities bought and sold by the Fund for the reporting period.

3) The average maturity and modified duration of the portfolio.

4) The credit rating of each security.

5) The book and market yield of each security.

6) Other information as requested by the Chief Financial Officer.

MITIGATION FUND
INVESTMENT POLICY

FOREWORD

The "Mitigation Fund" will consist of funds allocated in an amount up to 5% of the investment income on the CEA's invested funds each calendar year or five million dollars, whichever is less. The funds will be utilized for the mitigation program and associated expenses.

GOAL I. PORTFOLIO SAFETY/DIVERSIFICATION

The pool will be managed to insure the safety of the portfolio by investing in high quality securities and by maintaining a mix of securities that will provide reasonable assurance that no single investment or class of investments will have a disproportionate impact on the total portfolio.

OBJECTIVE: In addition to the safety provided by investing in high quality securities, the safety of the portfolio is enhanced three ways by maintaining a prudent mix (i.e., diversity) of investments: 1) Spreading investments over different investment types minimizes the impact any one industry/investment class can have on the portfolio; 2) Spreading investments over multiple credits/issuers within an investment type minimizes the credit exposure of the portfolio to any single firm/institution; and 3) Spreading investments over various maturities minimizes the risk of portfolio depreciation due to a rise in interest rates.

POLICY: The portfolio shall contain a sufficient number and diversity of marketable securities so that a reasonable portion of the portfolio can be readily converted to cash without causing a material change in the value of the portfolio. Approved investments are only those specifically authorized in this policy. All trades except direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes will be conducted through "primary dealers". Direct issue commercial paper, bankers' acceptances, certificates of deposit and bank notes may be purchased directly from the issuer as long as these instruments otherwise meet the investment criteria outlined in the appropriate sections of this policy.

GOAL II. LIQUIDITY

The pool will be managed to ensure that normal cash needs, as well as scheduled extraordinary cash needs can be met. Further, adequate liquidity shall be maintained to meet any unforeseen cash needs, whether ordinary or extraordinary.

OBJECTIVE**:** The "Mitigation Fund" will be managed so that 100% of the principal value of the Fund will be available within 91 days at par. This Fund consists of the monies that are utilized for the mitigation program and associated expenses.

POLICY**:** First priority is given to maintaining specific calendar liquidity. While operating expenses can be reasonably forecast, this Fund will also be used for other purposes. Therefore, the portfolio should have laddered maturities to mitigate the necessity of liquidating securities before their maturity.

GOAL III. RATE OF RETURN

Investments shall be made in such a way as to realize the maximum return consistent with safe and prudent treasury management**.**

OBJECTIVE**:** The rate of return will be maintained on a consistent level representative of current market yield direction.

POLICY**:** Sales gains/losses will not be incurred to the point of radically altering the final income from the portfolio. Significant sales gains will be offset for restructuring purposes to maintain consistent current return, as well as maximizing future portfolio performance. This portfolio is to be managed as a "par" portfolio. It is not expected that sales will generate significant gains or losses.

CONFORMANCE

All of the foregoing goals, objective and policies shall be observed by the Investment Advisor**,** and will be monitored and reviewed continually by the Chief Financial Officer.

MITIGATION FUND
MANAGEMENT GUIDELINES

The California Earthquake Authority has set forth a general declaration of portfolio goals, objectives and policies. Following are various guidelines necessary to the good faith observance of these policies.

I. GUIDELINES FOR MAINTAINING SAFETY/DIVERSIFICATION

There are few statutory limitations placed on individual categories of authorized investments. However, this does not entitle the Investment Advisor to "carte blanche" participation in these security types. In the absence of direct statutory limitations, the "prudent person rule" shall be utilized by the investment staff. As market conditions change altering credit risk, marketability, yield spreads, and securities availability, application of this rule shall govern any investment decision.

Compliance with investment policy should be measured on the date a security is purchased. If market fluctuation or reduction in portfolio size cause existing investments to exceed concentration limits, the portfolios should be returned to compliance when new investments are made. Following are various considerations/limitations as they pertain to specific investment types:

A. **U.S. Treasury Securities**

1)	Maximum maturity:	Statutory:	30 years.
		Policy:	91 days.
2)	Maximum par value, total portfolio:	None.	
3)	Maximum par value per name:	None.	
4)	Maximum par value per maturity:	None.	
5)	Credit: Full faith and credit of the Federal Government.		

B. **Federal Agency Securities**

1)	Maximum maturity:	Statutory:	30 years.
		Policy:	91 days.
2)	Maximum par value, total portfolio:	50%.	
3)	Maximum par value per name:	25%.	

4) Maximum par value per maturity: None.

5) Credit: Despite the implied government guarantee, prudent investment practice necessitates constant credit analysis of certain issuing agencies. Market perception often limits the liquidity of these issues.

C. Bankers Acceptances (BA) -Domestic/Foreign

1) Maximum maturity: Statutory: None.
Policy: 91 days.

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) The history of the acceptance market is spotless on "Failures to redeem." This was true even through the years of WW II.

b) Geopolitical location is of prime concern when considering potential candidates. Internal, as well as border political and economic stability of the host country are of prime concern.

c) Liquidity as far as both credit risk and marketability in the secondary level are addressed.

d) The issuer of the BA will be rated in the highest rating category by all rating agencies that rate the issuer.

D. Certificates of Deposits (CDs)

1) Maximum maturity: Statutory: None.
Policy: 91 days.

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) Criteria concerning loan make-up, Less Developed Countries (LDC) exposure, geographic location, market perceptions, and financial condition all serve to eliminate lesser names.

b) Liquidity as far as both credit risk and marketability in the secondary level are addressed. There must be a market for the name in which at least three major dealers will bid or offer at a given moment.

c) The issuer will be rated in the top short-term rating category by all rating agencies that rate the issuer.

E. Commercial Paper (CP)

1) Maximum maturity: Statutory: 180 days.
Policy: 91 days.

2) Maximum par value, total portfolio: Statutory: 30% of the current portfolio.
Policy: 25%.

a) If over 15% of the portfolio is invested in commercial paper, the dollar-weighted average maturity of the entire portfolio amount cannot exceed 31 days. Dollar-weighted average maturity means the sum of the amount of each outstanding commercial paper investment multiplied by the days to maturity, divided by the total amount of outstanding commercial paper.

3) Maximum par value per name: Statutory: 10% of outstanding.
Policy: 5%.

4) Maximum par value per maturity: None.

5) Credit:

a) Rated A1/P1 or equivalent quality as defined by a nationally recognized organization which rates such securities.

b) Organized and operating with the United States.

c) Have total assets in excess of five hundred million dollars ($500,000,000).

F. Corporate Bonds/Notes

1) Maximum maturity: Statutory: None.
Policy: 91 days.

2) Maximum par value, total portfolio: 25%.

3) Maximum par value per name: 5%.

4) Maximum par value per maturity: None.

5) Credit: Securities eligible for investment under this subdivision must be issued by corporation (including banks) organized and operating within the United States and shall be within the top three ratings of a nationally recognized rating service.

G. Repurchases (RP)

1) Maximum maturity: Statutory: None.
Policy: 91 days.

2) Maximum par value, total portfolio: Statutory: None.
Policy: 50%.

Exception: Substantial cash disbursements may require the amount in overnight repurchase agreements to exceed the maximum par value. This exception may be in effect for no more than 10 days.

3) Maximum par value per counterparty: 10%.

4) Maximum par value per term maturity: 10%.

5) Credit:

a) Must have on file a signed Public Securities Association (PSA) Agreement.

b) Acceptable collateral includes Governments, Agencies (including Agency Mortgage-Backed Security (MBS), AAA-rate Asset Backed Securities (ABS), investment grade corporates and A1/P1 money market securities.

c) Acceptable collateral must be equal to 105% of the securities value (U.S. Treasuries are 102% collateralized).

H. Reverse Repurchase Agreements (RRP)

Reverse Repurchase Agreements are prohibited.

I. Money Market Mutual Funds

Shares of beneficial interest issued by diversified management companies, otherwise known as mutual funds, as defined in Section 23701(m) of the Revenue and Taxation Code. Mutual funds must consist of securities and obligations of the U.S. government authorized by Section 53601 of the California Government Code as amended. Said companies shall either:

1) Attain the highest ranking or the highest letter and numerical rating provided by not less than two of the three largest nationally recognized rating services; or

2) Have an investment adviser registered with the Securities and Exchange Commission with not less than five year's experience investing in the securities and obligations as authorized above, and with assets under management in excess of $ 500,000,000. The price of shares of beneficial interest (mutual funds) shall not include any commission that these companies may charge at the time of purchase or redemption.

3) Mutual Fund investments will be limited to Money Market Mutual Funds with a par value of $1.00.

II. GUIDELINES FOR MAINTAINING LIQUIDITY

The "Mitigation Fund" contains the Funds that will be utilized for the mitigation program and associated expenses. The portfolio must be managed so that all Funds can be converted to cash within 90 days. Maturities should be laddered within the 91 days allowed as the maximum investment. At least 10% of the Fund must be kept in cash or cash equivalents.

III. GUIDELINES FOR MAINTAINING RATE OF RETURN

Safety of principal and adequate liquidity will be the overriding principles guiding the management of the Fund. After these two goals are met, rate of return can be considered. Trading for gains in the portfolio is not permitted. Securities in the Fund may be sold to furnish liquidity, because of deterioration in the credit quality of an issuer, or to purchase a security that better fits the current needs of the Fund.

Issued securities may be purchased only to the extent that there is adequate cash, maturities, or pending sales to fund the purchase. Short positions will not be taken at any time.

IV. REPORTING

The Investment Advisor will provide a monthly report on the portfolio to the Chief Financial Officer. The report as a minimum will include:

1) All securities currently held by the Fund with their book and market values.

2) All securities bought and sold by the Fund for the reporting period.

3) The average maturity and modified duration of the portfolio.

4) The credit rating of each security.

5) The book and market yield of each security.

6) Other information as requested by the Chief Finance Officer.

SUPPLEMENTAL ACCOUNT
INVESTMENT POLICY

FOREWORD

The "Supplemental Account" will consist of premiums collected from supplemental coverage to the CEA basic earthquake policy. These funds will be paid to the reinsurers as premium for supplemental earthquake coverage. The premium for each month will be collected in the fund and then paid within 60 days.

GOAL I. PORTFOLIO SAFETY

The pool will be managed to insure the safety of the portfolio by investing in high quality money market mutual funds.

GOAL II. LIQUIDITY

The pool will be managed to ensure that timely premium payments can be made to the reinsurers. The "Supplemental Account" will be managed so that 100% of the principal value of the account will be available.

GOAL III. RATE OF RETURN

Investments shall be made in such a way as to realize the maximum return consistent with safe and prudent treasury management. The rate of return will be maintained on a consistent level representative of current market yield direction.

CONFORMANCE

All of the foregoing goals, objective and policies shall be observed by the Investment Advisor, and will be monitored and reviewed continually by the Chief Financial Officer.

SUPPLEMENTAL ACCOUNT
MANAGEMENT GUIDELINES

I. GUIDELINES FOR MAINTAINING SAFETY

Money Market Mutual Funds

Shares of beneficial interest issued by diversified management companies, otherwise known as mutual funds, as defined in Section 23701(m) of the Revenue and Taxation Code. Mutual funds must consist of securities and obligations of the U.S. government authorized by Section 53601 of the California Government Code as amended. Said companies shall either:

1) Attain the highest ranking or the highest letter and numerical rating provided by not less than two of the three largest nationally recognized rating services; or

2) Have an investment adviser registered with the Securities and Exchange Commission with not less than five year's experience investing in the securities and obligations as authorized above, and with assets under management in excess of $ 500,000,000. The price of shares of beneficial interest (mutual funds) shall not include any commission that these companies may charge at the time of purchase or redemption. 100% of the fund must be invested in mutual funds.

3) Mutual Fund investments will be limited to Money Market Mutual Funds with a par value of $1.00.

II. GUIDELINES FOR MAINTAINING LIQUIDITY

The "Supplemental Account" contains funds that will be paid to the reinsurers as premium for supplemental earthquake coverage. The premium for each month will be collected in the fund and then paid within 60 days. The portfolio must be managed so that all funds are available for disbursements.

III. GUIDELINES FOR MAINTAINING RATE OF RETURN

Safety of principal and adequate liquidity will be the overriding principles guiding the management of the Account. After these two goals are met, rate of return can be considered.

IV. REPORTING

The Investment Advisor will provide a monthly report on the portfolio to the Chief Financial Officer. The report as a minimum will include:

1) All money market funds currently held by the Account with their book and market values.

2) All money market funds bought and sold by the Account for the reporting period.

3) Other information as requested by the Chief Financial Officer.

CALIFORNIA EARTHQUAKE AUTHORITY

INVESTMENT POLICIES

California Earthquake Authority

Investment Policies

Format Change Only

Draft:	09/12/18
Revised:	12/16/15
Revised:	08/01/02
Revised:	06/20/02
Revised:	10/28/99
Revised:	05/28/98
Revised:	10/09/97
Revised:	11/01/96
Adopted:	10/07/96

DEFINITIONS

"Applicable Laws and Regulations" or "Legal Restrictions" means California Insurance Code section 10089.6, subdivision (b)(1), California Government Code section 16430, and California Code of Regulations, Title 10, section 2697.4, as well as any amendments or successor provisions to those sections.

"Business Day" or "Business Days" means a day or days other than Saturdays, Sundays, or state holidays.

"CEA Portfolio" or "Portfolio" means the entirety of all the individual Funds of the California Earthquake Authority Fund collectively, i.e., the Primary Fund, the Liquidity Fund, the Claim-Paying Fund, the Reinsurance Fund, and the Mitigation Fund.

"Daily" refers to Business Days.

"Financial Advisor" means a firm contracted by the CEA to provide analysis for the CEA concerning debt issuance and that may, if contracted to do so, provide services related to oversight of the CEA's Investment Managers.

"Fund" means a fund within the California Earthquake Authority Fund such as, but not by way of limitation, the CEA's Primary Fund, Liquidity Fund, Claim-Paying Fund, Claims-Paying Fund, Reinsurance Fund, and Earthquake Loss Mitigation Fund.

"Investment Manager" means a firm contracted by the CEA to invest monies on its behalf, in accordance with all Applicable Laws and Regulations and the CEA's Investment Policies.

"Investment" refers to a Security purchased for, and owned by, the CEA.

"Modified Duration" is the average length of time to receive the present value of bond cash flows.

A “Security” is a financial instrument before it is purchased for, or owned by, the CEA.

PHILOSOPHY

The California Earthquake Authority (CEA) is an insurance provider whose primary business is to pay policyholder claims in a timely manner while maintaining quality customer service and a sound financial posture. In furtherance of those goals, the CEA should have Investment Policies that provide for the following prioritized goals:

1) Safety and preservation of principal;
2) Liquidity, so that operating expenses and claims can be paid in a timely manner; and
3) Competitive returns (yield).

As a public instrumentality, created by act of the California state government, the CEA discloses much of its operations and investment activity. The integrity of the CEA’s investment activities should be above that of private sector organizations conducting comparable business operations. Therefore, the CEA has the social and ethical obligation to require that Investments made on its behalf and held in its accounts be in corporations and entities that meet a high standard of conduct in their operations. Still, the investment of CEA assets should appropriately reflect sound judgment that each Investment will produce an attractive rate of return, within the bounds of all Applicable Laws and Regulations and these Investment Policies.

PRINCIPLES

After the primary goals of safety and preservation of principal and attention to appropriate liquidity requirements are met, rate of return must be considered. Safe and prudent investment management will be the primary and underlying criterion for the selection of Securities and retention and disposition of Investments.

Non-economic factors will supplement profit factors in making investment decisions. Non-economic factors are defined as those considerations not directly related to providing for the safety of principal, maintaining adequate liquidity, and maximizing income, but which seek to ensure that in making or holding its Investments, the CEA does not, either through action or inaction, promote, condone, or facilitate social or environmental injury.

Social or environmental injury may be said to exist when the activities of a corporation serve to undermine basic human rights and dignities, or when the CEA perceives that the practices of a corporation result in undesirable side effects for others and that those side effects are substantial in nature. Side effects that may be deemed undesirable and substantial include, but are not limited to, the following:

A. Subject to current federal, state, and local law, any practice that is known to endanger, directly or indirectly, human health or the environment:

B. Practices that result in the suppression of human rights, including:

1) The sale of weapons and technology to governments known to engage in the systematic suppression of human rights; and
2) The sale of goods to, or the purchase of goods from, countries known to employ forced labor.

C. Practices that endanger human health, including:

1) The sale and distribution of known contaminated products;
2) The sale and distribution of dangerous drugs; and
3) The sale of goods to, or the purchase of goods from, companies known to disregard worker safety.

In addition, it is the CEA's policy not to invest in expatriate companies. Expatriate companies are defined as U.S. corporations that relocate their "principal office," for tax purposes only, to offshore tax havens.

Investments shall not be selected or rejected based solely on non-economic factors. In general, non-economic factors, to the extent known after reasonable investigation, should be considered after all relevant financial criteria and Legal Restrictions have been satisfied.

The CEA Portfolio and each of the Funds within the Portfolio will be managed to ensure the safety of the Portfolio and the Funds by investing in high-quality fixed-income Securities with limited durations. When permitted by these Investment Policies, investments shall be made in different investment types in order to minimize the impact any one industry or investment class can have on a Fund, or portion of a Fund, managed by a CEA Investment Manager. Investments shall also be spread over multiple credits and issuers within an investment class (when these Investment Policies permit multiple credits and issuers within a Fund), thereby minimizing the credit exposure of the CEA Portfolio or any Fund within the Portfolio to any single firm or institution.

Banker's acceptances, certificates of deposit, and bank notes must be purchased directly from the issuer, as long as these Investments meet the investment criteria outlined in the appropriate sections of these Investment Policies and as long as they comply with all Applicable Laws and Regulations.

PRUDENT INVESTOR STANDARD

In addition to complying with these Investment Policies and all Applicable Laws and Regulations, all CEA Investments and evaluation of such Investments shall be made with regard to the "prudent investor" standard of care, that is, with the care, skill, prudence, and diligence under the circumstances then prevailing, that persons of prudence, discretion, and intelligence exercise in the professional management of their business affairs, not for speculation, but for investment, considering the probable safety of their capital, including liquidity of the Investment, as well as the probable income to be derived.

ETHICS, AVOIDANCE OF CONFLICT OF INTERESTS, AND COMPLIANCE WITH INVESTMENT ADVISERS ACT OF 1940

No officer or employee of the CEA, or of any firm contracted with the CEA involved in the investment of CEA funds, shall engage in any personal or business activity that may conflict with proper execution of the CEA's investment program or that may impair his or her ability to make impartial investment decisions for the CEA. Any personal investments in entities that do business with the CEA, either by contract or where the CEA has Investments with that entity, shall be disclosed as required in regulations of the Fair Political Practice Commission (using its Form 700, which shall be filed according to law) and the CEA's Conflict of Interest Code.

The CEA's Financial Advisor and Investment Managers shall ensure that they are registered with, and comply with the rules, advice, rulings, and regulations of, the Securities and Exchange Commission as an investment adviser under the Investment Advisers Act of 1940 that is licensed to choose investments for clients. The CEA's Financial Advisor and Investment Managers shall procure and fully and currently maintain the permits and licenses, if any, necessary to advise the CEA on investments and to make investments on the CEA's behalf.

PERMISSIBLE INVESTMENTS

In accordance with California Insurance Code section 10089.6, subdivision (b), paragraph (1), Investments made by the CEA or on behalf of the CEA shall be made in compliance with California Government Code section 16430, as section 16430 is in effect at the time the Investment is made. California Government Code section 16430 may be amended from time to time, and the CEA's Financial Advisor and Investment Managers shall be responsible for being aware and informed of any amendments to section 16430 and to all Applicable Laws and Regulations.

As of January 1,2017, California Government Code section 16430 provides in its entirety:

> *"Eligible securities for the investment of surplus moneys shall be any of the following:*
>
> *"(a) Bonds or interest-bearing notes or obligations of the United States, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.*
>
> *"(b) Bonds or interest-bearing notes on obligations that are guaranteed as to principal and interest by a federal agency of the United States.*
>
> *"(c) Bonds, notes, and warrants of this state, or those for which the faith and credit of this state are pledged for the payment of principal and interest.*
>
> *"(d) Bonds or warrants, including, but not limited to, revenue warrants, of any county, city, metropolitan water district, California water district, California water storage district, irrigation district in the state, municipal utility district, or school district of this state.*
>
> *"(e) Any of the following:*
>
> *"(1) Bonds, consolidated bonds, collateral trust debentures, consolidated debentures, or other obligations issued by federal land banks or federal*

intermediate credit banks established under the Federal Farm Loan Act, as amended (12 U.S.C. Sec. 2001 et seq.).

"*(2) Debentures and consolidated debentures issued by the Central Bank for Cooperatives and banks for cooperatives established under the Farm Credit Act of 1933, as amended (12 U.S.C. Sec. 2001 et seq.).*

"*(3) Bonds or debentures of the Federal Home Loan Bank Board established under the Federal Home Loan Bank Act (12 U.S.C. Sec. 1421 et seq.).*

"*(4) Stocks, bonds, debentures, and other obligations of the Federal National Mortgage Association established under the National Housing Act, as amended (12 U.S.C. Sec. 1701 et seq.).*

"*(5) Bonds of any federal home loan bank established under that act.*

"*(6) Obligations of the Federal Home Loan Mortgage Corporation.*

"*(7) Bonds, notes, and other obligations issued by the Tennessee Valley Authority under the Tennessee Valley Authority Act, as amended (16 U.S.C. Sec. 831 et seq.).*

"*(8) Other obligations guaranteed by the Commodity Credit Corporation for the export of California agricultural products under the Commodity Credit Corporation Charter Act, as amended (15 U.S.C. Sec. 714 et seq.).*

"*(f)(1) Commercial paper of "prime" quality as defined by a nationally recognized organization that rates these securities, if the commercial paper is issued by a federally or state-chartered bank or a state-licensed branch of a foreign bank, corporation, trust, or limited liability company that is approved by the Pooled Money Investment Board as meeting the conditions specified in either subparagraph (A) or subparagraph (B):*

"*(A) Both of the following conditions:*

"*(i) Organized and operating within the United States.*

"*(ii) Having total assets in excess of five hundred million dollars ($500,000,000).*

"*(B) Both of the following conditions:*

"*(i) Organized within the United States as a federally or state-chartered bank or a state-licensed branch of a foreign bank, special purpose corporation, trust, or limited liability company.*

"*(ii) Having programwide credit enhancements including, but not limited to, overcollateralization, letters of credit, or surety bond.*

"*(2) A purchase of eligible commercial paper may not do any of the following:*

"*(A) Exceed 270 days maturity.*

"*(B) Represent more than 10 percent of the outstanding paper of an issuing federally or state-chartered bank or a state-licensed branch of a foreign bank, corporation, trust, or limited liability company.*

"*(C) Exceed 30 percent of the resources of an investment program.*

"*(3) At the request of the Pooled Money Investment Board, an investment made pursuant to this subdivision shall be secured by the issuer by depositing with the Treasurer securities authorized by Section 53651 of a market value at least 10 percent in excess of the amount of the state's investment.*

"(g) Bills of exchange or time drafts drawn on and accepted by a commercial bank, otherwise known as bankers acceptances, that are eligible for purchase by the Federal Reserve System.

"(h) Negotiable certificates of deposits issued by a federally or state-chartered bank or savings and loan association, a state-licensed branch of a foreign bank, or a federally or state-chartered credit union. For the purposes of this section, negotiable certificates of deposits are not subject to Chapter 4 (commencing with Section 16500) and Chapter 4.5 (commencing with Section 16600).

"(i) The portion of bank loans and obligations guaranteed by the United States Small Business Administration or the United States Farmers Home Administration.

"(j) Bank loans and obligations guaranteed by the Export-Import Bank of the United States.

"(k) Student loan notes insured under the Guaranteed Student Loan Program established pursuant to the Higher Education Act of 1965, as amended (20 U.S.C. Sec. 1001 et seq.) and eligible for resale to the Student Loan Marketing Association established pursuant to Section 133 of the Education Amendments of 1972, as amended (20 U.S.C. Sec. 1087-2).

"(l) Obligations issued, assumed, or guaranteed by the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the International Finance Corporation, or the Government Development Bank of Puerto Rico.

"(m) Bonds, debentures, and notes issued by corporations organized and operating within the United States. Securities eligible for investment under this subdivision shall be within the top three ratings of a nationally recognized rating service.

"(n) Negotiable Order of Withdrawal Accounts (NOW Accounts), invested in accordance with Chapter 4 (commencing with Section 16500)."

COMPLIANCE

These Investment Policies, and all Applicable Laws and Regulations, shall be observed by the CEA's Independent Financial Advisor and acted on by all Investment Managers in the course of their administering CEA Funds. All Investment Policies are subject to continual monitoring and review by the CEA's Chief Financial Officer (the "CFO").

A trade executed for the CEA's Portfolio shall be deemed to be in compliance with these Investment Policies if, as of the trade date, the trade met both (A) the requirements of these Investment Policies and (B) all Applicable Laws and Regulations. Notwithstanding, however, the deemed trade-day compliance of any individual trade, if at the close of any day any Fund concentration limit stated in these Investment Policies is exceeded, the Investment Manager must, within one business day, consult with the CEA CFO (or his or her designee) in order that the CEA, in its sole discretion, may provide a directive to correct the exceedance of the concentration limit; if the CEA CFO provides no such directive, the Investment Manager must bring the exceeded concentration limit back into compliance with the Investment Policies as soon as reasonably possible.

The CEA will perform Daily quality-assurance checks of the Portfolio and of each Fund (or portion of a Fund in the case where an Investment Manager is managing a defined portion of a Fund) to ensure compliance with these Investment Policies and with all Applicable Laws and Regulations. If the CEA becomes aware of any noncompliance with any Investment Policy, the CEA will contact the Investment Manager immediately to discuss the situation so that the CEA may determine the appropriate actions to be taken by the Investment Manager and CEA to bring the Fund into compliance; if an Investment Manager or the Financial Advisor becomes aware of any noncompliance with any Investment Policy, it shall contact the CEA immediately to discuss the situation so that the CEA may determine the appropriate actions to be taken by the Investment Manager and CEA to bring the Fund into compliance.

The performance by CEA of a Daily quality-assurance check does not relieve any CEA Investment Manager of its respective independent duties to ensure that all Investments made and held for the CEA comply with these Investment Policies and all Applicable Laws and Regulations. CEA's failure to discover, or failure to report the discovery to the CEA's Financial Advisor or Investment Managers (or any of them), any noncompliance, does not constitute (A) CEA's acceptance or ratification of that noncompliance or (B) any waiver by CEA of its right to require compliance by Investment Managers with these Investment Policies and all Applicable Laws and Regulations.

THE CEA PORTFOLIO

For the purposes of these Investment Policies, the "CEA Portfolio" consists of the following Funds:

- Liquidity Fund
  - This fund consists of one custody account, which provides funds used for CEA's operational cash-flow.
- Primary Fund
  - This fund consists of a number of custody accounts, which primarily provide funds for paying CEA claims and claim expenses.
- Claim-Paying Fund
  - This fund consists of a number of custody accounts, which receive the proceeds of CEA's debt issuances.
- Reinsurance Fund
  - This fund consists of one custody account, which receives reinsurance recoverables collected after earthquake events.
- Mitigation Fund
  - This fund consists of a number of custody accounts, which fund mitigation-related activities.

MINIMUM RATING REQUIREMENTS

Short-term debt is defined as any debt coming due within one year or less when acquired by the CEA. The rating of short-term debt is acceptable under these Policies if, when issued and at date of CEA acquisition, it has a long-term debt rating of at least "A" by Standard & Poor's Corporations, "A2" by Moody's Investors Service, Inc. or "A" by Fitch, or a short-term rating of A-1 by Standard & Poor's Corporations, P-1 by Moody's Investors Service, Inc., or F-1+ by Fitch Ratings

Long-term debt is defined as any debt coming due in more than one year as of the date acquired by the CEA. The rating of long-term debt is acceptable under these Policies if, when issued and at the date of CEA acquisition, it bears a long-term debt rating of at least "A" by Standard & Poor's Corporations, "A2" by Moody's Investors Service, Inc., or "A" by Fitch Ratings.

The minimum rating requirement for each Security is further defined within the **Permissible Investments** section, above, and in the **Fund Permitted Investments** section, below.

If any Investment held in any CEA Fund is downgraded below the credit quality required by the Applicable Laws and Regulations, or below the credit quality required by these Investment Policies, the CEA, in consultation with its Financial Advisor, will determine whether to retain the Investment or to divest CEA of the Investment. Evaluation of divestiture of Investments will be made on a case-by-case basis.

MATURITY & DURATION

The Investments made in the CEA Portfolio, consisting of all CEA Funds, shall have a combined maximum Modified Duration of no greater than 3.0 years. To minimize the risk of portfolio market value decline due to a change in market conditions, each Investment Manager managing Investments with maturity dates greater than 365 days shall spread the maturities of those Investments to avoid having 10% or more of the market value of the Investment Manager's Fund of Investments maturing on a single date.

The "maximum maturity" requirement listed in the charts in the **Fund Permitted Investments** section below is defined as the number of days from trade date to maturity date, including the trade date but excluding the maturity date. An Investment with a maximum maturity of 181 days means the Investment must mature in 180 days or less.

DIVERSIFICATION

Diversification is one of the fundamental principles of investing. Properly exercised, it allows for risks to be minimized and returns maximized within a given investment framework. The CEA and its Financial Advisor and Investment Managers shall seek prudent amounts of diversification at all levels of its investment-management process. This includes diversification both among and within allowable asset classes, as well as diversification of Investment Managers. The Investment Policies provide guidance on diversification, including allowable limits for various asset classes, industry sectors, issuers, and investment types. Consistent with the Investment

Policies, the CEA and its Financial Advisor and Investment Managers shall adhere to prudent practices of diversification to safeguard the assets under their management.

CUSTODY

All CEA Investments shall be secured or held by a custody bank. CEA will obtain a custody bank through a competitive procurement process.

UNINVESTED CASH

Each Investment Manager shall seek to minimize the amount of cash remaining at the end of a Business Day that is not invested in a manner consistent with these Investment Policies.

INVESTMENT GOALS

Consistent with the CEA's published Investment Philosophy, and in order of priority, the CEA's investment goals are:

1) Portfolio Safety/Diversification
   Where allowed by the Investment Policies, the Portfolio shall contain a sufficient number and diversity of marketable Investments so that a reasonable portion of the Portfolio can be readily converted to cash at a price closely approximating amortized cost.

2) Liquidity
   The Portfolio shall be managed to ensure that the CEA's usual cash needs can be met; if unforeseen cash needs arise, CEA will work with individual Managers to plan to meet liquidity requirements.

3) Rate of Return
   Investments shall be made in such a way as to realize the maximum return consistent with the principles of prudence expressed in CEA's Investment Philosophy and these Guidelines.

Investments in the Portfolio may be sold to:

- Provide liquidity,
- Address deterioration in the credit quality of an issuer, or
- Purchase an Investment that better meets the current needs of the Portfolio, after notification to and consultation with the CEA.

REPORTING

Each Investment Manager shall report to the CEA, via email to investreports@calquake.com, by 9:00 a.m. Pacific Time each Business Day, the previous day's holdings in each Fund, or portion of a Fund, under its management.

For each Investment it makes, the Investment Manager shall transmit to the CEA, via email to investreports@calquake.com sent by 9:00 a.m. Pacific Time on the trade date, a copy of the trade ticket generated for that Investment transaction. CEA will use this trade ticket in the Daily quality assurance process and to update CEA's investment accounting system and other trade-related information as requested by the CEA, its Chief Financial Officer, or another individual designated by the CEA.

Each Investment Manager shall compile a monthly report of each Fund, or portion of Fund, managed by the Investment Manager and deliver the report electronically to the CEA on or by the fifth Business Day of the following month. The report shall contain information as requested by the CEA, its Chief Financial Officer, or another individual designated by the CEA.

FUND PERMITTED INVESTMENTS

The following tables list permissible Investment types for each Fund in the CEA Portfolio that comply with both Applicable Laws and Regulations and the CEA's Investment Policies. [Note that in some instances, Investments permitted by the CEA may be more restrictive than Investments otherwise permitted under Applicable Laws and Regulations.] For example, the maturity requirements below act to limit commercial paper in the Liquidity Fund to a maximum maturity of 180 days, while the Applicable Laws and Regulations would limit commercial paper to a maximum maturity of 270 days (see Cal. Gov. Code, § 16430, subd. (f)(2)(A)); such variances are intentional, and Investment Managers are to follow the requirements below. In the event, however, that any requirement below may appear to be inconsistent with any of the Applicable Laws and Regulations, the Applicable Laws and Regulations shall be followed, and the Investment Manager shall immediately notify the CEA of any such inconsistency. If there is any question regarding any table or any permissible Investment described in the table, the Investment Manager shall contact the CEA for clarification.

CEA staff may issue interpretive memorandum for the intended purpose to further enhance understanding of the Investment Policy or provide guidance for matters not covered by the Investment Policy.

Liquidity Fund

Investment	U.S. Treasury	Federal Agency	Banker's Acceptance (BA)	Certificate of Deposit (CDs)	Commercial Paper (CP)	Corporate Bond / Note
Maximum Maturity	181 days	181 days	181 days	181 days	180 days	181 days
Maximum Par Value, Total	None	50%	25%	25%	25%	25%
Maximum Par Value Per Name	None	25%	5%	5%	5%	5%
Maximum Par Value Per Maturity	None	None	None	None	None	None
Credit	Full faith and credit of the Federal Government	Implied government guarantee - credit analysis of certain issuing agencies	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch
Other Requirements	Exclude: • Treasury Inflation Protect Security (TIPS) • Separate Trading of Registered Interest and Principal of Securities (STRIPS)	Exclude: • Federal Home Loan Bank note	• Must be purchased directly from the issuer and are eligible for purchase by the Federal Reserve System	• Must be purchased directly from the issuer	• Organized in U.S. • Total assets must be >$500M • On Pooled Money Investment Board's approved list of active issuers • <10% of the outstanding paper of the issuer • If over 15% of the fund is invested in CP, the dollar-weighted average maturity of the entire fund amount cannot exceed 31 days	• Organized in U.S.

Primary Fund

Investment	U.S. Treasury	Federal Agency	Banker's Acceptance (BA)	Certificate of Deposit (CDs)	Commercial Paper (CP)	Corporate Bond / Note
Maximum Maturity	5 years	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Maximum Par Value, total Portfolio	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Maximum Par Value Per Name	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Maximum Par Value Per Maturity	None	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Credit	Full faith and credit of the Federal Government	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Other Requirements	Exclude: • Treasury Inflation Protect Security (TIPS) • Separate Trading of Registered Interest and Principal of Securities (STRIPS)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Claim-Paying Fund

Investment	U.S. Treasury	Federal Agency	Banker's Acceptance (BA)	Certificate of Deposit (CDs)	Commercial paper (CP)	Corporate Bond / Note
Maximum Maturity	5 years	181 days	181 days	181 days	180 days	180 days
Maximum Par Value, Total	None	50%	25%	25%	25%	25%
Maximum Par Value Per Name	None	25%	5%	5%	5%	5%
Maximum Par Value Per Maturity	None	None	None	None	None	None
Credit	Full faith and credit of the Federal Government	Implied government guarantee - credit analysis of certain issuing agencies	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch
Other Requirements	Exclude: • Treasury Inflation Protect Security (TIPS) • Separate Trading of Registered Interest and Principal of Securities (STRIPS)	Exclude: • Federal Home Loan Bank note	• Must be purchased directly from the issuer and are eligible for purchase by the Federal Reserve System	• Must be purchased directly from the issuer	• Organized in U.S. • Total assets must be >$500M • On Pooled Money Investment Board's approved list of active issuers • <10% of the outstanding paper of the issuer • If over 15% of the fund is invested in CP, the dollar-weighted average maturity of the entire fund amount cannot exceed 31 days	• Organized in U.S.

Reinsurance Fund

Investment	U.S. Treasury	Federal Agency	Banker's Acceptance (BA)	Certificate of Deposit (CDs)	Commercial paper (CP)	Corporate Bond / Note
Maximum Maturity	181 days	181 days	181 days	181 days	180 days	180 days
Maximum Par Value, Total	None	50%	25%	25%	25%	25%
Maximum Par Value Per Name	None	25%	5%	5%	5%	5%
Maximum Par Value Per Maturity	None	None	None	None	None	None
Credit	Full faith and credit of the Federal Government	Implied government guarantee - credit analysis of certain issuing agencies	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch
Other Requirements	Exclude: • Treasury Inflation Protect Security (TIPS) • Separate Trading of Registered Interest and Principal of Securities (STRIPS)	Exclude: • Federal Home Loan Bank note	• Must be purchased directly from the issuer and are eligible for purchase by the Federal Reserve System	• Must be purchased directly from the issuer	• Organized in U.S. • Total assets must be >$500M • On Pooled Money Investment Board's approved list of active issuers • <10% of the outstanding paper of the issuer • If over 15% of the fund is invested in CP, the dollar-weighted average maturity of the entire fund amount cannot exceed 31 days	• Organized in U.S.

Mitigation Fund

Investment	U.S. Treasury	Federal Agency	Banker's Acceptance (BA)	Certificate of Deposit (CDs)	Commercial paper (CP)	Corporate Bond / Note
Maximum Maturity	91 days	91 days	91 days	91 days	91 days	91 days
Maximum Par Value, Total	None	50%	25%	25%	25%	25%
Maximum Par Value Per Name	None	25%	5%	5%	5%	5%
Maximum Par Value Per Maturity	None	None	None	None	None	None
Credit	Full faith and credit of the Federal Government	Implied government guarantee - credit analysis of certain issuing agencies	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch	Long-term debt ratings of at least "A" by Standard & Poor's or "A2" by Moody's or "A" by Fitch OR short-term debt ratings of "A-1" by Standard & Poor's or "P-1" by Moody's or "F-1+" by Fitch
Other Requirements	Exclude: • Treasury Inflation Protect Security (TIPS) • Separate Trading of Registered Interest and Principal of Securities (STRIPS)	Exclude: • Federal Home Loan Bank note	• Must be purchased directly from the issuer and are eligible for purchase by the Federal Reserve System	• Must be purchased directly from the issuer	• Organized in U.S. • Total assets must be >$500M • On Pooled Money Investment Board's approved list of active issuers • <10% of the outstanding paper of the issuer • If over 15% of the fund is invested in CP, the dollar-weighted average maturity of the entire fund amount cannot exceed 31 days	• Organized in U.S.

In addition to the requirements in the charts above, the following are further requirements that the CEA's Investment Managers must follow:

Commercial Paper

Consistent with California Insurance Code section 10089.6, subdivision (b), and California Government Code section 16430, subdivision (f), eligible commercial paper for the CEA's Liquidity, Claim-Paying, Claims-Paying, and Mitigation Funds is limited to commercial paper of issuers expressly approved by the State of California's Pooled Money Investment Board ("PMIB") and designated by PMIB an "Active Issuer." The CEA will use reasonable efforts to continue to provide updated PMIB-approval lists, as updates are made available by the PMIB and the California State Treasurer's Office ("STO") on its website, currently at http://www.treasurer.ca.gov/pmia-laif/investments/cp.pdf, to all CEA Investment Managers responsible for managing commercial-paper assets in any CEA Fund. The CEA's Investment Managers, however, have separate, independent responsibility for ensuring that, in any Fund or Funds they manage or oversee, any Investments purchased on the CEA's behalf comply with this requirement, with all other requirements of any of the Applicable Laws and Regulations, and with these Investment Policies.

Negative Yields

The Investment Managers are encouraged to hold cash until an allowable Security with a positive yield becomes available. The Investment Managers must notify CEA when yields are negative.

Minimum Trade Return

Subject to guidance from the CEA, Investment Managers should not execute a trade if the expected return is less than the cost of executing the trade. If any Investment Manager believes that circumstances warrant making such a trade, it must contact the office of the CEA's Chief Financial Officer to discuss.

Governing Board Memorandum

September 12, 2018

Agenda Item 9: CEA Enterprise Risk Management Program update

Recommended Action: No action required—information only

The CEA Enterprise Risk Management (ERM) Program is focused on monitoring and managing 13 priority risks:

Financial Risks	Insurance Risks	Operational Risks	Strategic Risks
• Risk Transfer • Financial Management – Investments and Accounting	• Policy Contracting and Servicing • Claim Handling • Earthquake Science and Modeling • CEA Mitigation programs	• Business Continuity • Cyber/Data Breach • Legal – Compliance and Litigation • Workforce • Information Systems	• Legislative/Regulatory • Reputation

For each priority risk, a number of risk drivers have been identified along with a corresponding series of risk checkpoints and limits that are regularly monitored by designated priority-risk owners, the CEA Enterprise and Strategic Risk Advisor, and the CEA ERM Committee. Also, since a major, damaging earthquake occurring in California would constitute an overarching risk consideration, each priority risk is assessed from a "steady-state" perspective and a post-earthquake perspective.

The following scorecard represents CEA ERM risk-reporting for 3rd quarter 2018 and includes all activity since the immediately past CEA Governing Board meeting. The column named "Q3 2018" indicates risk status and whether a risk escalation occurred during the preceding two months. The column named Outlook indicates the potential future direction of the risk status—as either positive, negative, or stable—until the CEA Board next meets. The final column is a brief summary of actions taken and risk-escalation status.

No new risk checkpoints or limits have been approached or reached during Q3 2018, but there is one continuing issue from the Q2 2018 report: In the July 2018 Governing Board memo, it was reported that three risk checkpoints for the priority risks of Financial Management, Legislative/Regulatory, and Residential Mitigation Programs had been reached in Q2 2018. All three had a positive outlook for Q3 2018 and have returned to "green" status and a stable outlook for Q4 2018.

In the July 2018 Governing Board memo, it was reported that two risk limits for the priority risks of Cyber/Data Breach and Workforce had been reached in Q2 2018. Both had a positive outlook for Q3 2018, and the Workforce risk has returned to "green" status and a stable outlook for Q4 2018. The Cyber/Data Breach risk remains at "red" status while the CEA continues to work to complete a related contracting matter for cyber/data breach risk management. The risk has a positive outlook for Q4 2018.

ERM Quarterly Report	Status		30-Aug-18
Priority Risk	**Q3 2018**	**Outlook**	**Activity Last Quarter/ Comments**
Risk Transfer	●	Stable	
Financial Mgmt (Investments, Accounting)	●	Stable	
Policy Sales and Servicing	●	Stable	
Business Continuity	●	Stable	
Cyber / Data Breach	◆	Positive	A required contracting matter is in progress, but it was not completed within the intended time frame.
Legislative/Regulatory	●	Stable	
Claim Handling	●	Stable	
Legal - Compliance and Litigation	●	Stable	
Reputation	●	Stable	
Earthquake Science and Modeling	●	Stable	
Workforce	●	Stable	
IT Systems	●	Stable	
Residential Mitigation Programs	●	Stable	

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

The Enterprise & Strategic Risk Advisor and support staff are continuing their work with the ERM Committee to place all developed data, policies, and protocols into 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.

The ERM Committee expects to complete its work on the ERM program plan this year. As the CEA's ERM Framework is built out, additions will include creating dashboard analytics, initiating risk-capital and solvency assessments, and addressing post-earthquake response-planning priorities revealed through the ERM efforts.

<u>Recommendations</u>: None—information only.

Governing Board Memorandum

September 12, 2018

Agenda Item 10:	Mitigation-program projects, including: • California Residential Mitigation Program incentive program (CRMP Earthquake Brace + Bolt) • CEA foundation update • Ongoing mitigation-related research projects
Recommended Actions:	No action required—information only

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1. **CRMP Earthquake Brace + Bolt Programs:**

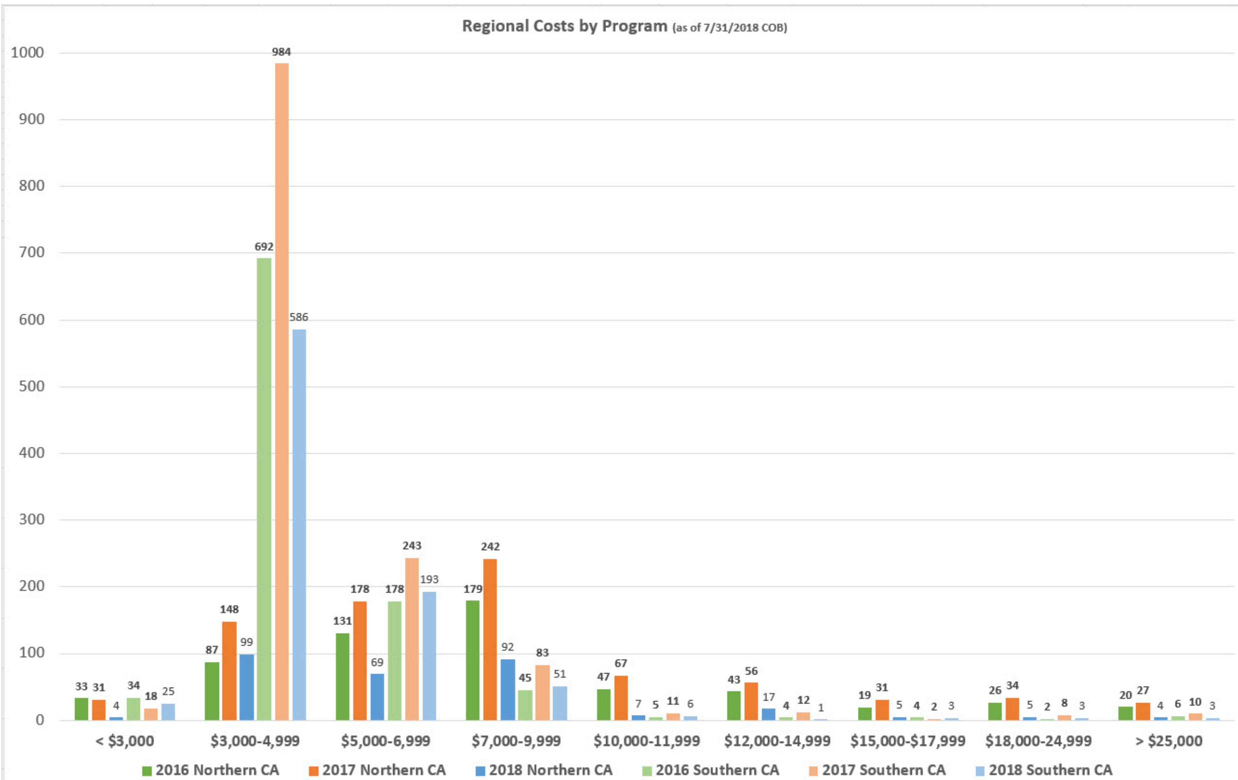
Background:
Homeowners in *Earthquake Brace + Bolt* (EBB) program ZIP Codes are eligible for an incentive payment of up to $3,000 to help pay costs associated with seismically retrofitting their houses. EBB is operated by the California Residential Mitigation Program, a joint powers authority whose members are the CEA and California Governor's Office of Emergency Services (Cal OES).

CRMP's pace continues at a record rate, with over 1,390 retrofits completed for the 2018 program and almost 5,847 for all programs, with more than 800 retrofits completed since reaching the 5,000 retrofit milestone in early June 2018.

Earthquake Brace + Bolt Programs (as of 8/20/18): CRMP and CEA			
Program	**Completed**	**In Progress**	**Status**
2013-14 EBB Pilot	9	N/A	Closed
2015 EBB	528	N/A	Closed
2016 EBB	1,555	N/A	Closed
2017 EBB	2,185	0	Closed
2018 EBB	1,394	1,016	7,546 registered 2,390 accepted 12 extensions
Napa EBB	84	0	Closed
CEA BB	92	10	Open 16 extensions
Total	5,847	1,026	n/a

EBB Northern and Southern Regional Differences

Analyses of 2016, 2017, and 2018 completed retrofits continue to highlight regional differences and other interesting matters. While the average and median cost remained relatively stable across program years, some costs went down slightly in 2017 and 2018. Retrofits in Northern California continue to be more expensive than in Southern California, with median and average costs almost double, mainly because of the type of retrofit completed and labor costs. In Southern California, there are more bolt-only retrofits completed, while Northern California has more engineered retrofits and brace-and-bolt retrofits. To date, the average cost for a retrofit has decreased in both Northern and Southern California—the average cost in Northern California decreased by almost 18% from 2017 to 2018. The minimum cost for a retrofit in Northern California in 2018 has increased, primarily because fewer homeowners complete the retrofit themselves. As the 2018 EBB program continues, these statistics may normalize.



Northern CA Retrofits (as of 7/31/2018 COB)			
Program Year:	2016	2017	2018
Total # of Retrofits:	669	814	302
Average Cost:	$ 8,699.40	$ 8,916.60	$ 7,346.66
Median Cost:	$ 7,138.58	$ 7,360.95	$ 6,168.13
Min Cost:	$ 928.27	$ 1,142.99	$ 2,123.95
Max Cost:	$75,464.63	$54,362.00	$60,844.00

Southern CA Retrofits (as of 7/31/2018 COB)			
Program Year:	2016	2017	2018
Total # of Retrofits:	970	1366	871
Average Cost:	$ 4,596.95	$ 4,759.19	$ 4,661.95
Median Cost:	$ 3,950.00	$ 3,960.00	$ 4,000.00
Min Cost:	$ 562.01	$ 1,196.68	$ 1,391.43
Max Cost:	$46,663.94	$45,390.30	$ 44,819.16

2016 Napa Earthquake Brace + Bolt (CRMP):

The Napa Earthquake Brace + Bolt program (Napa EBB) was launched in February 2017 and was funded by funds sub-granted to CEA from FEMA's Hazard Mitigation Grant Program (HMGP) and by a partial EBB-funding match provided with CEA funding support. The Program closed on May 31, 2018, with 84 retrofits completed and closeout documentation was submitted to Cal OES in July.

2017 CRMP EBB program:

For the 2017 CRMP EBB program, funding came from: CEA's Loss Mitigation Fund, FEMA, and a state-budget appropriation to the California Department of Insurance, with legislative direction to the Department to grant the appropriated funds to CEA for contribution to CRMP EBB.

The 2017 CRMP EBB program closed in early August, with 2,185 retrofits completed, exceeding its goal by more than 9%.

2018 CRMP EBB program:

The 2018 EBB program continues its speedy pace, with homeowners completing retrofits at a more rapid rate than in previous years. In 2016 and 2017, 1,000 retrofits were completed by November 3rd and September 19th, respectively, and for the 2018 program CRMP EBB completed almost 1,400 retrofits by mid-August.

During the July board meeting, the CRMP board approved receipt of additional CEA-supplied retrofit-grant funding to allow the wait-listed applicants to participate in the EBB program. The wait-listed applicants were accepted on August 1, 2018.

Future Funding Opportunities:

More than 1.2 million houses in California's high-seismic-hazard areas would qualify for an EBB retrofit, so the need far exceeds present funding. But because more funding means more incentive payments for more homeowners, CRMP continues to look beyond present funding sources—the primary source has been the CEA Earthquake Loss Mitigation Fund—to find additional EBB funding, including available FEMA HMGP grants.

CEA has submitted 13 applications to Cal OES for FEMA-funding consideration.

CEA has received a $3 million grant, which will be used to fund partially the 2019 EBB program. The program will open for registration on October 9, 2018, for one month. Homeowners will be randomly selected, and a list will be provided to Cal OES for FEMA's approval. After approval is received, expected in early 2019, the homeowners will be accepted into the program and the retrofits may begin.

2. CEA Brace + Bolt Program:

Background:

CEA's pilot program, CEA Brace + Bolt ("CEA BB"), grants each selected CEA policyholder up to $3,000 toward a retrofit, to encourage them to strengthen their CEA-insured older houses in CEA-identified high-seismic-activity areas.

The program has been offered in 10 ZIP Codes. As of August 20, 2018, in progress or completed were:

- Retrofits completed 92
- Permits received 9
- Extensions granted 16

Additional information and analysis:

To increase the number of retrofits completed, staff received Board approval in July to closeout the current program and open a new program:

- The new program will change encourage retrofit-program participation by the more than 10,000 CEA policyholders who may experience upward premium impacts of 15 percent or more on account of the CEA's recent rate and form filing (RFF), now pending with the Department of Insurance.

  Basic program eligibility criteria will continue, and the program will be available to CEA policyholders who (1) have insured their house with CEA for at least three years, (2) own a pre-1940 house, (3) live in selected ZIP Codes where there will be an RFF-caused rate increase of 15 percent or greater, and (4) whose houses are within established criteria for a code-compliant EBB retrofit.

  Staff expects the new program to include a phased-rollout sometime in late October or early November 2018.

3. CEA Foundation Update:

At its September 2017 meeting, the CEA Governing Board approved the establishment by CEA of a nonprofit charitable foundation, which would operate as a public-benefit corporation organized and regulated under California law.

Concrete steps consistent with the Board's September 2017 discussion and authorizations have been accomplished:

- Certain necessary intellectual property, considered key to successful foundation operations and promotion, have been secured by the CEA at a reasonable cost: the Internet domain name (i.e., the Web address), as well as the Twitter handle for the preferred organizational name.

- Articles of incorporation have been formally filed with the California Secretary of State—that filing establishes the foundation's legal existence (but not the foundation's operating or business rules, which remain under development).
- A Statement of Information has been formally filed with the California Secretary of State—that filing identifies the CEO, Secretary, and CFO.

CEA is now considering next steps, including:

- Obtaining a tax identification number.
- Development of trustee-selection criteria based on an individual or organization's commitment to building more resilient communities.
- Formulation of draft by-laws.

4. **Guidelines Development:**

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

   - Volume 1, Prestandard publication (available online (estimated) September 2018 and softcover (estimated) December 2018)
   - Volume 2, FEMA plan set
   - Volume 3, background documents

   ATC managed the project budget so as to permit a contract extension for 12 months at no additional cost. The additional work and remaining funds will be used to develop training materials for the guidelines and to archive the data used in developing the guidelines.

   With FEMA P-1100, CEA can work with FEMA and the International Code Council (ICC) to adopt the guidelines as industry standards, which paves the way for adoption into California's building code. Additionally, by creating a uniform seismic-retrofit-design method for homeowners, contractors, and engineers, the new guidelines will help the CEA and others (1) establish and expand incentive programs to encourage seismic retrofits, such as that of the California Residential Mitigation Program, and (2) enhance the CEA's ability to develop and provide suitable mitigation discounts for CEA-insured homeowners.

   CEA provided the funding for this project, and CEA's CMO Janiele Maffei and FEMA's Mike Mahoney jointly manage the project.

5. **FEMA P-50/P-50-1 Training, Simplified Seismic Assessment Certification, and QuakeGrade™:**

   CEA contributed funds to develop FEMA P-50 and FEMA P-50-1 tools. While the tools have been available for use by home inspectors, they were not widely distributed or used.

CEA took the initiative and brought the FEMA P-50 evaluation tool—and related training— to California home inspectors in 2015:

- To help homeowners interested in retrofits learn associated risks and vulnerabilities.
- To provide home buyers information at time of sale regarding potential seismic risks, in light of structure vulnerabilities.
- To provide additional inspection resources in support of CEA's Hazard Reduction Discount program.

In the past three years, CEA has collaborated with the California Real Estate Inspection Association (CREIA) and the American Society of Home Inspectors (ASHI) to bring the training to home inspectors. CEA's goal was to train the intended audience but also to encourage those trade organizations to work with ATC, the designated provider for FEMA P-50 training.

The baton was passed in late spring 2018, and CREIA and ASHI are now working with ATC to continue to bring the training to their members.

Simplified Seismic Assessment Certification:
With CEA's assistance, CREIA worked with ATC to develop a training curriculum to support CREIA's implementation of a Simplified Seismic Assessor (SSA) certification. The training program was launched at CREIA's annual conference in April 2018.

CREIA is promoting the SSA and the related training and will be the lead in coordinating the training.

Mobile Application – QuakeGrade™:
In 2017, CEA launched a Web-based application based on FEMA P50 for use by home inspectors: QuakeGrade™ may be used on Macs or PCs running Safari, Chrome, or Internet Explorer browsers, as well as on mobile devices running iOS or Android operating systems.

QuakeGrade™ uses data the inspector inputs as they note certain structural and geological conditions of the house. From these data points, the application calculates a seismic-vulnerability score, which supports a report that describes the inspected house's seismic vulnerabilities and identifies potential retrofit options—implementing the retrofit options can mitigate the vulnerabilities and improve the vulnerability score.

Earlier this year CEA was told that one data source used in calculating hazard would no longer be accessible (as programmed) because of budget cuts at USGS. But the data remain available, and CEA was able to work with USGS to identify an alternative method to access the data.

But QuakeGrade™ is on hiatus while this and other upgrades are developed—the estimated date for full operational status is pending.

Governing Board Memorandum

September 12, 2018

Agenda Item 11: CEA Research Program: Projects

Recommended Actions: No action required—information only

Background:

With Governing Board support and approval, CEA launched a new Research Program in 2017. The program provides for three tiers of 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. As well, 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 will not launch until late 2018 or early 2019.

2. Research Projects

Cripple-Wall-Performance Effects

The 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. ***In Progress***
4. Experimental Program. ***In Progress***
5. Analytical modeling. ***In Progress***
6. Loss Model Calibration Framework. ***In Progress****
7. Reporting, including regular progress reports: three reports have been received, and the project is on track.

* Task 6 has presented an opportunity for CEA and PEER to collaborate with catastrophe-loss modelers to develop fragility-function-modification factors, used by loss modelers to evaluate raised-foundation houses that have a cripple-wall and sill-anchorage retrofit—this is the type of house and retrofit method studied in the PEER project. CEA is contracting with CEA loss-modeler RMS in connection with PEER efforts, which will inform CEA's sophisticated operational and financial needs.

With this project, CEA will have refined scientific data to inform CEA rate levels and premium discounts.

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 the 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 (renaming them to the "CEA Damage Assessment Guidelines") and to develop companion engineering guidelines.

The project kicked off on June 18, 2018, and is expected to be completed in 18 months. The team is currently reviewing the existing CUREE document and developing a project plan.

UCERF 3 Analysis

The UCERF3 model represents a substantial advancement in science. It is also complex, yielding more than 250,000 fault-based ruptures—25 times more than the UCERF2 model.

To deal with the complexity, work is required to identify which of the UCERF3 model's "branches" most influence modeled results.

Although CEA is not legally obligated to advance the scientific understanding of seismic risk in California, staff continues to believe that it is in the CEA's best interests to do so, on a voluntary basis. Seismic research underpins many of the 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 the CEA contract with the Southern California Earthquake Center (SCEC) to manage and carry out with 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 staff is currently working with SCEC to finalize the contract, and the project is slated to begin in September 2018.

Recommendation:

No action required—information only.

Governing Board Memorandum

September 12, 2018

Agenda Item 12: CEA Insurance & Technology Update

Recommended Action: No action required – information only

CEA Chief Insurance & Technology Officer, Todd Coombes, will provide the Governing Board with an update from Insurance Education and Sales Support, Insurance Operations, and Information Technology.

Governing Board Memorandum

September 12, 2018

Agenda Item 13:	Quantitative business metrics report update
Recommended Action:	No action required—information only

Chief Operations Officer Kellie Schneider will present to the Board the periodic CEA-operations business metrics report.

California Earthquake Authority

Losses & Loss Adjustment Expenses (LAE) Paid - Cumulative to June 30, 2018

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 June 30, 2018 (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	3,448,238.83	310,341.50	$3,758,580.33
	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
				Total	**479**	**$8,129,061.42**	**$710,455.30**	**$8,839,516.72**

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.

California Earthquake Authority

Insurance Operations - Governing Board Report

All Companies - As Of 8/23/2018 - Policies in Force on: 07/31/2018

TOTALS	Policies In Force	%Total	Exposure	%Total	Written Premium	% Total	Avg Written Premium
Homeowners	718,056	68.6 %	377,972,432,815	82.1 %	559,415,295	76.2 %	779
Homeowners Choice	102,509	9.8 %	61,267,313,995	13.3 %	103,448,684	14.1 %	1,009
All Homeowners Total	820,565	78.4 %	439,239,746,810	95.4 %	662,863,979	90.3 %	808
Manufactured Homes (Mobilehomes) - Homeowners	27,788	2.7 %	3,739,082,950	0.8 %	3,838,603	0.5 %	138
Manufactured Homes (Mobilehomes) - Homeowners Choice	2,867	0.3 %	536,559,565	0.1 %	664,076	0.1 %	232
All Manufactured Homes (Mobilehomes) - Homeowners Total	30,655	2.9 %	4,275,642,515	0.9 %	4,502,678	0.6 %	147
Condo	115,686	11.0 %	13,701,922,000	3.0 %	58,219,504	7.9 %	503
Renters	80,123	7.7 %	3,122,554,000	0.7 %	8,835,348	1.2 %	110
Grand Total	1,047,029	100.0 %	460,339,865,325	100.0 %	734,421,510	100.0 %	701

California Earthquake Authority

Insurance Operations - Governing Board Report

All Companies - As Of 8/23/2018 - Policies in Force on: 07/31/2018

TOTALS	Policies In Force	% Total	Exposure	% Total	Written Premium	% Total	Avg Written Premium
Homeowners - by Cov A Ded							
25% Total	5,955	0.6 %	3,478,988,047	0.8 %	4,494,671	0.6 %	755
20% Total	5,490	0.5 %	3,272,354,880	0.7 %	5,155,700	0.7 %	939
15% Total	558,529	53.3 %	290,353,651,727	63.1 %	432,927,903	58.9 %	775
10% Total	102,640	9.8 %	56,289,548,359	12.2 %	82,438,146	11.2 %	803
5% Total	45,442	4.3 %	24,577,889,802	5.3 %	34,398,875	4.7 %	757
Homeowners Total	718,056	68.6 %	377,972,432,815	82.1 %	559,415,295	76.2 %	779
Homeowners Choice - by Cov A Ded							
25% Total	3,970	0.4 %	2,498,304,094	0.5 %	3,450,832	0.5 %	869
20% Total	2,889	0.3 %	1,903,609,213	0.4 %	3,278,847	0.4 %	1,135
15% Total	44,372	4.2 %	27,858,007,805	6.1 %	47,547,993	6.5 %	1,072
10% Total	28,652	2.7 %	16,967,506,605	3.7 %	28,710,978	3.9 %	1,002
5% Total	22,626	2.2 %	12,039,886,278	2.6 %	20,460,034	2.8 %	904
Homeowners Choice Total	102,509	9.8 %	61,267,313,995	13.3 %	103,448,684	14.1 %	1,009
All Homeowners Total	820,565	78.4 %	439,239,746,810	95.4 %	662,863,979	90.3 %	808

California Earthquake Authority

Insurance Operations - Governing Board Report

All Companies - As Of 8/23/2018 - Policies in Force on: 07/31/2018

TOTALS	Policies In Force	% Total	Exposure	% Total	Written Premium	% Total	Avg Written Premium
Manufactured Homes (Mobilehomes) - Homeowners - by Cov A Ded							
25% Total	17	0.0 %	2,491,371	0.0 %	2,564	0.0 %	151
20% Total	25	0.0 %	3,997,493	0.0 %	4,110	0.0 %	164
15% Total	21,359	2.0 %	2,631,483,416	0.6 %	2,651,776	0.4 %	124
10% Total	4,439	0.4 %	758,844,746	0.2 %	771,989	0.1 %	174
5% Total	1,948	0.2 %	342,265,924	0.1 %	408,164	0.1 %	210
Manufactured Homes (Mobilehomes) - Homeowners Total	27,788	2.7 %	3,739,082,950	0.8 %	3,838,603	0.5 %	138
Manufactured Homes (Mobilehomes) - Homeowners Choice - by Cov A Ded							
25% Total	22	0.0 %	3,784,417	0.0 %	4,223	0.0 %	192
20% Total	9	0.0 %	1,305,607	0.0 %	1,522	0.0 %	169
15% Total	976	0.1 %	170,171,541	0.0 %	211,201	0.0 %	216
10% Total	894	0.1 %	173,796,917	0.0 %	222,272	0.0 %	249
5% Total	966	0.1 %	187,501,083	0.0 %	224,858	0.0 %	233
Manufactured Homes (Mobilehomes) - Homeowners Choice Total	2,867	0.3 %	536,559,565	0.1 %	664,076	0.1 %	232
All Manufactured Homes (Mobilehomes) - Homeowners Total	30,655	2.9 %	4,275,642,515	0.9 %	4,502,678	0.6 %	147

California Earthquake Authority

Insurance Operations - Governing Board Report

All Companies - As Of 8/23/2018 - Policies in Force on: 07/31/2018

TOTALS	Policies In Force	% Total	Exposure	% Total	Written Premium	% Total	Avg Written Premium
Condo - by Cov A Ded							
25% Total	1,378	0.1 %	210,841,000	0.0 %	779,294	0.1 %	566
20% Total	976	0.1 %	149,870,500	0.0 %	608,477	0.1 %	623
15% Total	71,746	6.9 %	8,863,496,000	1.9 %	37,827,067	5.2 %	527
10% Total	7,655	0.7 %	1,300,800,500	0.3 %	4,902,485	0.7 %	640
5% Total	12,578	1.2 %	2,056,563,500	0.4 %	6,952,189	0.9 %	553
No Cov A	21,353	2.0 %	1,120,350,500	0.2 %	7,149,992	1.0 %	335
Condo Total	115,686	11.0 %	13,701,922,000	3.0 %	58,219,504	7.9 %	503

California Earthquake Authority

Insurance Operations - Governing Board Report

All Companies - As Of 8/23/2018 - Policies in Force on: 07/31/2018

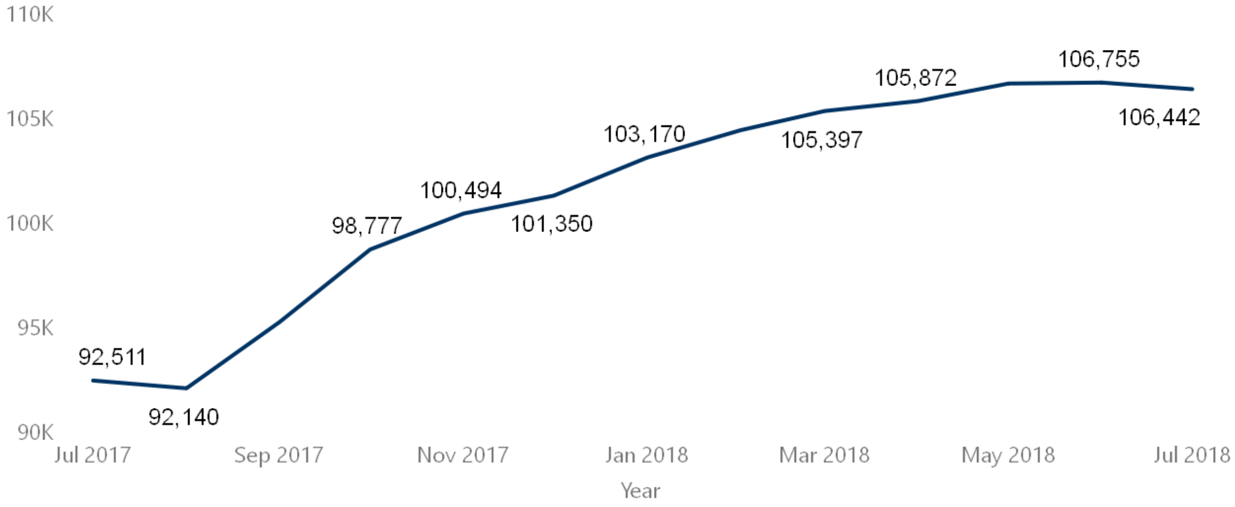
TOTALS	Policies In Force	% Total	Exposure	% Total	Written Premium	% Total	Avg Written Premium
Renters - by Cov C Ded							
25% Total	1,754	0.2 %	37,033,000	0.0 %	76,960	0.0 %	44
20% Total	660	0.1 %	23,522,500	0.0 %	42,852	0.0 %	65
15% Total	23,372	2.2 %	590,265,500	0.1 %	1,385,641	0.2 %	59
10% Total	5,919	0.6 %	323,533,500	0.1 %	799,952	0.1 %	135
5% Total	48,418	4.6 %	2,148,199,500	0.5 %	6,529,943	0.9 %	135
Renters Total	80,123	7.7 %	3,122,554,000	0.7 %	8,835,348	1.2 %	110
Grand Total	1,047,029	100.0 %	460,339,865,325	100.0 %	734,421,510	100.0 %	701

CEA Project Portfolio

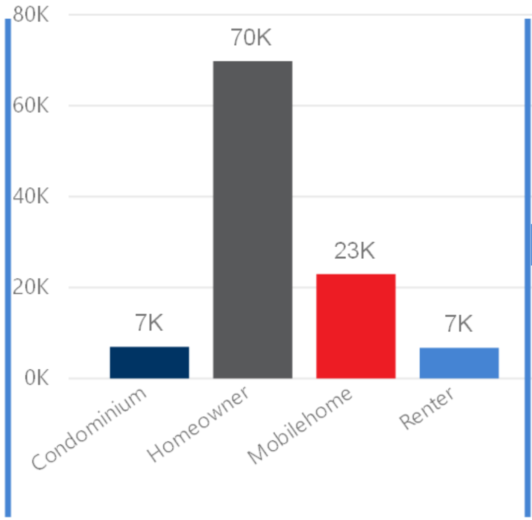
Schedule	Scope	External Resources	Project Cost	Overall Score	Portfolio #	Project Name	PM	Status	Target Start Date	Start Date	Project % Complete	Target End Date	End Date
!	!	!	✔	!	2016-01	CEA Agent Sales Tool Phase I	Danica Wallin	Active	03/08/18	03/08/18	68%	10/25/18	
✔	✔	✔	✔	✔	2016-02	Training and Registration Form	Stephenie Dagata	Completed	01/04/16	01/04/16	100%	08/03/17	08/03/17
✔	✔	✔	✔	✔	2016-03	Combine Agent Databases	Stephenie Dagata	Completed	01/04/16	01/04/16	100%	08/03/17	08/03/17
✔	✔	✔	✔	✔	2017-01	CPP Data Warehouse & Reporting	Paul Stubbles	Completed	01/03/17	01/03/17	100%	07/31/17	07/31/17
✔	✔	✔	✔	✔	2017-02	Written Premium Write Off	Terri Kletzman	Completed	02/01/17	02/01/17	100%	12/31/17	09/01/17
✔	✔	✔	✔	✔	2017-03	Business Continuity	Paul Stubbles	Active	01/03/17	01/03/17	50%	12/31/18	
✔	✔	✔	✔	✔	2017-04	ECMS	Jason Haxton	Completed	01/03/17	01/03/17	85%	12/31/17	12/31/17
✔	✔	✔	✔	✔	2017-05	Enterprise Resource Planning	Terri Kletzman	Active	02/01/17	02/01/17	15%	12/31/18	
✔	✔	✔	✔	✔	2017-06	End to End Website	Terri Kletzman	Cancelled	02/01/17	02/01/17	5%	09/29/17	04/14/17
✔	✔	✔	✔	✔	2017-07	QuakeGrade (SVIMA P2)	Terri Kletzman	Completed	01/03/17	01/03/17	100%	09/01/17	06/08/17
✔	✔	✔	✔	✔	2017-08	Self Service BI Reporting	Paul Stubbles	Completed	01/03/17	01/03/17	100%	12/31/17	12/22/17
✔	✔	✔	✔	✔	2017-09	EQA Redesign	Danica Wallin	Completed	01/03/17	01/03/17	100%	03/29/18	03/29/18
✔	✔	✔	✔	✔	2017-10	ZIP Code Validation	Terri Kletzman	Completed	01/03/17	12/01/16	100%	02/01/17	01/03/17
✔	✔	✔	✔	✔	2017-12	eDiscovery	Jason Haxton	Active	01/03/17	01/03/17	92%	12/31/18	
!	✔	✔	✔	✔	2017-13	Rate and Form Filing Project 2019	Terri Kletzman	Active	06/05/17	06/05/17	80%	12/31/18	
!	!	✔	✔	!	2018-01	Agent Portal	Danica Wallin	Active	03/08/18	03/08/18	73%	10/25/18	
✔	✔	✔	✔	✔	2018-02	EBB Redesign	Terri Kletzman	Active	08/27/18	08/27/18	10%	10/01/19	

Insurance Education and Sales-Support

CPP Policy Growth



Policy Type Composition



CPP Policy Activity

7
# of CPP PIs

106,442
CPP Policy Count

10%
% of Total Book

-313
MTD Growth

5,092
Growth YTD

MVP Agent Snapshot

733
Trained Agents

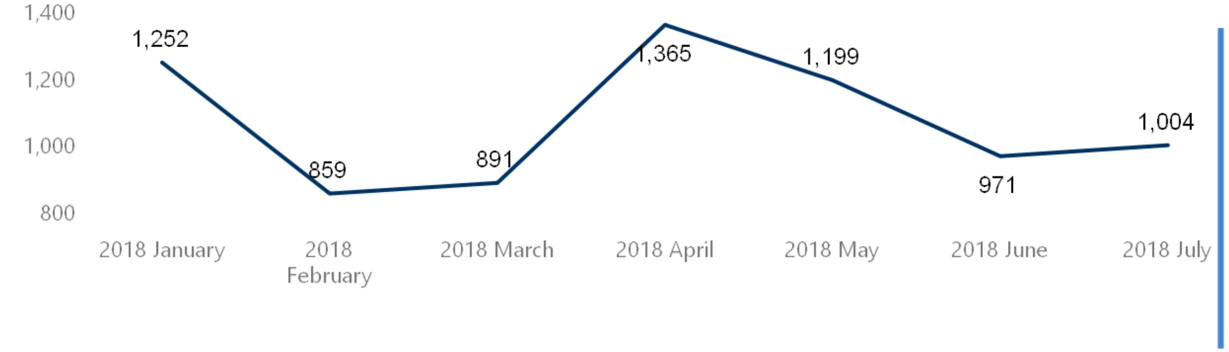
461
MVP Trained Agents

63%
% MVP Trained Agents

Agent Training

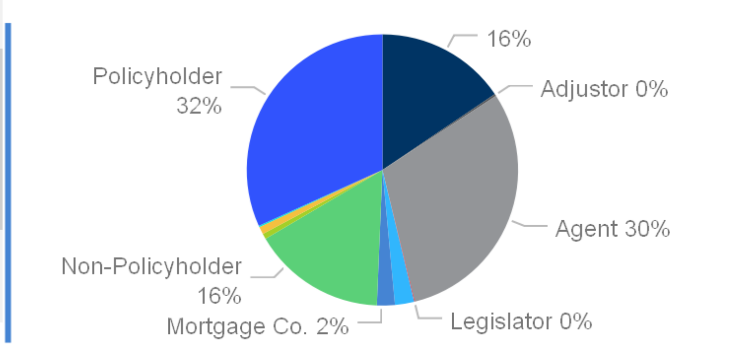
California
15
Out-of-state
6
Webinar
18

Information Desk Case Trend



Month	% of Total Cases YTD
January	16.60%
February	11.39%
March	11.82%
April	18.10%
May	15.90%
June	12.88%
Total	**100.00%**

Who's Calling?

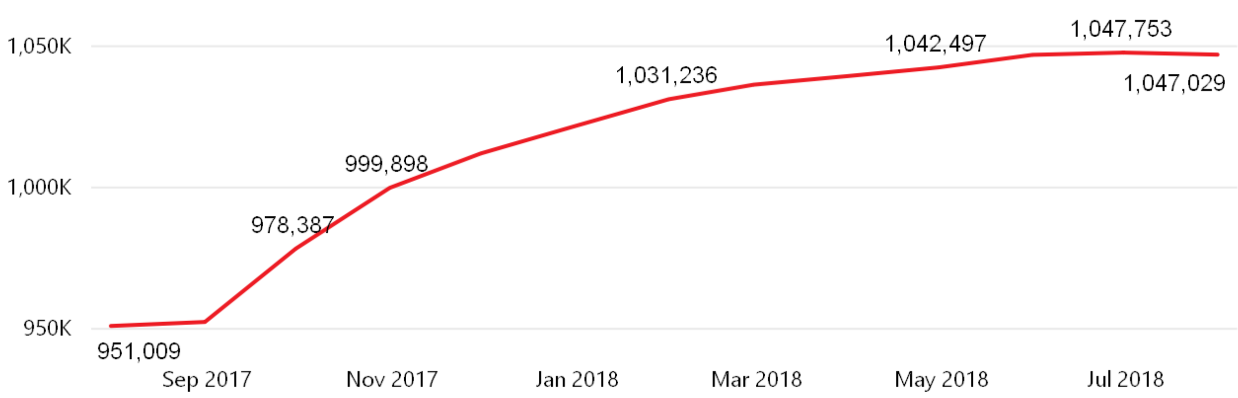


Progress and Planning

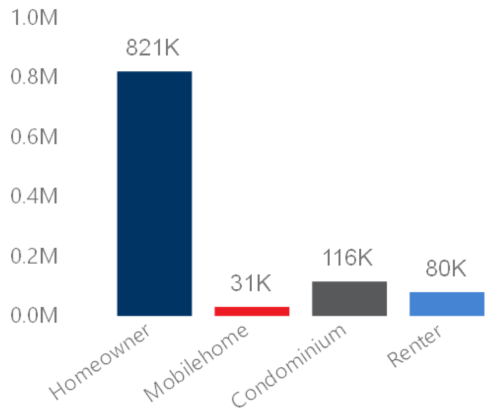
Continuing work on an online agent sales tool to assist agents selling policies by providing planning, comparison, and presentation capabilities beyond the current premium calculator.
Continuing work on the Agent Portal, which is being designed as a CEA website specifically for agents and others that sell and service CEA policies.
Implemented 7th PI on CPP-Diamond - the first PI in CEA hosted environment.
Information Desk now has daily overflow capability with a third-party call-center.

Insurance Operations

Policy Growth



Policy Type Composition



Policy Activity

1,047,029
Policy Count

-724
MTD Growth

25,322
YTD Growth

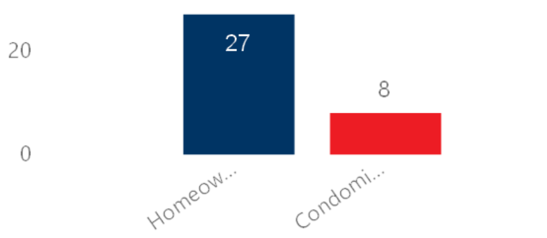
Claim Activity Previous 90 Days

35
Recent Claims

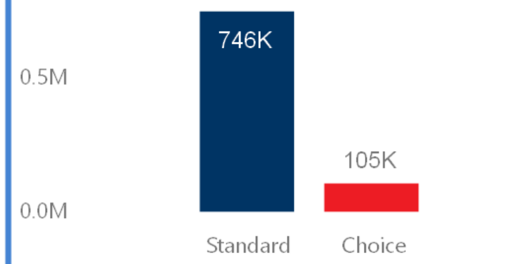
None
Recent Payments

$60,000
Recent Reserves

Claims by Policy Type



Product Type Composition



Endorsement Activity

63,138
Current Breakables

8,952
YTD Growth

24,932
Current Masonry Veneer

3,899
YTD Growth

Progress and Planning

Insurance Operations along with the EPMO began the Adjuster portal project with a kickoff meeting to review initial requirements.
Working with IT and other CEA departments, Insurance Operations successfully onboarded Amica Insurance as a CEA Participating Insurer.
Insurance Operations continues collaborating with other CEA departments to deliver updated RFF communication to Participating Insurers.
Insurance Operations Analysts scheduled 2018 Mid-Year Participating Insurer reviews for August and September.

Information Technology

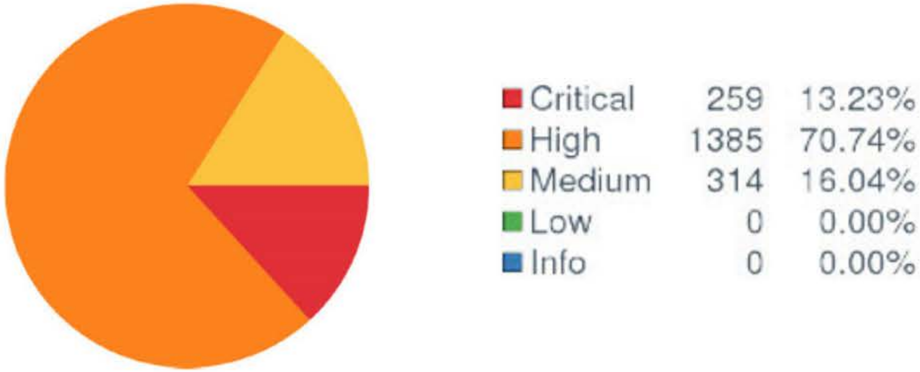
Cybersecurity Report

	Total Mitigated	Mitigated <10d	Mitigated 10-30d	Mitigated >30d
Total Vulnerabilities	7507	24 %	48 %	28 %
Critical	988	19 %	72 %	10 %
High	5626	27 %	46 %	27 %
Medium	888	9 %	37 %	54 %
Low	5	0	0	100 %

Release User Story Performance

Release	Accepted	% Accepted	Not Accepted	% Not Accepted	Removed	% Removed
34	115	82%	19	13%	7	5%
35	113	90%	9	7%	4	3%
36	117	98%	2	2%	1	1%
Total	**345**	**89%**	**30**	**8%**	**12**	**3%**

Vulnerability Composition



Release Quality

Testing Phase	Code Defects	Environment Defects	Requirements Defects	Total Defects
Integration	20	0	3	23
QA	53	1	1	55
Total	**73**	**1**	**4**	**78**

QA Capacity Planning

88%

% Utilization

Development Capacity Planning

109%

% Utilization

Progress and Planning

Delivered initial system changes in support of the 2019 Rate and Form Filing.

Penetration test undertaken with third party, awaiting final results

No security incidents to report; 91% of all 'Critical' vulnerabilities were mitigated within 30 days of discovery; 7,507 individual vulnerabilities mitigated in Q3.

THE STRENGTH TO REBUILD®

CEA GOVERNING BOARD MEETING DATES FOR - 2018

January 25, 2018 – Thursday (Added)

March 14, 2018 – Wednesday

~~June 13, 2018 – Wednesday~~ (Rescheduled)

July 19, 2018 – Thursday (Added)

September 12, 2018 – Wednesday

December 12, 2018 – Wednesday

CEA ADVISORY PANEL MEETING DATES FOR - 2018

January 23, 2018 – Tuesday (Added)

August 22, 2018 – Wednesday (Added)

[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*** **]**

801 K Street · Suite 1000 · Sacramento, CA · 95814
(916) 325-3800 · Fax (916) 327-8270