

WELCOME

The CEA Governing Board Meeting will begin shortly

Thursday
June 11th 2020



CEA Governing Board Meeting

California Earthquake Authority

9:00 a.m.

ANNOUNCEMENT

CEA staff will provide an overview of the teleconference procedures to be utilized in the conduct of this meeting, in accordance with Executive Order No. N-29-20 issued on March 17, 2020

ITEM 1

Meeting Call to Order

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

Establishment of a quorum

ITEM 2

Approval of
Minutes

Consideration and approval of the minutes of the April 10, 2020, CEA Governing Board meeting.

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Glenn Pomeroy
Chief Executive Officer

ITEM 3

Executive Report

Executive Report by Chief Executive Officer Glenn Pomeroy, which will include among other things a report on CEA's response to the COVID-19 crisis and legislative activities of interest to CEA, and an introduction to the new CEA Chief Communications Officer.

ITEM 3 • Executive Report

Chief Communications Officer

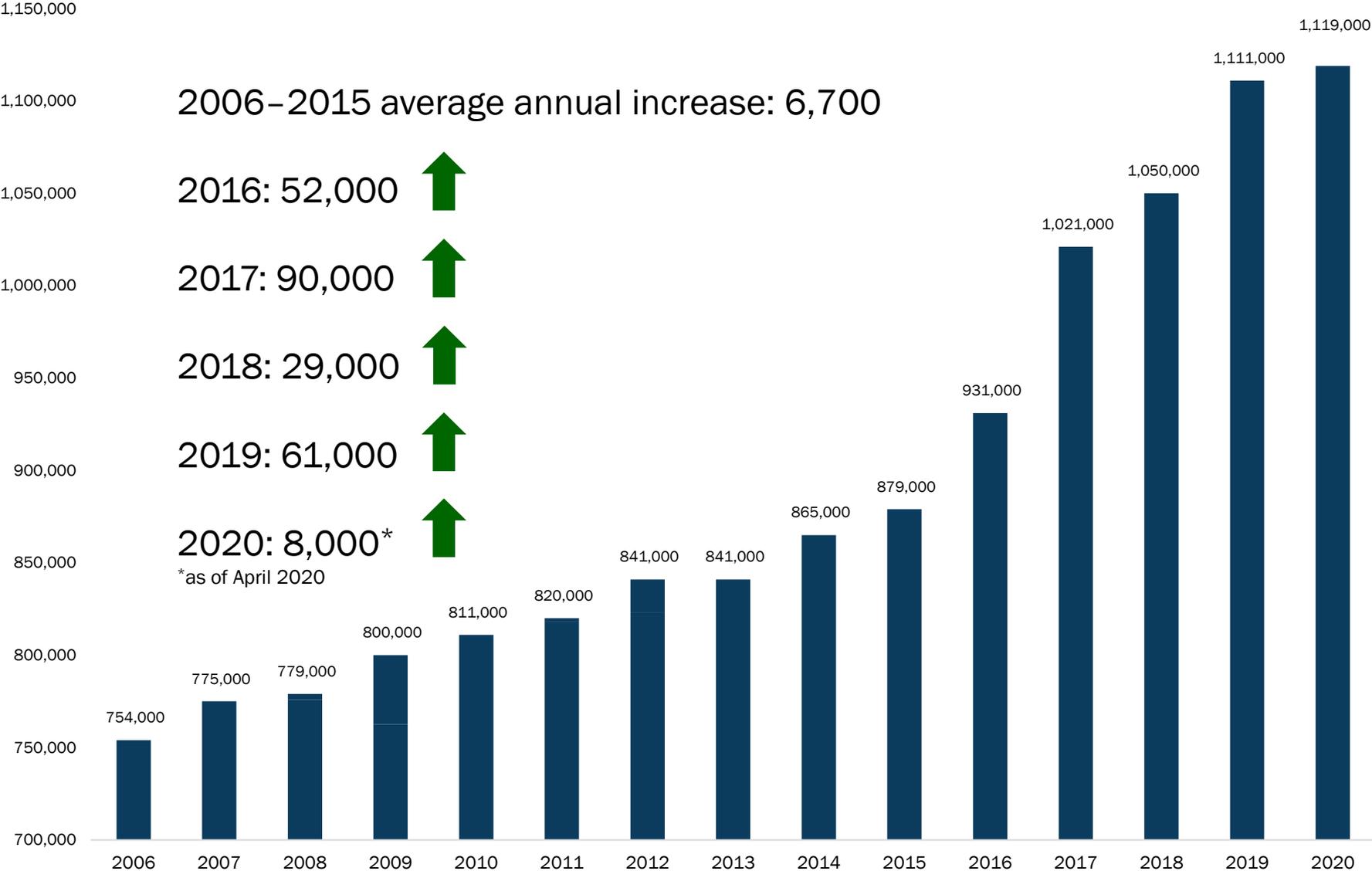
Charlotte Fadipe

- Born and raised in UK and Nigeria
- Masters in Journalism from UC Berkeley
- Undergraduate degree from Oxford Brookes University
- 20 years of experience in communications, media and stakeholder relations
- Broadcast journalist in England, San Francisco and Sacramento
- Lived in Sacramento since the 1990's
- Communications leader at CalEPA, Department of Pesticide Regulation since 2009
- Member of executive team, strategic framing of issues, plan statewide communications
- Started Monday, June 8



ITEM 3 • Executive Report

Significant Growth Over Last 5 Years



ITEM 3 • Executive Report

Cyber Insurance Update



Kimberley Owen
Chief Information
Security Officer

Status:

- CEA has \$25M in Cyber Coverage as of 05/19/2020
- Aspen Specialty Insurance Company
- Privacy & Network Security Base Coverage
- Notification, Fraud Monitoring and Resolution
- Data Forensics, Incident Response, Public Relations
- Total Annual Premium: \$382,075

Next Steps:

- Evaluating Need and Options for Additional Layers of Coverage

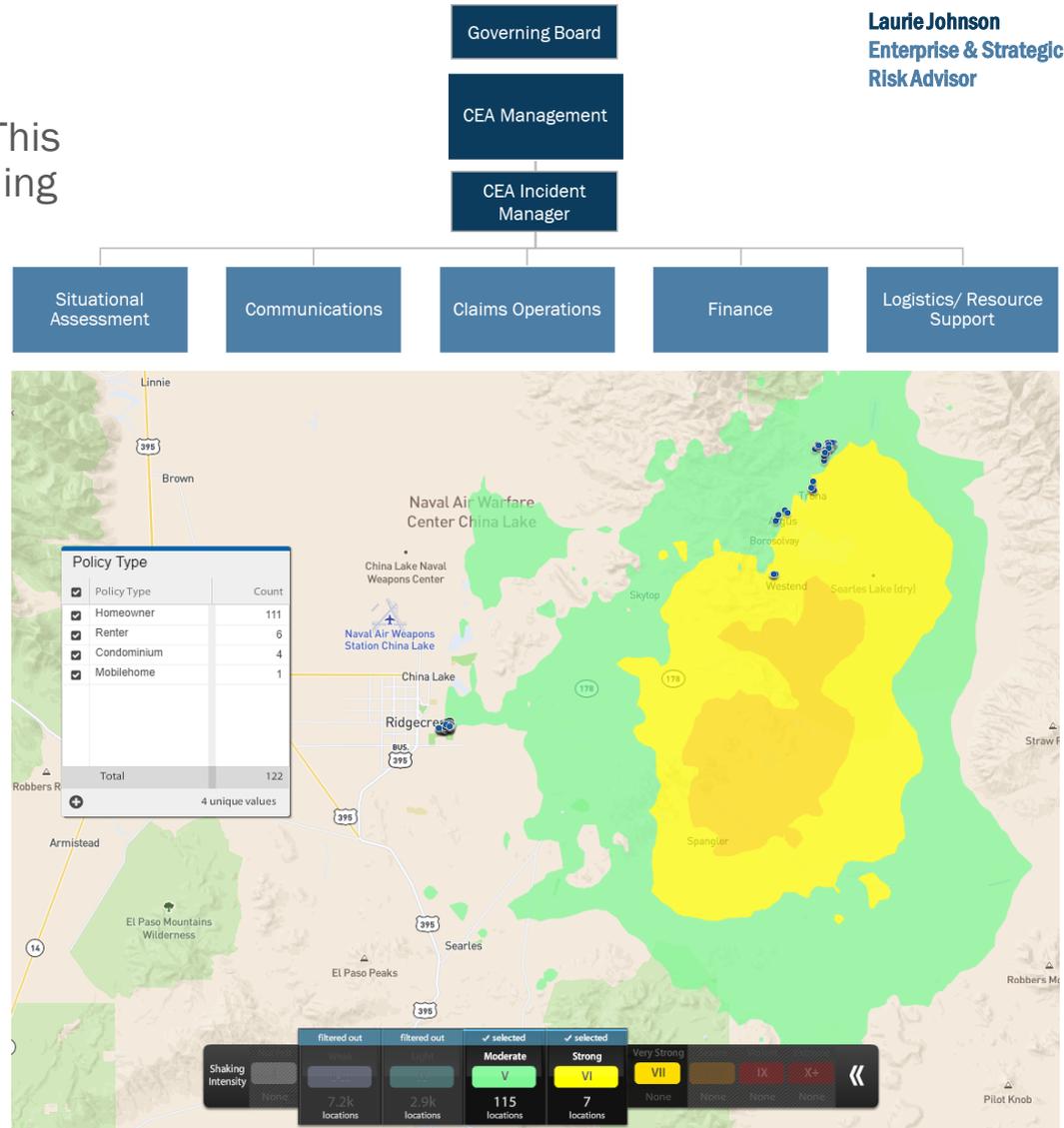
ITEM 3 • Executive Report

Ensuring CEA earthquake readiness, even during COVID-19



Laurie Johnson
Enterprise & Strategic
Risk Advisor

- Leveraged CEA’s cross-organizational inventory of > 200 Mission Essential Functions, as part of the “We Are All In This Together” project for EQ response planning
- Prioritized the development of Job Aids for Mission Essential Functions either intensified during an earthquake or entirely post-event
 - >30 Job Aids in development
- Conducting ‘table-top’ exercises by different functional units within CEA’s response organization
- Situational Assessment team table-top exercise on Wednesday, June 3, 2:30 – 4:30 pm
- M5.5 Ridgecrest Earthquake occurred at 6:32 pm, Situational Assessment team sprang into action analyzing the earthquake’s impacts



ITEM 3 • Executive Report

Claim Process Review Update



Tom Hanzel
Chief Financial Officer

- CEA continues its evaluation and implementation of 12 major recommendations resulting from the consulting firm review of CEA’s end-to-end claims process (from event occurrence through reimbursement) with a focus on all activities performed by CEA
- CEA is adopting a more “Active” claim management philosophy, providing more policy guidance and ensuring claim handling consistency among the Pls.
- Cross-functional team is reviewing, prioritizing and staffing the implementation of the recommendations
 - Review and update of CEA EQ Response Guidelines → Moving to an ICS-based response framework with functionally-based teams, incident manager and management team and series of job aids to enhance response cross training for internal staff
 - Conduct holistic stress testing → Updating and expanding event scenario(s), including multiple event scenarios, and using these to conduct both IT/data testing and personnel exercises
 - Enhance communication capabilities → Reviewing CEA communication technology and personnel capabilities and procedures
 - Enhance claim reimbursement review process → Reviewing CEA types of retrospective quality assurance procedures and considering live claim reimbursement-request audits

ITEM 3 • Executive Report

Federal Insurance Office Advisory Committee

June 4, 2020



...Addressing the Protection Gap through Public Private Partnerships...

CEA: Closing the Protection Gap from Both Directions

Diversity and Inclusion

ITEM 3 • Executive Report

New Internal Advisory Council



Sheri Aguirre



Lynda Foster



Jacqueline Ball



Stephanie Halpin



Sarah Sol



Charlotte Fadipe



Shweta Haight



Douglas Briones



Craig Merry



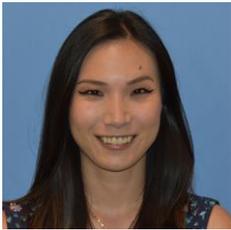
Erin Rogers



D'Angelo Smith



Anna Gallardo



Madison Hoang



Angie Ruckle



Daniel Gonzales



Saru
Radhakrishnan



Kwaun Williams



Tanya Campbell



Dan Hess



PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Glenn Pomeroy
Chief Executive Officer

ITEM 4

Chief
Catastrophe
Response and
Resiliency
Officer

Mr. Pomeroy will seek Board approval to permit CEA to contract to hire Chief Catastrophe Response and Resiliency Officer.

ITEM 4 • Chief Catastrophe Response & Resiliency Officer

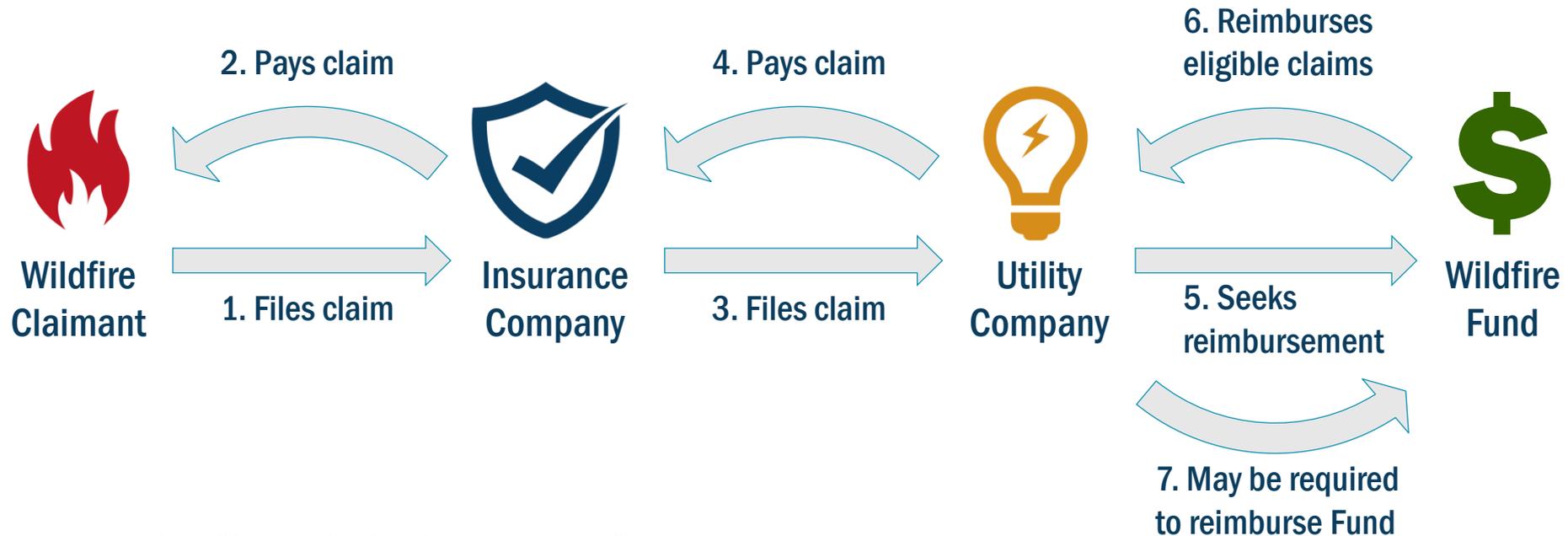
CEA Earthquake Claim Payment and Reimbursement Sequence



1. Claim submitted to Participating Insurer
2. Participating Insurer pays claim in typical scenario
 - Some claims may also be paid directly by CEA
3. Participating Insurer submits reimbursement claim to CEA
4. CEA reimburses eligible claims

ITEM 4 • Chief Catastrophe Response & Resiliency Officer

Wildfire Claim Payment and Reimbursement Sequence

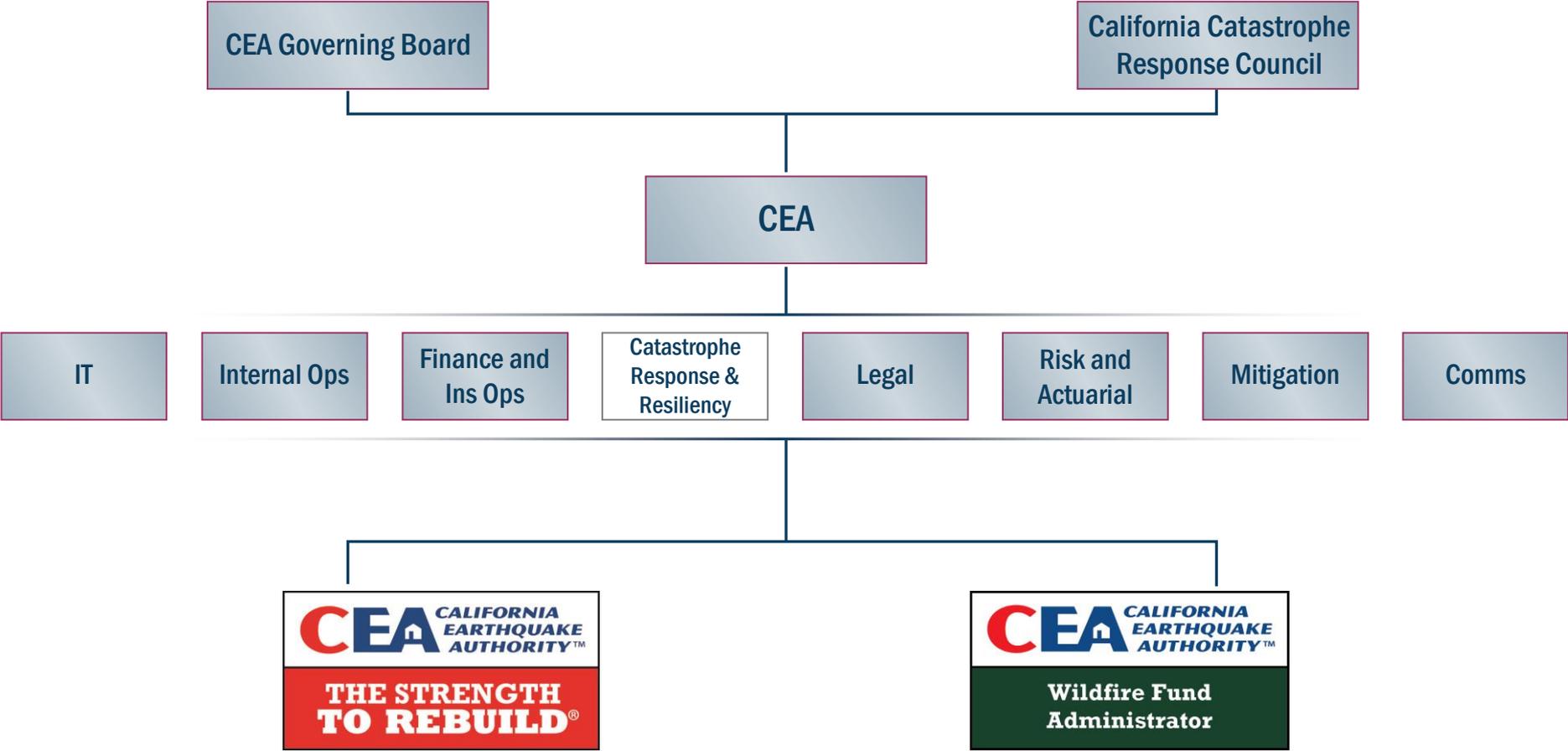


1. Claim submitted to Insurance Company
 - If uninsured: claim submitted directly to Utility Company
2. Insurance Company pays claim
3. Claims submitted to Utility Company
4. Utility Company plays claim
5. Utility submits reimbursement claim to Wildfire Fund
6. Wildfire Fund reimburses eligible claims that comply with its claim standards and procedures
7. CPUC determines whether the utility had acted reasonably, and based on that determination, what, if any, monies it must reimburse the Wildfire Fund

ITEM 4 • Chief Catastrophe Response & Resiliency Officer

A new position on CEA Executive Team

Proposed Addition to CEA's Operating Structure



ITEM 4 • Chief Catastrophe Response & Resiliency Officer

Primary duties

CEA earthquake claims and response oversight

Wildfire Fund claims and response oversight

CEA Post Event Response Incident Manager

ITEM 4 • Chief Catastrophe Response & Resiliency Officer

Chief Communications Officer

Laurie Johnson



- Urban planner specializing in disaster recovery and catastrophe risk management
- Bachelors in Geophysics and Masters in Urban Planning, both from Texas A&M; PhD in Informatics-Disaster Management, Kyoto University
- 30 years of experience in post-disaster recovery planning and management after major urban disasters across the U.S. and globally
- Author of numerous papers and publications, including 2 books:
 - Clear as Mud: Planning for the Rebuilding of New Orleans
 - After Great Disasters: An In-Depth Analysis of How Six Countries Managed Community Recovery
- 15 years of experience working with the insurance industry on natural catastrophe modeling, response planning, and disaster loss estimation and investigations
- CEA Enterprise and Strategic Risk Advisor since August 2016, established CEA's Enterprise Risk Management (ERM) program, leads global re/insurance industry (Nat Cat) working group to enhance industry's response to a major CA earthquake, and coordinating CEA's earthquake readiness

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Tom Hanzel
Chief Financial Officer

ITEM 5

Financial and Insurance Report

Chief Financial Officer & Chief Insurance Operations Officer Tom Hanzel will present to the Board the quarterly CEA financial report.

ITEM 5 • Financial and Insurance Report

Financial Update: 5-Year History

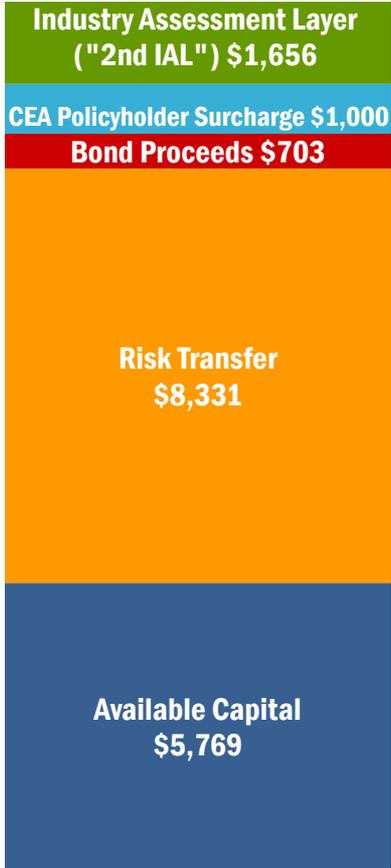
California Earthquake Authority					
5 Year History (As of March 31)					
GASB Basis for All Amounts	2020	2019	2018	2017	2016
Premiums Written	\$194,810,266	\$195,878,310	\$176,846,653	\$146,985,244	\$125,246,508
Net Premiums Earned	98,780,928	109,139,759	86,761,488	91,307,082	112,837,107
Net Underwriting Gain	57,150,330	67,295,753	49,507,831	59,432,654	86,424,382
Investment Income*	31,883,677	30,008,891	23,332,579	18,379,521	13,882,015
Balance Sheet Assets	7,781,384,734	6,917,862,236	6,549,695,134	6,376,061,352	6,146,942,945
Loss and LAE Reserves	2,132,819	131,243	42,079	76,414	193,203
Risk-Transfer Expenses	101,901,240	92,511,828	90,189,728	66,422,450	47,993,445
Total Net Position	6,945,299,534	6,338,382,274	5,926,766,556	5,747,318,519	5,499,471,188
Policy Count	1,115,040	1,054,178	1,039,432	943,681	875,770
Claim Paying Capacity (in Millions)	18,291	17,459	15,861	14,139	12,124

* Unrealized gain/loss is not included in investment income as most investments are held to maturity, and the change from year to year can vary significantly, so it can impact reasonable comparison between years. In addition, this is consistent with statutory reporting which excludes unrealized gain/loss.

ITEM 5 • Financial and Insurance Report

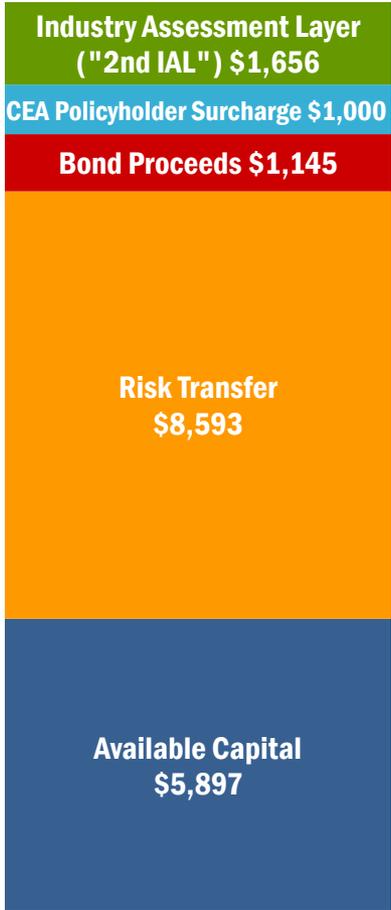
Claim-Paying Capacity

March 31, 2019



Total Capacity **\$17,459M**

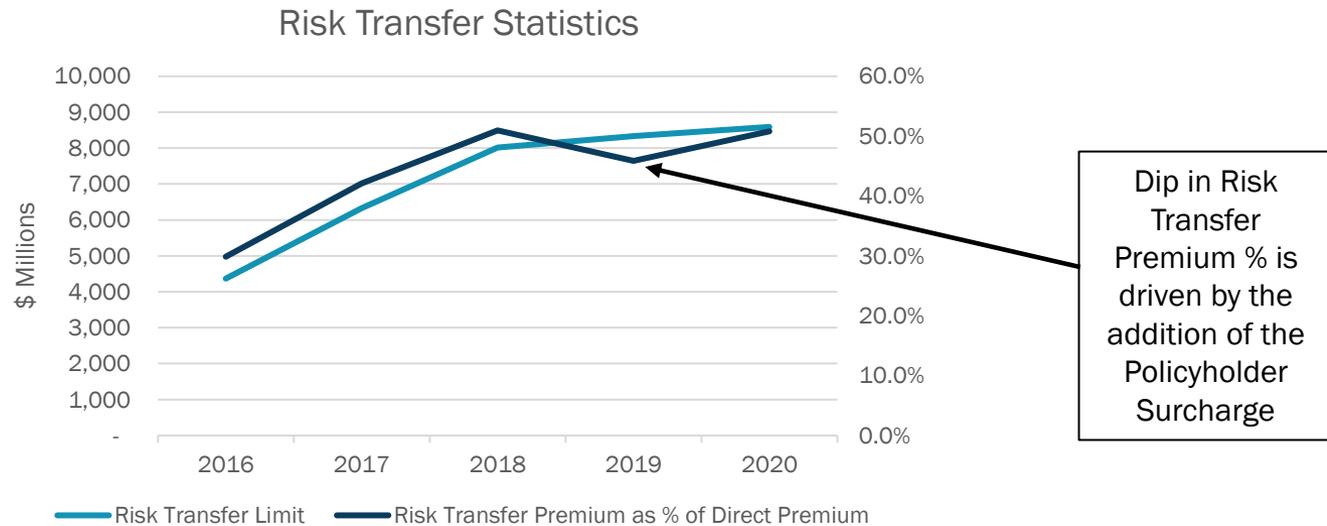
March 31, 2020



Total Capacity **\$18,291M**

ITEM 5 • Financial and Insurance Report

Risk Transfer Update



Strengths

- Well established program with over 100 reinsurers and capital market providers
- Multi-year program with renewals spread throughout the calendar year
- CA earthquake is a diversifying peril

Challenges

- Increased need for limit due to growth
- Price hardening in the reinsurance market due to reinsurer losses from other catastrophe events and impact of Covid-19

ITEM 5 • Financial and Insurance Report

Budgeted to Actual Expenditures 2020 Insurance Services Budget

California Earthquake Authority Insurance Services Budgeted and Actual Expenditures as of March 31, 2020

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2020 Budget 1/1/2020	Adjustments	Augmentations	2020 Budget after Augmentations and Adjustments	Actual Expenditures	Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)	Percentage used of Augmented & Adjusted 2020 Budget
Human Resources:							
Compensation and Benefits	\$ 30,892,048	\$ -	\$ -	\$ 30,892,048	\$ 6,998,185	\$ 23,893,863	22.7%
Travel	764,236	-	-	764,236	44,155	720,081	5.8%
Other	524,481	-	-	524,481	79,652	444,829	15.2%
Board Meeting	25,000	-	-	25,000	6,635	18,365	26.5%
Administration & Office	1,182,613	-	-	1,182,613	87,818	1,094,795	7.4%
EDP Hardware	773,995	-	-	773,995	433,903	340,092	56.1%
EDP Software	3,791,752	-	-	3,791,752	983,093	2,808,659	25.9%
Telecommunications	396,008	-	-	396,008	56,603	339,405	14.3%
Rent/Lease	1,569,529	-	-	1,569,529	344,077	1,225,452	21.9%
Compliance	30,000	-	-	30,000	-	30,000	0.0%
Government Affairs	600,000	-	-	600,000	46,000	554,000	7.7%
Insurance	232,560	-	-	232,560	-	232,560	0.0%
Internal Audit	30,000	-	-	30,000	-	30,000	0.0%
Other	20,600	-	-	20,600	-	20,600	0.0%
Regulatory Expenses	10,000	-	-	10,000	-	10,000	0.0%
Risk Management	67,600	-	-	67,600	9,343	58,257	13.8%
California Wildfire Fund Allocation ²	(1,200,000)	-	-	(1,200,000)	(241,407)	(958,593)	20.1%
Total Statutory Expenditures¹	\$ 39,710,422	\$ -	\$ -	\$ 39,710,422	\$ 8,848,057	\$ 30,862,365	22.3%

¹ Total 2020 Statutory Expenditures of \$8.85 million were 4.5% of written premium. This is in compliance with the maximum permitted ratio of 6.0%.

² Reimbursement to CEA from the California Wildfire Fund for incurred expenses.

ITEM 5 • Financial and Insurance Report

Budgeted to Actual Expenditures 2020 Insurance Services Budget (continued)

California Earthquake Authority Insurance Services Budgeted and Actual Expenditures as of March 31, 2020

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2020 Budget 1/1/2020	Adjustments	Augmentations	2020 Budget after Augmentations and Adjustments	Actual Expenditures	Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)	Percentage used of Augmented & Adjusted 2020 Budget
Audit Services	121,500	-	-	121,500	11,134	110,366	9.2%
Capital Market	212,000	-	-	212,000	901,390	(689,390)	425.2%
Claims	473,000	-	-	473,000	221,110	251,890	46.7%
Grants	9,210,000	-	-	9,210,000	846,683	8,363,317	9.2%
Investment Services	3,560,500	-	-	3,560,500	884,187	2,676,313	24.8%
Legal Services	2,324,934	-	-	2,324,934	8,081	2,316,853	0.3%
Loss-Modeling	1,097,806	-	-	1,097,806	133,565	964,241	12.2%
Marketing Services	15,748,750	-	-	15,748,750	309,778	15,438,972	2.0%
Producer Compensation	85,000,000	-	-	85,000,000	19,484,309	65,515,691	22.9%
Participating Insurer Operating Costs	34,654,662	-	-	34,654,662	7,525,028	27,129,634	21.7%
Seismic Related Research	850,000	-	-	850,000	-	850,000	0.0%
Engineering Related Research	2,347,000	-	-	2,347,000	205,092	2,141,908	8.7%
Risk Transfer	363,648,800	-	-	363,648,800	102,601,240	261,047,560	28.2%
Total Non-Statutory Expenditures	\$ 519,248,952	\$ -	\$ -	\$ 519,248,952	\$ 133,131,597	\$ 386,117,355	25.6%
Total Budget Expenditures	\$ 558,959,374	\$ -	\$ -	\$ 558,959,374	\$ 141,979,654	\$ 416,979,720	25.4%

ITEM 5 • Financial and Insurance Report

Budgeted to Actual Expenditures 2020 Mitigation Budget

California Earthquake Authority Mitigation Budgeted and Actual Expenditures as of March 31, 2020

	(a)	(b)	(c)	(d) (d=a+b+c)	(e)	(f) (f=d-e)	(g) (g=e/d)
	Approved 2020 Budget 1/1/2020	Adjustments	Augmentations	2020 Budget after Augmentations and Adjustments	Actual Expenditures	Augmented & Adjusted Approved Budget (d) vs. Actual Expenditures (e)	Percentage used of Augmented & Adjusted 2020 Budget
Human Resources:							
Compensation and Benefits	\$ 1,501,398	\$ -	\$ -	\$ 1,501,398	\$ 402,440	\$ 1,098,958	26.8%
Travel	35,560	-	-	35,560	536	35,024	1.5%
Other	19,365	-	-	19,365	945	18,420	4.9%
Administration & Office	66,449	-	-	66,449	8,938	57,511	13.5%
Information Technology	840	-	-	840	-	840	0.0%
Telecommunications	20,500	-	-	20,500	2,803	17,697	13.7%
Rent/Lease	107,600	-	-	107,600	23,437	84,163	21.8%
Other	200,000	-	-	200,000	-	200,000	0.0%
Total Operating Expenditures	\$ 1,951,712	\$ -	\$ -	\$ 1,951,712	\$ 439,099	\$ 1,512,613	22.5%
CRMP Contribution	4,000,000	-	-	4,000,000	3,880,000	120,000	97.0%
Investment Services	9,600	-	-	9,600	1,311	8,289	13.7%
Marketing	500	-	-	500	1,400	(900)	280.0%
Engineering Related Research	100,000	-	-	100,000	-	100,000	0.0%
Total Other Expenditures	\$ 4,110,100	\$ -	\$ -	\$ 4,110,100	\$ 3,882,711	\$ 227,389	94.5%
Total Expenditures	\$ 6,061,812	\$ -	\$ -	\$ 6,061,812	\$ 4,321,810	\$ 1,740,002	71.3%

ITEM 5 • Financial and Insurance Report

Insurance Report

Claims

- 2020 Claims conference was held on Tuesday, June 9th
- Due to Covid-19, the conference was held virtually
- Over 150 participants including Participating Insurers and other industry partners
- Primary agenda items included:
 - CEA-ATC General Guidelines and Checklists
 - Claim Case Studies including Inspection, Engineer's Report, Photos, Payment and Non-Payment
 - CEA Research and Mitigation Update
 - Updates on Ridgecrest CEA Reinspections, Claim Process Review and NatCat

Insurance

- Of the ~7,000 policy increase in 2020
 - San Diego County accounted for 46%
 - L.A. County accounted for 18%
 - Riverside accounted for 16%
 - These three southern CA counties total 80% of this year's policy growth through April 2020

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Tom Hanzel
Chief Financial Officer

ITEM 6

Earthquake Loss Mitigation Fund

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

ITEM 6 • Earthquake Loss Mitigation Fund

Background:

California Insurance Code section 10089.37 states, in pertinent part:

The board shall set aside in each calendar year an amount equal to five percent of investment income accruing on the authority's invested funds, or five million dollars (\$5,000,000), whichever is less, if deemed actuarially sound by a consulting actuary employed or hired by the authority, to be maintained as a subaccount in the California Earthquake Authority Fund. The authority shall use those funds to fund the establishment and operation of an earthquake Loss Mitigation Fund.

ITEM 6 • Earthquake Loss Mitigation Fund

- The Governing Board last approved set-aside funding for the CEA Loss Mitigation Fund in June 2019, when it authorized a set-aside amount of \$5,000,000.
- The Fund is established by law to hold money for CEA mitigation expenses.
- Insurance Code requires the set-aside be reviewed “by a consulting actuary employed or hired by the authority.”
- CEA’s Chief Risk and Actuarial Officer has reviewed the staff proposal to transfer funds and determined that the requested transfer will not impair CEA’s actuarial soundness (opinion provided as *Attachment A*).

ITEM 6 • Earthquake Loss Mitigation Fund

Calculation of Available Set-Aside Amount for Loss Mitigation Fund

Year	Investment Income	5% of Investment Income	Lesser of 5% of Investment Income or \$5 million *
2019	\$125,681,687.00	\$6,284,084.35	\$5,000,000.00
2018	\$105,539,322.00	\$5,276,966.10	\$5,000,000.00
2017	\$81,770,000.00	\$4,088,500.00	\$4,088,500.00
2016	\$110,719,225.00	\$5,535,961.25	\$5,000,000.00
2015	\$42,808,825.00	\$2,140,441.25	\$2,140,441.25

*By law, "(t)he board shall set aside in each calendar year an amount equal to 5 percent of investment income accruing on the authority's invested funds, or five million dollars (\$5,000,000), whichever is less..."
Insurance Code section 10089.37.

ITEM 6 • Earthquake Loss Mitigation Fund

Recommendation:

Staff recommends the Board authorize a 2020 set-aside of \$5,000,000 for the CEA Loss Mitigation Fund (calculation shown on *Attachment B*).

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Tom Hanzel
Chief Financial Officer

ITEM 7

Risk Transfer Program

Mr. Hanzel will seek Board approval for revisions to the CEA's Guidelines for Securing Risk Transfer: *Traditional Reinsurance and Alternative Risk Transfer.*

ITEM 7 • Revised Guidelines for Securing Risk Transfer

- The Governing-Board-approved *Guidelines for Securing Risk Transfer: Traditional Reinsurance and Alternative Risk Transfer* (the *Guidelines*) provide standards under which the CEA determines whether a reinsurer would be eligible to participate on the CEA's reinsurance program, and if so, what maximum (dollar amount) line of reinsurance the CEA might accept from that reinsurer.
- The *Guidelines* expressly provide that they should be modified periodically to respond to changing reinsurance-market conditions and reinsurance products, to encompass other financial tools from other segments of the financial community, and to adjust to economic changes—accordingly, the *Guidelines* have been modified repeatedly over the years since they were first established in 1999. The most recent revisions to the *Guidelines* were adopted by the Governing Board more than three years ago, at its March 15, 2017 meeting.
- CEA Staff believes that the *Guidelines* should now again be modified to account for changes and updates in the reinsurance and other risk-transfer markets, and to update and streamline CEA risk-transfer practices and procedures in light of current market conditions and experience and knowledge gained over recent years.

ITEM 7 • Revised Guidelines for Securing Risk Transfer

Proposed Revisions to the Guidelines

1. Risk Transfer Advisory Committee

- Expand internal oversight by restructuring the current Alternative Risk Transfer Subgroup into a broader Risk Transfer Advisory Committee (“RTA Committee”)
 - a. Addition of CEA’s Chief Risk and Actuarial Officer and other staff members, supplemented by outside experts, as necessary
 - b. Participate in formulating, overseeing, and approving risk transfer strategies
 - c. Operate through a consensus and will convene at least quarterly

2. Minimum Surplus Requirements

- Increases the minimum surplus requirements from the previous minimum of \$150 million to a new minimum of \$250 million while increasing the maximum line allocation for reinsurers with surplus between \$250 million and \$300 million

3. Maximum Line Allocation

- The RTA Committee will use its discretion in determining the appropriate rating to use for calculating the maximum line allocation

4. Expatriate Companies

- Remove the limitation on conducting business with expatriate companies
- In 2017, the Base Erosion and Anti-Abuse Tax (BEAT), a new tax under the Tax Cuts and Jobs Act, was passed. This new tax effectively renders affiliated offshore quota share agreements uneconomic

ITEM 7 • Revised Guidelines for Securing Risk Transfer

Recommendations:

Staff recommends that:

- The Board approve the revised *Guidelines for Securing Risk Transfer: Traditional Reinsurance and Alternative Risk Transfer*.
-

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**

ITEM 8

Annual Report on the State of the Economy

Kapil Bhatia, Managing Director of Public Finance for Raymond James & Associates, Inc.— CEA’s independent financial advisor—will present to the Board the annual report on the state of the economy.

Economic, Financial, Investment, and Risk Transfer Market Overview

Prepared for:



June 11, 2020

RAYMOND JAMES

Kapil Bhatia

Managing Director, Public Finance

Raymond James & Associates, Inc.

880 Carillon Parkway, St. Petersburg, FL 33716

Cell: 727-415-3267

Email: Kapil.Bhatia@RaymondJames.com

Financial Advisor and Investment Consultant, **California Earthquake Authority**

Investment Consultant and Risk Transfer Advisor, **California Wildfire Fund**

Financial Advisor and Investment Consultant, **Citizens Property Insurance Corporation**

Financial Advisor and Investment Consultant, **Florida Hurricane Catastrophe Fund**

Financial Advisor and Investment Consultant, **Florida Insurance Guaranty Association**

Risk Transfer Advisor, **Metropolitan Transportation Authority**

Member of Investment Banking Team: **Louisiana Citizens Property Insurance Corporation, Texas**

Windstorm Insurance Association, North Carolina Insurance Underwriting Association

Section 1

U.S. Economic Overview

Section 2

Financial Market Overview

Section 3

CEA Investment Portfolio

Section 4

Risk Transfer Market

Section 1:

U.S. Economic Overview

U.S. ECONOMIC OVERVIEW

- **Since middle of March, more than 40 million Americans filed for unemployment claims, effectively erasing more than a decade of job creation. In addition, industrial production has fallen, retail sales have declined at a record pace, and housing sales have declined**
- Total nonfarm payroll employment fell by 20.5 million in April, and the unemployment rate rose from 4.4% to 14.7% or increased by 10.3%
 - This is the highest rate and the largest over-the-month increase in the history of the series (seasonally adjusted data are available back to January 1948)
 - The number of unemployed persons rose by 15.9 million to 23.1 million and labor participation rate decreased from 62.7% to 60.2% in April
- Total nonfarm payroll employment rose by 2.5 million in May, and the unemployment rate declined to 13.3%, the number of unemployed persons fell by 2.1 million to 21.0 million, and the labor participation rate increased to 60.8% from 60.2%
- The U.S. Federal Reserve reduced its Fed Funds target from 1.50%-1.75% to 0.00%-0.25% in two cuts – the first cut on March 4th was 0.50% to a range of 1.00%-1.25% and the second cut on March 14th was 1.00% to a range of 0.00%-0.25%
- Before the contraction due to COVID, U.S. GDP had grown nearly unimpeded since the Great Recession of 2007-2009. During the record expansion, the unemployment rate fell to a 50-year low of 3.5%, and the U.S. economy added jobs for 113 months in a row
 - U.S. gross domestic product fell at a 4.8% annualized rate in the first quarter, which marks the official end to the U.S.'s longest economic expansion that started following the Great Recession
 - U.S. GDP is expected to fall at an even sharper annualized rate in the second quarter. Economists expect double-digit slumps in the range of 30% to 40%

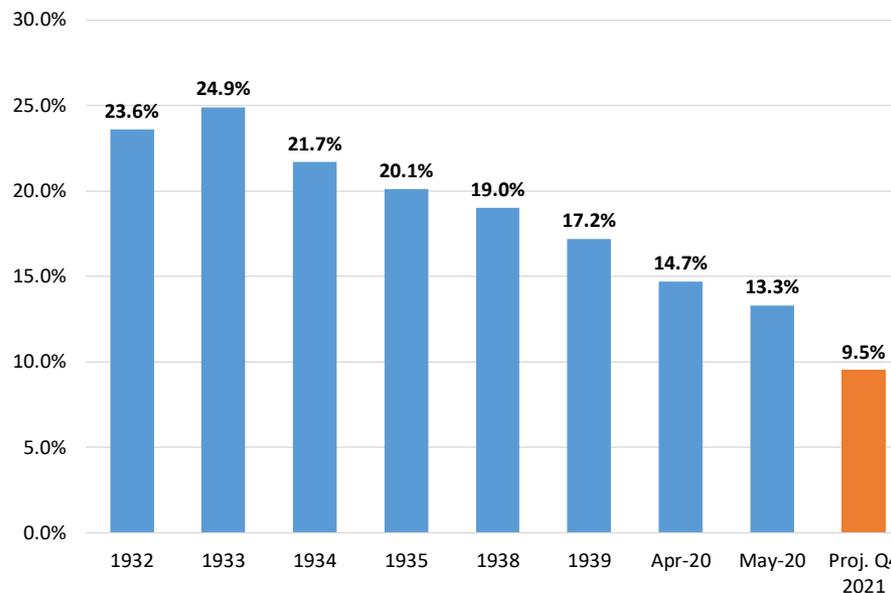
- We are experiencing a significant global recession and previously unseen volatility in the financial markets as a result of the COVID-19 global pandemic
- U.S. gross domestic product fell at a 4.8% annualized rate in the first quarter and is expected to decrease by 30%-40% in the second quarter
- The overall growth rate for 2020 is expected to contract by approximately 4-5% before recovering in 2021

U.S. UNEMPLOYMENT HAS RISEN SHARPLY AS A RESULT OF COVID-19

- Unemployment is currently at its second highest level in the last 100 years, second only to the Great Depression rate of 24.9%
- Since mid-March, more than 40 million Americans filed for unemployment claims, effectively erasing more than a decade of job creation
- The April decline in employment is the largest in modern history and brought employment to its lowest level since January 2011

- Total nonfarm payroll employment fell by 20.5 million in April and rose by 2.5 million in May for a net decrease of 18.0 million through April and May. In April, the unemployment rate rose to 14.7% and decreased to 13.3% in May - the changes in these measures reflect the effects of COVID-19 and public health efforts to contain it
 - Employment fell sharply in all major industry sectors, with particularly heavy job losses in leisure and hospitality
- The labor force participation rate decreased by 2.5% over the month of April to 60.2%, the lowest rate since January 1973 (when it was 60.0%). In May, the labor force participation rate increased to 60.8%
- According to the Congressional Budget Office, the forecast for the unemployment rate is 9.5% by the end of 2021 – nearly three-times higher than pre-COVID levels
 - However, we believe that unemployment will be approximately 10% at the end of 2020 and in the range of 7%-8% at the end of 2021 as the economy slowly reopens

Highest Unemployment Rates in U.S. History

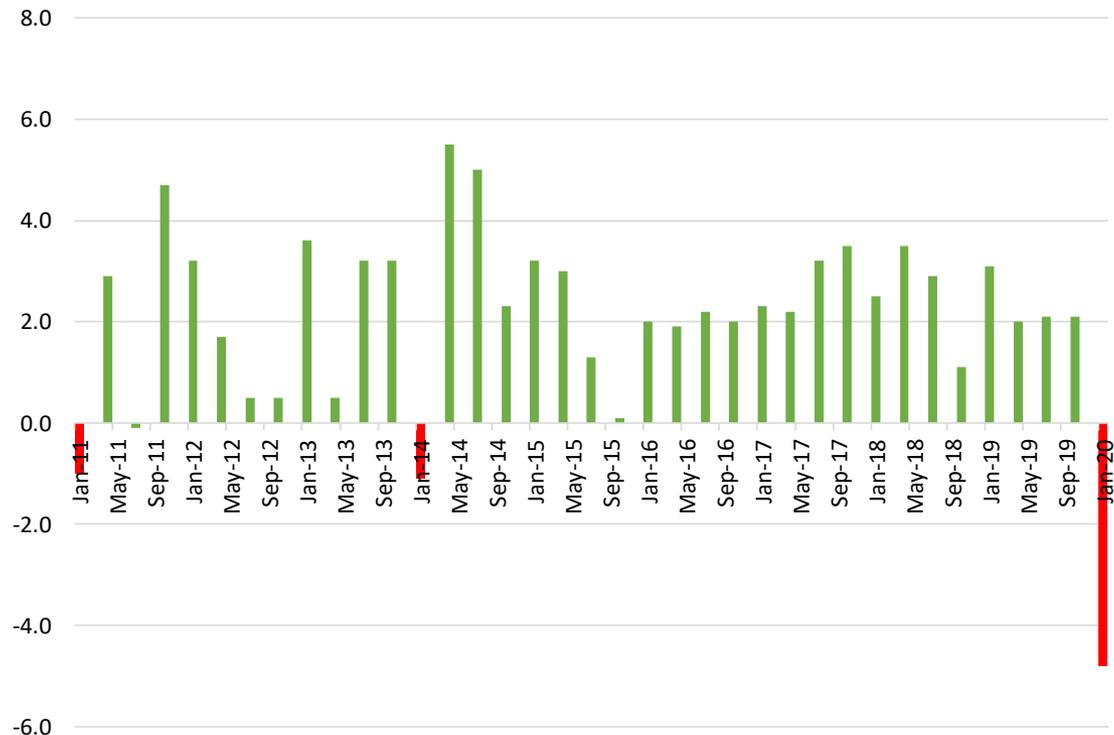


Source: Bureau of Labor Statistics for historical data and 2021 projection is from Congressional Budget Office

U.S. GDP HAS FALLEN SHARPLY AS A RESULT OF COVID-19

- Real GDP decreased at an annual rate of 4.8% in the first quarter of 2020 according to the "advance" estimate, this marks for decline in six years
 - In the fourth quarter of 2019, real GDP increased 2.1%
- Current-dollar GDP as of December 31, 2019 was \$21.7 trillion
- Current-dollar GDP decreased 3.5%, or \$191.2 billion, in the first quarter to a level of \$21.54 trillion
 - In the fourth quarter, GDP increased 3.5%, or \$186.6 billion
- We expect GDP to return to December 31, 2019 levels by the end of 2021

U.S. Real GDP Quarterly Growth Rate (Seasonally Adjusted Annual Rate)



Source: Bureau of Economic Analysis

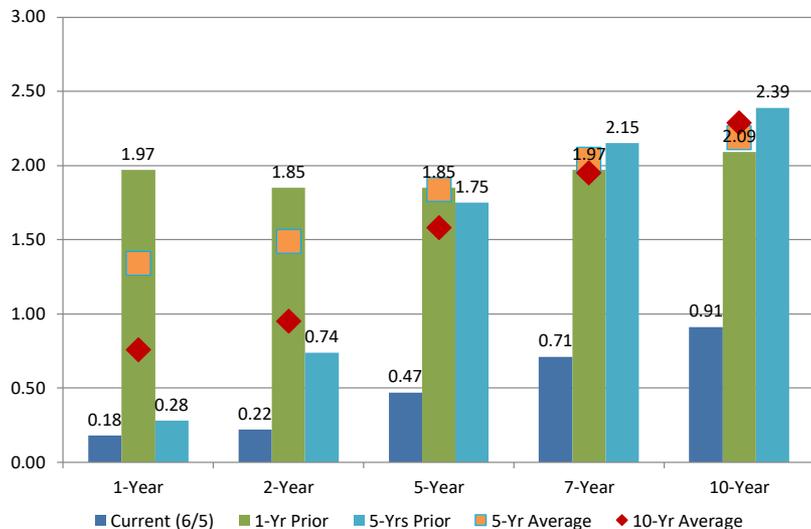
Section 2:

Financial Market Overview

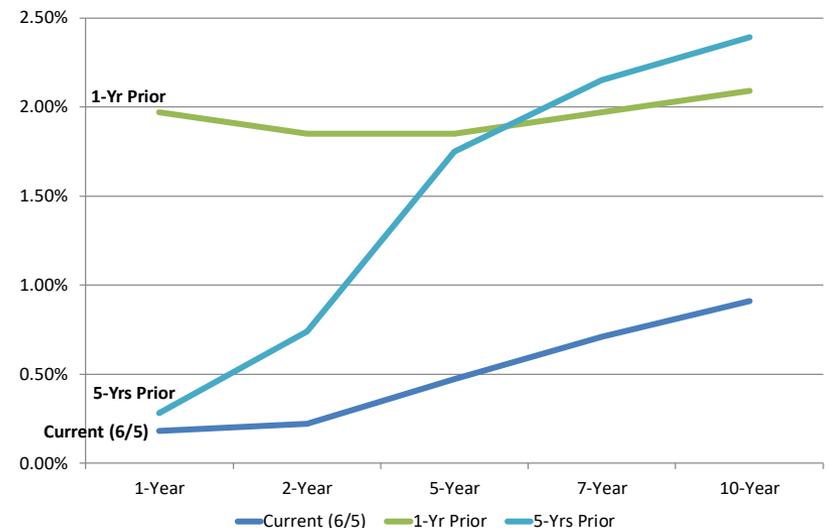
U.S. INTEREST RATES

U.S. Treasury Rates								
	1-Year	2-Year	5-Year	7-Year	10-Year	3Mo-5Yr Spread	6Mo-10Yr Spread	2-10 Yr Spread
Current (6/5)	0.18	0.22	0.47	0.71	0.91	0.32	0.73	0.69
1-Yr Prior	1.97	1.85	1.85	1.97	2.09	(0.43)	(0.06)	0.24
2-Yrs Prior	2.30	2.50	2.77	2.88	2.93	0.84	0.81	0.43
5-Yrs Prior	0.28	0.74	1.75	2.15	2.39	1.73	2.29	1.65
5-Yr Average	1.34	1.49	1.84	2.04	2.19	0.70	0.95	0.70
10-Yr Average	0.76	0.95	1.58	1.95	2.29	0.98	1.61	1.34
Current as % Above / Below 5-Yr Average	-87%	-85%	-74%	-65%	-58%	-54%	-23%	-1%
Current as % Above / Below 10-Yr Average	-76%	-77%	-70%	-64%	-60%	-67%	-55%	-48%

Current and Historical Treasury Curves (%)



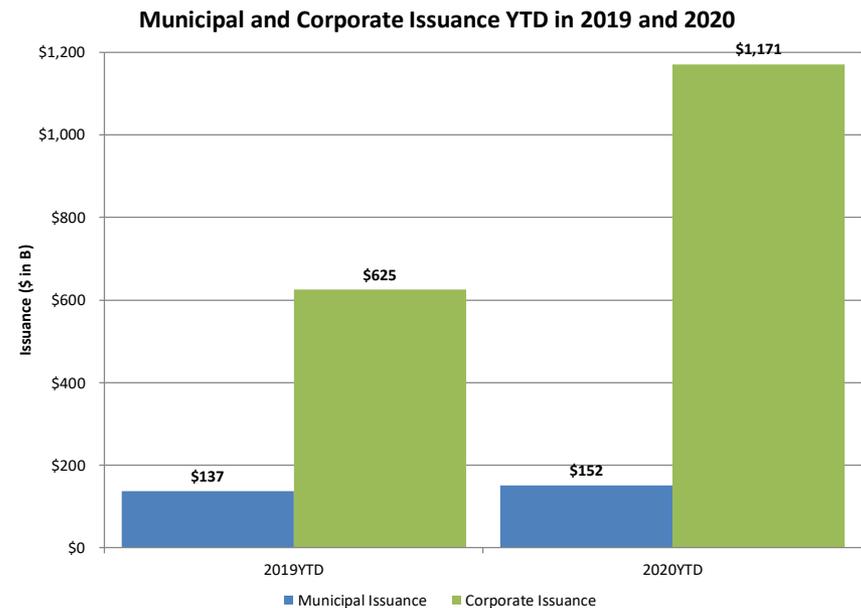
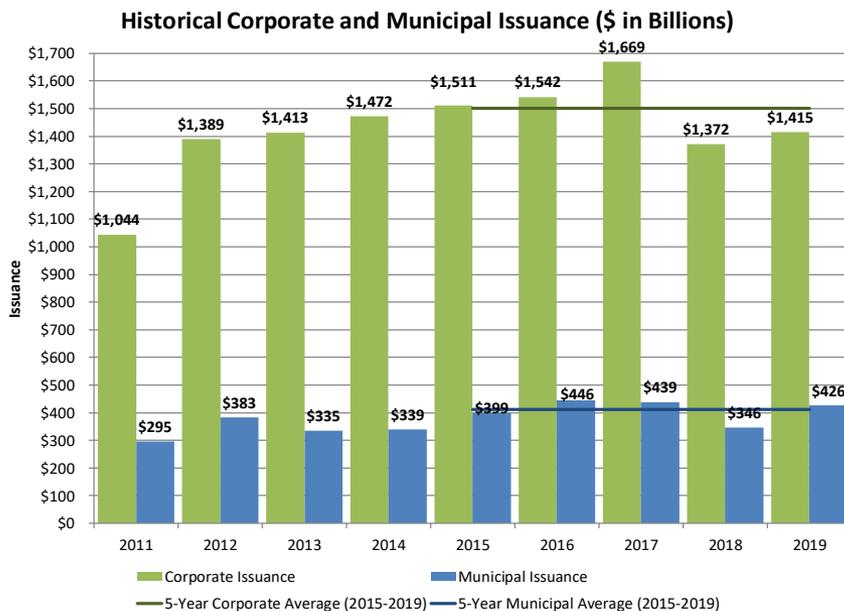
Current and Historical Treasury Curves



U.S. BOND MARKETS

- The debt markets are strong with record issuance as issuers take advantage of historically low interest rates
- While corporate bond issuance has reached record levels since 2011, most issuances prior to 2020 were for financial engineering
- However, most of the recent large issuances have been to build additional reserves, liquidity and cash-flow
- Recent examples include Boeing's record-breaking \$25 billion issuance, Oracle's \$20 billion issuance, T-Mobile's \$19 billion issuance, Disney's \$11 billion issuance, and Amazon's \$10 billion issuance

Year	Corporate Issuance		Municipal Issuance	
	Par (\$B)	% Change from Prior Yr	Par (\$B)	% Change from Prior Yr
2011	\$1,044	-4%	\$295	-32%
2012	\$1,389	33%	\$383	30%
2013	\$1,413	2%	\$335	-12%
2014	\$1,472	4%	\$339	1%
2015	\$1,511	3%	\$399	18%
2016	\$1,542	2%	\$446	12%
2017	\$1,669	8%	\$439	-2%
2018	\$1,372	-18%	\$346	-21%
2019	\$1,415	3%	\$426	23%
2019YTD	\$625		\$137	
2020YTD	\$1,171	87%	\$152	11%

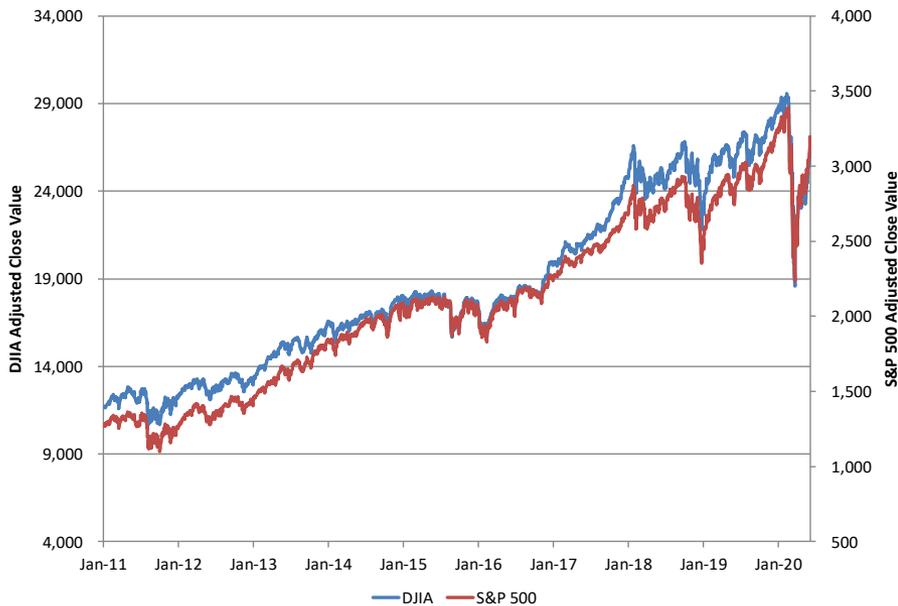


U.S. EQUITY MARKETS

- The equity market reached its high point near the middle of February 2020
- The equity market has taken a significant downturn as a result of COVID with the S&P500 down 1% for the year and DJIA down 4% for the year

(Since 2011)	DJIA	S&P 500
Current	27,100	3,193
Minimum	10,655	1,099
Maximum	29,551	3,386
Date of Minimum	10/3/2011	10/3/2011
Date of Maximum	2/12/2020	2/19/2020

U.S. Equity Indices



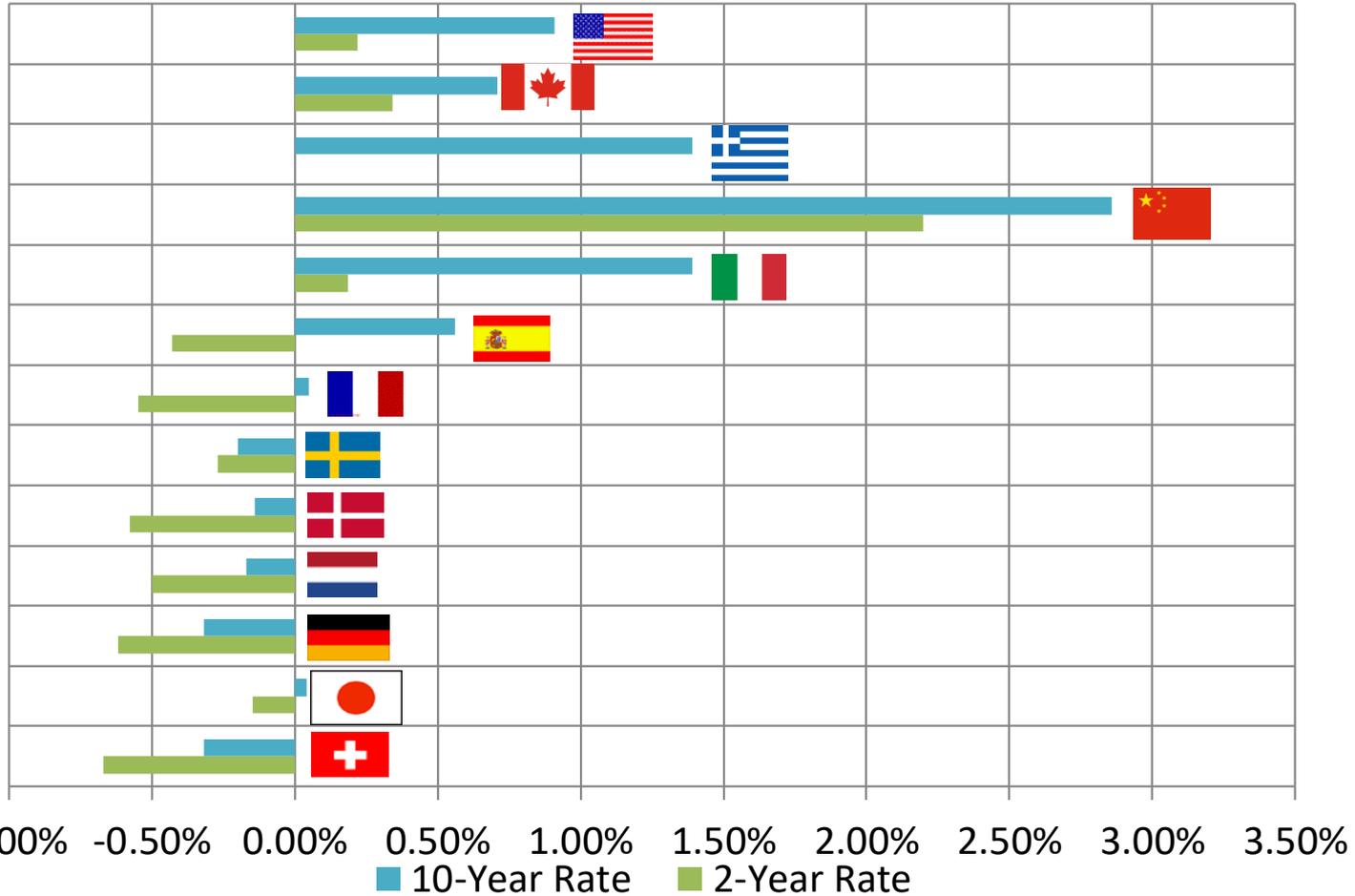
U.S. Equity Indices - Last Three Months



Source: WSJ

GLOBAL INTEREST RATES

Sovereign Interest Rates



- Interest rates have cratered globally as a result of COVID-19
- Prior to COVID, central banks had pushed their short term interest rate targets near or below zero, but now target rates will remain low or have been lowered further as a result of COVID
- U.S. Fed Funds target rate is 0.00%-0.25%
- ECB target rate is 0.00%
- Japan target rate is 0.1%

Section 3:

CEA Investment Portfolio

CEA INVESTMENT POLICIES AND PORTFOLIO OVERVIEW

CEA Investment Policy Summary				
Fund	Liquidity	Primary	Claims-Paying	Mitigation
Purpose	Funds to pay for the operating expenses and initial claims from an earthquake	Funds in excess of the Liquidity Fund to pay claims following an earthquake	Bond proceeds from the CEA's issuance of revenue bonds to pay claims following an earthquake	Funds to pay for the mitigation program and associated expenses
Treasuries / Agencies Composition	Up to 100% Treasuries / Max. 50% Agencies	100% Treasuries	Up to 100% Treasuries / Max. 50% Agencies	Up to 100% Treasuries / Max. 50% Agencies
Maximum Final Maturity	181 days	5 years	5 years	91 days

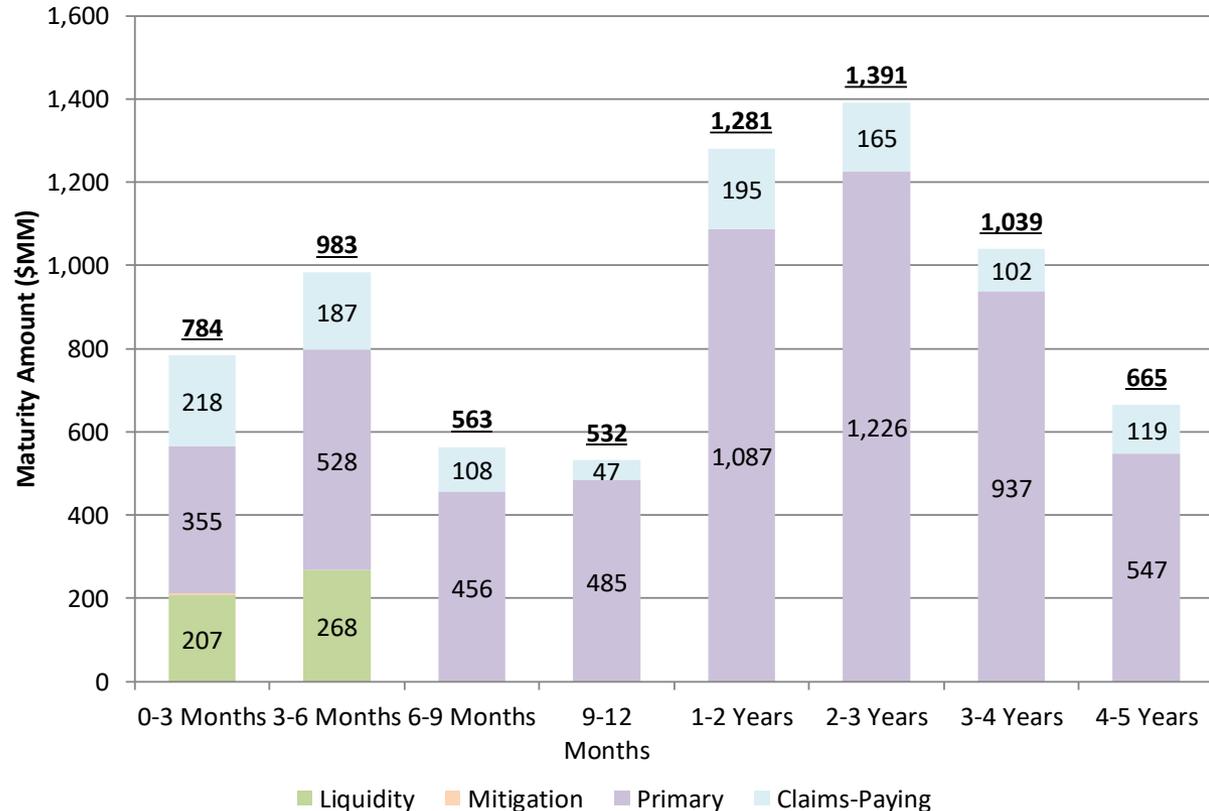
CEA Investment Portfolio Statistics - May 31, 2020					
Fund	Market Value (\$000's)	Composition (% of Mkt. Value)	12-Month Total Return	12-Month Income Return	Effective Duration (Years)
Liquidity	\$475,152	7%	1.55%	2.25%	0.26
Primary	\$5,620,915	78%	4.83%	1.98%	1.93
Claims-Paying	\$1,146,180	16%	5.17%	1.89%	1.33
Mitigation	\$3,674	0%	1.48%	1.68%	0.13
Total	\$7,245,921	100%	4.67%	1.98%	1.73
Primary and Liquidity Combined	\$6,096,067	84%	4.58%	1.83%	1.80
Primary, Liquidity, and Claims-Paying Combined	\$7,242,247	100%	4.67%	1.98%	1.73

- CEA's investment portfolio totals \$7.2 billion with an effective duration of 1.73 years and is comprised of liquidity, primary, claims-paying and mitigation funds
- In 2019, the CEA's interest income return was 1.80%, which generated approximately \$127 million in interest income, which is an increase of \$18 million versus 2018
- The CEA generated \$109 million of interest income in 2018, \$93 million in 2017, \$81 million in 2016, and \$64 million in 2015

CEA MATURITY DISTRIBUTION – MAY 31, 2020

CEA Investment Portfolio - May 2020 - Maturity Distribution (\$MM)									
Fund	Market Value	0-3 Months	3-6 Months	6-9 Months	9-12 Months	1-2 Years	2-3 Years	3-4 Years	4-5 Years
Liquidity	475	207	268						
Mitigation	4	4							
Primary	5,621	355	528	456	485	1,087	1,226	937	547
Claims-Paying	1,146	218	187	108	47	195	165	102	119
Total	7,246	784	983	563	532	1,281	1,391	1,039	665
% of Total		11%	14%	8%	7%	18%	19%	14%	9%

CEA Investment Portfolio - Current Maturity Distribution



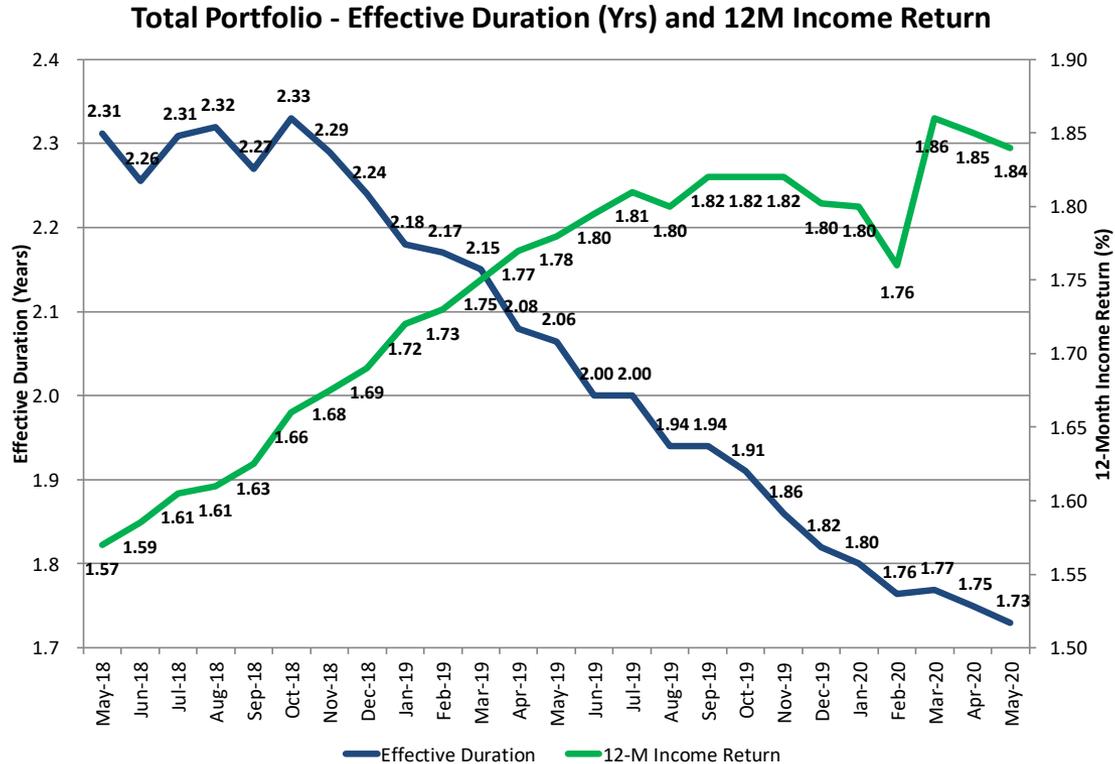
- As of May 31, 2020, the CEA has a total duration of 1.73 years as compared to February 28, 2019 total duration of 2.17 years

INVESTMENT PORTFOLIO DURATION

- In December 2015 after the Board’s approval, the CEA revised its investment portfolio maximum duration to 3.00 years from 1.75 years
- As of May 31, 2020, the CEA’s overall portfolio duration was 1.73 years
 - Liquidity Fund – 0.26 years
 - Mitigation Fund – 0.13 years
 - Primary Fund – 1.93 years
 - Claims-Paying Fund – 1.33 years

• After the CEA’s increase to its duration target from 1.75 years to 3.00 years in December 2015, the overall portfolio’s duration increased to 2.33 years in 2018 and has decreased to 1.73 years

• The 12-month interest income return for 2019 was 1.80% versus 1.69% in 2018



INVESTMENT POLICY

- We are evaluating modifying the investment portfolio to reflect market conditions as interest rates are not expected to increase and to better reflect our capital structure
- We are evaluating following changes to our Primary Fund and Claims-Paying Fund investment policies
 - Increase duration from 3 years to 5 years for Primary Fund and 6 years for Claims Paying Fund
 - Add marginal credit exposure by including corporate and supra-nationals to allowable securities within composition limits
 - Include Federal agencies to allowable securities
- We are preparing economic analysis and will come back to the Board in September with our proposed revised investment policy for your review

- **By increasing duration and expanding the allowable security universe with credit and composition limits, the CEA can take advantage of market conditions and optimize its investment portfolio based on its capital structure**

Section 4:

Risk Transfer Market

GLOBAL INSURED AND ECONOMIC LOSSES

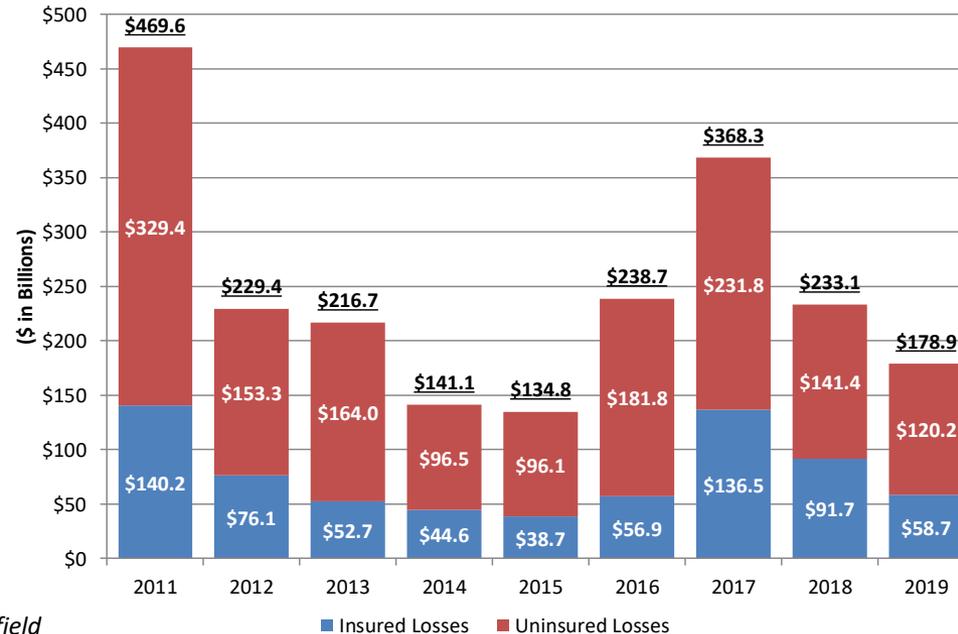
- Over the last ten years, insured losses have averaged \$75 billion with a high of \$140 billion in 2011 and a low of \$39 billion in 2015
- Lloyd's predicts COVID will cost the non-life industry approximately \$200 billion in insured and investment losses (approximately \$107 billion in underwriting losses and approximately \$96 billion in investment losses), making it the largest single loss event ever experienced by the global market

Year	Global			Insured as % of Economic
	Insured Losses (\$B)	Uninsured Losses (\$B)	Economic Losses (\$B)	
2011	\$140.2	\$329.4	\$469.6	30%
2012	\$76.1	\$153.3	\$229.4	33%
2013	\$52.7	\$164.0	\$216.7	24%
2014	\$44.6	\$96.5	\$141.1	32%
2015	\$38.7	\$96.1	\$134.8	29%
2016	\$56.9	\$181.8	\$238.7	24%
2017	\$136.5	\$231.8	\$368.3	37%
2018	\$91.7	\$141.4	\$233.1	39%
2019	\$58.7	\$120.2	\$178.9	33%

Globally there were over \$225 billion of insured losses in 2017 and 2018

Insured losses in 2019 were approximately \$60 billion, which is below the 10-year average of \$75 billion

Global Losses



Source: Aon Benfield

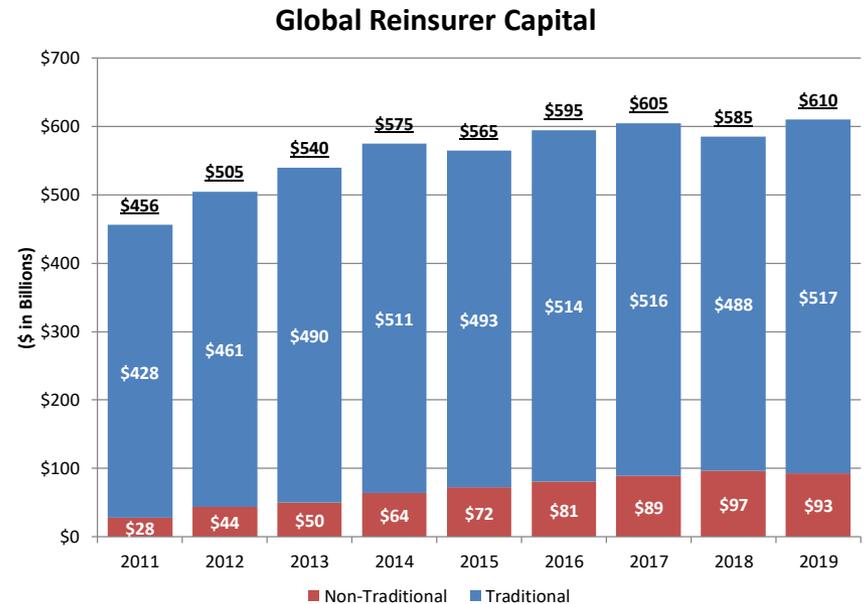
REINSURANCE MARKET OVERVIEW

- Prior to COVID, reinsurance pricing conditions were hardening in 2019 as a result of 2017 and 2018 insured losses with average price increases of 10%-20% and over 30% for loss-affected layers
- As a result of COVID, 2020 price increases are in the range of 15%-20% on average and 50%-100% in extreme cases
- A result of COVID, global reinsurance capital may be reduced by approximately \$30 billion due to investment losses and underwriting losses

- The 2017 hurricanes Harvey, Irma, and Maria caused losses of approximately 10% of global reinsurance capital, and absorbed the industry's net income for the year
- 2018 losses from Japanese typhoons and California Wildfires and Hurricane Michael were significantly less impactful and were similar to average loss years
- 2019 was a relatively benign year for losses with Japanese typhoons and Hurricane Dorian. At the end of 2019, there was over \$600 billion of global reinsurance capital
- Reinsurers are operating with an increased cost of capital as a result of increased retrocession costs and higher return expectations from third-party capital providers due to widening spreads in alternative markets such as the corporate bond market, as well as proactively trying to manage their potential risk to COVID claims

Global Reinsurer Capital						
Year	Traditional		Non-Traditional		Total	
	Amount (\$B)	YoY% Change	Amount (\$B)	YoY% Change	Amount (\$B)	YoY% Change
2011	\$428	-4%	\$28	17%	\$456	-3%
2012	\$461	8%	\$44	57%	\$505	11%
2013	\$490	6%	\$50	14%	\$540	7%
2014	\$511	4%	\$64	28%	\$575	6%
2015	\$493	-4%	\$72	13%	\$565	-2%
2016	\$514	4%	\$81	13%	\$595	5%
2017	\$516	0%	\$89	10%	\$605	2%
2018	\$488	-5%	\$97	9%	\$585	-3%
2019	\$517	6%	\$93	-4%	\$610	4%

Source: Aon Benfield



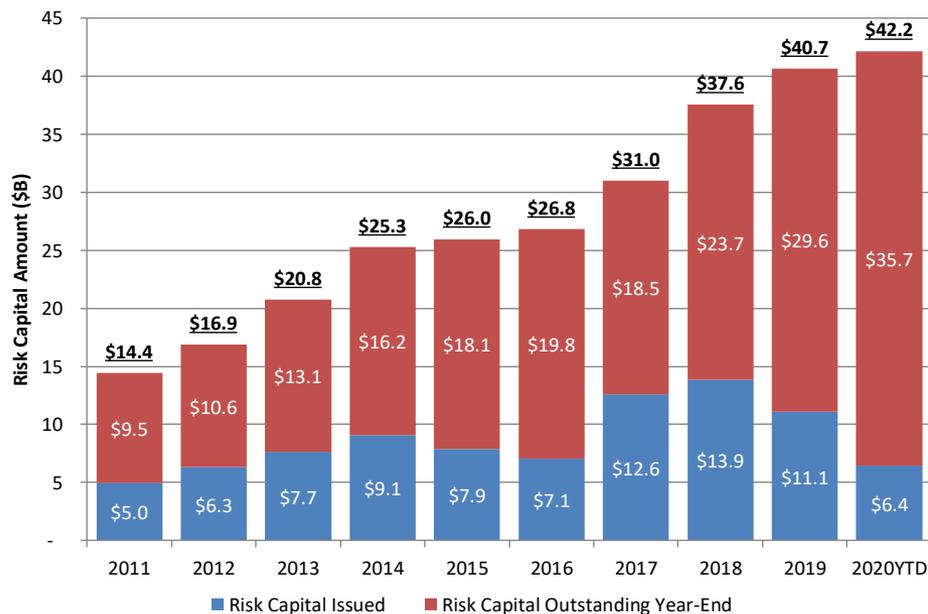
CATASTROPHE BOND MARKET OVERVIEW

- During 2019, there was \$11.1 billion and grew to a record level of \$40.7 billion
- As a result of COVID-19, the catastrophe bond market is currently disjointed and investor demand is reduced as required return on capital has increased and capital is being reserved

(\$ in MM)	Risk Capital Issued	Risk Capital Redemption Volume	Risk Capital Outstanding Year-End	% Change YoY of Risk Capital Outstanding
2011	4,970	4,395	14,448	4%
2012	6,310	3,886	16,872	17%
2013	7,668	3,786	20,754	23%
2014	9,094	4,569	25,279	22%
2015	7,898	7,217	25,960	3%
2016	7,053	6,193	26,820	3%
2017	12,560	8,344	31,036	16%
2018	13,860	7,346	37,550	21%
2019	11,094	7,959	40,685	8%
2020YTD	6,441	4,976	42,150	4%

- The catastrophe bond market has grown dramatically in recent years
- As the catastrophe bond market continues to grow, there has been expansion beyond natural catastrophe risk as a covered peril

Risk Capital Issued and Outstanding



CONCLUSION

- Conditions in the labor market have significantly worsened and will take 2-3 years to recover with skill mismatch, and structural deficiency continue to worsen
- U.S. interest rates are at historical low and are not expected to increase till the end of 2021
- Rates are expected to remain low globally and there is still over \$4 trillion of negative yielding sovereign debt and is not expected to change
- Global economic growth is also expected to remain low and not much is expected to change
- The corporate bond market has been bolstered by low interest rates and 2020 is expected to be a record year with over \$1.75 trillion in issuance to build additional reserves
- The risk transfer markets continues to harden to recover 2017-2019 global losses as well as potential losses associated with Covid-19 and to compensate for investment losses and low interest rates
- 2019 was relatively a benign year with the largest natural catastrophes losses coming from Japanese typhoons and Hurricane Dorian
- 2020 June renewals saw rate increases of 20%-35% in Florida due to the increased retrocession cost and higher return expectations
- The CEA's investment portfolio is stable and generating above market return as interest rates have significantly decreased
- We continue to evaluate our investment policy to reflect our capital structure and to update for market conditions

DISCLAIMER

The analysis or information presented herein is based upon projections and have limitations. No representation is made that it is accurate or complete or that any results indicated will be achieved. In no way is past performance indicative of future results. Changes to any prices, levels, or assumptions contained herein may have a material impact on results. Any estimates or assumptions contained herein represent our best judgment as of the date indicated and are subject to change without notice.

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Tom Hanzel
Chief Financial Officer

ITEM 9

CEA Audit Results

Mr. Hanzel will introduce CEA's independent financial auditors, Plante Moran, PLLC, to present the CEA's annual audited financial statements.

ITEM 9 • Reports of Audits of CEA's 2019 Financial Statements

Plante Moran, PLLC, CEA's independent auditor, performed and completed an audit of the CEA's financial statements for the year ended December 31, 2019

- The independent auditor conducted an audit of CEA's financial statements prepared in accordance with accounting principles generally accepted in the United States of America.

Reports of Audit for GAAP financial statements are found in *Attachment A* and consist of:

- Independent Auditor's Report
- Management's Discussion and Analysis (MD&A)
- Audited Financial Statements and accompanying notes
- Supplementary Information

ITEM 9 • Reports of Audits of CEA's 2019 Financial Statements

Analysis:

According to the Independent Auditor's Report, CEA's 2019 audited financial statements present fairly, in all material respects, the financial position of CEA, in conformity with accounting principals generally accepted in the United States of America.

Recommended Action:

No action required – information only



plante moran | Audit. Tax. Consulting.
Wealth Management.

California Earthquake Authority

Report to the Governing Board for the Year Ended December 31, 2019

June 11, 2020



California Earthquake Authority

Presentation Agenda

- Audit Process Revisited
- Required Communications Under AU 260
- Questions



California Earthquake Authority

Audit Process Revisited

- Financial statements prepared in accordance with accounting principles generally accepted in the United States of America (required by the Governmental Accounting Standards Board)



California Earthquake Authority

Audit Process Revisited

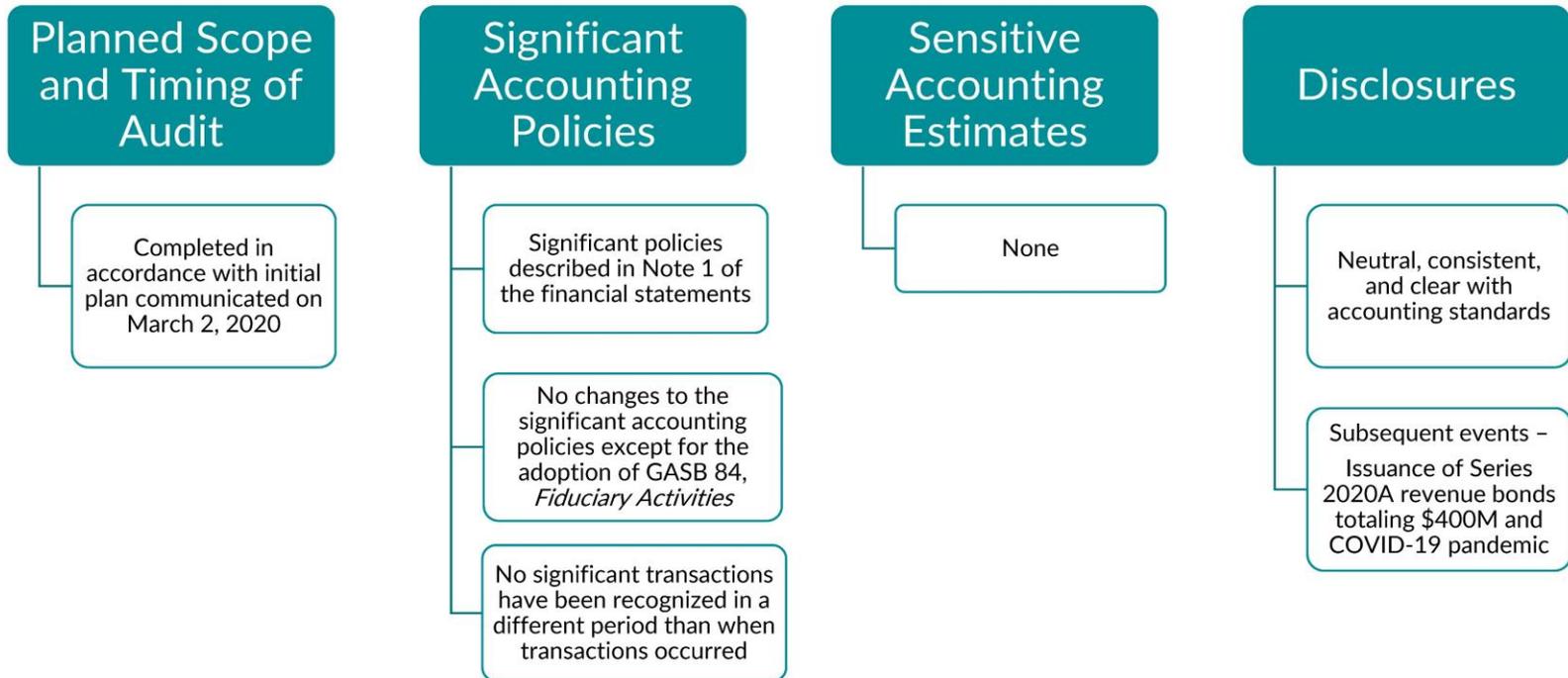
Audit Timeline

- Planning and Risk Assessments (January 2020)
- Communication with Governance (Tom Hanzel and Tom Welsh) prior to the audit (March 2, 2020)
- Internal controls testing (April 2020)
- Test of year-end balances (April 2020)
- Financial statements approved by management (May/June 2020)
- Independent Auditor's Report issued (June 2020)



California Earthquake Authority

Required Communications Under AU 260





California Earthquake Authority

Required Communications Under AU 260

Significant risks of material misstatement

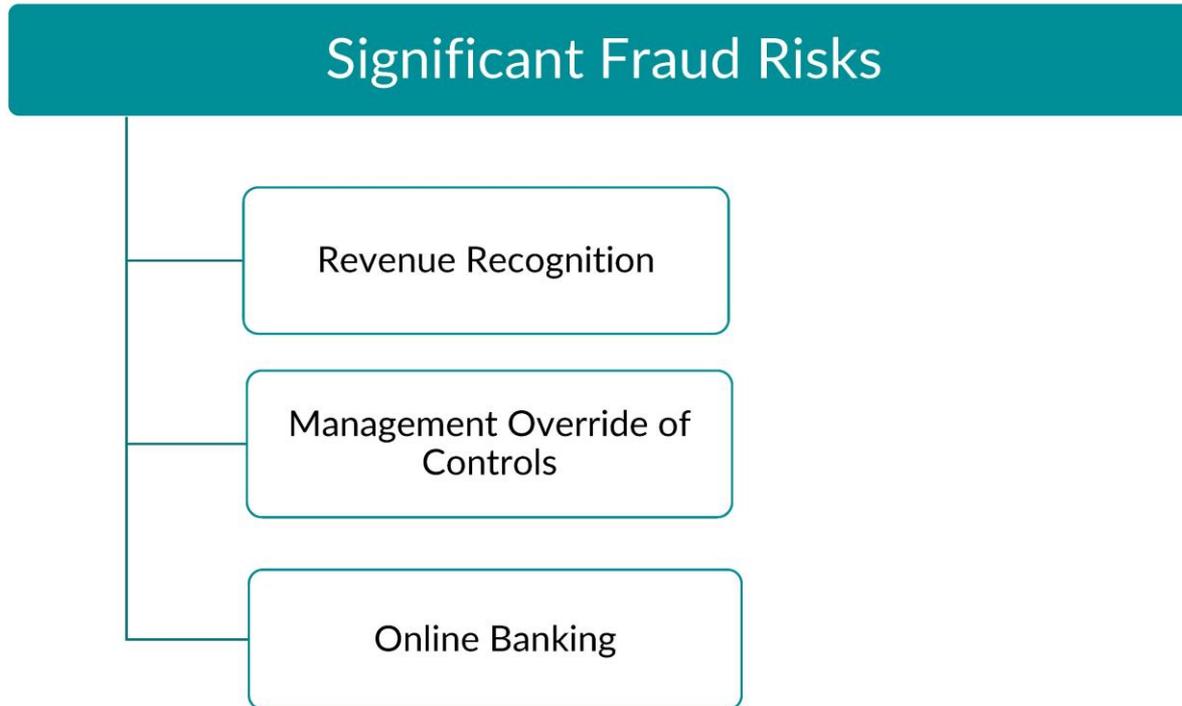
Investment Valuation

Reinsurance



California Earthquake Authority

Required Communications Under AU 260





California Earthquake Authority

Required Communications Under AU 260

Other Matters

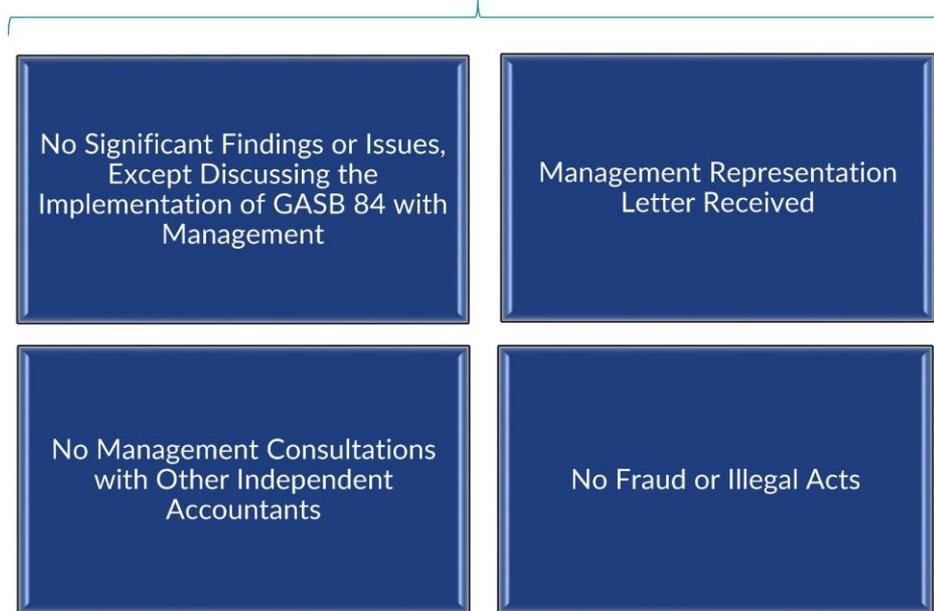




California Earthquake Authority

Required Communications Under AU 260

Other Matters





California Earthquake Authority

Required Communications Under AU 260

Plante Moran issued an unmodified “clean” opinion on the audited financial statements

Financial statements are the responsibility of management

Plante Moran is responsible for rendering an opinion on the audited financial statements

Audit completed in accordance with auditing standards generally accepted in the United States of America



California Earthquake Authority

Cost Allocation Methodology – California Wildfire Fund

- CEA served as the interim administrator from inception of the Wildfire Fund until April 2020 when CEA was named permanent administrator
- CEA's infrastructure and employees are utilized to administer the Wildfire Fund
- Cost allocation methodology was developed to document written methods and procedures for cost allocation to Wildfire Fund (starting in July 2019):
 - All direct costs incurred
 - All other general and administrative costs are allocated based on:
 - ✓ Compensation - Time distributions documented by employees on timesheets
 - ✓ Allocation of other costs based on ratio of the CEA and Wildfire Fund direct salaries and benefits charged monthly to the total



California Earthquake Authority

Questions



Thank you for the opportunity to serve the California Earthquake Authority

Michelle M. Goss, CPA, Partner
517.336.7507
Michelle.Goss@plantemoran.com

Dan VanDreumel, CPA, Senior Manager
517.336.7459
Dan.VanDreumel@plantemoran.com

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Shawna Ackerman
Chief Risk &
Actuarial Officer

ITEM 10

Enterprise Risk Management Program (ERM)

**Chief Risk and Actuarial Officer
Shawna Ackerman will deliver a
quarterly report to the Board on
the CEA enterprise-risk-
management-program.**

ITEM 10 • Enterprise Risk Management Program (ERM)

12 Priority Risks in the CEA ERM Program

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

Each priority risk is assessed from both a normal “steady-state” perspective and a “stressed” post-earthquake perspective.

ITEM 10 • Enterprise Risk Management Program (ERM)

ERM Quarterly Report (Status as of May 26, 2020)

ERM Quarterly Report	Status		
Priority Risk	Q2 2020	Outlook	Activity Last Quarter / Comments
Risk Transfer	●	Stable	
Financial Management - Investments and Accounting	●	Stable	
Policy Sales and Servicing	●	Stable	
Business Continuity	●	Stable	
IT Systems and Data Security	●	Stable	Cyber insurance secured
Legislative/Regulatory	●	Stable	
Claim Handling	●	Stable	
Legal - Compliance and Litigation	●	Stable	
Reputation	●	Stable	
Earthquake Science and Modeling	●	Stable	
Workforce	●	Stable	
Residential Mitigation Programs	●	Stable	

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

ITEM 10 • Enterprise Risk Management Program (ERM)

ERM Status Report – COVID-19 (Status as of May 26, 2020)

ERM Risk Status for COVID-19					
Priority Risks	Status	Outlook	Mitigation	Appetite and Tolerance	Activity/Comments
Financial					
Risk Transfer	●	Negative	●	●	Tracking surplus, ratings and market status
Investments	●	Stable	●	●	Will see decreases due to interest rate reductions
Accounting	●	Stable	●	●	Premium write-offs expected
Insurance					
Policy Sales and Servicing	●	Stable	●	●	Possible longer-term decrease in take-up
Claim Handling	●	Stable	●	●	No impact to CEA claims
Earthquake Science and Modeling	●	Stable	●	●	No impact. Critical vendors have been contacted and are available
Residential Mitigation Programs	●	Stable	●	●	Retrofitting program is underway
Operational					
Business Continuity	●	Stable	●	●	Good monitoring in place. All critical vendors contacted.
IT Systems and Data Security	●	Stable	●	●	Expecting and observed increase in phishing; intermittent slowdowns in connectivity
Legal - Compliance and Litigation	●	Stable	●	●	
Workforce	●	Stable	●	●	100% work-from-home since mid-March
Strategic					
Legislative/Regulatory	●	Stable	●	●	Monitoring activities
Reputation	●	Stable	●	●	Website, messaging
					<i>May 26, 2020</i>

ITEM 10 • Enterprise Risk Management Program (ERM)

Risk and Compliance Committee

- Formal Risk and Compliance Committee established to integrate with the organization's Enterprise Risk Management program and promote a culture of compliance throughout CEA.
- The Committee's main responsibilities are:
 - Ensuring policies are appropriate, comprehensive, and consistent with applicable law
 - Oversees CEA policy management including policy creation, review, and approval
 - Reviewing and advising on risks and mitigating controls
 - Reviewing department assessment reports
 - Approving/disapproving of revisions or proposals of new Policies
- First steps
 - Use existing expertise to perform a complete review of current CEA policies
 - Identify any gaps

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Michael Melavic
Chief Information
Officer

ITEM 11

Data Hosting and Related IT Services

Chief Information Officer Michael Melavic will provide a status report on the purchase agreement with Microsoft for Azure cloud data hosting and related IT services.

ITEM 11 • Data Hosting and Related IT Services

The CEA spend on Microsoft Azure services has steadily risen over the last four years. As illustrated in the table below:

Year	Total Spend	% Change	Justification
2016	\$66,912	N/A	Year 1 of the three year Microsoft Azure commitment; Microsoft Azure testing and migration begins
2017	\$390,057	+483%	Year 2 of the three year Microsoft Azure commitment; Migration of CEA functions and data continues; CEA office functions and files, including email, migrated to Azure; MS SharePoint deployed; Begin migration of website functions to Azure
2018	\$725,697	+86%	Year 3 of the three year Microsoft Azure commitment; CEA hosts two CPP PIs; EBB system migrated to Azure; Increase in use and storage within MS SharePoint; Complete migration of website functions to Azure
2019	\$1,007,656	+39%	1 year extension of the three year Microsoft Azure commitment; CEA hosts a third CPP PI; Preparations to migrate the insurance data repository begin; Migration to MS Teams begins

ITEM 11 • Data Hosting and Related IT Services

The projected MS Azure spend for 2020 is \$1,202,399 which would be a 19% increase from 2019 and include the cost to add a participating insurer (Toggle) to CPP and host the CEA insurance repository. The six-month trending (November 2019 through April 2020) show the MS Azure Daily spend increasing from \$3,086 to \$3,459 which equals a 12.1% increase (\$373/day).

The MS Azure cost to add a participating insurer to CPP is \$136/day or \$49,640 per year. The MS Azure cost to migrate the CEA insurance repository to the cloud is \$256/day or \$93,440 per year. These two costs equal \$392/day, which accounts for the 12.1% increase.

ITEM 11 • Data Hosting and Related IT Services

The CEA's current MS Azure spend by function is illustrated in the table below:

Function	% of Total
Core IT Services (security, software, data sharing, communications, etc.)	30.8%
Centralized Policy Processing (CPP – currently 9 Participating Insurers)	20.3%
Insurance Data System of Record (EPICenter Data Repository)	9.7%
Earthquake Brace & Bolt System (EBB)	8.6%
Equacat Actuary Modelling Platform (EQE)	5.9%
CEA Premium Quoter	5.9%
Insurance Data Warehouse	5.5%
CEA Geographical Information System (GIS – geographic insurance trending)	4.5%
CEA Website (EQA)	3.4%
CA Department of Insurance – Agent Data Feed and Storage	1.1%
9 other services and functions including Finance, Secure File Transfer, & Ticketing	<u>4.3%</u>
	100%

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Sonya Berry
CPP Portfolio
Manager

ITEM 12

Centralized Policy Processing Program

CPP Portfolio Manager, Ms. Sonya Berry, will provide a status report on CEA's Centralized Policy Processing program (CPP).

ITEM 12 • Centralized Policy Processing Program

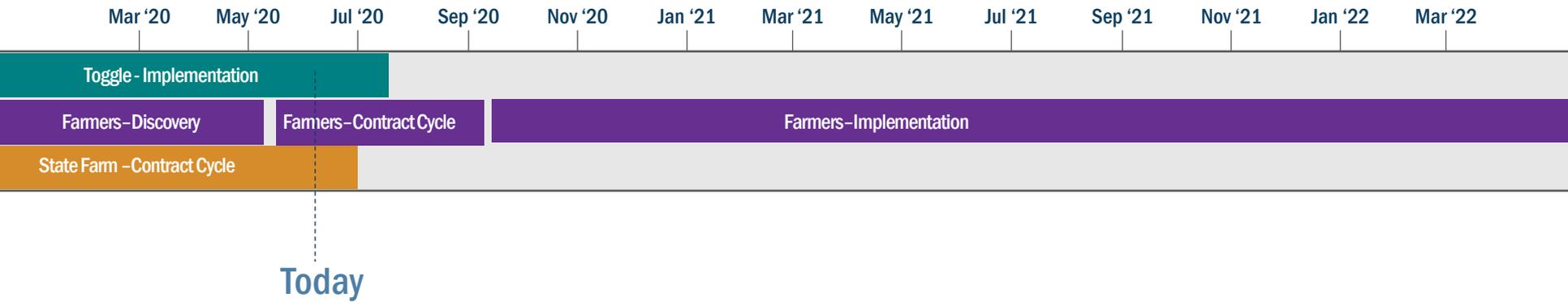
2020 Activities

- **Ongoing CPP Activities**

- Toggle Implementation: Project has been delayed due to Toggle resources being pulled away to work on internal projects related to COVID-19 response. The Toggle team has recently reengaged and is actively working to go-live on CPP in July 2020.
- Farmers: Discovery meetings are complete and contract review cycle is underway. Estimated go-live is scheduled for 2Q2021
- State Farm: State Farm continues to review the CPP contract and a project implementation is not scheduled.

ITEM 12 • Centralized Policy Processing Program

2020 Activities



ITEM 12 • Centralized Policy Processing Program

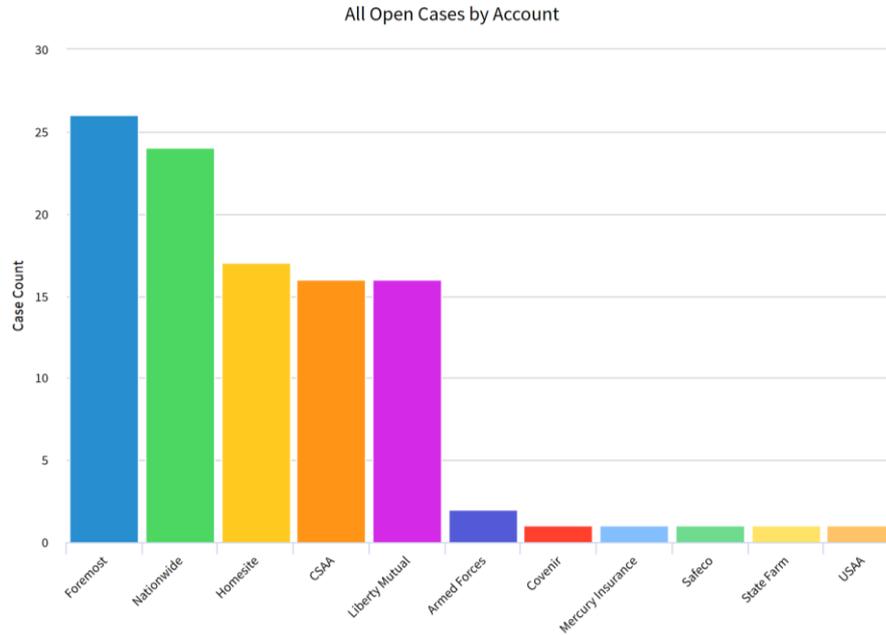
2020 Activities

- **CPP Internal Ticketing Software Replacement**

- Previous ticketing platform, Desk.com, retired Q12020
- CPP team replaced with ServiceNow
- ServiceNow provides new functionality:
 - Automated workflows
 - PI's can submit and manage tickets for support with CPP and EpiCenter
 - Standard and ad-hoc reporting
 - Metrics to monitor service level agreements

ITEM 12 • Centralized Policy Processing Program

CPP Internal Ticketing Software Replacement



Account	Case Count	Percentage of Count
Foremost	26	24.53%
Nationwide	24	22.64%
Homesite	17	16.04%
CSAA	16	15.09%
Liberty Mutual	16	15.09%
Armed Forces	2	1.89%
Covenir	1	0.94%
Mercury Insurance	1	0.94%
Safeco	1	0.94%
State Farm	1	0.94%
USAA	1	0.94%
Total	106	100%

ITEM 12 • Centralized Policy Processing Program

California Earthquake Authority CPP Diamond Budget & Spending Tracking as of March 31, 2020

Description	Total Est Spend presented at Dec' 19 board meeting	Actual Spend from inception - 03/31/2020	Projected spend from 03/31/2020 - 2026	Total New Est	Variance Orig to New
1. Standard Implementation Fee approved \$85,500 x 24 PI's actual = 9 x \$85,500	2,052,000	769,500	1,282,500	2,052,000	0
2. Policy Conversion Fee approved = 1,100,000 (PIF Count) x \$5 actual = 13% of total PIF of 1,100,000	5,500,000	715,000	4,785,000	5,500,000	0
3. Transition Services Fee (a) approved = \$25,000 x 24 PI's actual = \$25,000 x 9 PI's	600,000	225,000	375,000	600,000	0
4. Transition Services Fee (b) approved = 1,100,000 (PIF Count) x \$5 actual = 1,100,000 x 13% x \$5 actual = discovery for Farmers and State Farm	5,500,000	715,000 958,875	3,826,125	5,500,000	0
5. Master Service Agreement Expenses <i>The original MSA agreement (Sept'15) along with the 4 amendments allows for a total of \$5mm of MSA spend.</i>	3,579,639	3,323,002	256,638	3,579,639	0
6. Maintenance/Hosting/Companion/ Software Services Fees <i>New Insuresoft SILA Hosting fees, companion software fees, and maintenance service fees.</i>	4,574,031	2,488,510	2,085,521	4,574,031	0
7. Initial Maintenance Svs & Hosting Expenses <i>Hosting expense for original 6 Blue Cod PI's. Amounts were included in the prior signed project assignments with Insuresoft \$333,776. Included is Maint. SVS costs of \$400K</i>	733,776	733,776	0	733,776	0
8. Initial License Fee <i>One time fee to Insuresoft paid in FY 2015</i>	500,000	500,000	0	500,000	0
Total Spend	23,039,446	10,428,663	12,610,784	23,039,446	0

PUBLIC COMMENT

**To participate in Public Comment press *9
and the moderator will unmute you**



Janiele Maffei
Chief Mitigation
Officer

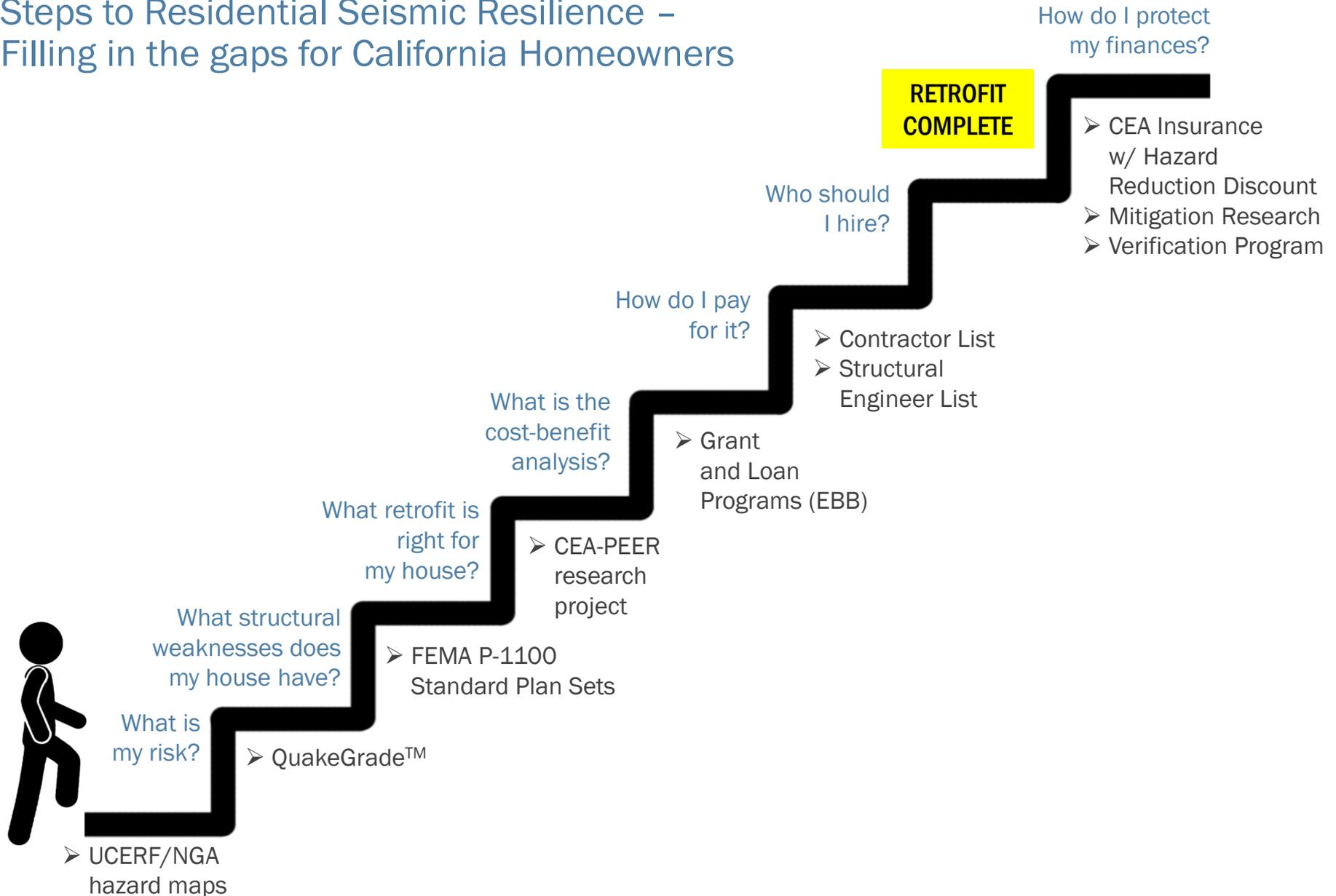
ITEM 13

CEA Mitigation and Research Programs

Chief Mitigation Officer Janiele Maffei will update the Board on developments in the CEA mitigation programs (CRMP Earthquake Brace+Bolt, and CEA Brace+Bolt) and the CEA Research Program.

ITEM 13 • CEA Mitigation and Research Programs

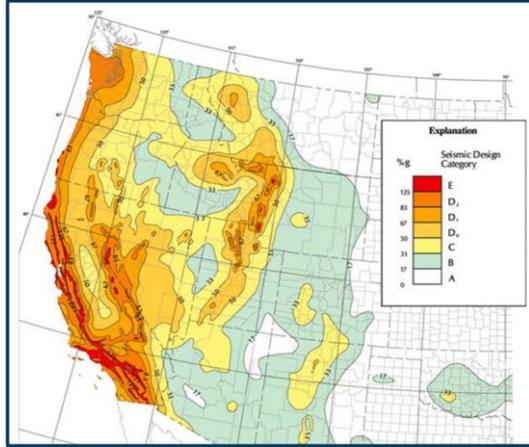
Steps to Residential Seismic Resilience –
Filling in the gaps for California Homeowners



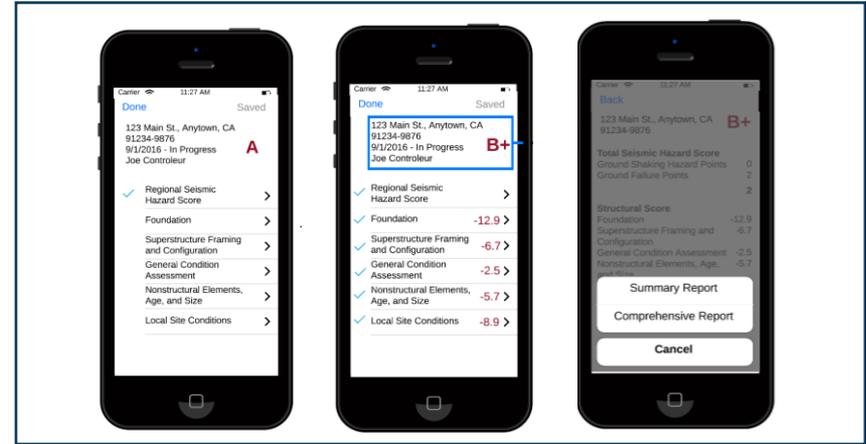
ITEM 13 • CEA Mitigation and Research Programs

CEA Research Providing Answers

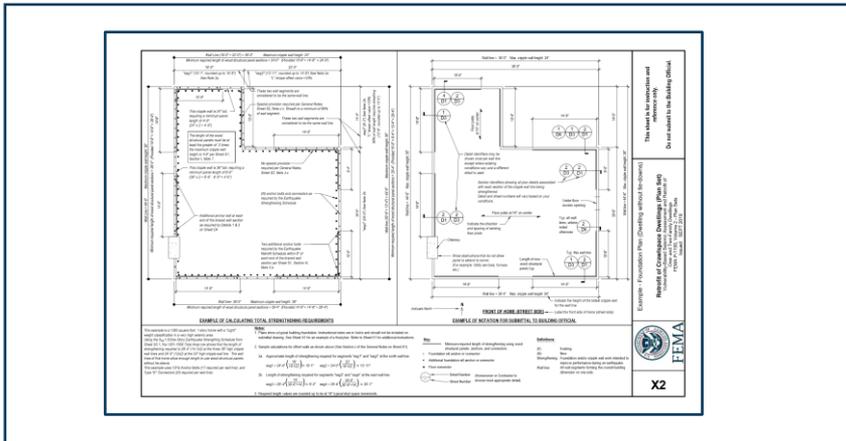
UCERF 3 – Hazard science funding



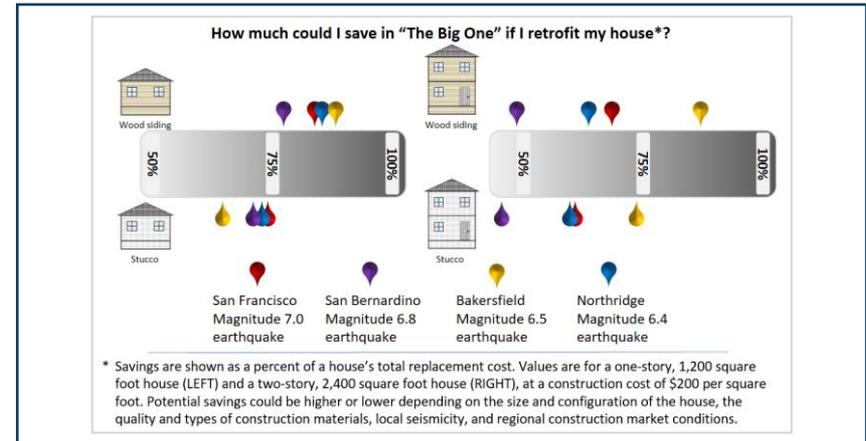
QuakeGrade™ – Simplified seismic assessment



FEMA P-1100– Plan sets for retrofit



CEA/PEER Project – \$\$ retrofit benefit



ITEM 13 • CEA Mitigation and Research Programs

CEA Research Providing Answers

Earthquake Brace and Bolt – retrofit grants

Contractor/engineer/inspector directories

Earthquake Insurance – Financial protection

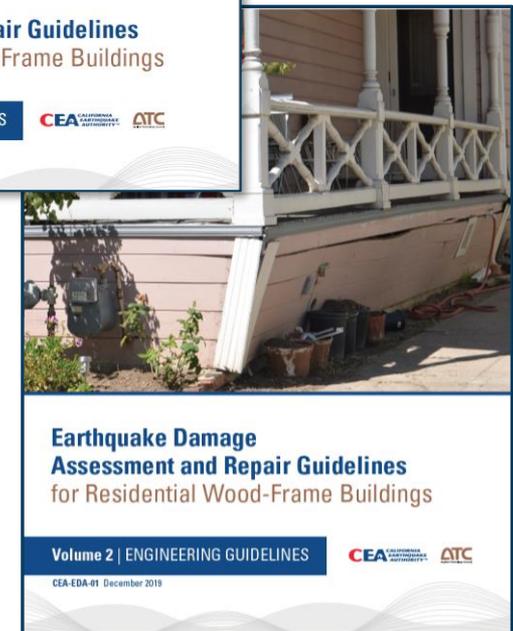
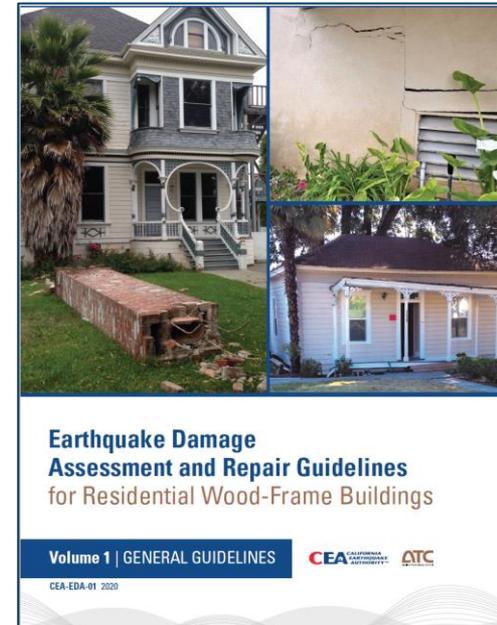
Earthquake Insurance – Retrofit discount

ITEM 13 • CEA Mitigation and Research Programs

Damage Assessment and Repair – General and Engineering Guidelines

CEA Research informed the guidelines:

- UCERF3
- NGA WEST2
- FEMA P-50 / QuakeGrade™
- FEMA P-1100
- PEER/CEA retrofit project



ITEM 13 • CEA Mitigation and Research Programs

Mitigation Grant Programs

Program	Funding Source	Goal	Paid to Date	In Process
2019 CRMP EBB	CEA Loss Mitigation Fund	1,000	557	27
2019 & 2020 FEMA EBB	FEMA HMGP	6,700 +	2,016	1,344
CEA BB	CEA funding approved by CEA board	10,000 +	542	105

PUBLIC COMMENT

ITEM 14

Public Comment

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.

To participate in Public Comment press *9 and the moderator will unmute you

ITEM 15

Closed
Session

The Board will meet in closed session to discuss personnel matters, as permitted by California Government Code section 11126, subdivision (a).

CLOSED SESSION

**Thank you for your patience
Public Session will convene shortly**

ITEM 16

Adjournment

**Thank you for attending this meeting
of the California Earthquake Authority
Governing Board.**

Media Contact

Sarah Sol

(916) 661-5502 (Direct)

ssol@calquake.com

General Information

Shannon McEuen

(916) 661-5430 (Direct)

Toll free (877) 797-4300