Closing the Protection Gap from Both Directions

CEA CALIFORNIA EARTHQUAKE AUTHORITY™

Residential Earthquake Insurance

- 1.1 Million Policyholders
- Publicly Managed/Privately Financed
- Not for Profit

Residential Earthquake Mitigation Grants

- Pre-1980 Homes/$3,000 Grant
- Retrofits to date: 11,000
- 2020 Goal: 4,400 Retrofits

California Wildfire Fund

- Coverage for Wildfires Caused by Investor Utilities
- $21 Billion Fund
- Overseen by California Catastrophe Response Council

AAA Insurance

StateFarm®

FARMERS INSURANCE

USAA®

California FAIR Plan PROPERTY INSURANCE

Allied Insurance
a Nationwide Insurance® company

Toggle℠
A Farmers® Company

Armed Forces Insurance
OUR MISSION IS YOU.®

Automobile Club of Southern California AAA

CommerceWest INSURANCE
A MAPFRE COMPANY

MERCURY CASUALTY COMPANY

Allstate.
You're in good hands.

FOREMOST INSURANCE GROUP

Nationwide®

Safeco Insurance℠
A Liberty Mutual Company

Golden Eagle Insurance
Member of Liberty Mutual Group

Liberty Mutual INSURANCE

MAPFRE INSURANCE

Crestbrook
a Nationwide Insurance® company

PROGRESSIVE

Amica
AUTO HOME LIFE

Encompass
Creating protection around you

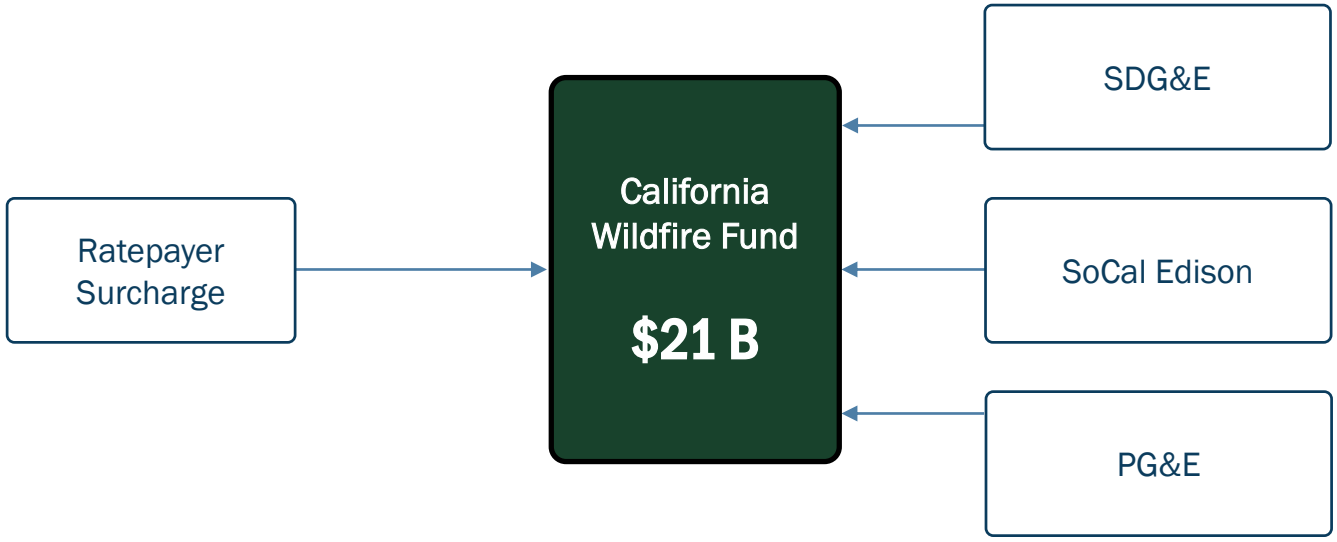
Homesite
HOME INSURANCE

Hyundai Insurance

ASI™

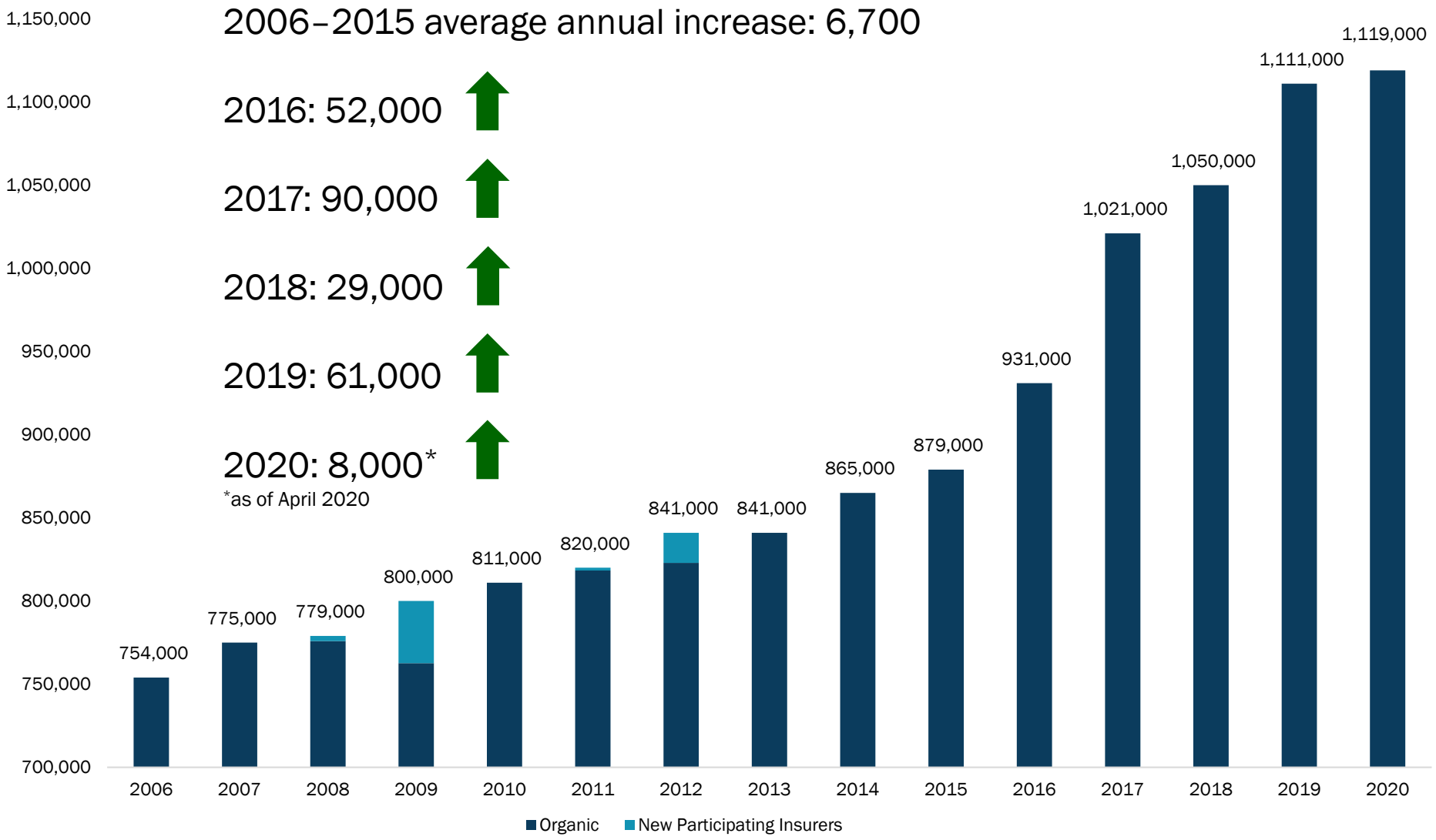
Coverage for Wildfires Caused by Investor Owned Utilities

Ratepayers $10.5 B + **Utilities $10.5 B**



Narrowing the Protection Gap: Insurance

More Californians Choosing CEA



Narrowing the Protection Gap: Mitigation

Earthquake Vulnerabilities

Cripple Wall

Living-space-over garage

Hillside House

Chimney

Narrowing the Protection Gap: Mitigation

Cripple Wall

House shifted and dropped

Cripple wall collapsed

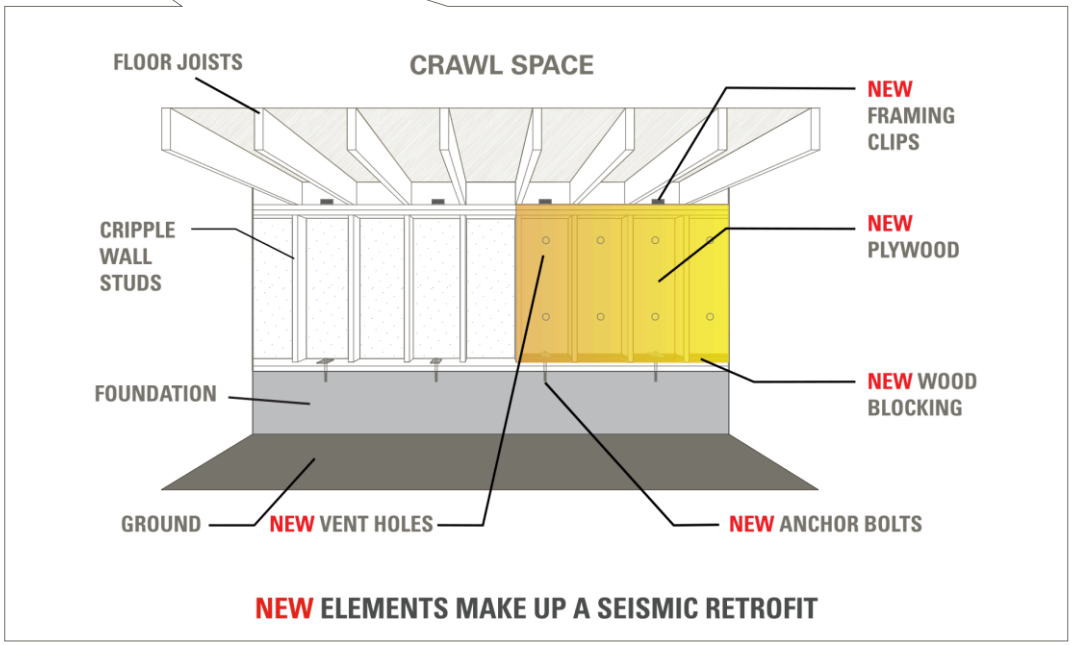
2014 South Napa M6.0 Earthquake damage

Narrowing the Protection Gap: Mitigation

EBB Retrofit: Cripple Wall

Crawl space vents and access door

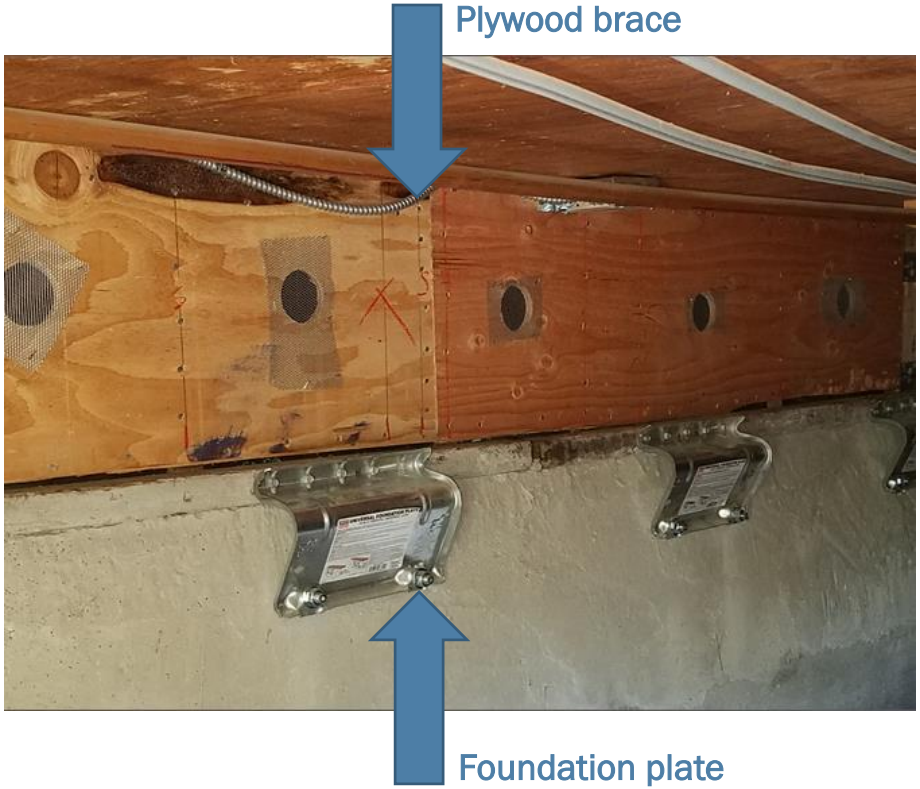
Several steps to the house



Earthquake Brace + Bolt

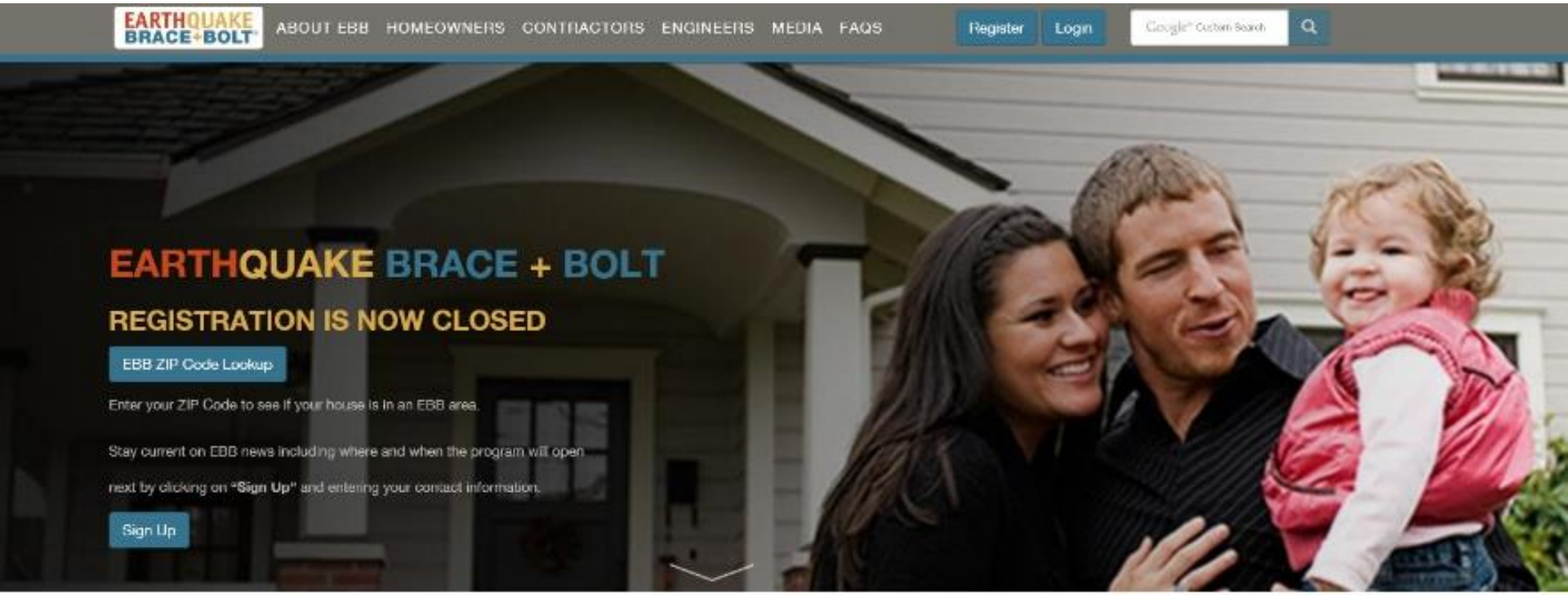
Cripple Wall Retrofit: Framing Clips, Foundation Plates, and Plywood

Crawlspace **Before** Retrofit



Crawlspace **After** Retrofit

EarthquakeBraceBolt.com



11,000 Retrofits Over Last 5 Years

Grant recipients are not required to be a CEA policyholder

CEA policyholders may be eligible for up to a 25% premium discount.

PROBLEM

State funded mitigation grants potentially subject to federal taxation.

State Funded Mitigation Programs

California

EARTHQUAKE BRACE+BOLT
Funds To Strengthen Your Foundation®

Alabama

STRENGTHEN ALABAMA HOMES

North Carolina

STRENGTHEN YOUR ROOF
NCIUA pilot program to build better beach communities

South Carolina

SC DOI

Safe Home Program

H.R. 5494: Catastrophe Loss Mitigation Incentive and Tax Parity Act of 2019

Establishes tax exempt status for grants from state-funded residential mitigation programs for earthquake, windstorm and wildfire.

Sponsor: Rep. Mike Thompson (D, CA)

Co-Sponsors:

California

Rep. Aguilar (D)
Rep. Bera (D)
Rep. Brownley (D)
Rep. Calvert (R)
Rep. Chu (D)
Rep. Cisneros (D)
Rep. Cook (R)
Rep. Garamendi (D)
Rep. Gomez (D)
Rep. Panetta (D)
Rep. Sanchez (D)
Rep. Speier (D)
Rep. Swalwell (D)

Alabama

Rep. Byrne (R)
Rep. Rogers (R)
Rep. Sewell (D)

South Carolina

Rep. Rice (R)

North Carolina

Rep. Rouzer (R)

Wisconsin

Rep. Moore (D)

Goal: Pass H.R. 5494 in 2020

OPPORTUNITY

Enable CEA to provide approximately $50 million per year for natural catastrophe mitigation in California.

Concept: Funding for Mitigation

CEA Return Period	Probability	2020 Estimated CEA Loss	Reoccurrence of Previous Earthquakes	2020 Claim Paying Capacity 1 in 400 Return Period
1 in 400	.25%	$19 B		$19 B
1 in 350	.28%	$17.7 B		IAL $1.7 B
1 in 300	.33%	$16.3 B		CEA Surcharge $1 B
1 in 250	.40%	$14.9 B		Bond Proceeds $1.1 B
1 in 200	.50%	$13 B	1906 San Francisco $13 B	Reinsurance $9.2 B
1 in 150	.66%	$11 B		
1 in 100	1%	$8.6 B	1994 Northridge $8 B	
			1868 Hayward $6 B	
1 in 50	2%	$5.2 B		Capital $6 B
1 in 10	10%	$630 M	>$1.3 B 1989 Loma Prieta 2014 Napa 2019 Ridgecrest	

CEA Claim Paying Capacity

Rating Agencies require CEA to meet an extremely conservative benchmark: enough claim paying capability for a 1 in 400 year return period.

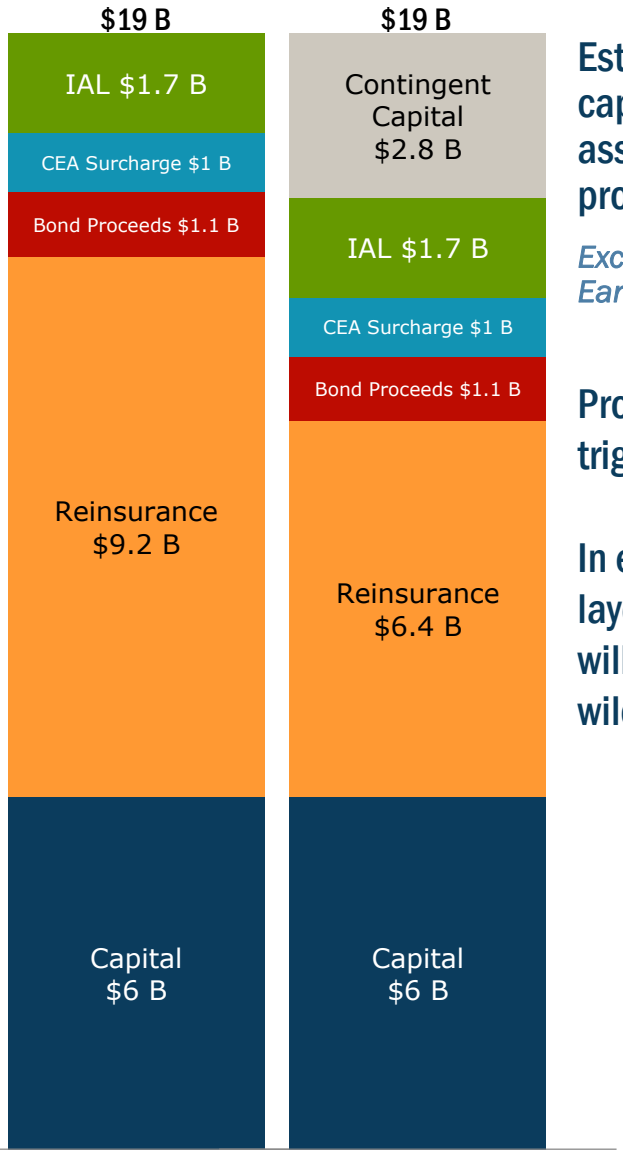
For 2020, CEA must have access to $19 billion to pay for potential claims. The probability of incurring this much in covered claims is ¼ of 1%.

To meet this benchmark this year, CEA will spend nearly $400 million in exchange for $9.2 billion of claim paying capacity.

Since opening in 1996, CEA has spent $5 billion for its reinsurance protection. Because California has not been hit by a catastrophic earthquake during that time, reinsurers have paid a total of $250,000 in reinsurance claims over that same period.

Concept: Funding for Mitigation

CEA Return Period	Probability	2020 Estimated CEA Loss	Reoccurrence of Previous Earthquakes
1 in 400	.25%	$19 B	
1 in 350	.28%	$17.7 B	
1 in 300	.33%	$16.3 B	
1 in 250	.40%	$14.9 B	
1 in 200	.50%	$13 B	1906 San Francisco $13 B
1 in 150	.66%	$11 B	
1 in 100	1%	$8.6 B	1994 Northridge $8 B
			1868 Hayward $6 B
1 in 50	2%	$5.2 B	
1 in 10	10%	$630 M	>$1.3 B 1989 Loma Prieta 2014 Napa 2019 Ridgecrest



Establish a new layer of a contingent capital, funded by a post-event assessment (maximum: 2%) on most property and casualty lines.

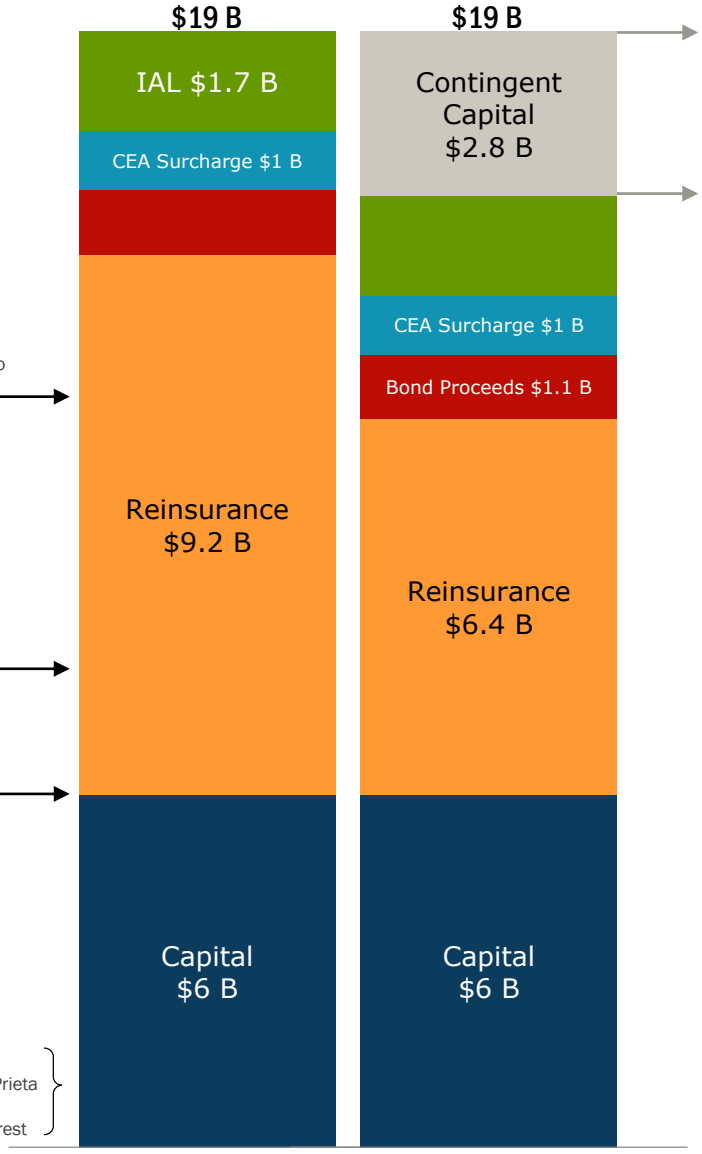
Excluding: Work Comp, Med Mal and Earthquake

Probability of any assessment being triggered is less than ⅓ of 1%.

In exchange for the Contingent Capital layer approximately $50 M/year will be invested in earthquake and wildfire mitigation.

Concept: Funding for Mitigation

CEA Return Period	Probability	2020 Estimated CEA Loss	Reoccurrence of Previous Earthquakes
1 in 400	.25%	$19 B	
1 in 350	.28%	$17.7 B	
1 in 300	.33%	$16.3 B	
1 in 250	.40%	$14.9 B	
1 in 200	.50%	$13 B	1906 San Francisco $13 B
1 in 150	.66%	$11 B	
1 in 100	1%	$8.6 B	1994 Northridge $8 B
			1868 Hayward $6 B
1 in 50	2%	$5.2 B	
1 in 10	10%	$630 M	>$1.3 B 1989 Loma Prieta 2014 Napa 2019 Ridgecrest



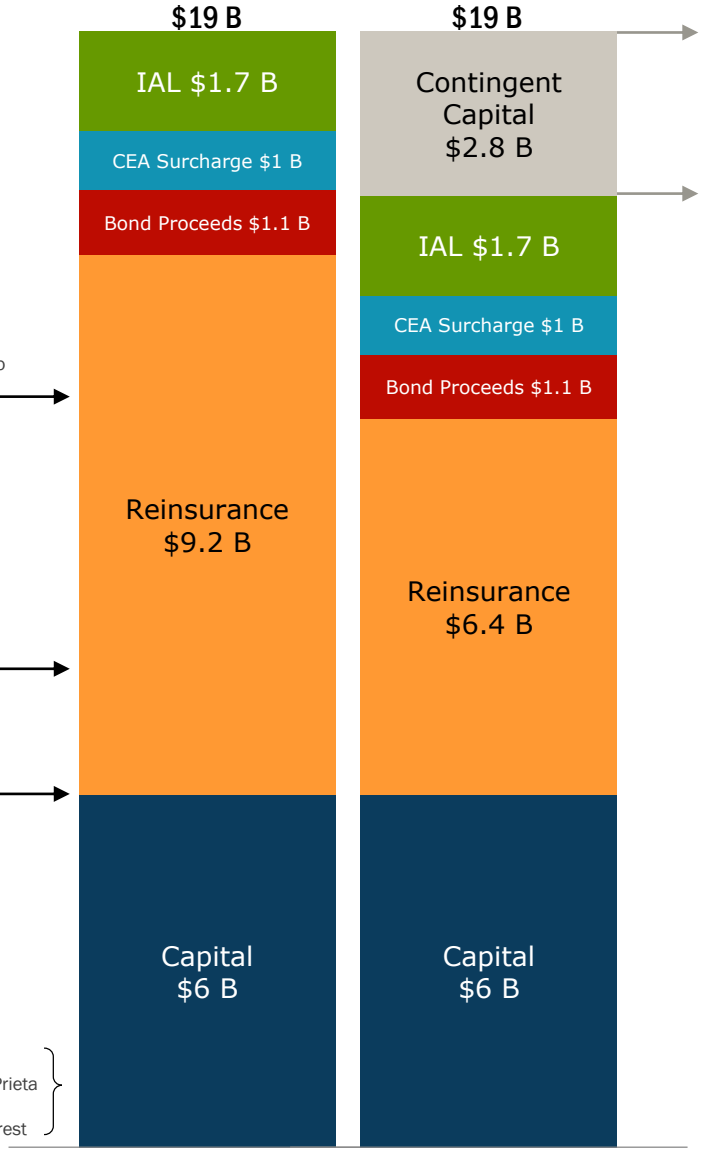
Potential Assessment %

Probability of a maximum assessment is ¼ of 1%.

A reoccurrence of any of the most damaging earthquakes in California history would not trigger a post-event assessment.

Concept: Funding for Mitigation

CEA Return Period	Probability	2020 Estimated CEA Loss	Reoccurrence of Previous Earthquakes
1 in 400	.25%	$19 B	
1 in 350	.28%	$17.7 B	
1 in 300	.33%	$16.3 B	
1 in 250	.40%	$14.9 B	
1 in 200	.50%	$13 B	1906 San Francisco $13 B
1 in 150	.66%	$11 B	
1 in 100	1%	$8.6 B	1994 Northridge $8 B
			1868 Hayward $6 B
1 in 50	2%	$5.2 B	
1 in 10	10%	$630 M	>$1.3 B 1989 Loma Prieta 2014 Napa 2019 Ridgecrest

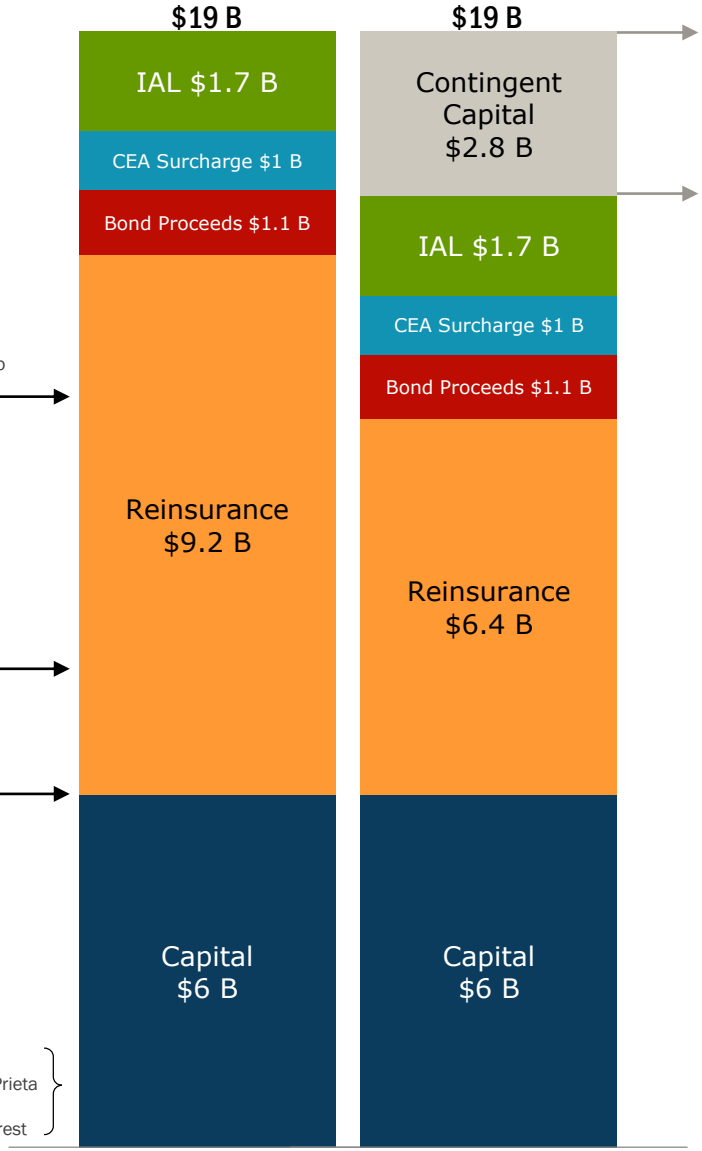


Homeowners Insurance Average Annual Premium: $1,100

Maximum Assessment
Annually: $11.00
Monthly: $0.91

Concept: Funding for Mitigation

CEA Return Period	Probability	2020 Estimated CEA Loss	Reoccurrence of Previous Earthquakes
1 in 400	.25%	$19 B	
1 in 350	.28%	$17.7 B	
1 in 300	.33%	$16.3 B	
1 in 250	.40%	$14.9 B	
1 in 200	.50%	$13 B	1906 San Francisco $13 B
1 in 150	.66%	$11 B	
1 in 100	1%	$8.6 B	1994 Northridge $8 B
			1868 Hayward $6 B
1 in 50	2%	$5.2 B	
1 in 10	10%	$630 M	>$1.3 B 1989 Loma Prieta 2014 Napa 2019 Ridgecrest



Auto Insurance
Average Annual Premium: $1200

Maximum Assessment
Annually: $12.00
Monthly: $1.00

Projection: Assuming 7% Exposure Growth