

# NAIC Center for Insurance Policy and Research (CIPR) – Catastrophe Modeling Center of Excellence

## Climate Risk and Physical Resiliency Programs

(Jeffrey Czajkowski on behalf of)  
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Catastrophe Risk Resilience Specialist



## Examples of Fortified Homes' Resilience:

### •Hurricane Michael (2018):

Fortified homes in Florida's Panhandle demonstrated their resilience against the powerful Category 5 hurricane.

### •Hurricane Sally (2020):

More than 17,000 Fortified homes in Alabama and Florida withstood the storm, with 95% experiencing little to no damage.

### •Hurricane Ida (2021):

Fortified homes in Louisiana and other affected areas showed significantly reduced damage compared to non-Fortified structures.

FORBES > REAL ESTATE

# Hurricane Season 2024 Is Now Underway: Is Your Home Fortified?

Jamie Gold Senior Contributor

Jamie Gold writes about wellness design and related housing topics.

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Jun 4, 2024, 06:00am EDT

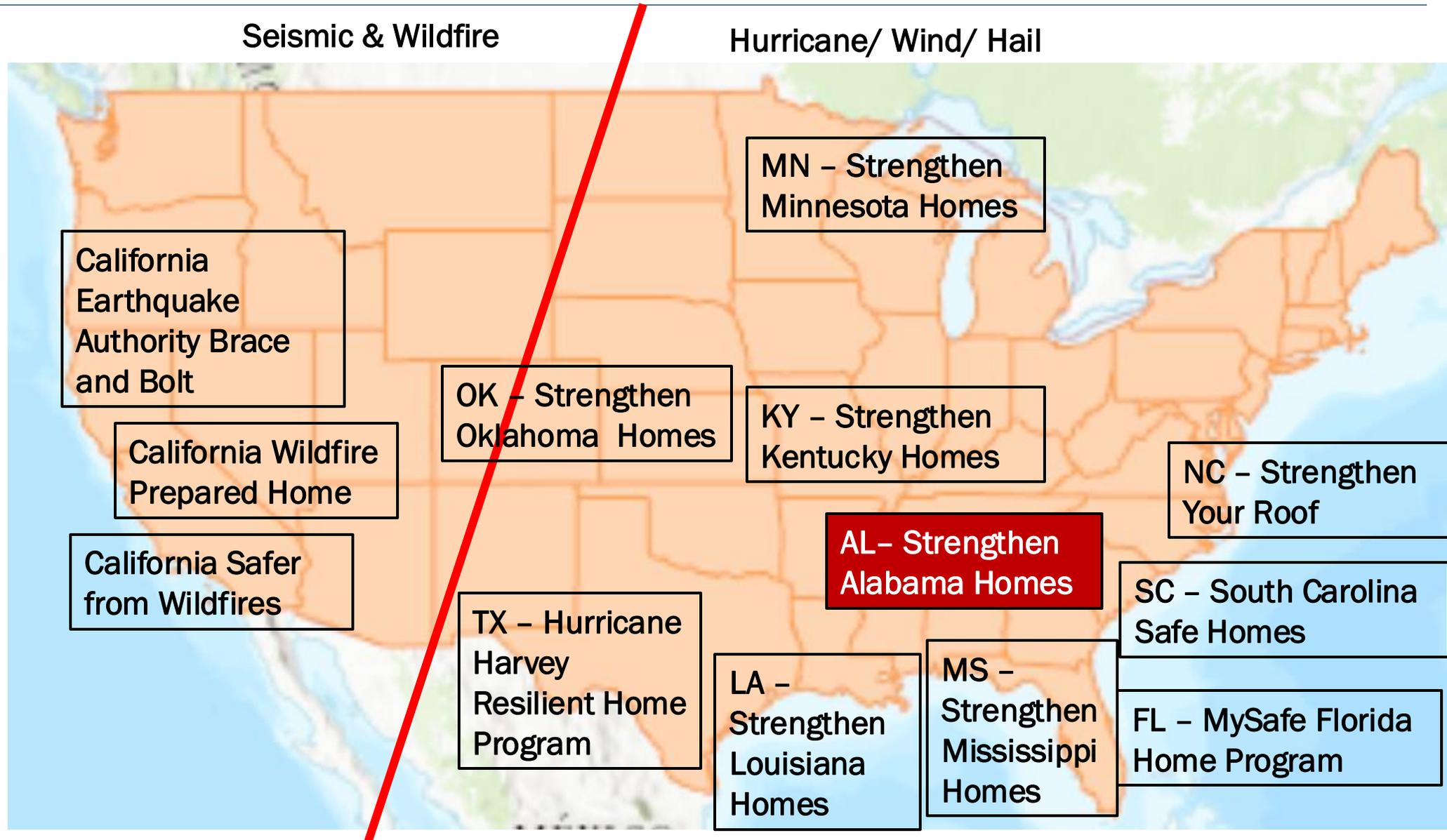


Homes built to Fortified standards withstood the kind of damage seen here from 2018's Hurricane ...

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# State Property Loss Mitigation (Retrofit Grant) Programs

- Resilience efforts involve numerous stakeholders
- Leverage existing knowledge & experience to build consistency of approach and competency





**Number of Fortified Homes  
Nationally**

Totals of Homes (new and existing)  
FORTIFIED by state

***As of 6/19/24***

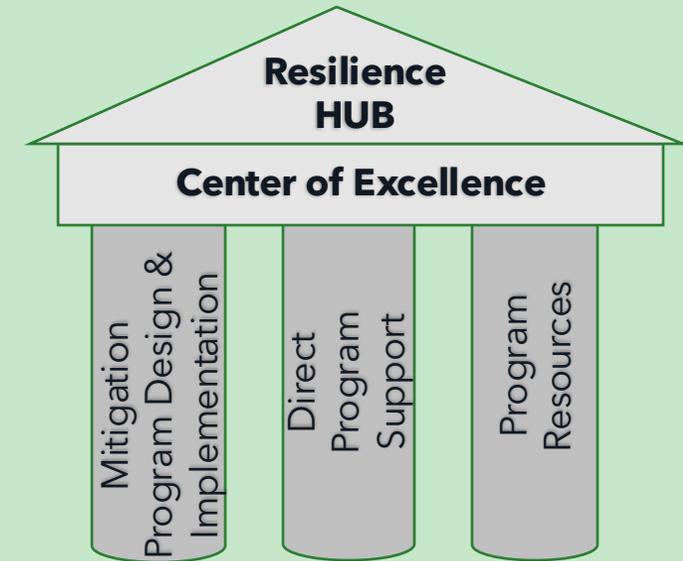
State	Gold	Roof	Silver	Total
<b>Alabama</b>	<b>24989</b>	<b>25044</b>	<b>744</b>	<b>50777</b>
North Carolina	299	11053	31	<b>11383</b>
Louisiana	429	2222	41	<b>2692</b>
Mississippi	125	740	58	<b>923</b>
South Carolina	8	250	4	<b>262</b>
Florida	104	142	5	<b>251</b>
Texas	22	65	3	<b>90</b>
Kentucky	0	21	11	<b>32</b>
Oklahoma	7	13	2	<b>22</b>
Connecticut	3	13	0	<b>16</b>
Virginia	0	8	0	<b>8</b>
Arkansas	1	5	0	<b>6</b>
Missouri	0	5	0	<b>5</b>
New York	1	3	1	<b>5</b>
Ohio	0	4	0	<b>4</b>
Rhode Island	2	2	0	<b>4</b>
Minnesota	1	1	1	<b>3</b>
Tennessee	0	3	0	<b>3</b>
Wisconsin	2	1	0	<b>3</b>
Colorado	1	1	0	<b>2</b>
Georgia	0	2	0	<b>2</b>
Iowa	0	2	0	<b>2</b>
Massachusetts	1	1	0	<b>2</b>
Oregon	0	2	0	<b>2</b>
Indiana	0	1	0	<b>1</b>
Michigan	0	1	0	<b>1</b>
Nebraska	0	1	0	<b>1</b>
New Jersey	0	1	0	<b>1</b>
<b>Total</b>	<b>25995</b>	<b>39607</b>	<b>901</b>	<b>66503</b>



- **CAT COE Established since July 2022**
- **Resilience HUB active in 2024**

To provide regulators with:

1. Engagement team to assist with the mitigation program design, implementation.
2. Provide direct program support.
3. Provide resources to support insurance commissioners in developing resilience in their state.



### **Team Members Contact Information:**

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# Mitigation and Resilience Assistance - **Resilience HUB**

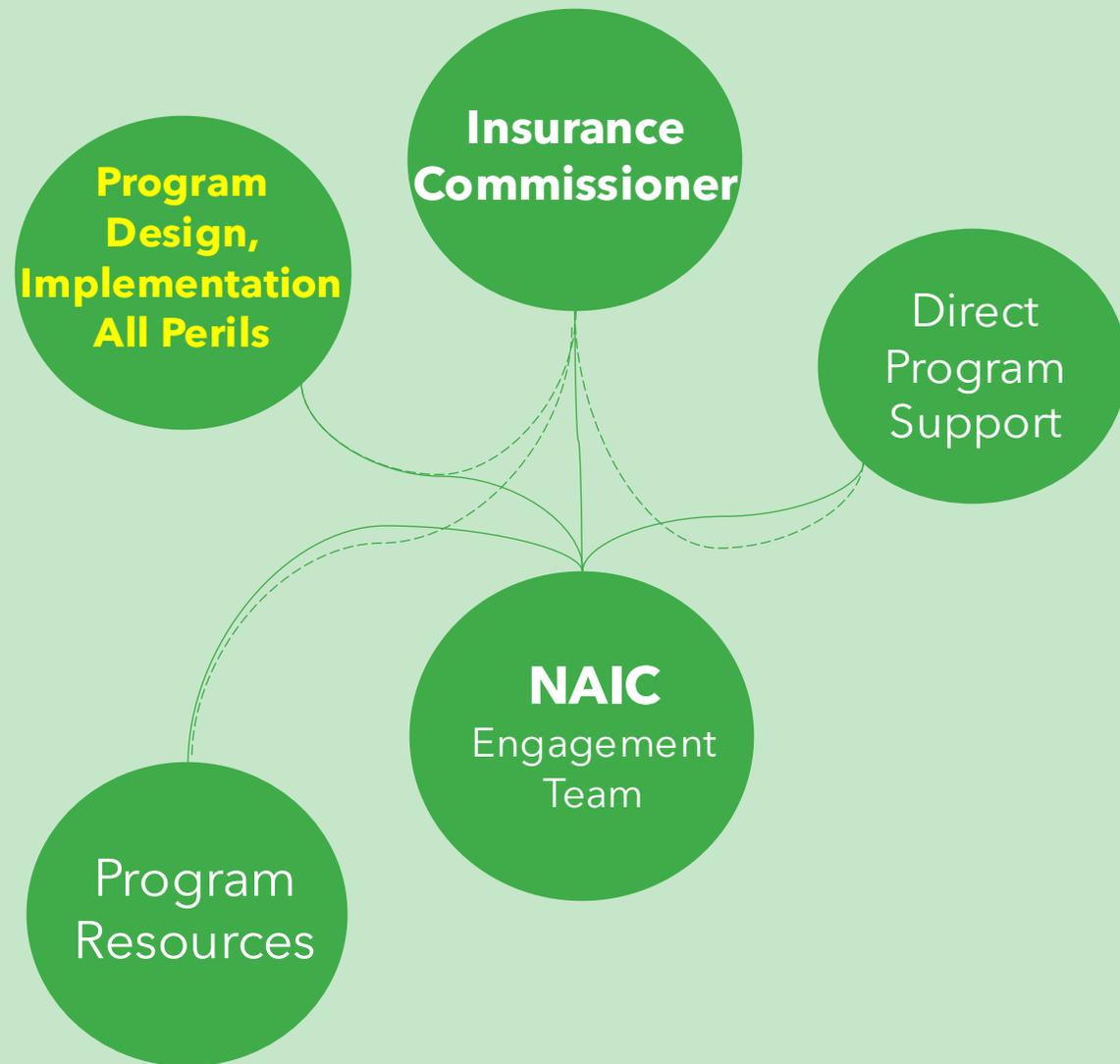
## Mitigation Program Design & Implementation

- Leads DOIs through establishment of mitigation programs



- Coordinates between partners to establish operating programs

- Design and implement a legislative strategy
- Design and implement an operational mitigation program
- Design and implement a resilience strategy





# Mitigation and Resilience Assistance - **Resilience HUB**

## Direct Support of Mitigation Programs

### Peer to Peer Learning Opportunities

- **Educational Events**
- Legislative Templates

### Resilience Funding

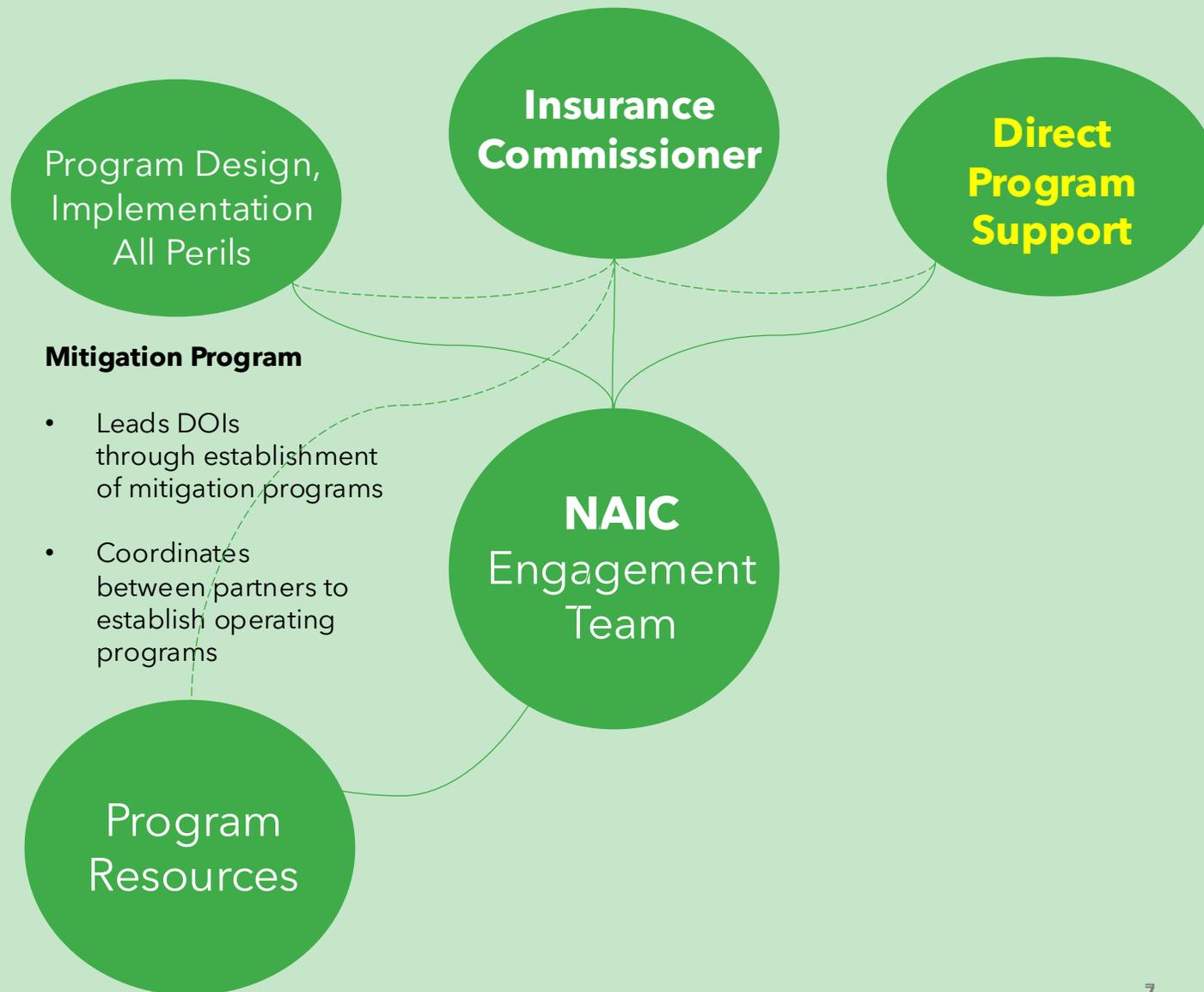
- Internal and external resources
- Reinsurers and Brokers

### Data gathering, analytics, evaluation

- Distribution Strategy
- Insurance Market Insight
- Economic Impact of Program
- Insurance Market Insight
- **Mitigation Research**
- Hazard Impacts Research

### Innovation Lab

- Pilot Programs
- Innovative Processes



With climate-fueled wildfires straining insurance markets, officials work to avoid ‘uninsurable future’



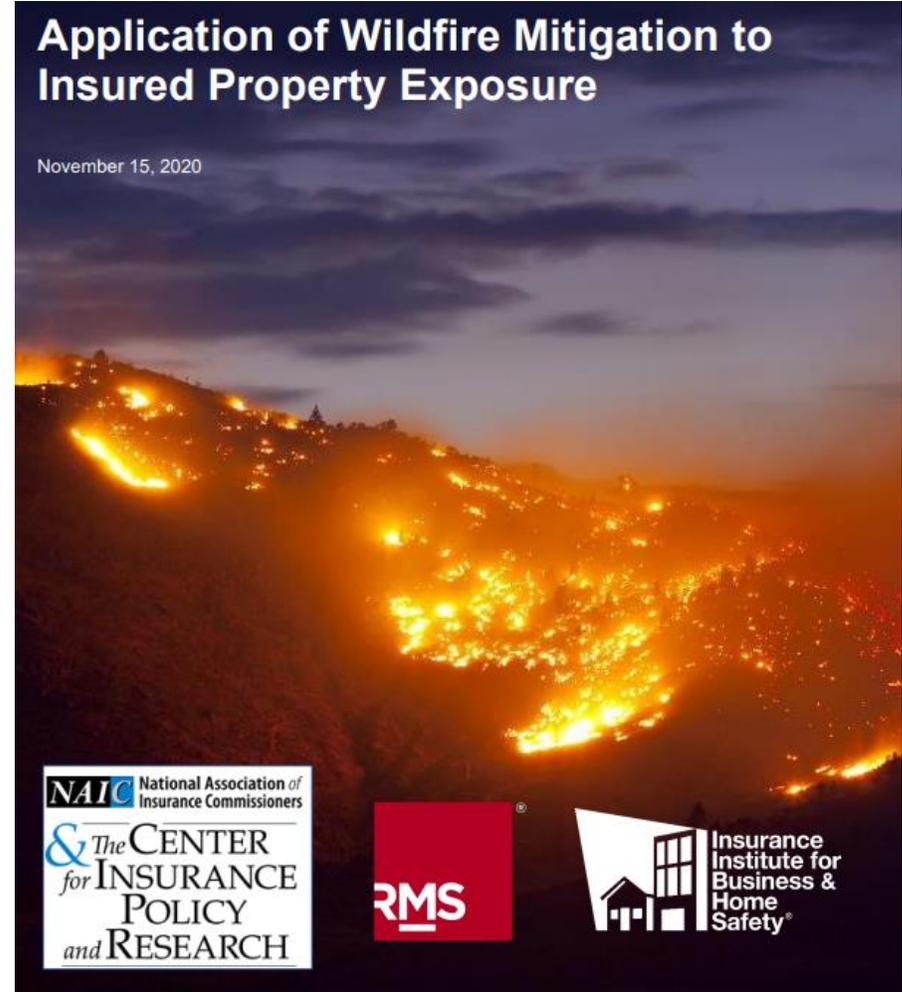
April 29, 2024

# Catastrophe Models and Mitigation Studies (Wildfire as an example)

Center for Insurance Policy and Research (CIPR) did a study working with RMS and IBHS using RMS's wildfire CAT Model different communities in 3 states (California, Oregon and Colorado).

**Table 27: Mean Benefit Cost Ratios by Analysis Time (10,25,50 years) for Structural**

Community	Low Cost Scenario (\$20,000 Structural)			Medium Cost Scenario (\$40,000 Structural)	
	10 year	25 Year	50 Year	10 year	25 Year
<b>California</b>					
Upper Deerwood	1.6	3.6	6.5	0.8	1.8
Berry Creek	0.4	0.9	1.7	0.2	0.5
Oroville	0.0	0.0	0.1	0.0	0.0



[https://content.naic.org/sites/default/files/cipr\\_report\\_wildfire\\_mitigation\\_0.pdf](https://content.naic.org/sites/default/files/cipr_report_wildfire_mitigation_0.pdf)



# Mitigation and Resilience Assistance - **Resilience HUB**

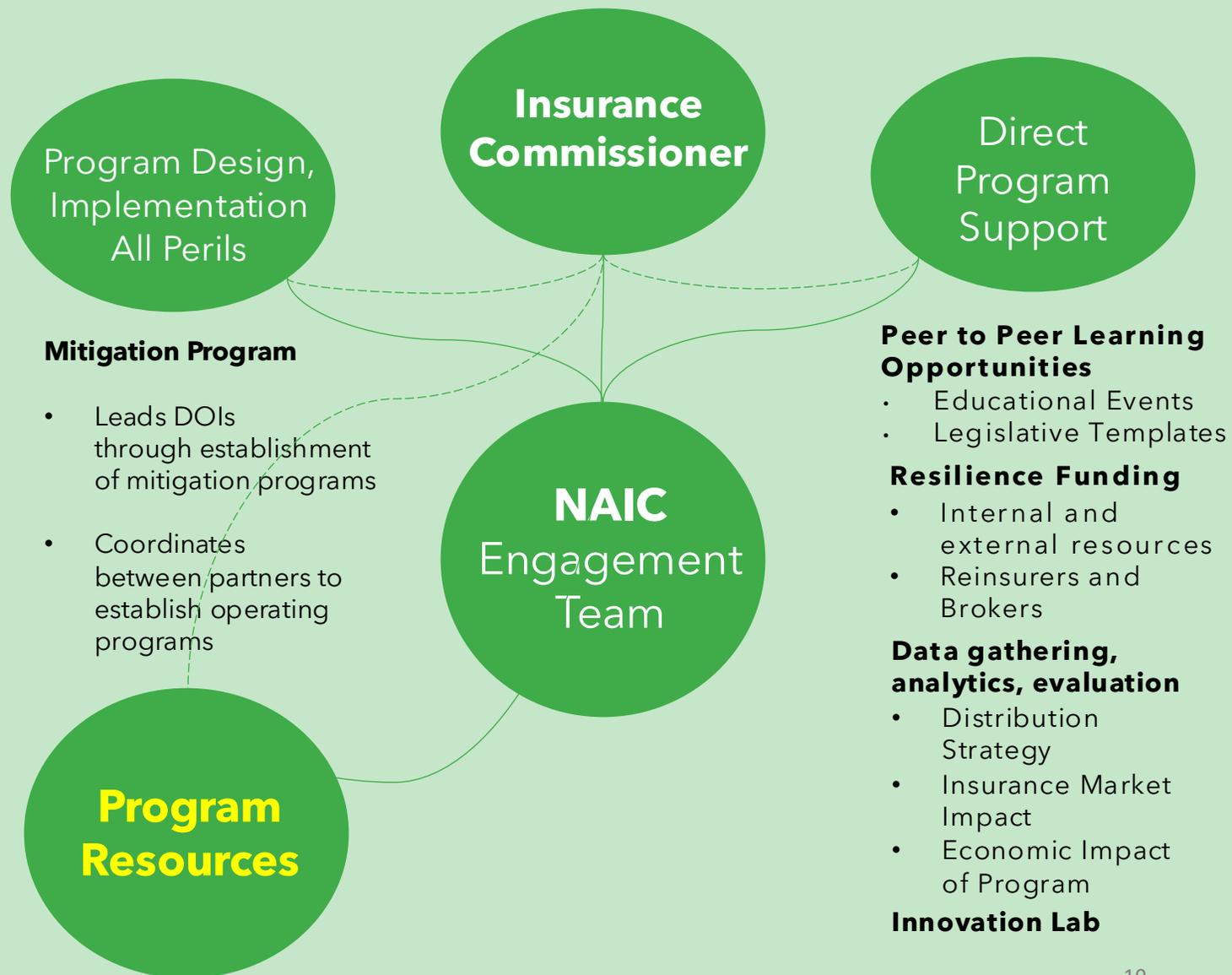
## Program Resources

### CIPR SharePoint

- **Resilience Playbook**
- Resilience Playbook Addendum
- IBHS Research Material
- Sample Grant Fortified Programs

### Peer to Peer Learning Opportunities

- Establishment of the Resilience HUB Program Calls (Starting Soon)
- Community of Practice





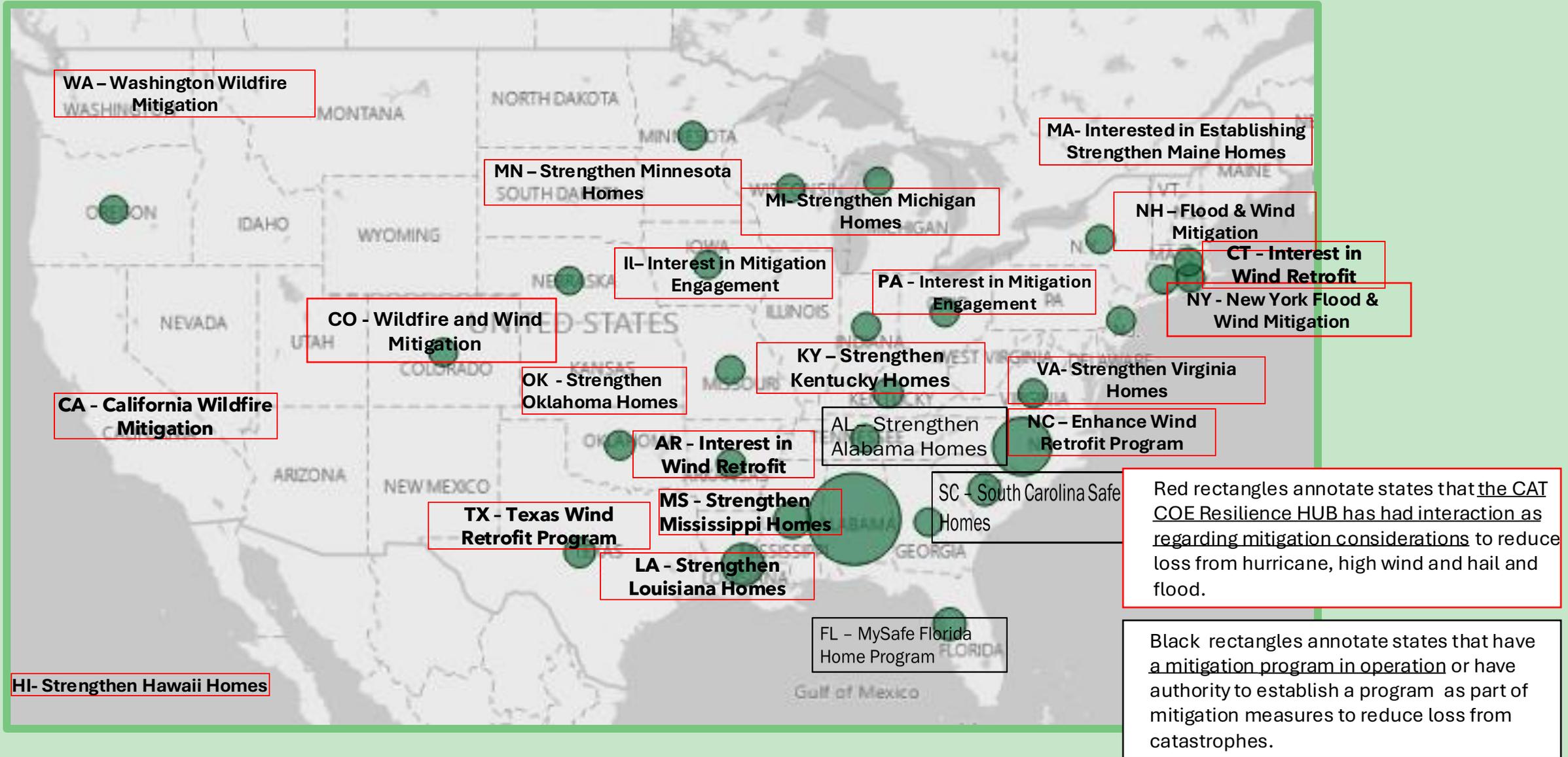
**Resilience Policy  
Resource Guide  
and Retrofitting  
Program Playbook**  
for State Insurance Regulators

- i. Building Code Policy Leadership
- ii. Creating and Sustaining Retrofit Programs
- iii. Creating a Culture of Resilience





# Cat COE Resilience HUB Engagement – Working with Established and Potential Opportunities for Establishing Mitigation Programs Across the U.S.



## Level of engagement by the CAT COE with state wind/hail mitigation grant programs

State	Initial Presentations of Program Development and Options	Legislation Development	Initial Engagement of Program Development	Program Design Development	Administration Development	Program Implementation	Program Monitoring
Alabama				*			
Arkansas							
Kentucky							
Louisiana							
Minnesota				*			
Mississippi							
New Hampshire							
Oklahoma							
Pennsylvania							
Texas							

\*CAT COE is engaged with state DOI to help with determining mitigation discount benchmarks for FORTIFIED Homes.

# **NAIC Center for Insurance Policy and Research (CIPR)**

**Thank you.**

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