



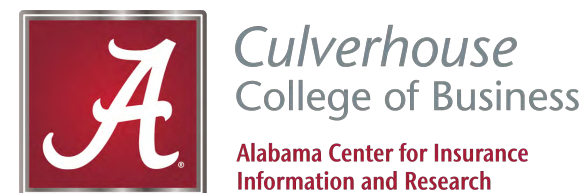
Increasing Insurability With **FORTIFIED** Homes



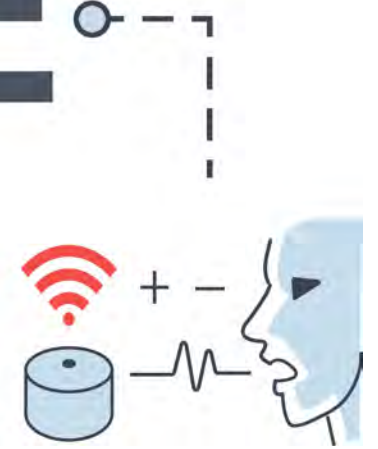
Julie Shiyou-Woodard
President and CEO



Lars Powell
Executive Director



SMART HOME





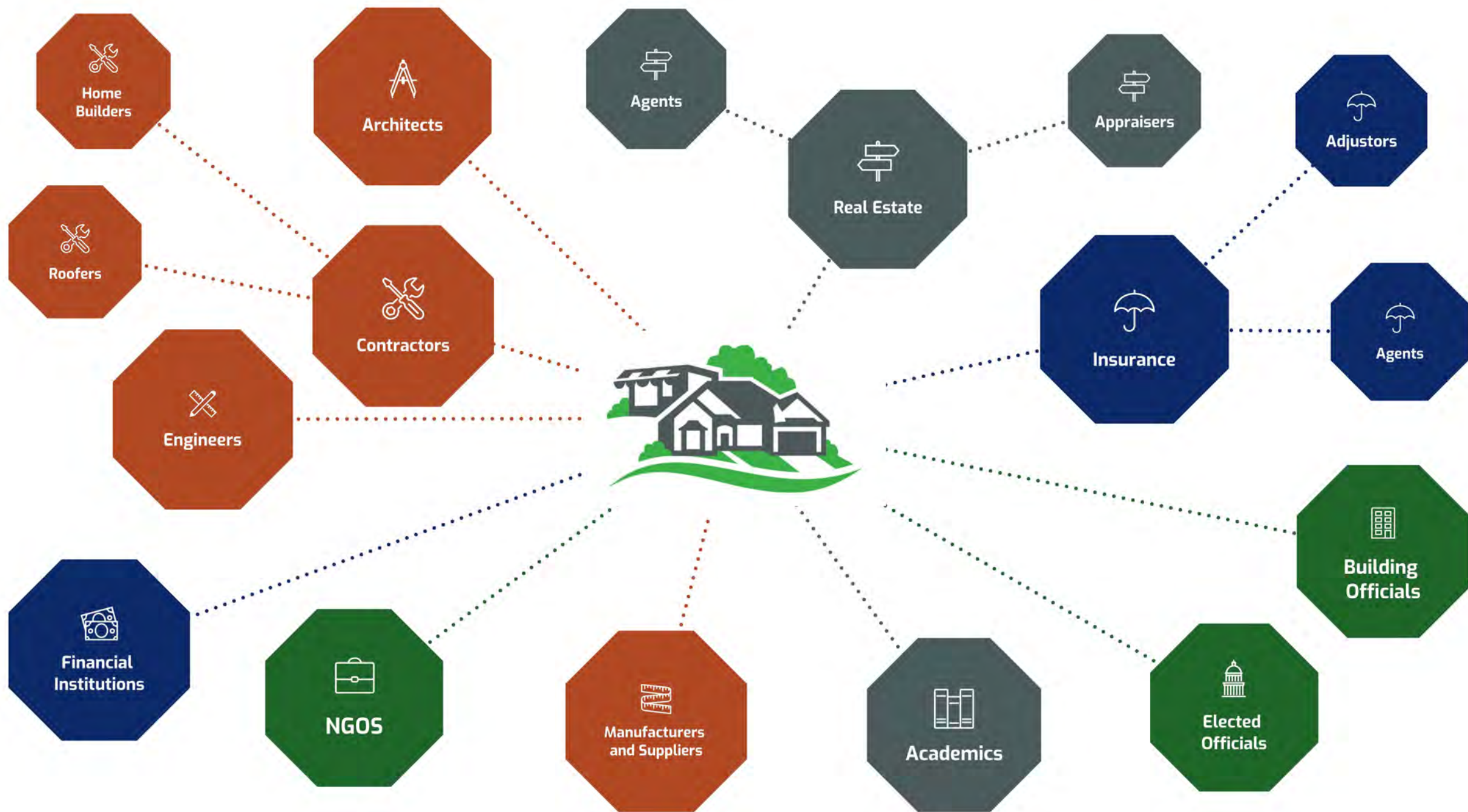


Why IBHS? Video [Click Here](#)



**SMART HOME
AMERICA**





EF Scale			Saffir-Simpson Hurricane Wind Scale		
EF Rating	3 Second Gust (mph)		Category	Sustained Winds (mph)	Types of Damage Due to Hurricane Winds
			Tropical Storm	39-73	
0	65-85		1	74-95	Very dangerous winds will produce some damage:
1	86-110		2	96-110	Extremely dangerous winds will cause extensive damage:
2	111-135		3 (major)	111-129	Devastating damage will occur:
3	136-165		4 (major)	130-156	Catastrophic damage will occur:
4	166-200		5 (major)	157 mph or higher	Catastrophic damage will occur:
5	Over 200				

Which house would you rather
Own? Build? Sell? Insure?



[Video Click Here](#)

WHAT IS FORTIFIED?

[What is FORTIFIED? Video Click Here](#)



IBHS



Water Intrusion Demo at the IBHS Research Center





**Sealed
Roof Deck**

**Unsealed
Roof Deck**

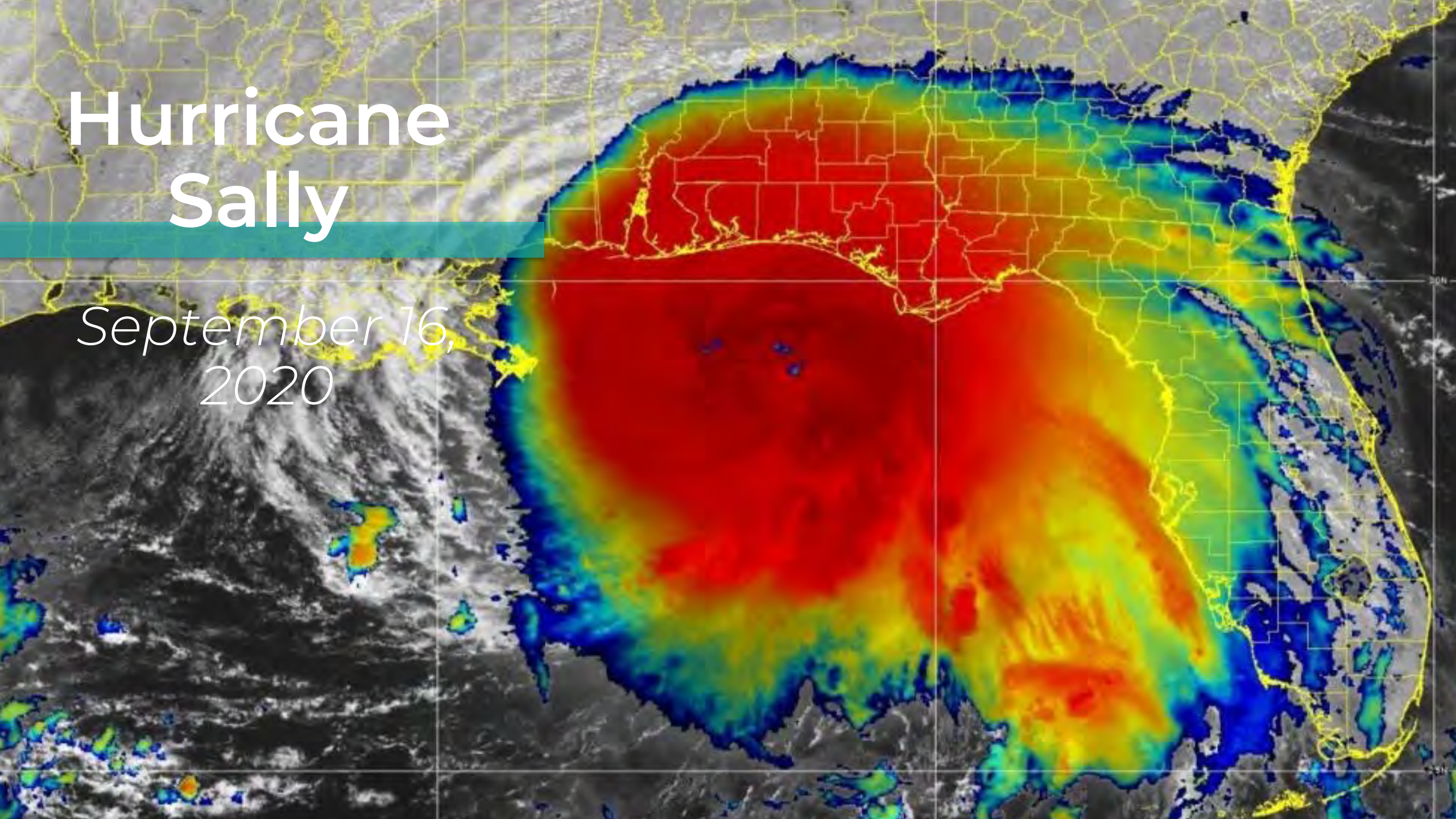
Damage Estimate:
\$6,143.53

Damage Estimate:
\$19,236.46

Comparison shows estimates in 2011 dollars adjusted for 2020 inflation

Hurricane Sally

*September 16,
2020*



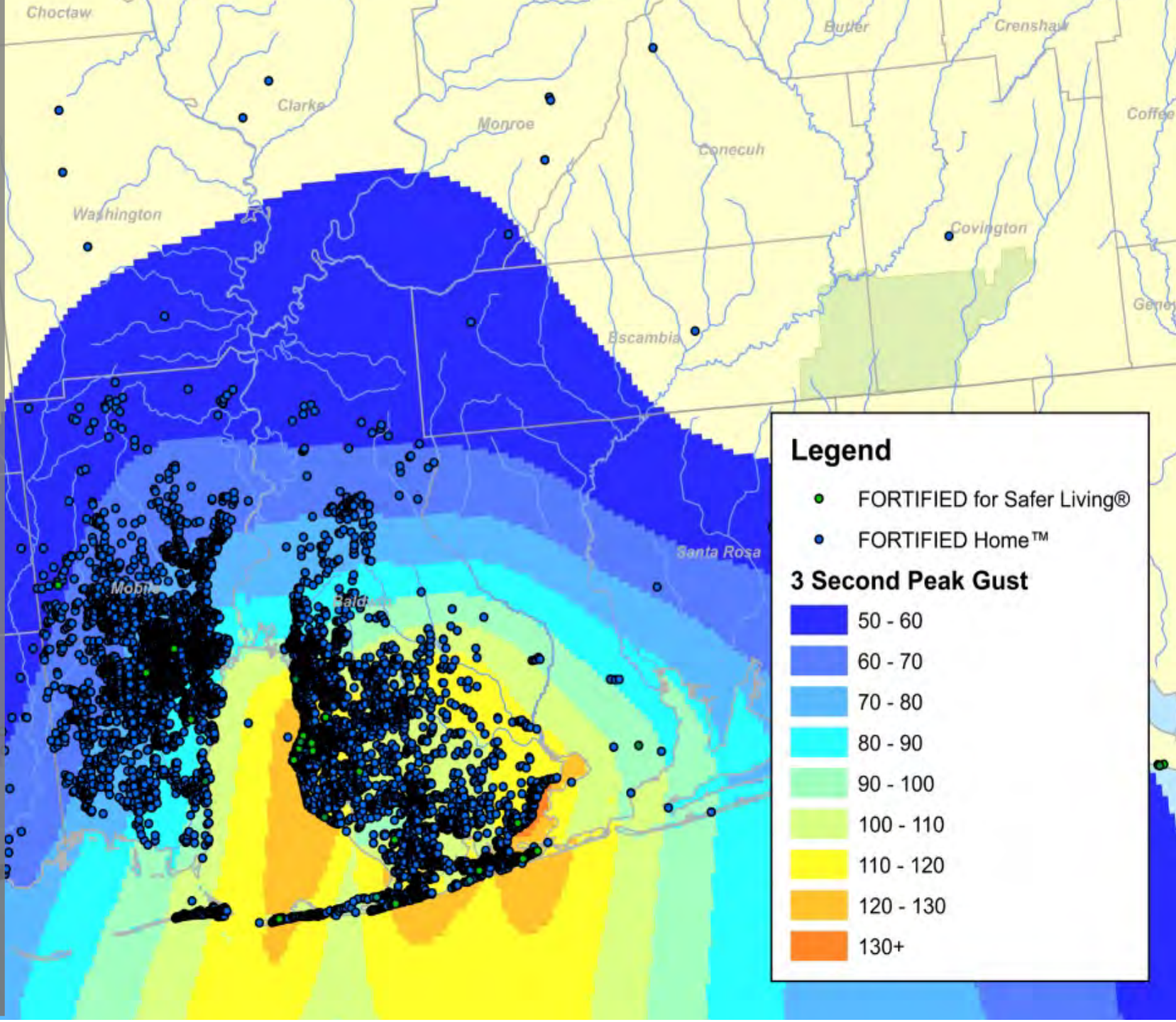
In total, nearly
17,000

FORTIFIED Homes
Threatened

Approximately

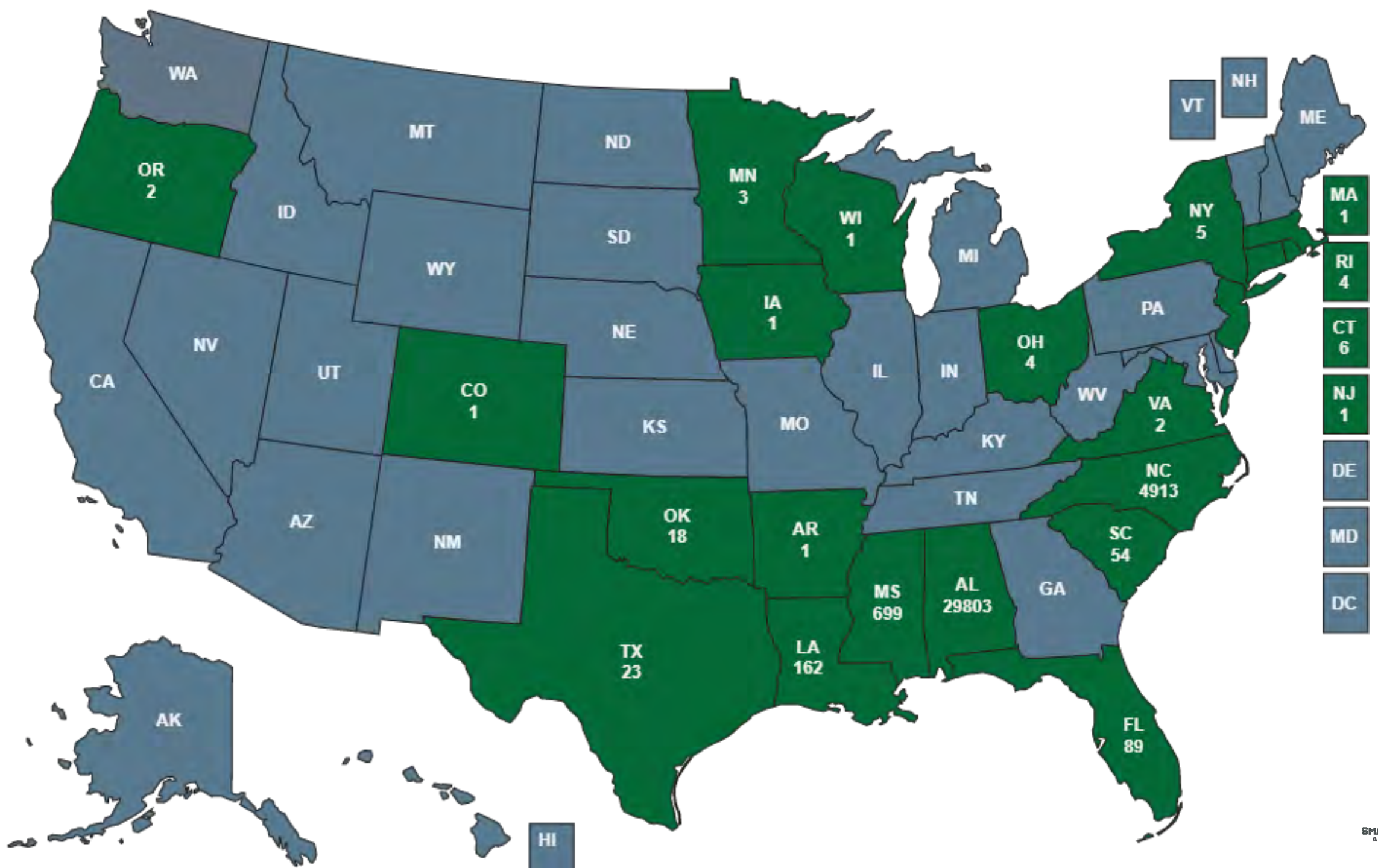
95%

Had Little or
No Damage



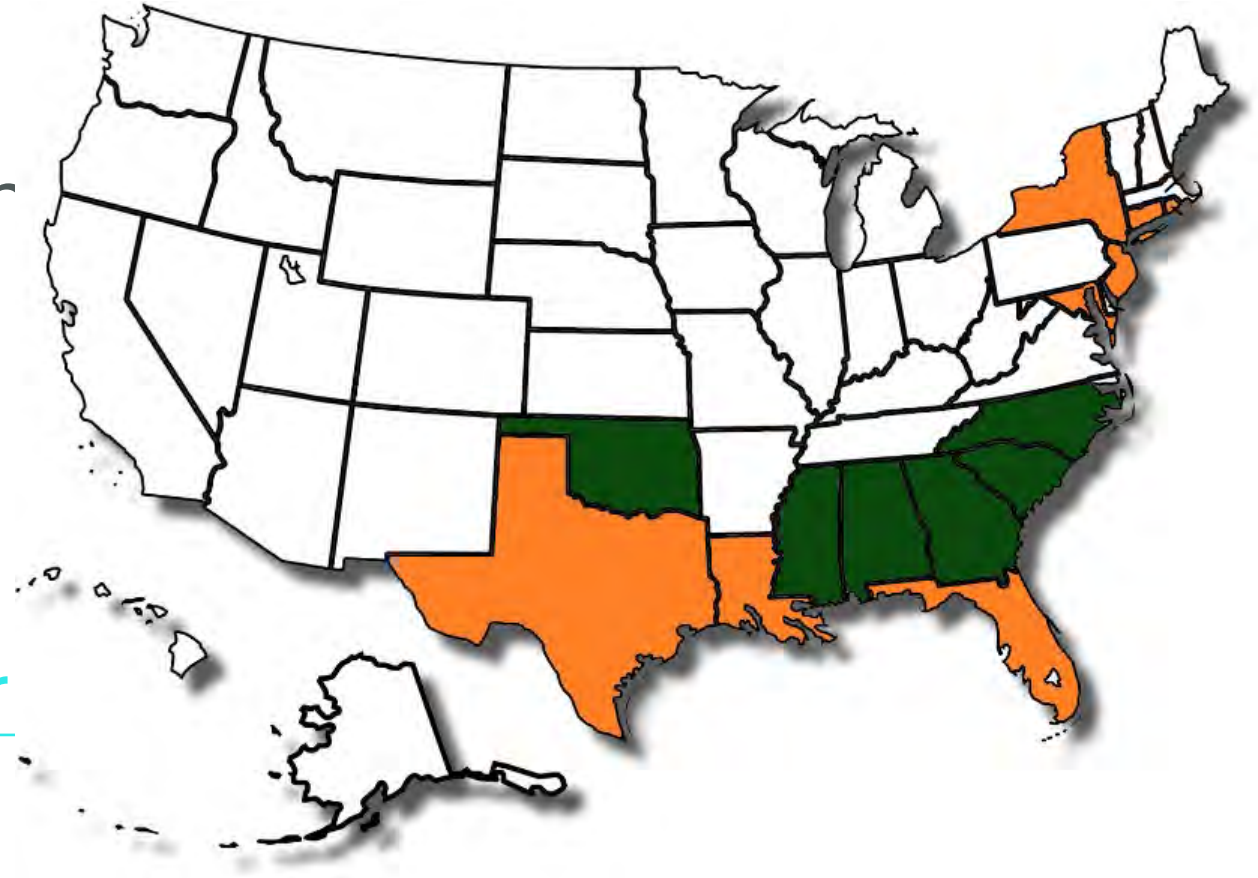


NOT FORTIFIED



FORTIFIED Incentives

- Insurance discounts
- Tax credits or deduction
- Mitigation credits
- Grant programs
- Visit <https://fortifiedhome.org/incentives/> for details



Estimating the Effect of
FORTIFIED Home™ Construction
on Home Resale Value¹

Stephen R. Kretschmer, Ph.D., University of Alabama
Christopher R. Hays, Ph.D., Auburn University
Christopher R. Hays, Ph.D., University of Mississippi
Dip. 10/10/10, University of Mississippi

THE UNIVERSITY OF
ALABAMA | Tuscaloosa, AL

¹ The authors are grateful to the Alabama Department of Transportation for funding this research. The authors are also grateful to the University of Alabama, Auburn University, and the University of Mississippi for their support. The authors are also grateful to the Alabama Department of Transportation for funding this research. The authors are also grateful to the University of Alabama, Auburn University, and the University of Mississippi for their support. The authors are also grateful to the Alabama Department of Transportation for funding this research. The authors are also grateful to the University of Alabama, Auburn University, and the University of Mississippi for their support.



THE UNIVERSITY OF
ALABAMA



AUBURN
UNIVERSITY



THE UNIVERSITY OF
MISSISSIPPI

Having a
FORTIFIED
Designation
**Increases
Home Value**
by nearly **7%**

According to a study by
The University of Alabama
Auburn University &
The University of Mississippi



FEMA



U.S. Small Business
Administration







[Video Click Here](#)



Adequately Insured vs Underinsured



**64% of
homes are
underinsured by an
average of 24%**

24% of a \$200,000 home is \$48,000

Adequately Insured vs Underinsured



**75% of
businesses are
underinsured by an
average of 40%**

40% of a \$500,000 business is \$200,000

Post Michael – Habitat Strong



Our Vision

Stronger, Sustainable, More Resilient Communities



Hurricane Ida





Hurricane Ida



Brian Emfinger @brianemfinger



Grant Ethridge Construction, <http://www.gchp.net>

Louisiana HB451 2021 (Act 30)

Effective July 1st, 2022

- Building or retrofitting to the FORTIFIED Home™ or FORTIFIED Commercial™ standards **will qualify for a reduced rate or discount on hazard insurance.**
- Homeowners receiving mitigation credits/insurance discounts may continue receiving discounts as long as they meet requirements.
- Insurance discounts are also available for meeting the Louisiana State Uniform Building Code.

New Paradigm: Intentional Resilience



- Proactive
- Goal-oriented
- Sustainable
- Affordable
- Community-wide

NOT FORTIFIED





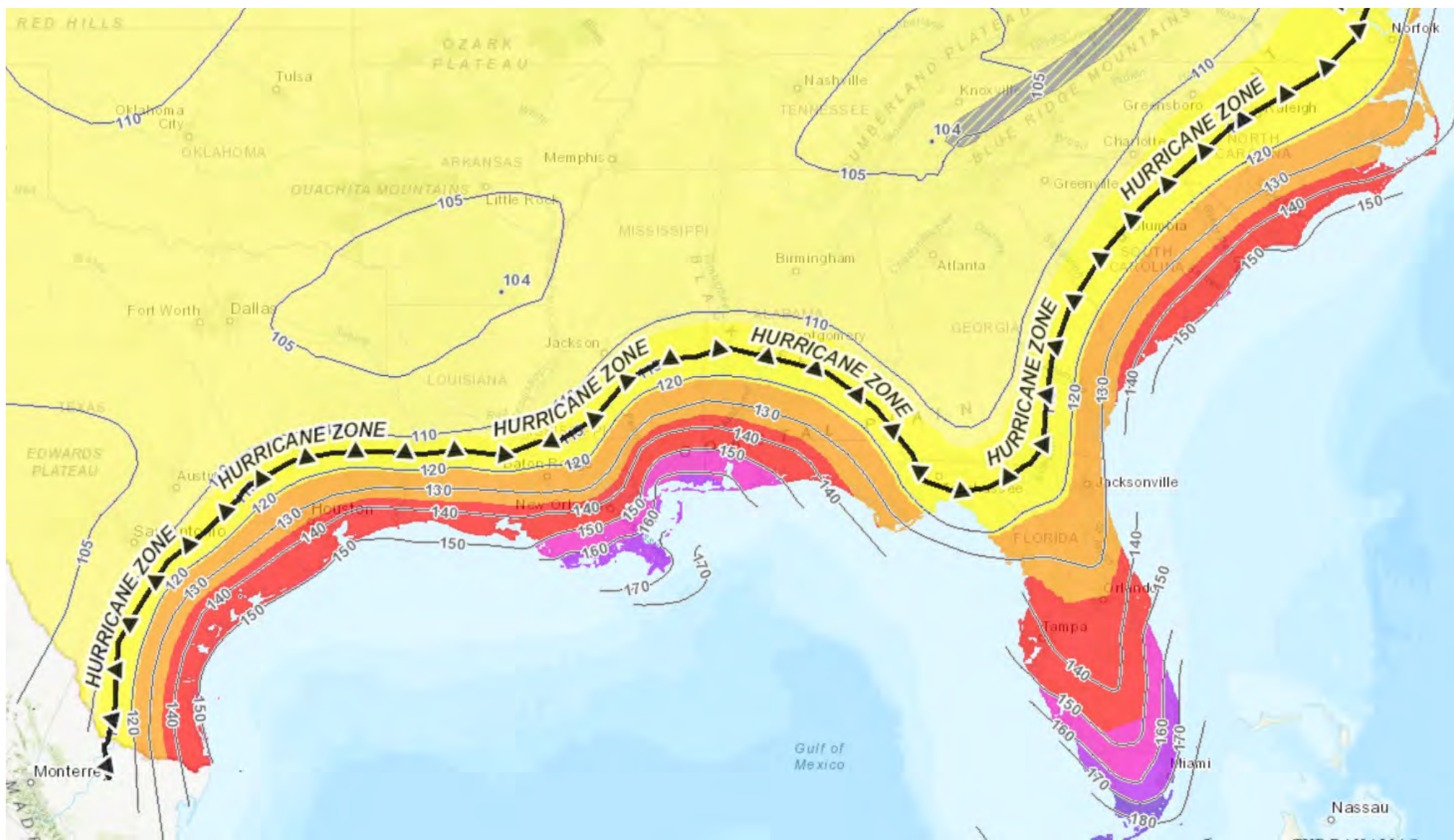
- 19% of Louisiana residents live in multifamily housing
- Residents prefer FORTIFIED
- FORTIFIED is profitable for owners
 - Inexpensive
 - High return



Specs:

- 2 stories
- 30 units
- 30,000 square feet
- Construction cost = \$3,000,000
- FORTIFIED cost over code
 - \$6,600 - \$38,000
 - 0.23% to 1.27%

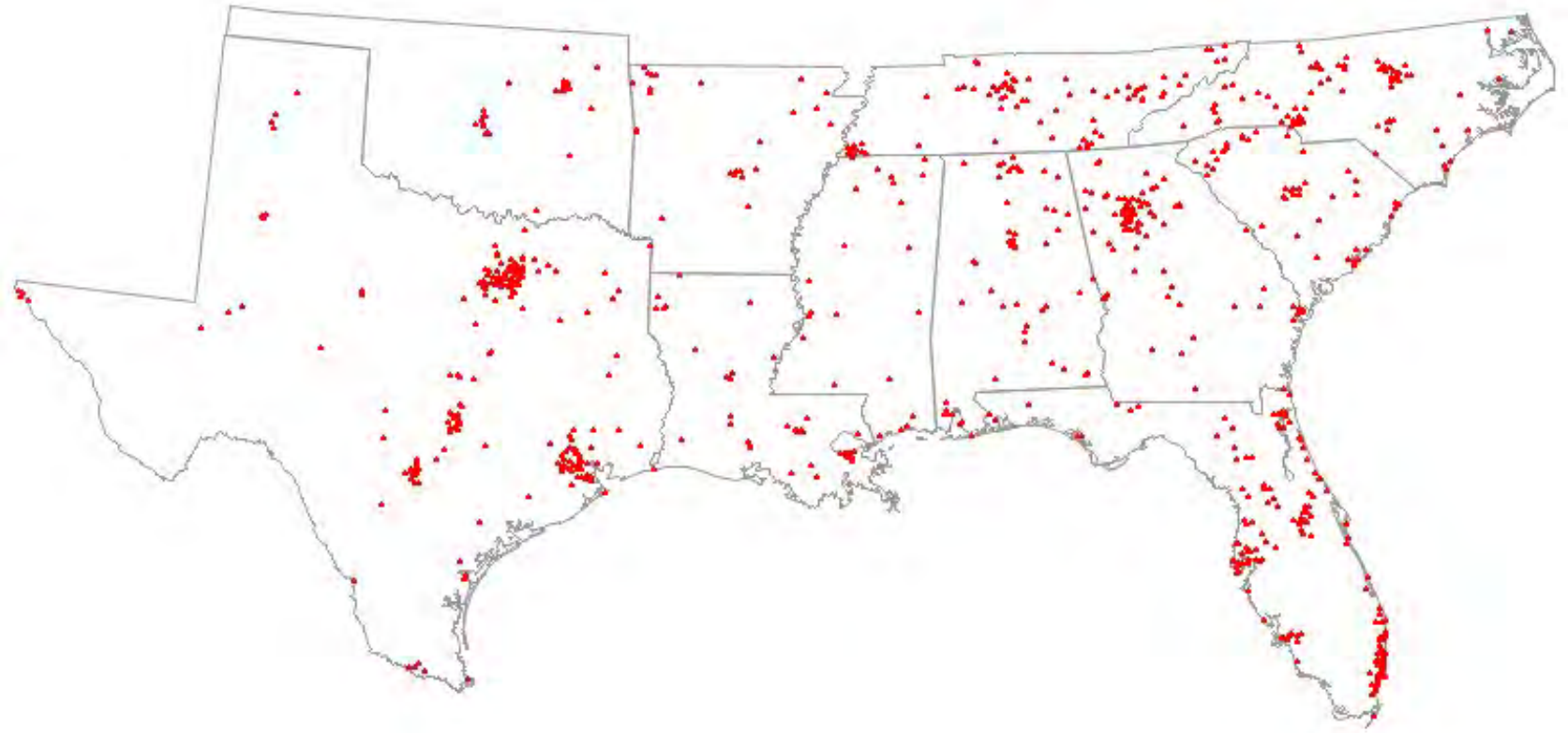




Zone	Fortified Roof	Fortified Gold
Hurricane (≥ 140)	\$7,000	\$7,000
Hurricane (< 140)	6,600	38,000
High wind and hail	16,900	16,900

Willingness to Pay Survey

- 2021
- 1,050 Respondents
- 11 states



“How much more rent would you pay to live in a FORTIFIED apartment complex?”

Willingness to Pay Survey

- 74% willing to pay at least 0.5%
- AR, OK, TN = \$6 / month
- Coastal states = \$12 / month

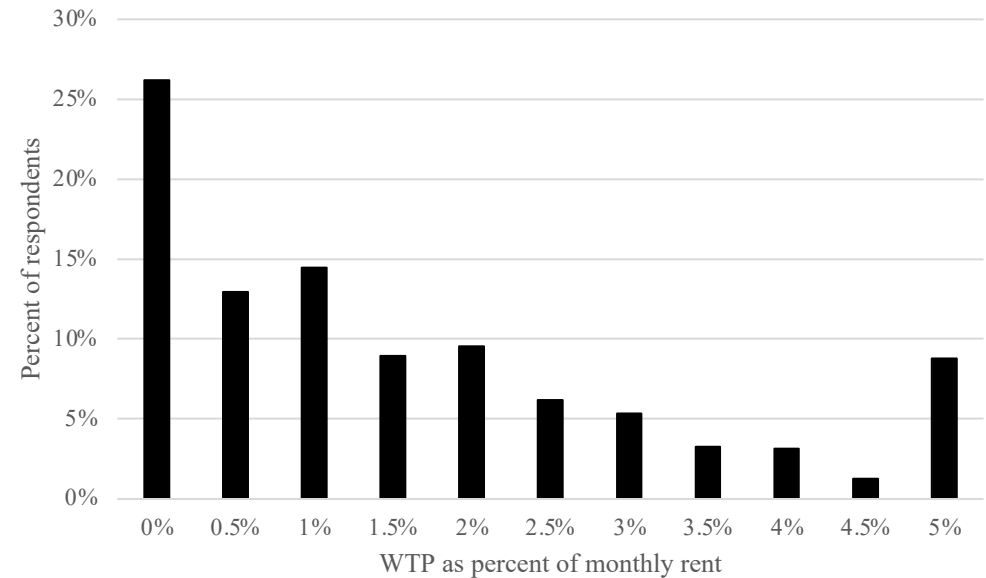


Table 2: Average Expected Insurance Premium Reductions from FORTIFIED

FORTIFIED Program	Wind zone	Expected loss	Risk load	Premium			Discount	
				Standard	Roof	Gold	Roof	Gold
Hurricane	>140	\$5,327	\$10,653	\$15,980	\$14,694	\$9,858	\$1,286	\$6,122
Hurricane	≤140	2,170	4,340	6,511	5,598	4,254	913	2,256
HWH	<115	2,002	2,002	4,003	3,197	2,784	806	1,219

	Hurricane Roof >140	Hurricane Gold > 140	Hurricane Roof 115-140	Hurricane Gold 115-140	HWH Roof	HWH Gold
1 Loss/insurance savings	\$1,286	\$6,122	\$913	\$2,256	\$806	\$1,219
2 Increased demand	2,160	2,160	2,160	2,160	1,080	1,080
3 Annual benefit	3,446	8,282	3,073	4,416	1,886	2,299
4 Cost	7,000	7,000	6,600	38,000	16,900	16,900
5 Payback period (years)	2.03	0.85	2.15	8.61	8.96	7.35
6 Internal rate of return	49%	118%	47%	10%	9%	12%

Thank you

Lars.Powell@ua.edu

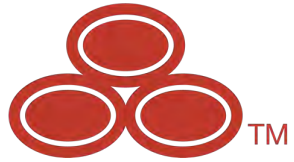


Culverhouse
College of Business

**Alabama Center for Insurance
Information and Research**

Questions?

State Farm



Sonja Sheffield

Technical Outreach Director

sonja@smarthomeamerica.org



**SMART HOME
AMERICA**

855-742-7233



@BuildResilient



TRAVELERS INSTITUTE



Culverhouse
College of Commerce

Alabama Center for Insurance
Information and Research

