



Draft date: 3/17/26

*2026 Spring National Meeting
San Diego, California*

PRE-DISASTER MITIGATION & RISK MODELING (EX) WORKING GROUP

Wednesday, March 25, 2026

10:45 –12:00 p.m.

Manchester Grand Hyatt—Grand Hall C—Level 1

ROLL CALL

Timothy J. Temple, Chair	Louisiana	Jackie Horigan	Massachusetts
Glen Mulready, Vice Chair	Oklahoma	Parker Fisher	Michigan
Tom Zuppan	Arizona	Peter Brickwedde	Minnesota
George Bradner	Connecticut	Andy Case/John Thornton	Mississippi
Sharon Shipp	District of Columbia	Connie Van Slyke	Nebraska
Anoush Brangaccio	Florida	Cherry Mui	New York
Sandra Darby	Maine	David Forte	Washington
Joy Hatchette	Maryland		

NAIC Committee Support: Butch Kinerney/Aaron Brandenburg

AGENDA

1. Discuss the Appointment of the Working Group and its Charges
—*Commissioner Timothy J. Temple (LA)*
2. Hear a Recap of the March 23 Center for Insurance Policy and Research (CIPR) Event with the Insurance Institute for Business & Home Safety (IBHS)—*Brian Powell (NAIC) and Michael Newman (IBHS)* Attachment A
3. Hear a Report on the Status of State Mitigation Programs
—*Brian Powell (NAIC)*
4. Discuss the Potential Development of a Model Law Related to Mitigation Grant Programs—*Commissioner Timothy J. Temple (LA)*
5. Discuss Real-Time Events Modeling Capability for States
—*Jeff Czajkowski (NAIC)*
6. Discuss Any Other Matters Brought Before the Working Group
—*Commissioner Timothy J. Temple (LA)*



7. Adjournment



BUILT TO LAST

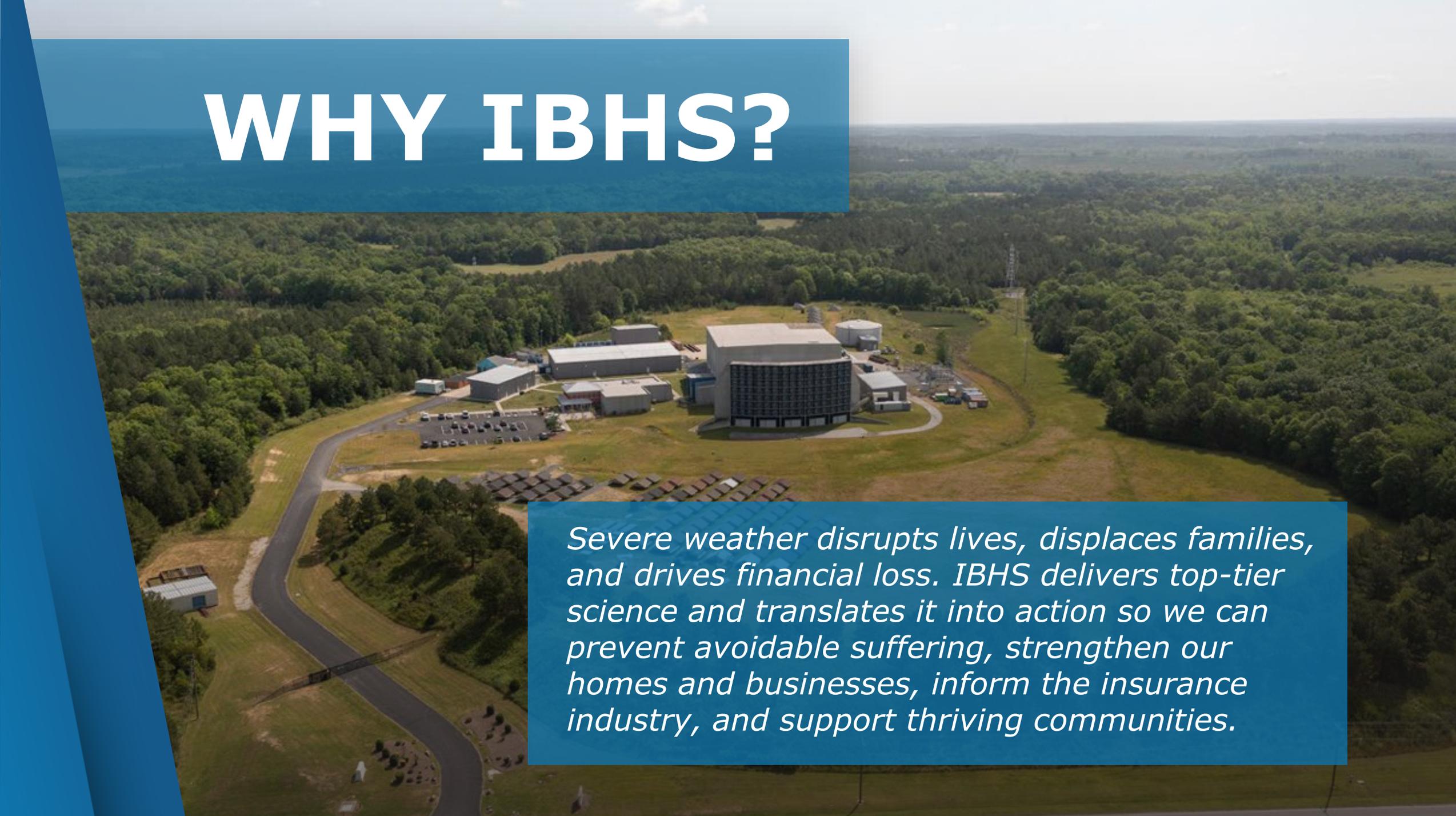
*Survivability & Insurability in the Face
of Severe Convective Storms*

Michael Newman

General Counsel

Insurance Institute for Business & Home Safety

WHY IBHS?

An aerial photograph of a large industrial or research facility, likely the IBHS campus. The facility consists of several large, modern buildings with flat roofs and a prominent circular building with a curved facade. A parking lot with several cars is visible. In the foreground, there are rows of solar panels. The facility is surrounded by a dense forest of green trees. A blue banner is overlaid on the top left of the image, and a blue text box is overlaid on the bottom right.

Severe weather disrupts lives, displaces families, and drives financial loss. IBHS delivers top-tier science and translates it into action so we can prevent avoidable suffering, strengthen our homes and businesses, inform the insurance industry, and support thriving communities.

A photograph of a road under a stormy sky. The sky is dark and cloudy, with some light breaking through on the left. The road is asphalt with white and yellow lines. There are utility poles and a tall tower on the right side. The text is overlaid on a dark blue rectangular background in the center of the image.

**From 1990 to 2022,
severe convective storm
losses increased at an
annual rate of 8.9
percent.** *AON 2023*



Severe Convective Storm Losses 2023 & 2024

\$123 Billion

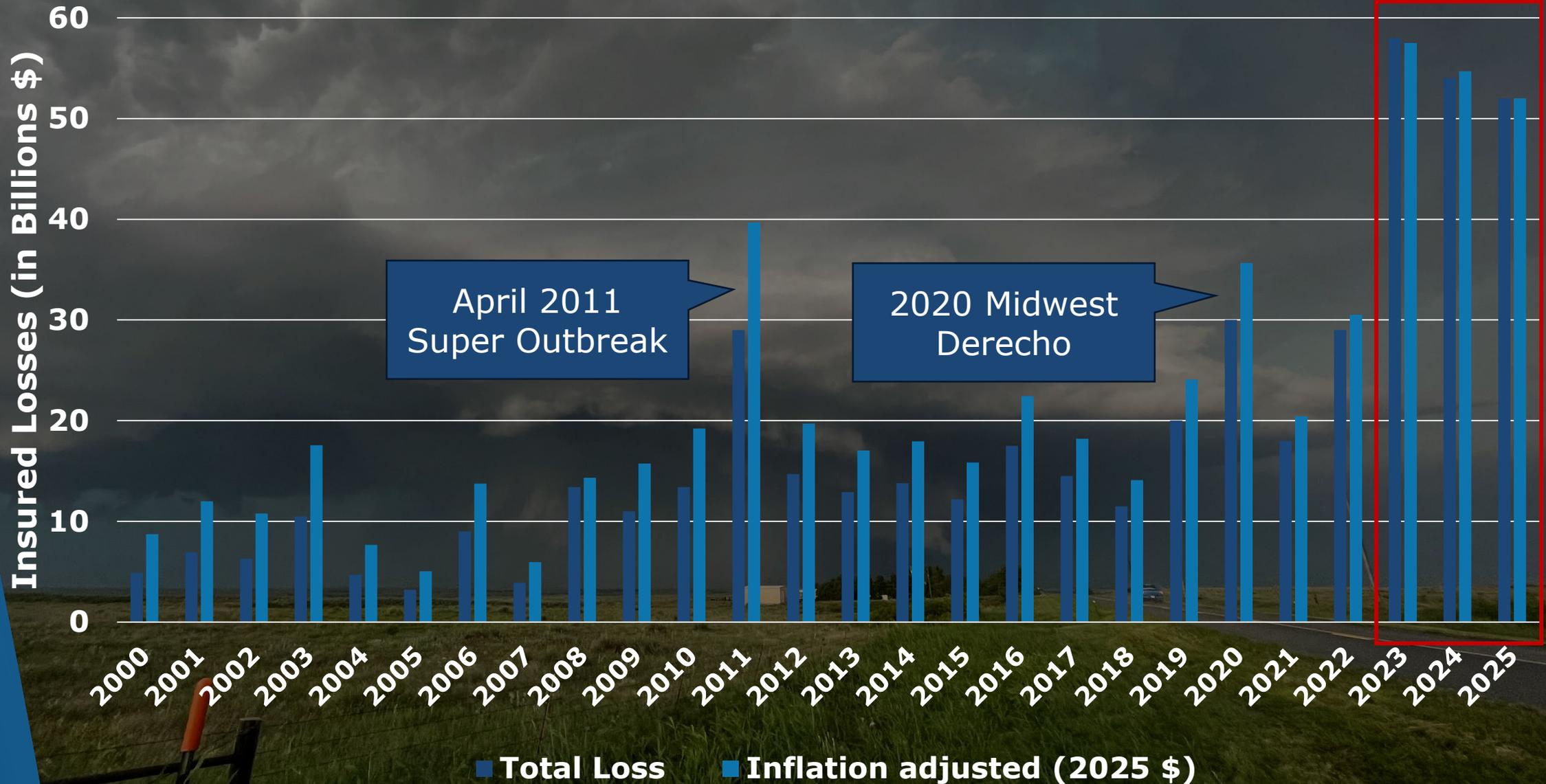
Perspective: 2004 & 2005

***The two most costly
hurricane seasons in US history***

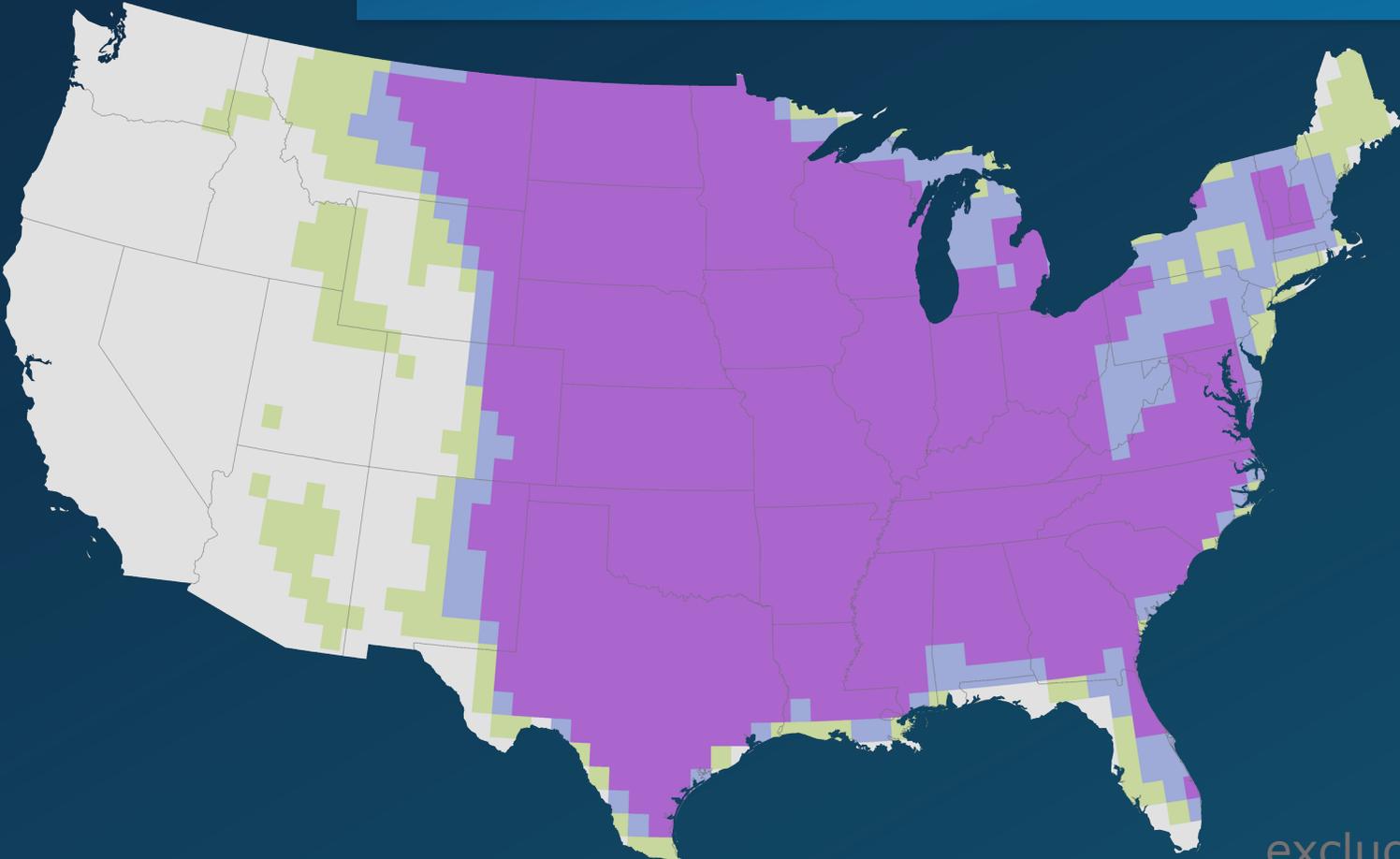
\$182 Billion

Annual Severe Storm Insured Losses

Data: AON Impact Forecasting



Severe Convective Storms: THE BIG PICTURE



Hail should drive roof replacement frequency



SCS wind and hail equal probability



excluding hurricane

SCS wind should drive roof replacement

***HURRICANES
TORNADOES
DERECHOS
SEVERE STORMS***



WIND



AGE is likely the
MOST IMPORTANT VARIABLE
in predicting **ASPHALT SHINGLE**
performance in high winds.

ROOF AGING FARMS

UNSEALING OBSERVED AFTER 10 YEARS





For a **10-YEAR-OLD** asphalt shingle roof:
nearly 20% chance
of damage from **100 MPH WINDS.**



PERFORMANCE RELATIVITIES

Tile

Modern code clay tile

Modern code concrete tile

Pre-2002 code clay tile

Pre-2002 code concrete tile

 Water entry potential

Asphalt

<5-year-old shingle

5-7-year-old shingle

7-10-year-old shingle

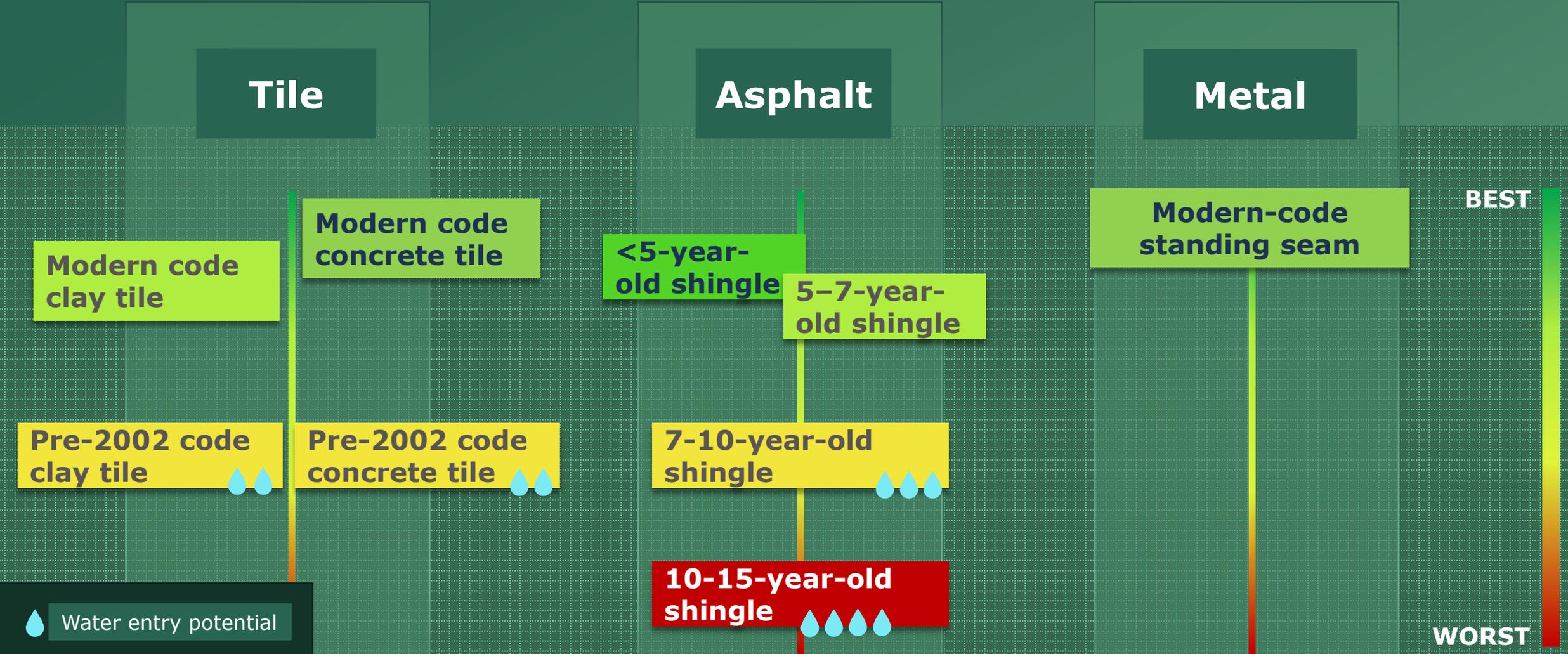
10-15-year-old shingle

Metal

Modern-code standing seam

BEST

WORST





FORTIFIED
HOME



FORTIFIED
COMMERCIAL



FORTIFIED
MULTIFAMILY



Keep the roof on and the water out.
Enhanced roof deck fastening, upgraded roof cover, mechanically secured roof-mounted equipment and storm-resistant flashing and gutters protect a building's roof and interior from wind and rain.



Keep the roof on and the water out.
Reduce damage amplifiers:
Impact & pressure-rated exterior walls and openings, flood protection for electrical and mechanical equipment and wind-rated garage or roll-up doors strengthen particularly vulnerable parts of a building.



Three Levels of Protection

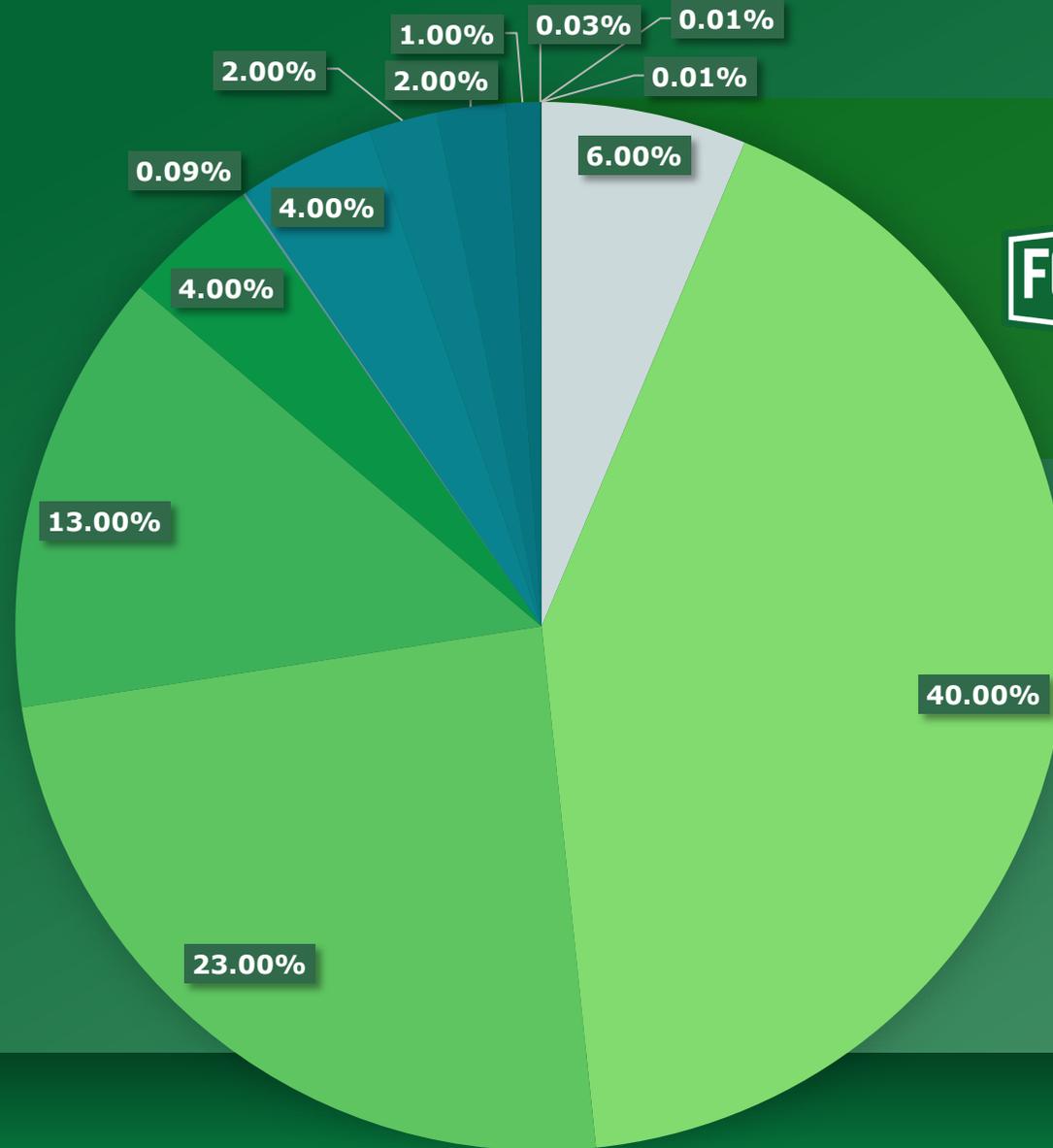


Keep the roof on and the water out
Reduce damage amplifiers
Continuous load path
By securing the roof to the walls, stories to stories, and the walls to the foundation, an entire building is strengthened against high winds.

Three FORTIFIED Programs



TORNADOES (2014-2022)



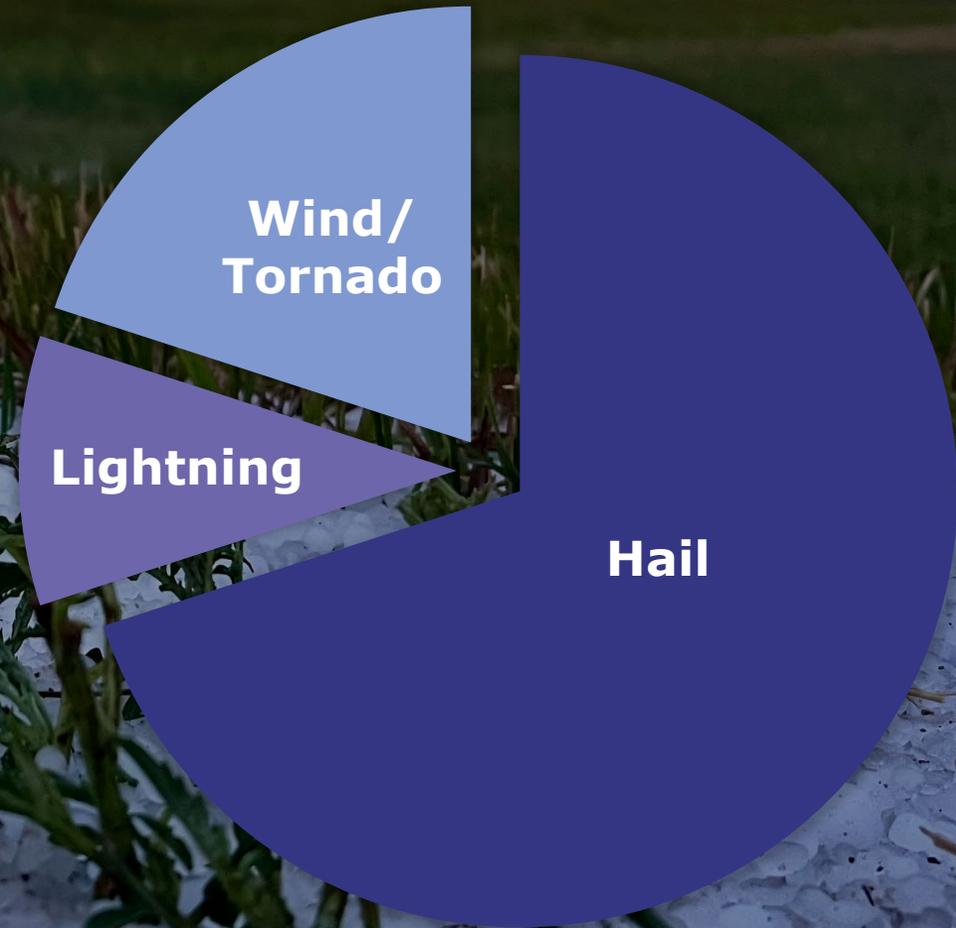
- Visible damage threshold
- Loss of roof covering and or gutters, siding etc.
- Uplift of roof deck, sig. roof cover loss, garage door failures, carport, porch failures
- Roof structural damage, walls standing
- Failed glazing
- Large % roof decking loss
- Exterior wall collapse
- Most exterior walls collapsed
- All walls collapsed
- House shifted from foundation
- Full roof structural failure
- Complete structural failure
- Complete destruction and all debris blown away



IBHS RESEARCH CENTER

HAIL

Hail accounts
for
70%
of average annual loss.



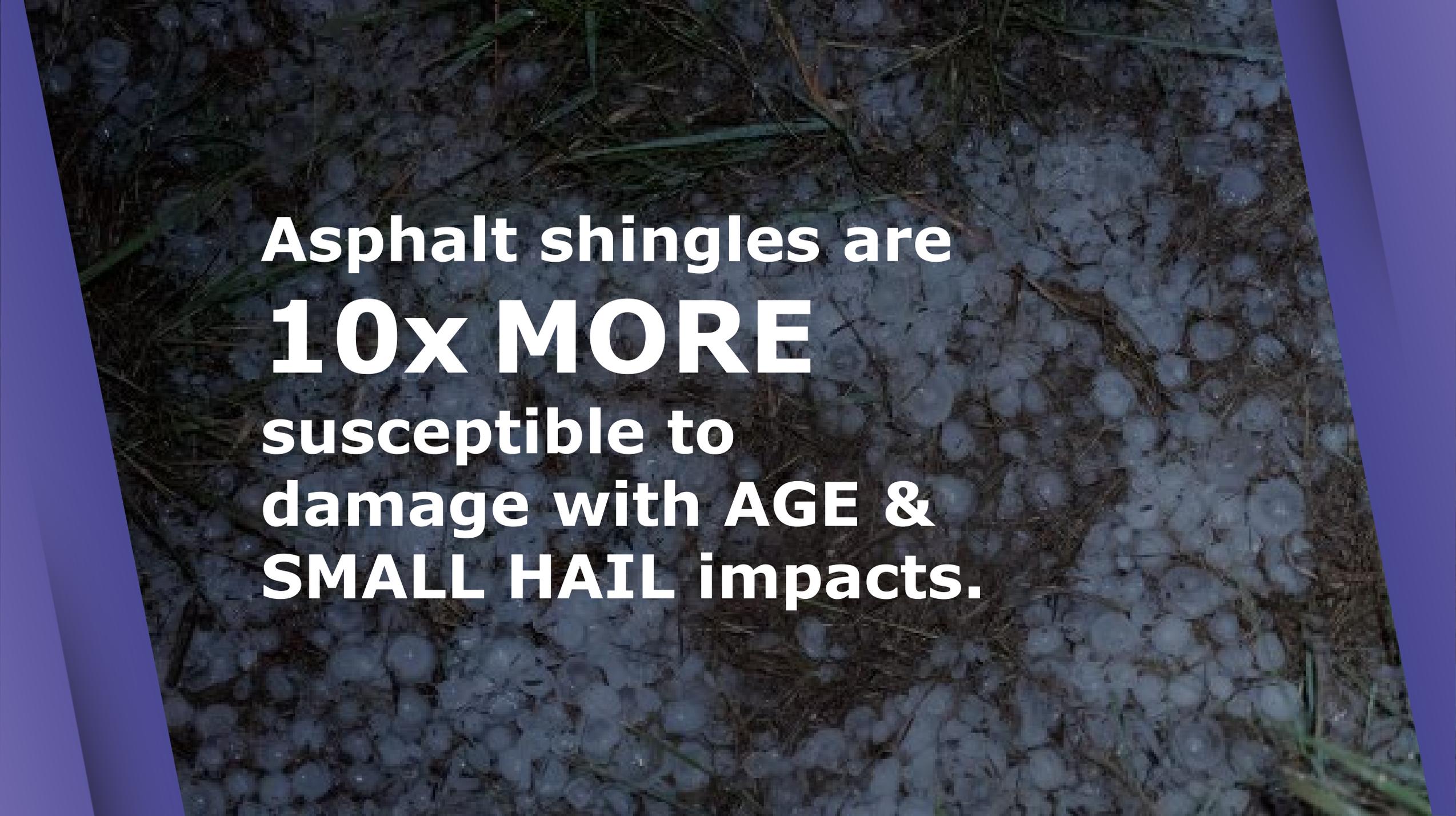
Severe Convective Storm Hazards and Loss

Loss by SCS hazard from Moody's Risk Management Solutions



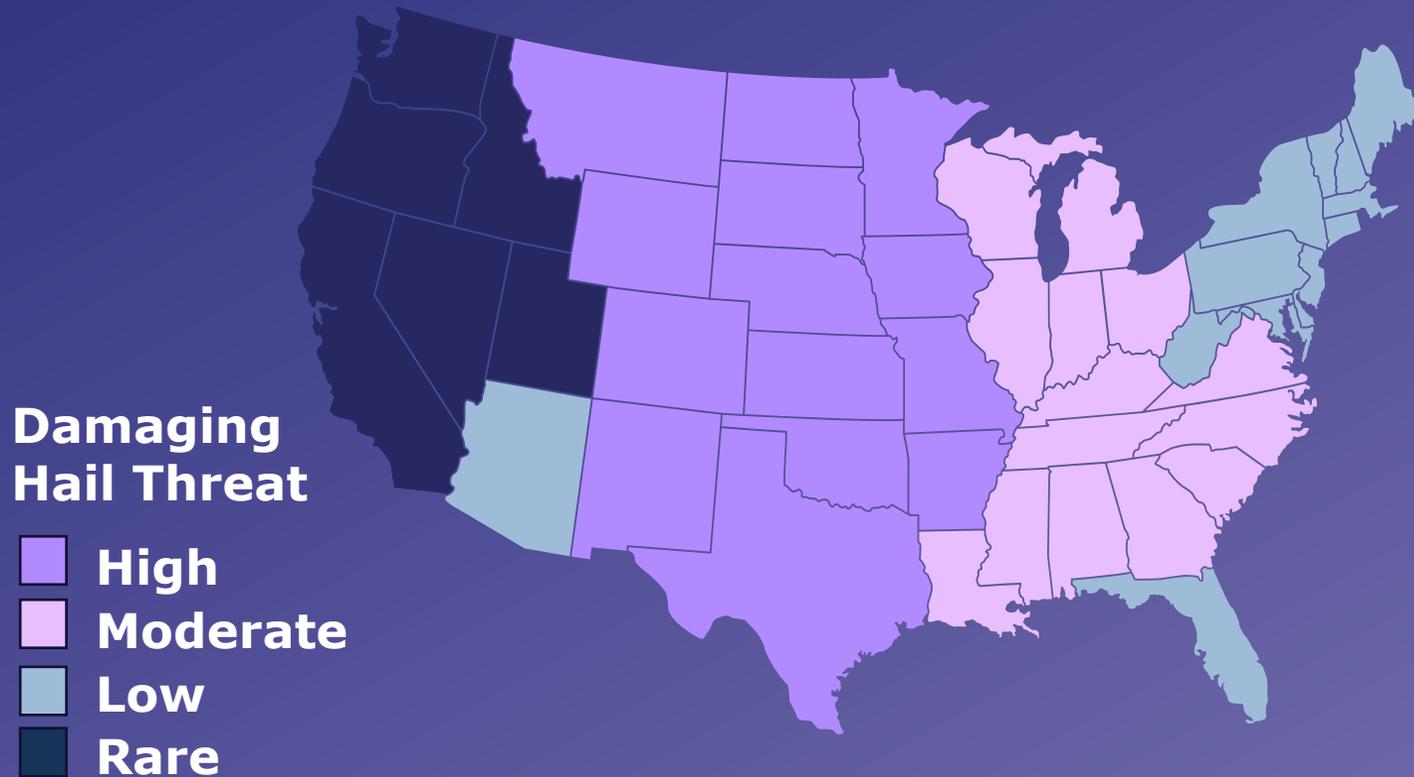
736,000 HAILSTONES

For a 2,000 sq ft roof



**Asphalt shingles are
10x MORE
susceptible to
damage with AGE &
SMALL HAIL impacts.**

**The average roof in
HAIL ALLEY lasts 5-7
years.**



**BUT roofs in hail alley are NOT
reaching their wind vulnerability
because of hail claims.**

NEW IMPACT-RATED

products perform

10-35%

BETTER than new
conventional shingles

in IBHS lab testing with 2-inch hail.





For **5-year-old** shingles,
IMPACT-RATED
products perform
up to **50%**
BETTER than
conventional shingles
in IBHS lab testing with 2-inch hail.

HAIL IMPACT-RESISTANT SHINGLE RATINGS

8.0 **GAF**
 Grand Sequoia® Designer Lifetime† Shingles

8.0 **OWENS CORNING**
 TruDefinition® Duration®

7.9 **GAF**
 Timberline AS II® ArmorShield® SBS Modified IR Shingles

7.8 **Malarkey Roofing Products**
 Legacy® Scotchgard™ Protector

7.7 **certainteed SAINT-GOBAIN**
 Northgate® ClimateFlex®

7.7 **certainteed SAINT-GOBAIN**
 Belmont® IR

7.5 **OWENS CORNING**
 TruDefinition® DurationFLEX®

7.0 **Malarkey Roofing Products**
 Highlander® AR

6.9 **certainteed SAINT-GOBAIN**
 Presidential Shake®

6.9 **certainteed SAINT-GOBAIN**
 Landmark®

6.9 **OWENS CORNING**
 TruDefinition® DurationSTORM®

6.8 **ATLAS**
 StormMaster® Shake

6.7 **GAF**
 Timberline HDZ® High Definition® Lifetime† Shingles

6.6 **ATLAS**
 Pinnacle® Impact

6.2 **PABCO Roofing Products**
 Pabco Prestige®

6.2 **certainteed SAINT-GOBAIN**
 Landmark® ClimateFlex™

6.1 **GAF**
 Timberline® UHDZ™ Ultra High Definition® Lifetime† Shingles

6.0 **ATLAS**
 Pinnacle® Pristine

5.8 **TAMKO BUILDING PRODUCTS**
 StormFighter Flex4™

5.7 **IKO**
 Dynasty® with Armour Zone®

5.6 **IKO**
 Nordic™ with Armour Zone®

5.4 **TAMKO BUILDING PRODUCTS**
 Titan XT™ Premium Architectural Shingles

5.2 **Malarkey Roofing Products**
 Vista® AR



Insurance Institute for Business & Home Safety
 Updated November 2025

D/R – Dents and Ridges T – Tears GL – Granule Loss



PERFORMANCE RELATIVITIES

Tile

Concrete tile

Clay tile

Asphalt

"New" IBHS-rated excellent asphalt shingle

"New" conventional asphalt shingle

"New" IBHS-rated good asphalt shingle

5-year-old IBHS-rated good/excellent asphalt shingle

5-year-old conventional asphalt shingle

10+ year-old conventional asphalt shingle

Metal

Standing seam (function)

Stone-coated (function)

BEST

 Water entry potential

WORST

- **2011 Super Outbreak**
\$7.7 billion dollars in insured loss

- **2011 Joplin, MO EF-5**
\$2.8 billion dollars in insured loss

- **2013 Moore, OK EF-5**
\$3.5 billion dollars in insured loss

- **2021 Mayfield, KY EF-4**
\$1.9 billion dollars

***WHAT IF:
WE MITIGATED
\$6.1 BILLION
IN LOSSES?***





Michael Newman
General Counsel



➔ ibhs.org



✂ [IBHS_org](#)