

WEATHERING THE STORM

Tracking Solutions for the Industry

PRESENTATION 2025



Today's Presenters



Kailey Joyce

*Product Manager, Verisk Weather
Solutions*



Craig Hoff

*Chief Technology Officer,
Earthvisionz*

WEATHERING THE STORM

NAMFS
NATIONAL ASSOCIATION OF MORTGAGE FIELD SERVICES

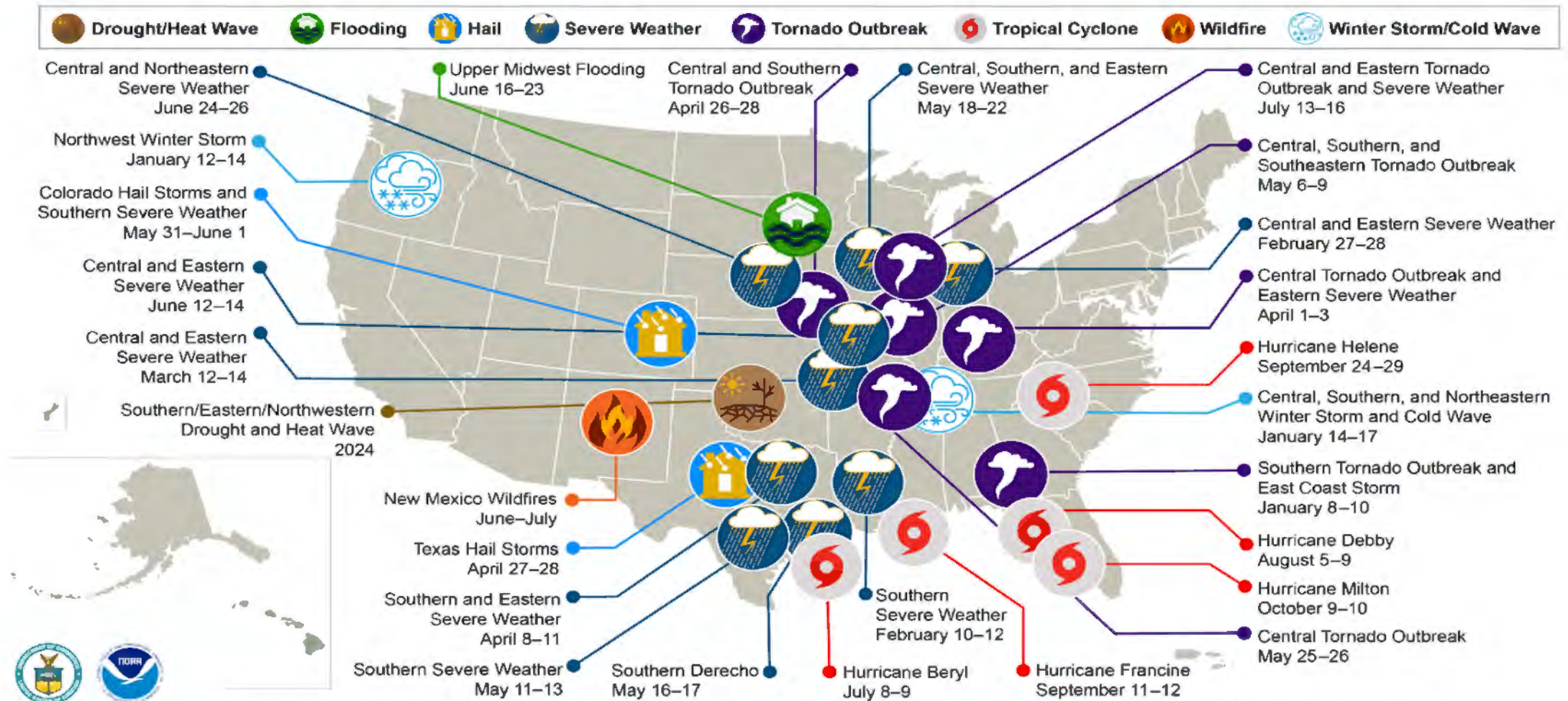
 **Verisk**

 **EARTHVISIONZ**



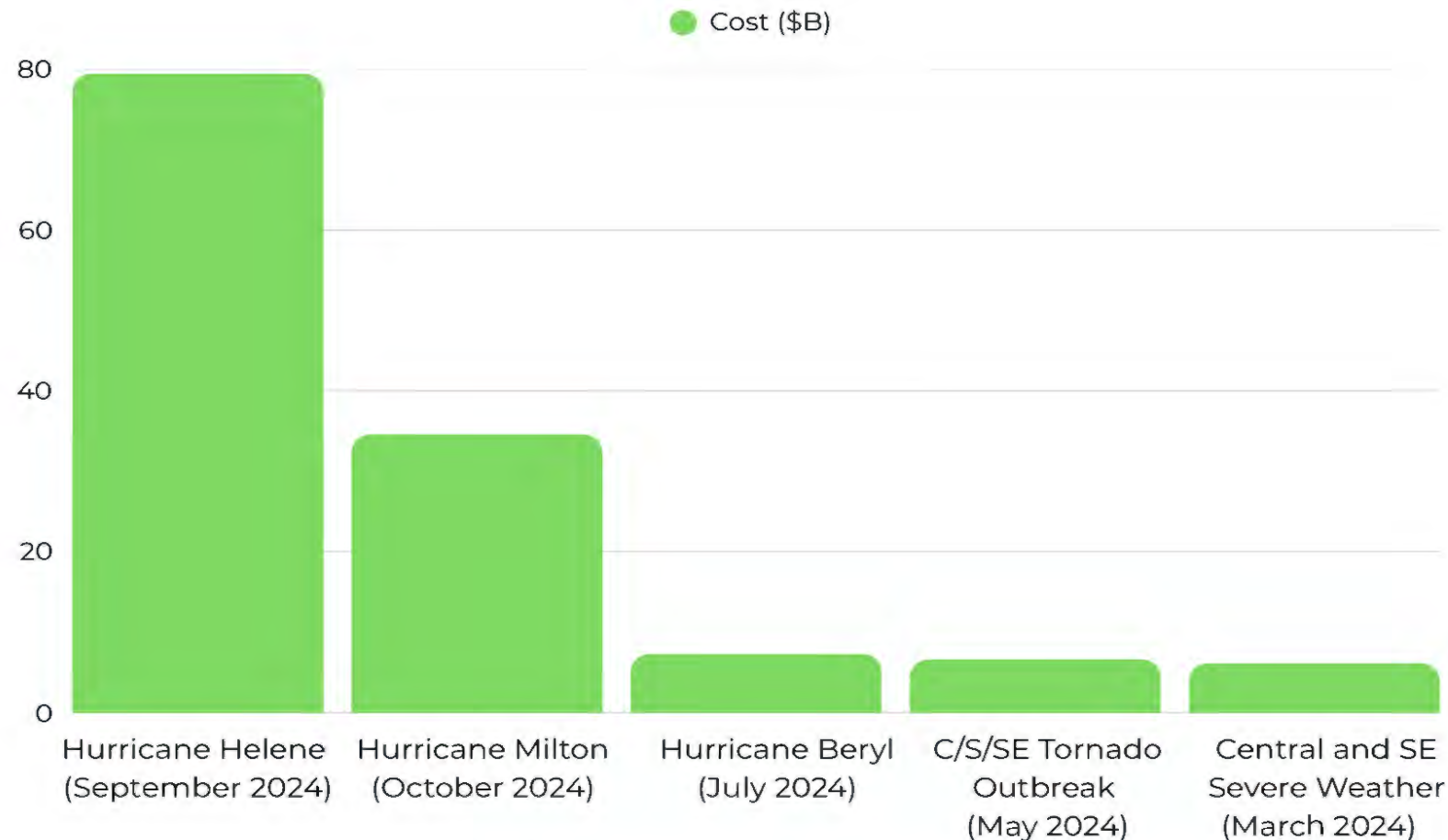
Recap of 2024

2024 Year in Review: Billion Dollar Events



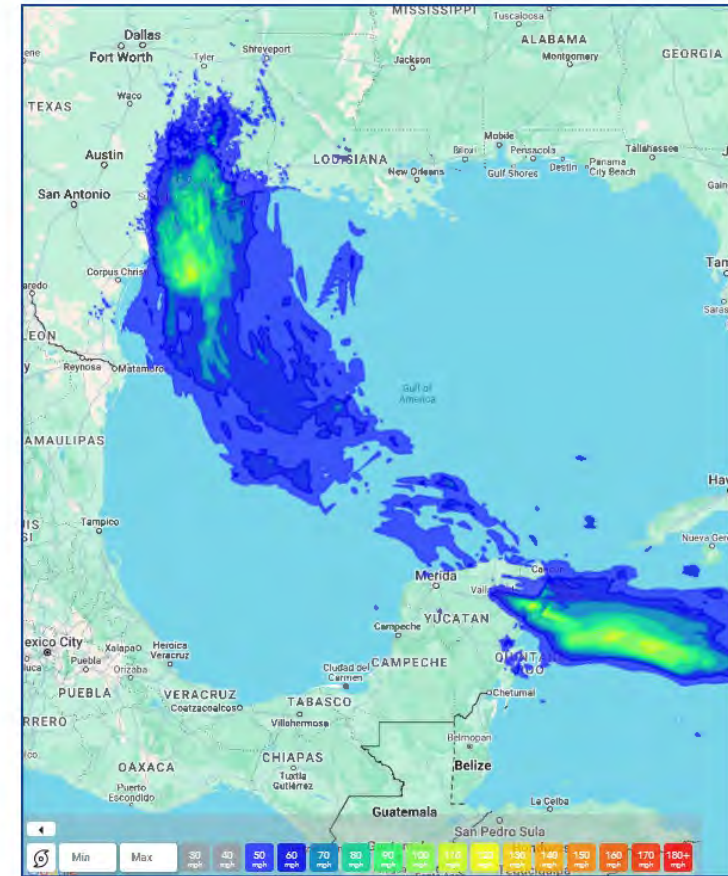
This map denotes the approximate location for each of the 27 separate billion-dollar weather and climate disasters that impacted the United States in 2024.

2024 Year in Review: Most Damaging Events



2024 Year in Review: Hurricane Beryl

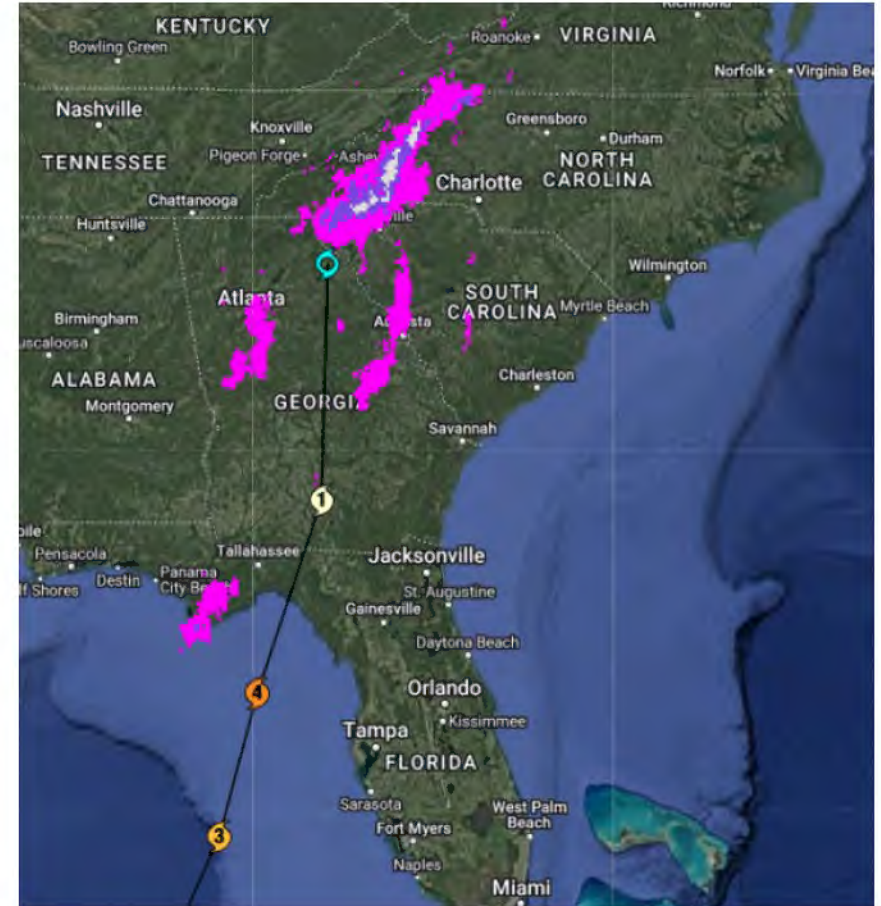
- Earliest ever category 5 Atlantic hurricane (July 2)
- Damage concentrated in Mexico and Texas
- \$7 billion in damage and responsible for 46 deaths



Respond™: Post-event Wind Field

2024 Year in Review: Hurricane Helene

- Surprising damage in inland North Carolina and nearby states due to extreme rainfall, exceeding 30" in some areas
- Nearly \$80 billion in damage, causing 219 deaths



Helene track with areas receiving more than 10" of rainfall in pink

Source: NOAA

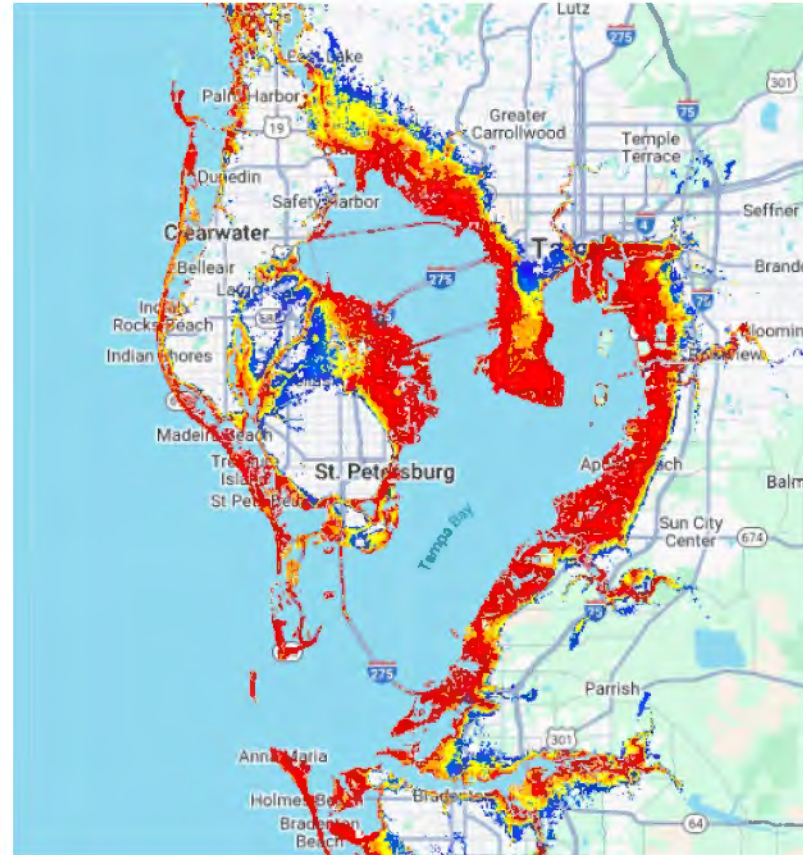
<https://www.ncei.noaa.gov/access/billions/>,
https://www.nhc.noaa.gov/data/tcr/AL092024_Helene.pdf

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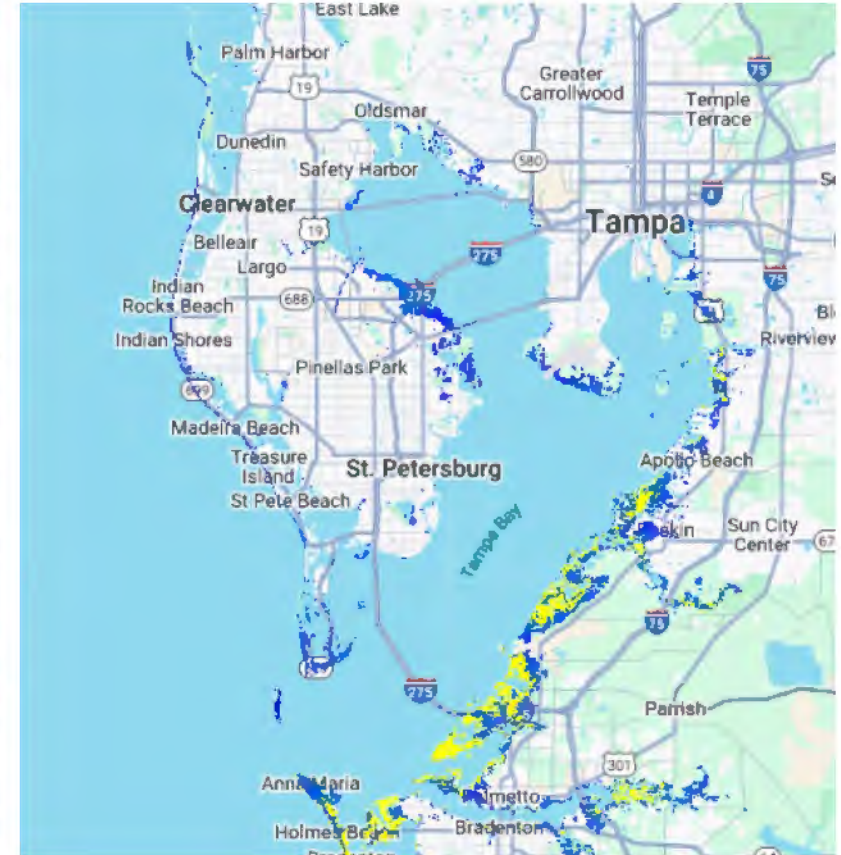
NAMFS Verisk EARTHVISIONZ

2024 Year in Review: Hurricane Milton

- Surprising explosion of intensity in the Gulf
- Original projections had much more storm surge in Tampa Bay – would have been much worse
- Damage nearly \$35 billion and responsible for 32 deaths



Oct 7: 9'+ storm surge forecast



Oct 9: 3' storm surge forecast

Source: NOAA

<https://www.ncei.noaa.gov/access/billions/>,
https://www.nhc.noaa.gov/data/tcr/AL142024_Milton.pdf

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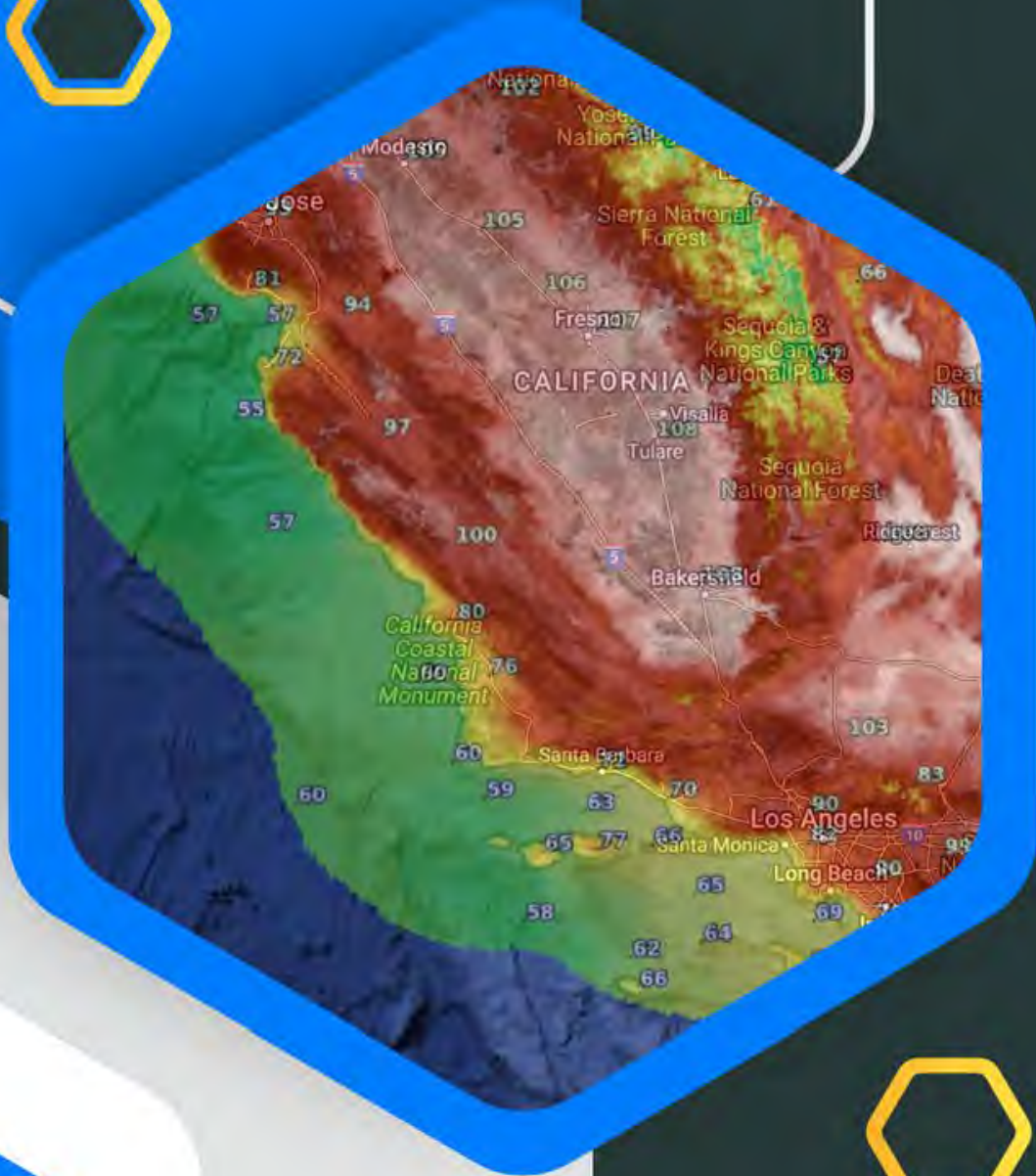
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2025: LA Wildfires

- Most catastrophic wildfires in the history of Los Angeles
- 18k structures damaged or destroyed, 30 deaths
- Up to \$131 billion in damage, \$45 billion in insured losses



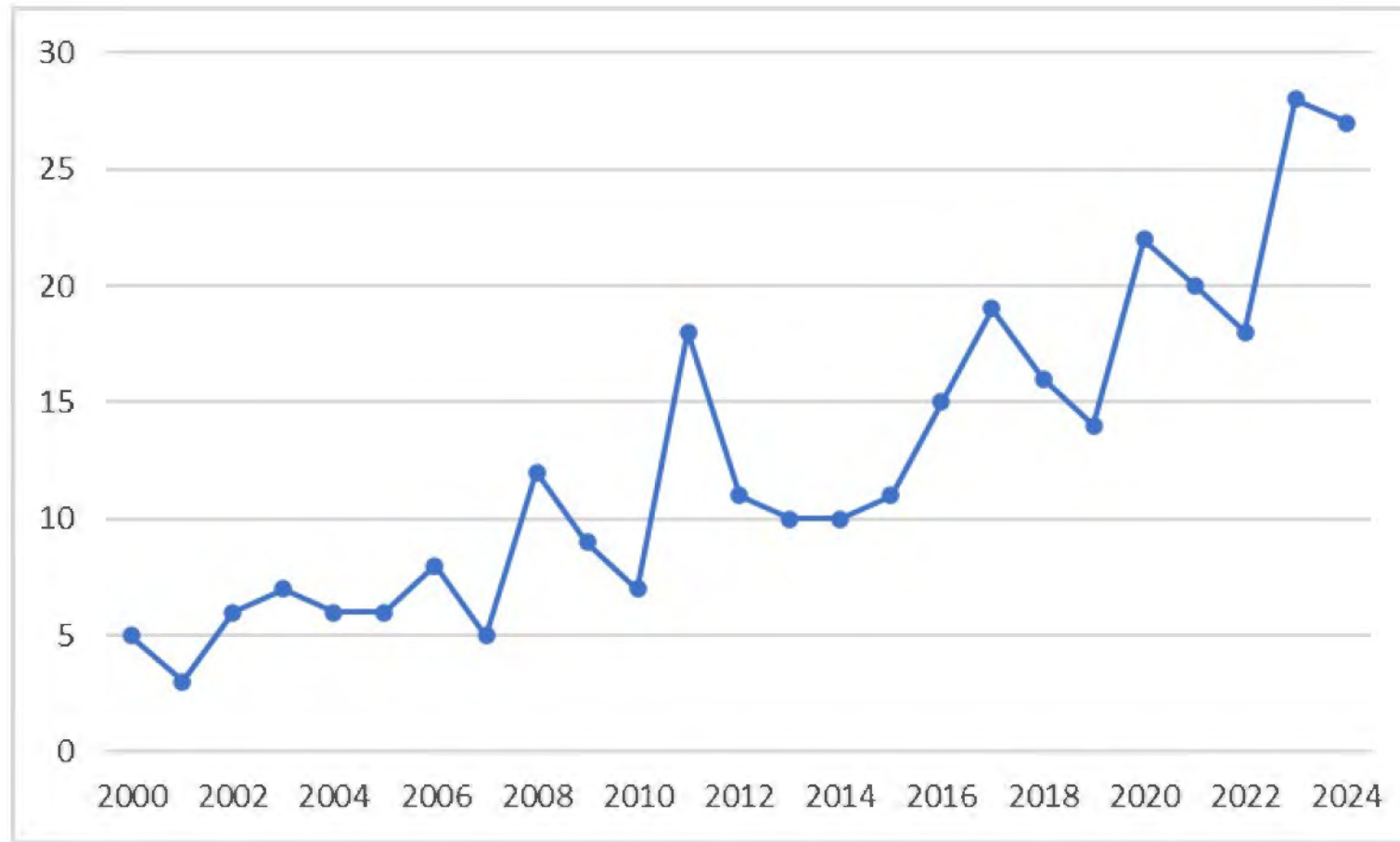
Sources: UCLA Anderson School of Management, Associated Press, CAL FIRE
<https://www.anderson.ucla.edu/about/centers/ucla-anderson-forecast/economic-impact-los-angeles-wildfires>,
<https://www.ctvnews.ca/world/article/death-toll-from-the-wildfires-that-tore-through-the-los-angeles-area-reaches-30/>,
<https://www.fire.ca.gov/incidents/2025>



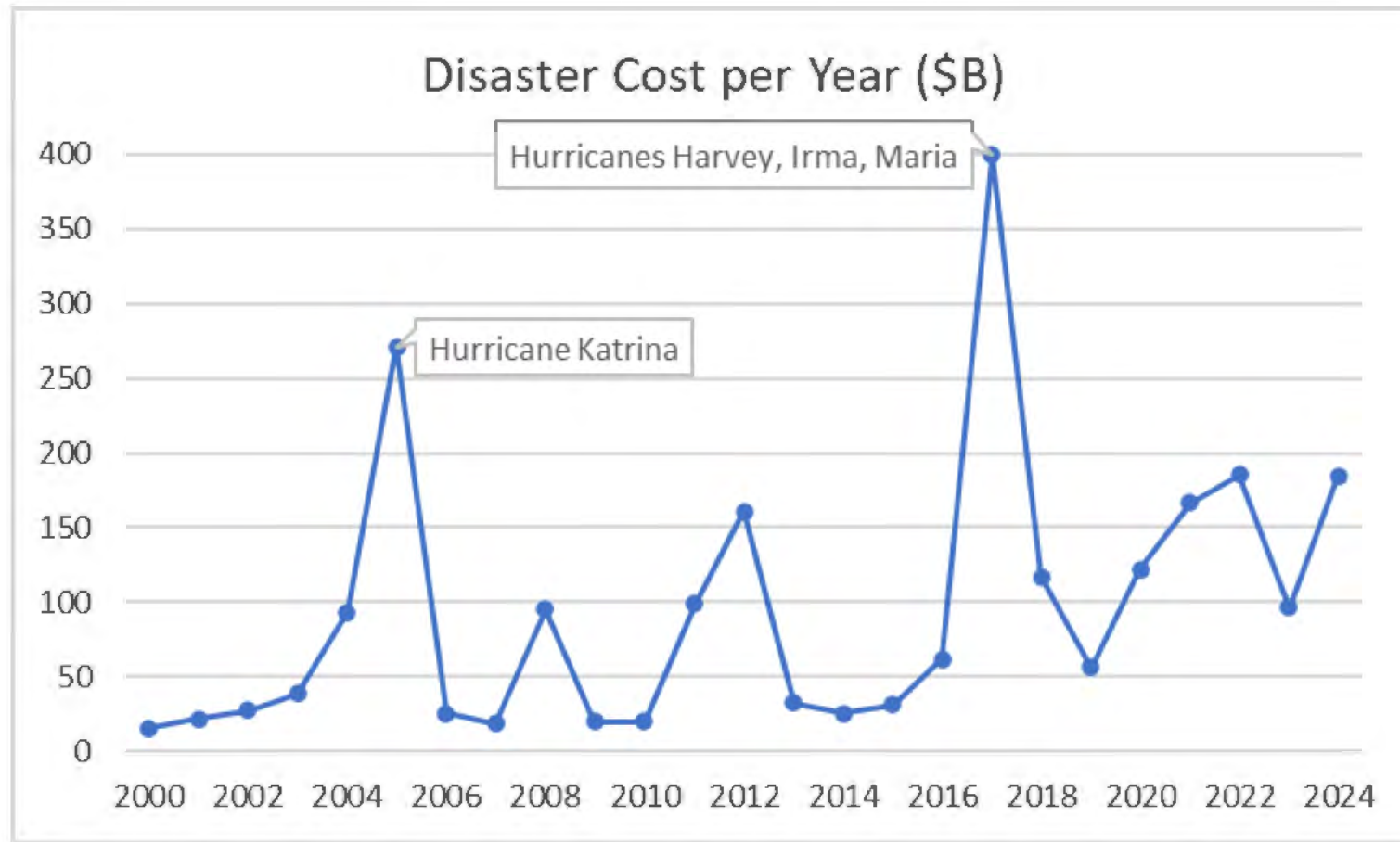
Long-Term Weather Trends



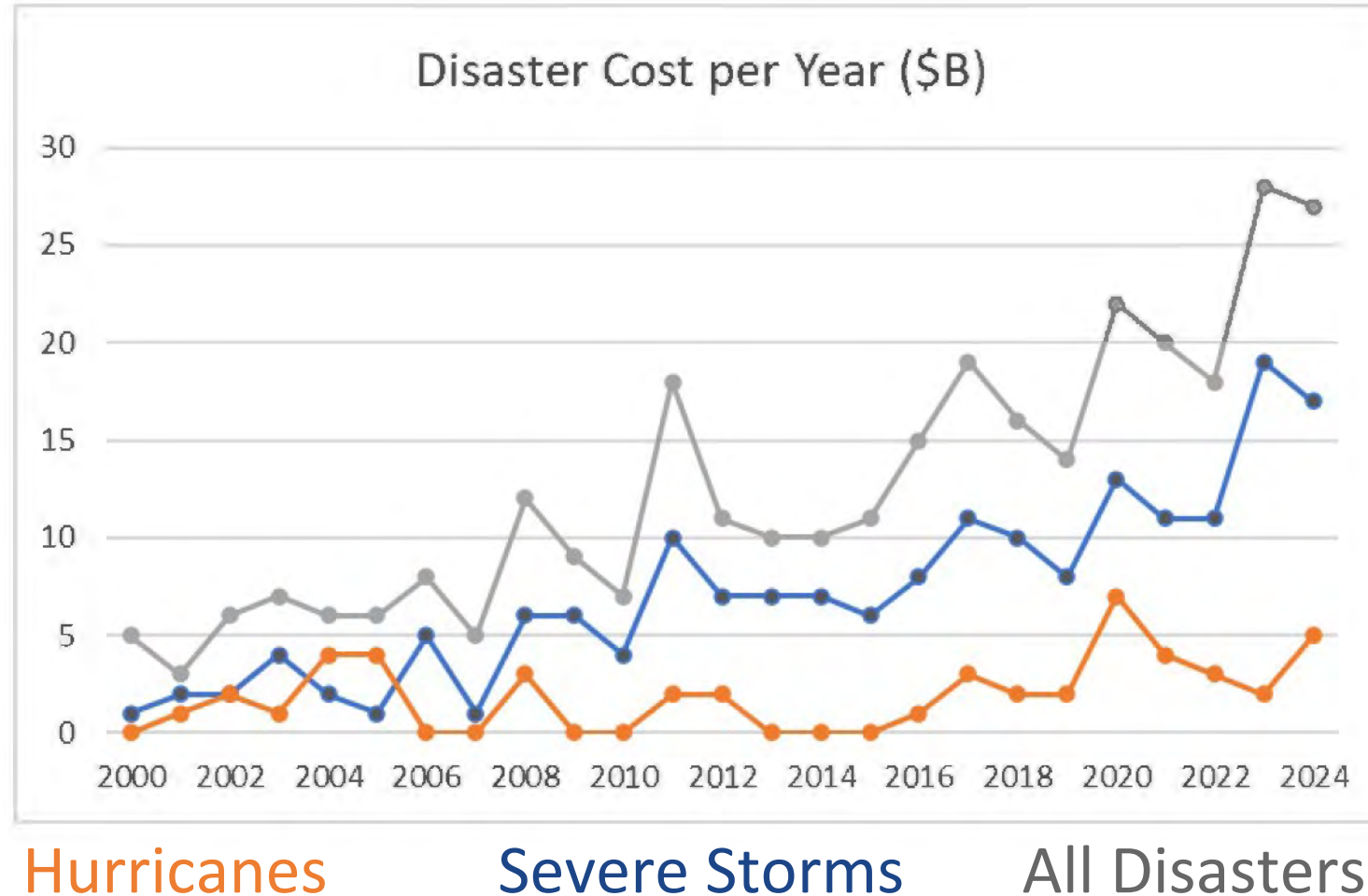
2000-2024: Increasing number of billion-dollar disasters



2000-2024: Increasing damage from disasters

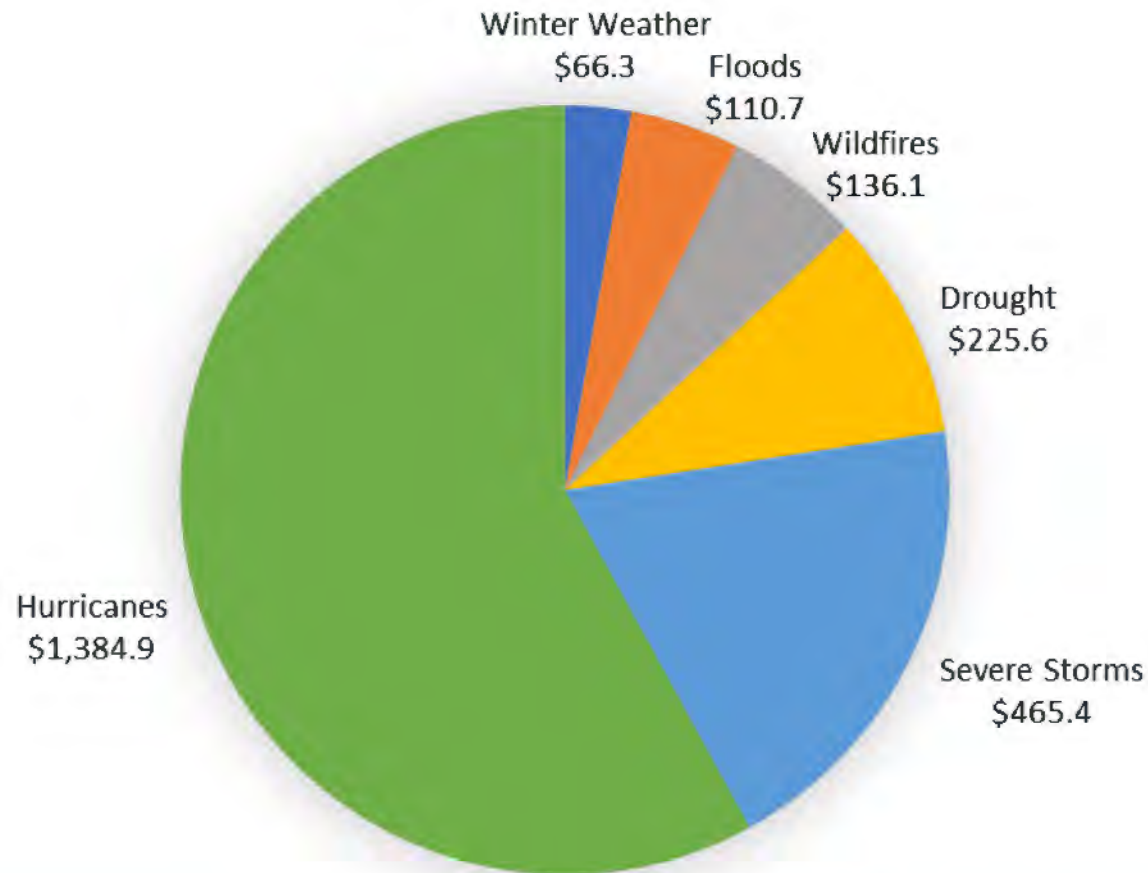


1980-2024: Billion-dollar severe storms are becoming more common



Which event types do the most damage?

Total Cost of Events 2000-2024 (\$B)

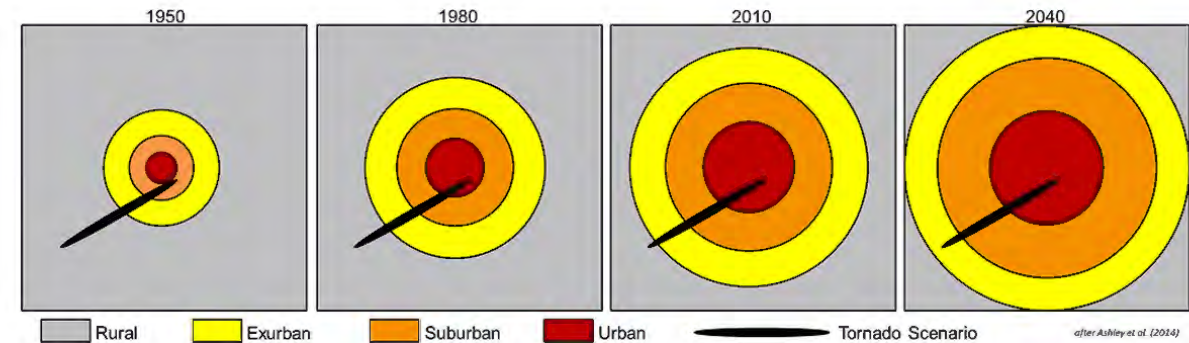


Total Cost: \$2,389 billion

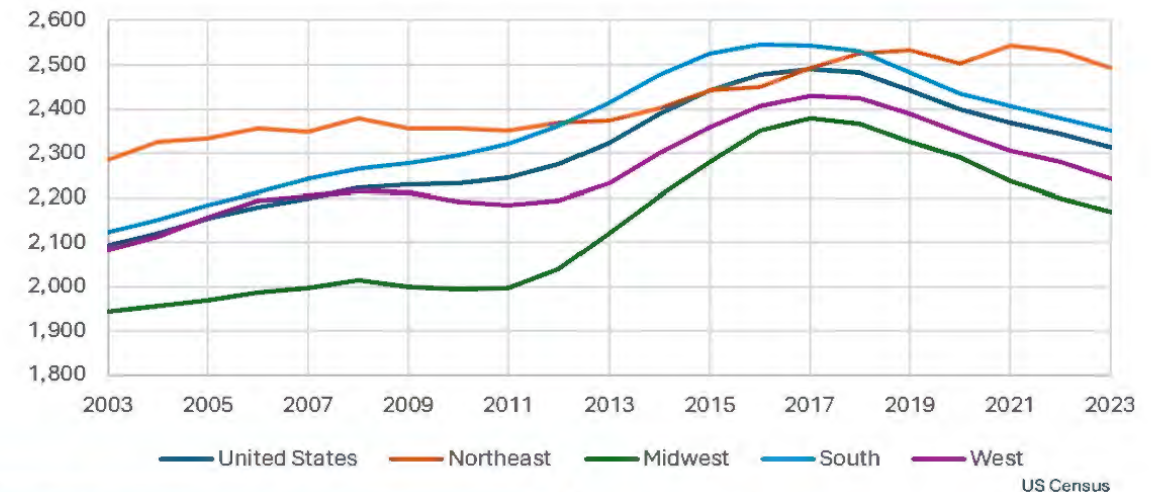
- 58% from hurricanes
- 19% from severe storms
- 9% from drought (mostly agricultural)
- 6% from wildfires
- 5% from floods
- 3% from winter storms and freezing temperatures

Why are we seeing increasing losses associated with severe thunderstorms?

1. **Increased Exposures:** Growing population and urbanization as well as changes in construction
2. **Rising Costs/Inflation:** Higher costs for materials and labor
3. **Climate Variations:** Changes in severe thunderstorm frequency and intensity
4. **Annual Variability:** Some years have more storms
5. **Other:** Consumer behavior changes (i.e WFH), increasing home sizes and structure complexity, etc.

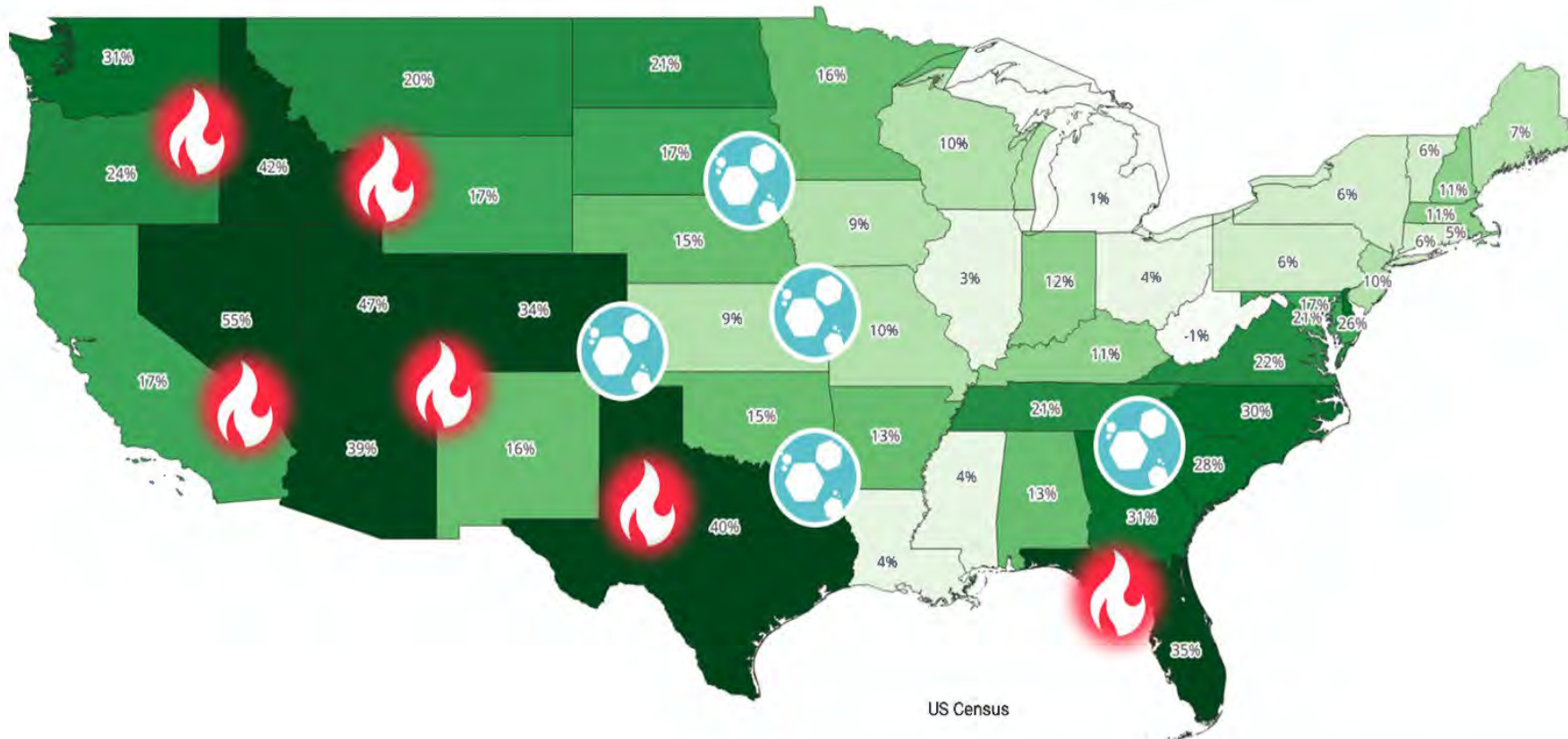


5-Year Average of the Median Square Footage of New Sold Single Family Homes



Increased Exposure: Population Growth

2000 to 2020 Percentage Population Growth



Growth rates
US: 0.8% YoY

TX: 1.8% YoY
DFW: 2.0% YoY

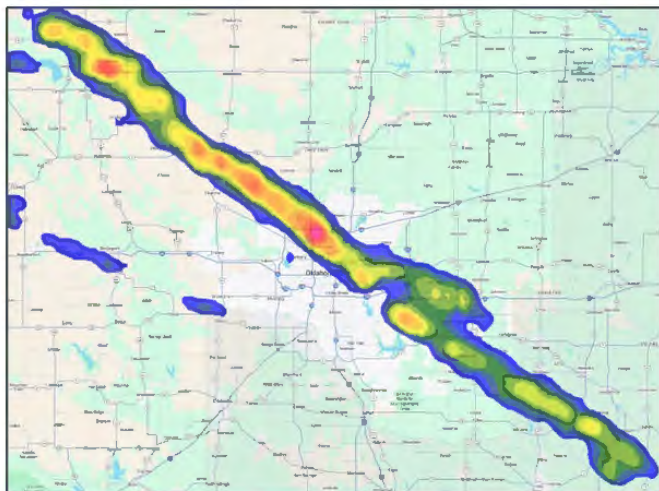
CO: 1.4% YoY
DEN: 1.5% YoY

Changing Exposure and Inflation

Case Study

Respond: Verisk's near real-time, high resolution geospatial weather data used to improve hazard event decision making and response

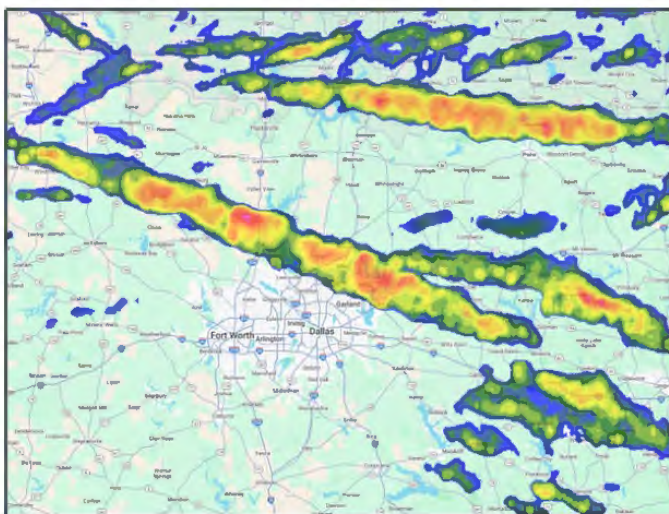
May 16, 2010: Oklahoma City



May 16, 2010: Oklahoma City Hail Event

	2000	2010	2024
Properties Damaged (Claims)	1.00x	1.15x	1.37x
Loss Amounts	1.00x	1.79x	4.12x

April 11, 2016: DFW Metro

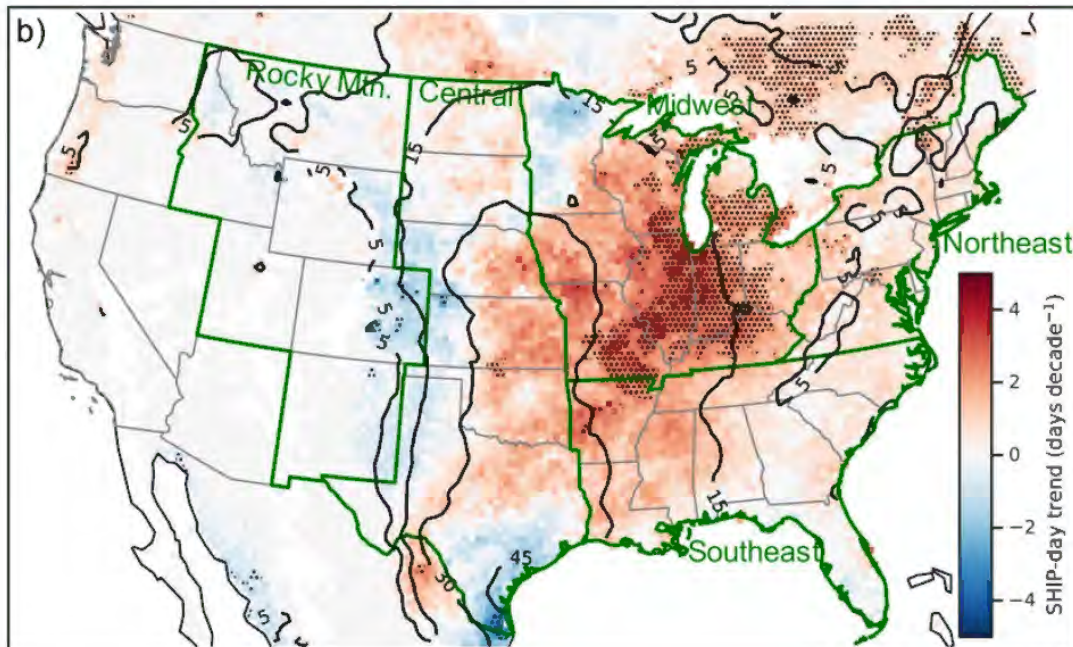


April 11, 2016: Dallas/Fort Worth Hail Event

	2000	2010	2024
Properties Damaged (Claims)	1.00x	1.24x	1.60x
Loss Amounts	1.00x	1.93x	4.79x

Climate Variations

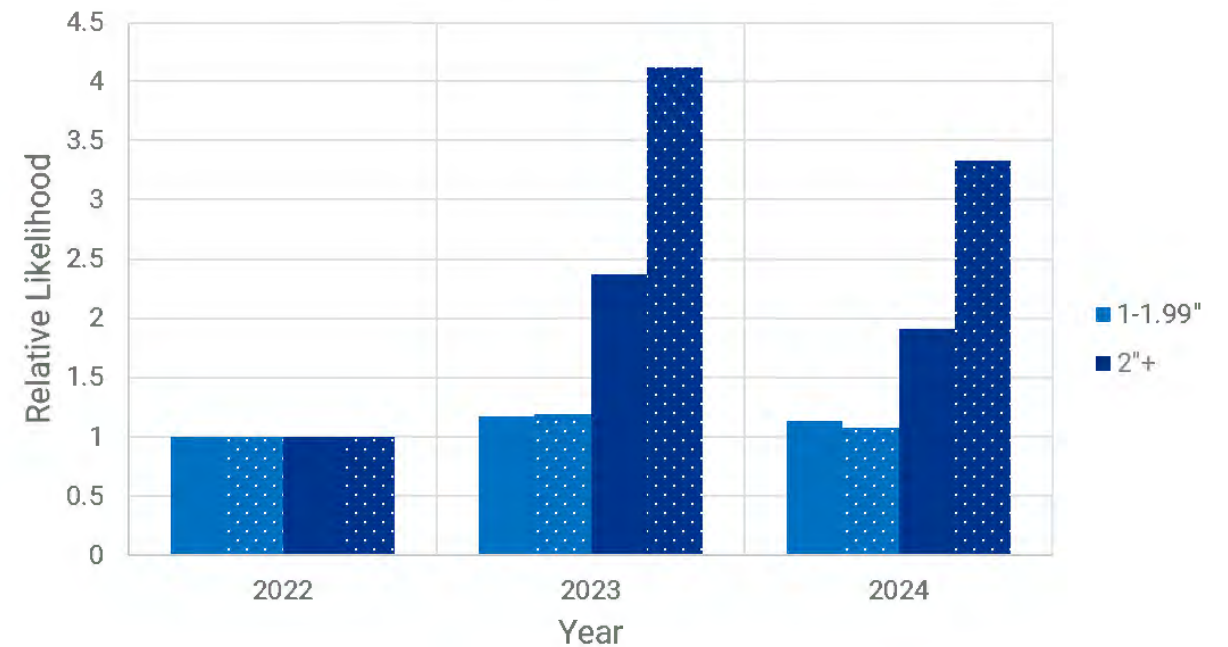
Geographical shifts in risk (frequency)
Intensity changes (severity)



B.H. Tang et al. (2019)

Annual Storm Variability

Relative Likelihood of Area (solid) and Roofs (dotted)
Impacted By Hail in 2023 and 2024 Compared to 2022



2023 and 2024 recorded more area impacted by larger hail sizes and significantly more roofs impacts (larger hail hit more populated areas)