

# RAA



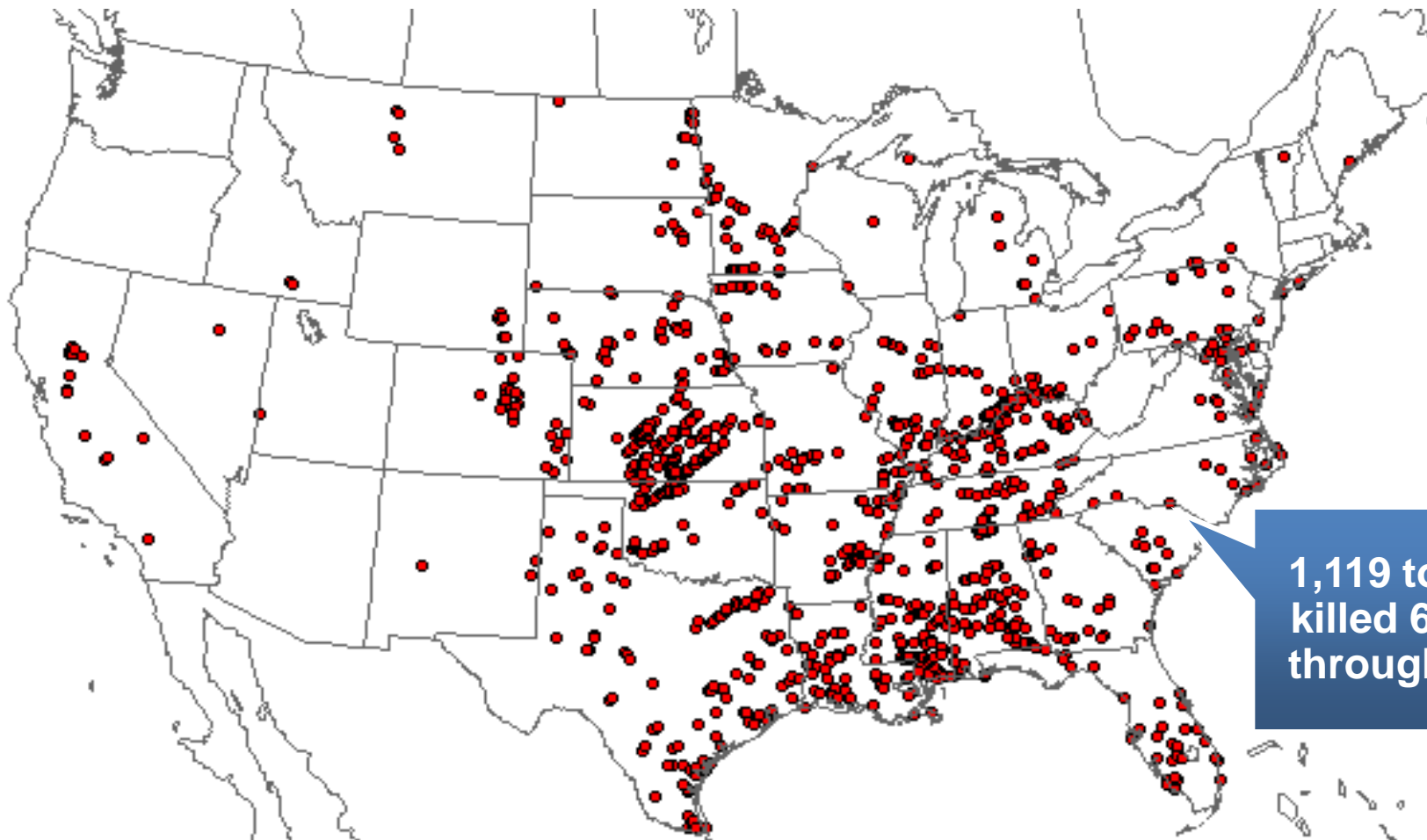
## Workshop on the Role of Insurance in Community Resilience



**May 10, 2013**

**Frank Nutter**  
**President**  
**Reinsurance Association of America**

# Location of Tornadoes in the US, 2012\*



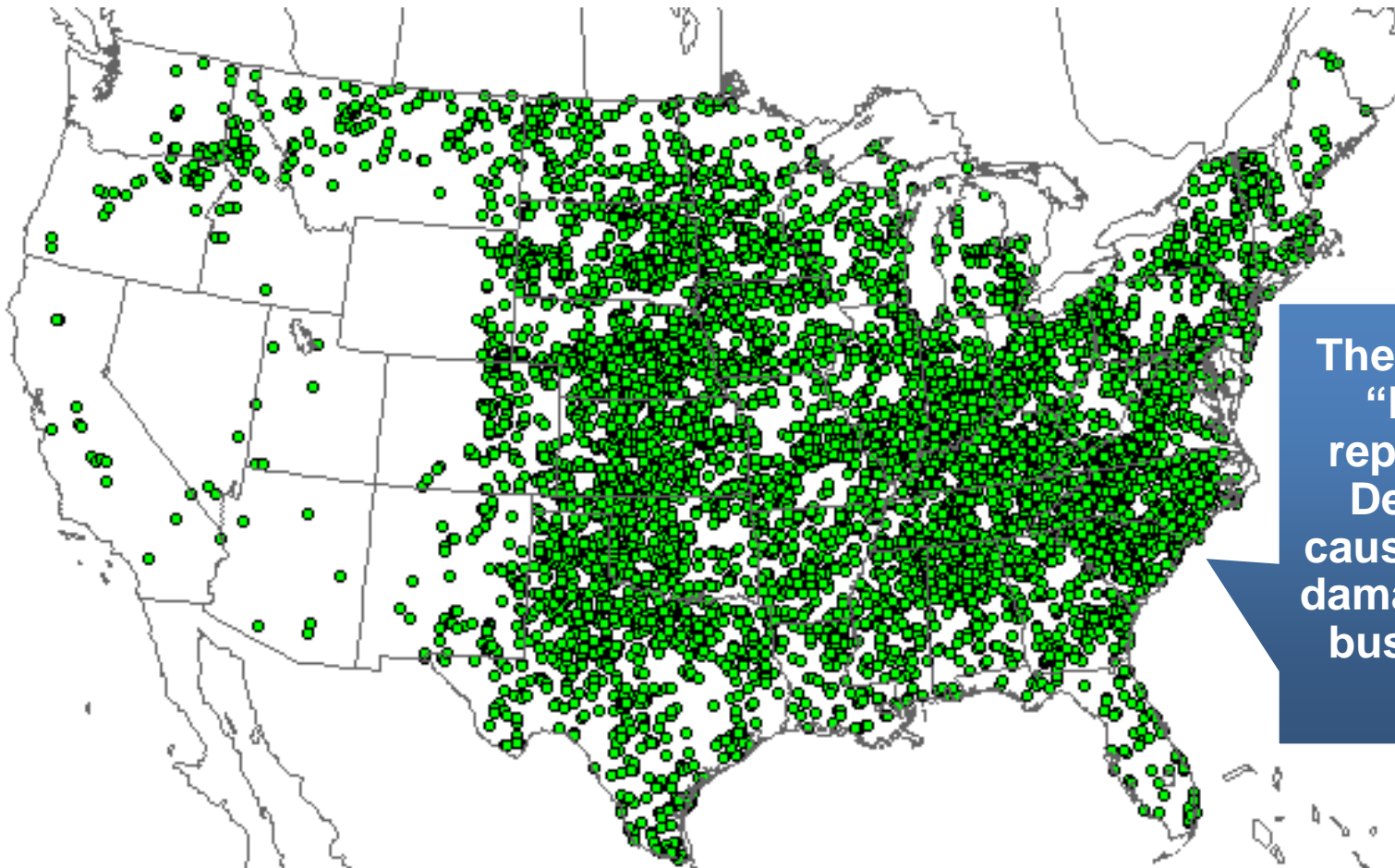
1,119 tornadoes  
killed 68 people  
through Dec. 31

 **PRELIMINARY SEVERE WEATHER REPORT DATABASE (ROUGH LOG)** **Tornado Reports**  
January 01, 2012 - December 31, 2012  
NOAA/Storm Prediction Center Norman, Oklahoma Updated: Sunday January 06, 2013 02:10 CT

\*Through Dec. 31, 2012.

Source: NOAA Storm Prediction Center; [http://www.spc.noaa.gov/climo/online/monthly/2012\\_annual\\_summary.html#](http://www.spc.noaa.gov/climo/online/monthly/2012_annual_summary.html#)

# Location of Large Hail Reports in the US, 2012\*



There were 7,033  
“Large Hail”  
reports through  
Dec. 31, 2012,  
causing extensive  
damage to homes,  
businesses and  
vehicles



PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

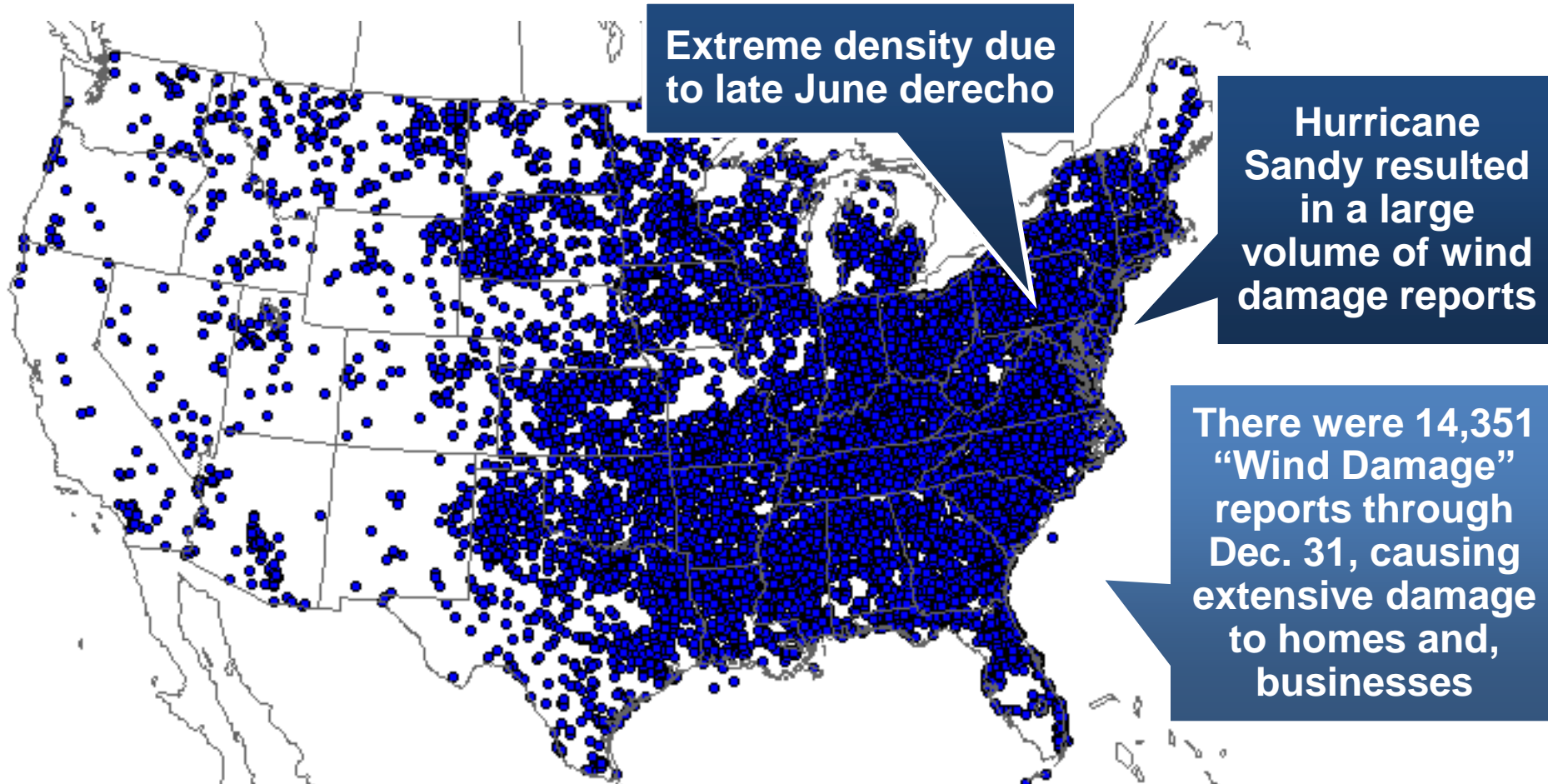
Hail Reports  
January 01, 2012 - December 31, 2012

Updated: Sunday January 06, 2013 02:10 CT

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Source: NOAA Storm Prediction Center; [http://www.spc.noaa.gov/climo/online/monthly/2012\\_annual\\_summary.html#](http://www.spc.noaa.gov/climo/online/monthly/2012_annual_summary.html#)

# Location of Wind Damage Reports in the US, 2012\*



PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Wind Reports  
January 01, 2012 - December 31, 2012

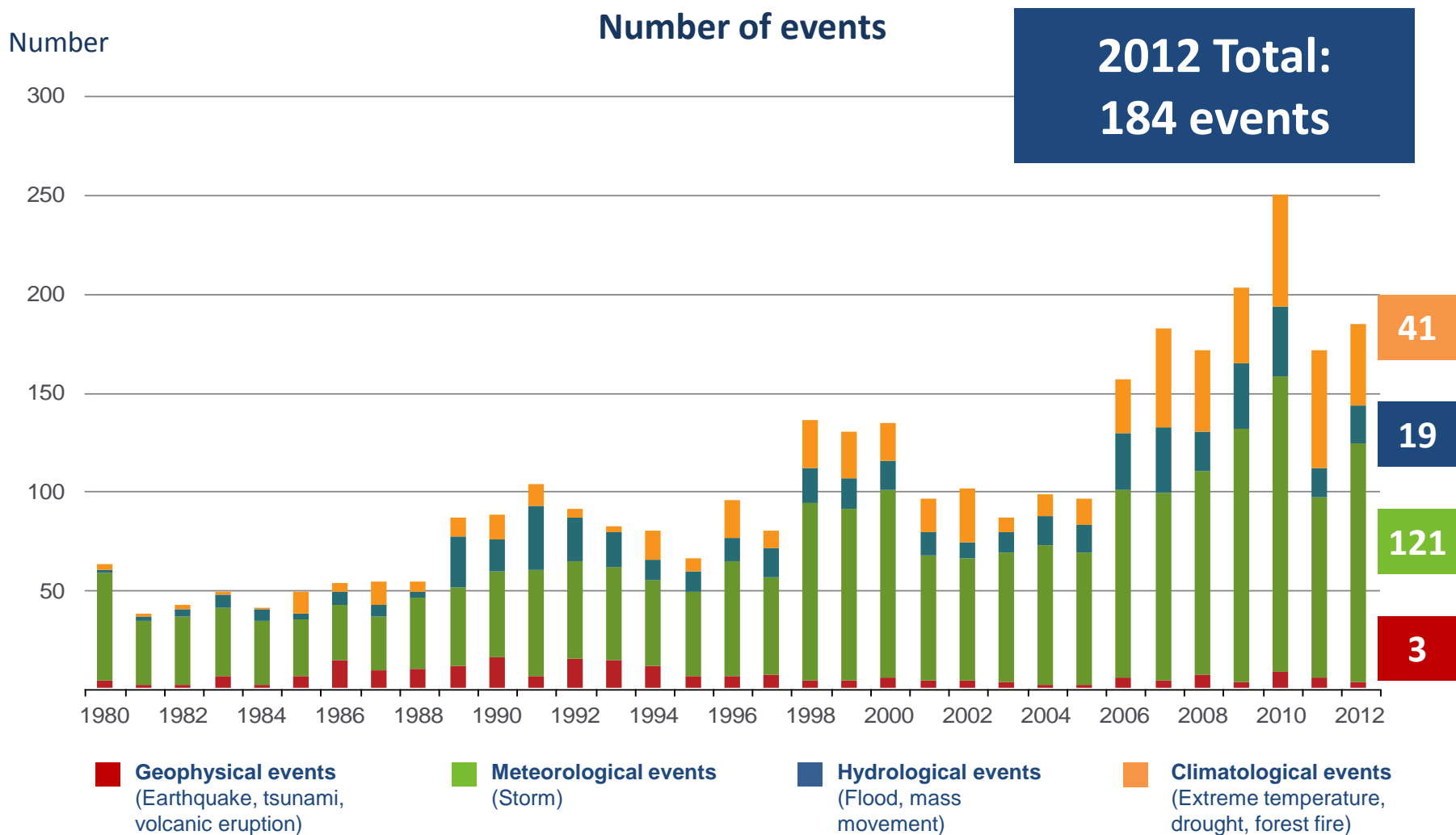
Updated: Sunday January 06, 2013 02:10 CT

\*Through Dec. 31, 2012.

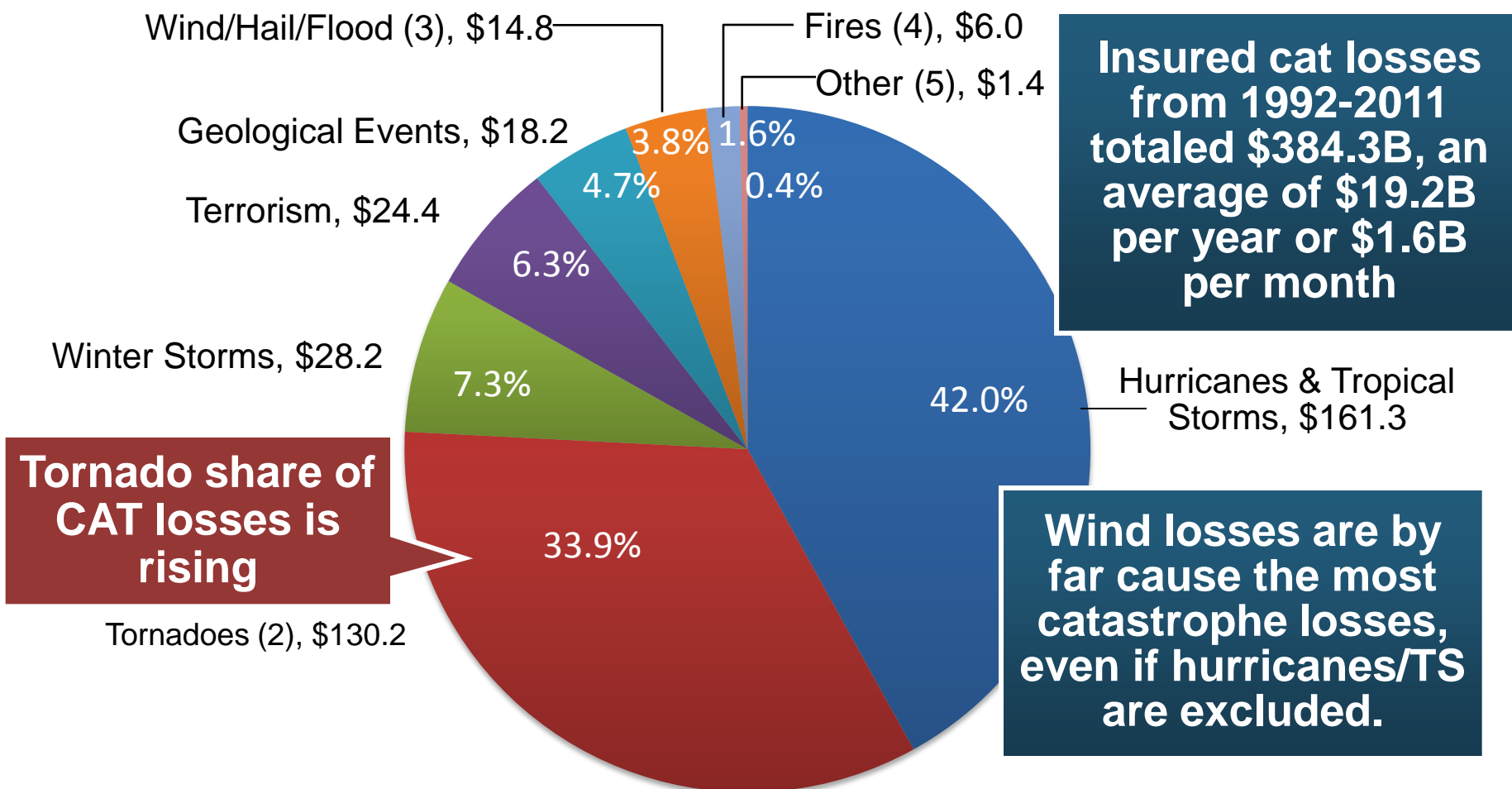
Source: NOAA Storm Prediction Center; [http://www.spc.noaa.gov/climo/online/monthly/2012\\_annual\\_summary.html#](http://www.spc.noaa.gov/climo/online/monthly/2012_annual_summary.html#)

# Natural Catastrophes in the USA

## 1980 – 2012



# Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1990–2011<sup>1</sup>



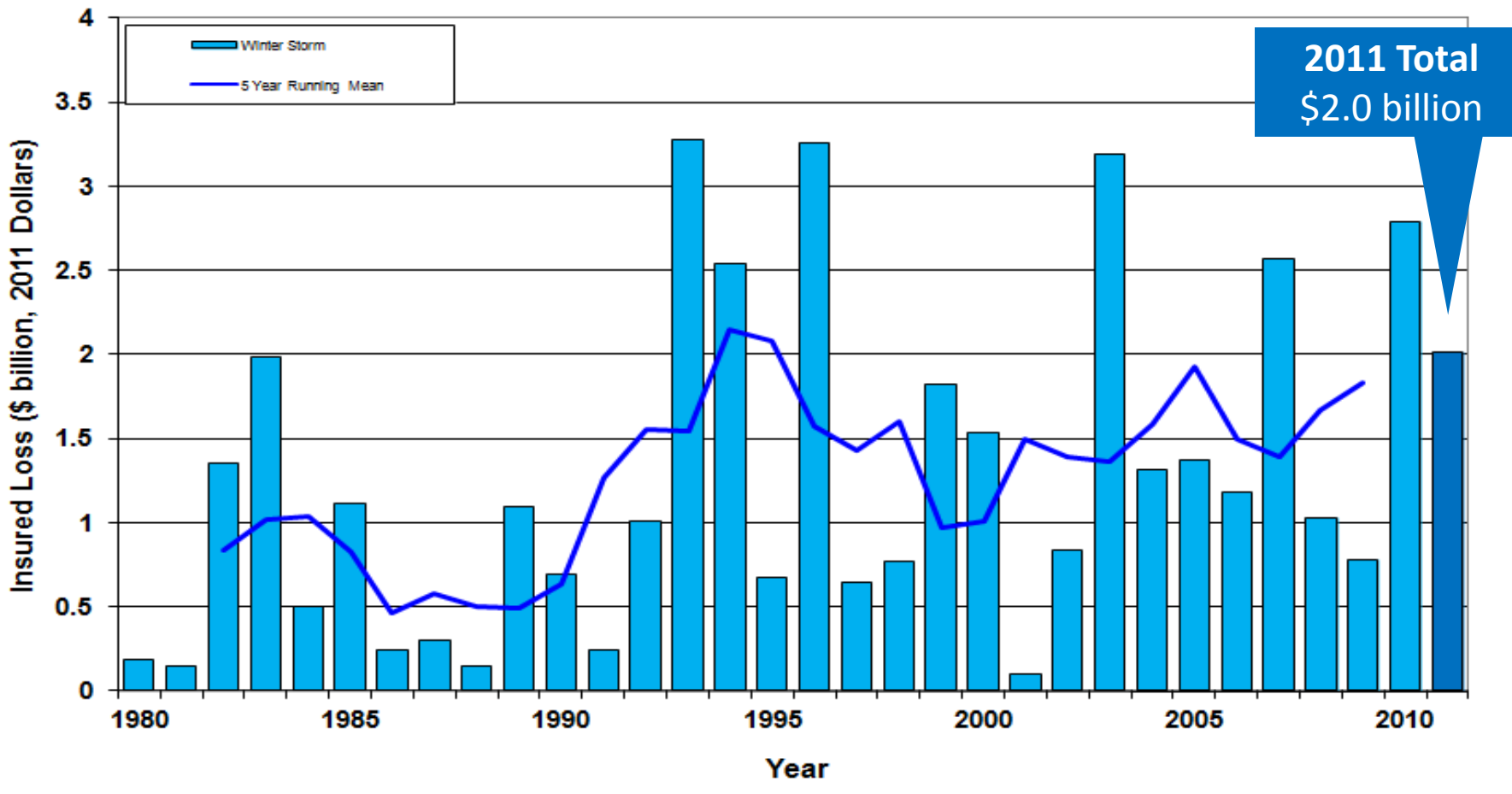
1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2009 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO's Property Claim Services Unit.

# U.S. Winter Storm Loss Trends

## Annual totals 1980 – 2011

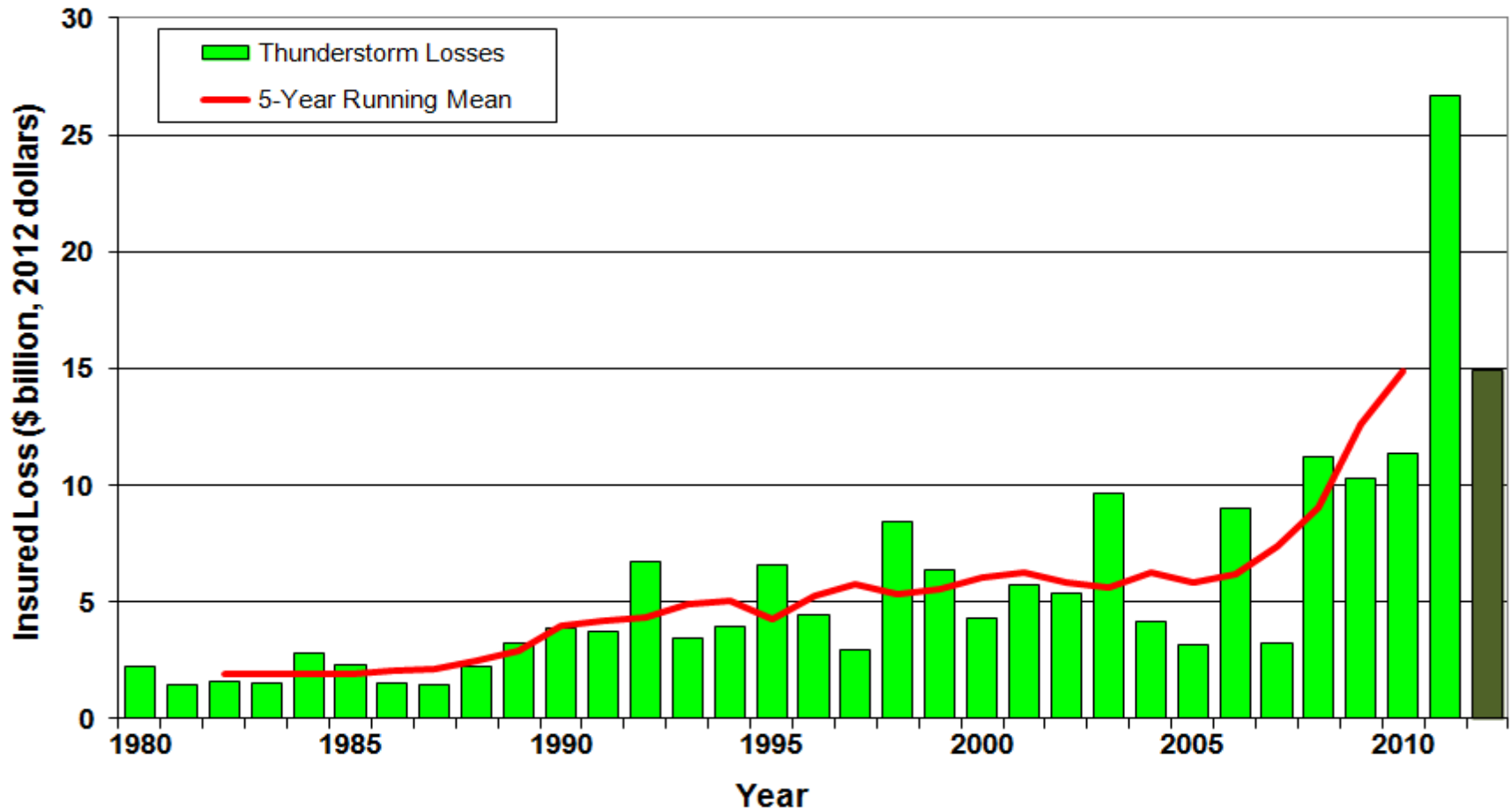
Average annual winter storm losses have almost doubled since the early 1980s.



# US Thunderstorm Loss Trends

## Annual Totals 1980 – 2012

Average thunderstorm losses have increased sevenfold since 1980.



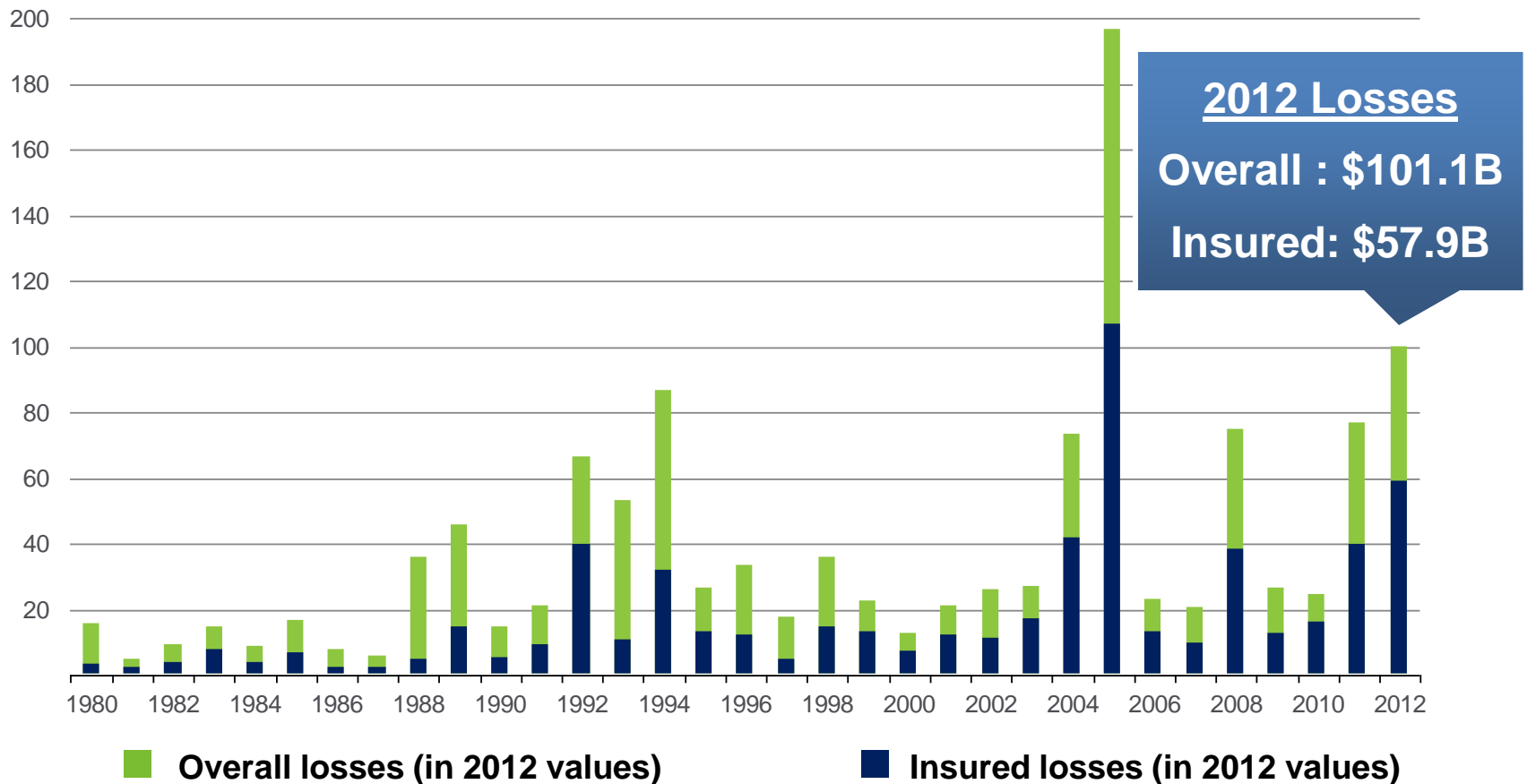


# Natural Catastrophes in the USA

## 1980 – 2012

Overall and insured losses

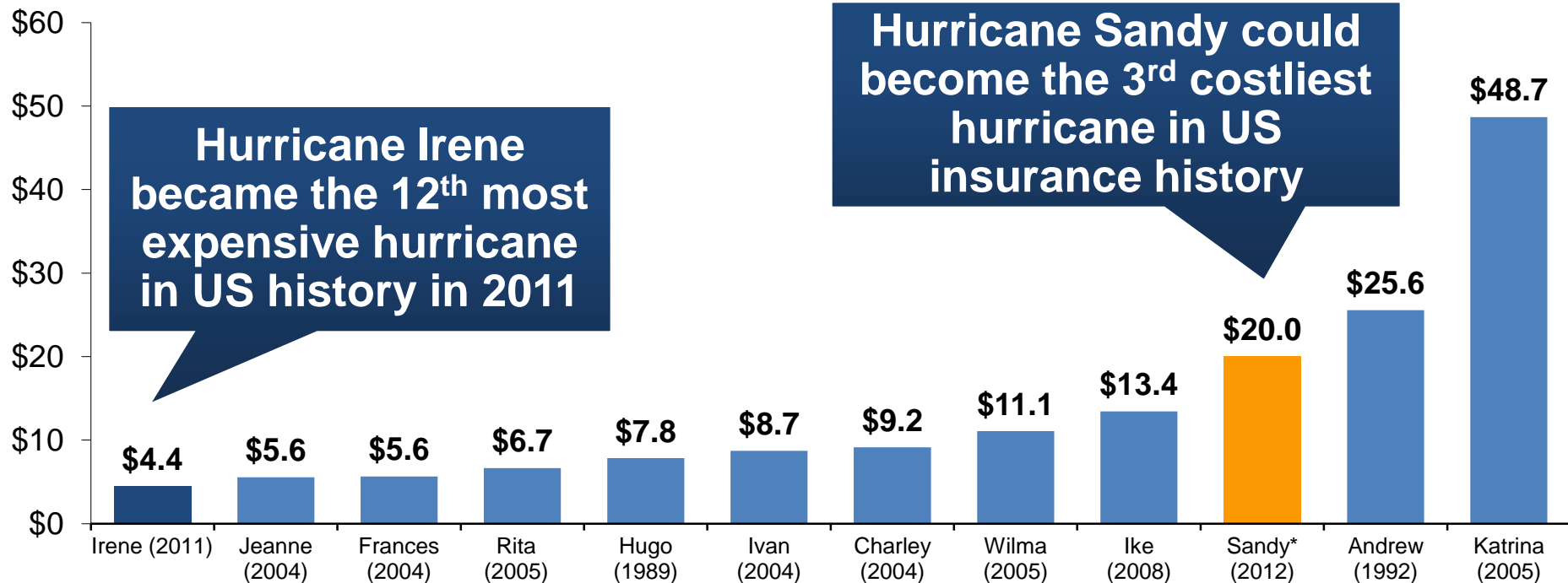
Insured losses in the U.S. In 2012 were the second highest on record.



# Top 12 Most Costly Hurricanes in U.S. History

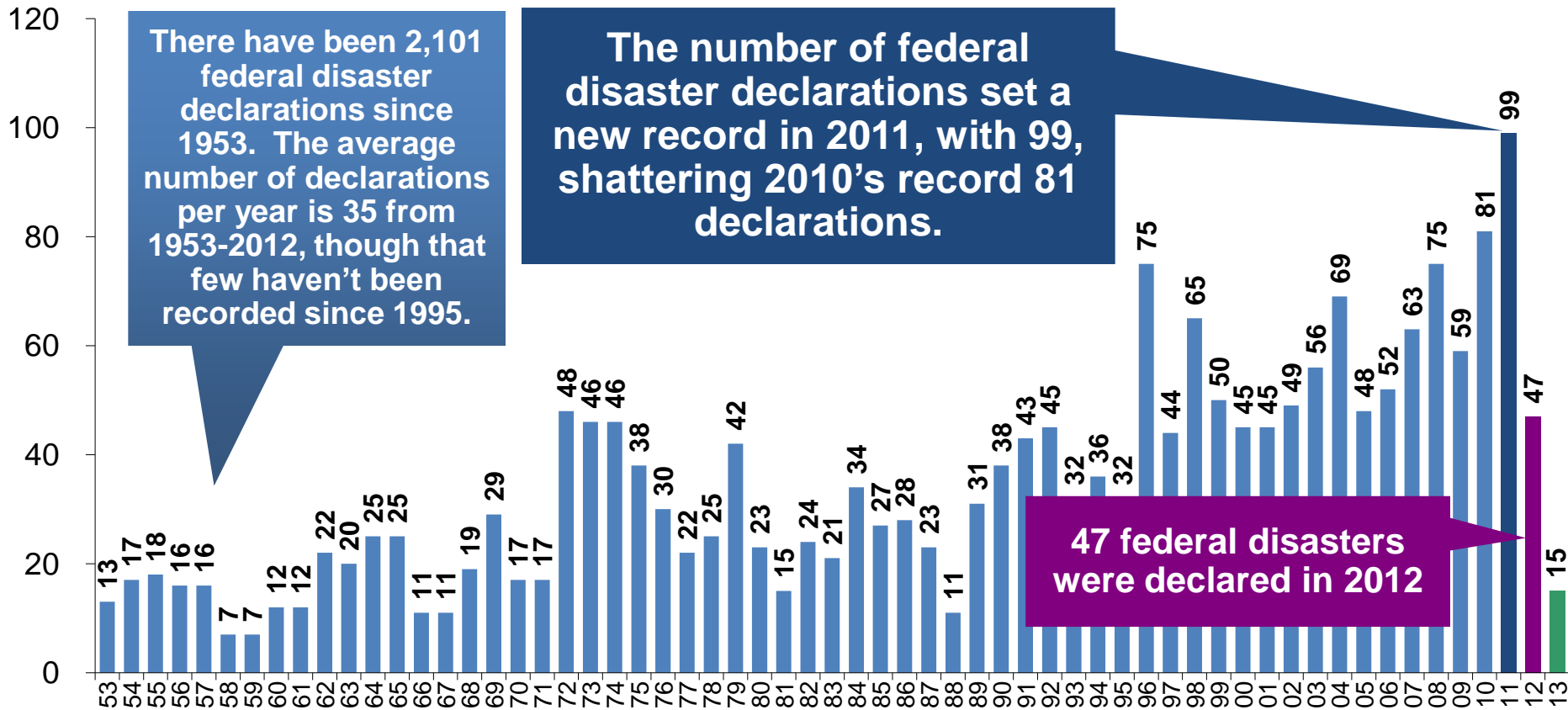
(Insured Losses, 2012 Dollars, \$ Billions)

10 of the 12 most costly hurricanes in insurance history occurred over the past 9 years (2004—2012)



\*Estimate as of 12/09/12 based on estimates of catastrophe modeling firms and reported losses as of 1/12/13. Estimates range up to \$25B. Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

# Number of Federal Disaster Declarations, 1953-2013\*

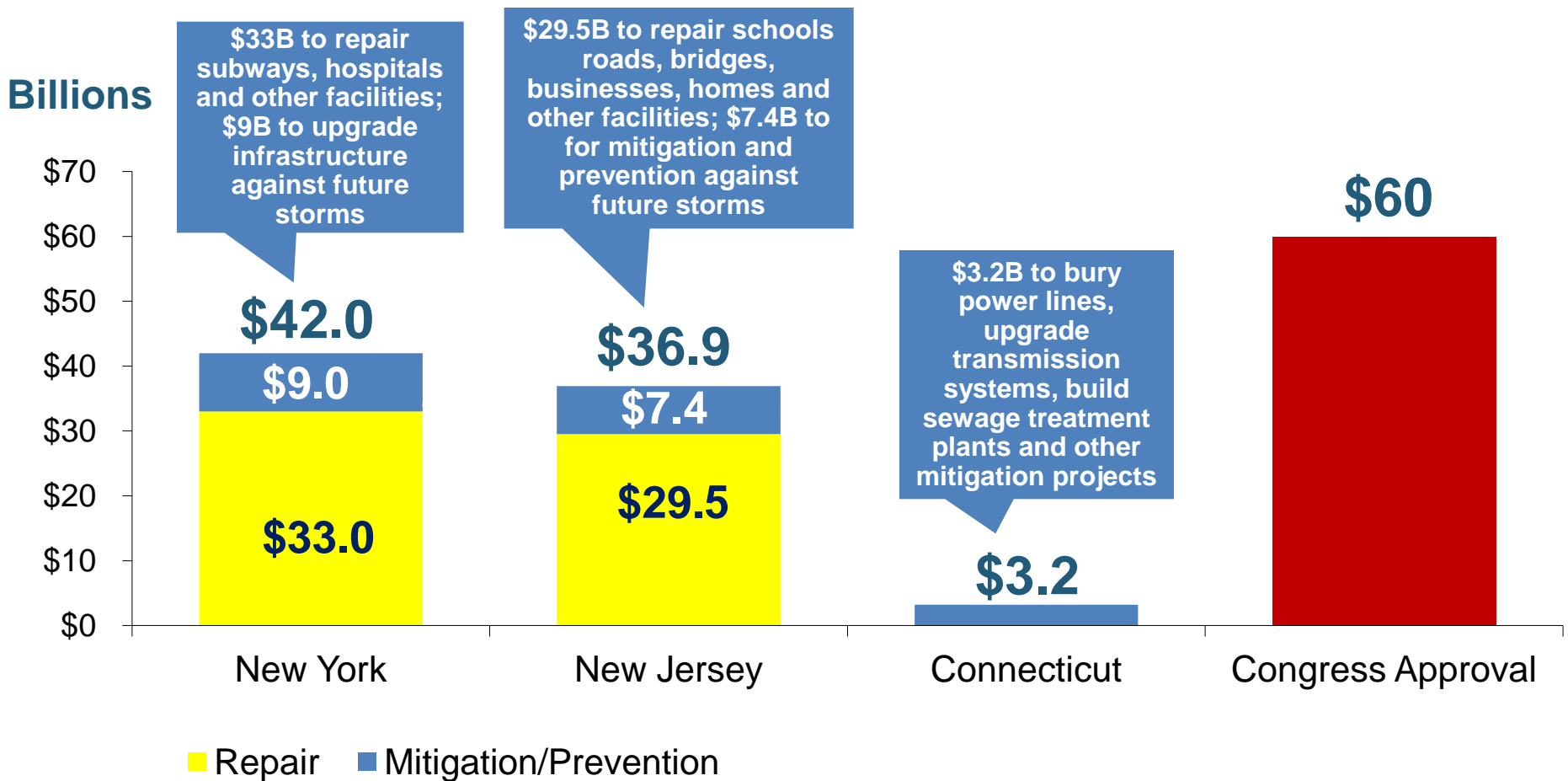


**The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 and 2011. Hurricane Sandy Produced 13 Declarations in 2012/13.**

\*Through May 1, 2013.

Source: Federal Emergency Management Administration; <http://www.fema.gov/disasters>; Insurance Information Institute.

# Federal Aid Requests for States With Greatest Sandy Impact & Federal Aid Proposals



**States Requested Enormous Sums in Sandy Aid in the Middle of the “Fiscal Cliff” Debate, Causing Delays**

\*As of Jan. 2, 2013.  
 Source: *New York Times*, Dec. 6, 2012; Insurance Information Institute research.



# U.S. Population Living in Coastal Watershed Counties

**52%**

Percent of the nation's total population that lived in coastal watershed counties in 2010 (less than 20% of the total land area excluding Alaska).

Source: U.S. Census Bureau, 2011

**50.9 million**

Increase in U.S. coastal watershed county population from 1970 to 2010 (or a 45% increase).

Source: U.S. Census Bureau, 2011

**319**

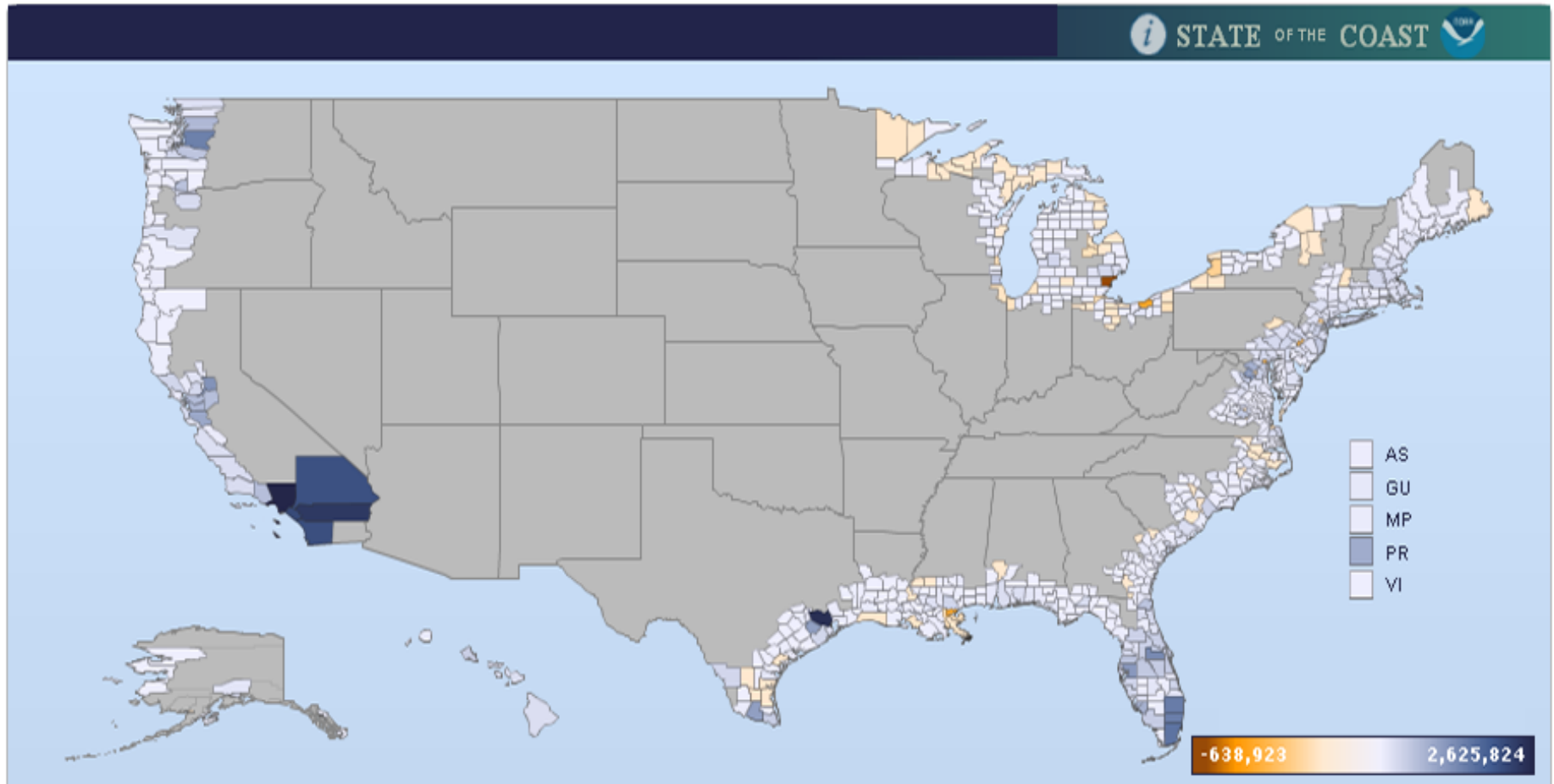
Average population density of the coastal watershed counties (excluding Alaska). Inland density averages 61 persons per square mile.

Source: U.S. Census Bureau, 2011

**14.9 million**

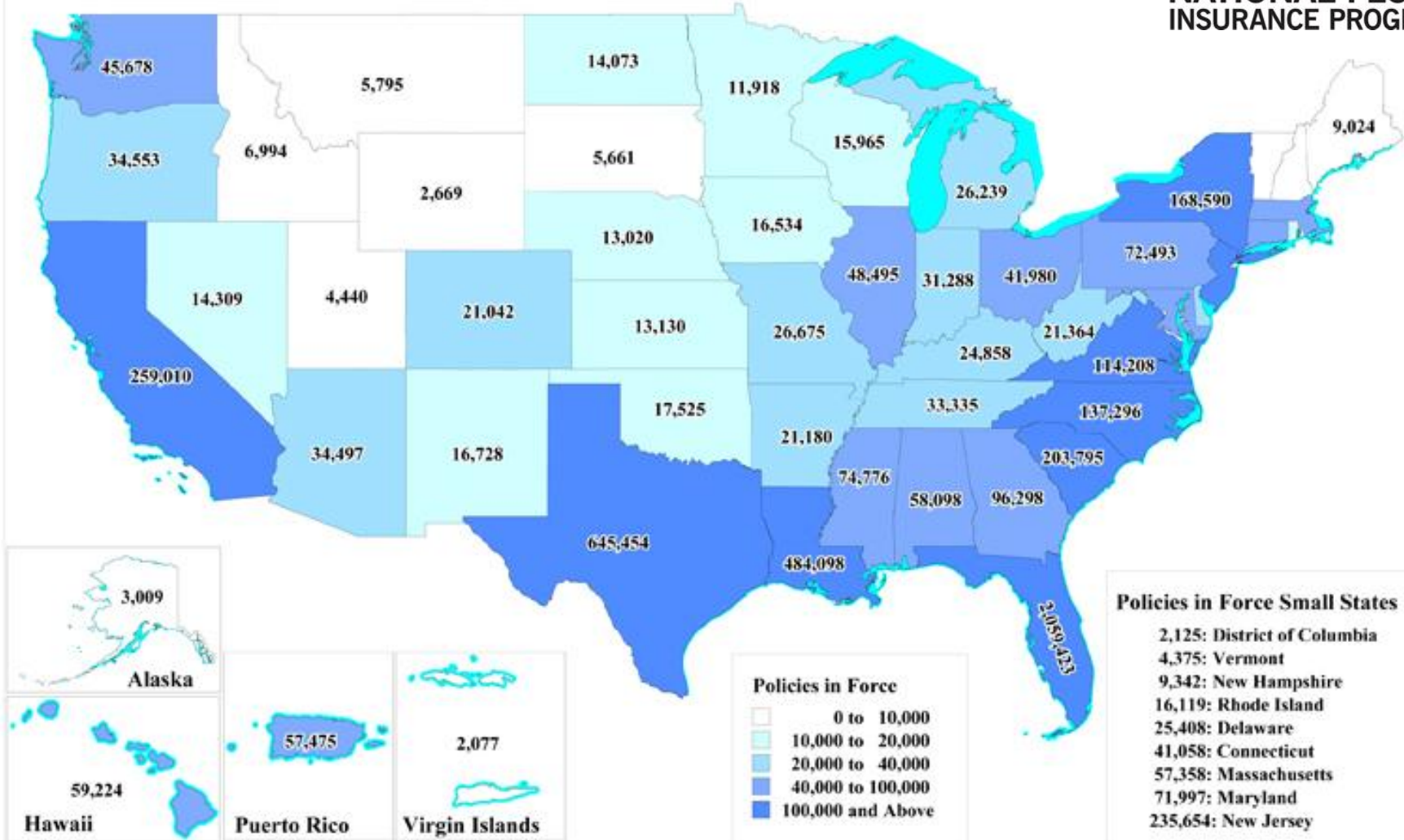
Expected increase in U.S. coastal watershed county population by 2020 (or a 9% increase, excluding Alaska).

Source: Woods & Poole, 2011; NOAA, 2011; U.S. Census Bureau, 2011



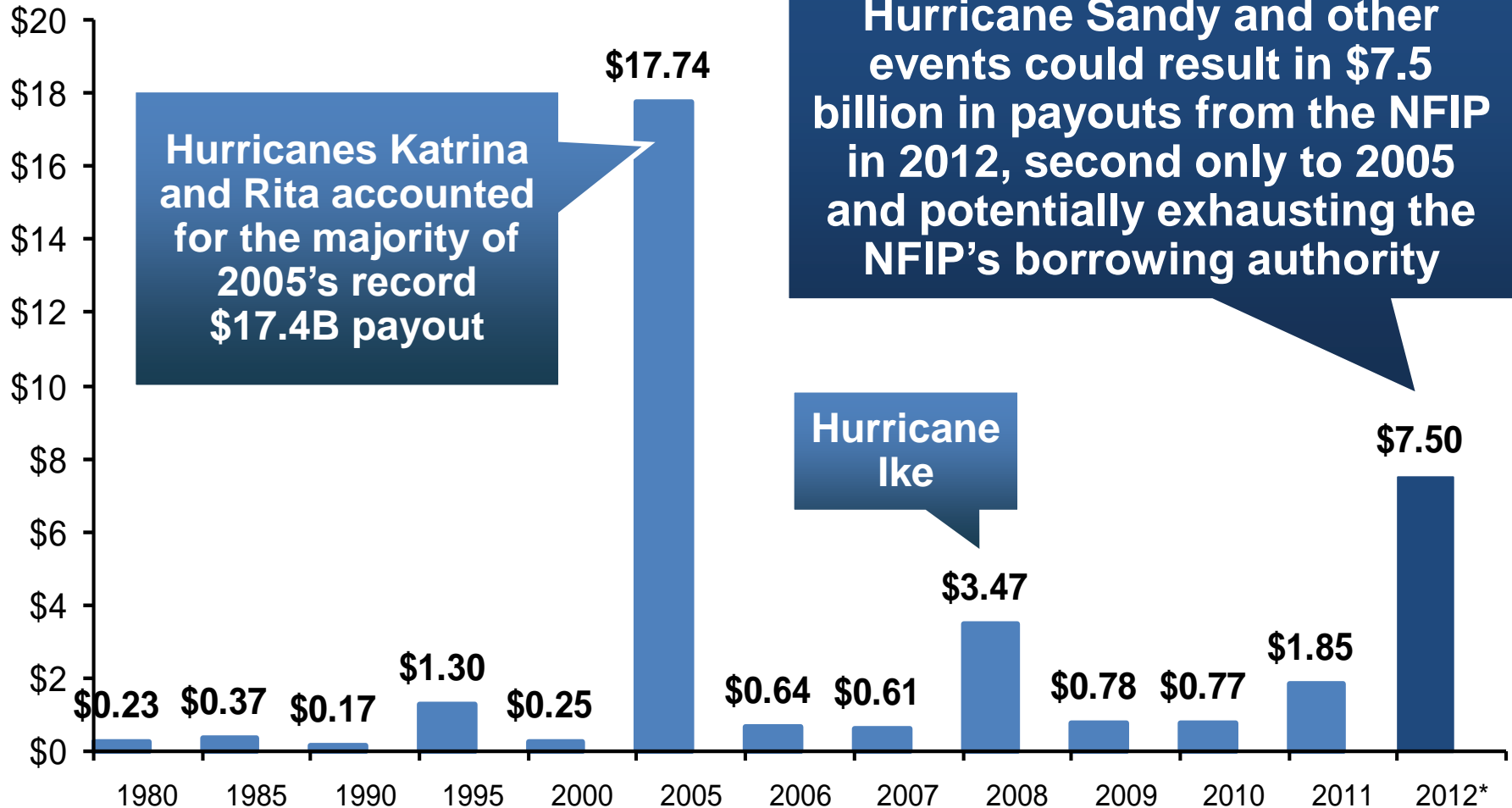
# National Flood Insurance Program Total Number of Policies in Force

AS OF SEPTEMBER 30, 2012



# Flood Loss Paid by the National Flood Insurance Program, 1980-2012E

Billions (Original Values)



\*Estimate as of 11/25/12.

Sources: Department of Homeland Security, Federal Emergency Management Agency, NFIP; Insurance Information Institute.



# NYS 2100 COMMISSION (Insurance)

- Improve consumer awareness
  - Wind deductibles
  - Hurricane deductible
  - Mold
  - Flood policies
- Prevent underinsurance for flood risk
- Assess existing building stock for mitigation choices
- Establish a revolving fund for risk mitigation
- Expand coverage for business interruption
- Promote a State level Chief Risk Officer
- Prefund disaster recovery



# NY Post Sandy Commission Recommendations

## Ready Commission

- Statewide network, emergency training, protocol, communication
- Certify emergency personnel
- Expand state authority to coordinate local decisions related to public health and safety
- Building code changes – resilient buildings and climate change
- Review critical facility locations (hospitals, nursing homes)
- Identify vulnerable populations in advance
- Access to fuel – gas station backup power, strategic fuel supply

# NY Post Sandy Commission Recommendations

## Respond Commission

- Employ National Guard, increase training for power restoration, debris removal (public safety)
- Establish a civilian emergency response corps, harness skilled trades
- More organized use of volunteers
- Establish emergency stockpile of equipment and supplies (generators, light towers, food)
- Private sector emergency response task force
- Statewide texting capability
- Develop web portal for financial, FEMA, state resources, use for on-the-ground response

# Resiliency Strategies

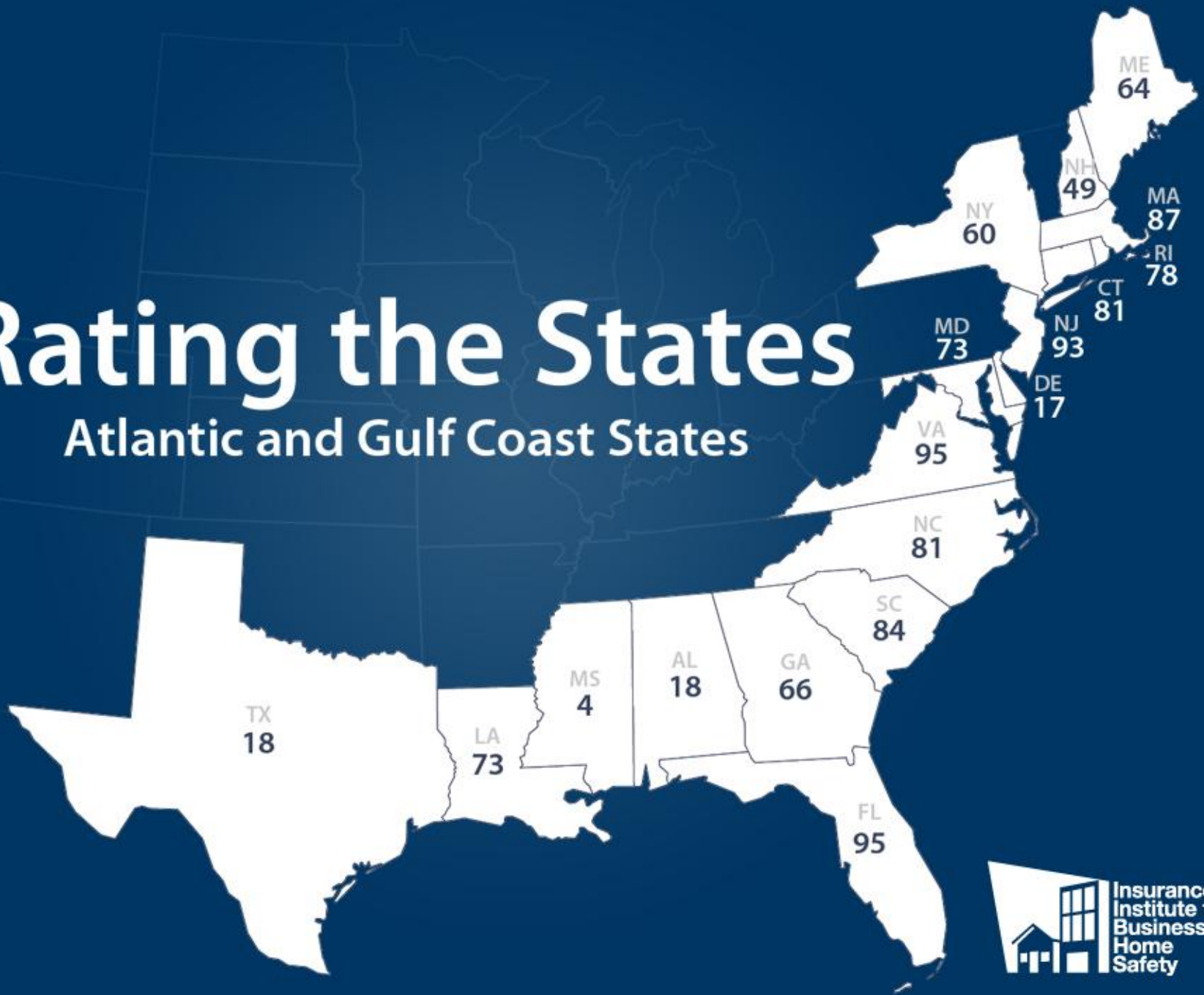
- Incorporate extreme weather risk in development, building codes, insurance risk pricing and assessment.
- Eliminate subsidies associated with insurance.
- Risk-based pricing of insurance
- State sponsored program for low income consumers
- Insurance coverage flexibility for consumers
- Insurers credit hazard mitigation.
- Reform the NFIP.
  - Reflect extreme weather risk
  - Risk-based pricing
- Use nature to mitigate damage and protect lives and property.
- Provide tax credits for specified mitigation and resiliency.

# Strategies, cont'd

- Federal standards for state / local building codes
- Create revolving fund to offer loans to homeowners who want to strengthen their property.
- Limit the number of times coastal residents receive insurance reimbursement / disaster assistance.
- Purchase or relocate properties near coastal or river areas at repeat risk.
- Transfer development rights from coastal and river properties to areas inland. (Coastal Barrier Resource Act)
- Remote sensing is a critical asset that needs new funding.
- Role/utilization of the Army Corps and Congressional interests.

# Rating the States

Atlantic and Gulf Coast States





**Is the NTSB a prototype for resiliency assessment?**

# RAA



[www.reinsurance.org](http://www.reinsurance.org)