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Trends, Challenges and Opportunities for the P/C Insurance and Reinsurance Industries in the Post-Crisis World

Florida Insurance Summit

Amelia Island, FL

January 29, 2014

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Presentation Outline

- P/C Performance
  - Florida Profitability & Growth Analyses
- U.S. and Global Catastrophe Loss Update
  - Florida's Role in History
- Flood Reform in Jeopardy
  - Biggert-Waters Rollback?
- Reinsurance Markets: New Capital

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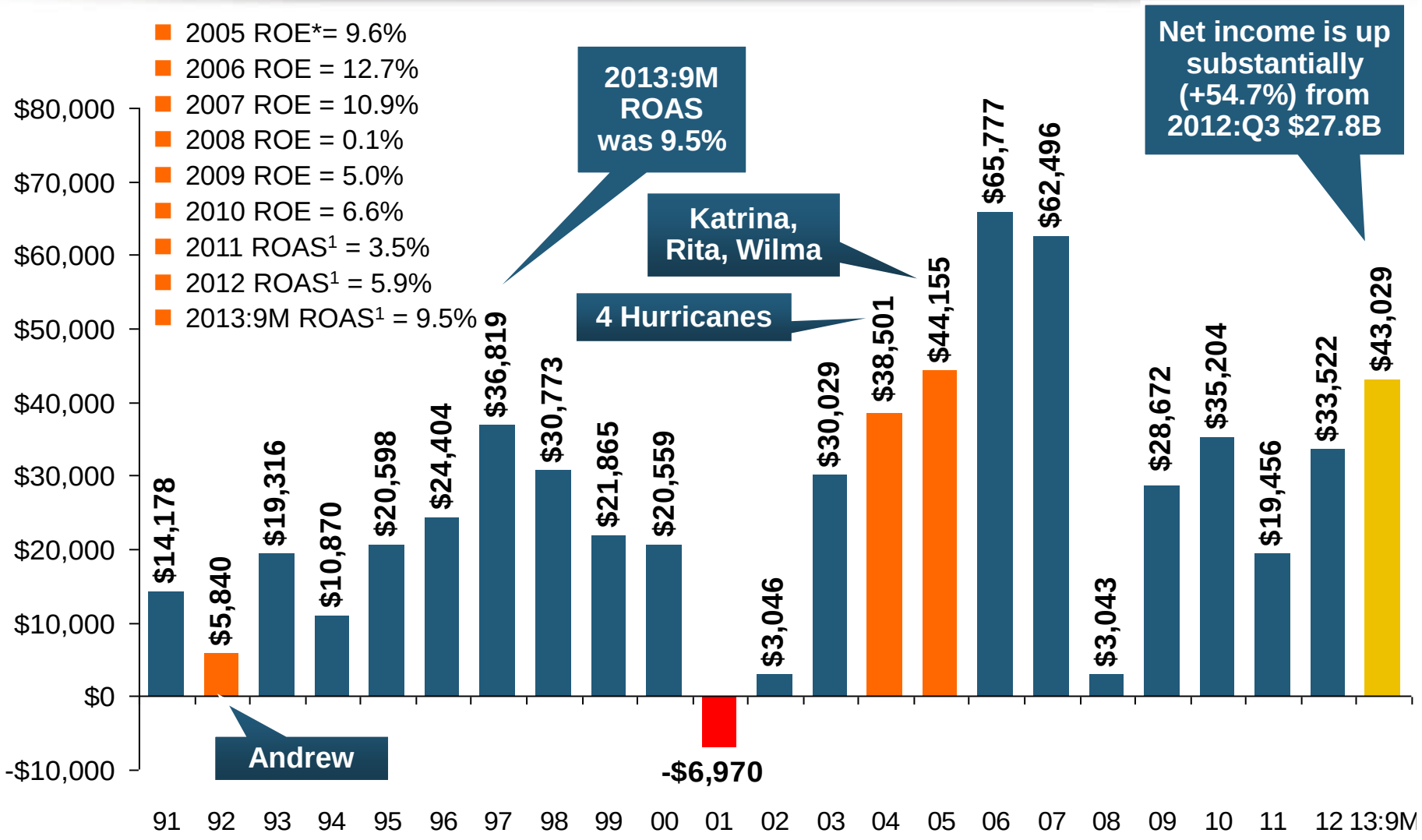
P/C Insurance Industry Financial Overview

2013: Best Year in the Post-Crisis Era

Low CATs in Florida and Elsewhere Helped

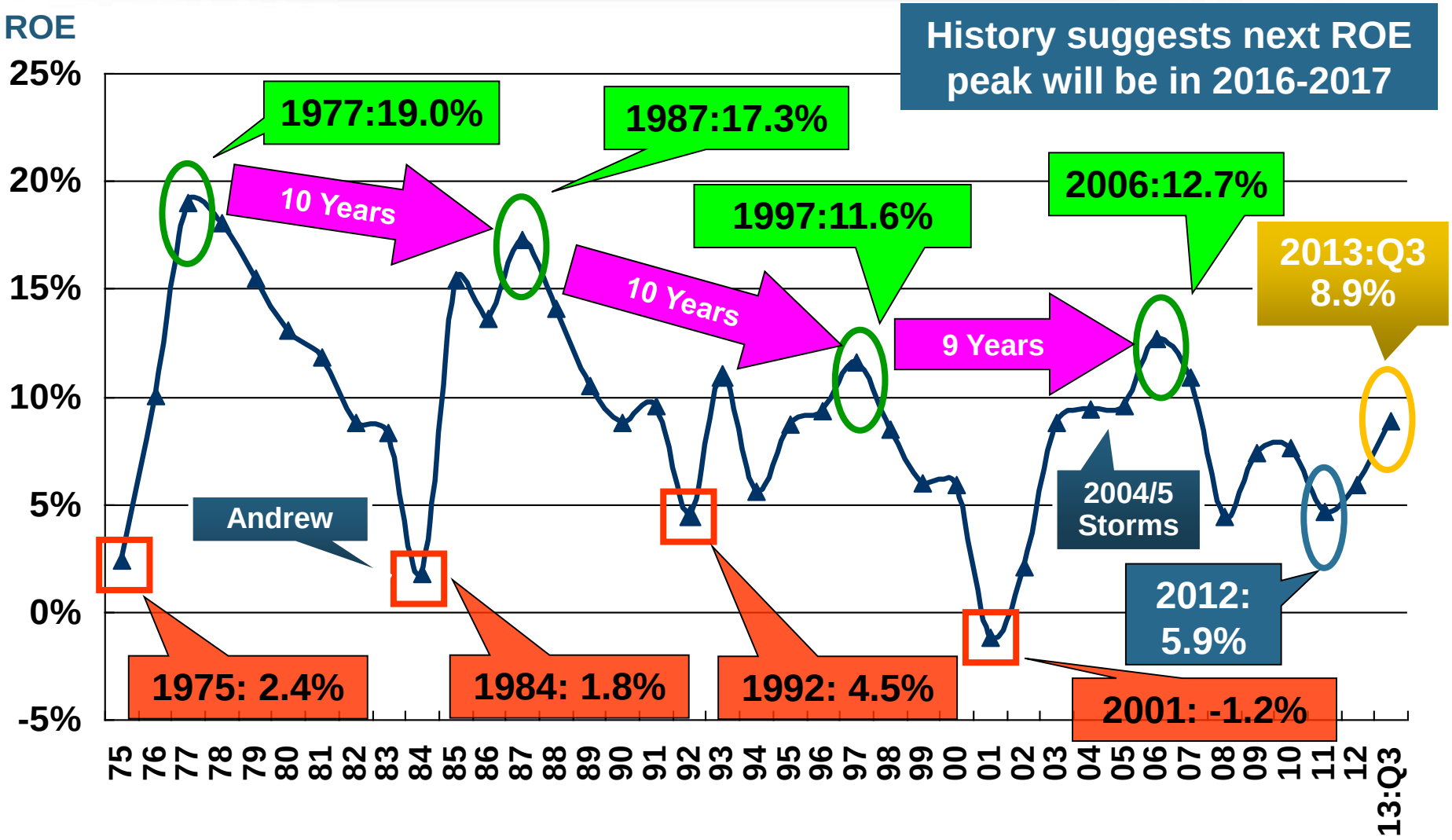
P/C Net Income After Taxes 1991–2013:Q3 ($ Millions)



•ROE figures are GAAP; [1]Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 8.9% ROAS through 2013:Q3, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009.

Sources: A.M. Best, ISO, Insurance Information Institute

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2013:Q3*



*Profitability = P/C insurer ROEs. 2011-13 figures are estimates based on ROAS data. Note: Data for 2008-2013 exclude mortgage and financial guaranty insurers.

Source: Insurance Information Institute; NAIC, ISO, A.M. Best.

A 100 Combined Ratio Isn't What It Once Was: Investment Impact on ROEs

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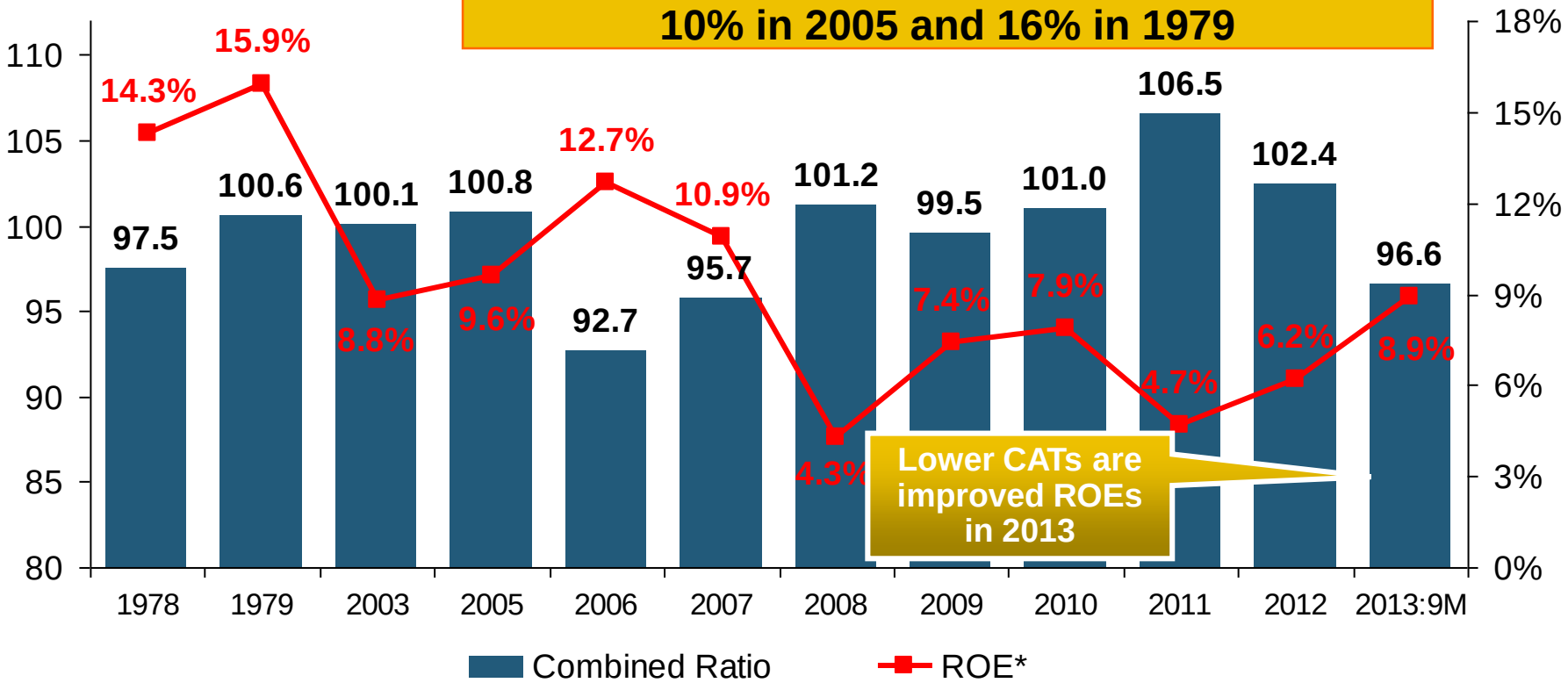
Combined Ratio / ROE

A combined ratio of about 100 generates an ROE of ~7.0% in 2012, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979

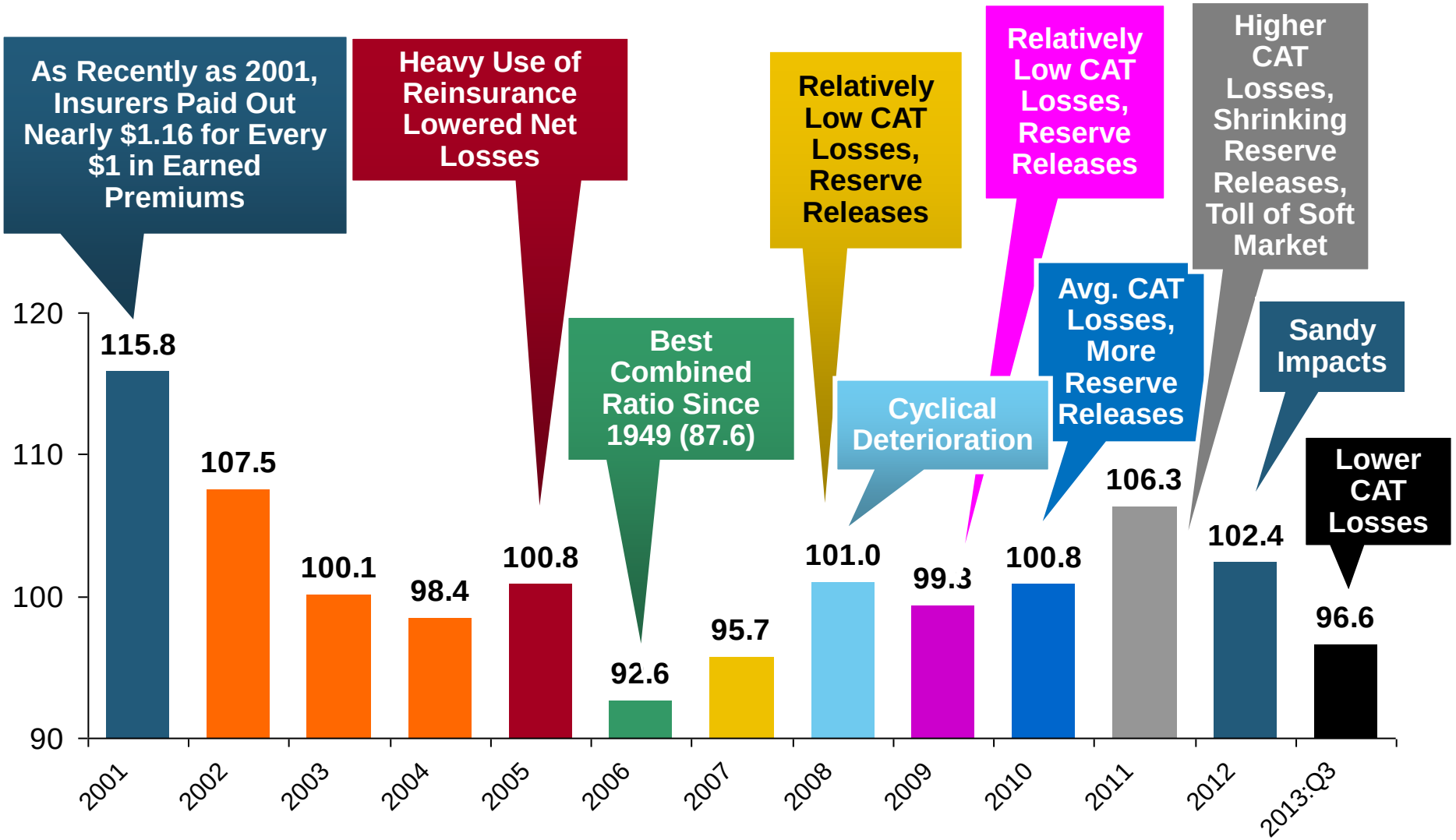


Combined Ratios Must Be Lower in Today's Depressed Investment Environment to Generate Risk Appropriate ROEs

* 2008 -2013 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2013:9M combined ratio including M&FG insurers is 95.8; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.

Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

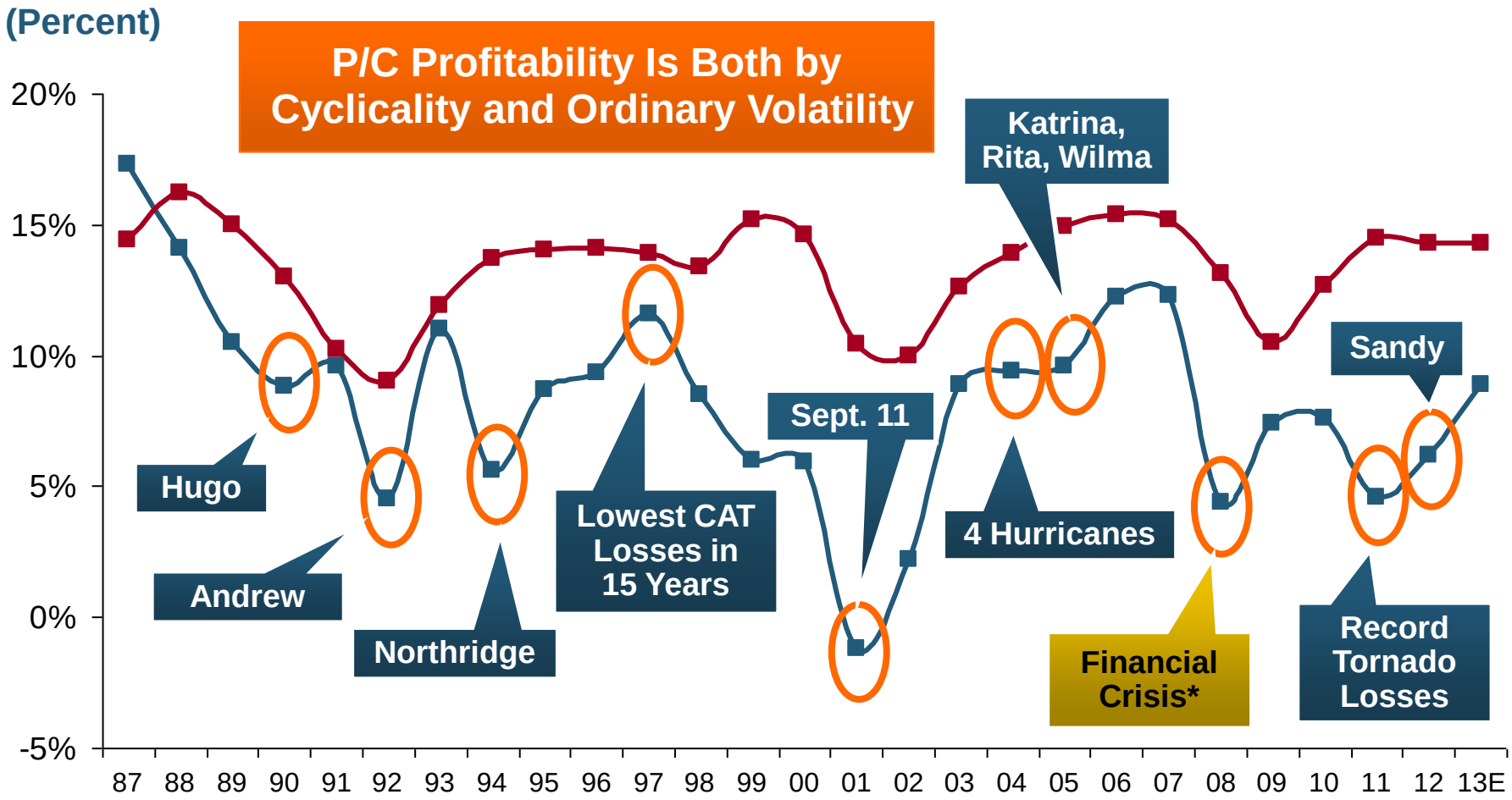
P/C Insurance Industry Combined Ratio, 2001–2013:Q3*



* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013:Q3 = 95.8.

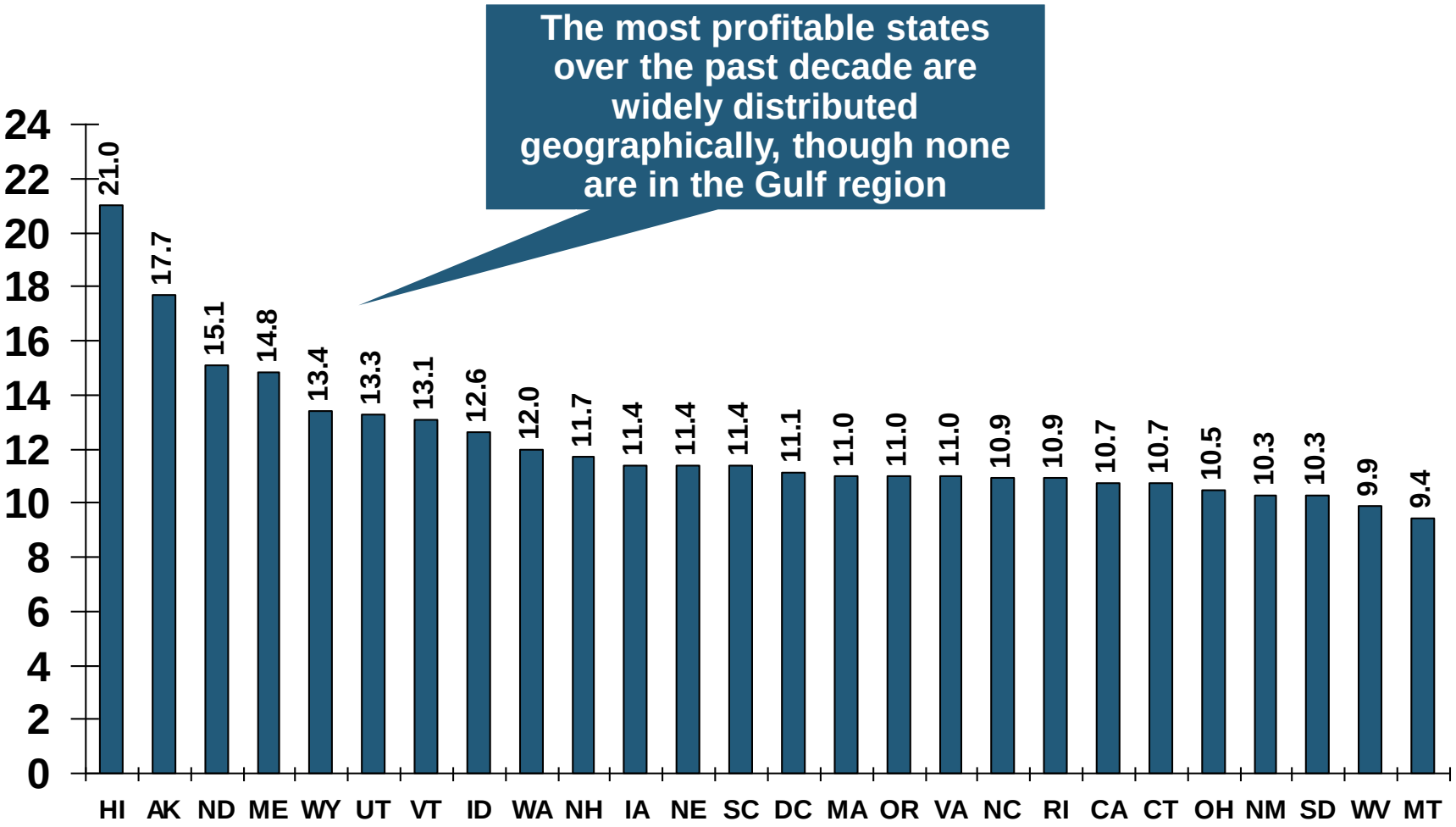
Sources: A.M. Best, ISO.

ROE: Property/Casualty Insurance vs. Fortune 500, 1987–2013E*



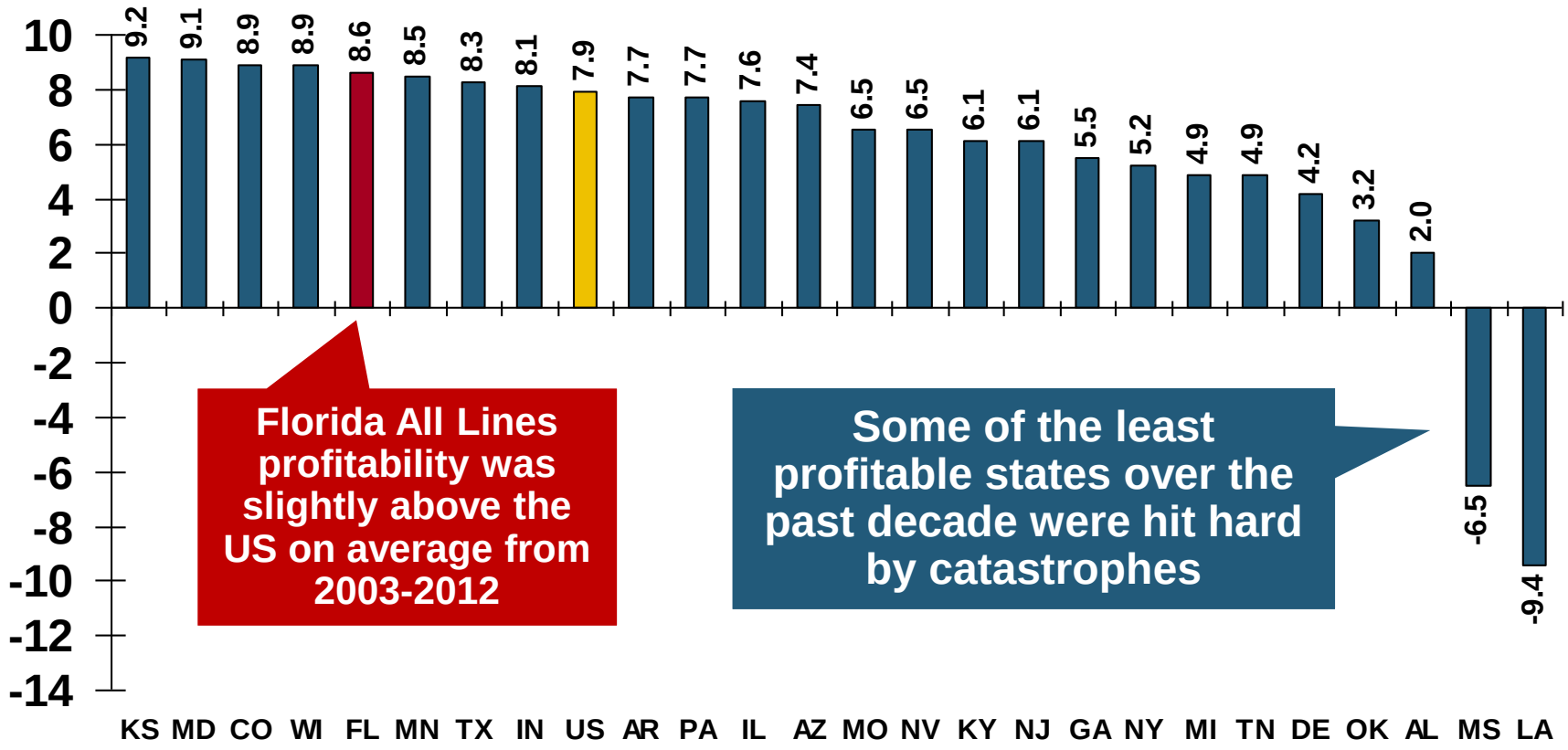
* Excludes Mortgage & Financial Guarantee in 2008 – 2013E. 2013 P/C ROE is through 2013:Q3.
Sources: ISO, *Fortune*; Insurance Information Institute.

RNW All Lines by State, 2003-2012 Average: Highest 25 States



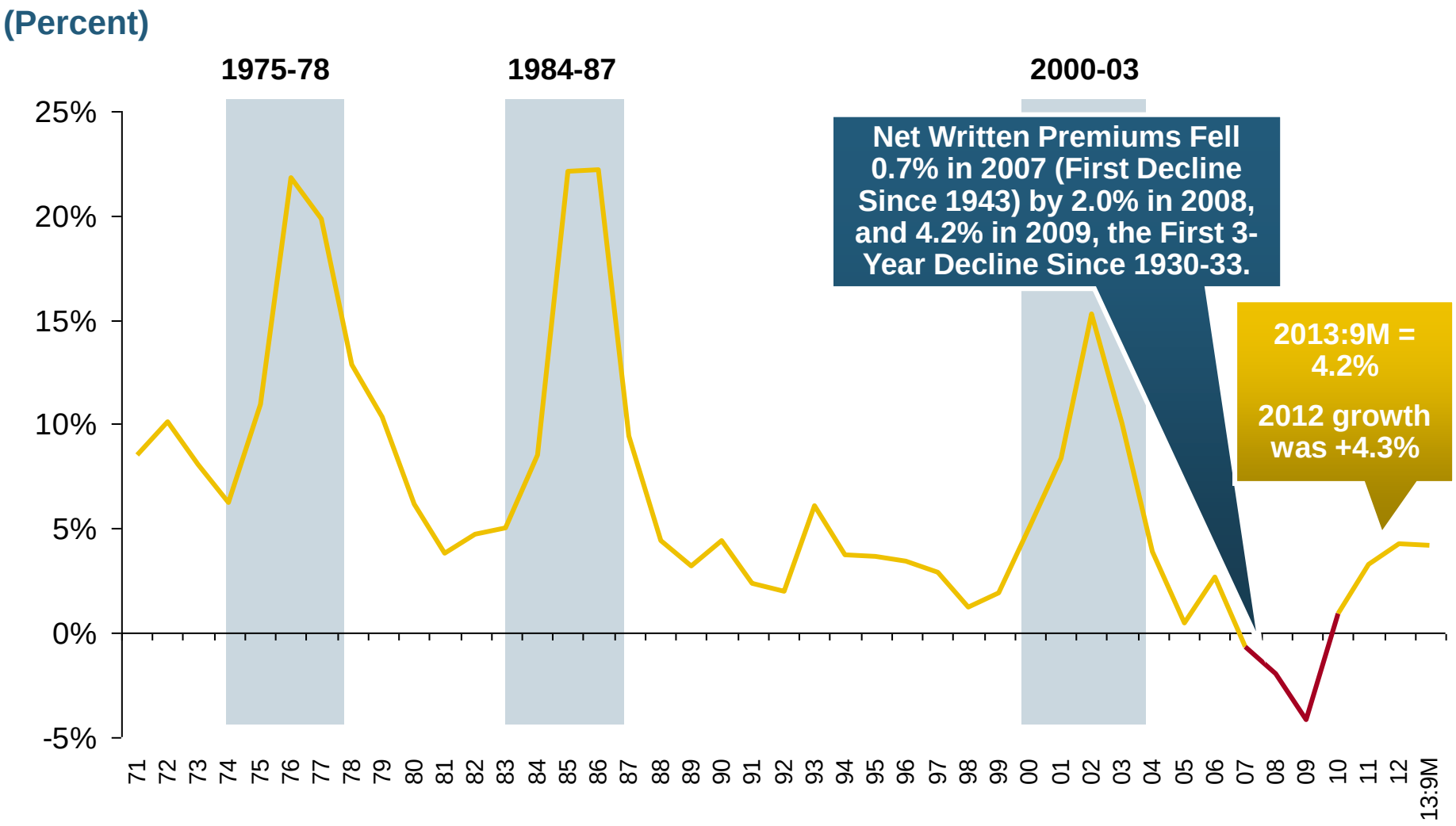
Source: NAIC.

RNW All Lines by State, 2003-2012 Average: Lowest 25 States



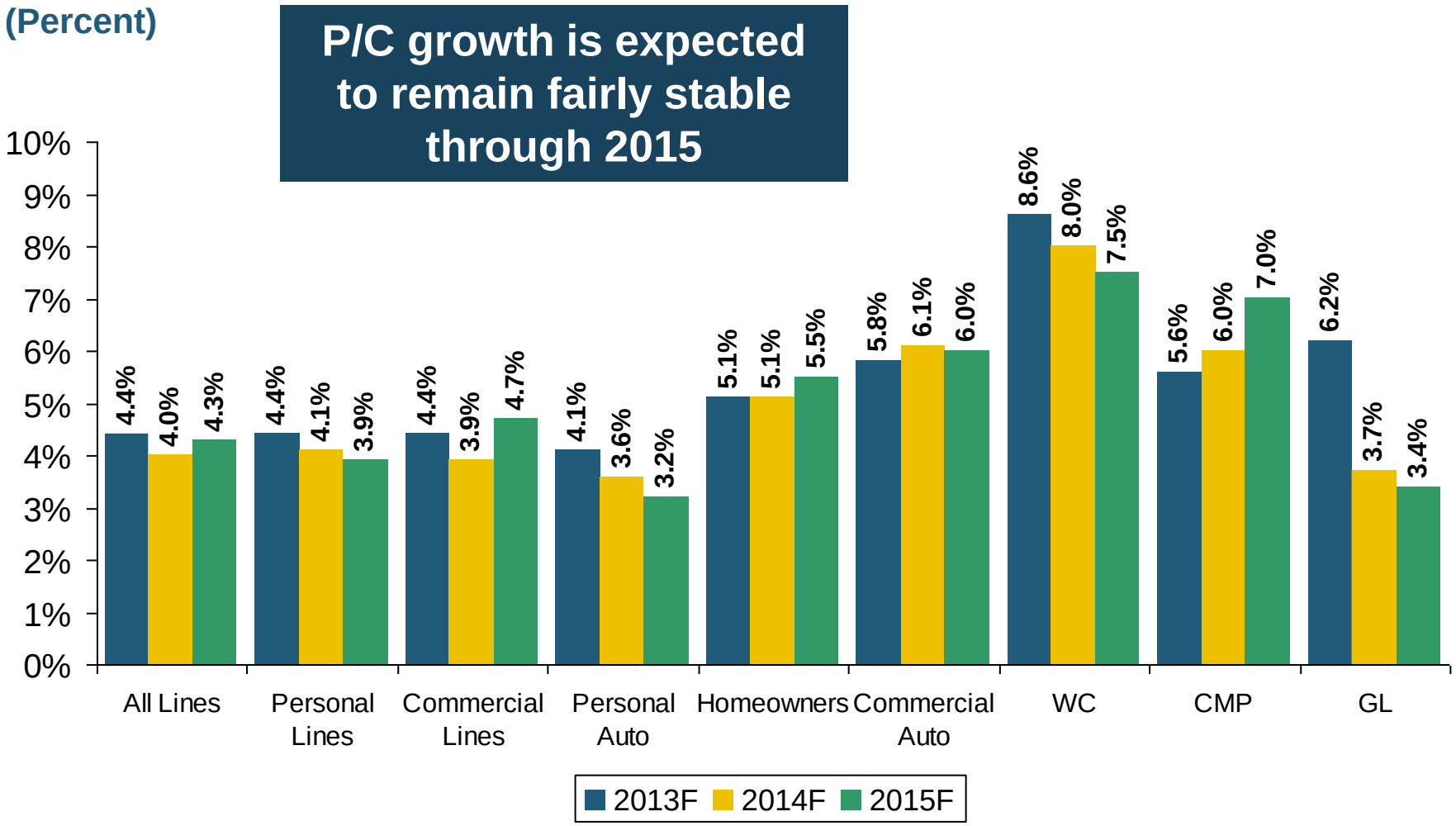
Source: NAIC.

Net Premium Growth: Annual Change, 1971—2013:Q3



Shaded areas denote "hard market" periods
Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

Growth in Direct Written Premium by Line, 2013-2015F*



Source: Conning.

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INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing

Property/Casualty Insurance Industry Investment Income: 2000–2013*[1]

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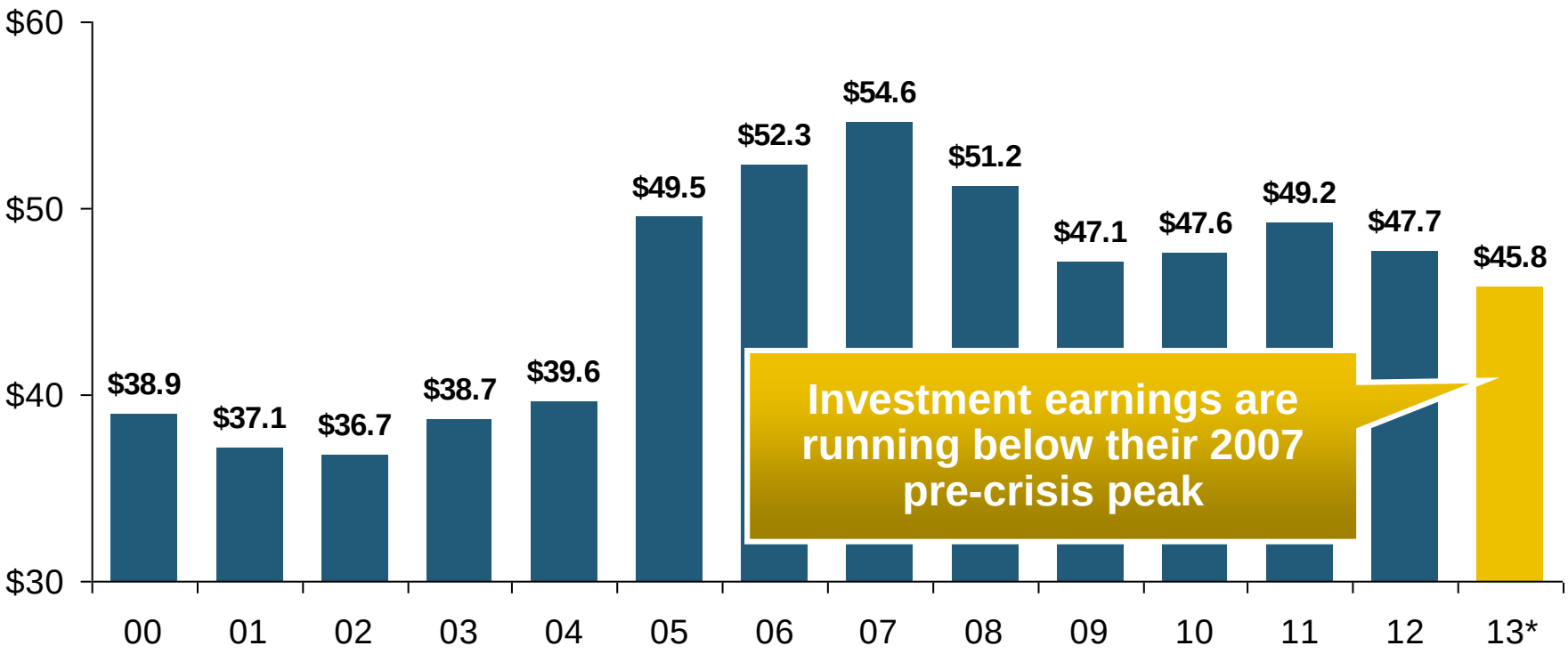
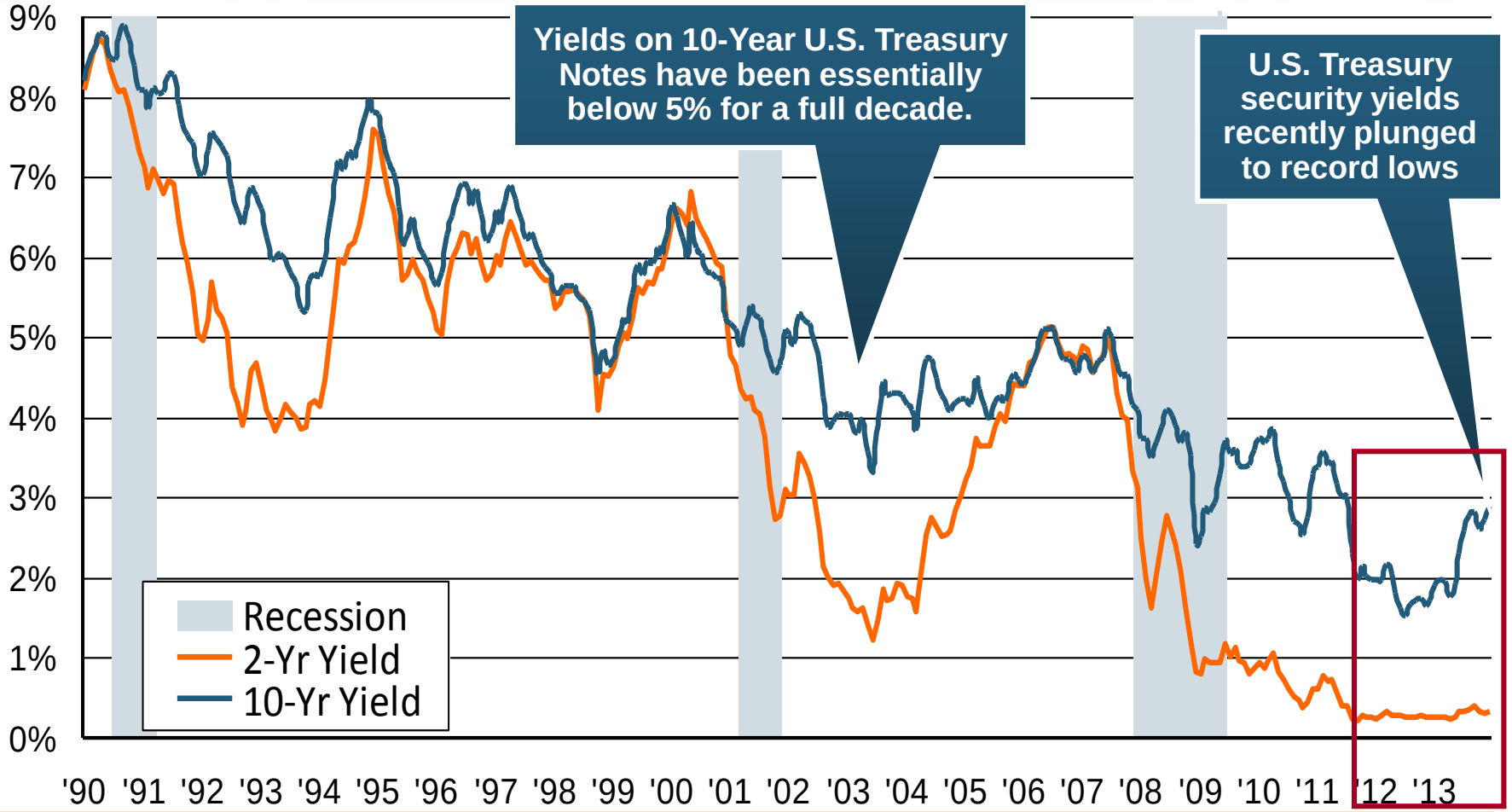
($ Billions)



Investment Income Fell in 2012 and is Falling in 2013 Due to Persistently Low Interest Rates, Putting Additional Pressure on (Re) Insurance Pricing

[1] Investment gains consist primarily of interest and stock dividends..
*Estimate based on annualized actual 9M:2013 investment income of $34.338B.
Sources: ISO; Insurance Information Institute.

U.S. Treasury Security Yields: A Long Downward Trend, 1990–2013*



Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through December 2013.

Sources: Federal Reserve Bank at http://www.federalreserve.gov/releases/h15/data.htm.
National Bureau of Economic Research (recession dates); Insurance Information Institute.

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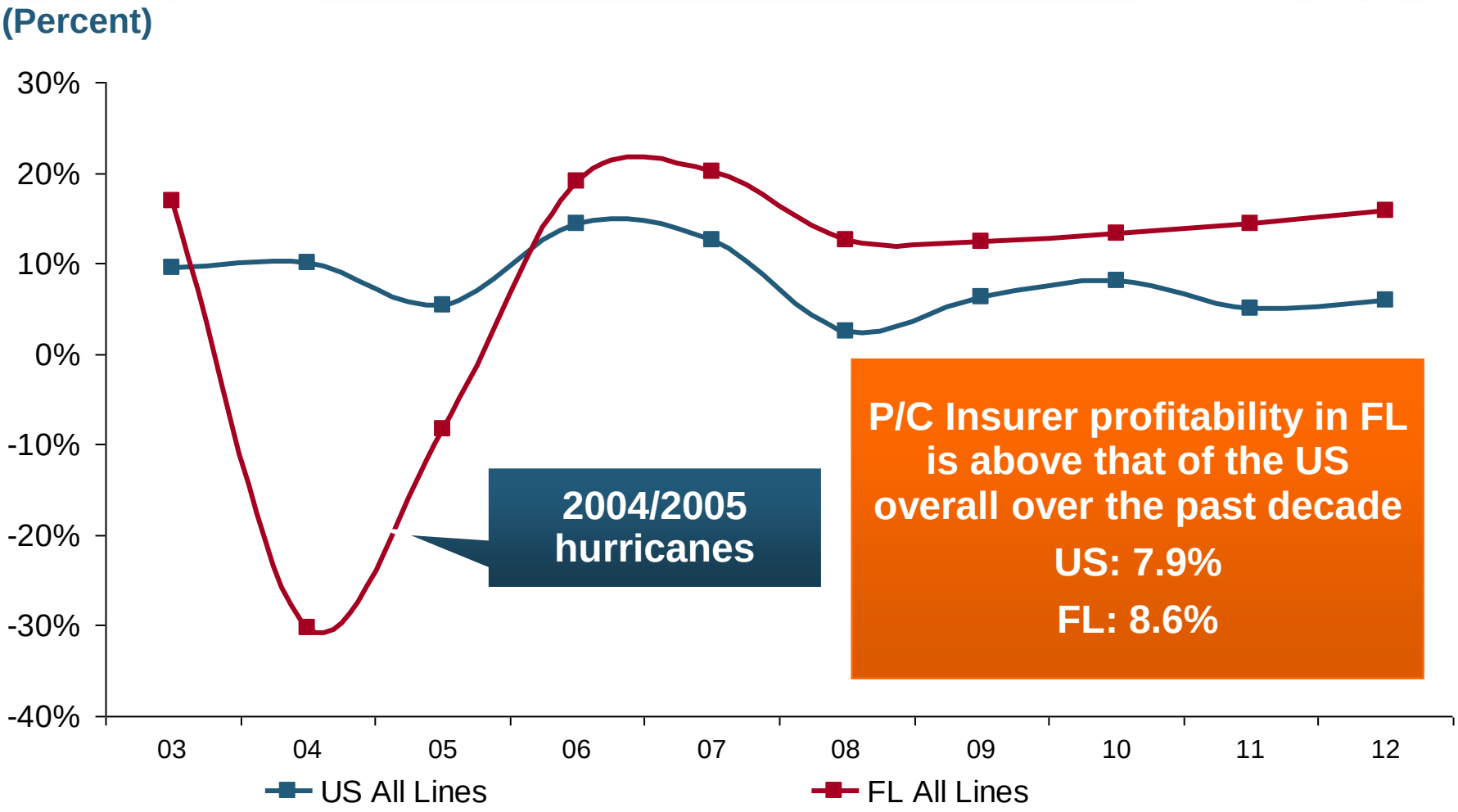
Profitability and Growth in Florida P/C Insurance Markets

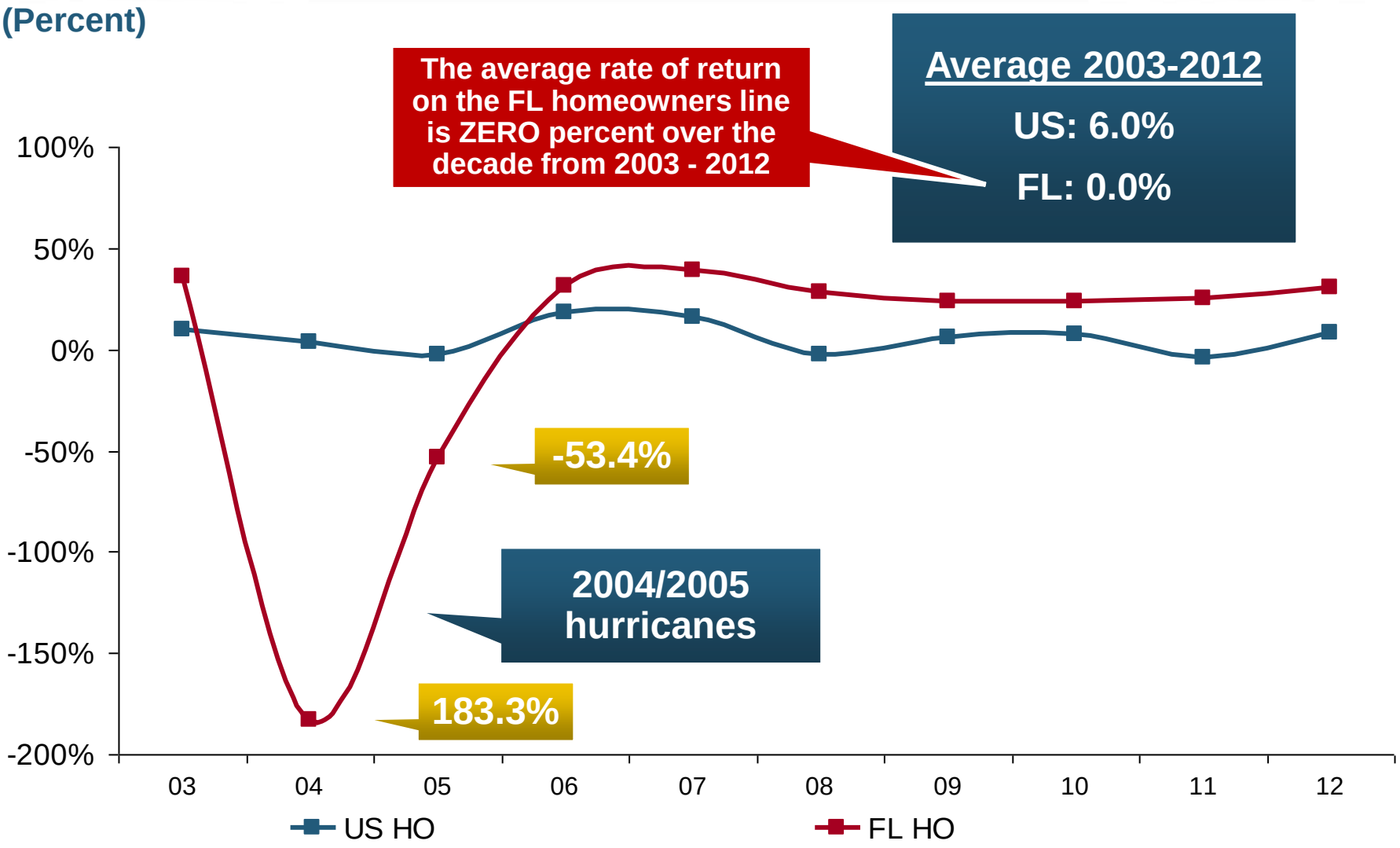
Analysis by Line and Nearby State Comparisons

RNW All Lines: FL vs. U.S., 2003-2012



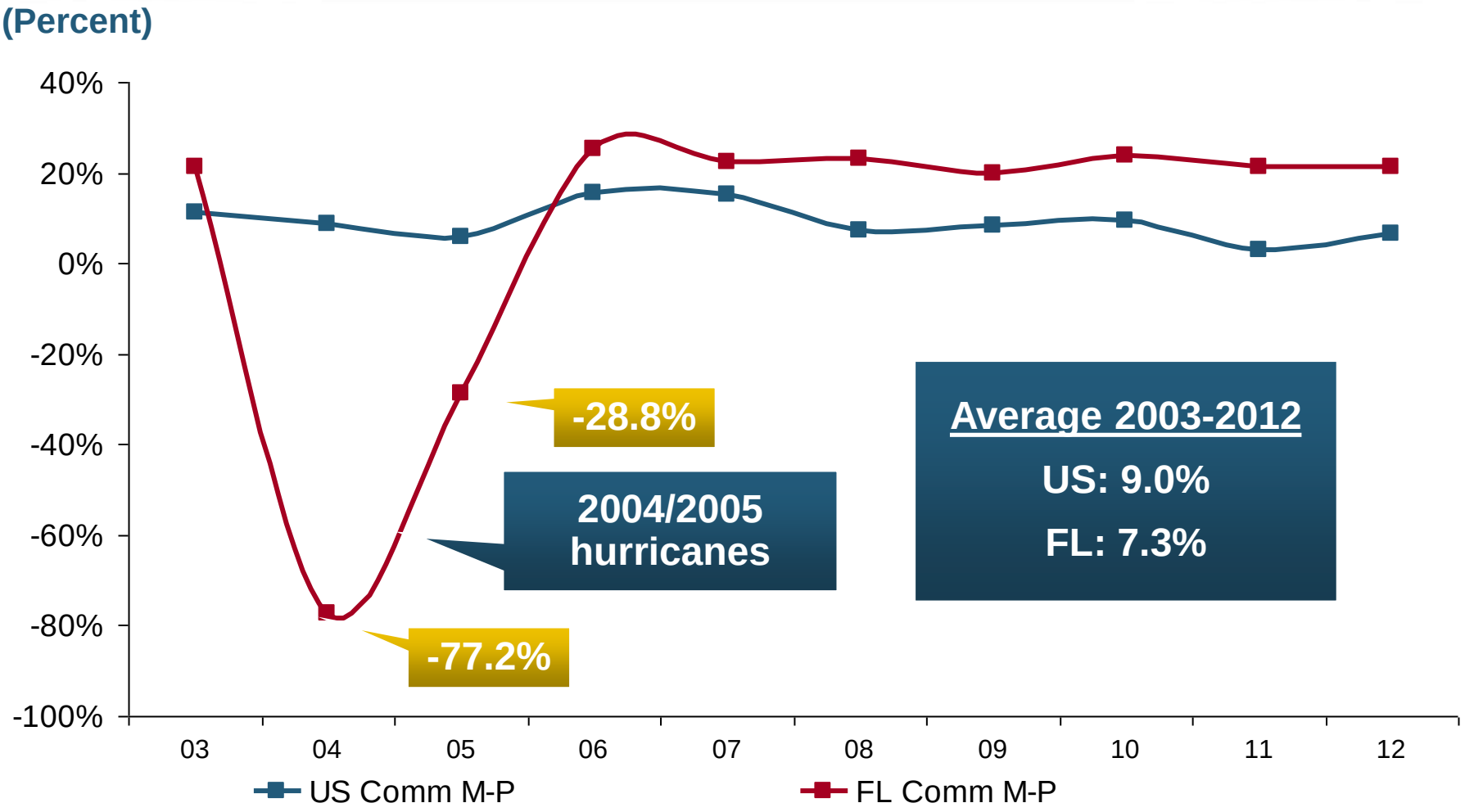
Sources: NAIC.

RNW Homeowners: FL vs. U.S., 2003-2012



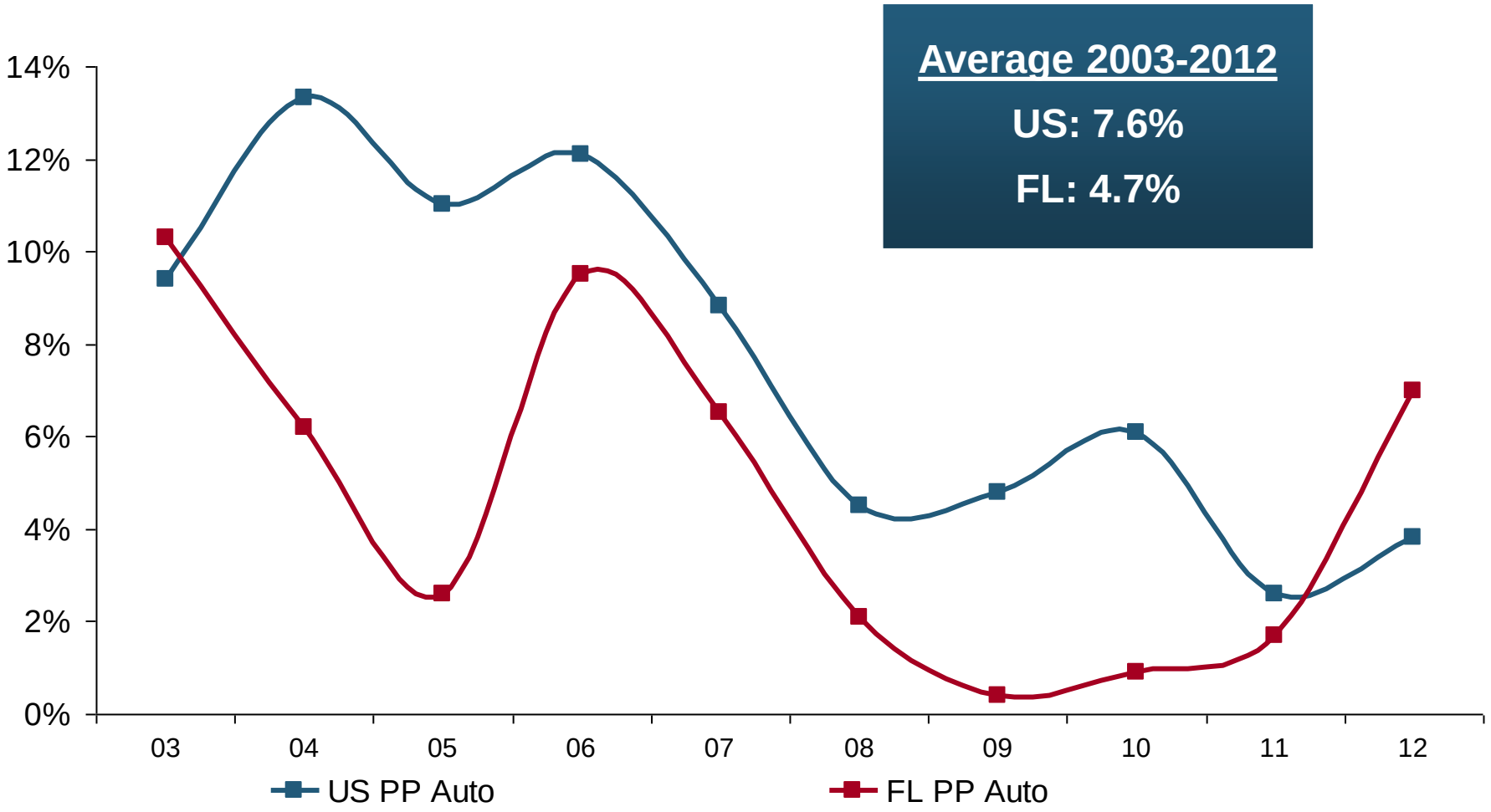
Sources: NAIC.

RNW Comm. Multi-Peril: FL vs. U.S., 2003-2012



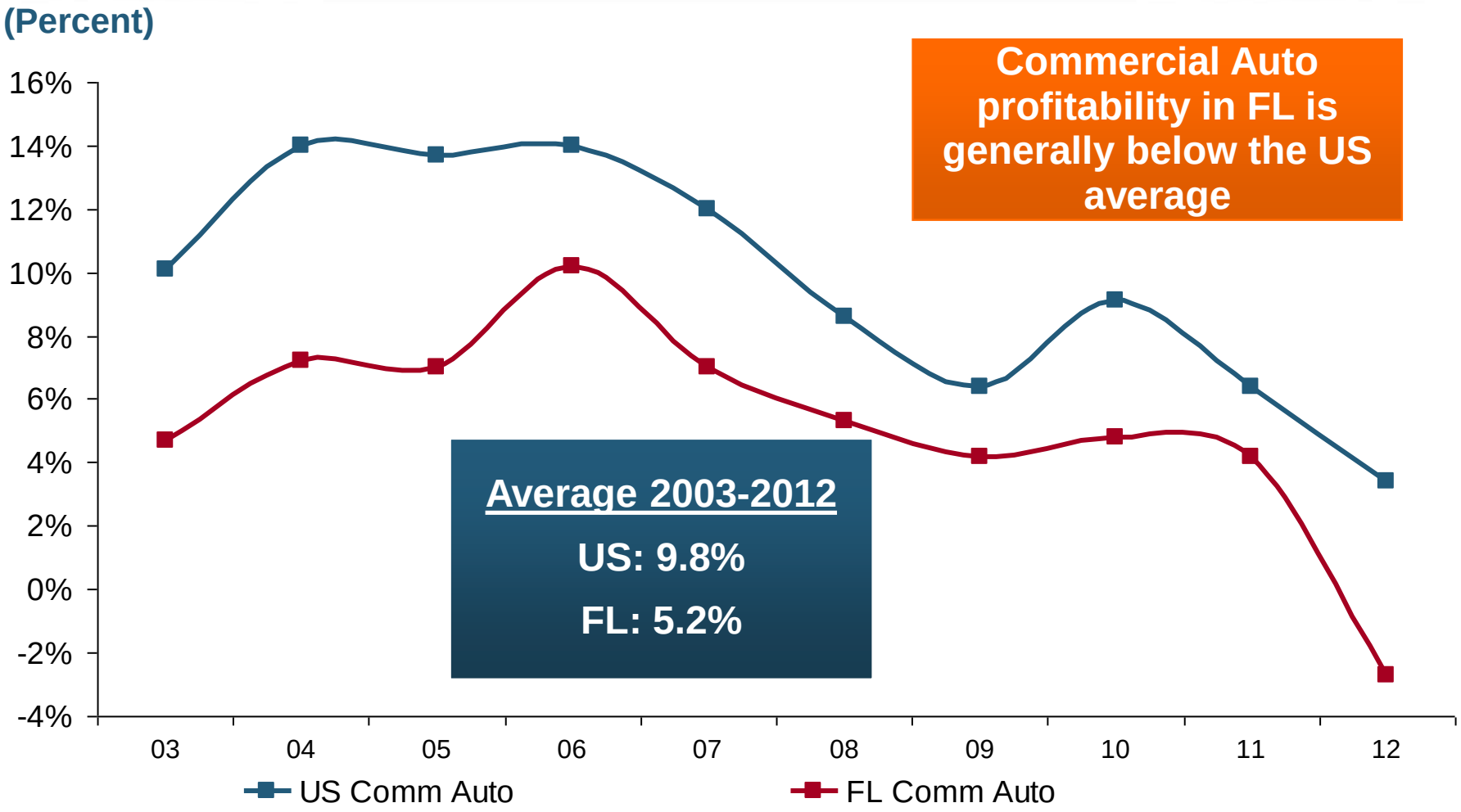
Sources: NAIC.

RNW PP Auto: FL vs. U.S., 2003-2012



Sources: NAIC.

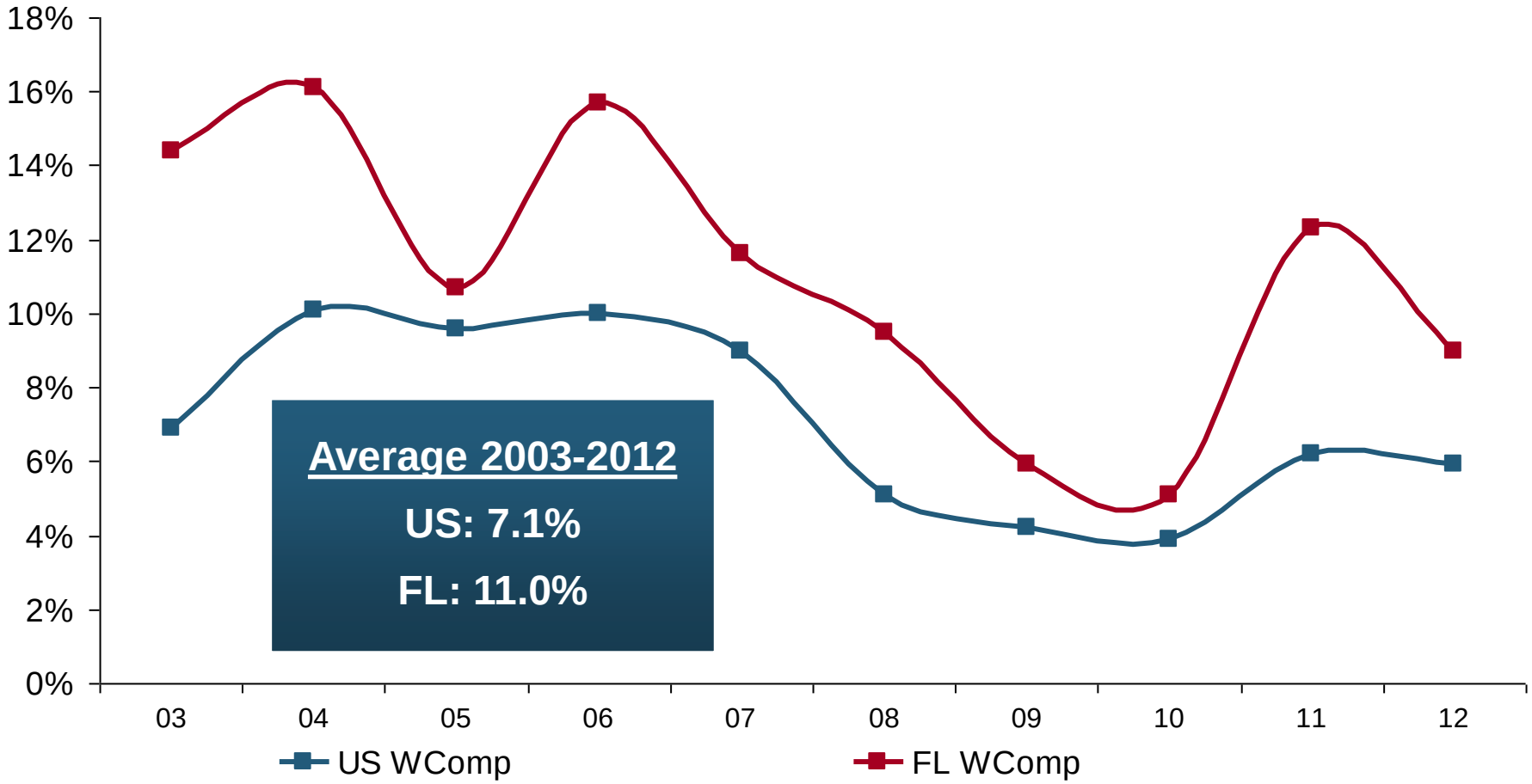
RNW Comm. Auto: FL vs. U.S., 2003-2012



Sources: NAIC.

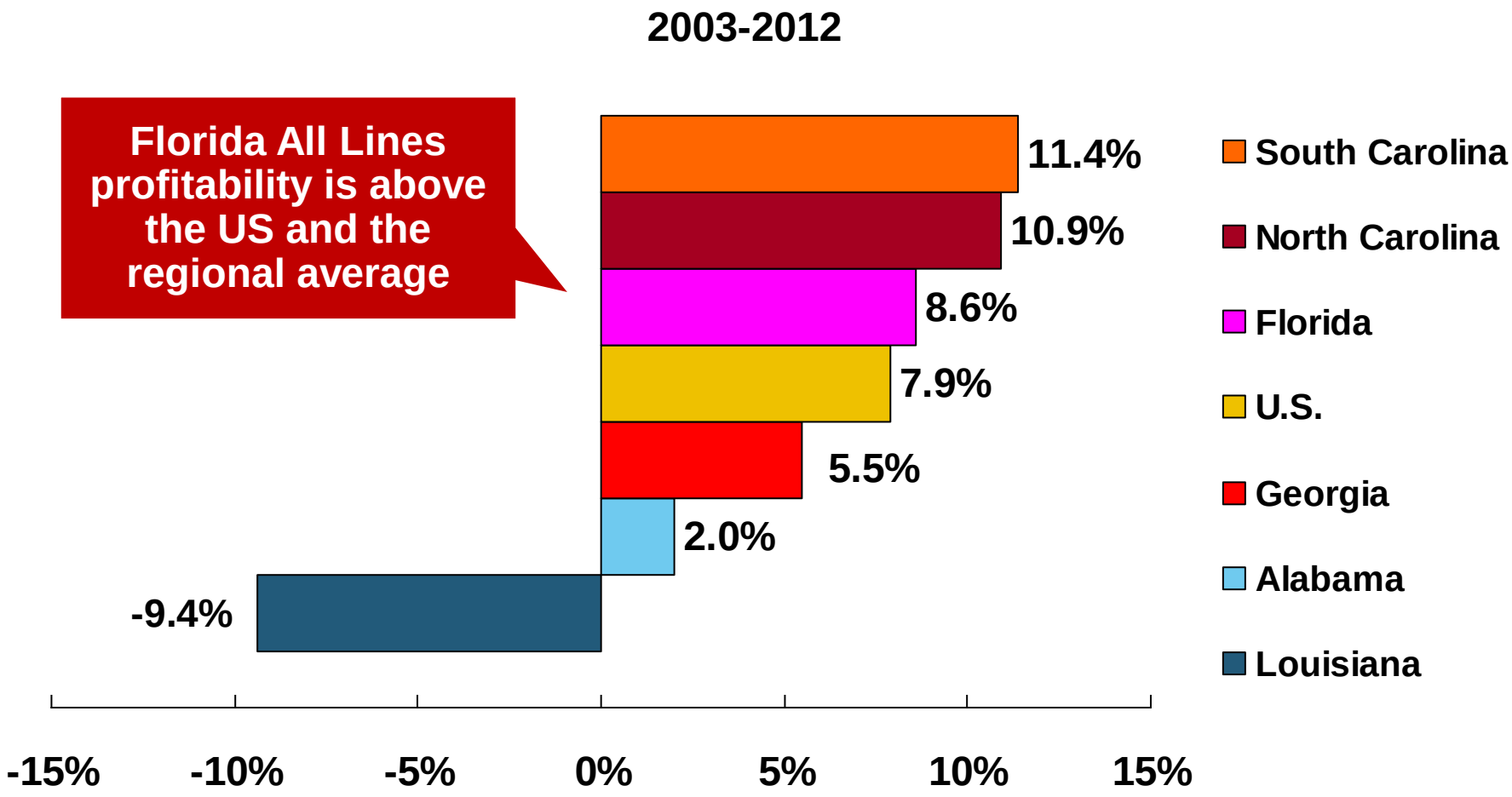
RNW Workers Comp: FL vs. U.S., 2003-2012

(Percent)



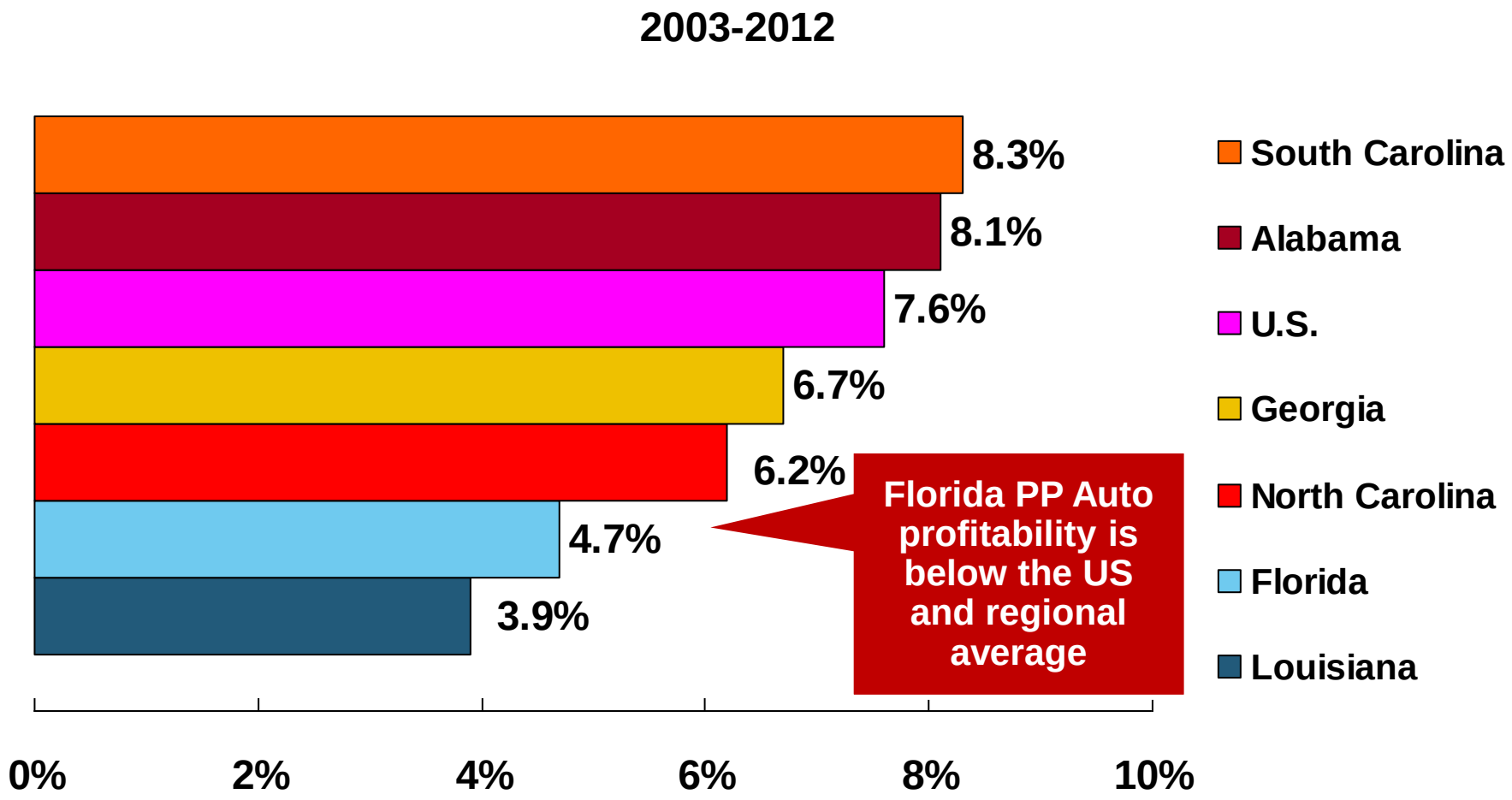
Sources: NAIC.

All Lines: 10-Year Average RNW FL & Nearby States



Source: NAIC, Insurance Information Institute

PP Auto: 10-Year Average RNW FL & Nearby States



Source: NAIC, Insurance Information Institute

Top Ten Most Expensive And Least Expensive States For Automobile Insurance, 2011 (1)

Rank	Most expensive states	Average expenditure	Rank	Least expensive states	Average expenditure
1	New Jersey	$1,183.95	1	Idaho	$525.15
2	District of Columbia	1,138.03	2	South Dakota	540.04
3	Louisiana	1,110.68	3	North Dakota	549.81
4	New York	1,108.64	4	Iowa	552.54
5	Florida	1,090.65	5	Maine	577.38
6	Delaware	1,052.28	6	North Carolina	600.33
7	Rhode Island	1,004.14	7	Wisconsin	601.40
8	Michigan	983.60	8	Nebraska	602.57
9	Connecticut	970.22	9	Wyoming	619.88
10	Maryland	956.17	10	Ohio	619.96

Florida ranked 5th as the most expensive state in 2011, with an average expenditure for auto insurance of $1,090.65.

(1) Based on average automobile insurance expenditures.

Source: © 2013 National Association of Insurance Commissioners.

Homeowners: 10-Year Average RNW FL & Nearby States

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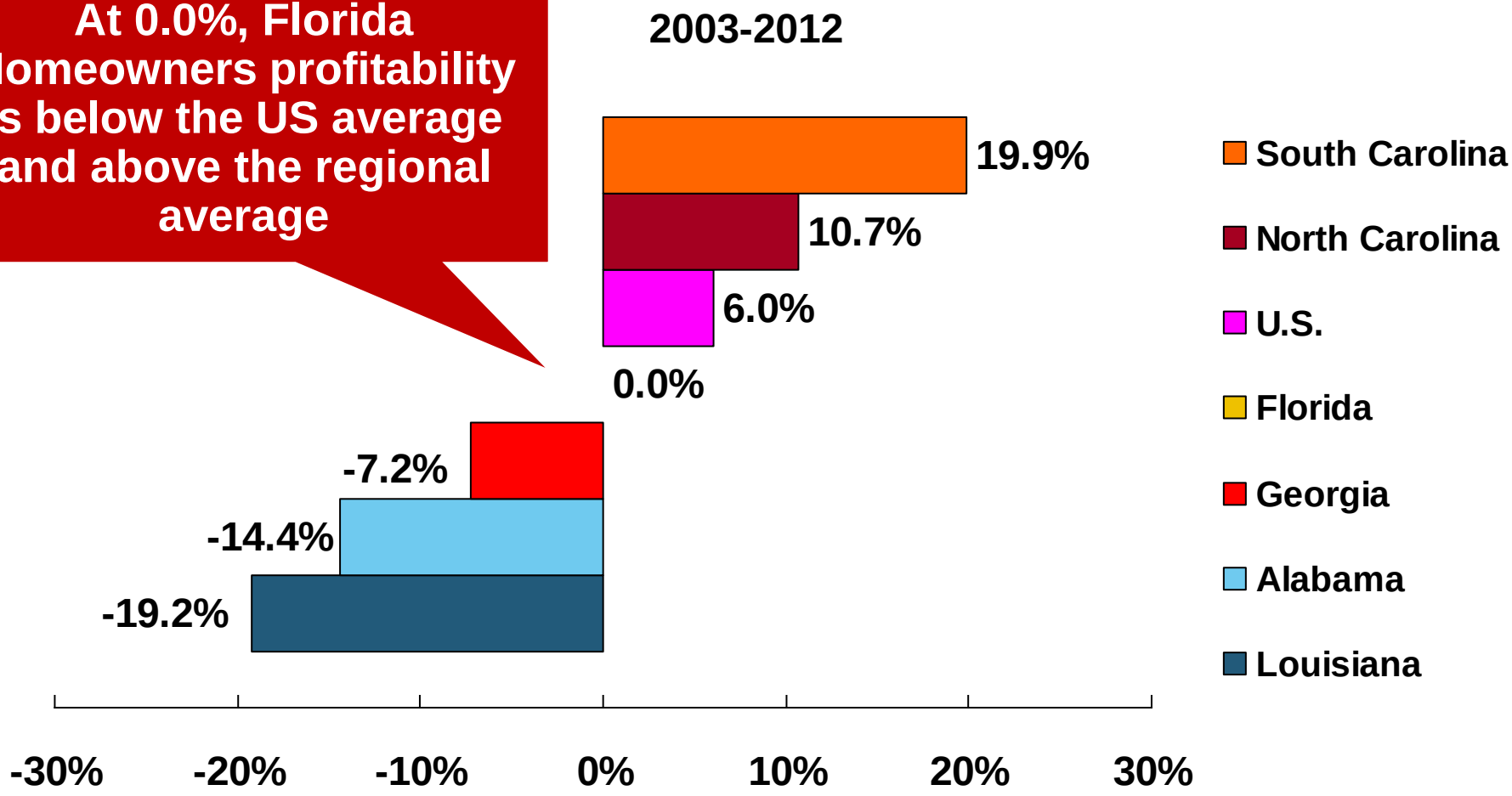
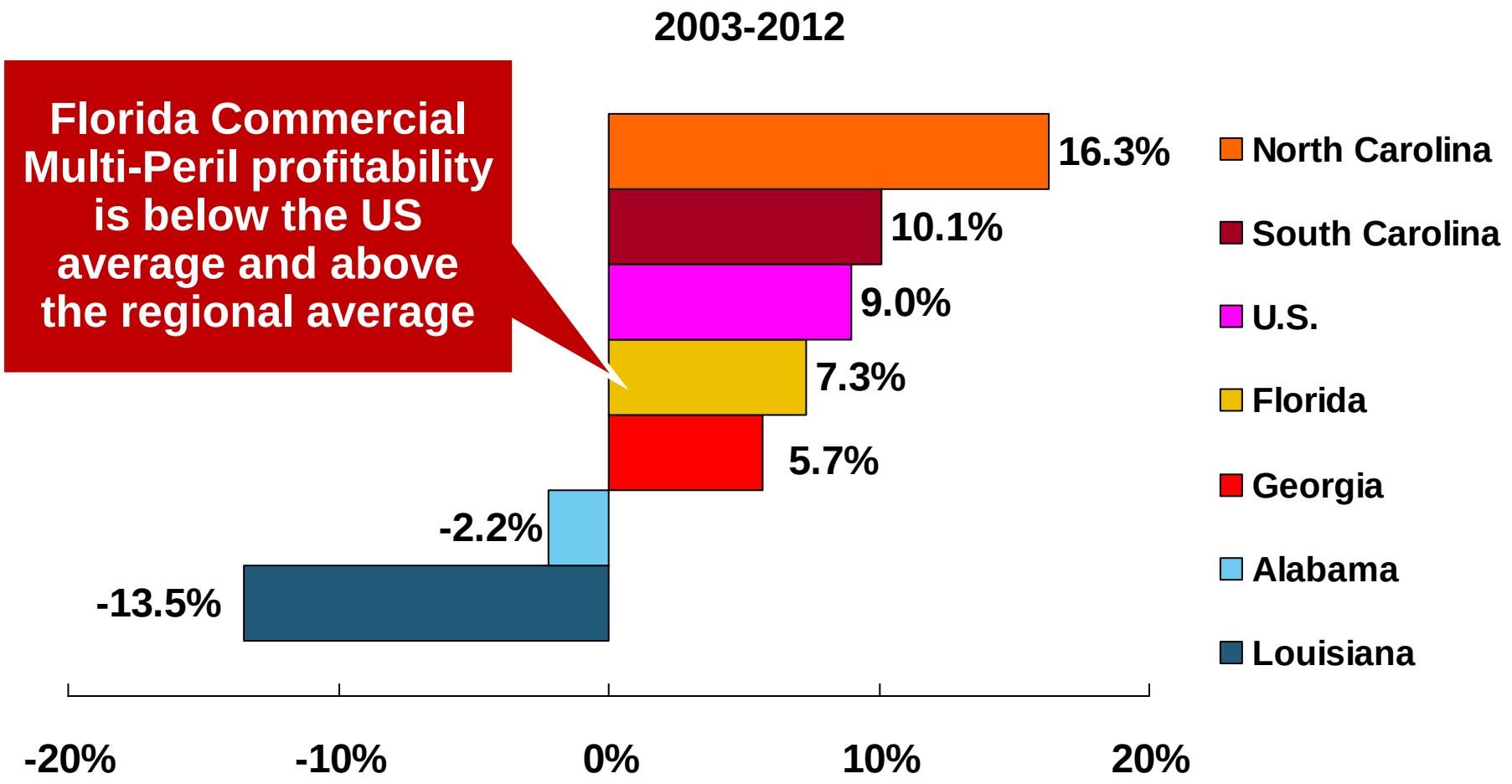
At 0.0%, Florida Homeowners profitability is below the US average and above the regional average



Source: NAIC, Insurance Information Institute

Comm. M-P: 10-Year Average RNW FL & Nearby States



Source: NAIC, Insurance Information Institute

Top Ten Most Expensive And Least Expensive States For Homeowners Insurance, 2011 (1)

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Florida ranked as the most expensive state for homeowners insurance in 2011, with an average expenditure of $1,933.

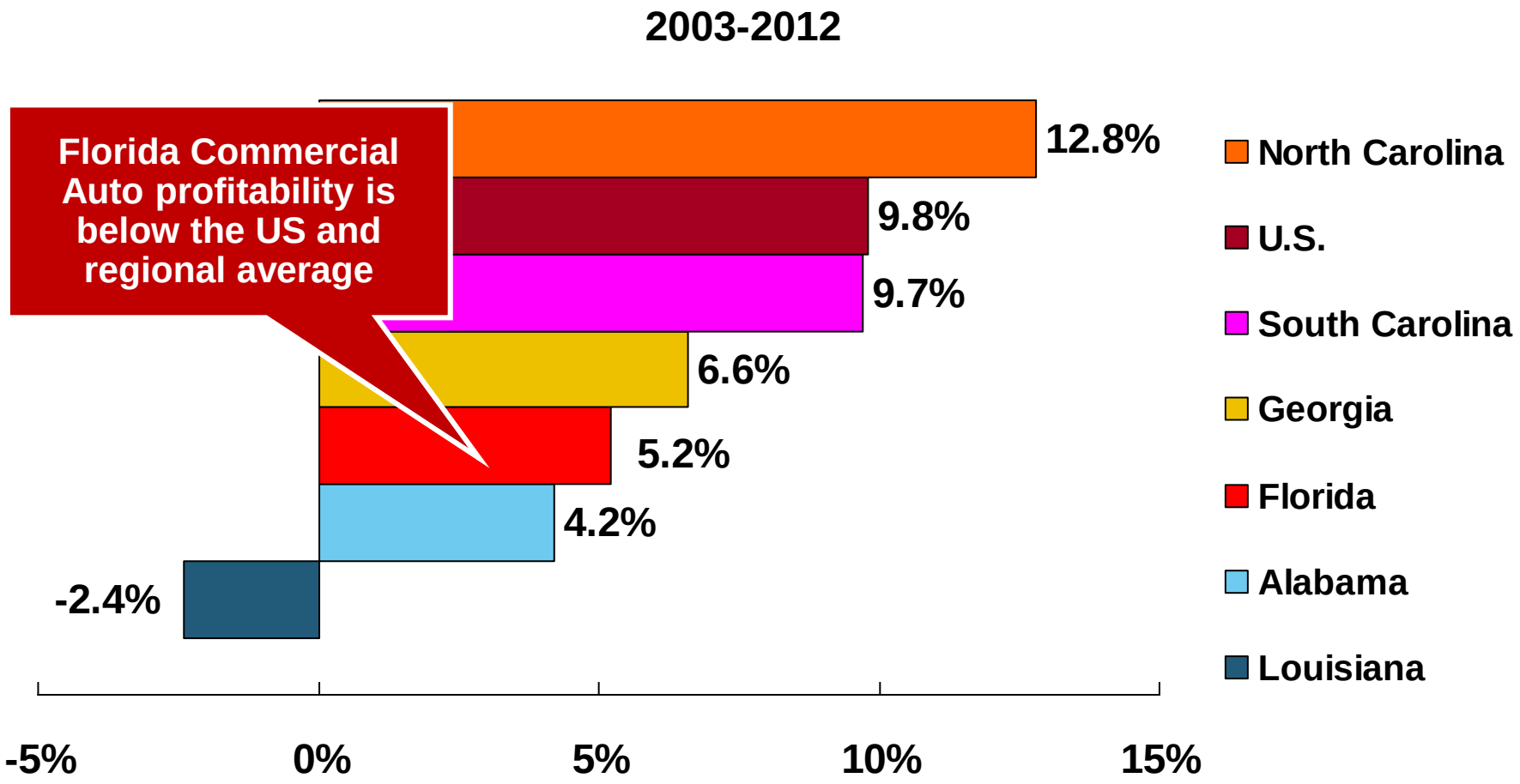
Rank	Most expensive states	HO average premium	Rank	Least expensive states	HO average premium
1	***Florida***	***$1,933***	1	Idaho	$518
2	Louisiana	1,672	2	Oregon	559
3	Texas (2)	1,578	3	Utah	563
4	Mississippi	1,409	4	Wisconsin	592
5	Oklahoma	1,386	5	Washington	626
6	Alabama	1,163	6	Ohio	644
7	Rhode Island	1,139	7	Delaware	664
8	Kansas	1,103	8	Arizona	675
9	New York	1,097	9	Nevada	689
10	Connecticut	1,096	10	Iowa	713

(1) Includes policies written by Citizens Property Insurance Corp. (Florida) and Citizens Property Insurance Corp. (Louisiana), Alabama Insurance Underwriting Association, Mississippi Windstorm Underwriting Association, North Carolina Joint Underwriting Association and South Carolina Wind and Hail Underwriting Association. Other southeastern states have wind pools in operation and their data may not be included in this chart. Based on the HO-3 homeowner package policy for owner-occupied dwellings, 1 to 4 family units. Provides "all risks" coverage (except those specifically excluded in the policy) on buildings and broad named-peril coverage on personal property, and is the most common package written.

(2) The Texas Department of Insurance developed home insurance policy forms that are similar but not identical to the standard forms. In addition, due to the Texas Windstorm Association (which writes wind-only policies) classifying HO-1, 2 and 5 premiums as HO-3, the average premium for homeowners insurance is artificially high.

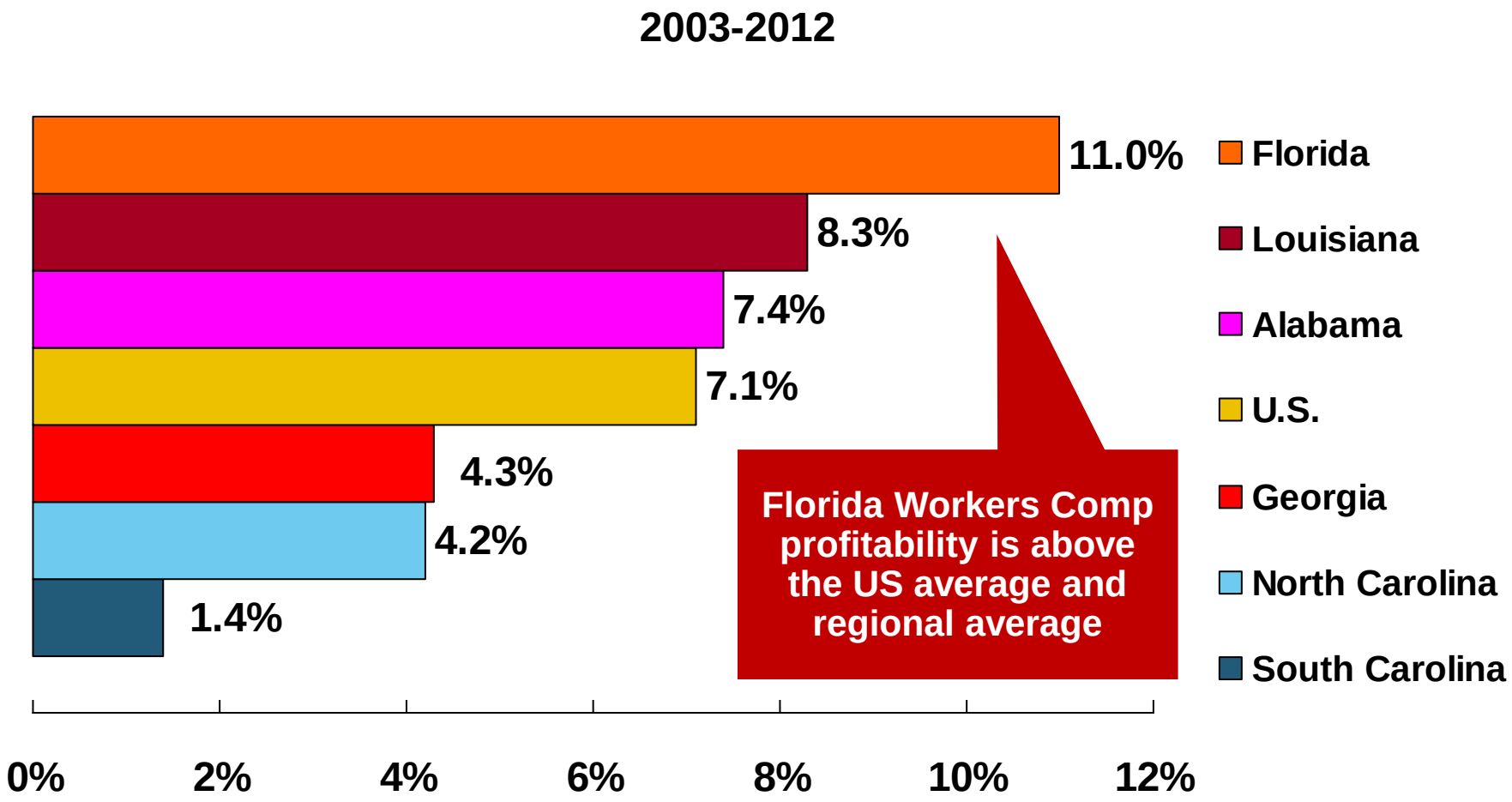
Note: Average premium=Premiums/exposure per house years. A house year is equal to 365 days of insured coverage for a single dwelling. The NAIC does not rank state average expenditures and does not endorse any conclusions drawn from this data.

Comm. Auto: 10-Year Average RNW FL & Nearby States



Source: NAIC, Insurance Information Institute

Workers Comp: 10-Year Average RNW FL & Nearby States



Source: NAIC, Insurance Information Institute

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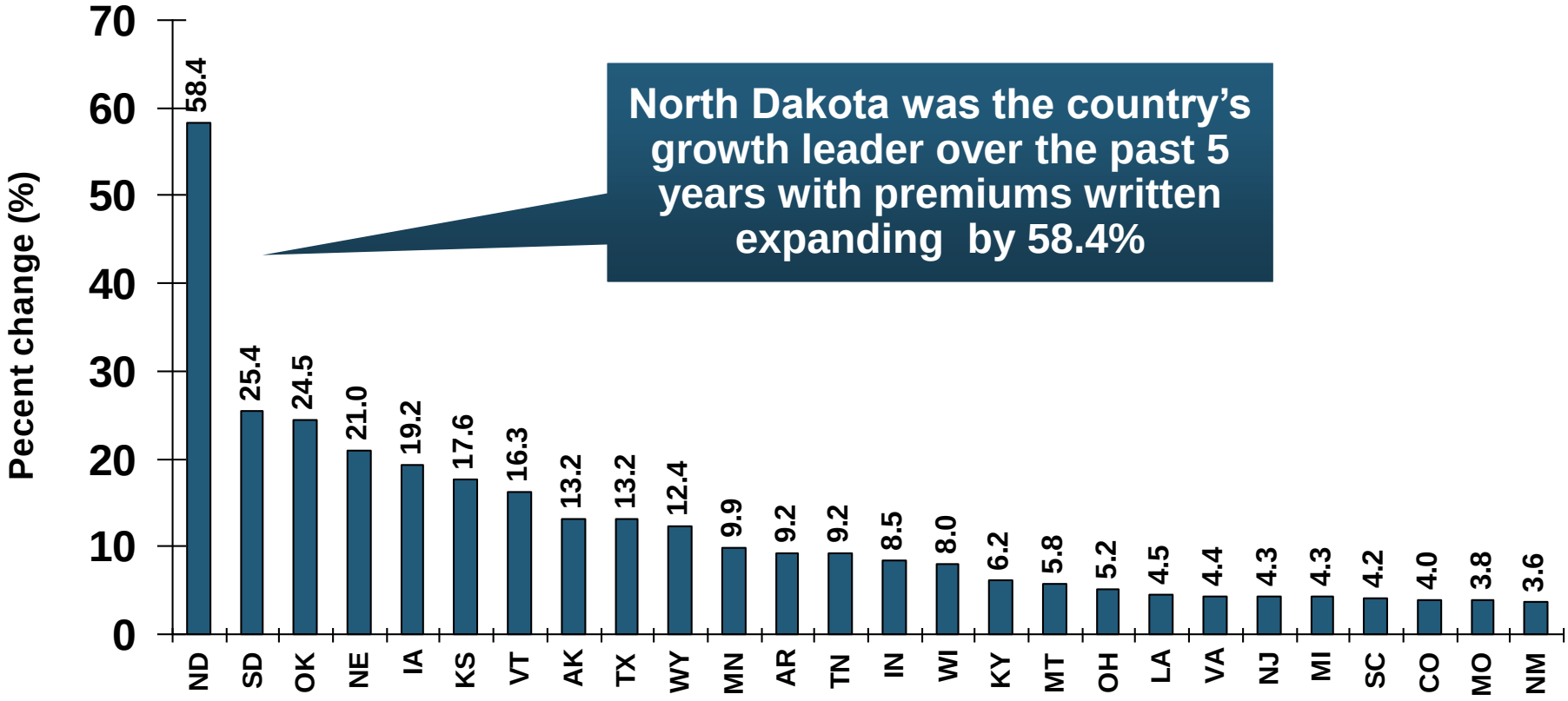
Premium Growth Analysis

Some Surprising States Are America's Growth Leaders

Direct Premiums Written: Total P/C Percent Change by State, 2007-2012*

Top 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Total P/C Percent Change by State, 2007-2012*

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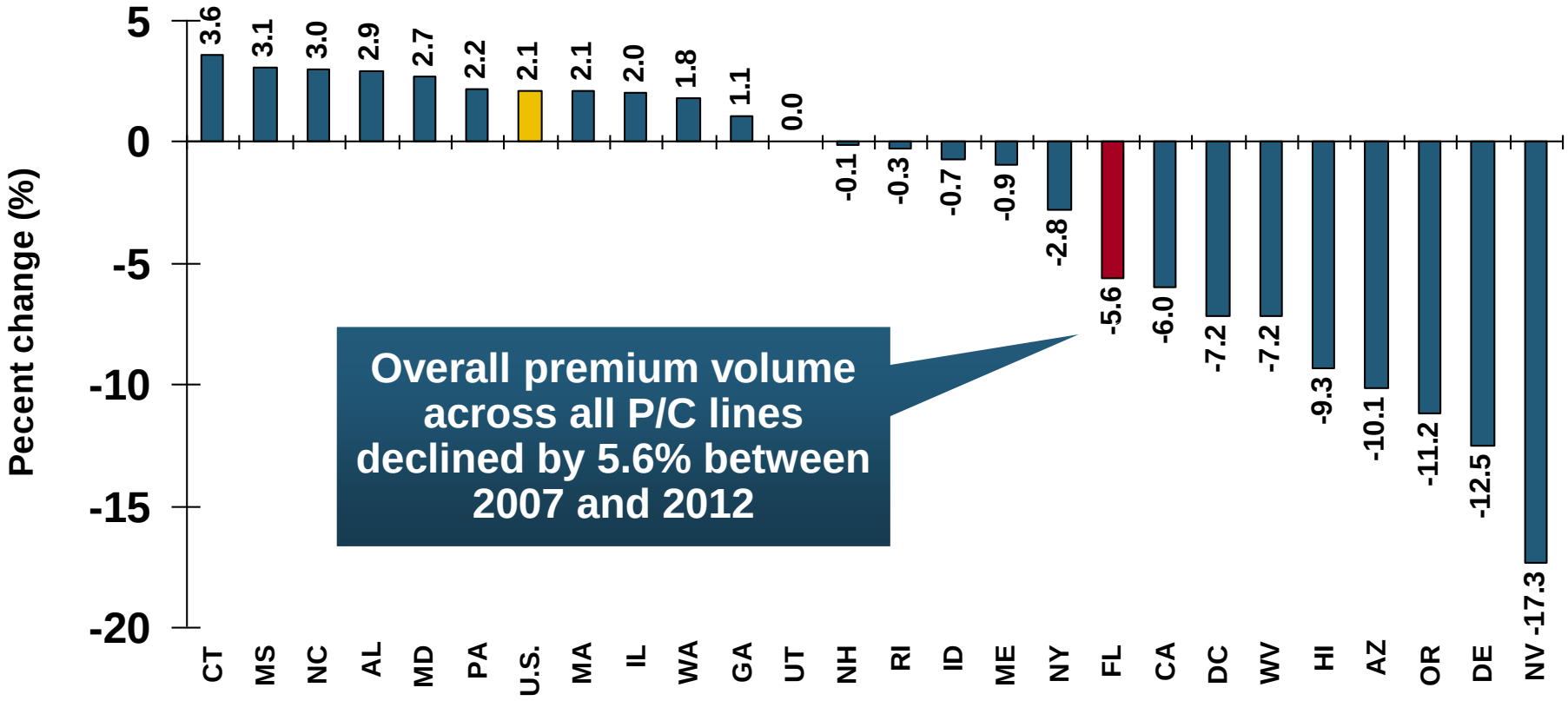
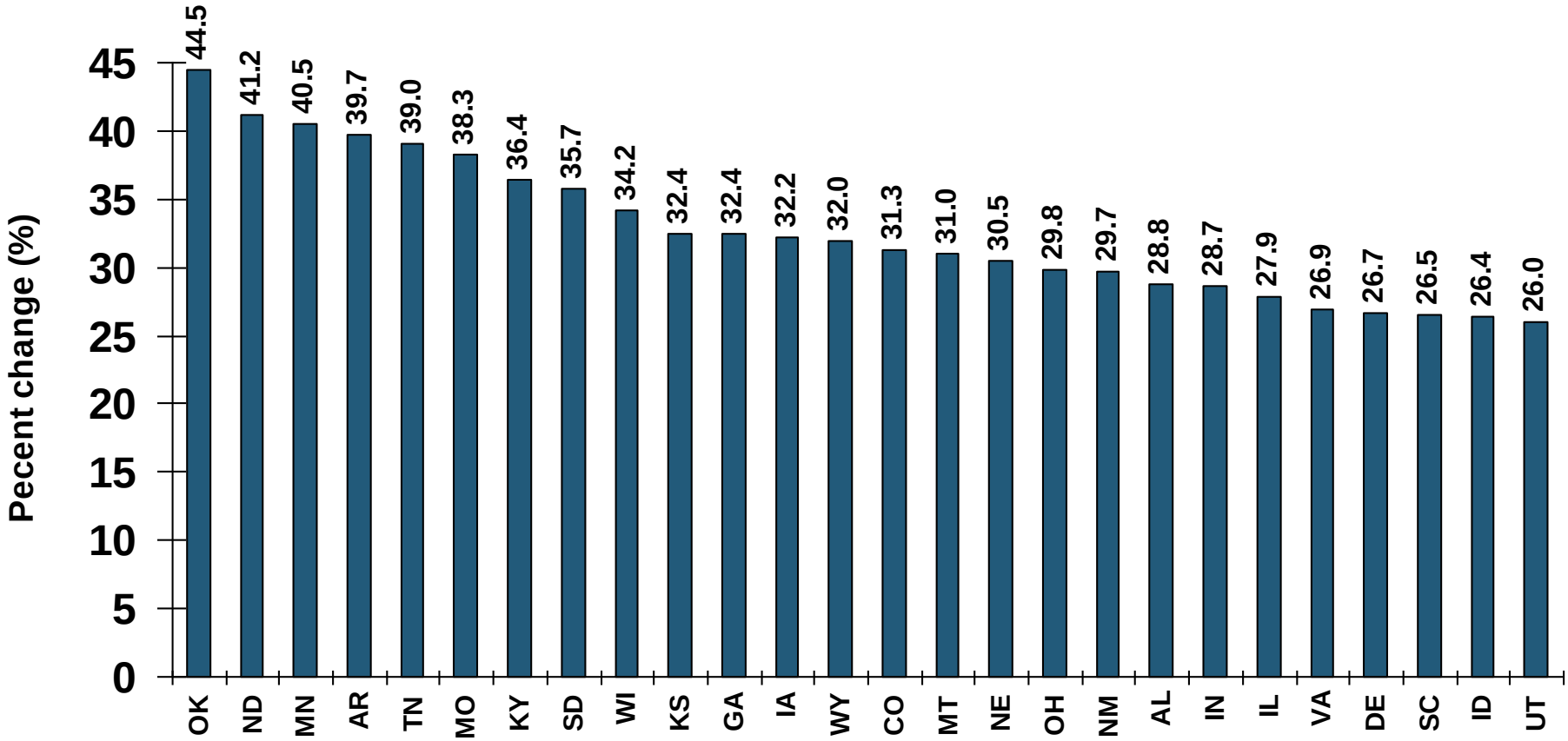
Bottom 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Homeowners Percent Change by State, 2007-2012*

Top 25 States



Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Homeowners Percent Change by State, 2007-2012*

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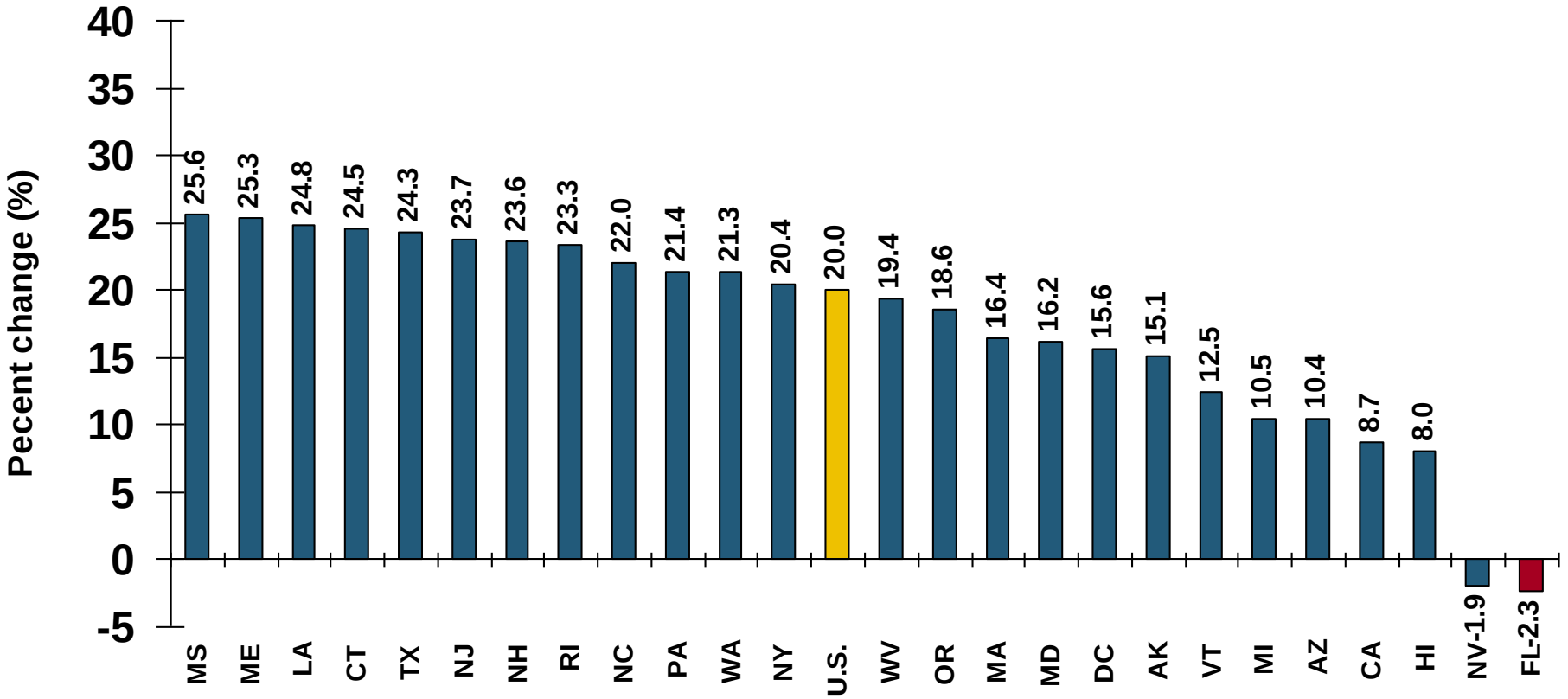
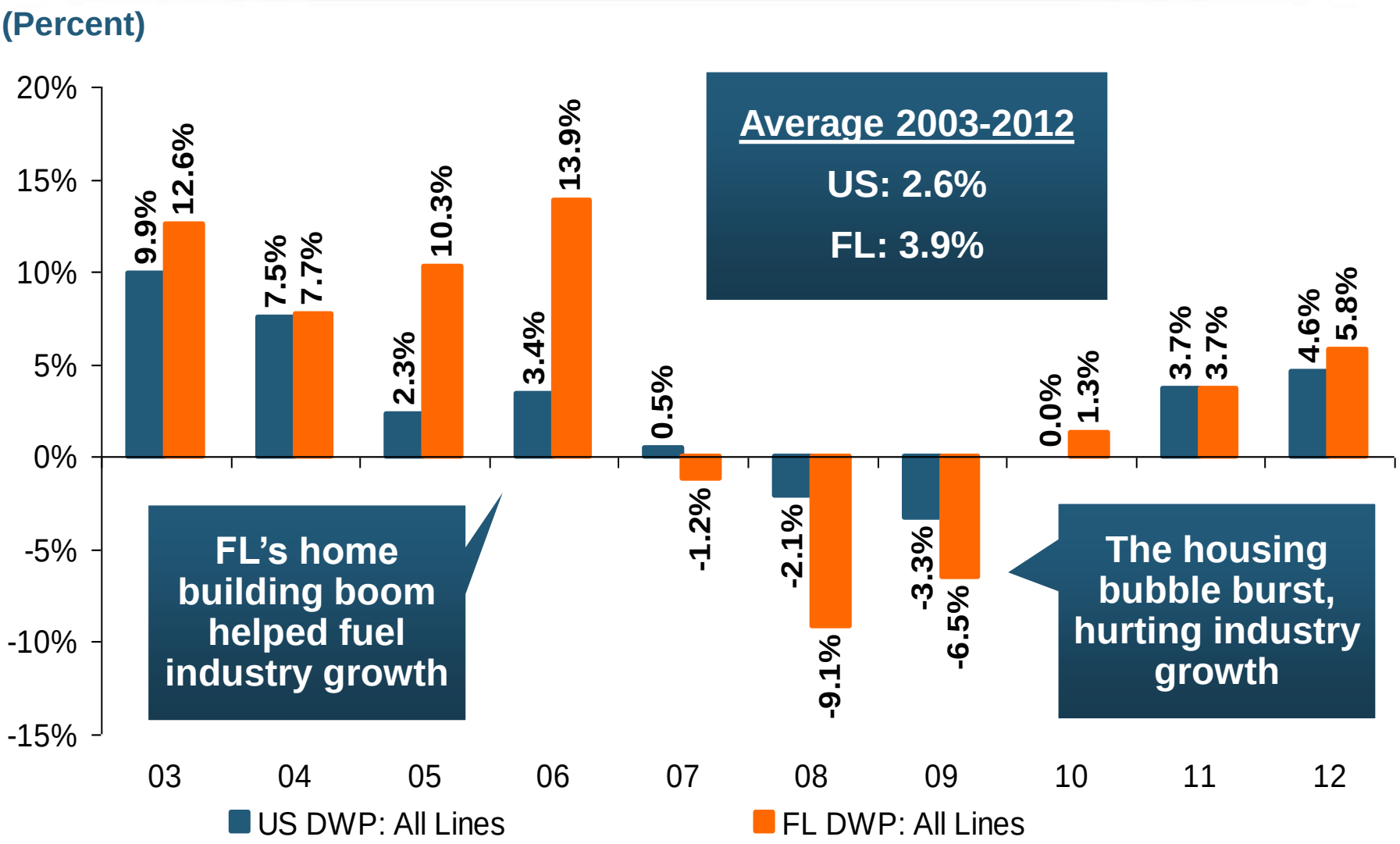
Bottom 25 States



Sources: SNL Financial LLC.; Insurance Information Institute.

All Lines DWP Growth: FL vs. U.S., 2003-2012



Source: SNL Financial.

Comm. Lines DWP Growth: FL vs. U.S., 2003-2012

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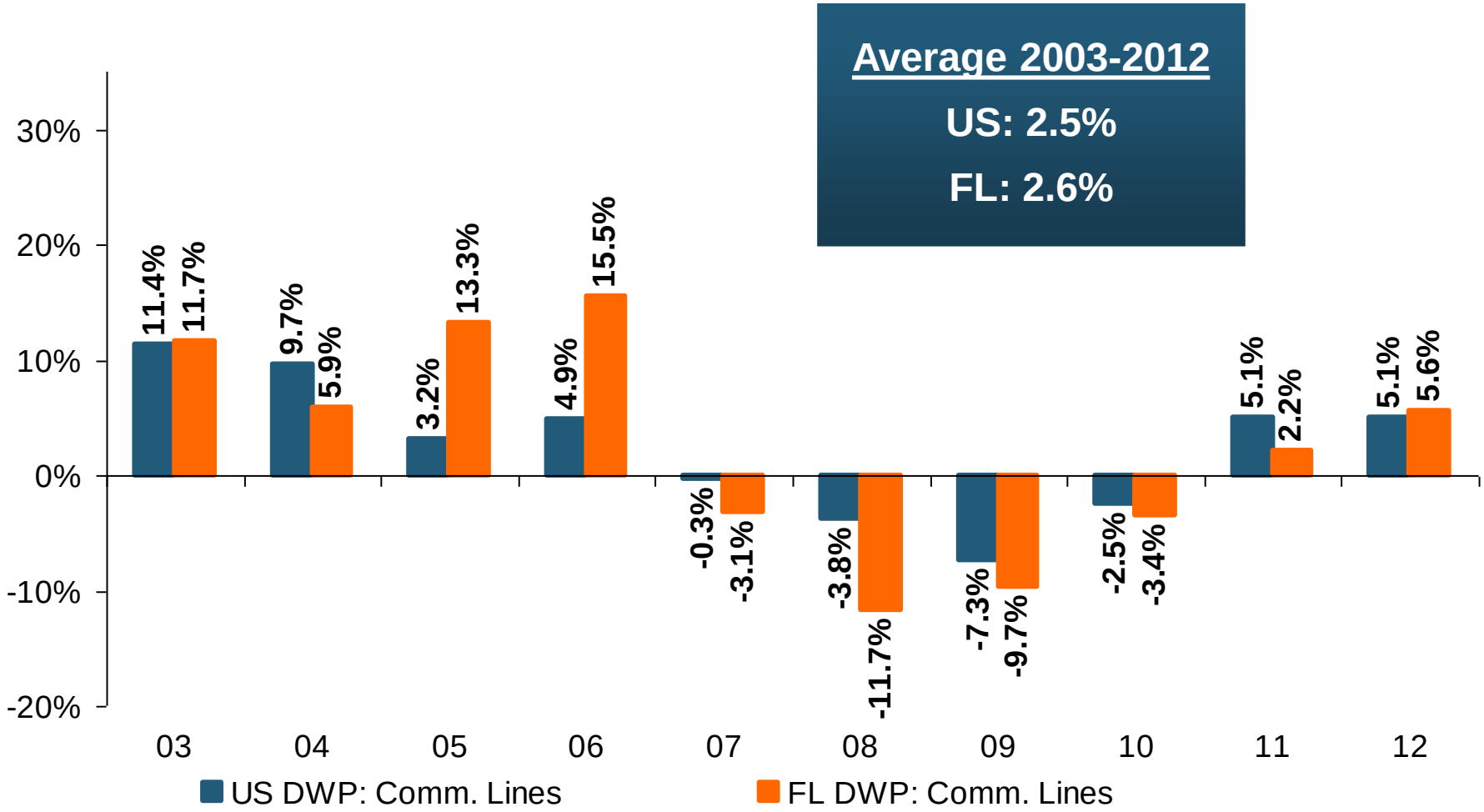
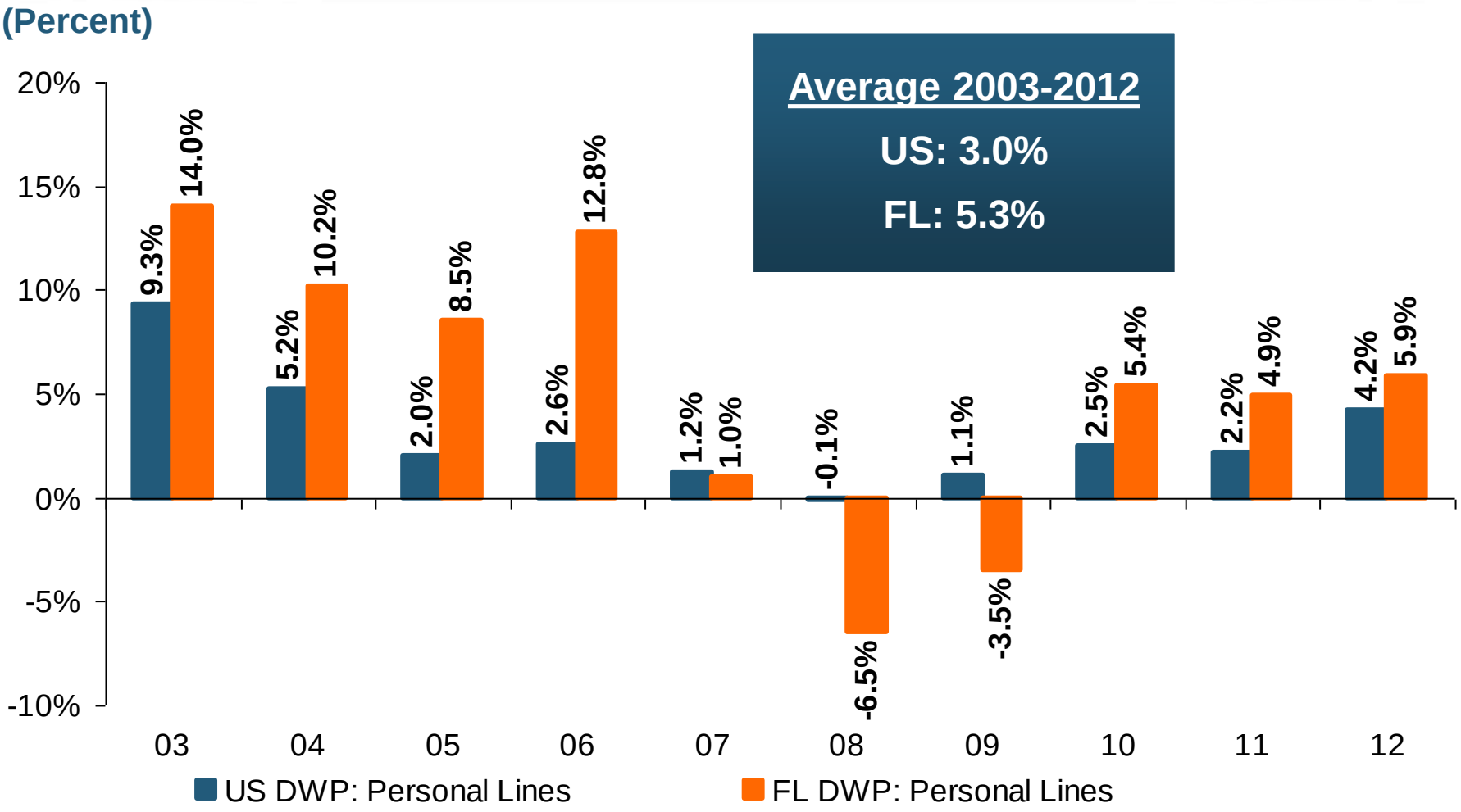
(Percent)



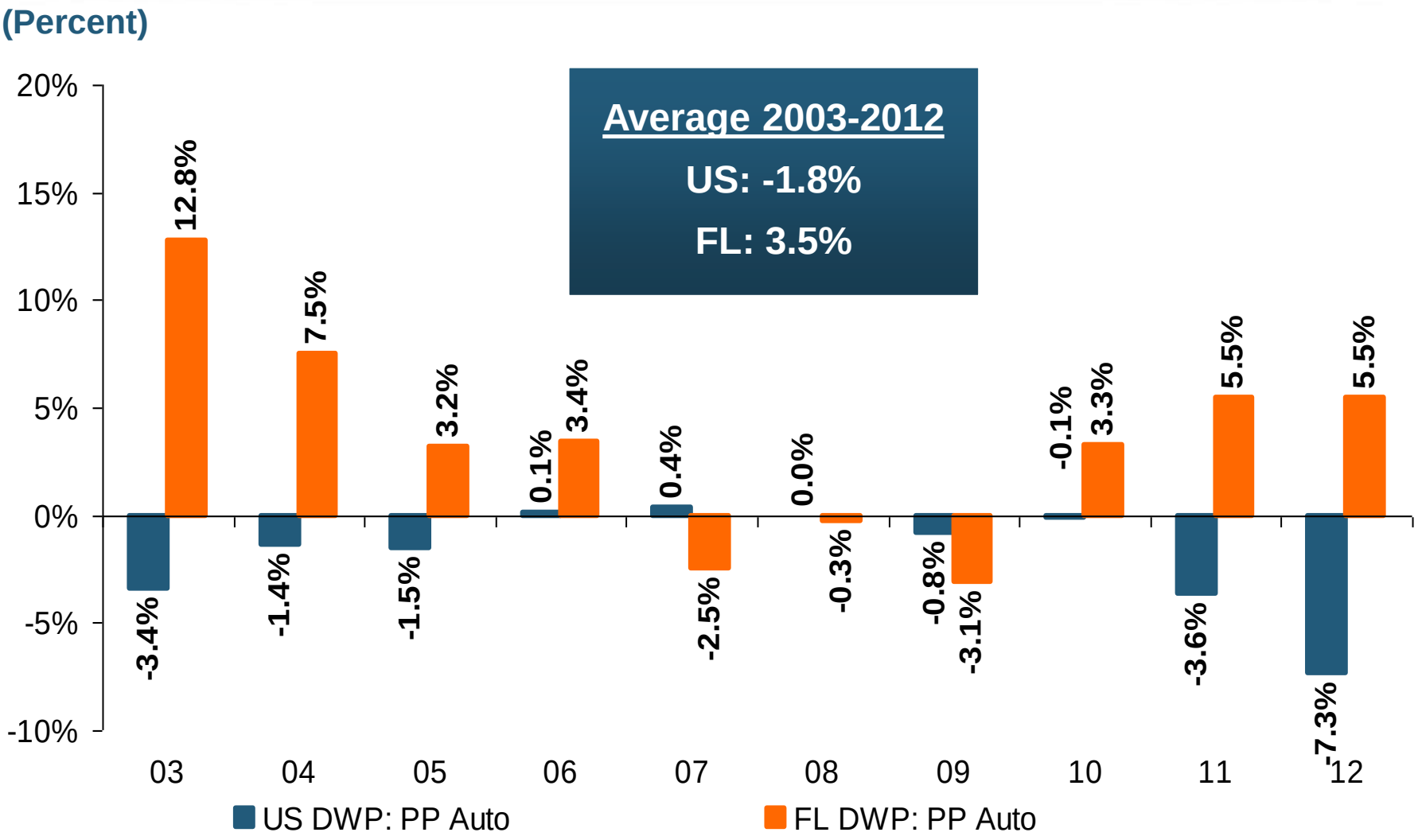
Source: SNL Financial.

Personal Lines DWP Growth: FL vs. U.S., 2003-2012



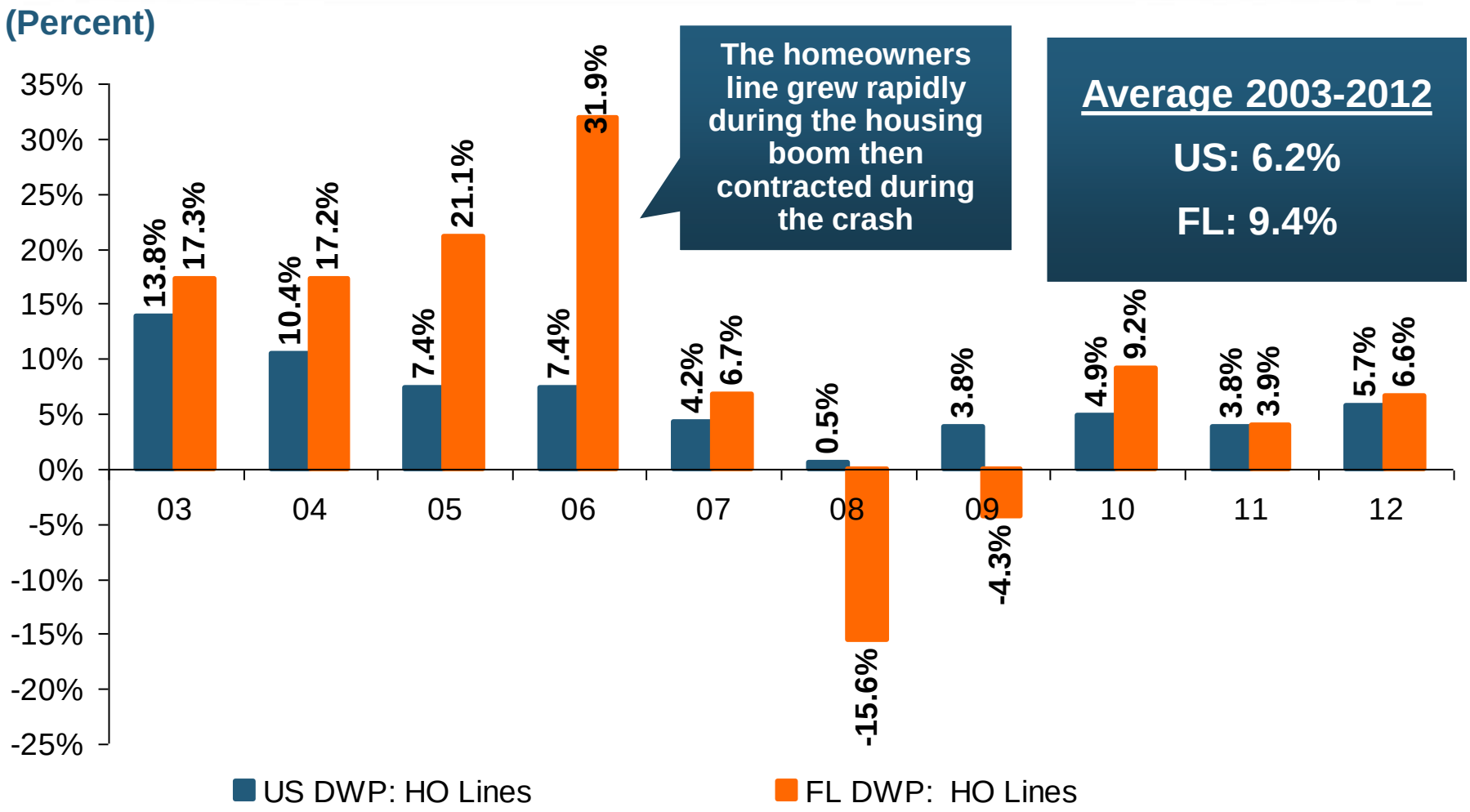
Source: SNL Financial.

Private Passenger Auto DWP Growth: FL vs. U.S., 2003-2012



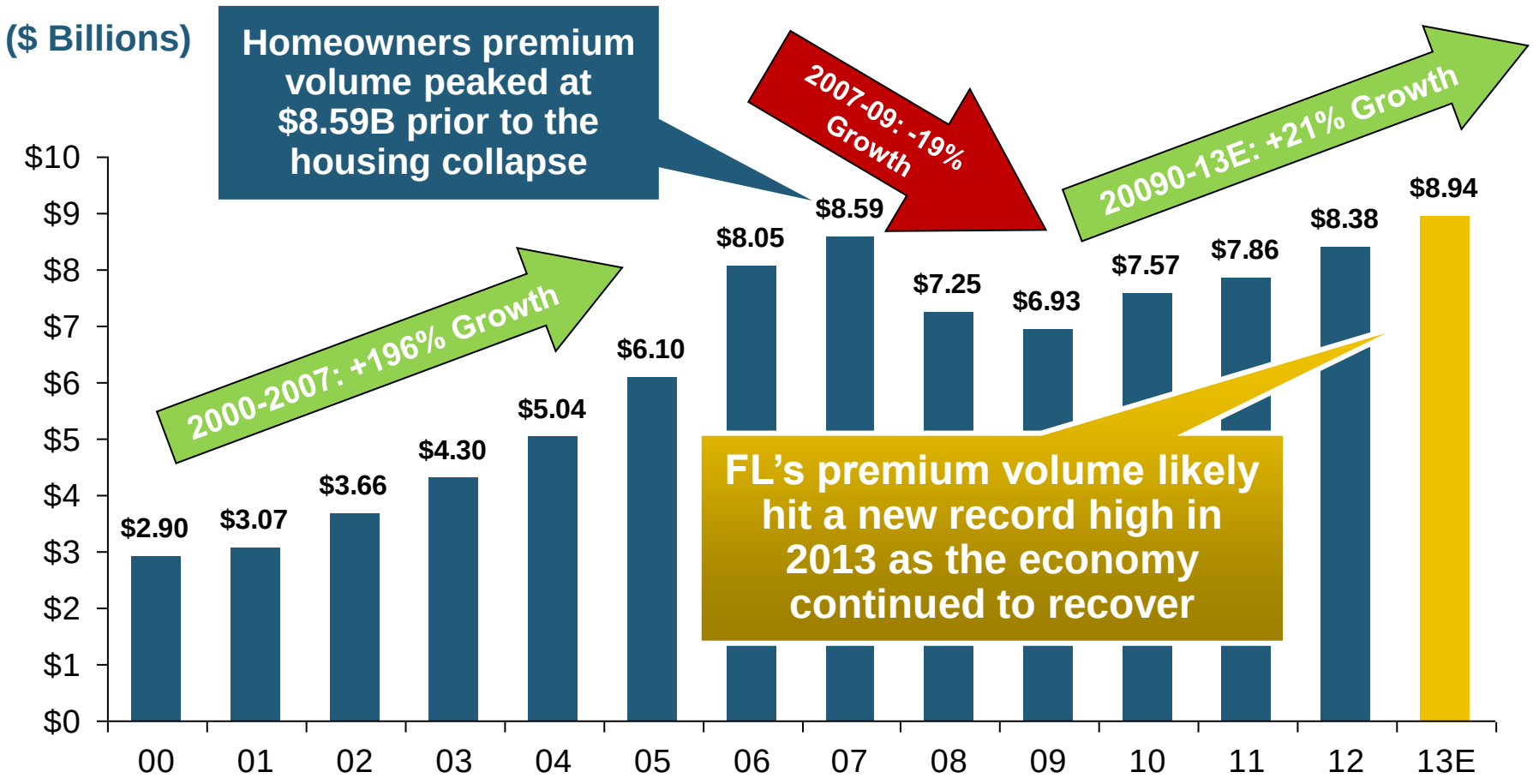
Source: SNL Financial.

Homeowner's MP DWP Growth: FL vs. U.S., 2003-2012



Source: SNL Financial.

Florida Homeowners Direct Written Premium, 200-2013E*



Florida's homeowners insurance market has been on a 15-year rollercoaster ride in terms of both volume and performance

*2013 is an I.I.I. estimate and assumes a 6.6% growth rate (same as in 2012).

Sources: SNL Financial; Insurance Information Institute.

Lender Placed Insurance Direct Earned Premiums, 2002-2011

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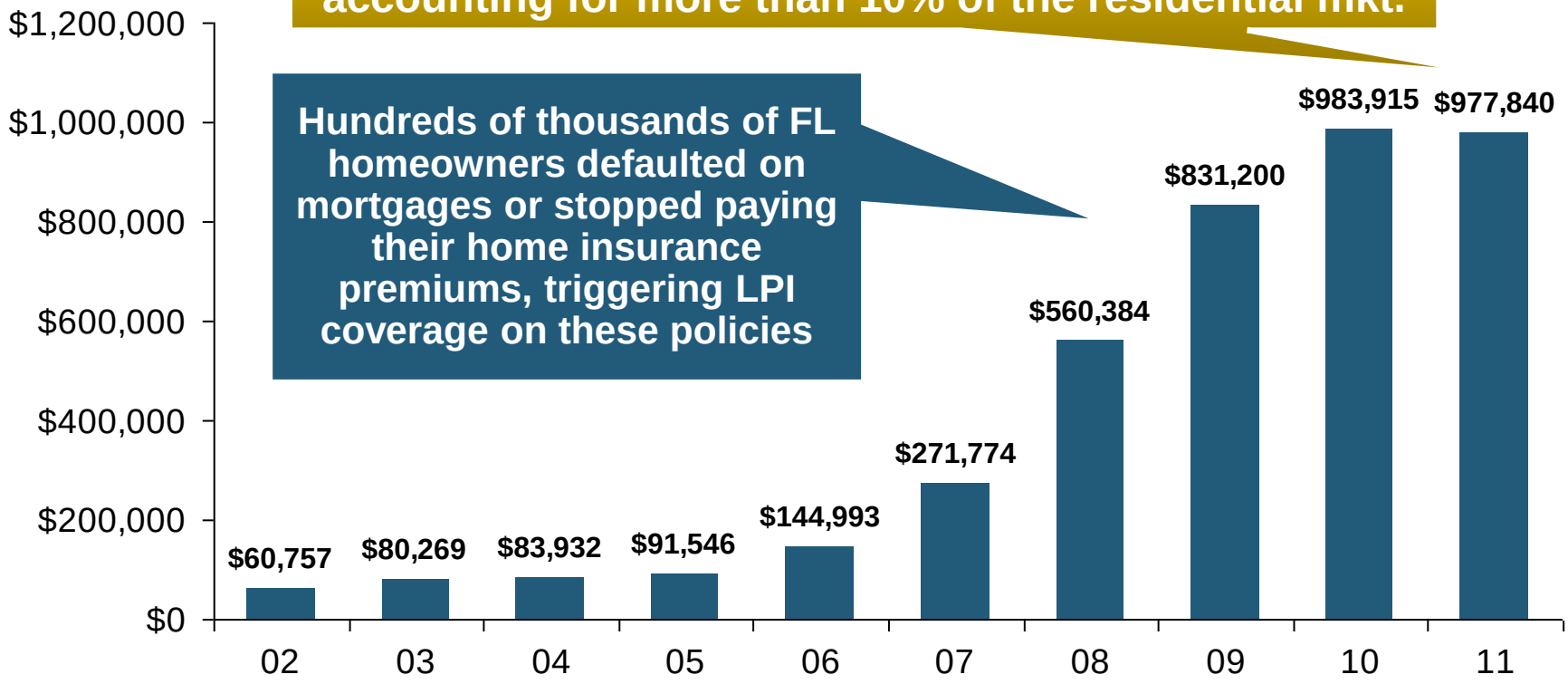
($ Millions)

By 2010, LPI volume had increased by 1,500%, from just $61 million in 2002 to nearly $1 billion in 2010, accounting for more than 10% of the residential mkt.

Hundreds of thousands of FL homeowners defaulted on mortgages or stopped paying their home insurance premiums, triggering LPI coverage on these policies



Even Florida Citizens underwriting guidelines forbid it from underwriting properties on which LPI was triggered

Sources: Milliman, Inc., "Considerations When Developing Actuarially Sound Rates for Lender Placed Property Insurance," NAIC Meeting, August 9, 2011; Insurance Information Institute.

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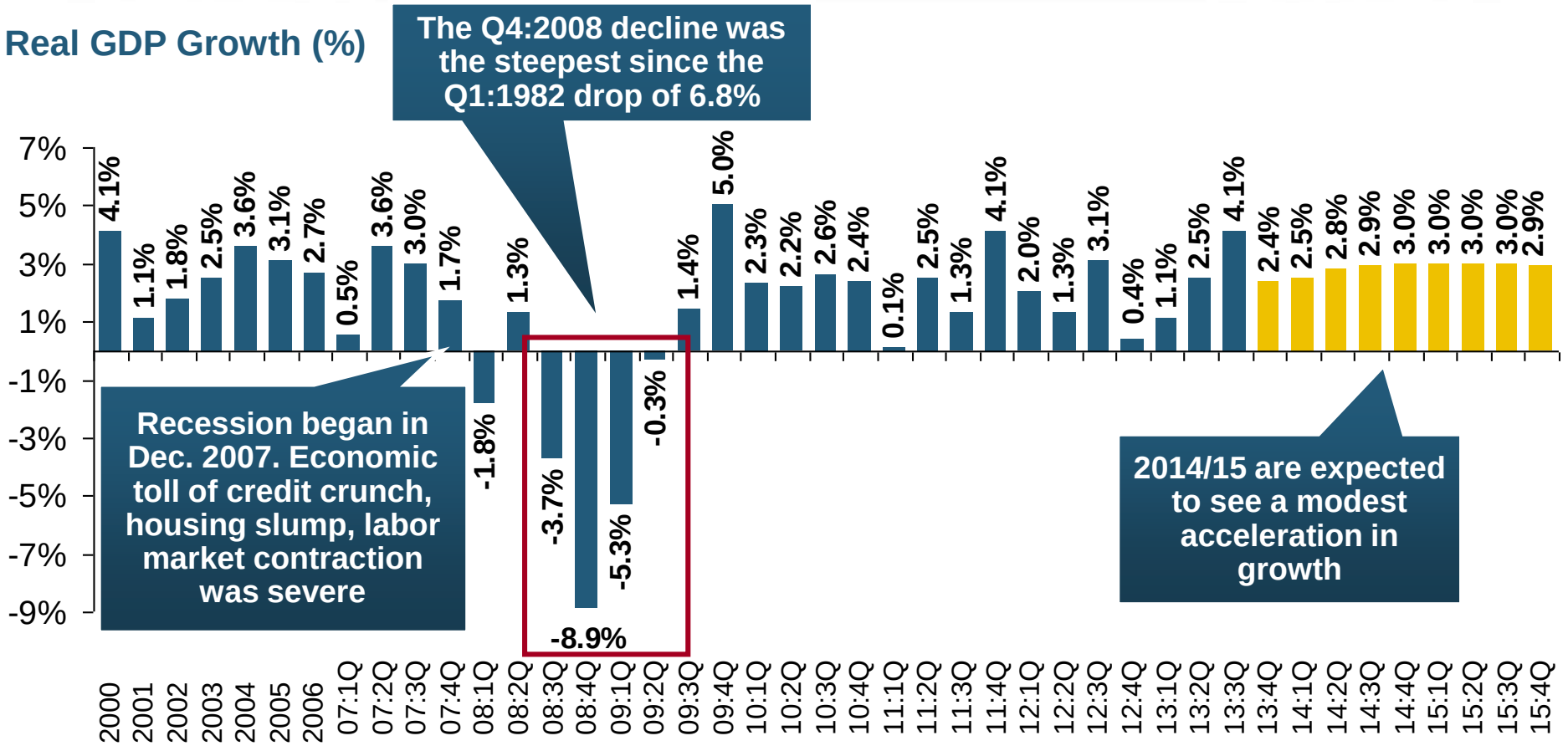
The Strength of the U.S. Economy Will Influence P/C Insurer Growth and Exposure

Growth Will Expand Insurer Property Exposures

Florida' Economy: Primed for Growth; Hurricane Vulnerability Increases

- **Home Construction in FL Will Rise Sharply**
  - 110,000 new homes are expected to be built in FL in 2014
  - 148,000 in 2015; 167,000 in 2016 and 168,000+ in 2017
  - Florida will account for 1-in-10 new homes built in the US
- **Real Economic Growth Average About 3% through 2017**
  - Will fuel commercial property exposures
- **Population Growth Will Greatly Exceed the US Overall**
  - 1.3% to 1.4% per year, almost double ~0.75% for the US
  - In 2013, FL likely overtook NY as the 3rd most populace state
  - More than 1 million increase through 2017
  - Will drive demand for housing, infrastructure, commercial prop.
  - Increase of about 600,000 jobs through 2017

US Real GDP Growth*

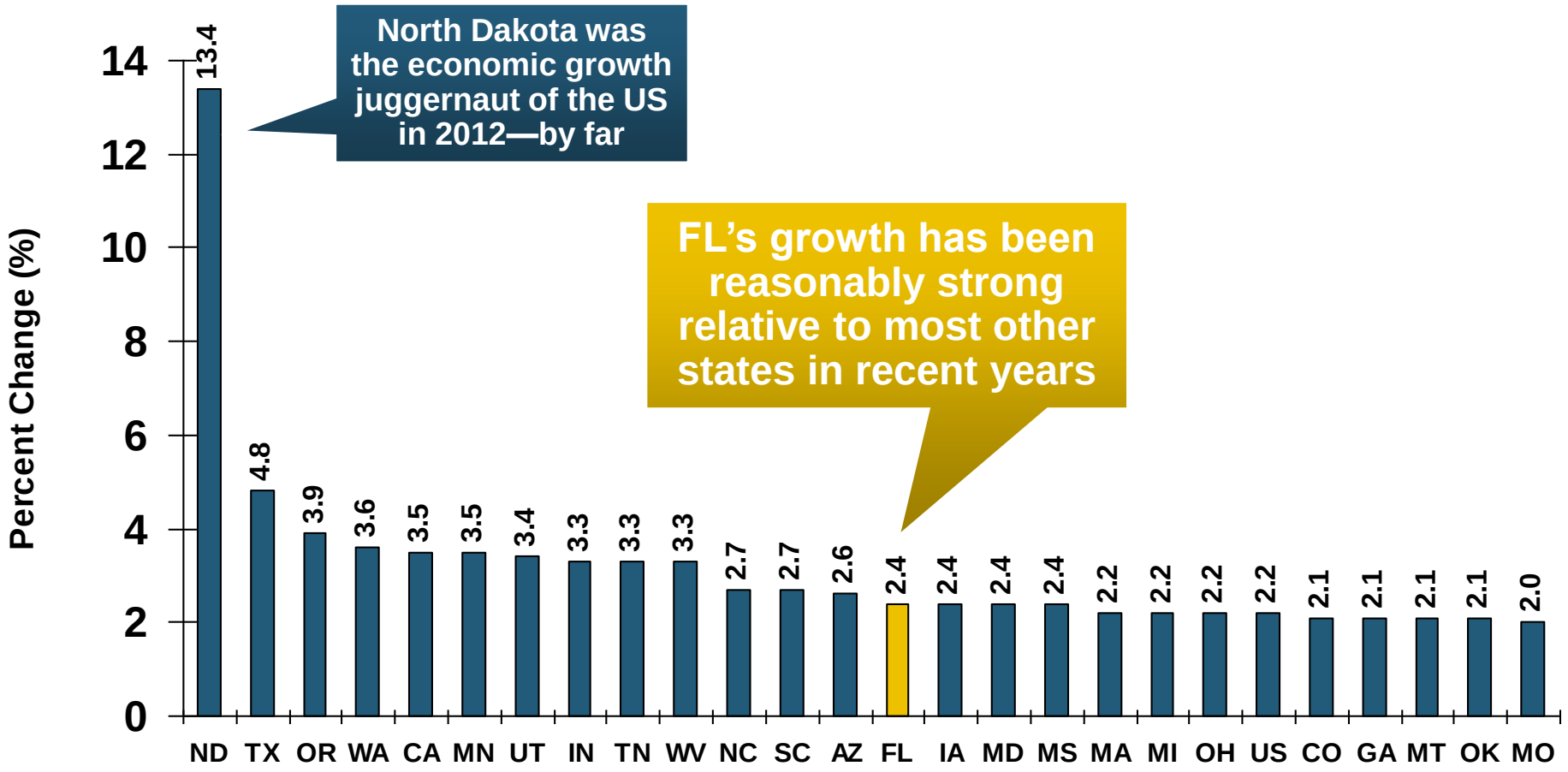


Demand for Insurance Continues To Be Impacted by Sluggish Economic Conditions, but the Benefits of Even Slow Growth Will Compound and Gradually Benefit the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.

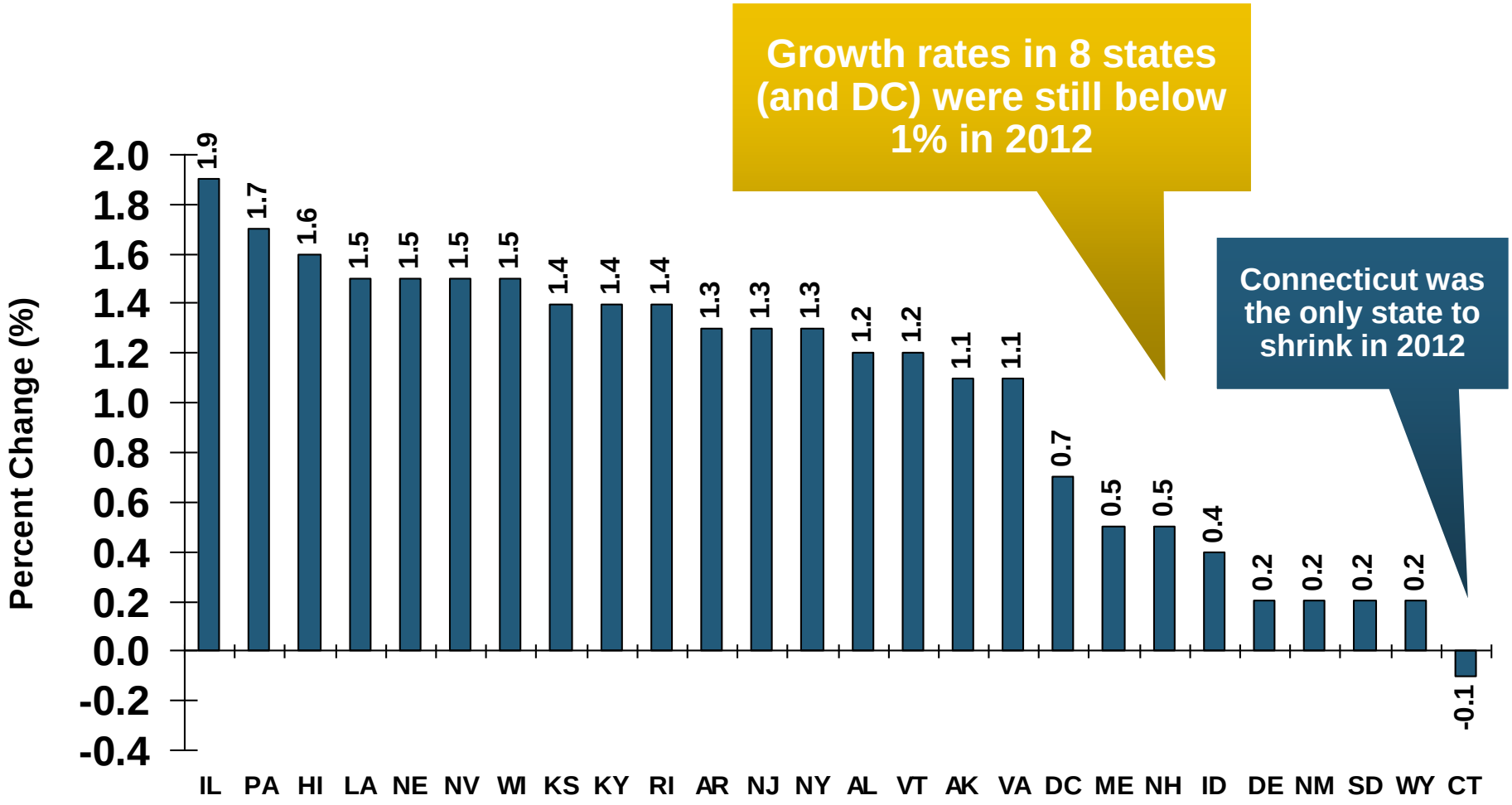
Source: US Department of Commerce, Blue Economic Indicators 1/14; Insurance Information Institute.

Real GDP by State Percent Change, 2012: Highest 25 States



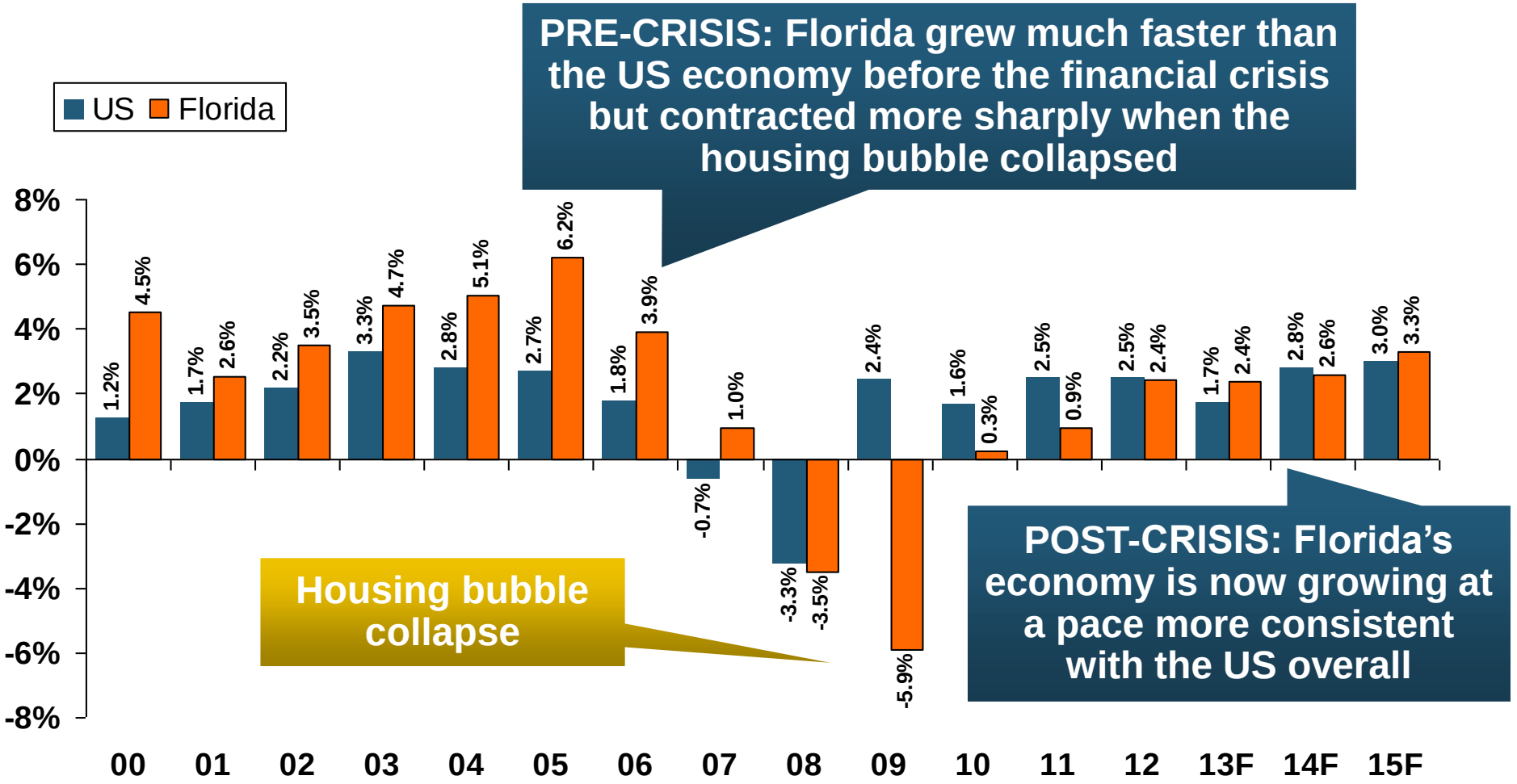
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Real GDP by State Percent Change, 2012: Lowest 25 States



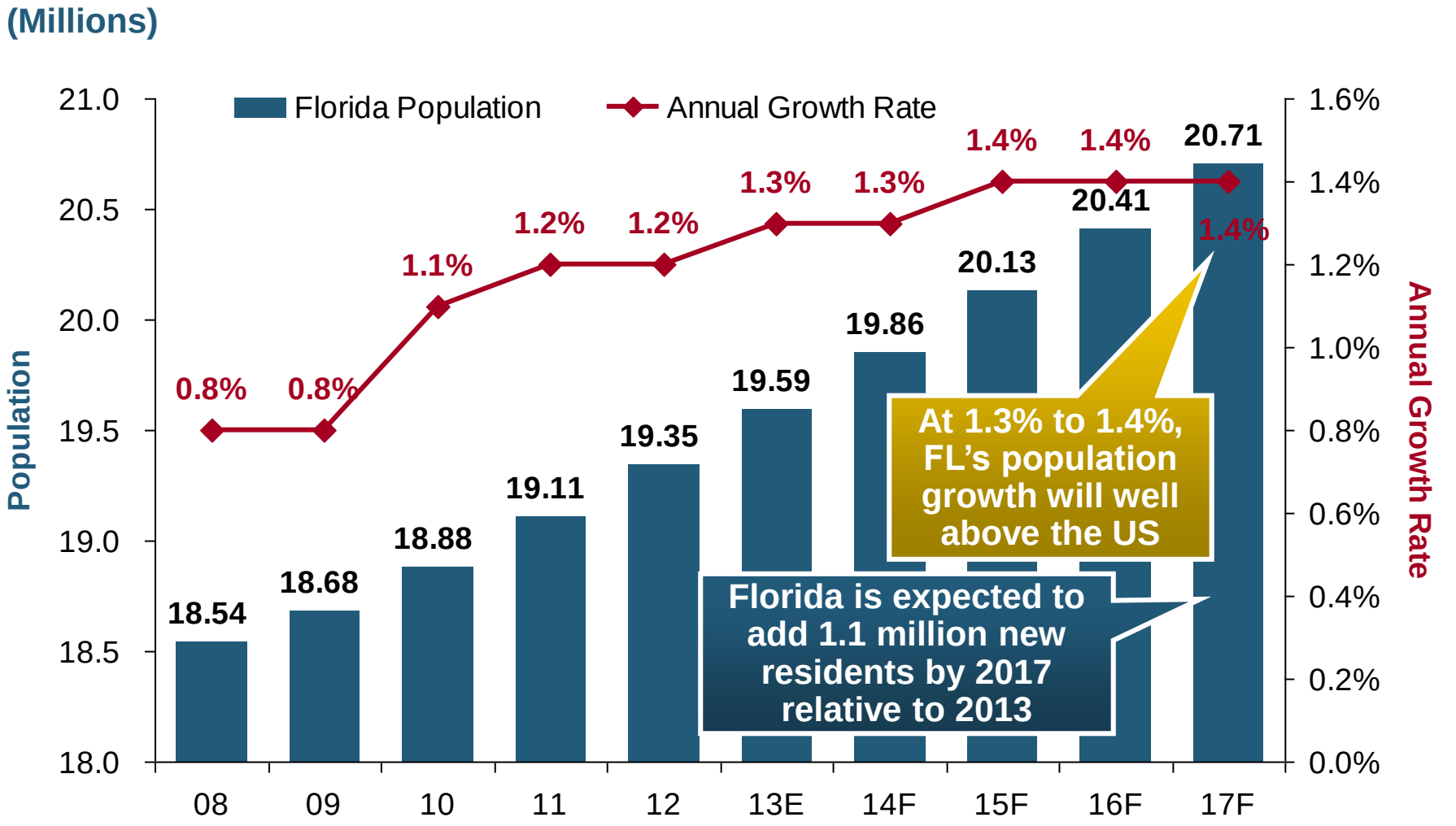
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Florida vs. US Real GDP Growth



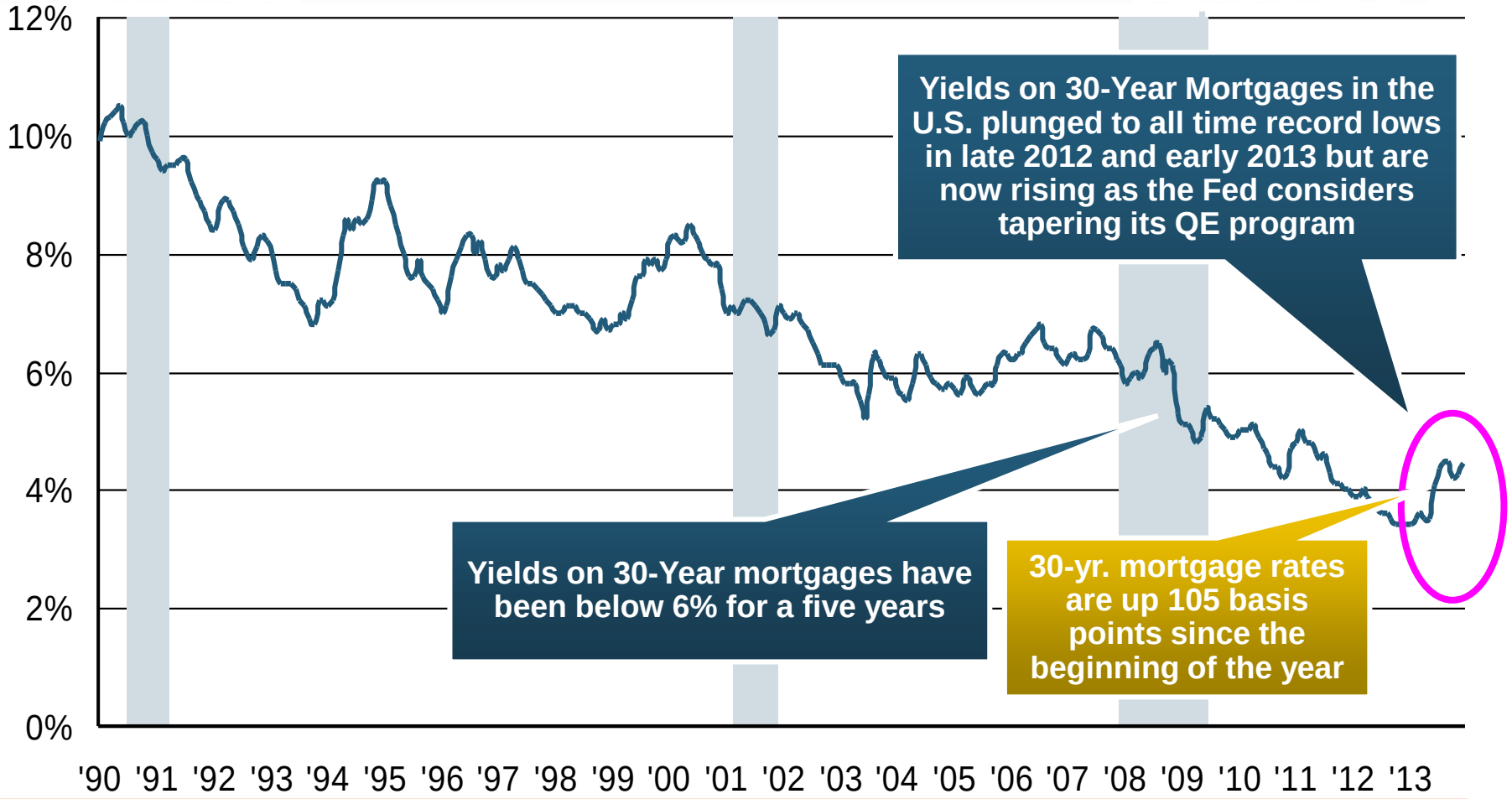
Source: US Department of Commerce; Blue Economic Indicators 1/14 (for US 2013-15 figures); University of Central Florida for 2013-2015 Florida figures: http://iec.ucf.edu/post/2014/01/07/Florida-Metro-Forecast-December-2013.aspx

Strong Florida Population Growth Will Drive Coastal Exposure Sharply Upward



Source: US Census Bureau; University of Central Florida Institute for Economic Competitiveness: http://iec.ucf.edu/post/2014/01/07/Florida-Metro-Forecast-December-2013.aspx ; Insurance Information Institute.

Interest Rate on Convention 30-Year Mortgages: Headed Back Up, 1990–2013*

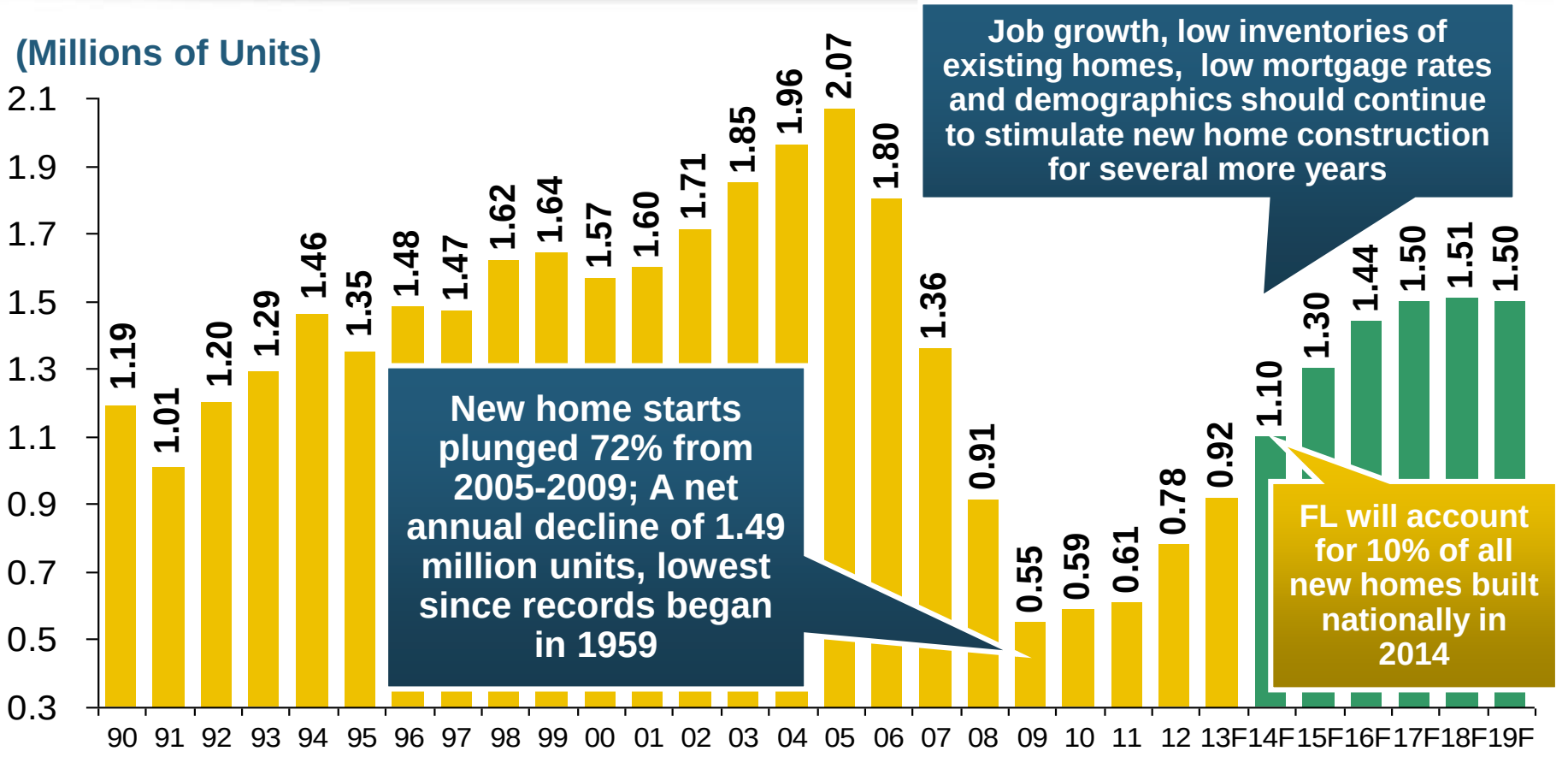


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, through December 2013. Note: Recessions indicated by gray shaded columns.

Sources: Federal Reserve Bank at http://www.federalreserve.gov/releases/h15/data.htm.
National Bureau of Economic Research (recession dates); Insurance Information Institutes.

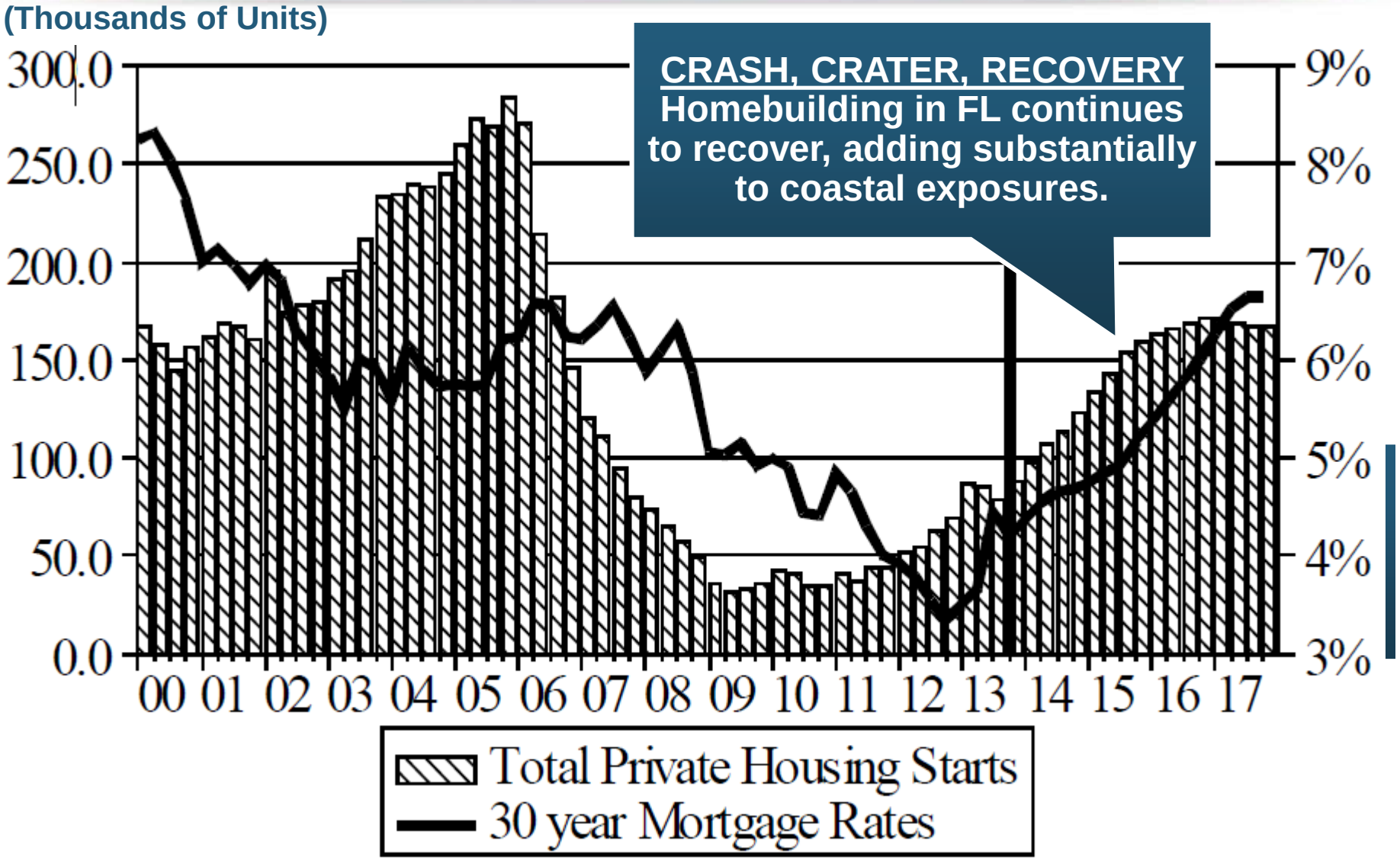
New Private Housing Starts, 1990-2019F



Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the "Great Recession" Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (1/14 and 3/13); Insurance Information Institute.

Florida Total Private Housing Starts, 2000 – 2017F



Source: University of Central Florida Institute for Economic Competitiveness: http://iec.ucf.edu/post/2014/01/07/Florida-Metro-Forecast-December-2013.aspx

Net Worth of Households* Recently Hit A Historic High

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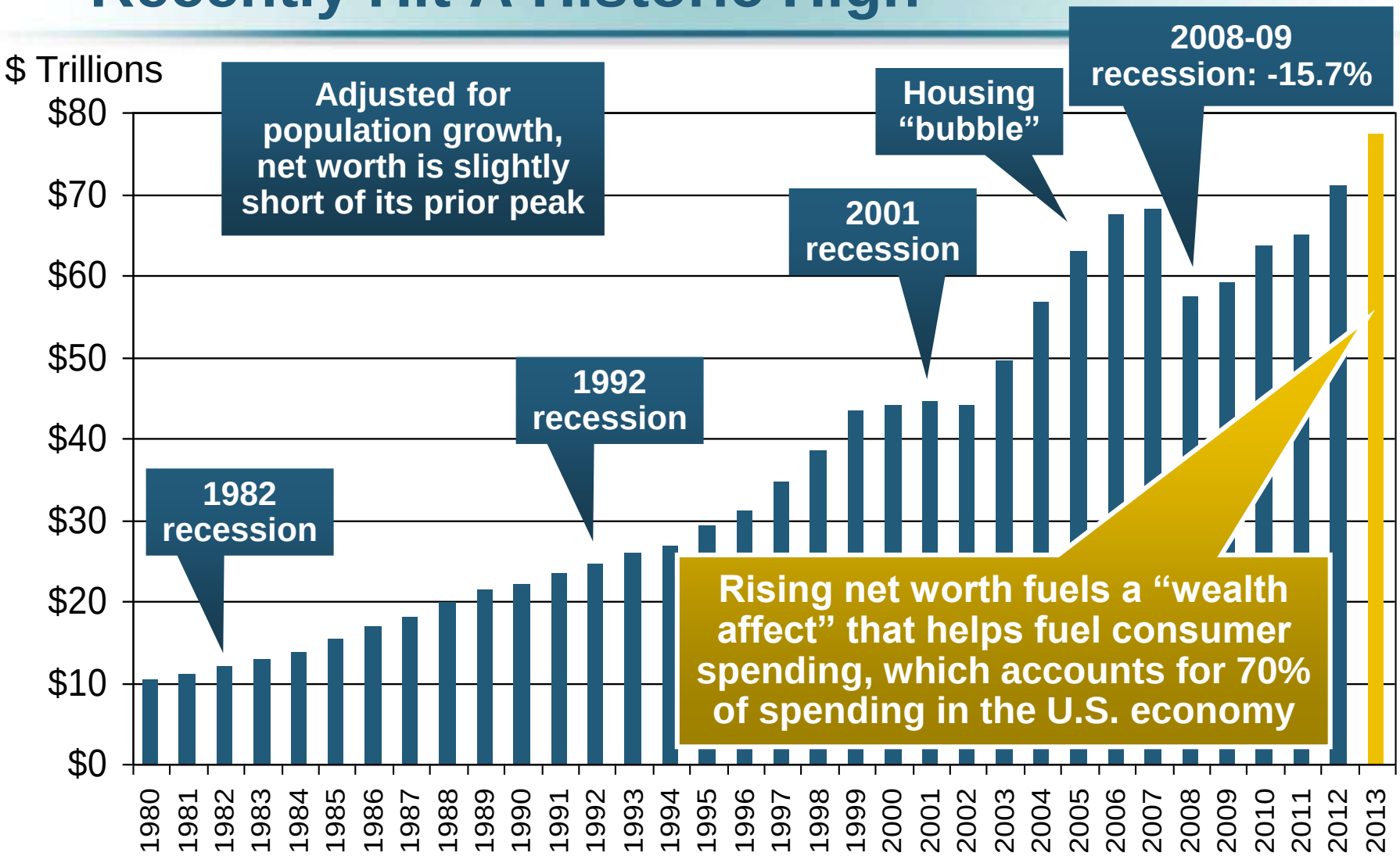
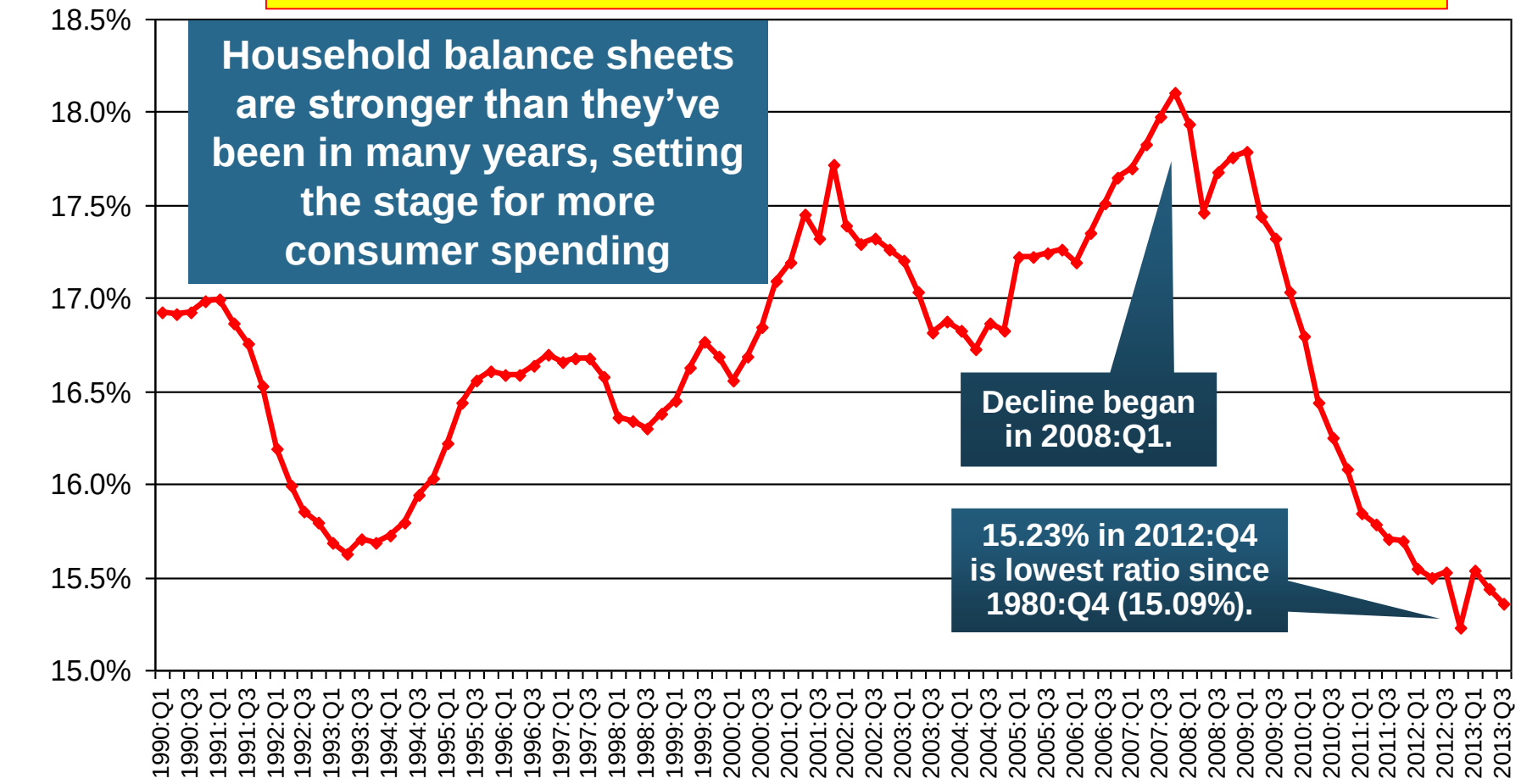


*and nonprofit organizations. Data are as of year-end, except in 2013:Q3 (data posted on Dec 9, 2013).
Next release March 6, 2014. Data not seasonally adjusted or inflation-adjusted
Source: Federal Reserve Board

Household Financial Obligations Ratio Recently Hit A Historic Low

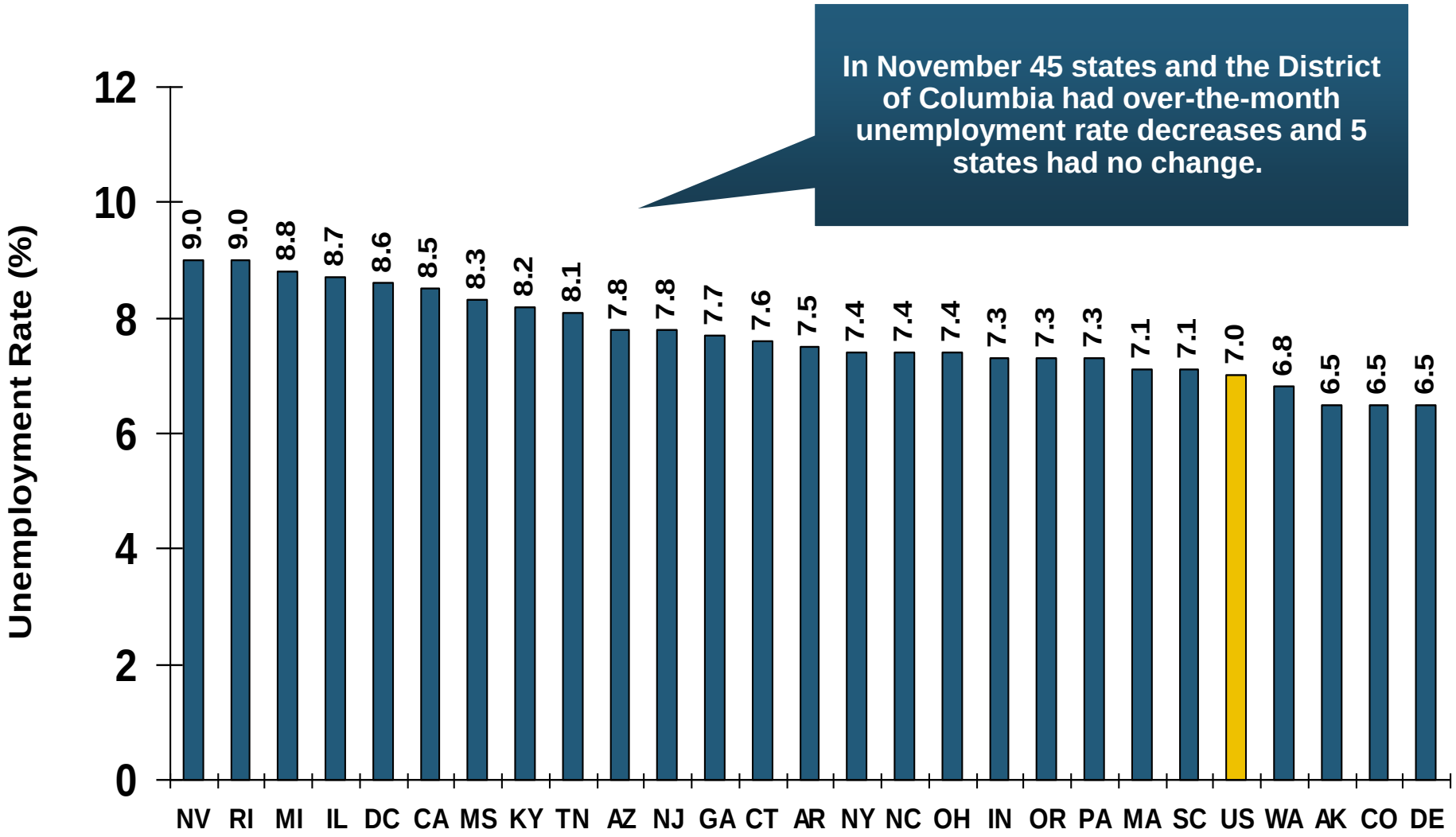
INSURANCE INFORMATION INSTITUTE

Financial Obligations Ratio: debt service (mortgage and consumer debt), auto lease, residence rent, HO insurance, and property tax payments as % of personal disposable income.



*through 2013:Q3 (data posted on Dec 13, 2013)
Source: Federal Reserve Board, at http://www.federalreserve.gov/releases/housedebt

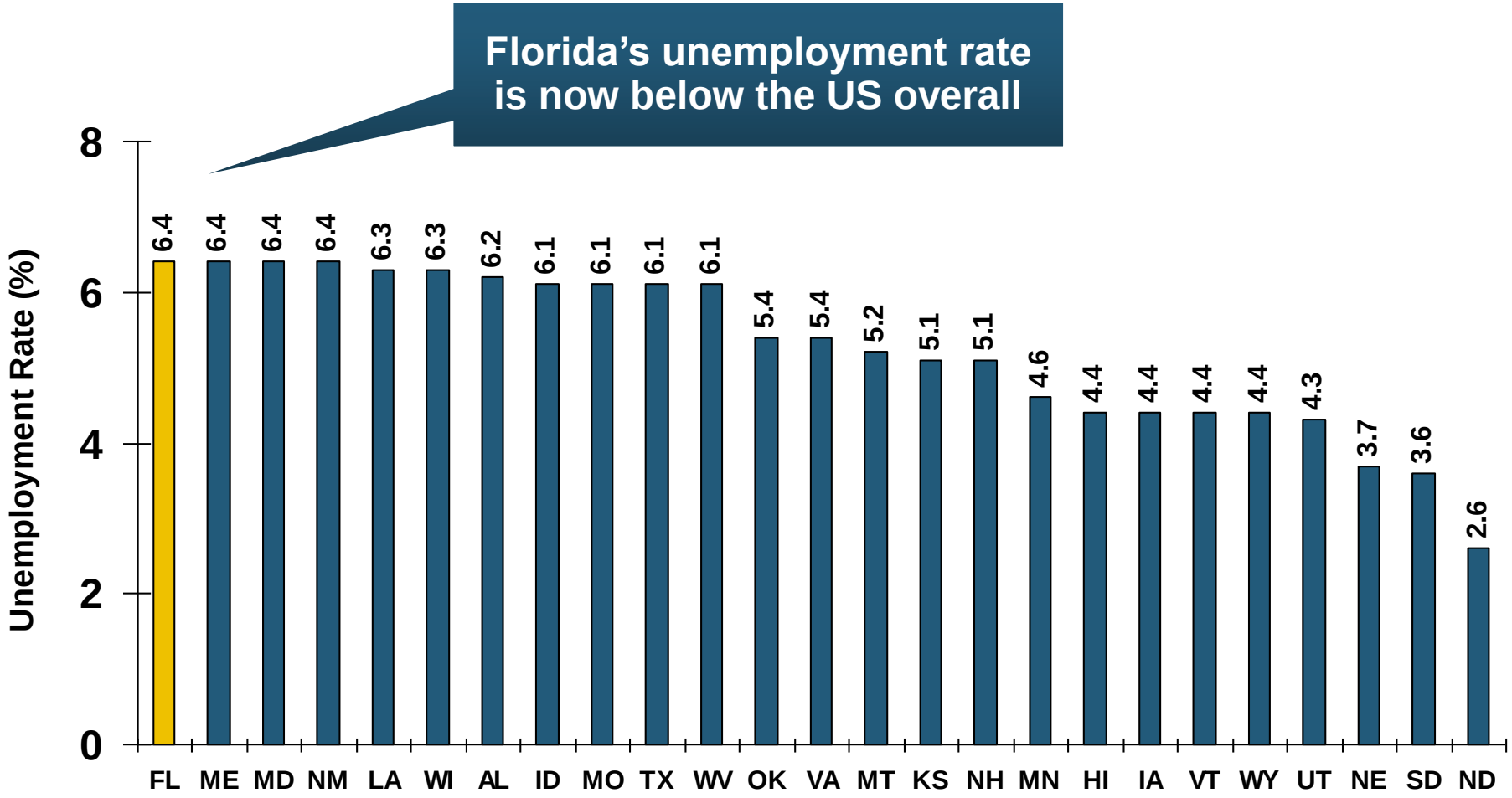
Unemployment Rates by State, November 2013: Highest 25 States*



*Provisional figures for November 2013, seasonally adjusted.

Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Unemployment Rates by State, November 2013: Lowest 25 States*



*Provisional figures for November 2013, seasonally adjusted.
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

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Insured Catastrophe Loss Update

Florida Has Played a Critical Role in the History of Catastrophe Losses in the U.S.

Relative Calm in Recent Years Is Unlikely to Endure

U.S. Insured Catastrophe Losses

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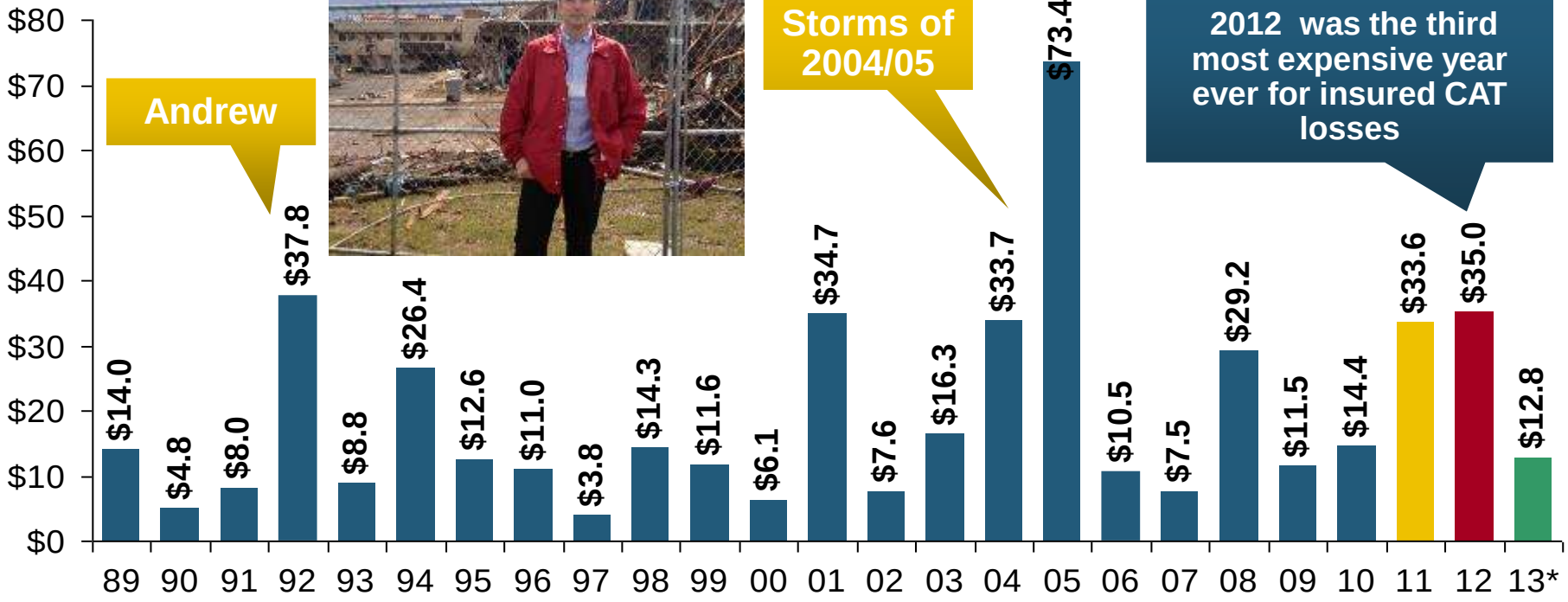
($ Billions, $ 2012)



2013 CATs Were Well Below Recent Years. 2012 Was the 3rd Highest Year on Record for Insured Losses in U.S. History on an Inflation-Adj. Basis. 2011 Losses Were the 6th Highest.

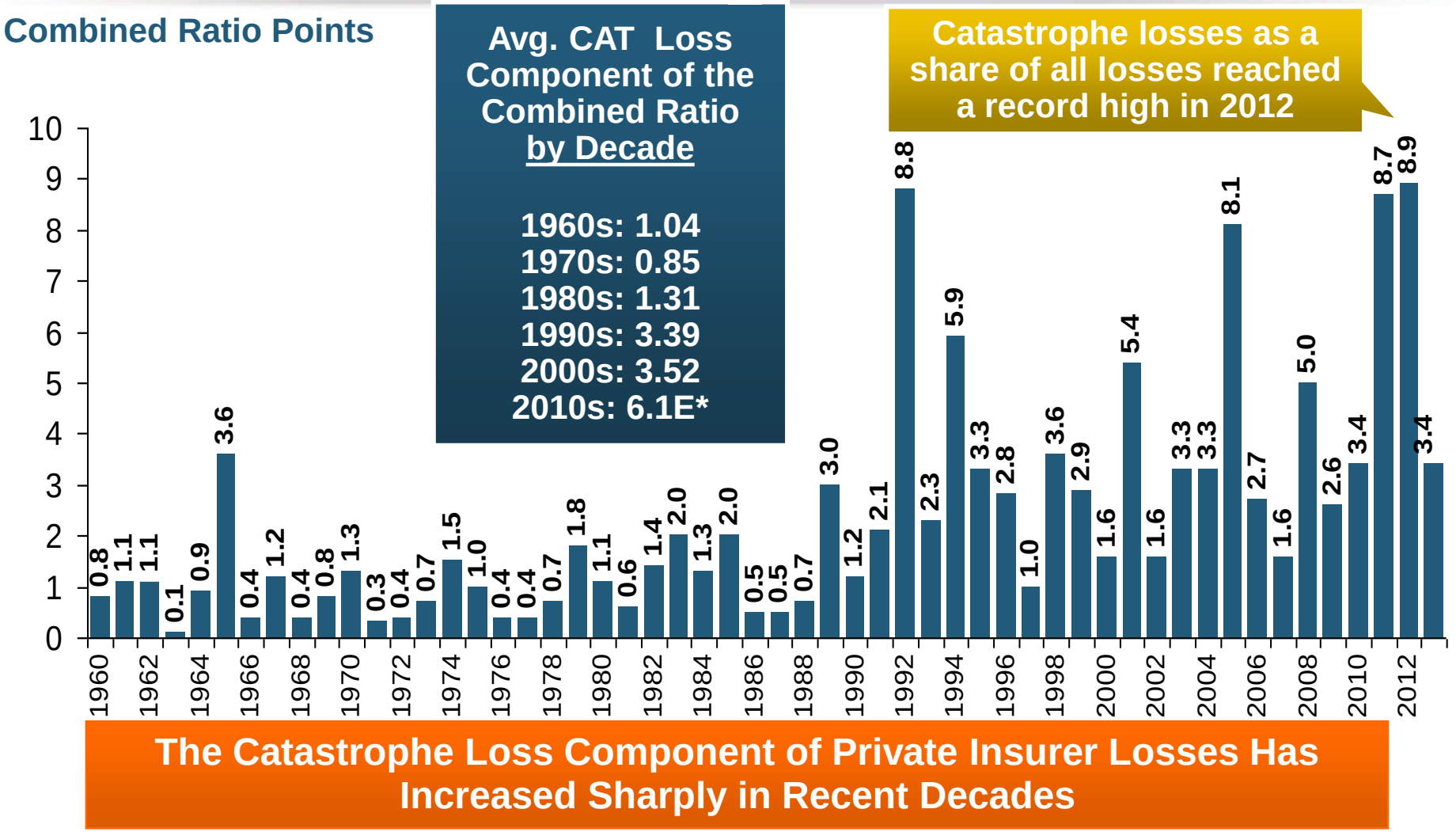
Record tornado losses caused 2011 CAT losses to surge

*Through 12/31/13.

Note: 2001 figure includes $20.3B for 9/11 losses reported through 12/31/01 ($25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = $12.2B ($15.6B in 2011 dollars.)

Sources: Property Claims Service/ISO; Insurance Information Institute.

Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2013*



*2010s represent 2010-2013.

Notes: Private carrier losses only. Excludes loss adjustment expenses and reinsurance reinstatement premiums. Figures are adjusted for losses ultimately paid by foreign insurers and reinsurers.

Source: ISO (1960-2011); A.M. Best (2012E) Insurance Information Institute.

Top 8 States for Insured Catastrophe Losses, 2013

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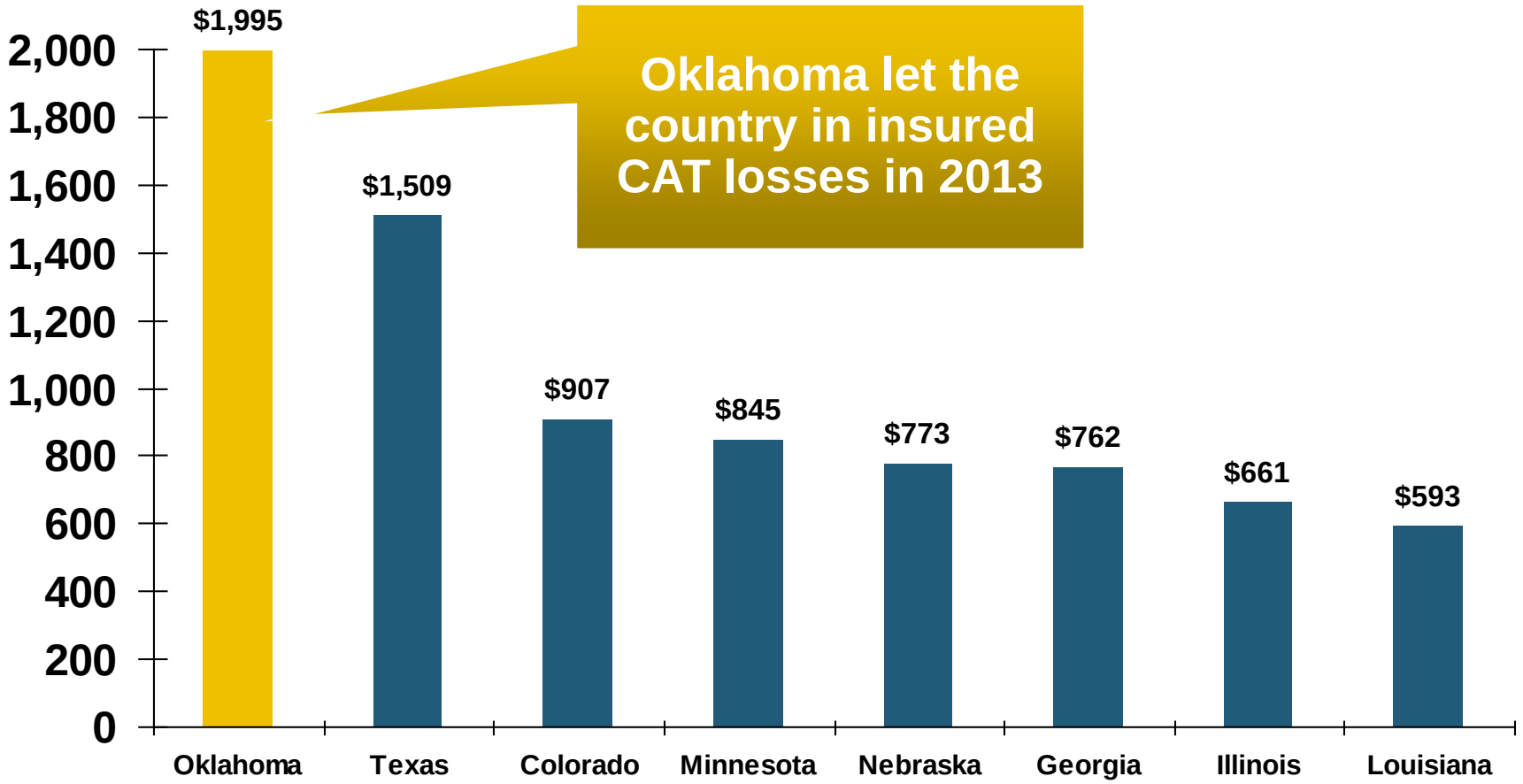
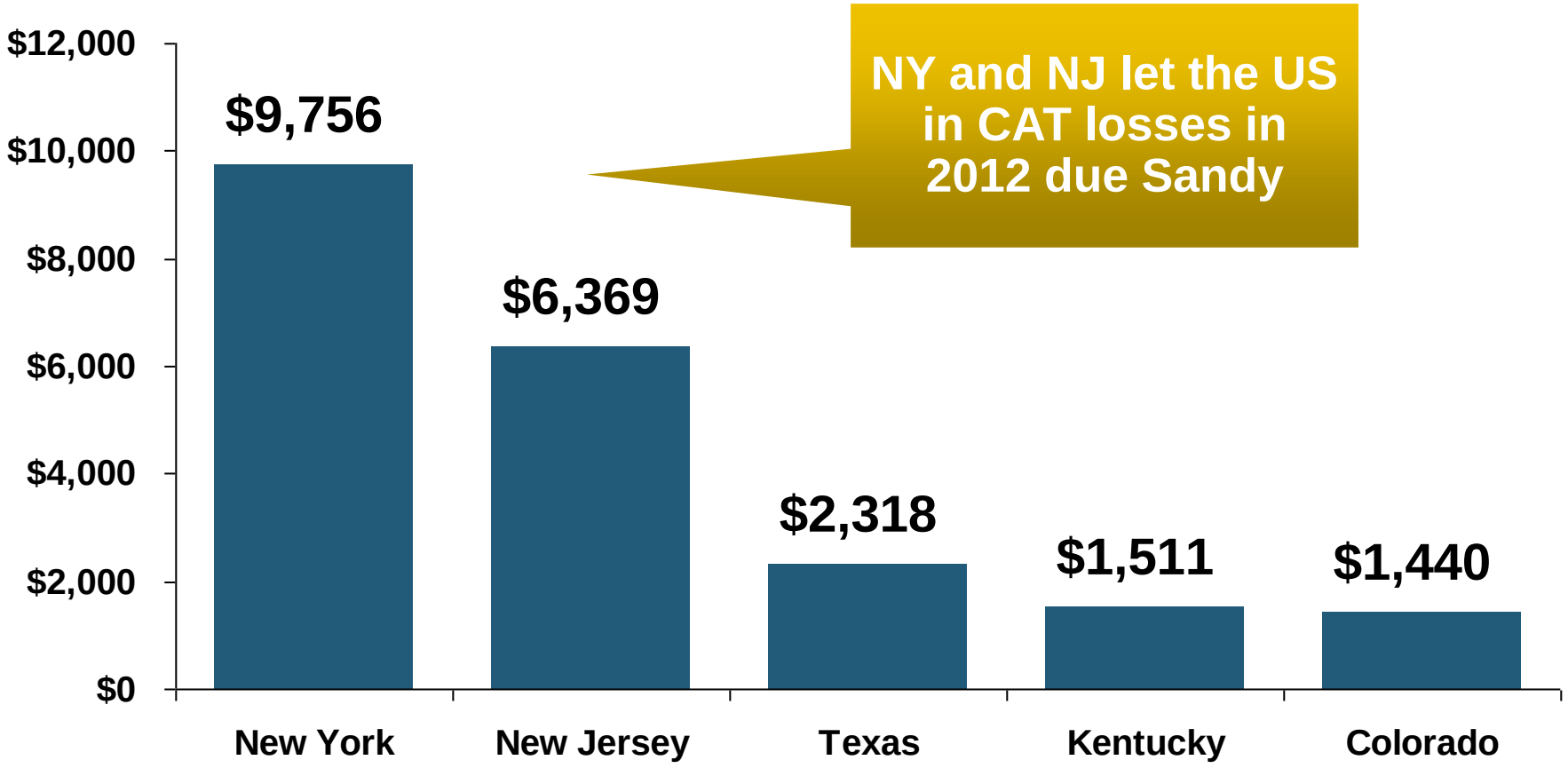
$ Millions



Source: The Property Claim Services (PCS) unit of ISO, a Verisk Analytics company.

Top 5 States by Insured Catastrophe Losses in 2012*

(2012, $ Billions)



*Includes catastrophe losses of at least $25 million.
Sources: PCS unit of ISO; Insurance Information Institute.

Top States by Inflation-Adjusted Insured Catastrophe Losses, 1983–2012

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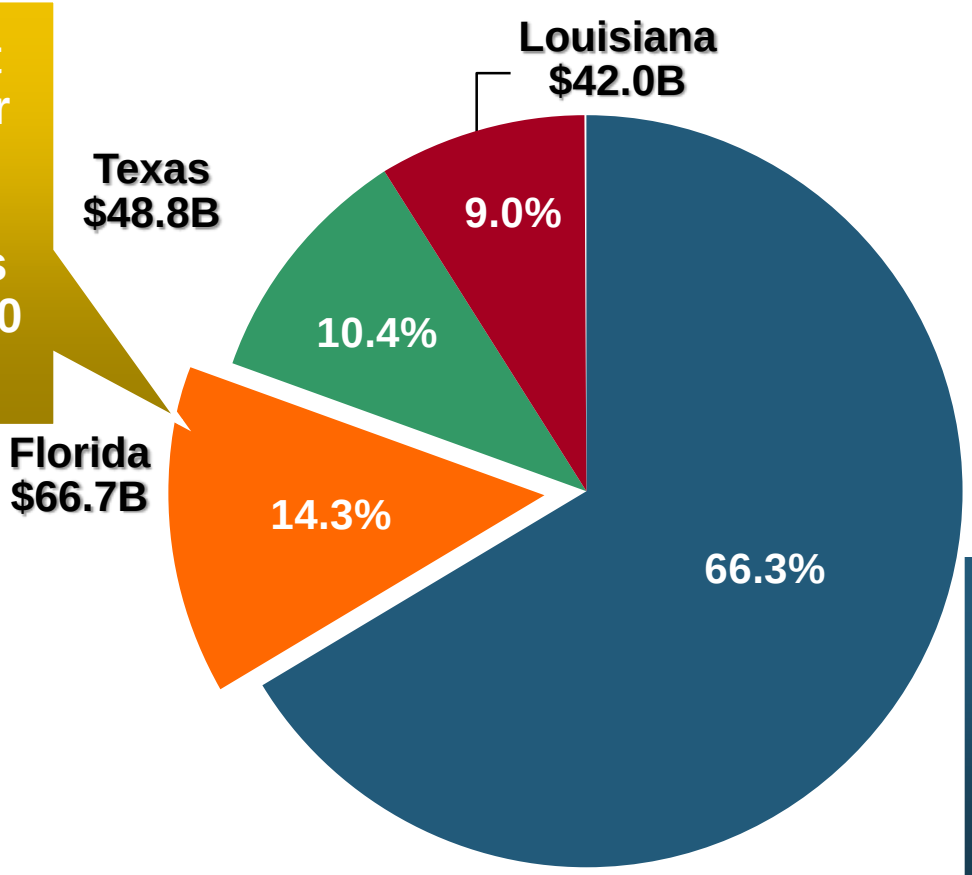
Over the Past 30 Years Florida Has Accounted for the Largest Share of Catastrophe Losses in the U.S., Followed by Texas and Louisiana

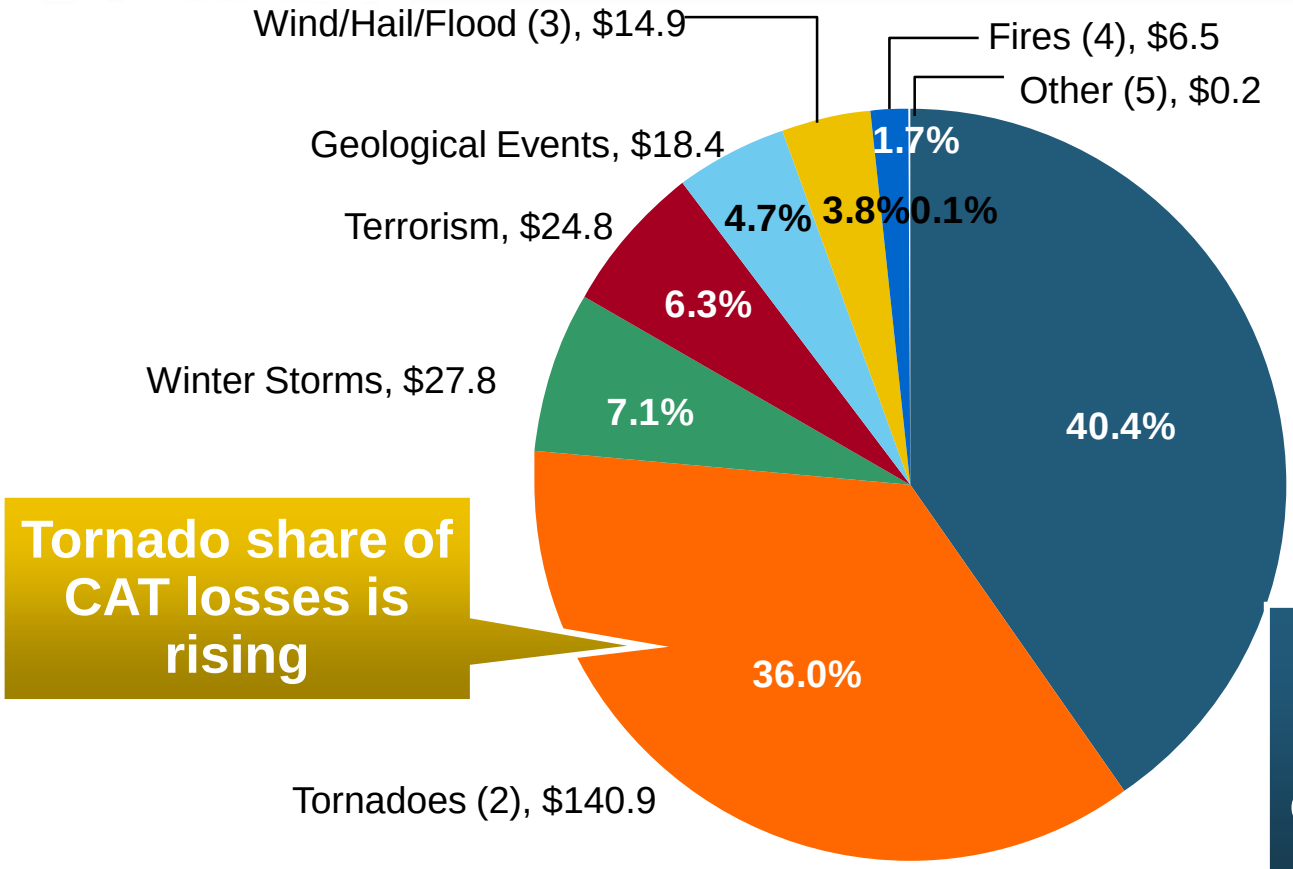
FL is the most costly state for CATs, with nearly $67B in insured losses over the past 30 years



Total: $467.5 Billion, an average of $16.6B per year or $1.3B per month

Source: PCS unit of ISO, Verisk Company.; Insurance Information Institute.

Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1993–2012[1]



Insured cat losses from 1993-2012 totaled $391.7B, an average of $19.6B per year or $1.6B per month

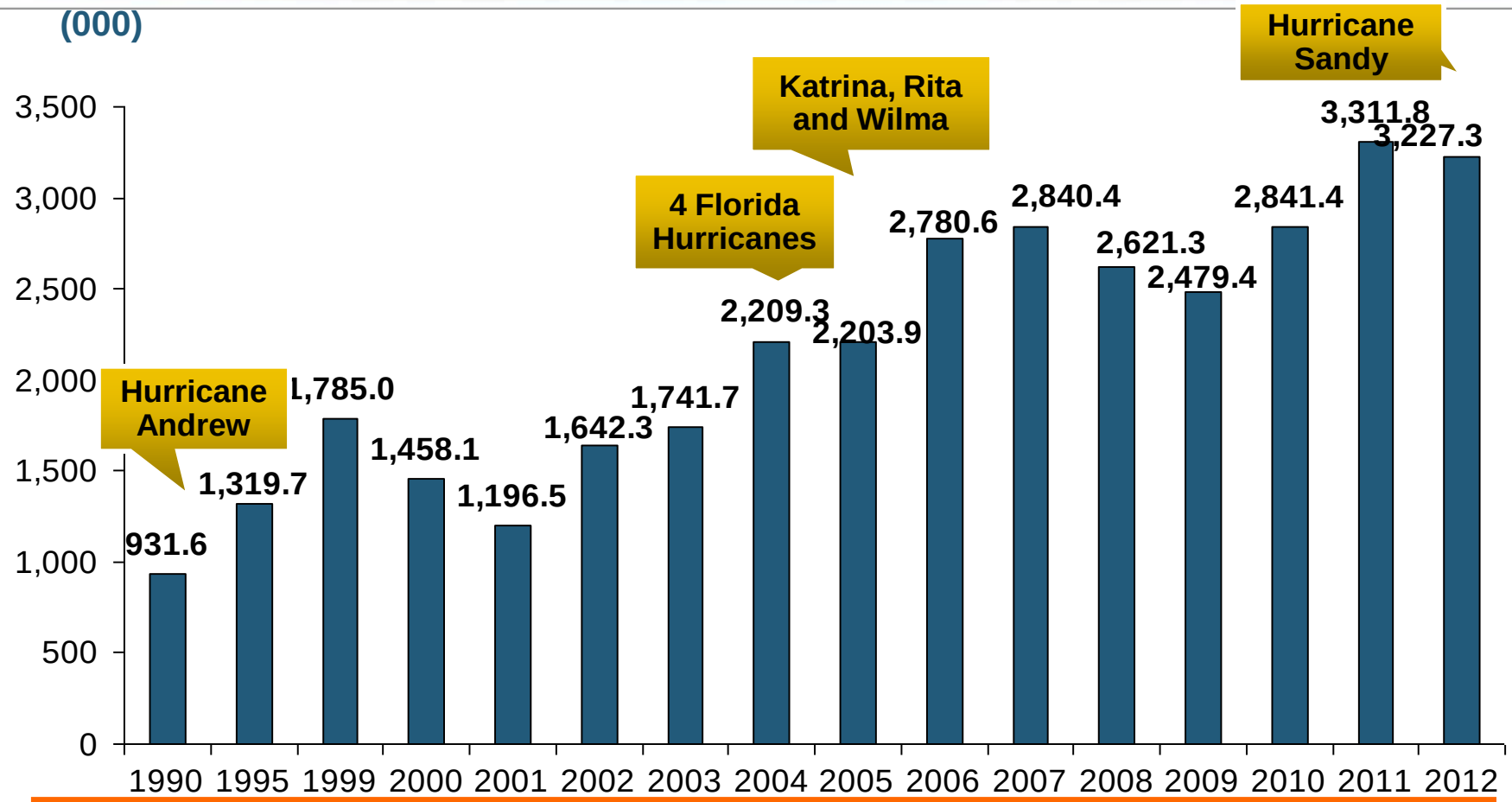
Tornado share of CAT losses is rising

Wind losses are by far cause the most catastrophe losses, even if hurricanes/TS are excluded.

1. Catastrophes are defined as events causing direct insured losses to property of $25 million or more in 2012 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.

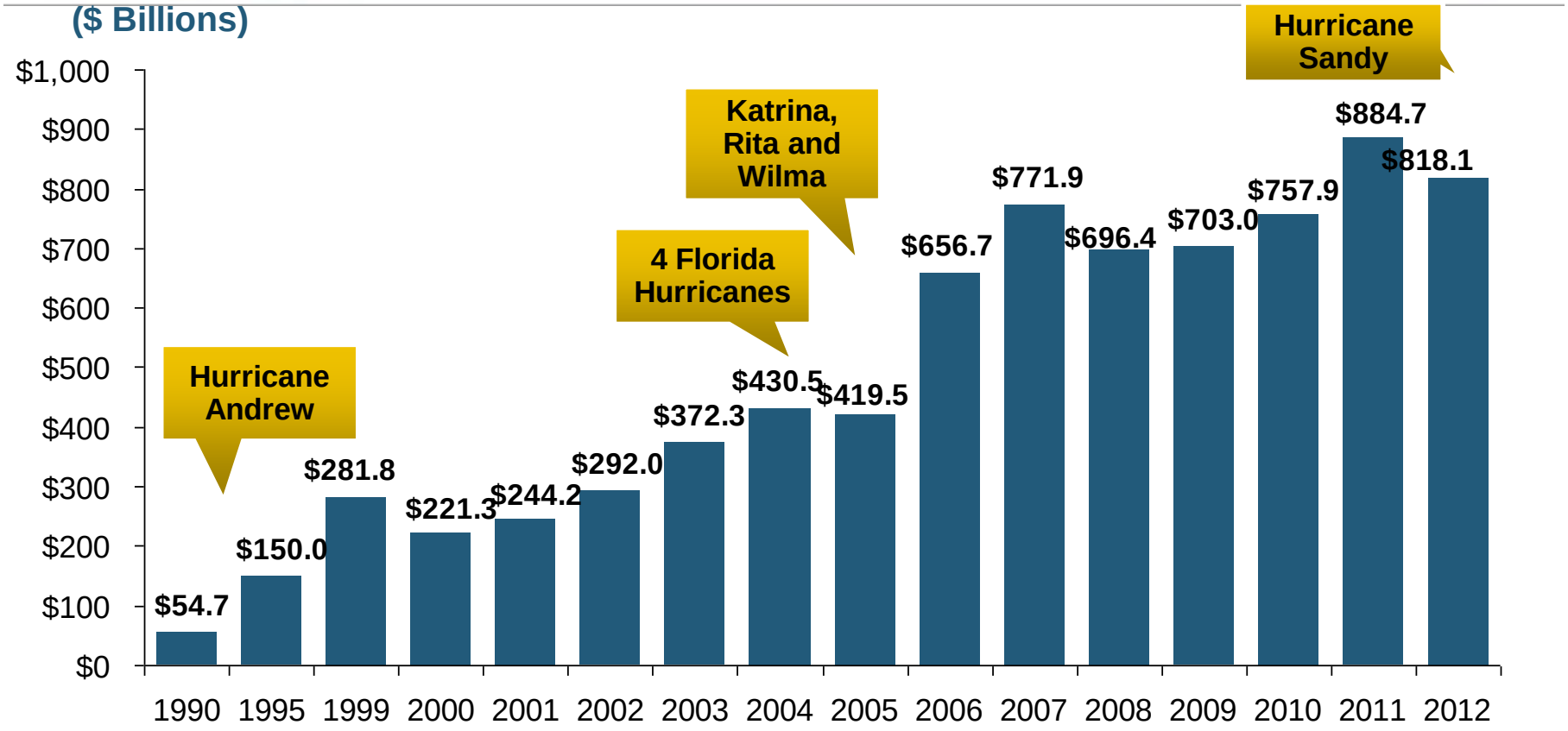
U.S. Residual Market: Total Policies In-Force (1990-2012) (000)



In the 23-year period between 1990 and 2012, the total number of policies in-force in the residual market (FAIR & Beach/Windstorm) Plans has more than tripled.

Source: PIPSO; Insurance Information Institute

U.S. Residual Market Exposure to Loss (1990-2012) ($ Billions)

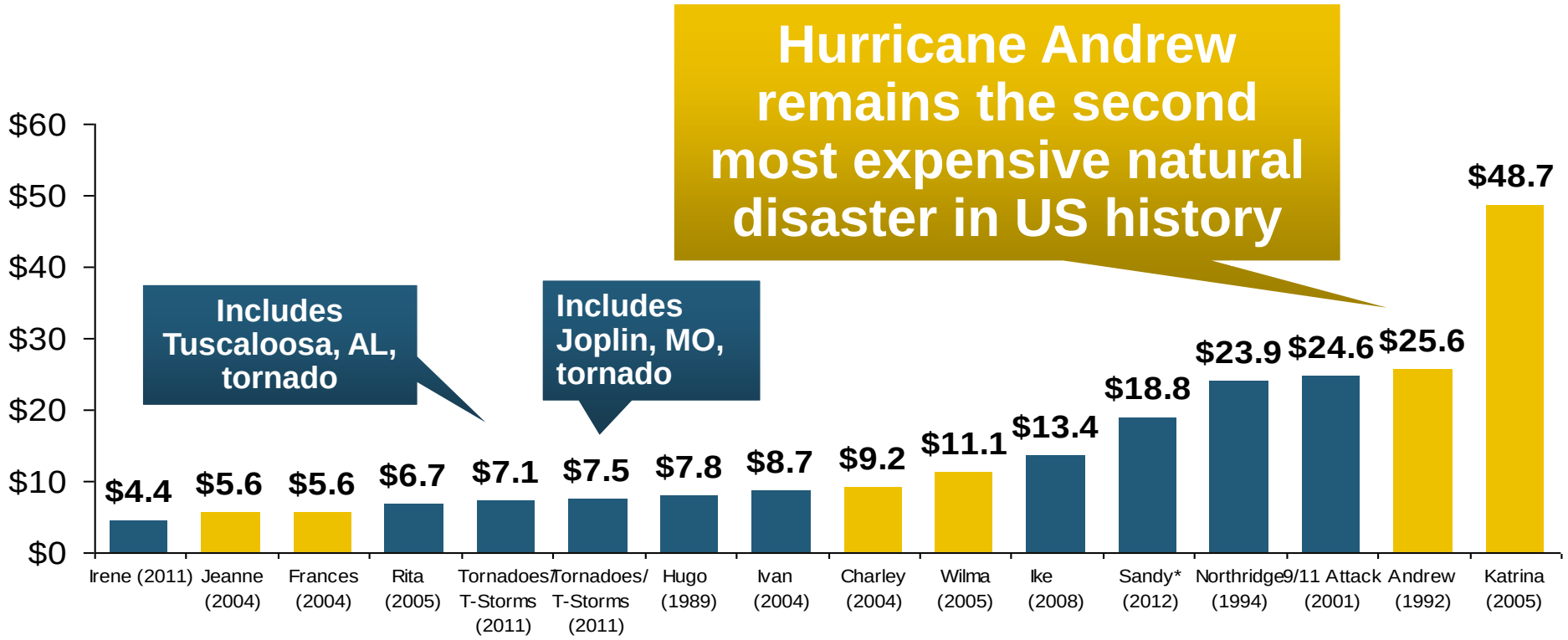


In the 23-year period between 1990 and 2012, total exposure to loss in the residual market (FAIR & Beach/Windstorm) Plans has surged from $54.7 billion in 1990 to $818.1 billion in 2012.

Source: PIPSO; Insurance Information Institute (I.I.I.).

Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2012 Dollars, $ Billions)



12 of the 16 Most Expensive Events in US History Have Occurred Over the Past Decade

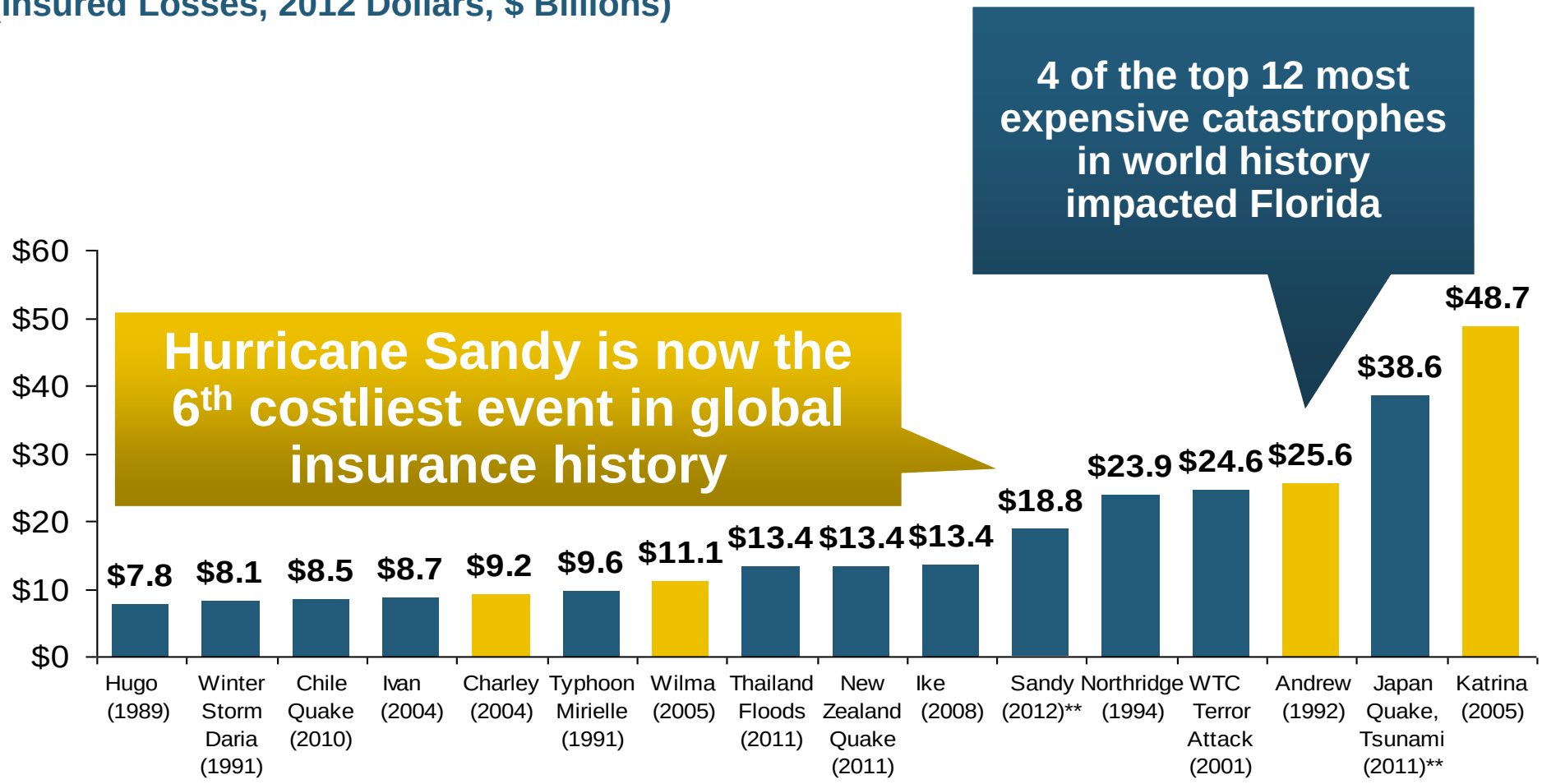
*PCS estimate as of 4/12/13.

Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

Top 16 Most Costly World Insurance Losses, 1970-2013*

INSURANCE INFORMATION INSTITUTE

(Insured Losses, 2012 Dollars, $ Billions)

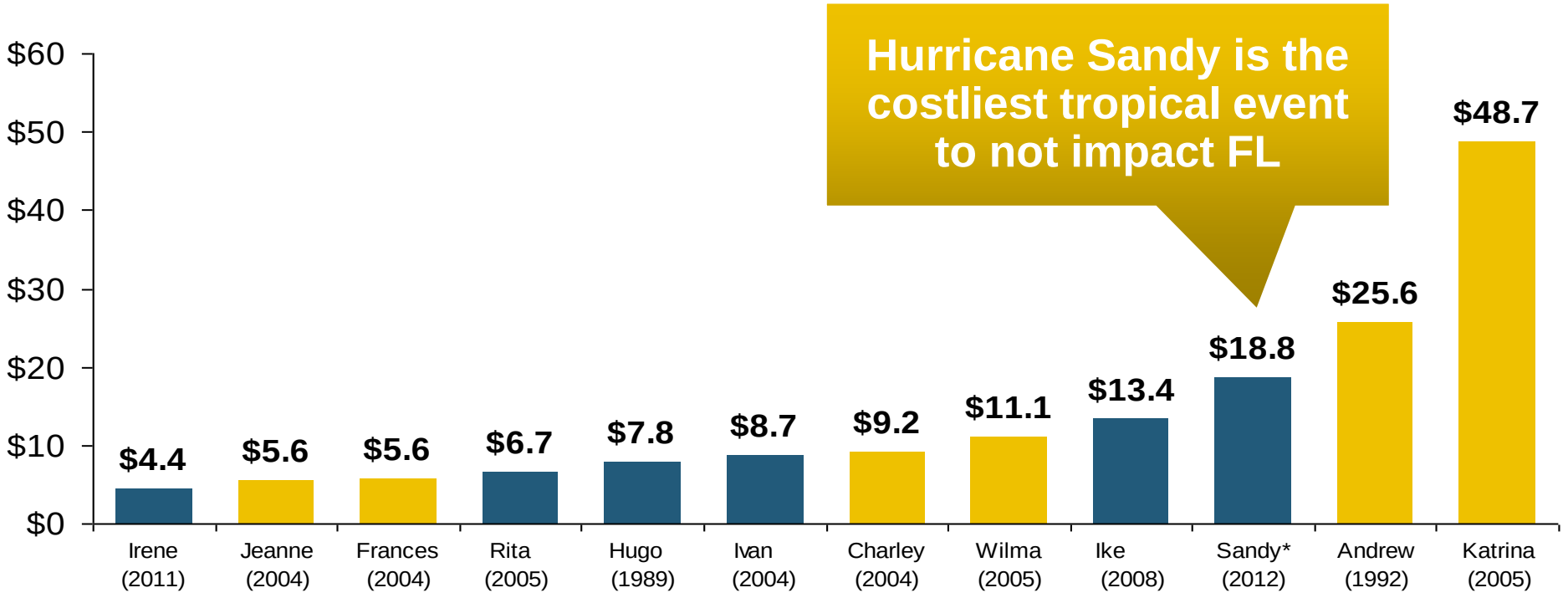


*Figures do not include federally insured flood losses.
**Estimate based on PCS value of $18.75B as of 4/12/13.
Sources: Munich Re; Swiss Re; Insurance Information Institute research.

Top 12 Most Costly Hurricanes in U.S. History

(Insured Losses, 2012 Dollars, $ Billions)

6 of the 12 most costly hurricanes in insurance history impacted Florida



*PCS estimate as of 4/12/13.

Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

Insured US Tropical Cyclone Losses, 1980 - 2013

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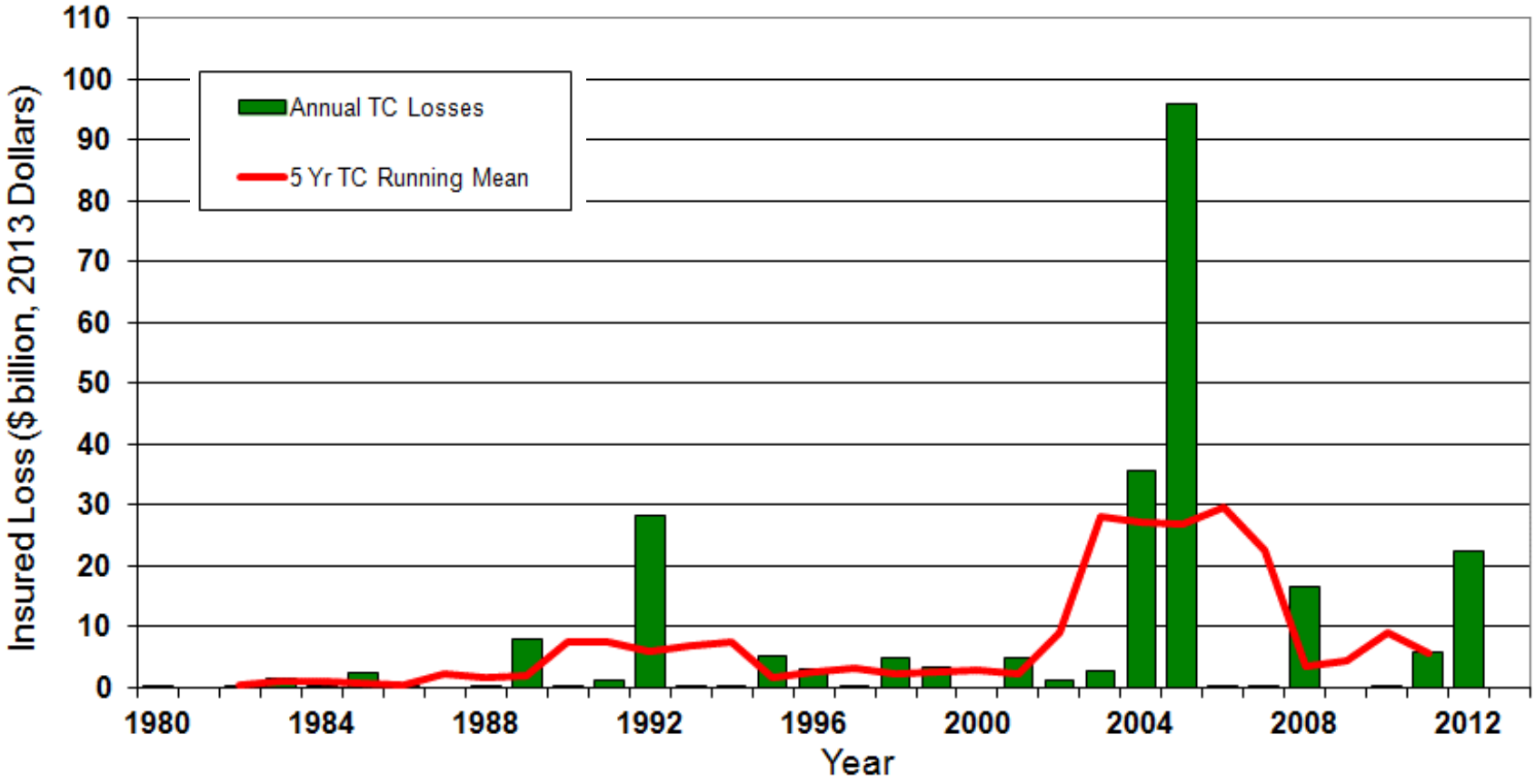
The current 5-year average (2008 - 2013) insured tropical cyclone loss is $5.6 billion per year.

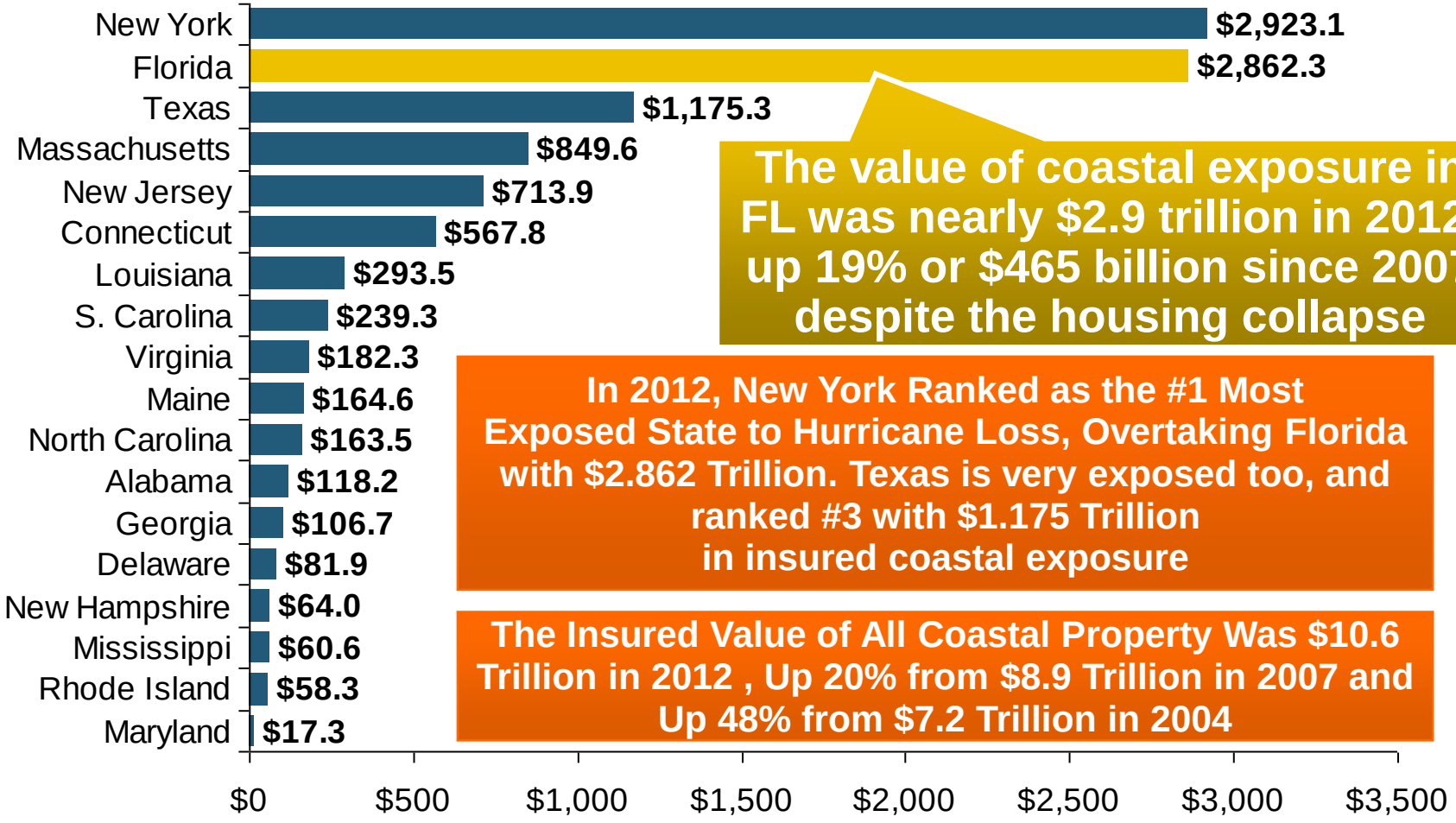


Sources: Property Claims Service, Munich Re NatCat*SERVICE,* NFIP

Total Value of Insured Coastal Exposure in 2012

INSURANCE INFORMATION INSTITUTE

(2012, $ Billions)



The value of coastal exposure in FL was nearly $2.9 trillion in 2012, up 19% or $465 billion since 2007 despite the housing collapse

In 2012, New York Ranked as the #1 Most Exposed State to Hurricane Loss, Overtaking Florida with $2.862 Trillion. Texas is very exposed too, and ranked #3 with $1.175 Trillion in insured coastal exposure

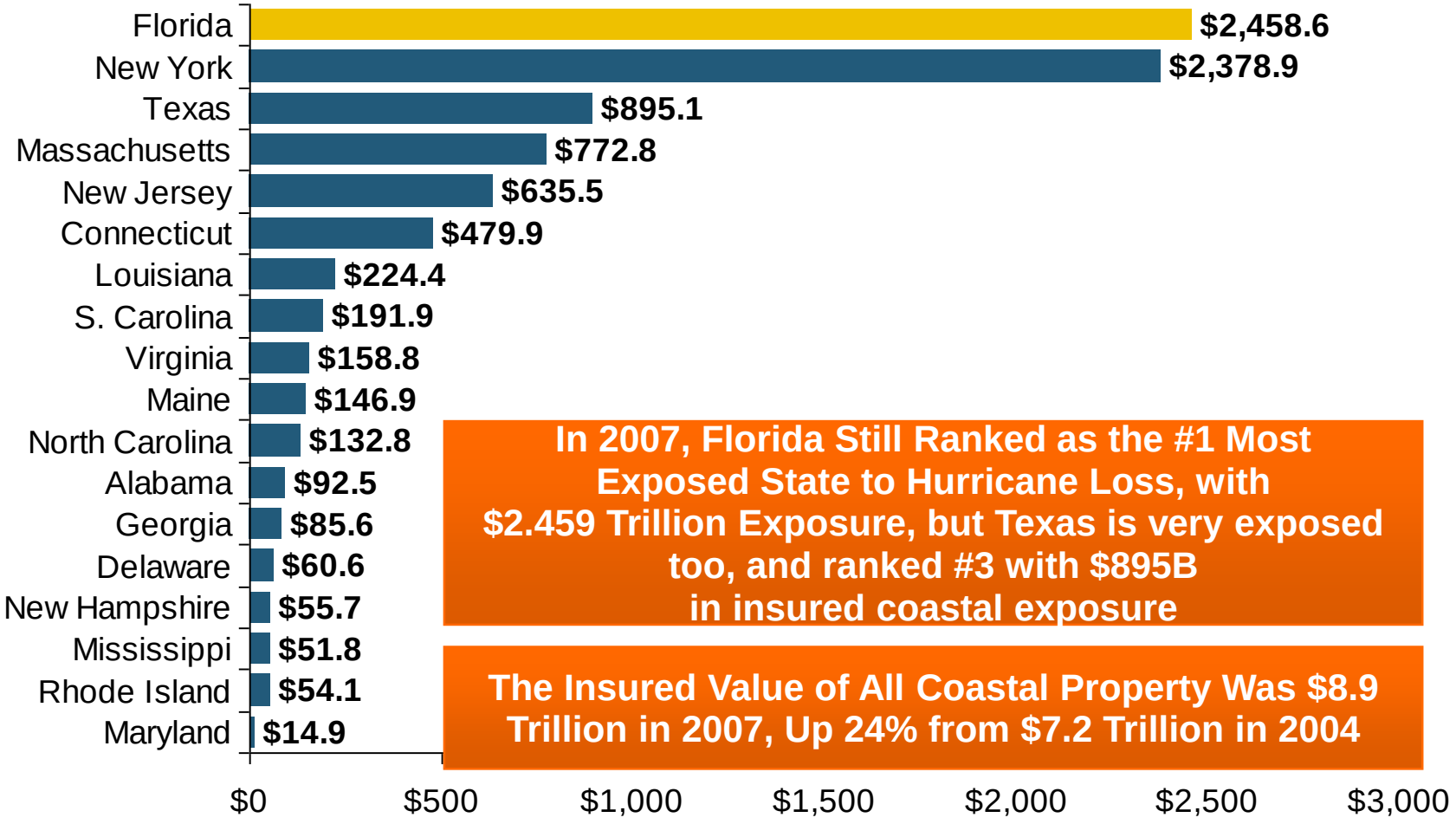
The Insured Value of All Coastal Property Was $10.6 Trillion in 2012 , Up 20% from $8.9 Trillion in 2007 and Up 48% from $7.2 Trillion in 2004

Source: AIR Worldwide

Total Value of Insured Coastal Exposure in 2007

INSURANCE INFORMATION INSTITUTE

(2007, $ Billions)



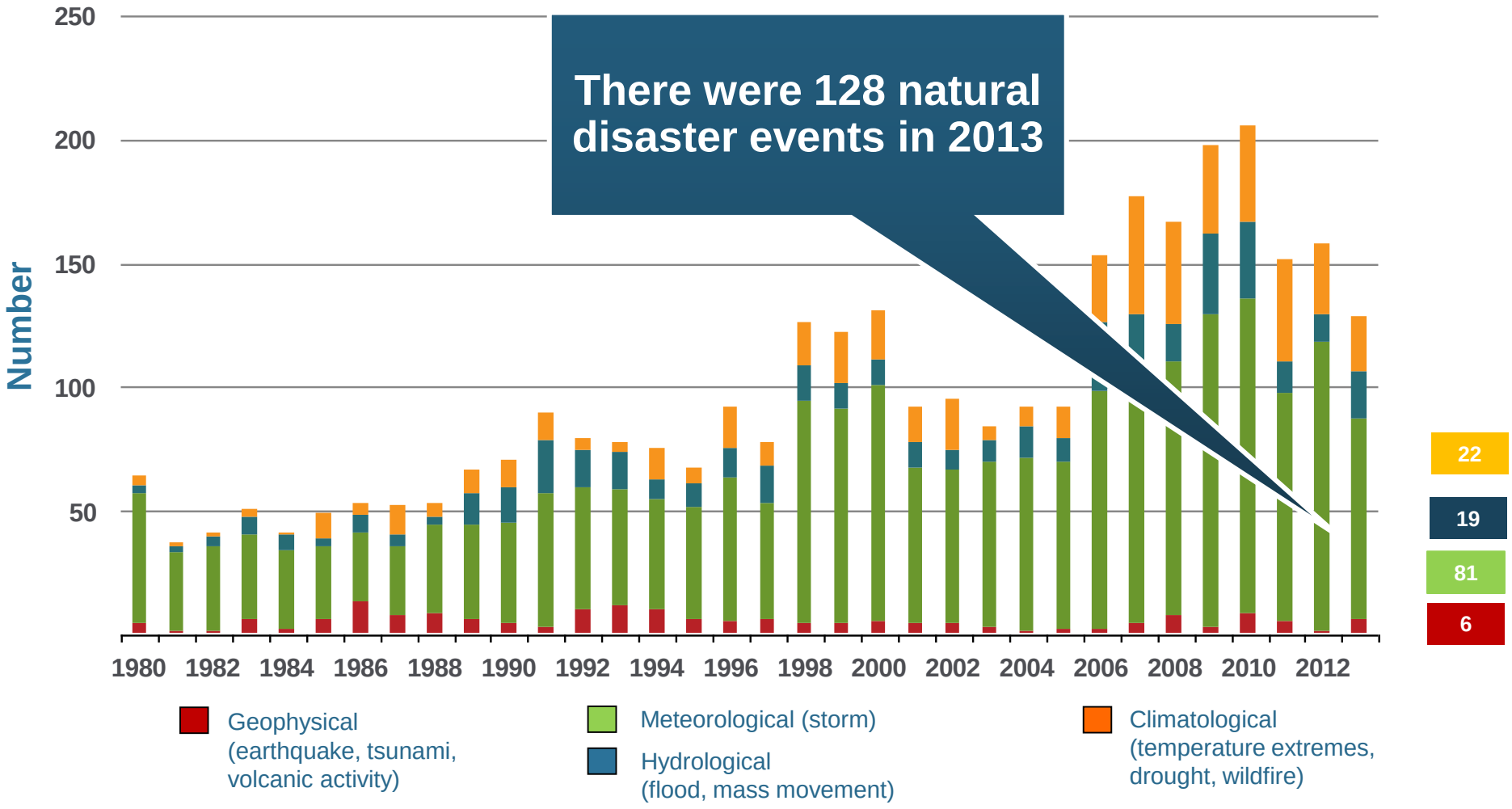
In 2007, Florida Still Ranked as the #1 Most Exposed State to Hurricane Loss, with $2.459 Trillion Exposure, but Texas is very exposed too, and ranked #3 with $895B in insured coastal exposure

The Insured Value of All Coastal Property Was $8.9 Trillion in 2007, Up 24% from $7.2 Trillion in 2004

Source: AIR Worldwide

Natural Disasters in the United States, 1980 – 2013

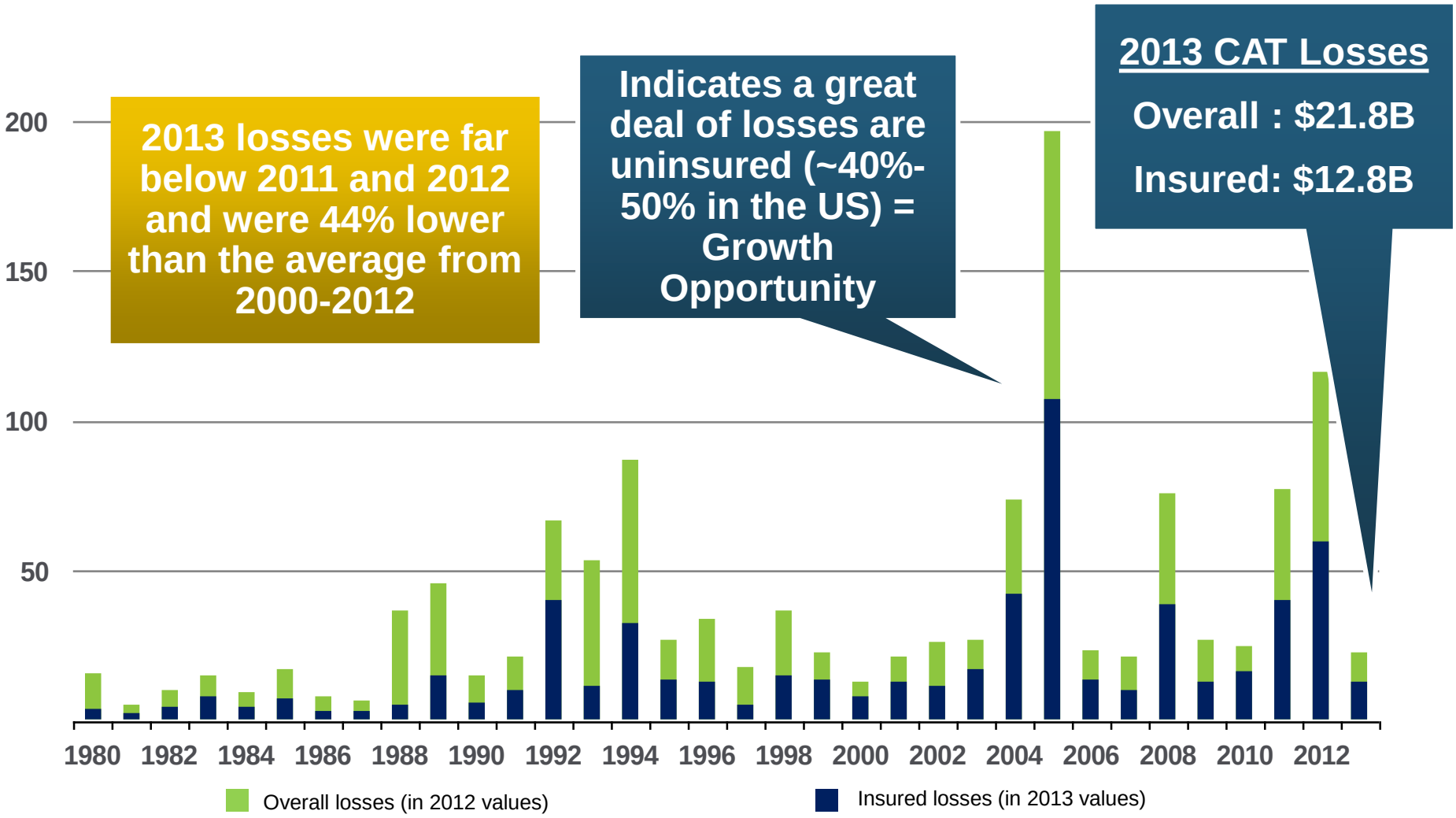
Number of Events (Annual Totals 1980 – 2013)



Source: MR NatCat*SERVICE*

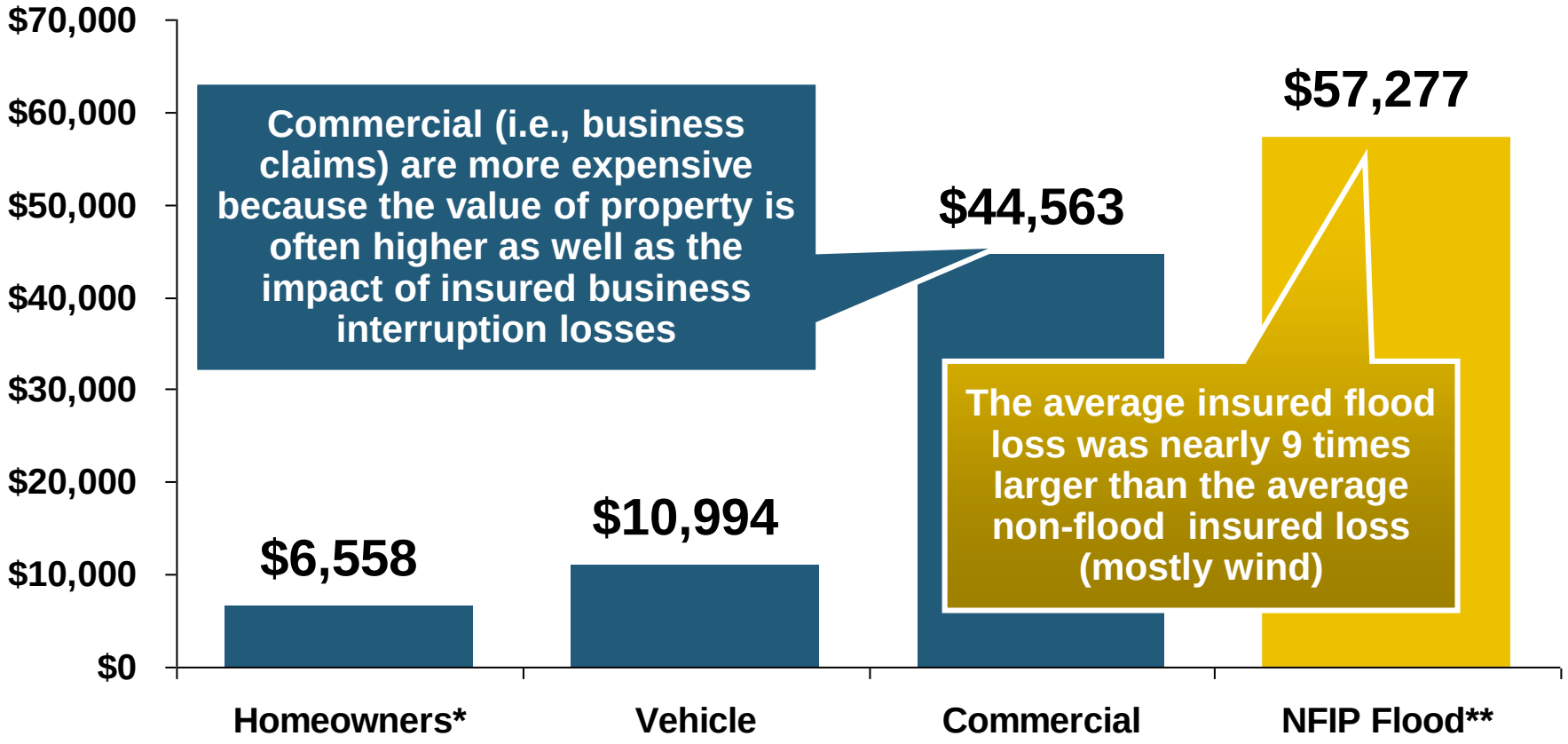
Losses Due to Natural Disasters in the US, 1980–2013

(2013 Dollars, $ Billions) (Overall and Insured Losses)



Source: MR NatCat*SERVICE*

Hurricane Sandy: Average Claim Payment by Type of Claim



Post-Sandy, the I.I.I. worked very hard to make help media, consumers and regulators understand the distinction between a flood claim and a standard homeowners claim. *NFIP is $24B in debt.*

*Includes rental and condo policies (excludes NFIP flood). **As of Oct. 31, 2013.

Sources: Catastrophe loss data is for Catastrophe Serial No. 90 (Oct. 28 – 31, 2012) from PCS as of March 2013; Insurance Information Institute.

Natural Disaster Losses in the United States, by Type, 2013

As of December 31, 2013	Number of Events	Fatalities	Estimated Overall Losses (US $m)	Estimated Insured Losses (US $m)
Severe Thunderstorm	***69***	***110***	***16,341***	***10,274***
Winter Storm	11	43	2,935	1,895
Flood	19	23	1,929	240
Earthquake & Geophysical	6	1	Minor	Minor
Tropical Cyclone	1	1	Minor	Minor
Wildfire, Heat, & Drought	22	29	620	385
Totals	**128**	**207**	**21,825**	**12,794**

Source: Munich Re NatCat*SERVICE*

Significant Natural Catastrophes, 2013

(Events with $1 billion economic loss and/or 50 fatalities)

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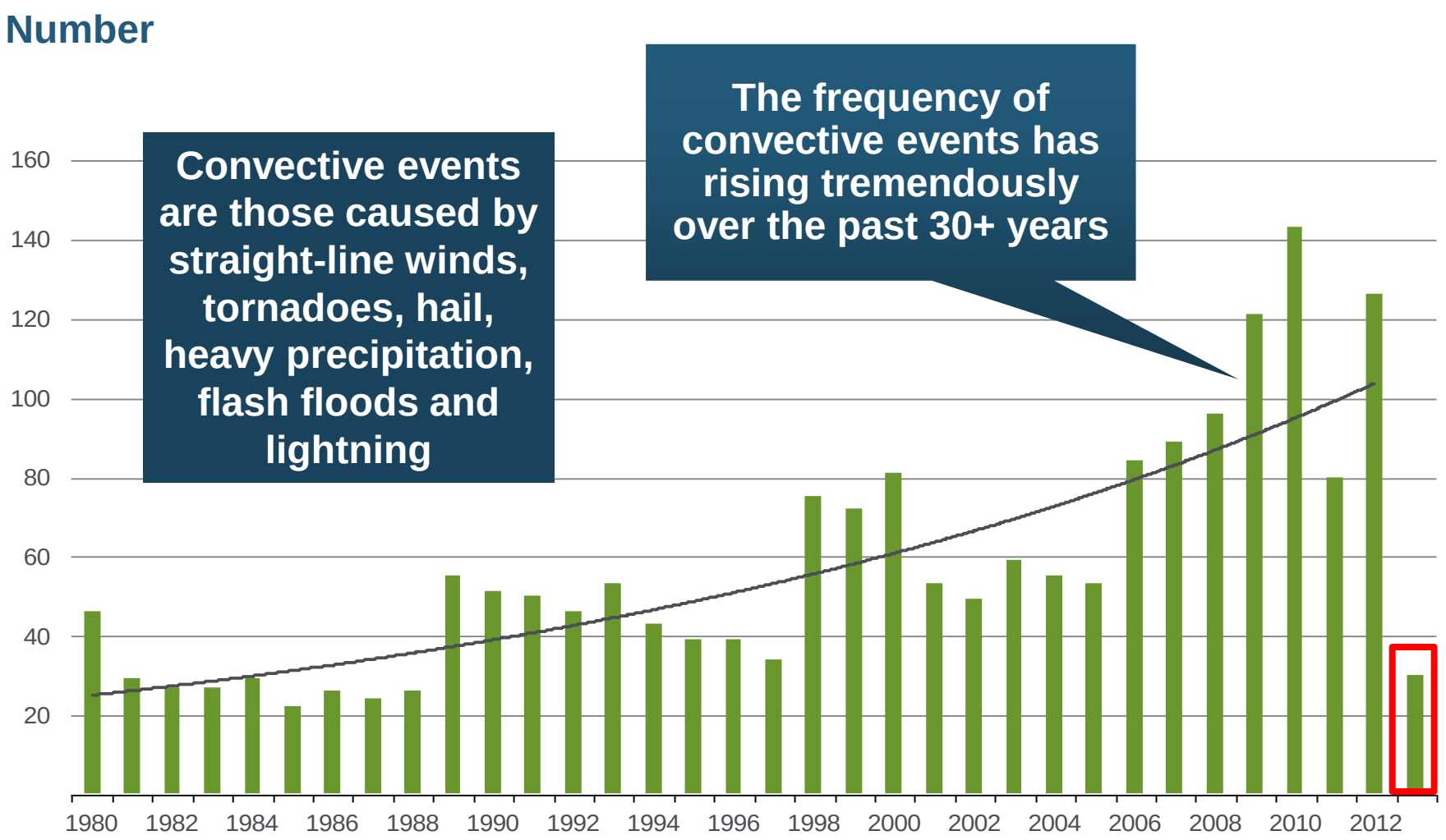
Date	Event	Estimated Economic Losses (US $m)	Estimated Insured Losses (US $m)
February 24 – 25	Winter Storm	1,300	690
March 18 – 19	Thunderstorms	2,200	1,600
April 7 – 11	Winter Storm	1,600	1,200
April 16 – 18	Thunderstorms	1,100	560
May 18 – 20	Thunderstorms	3,100	1,800
May 28 – 31	Thunderstorms	2,800	1,400
August 6 – 7	Thunderstorms	1,300	740
September 9 – 16	Flooding	1,500	160
November 17 - 18	Thunderstorms	1,300	931

Source: Munich Re NatCat*SERVICE*

Convective Loss Events in the U.S.

Number of events 1980 – 2012 and First Half 2013



Source: Geo Risks Research, NatCatSERVICE – As at July 2013

U.S. Thunderstorm Insured Loss Trends, 1980 – 2013

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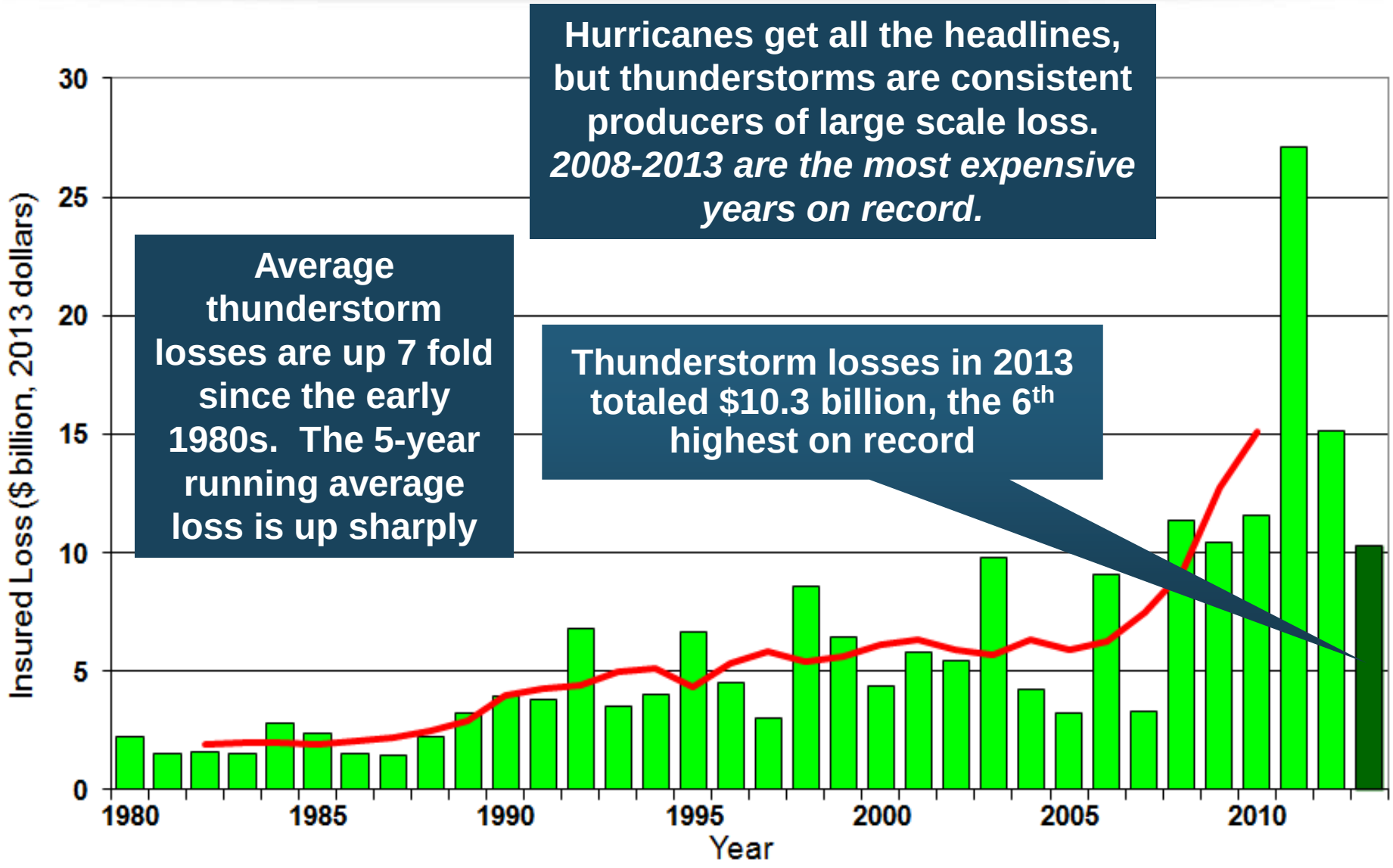
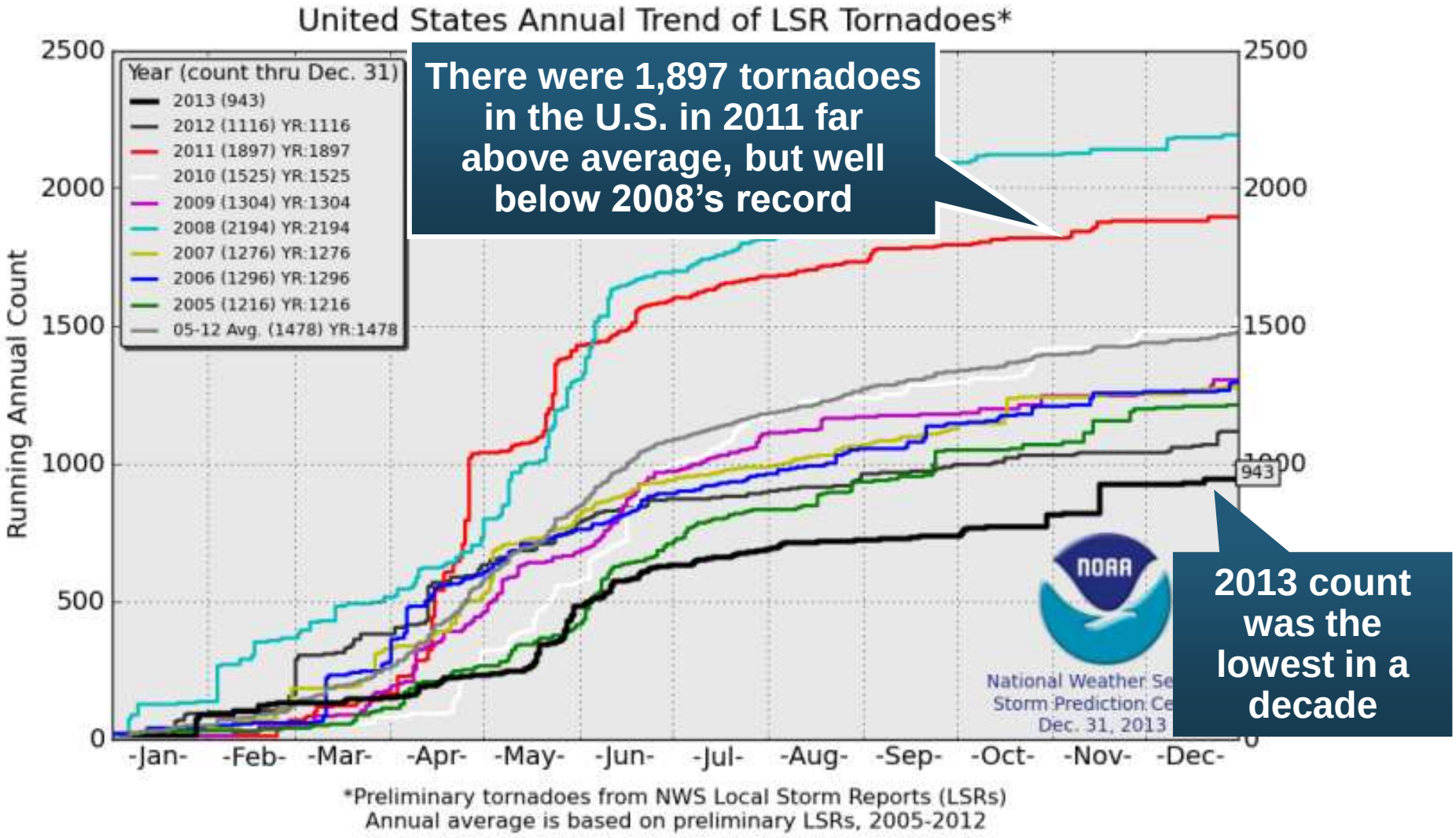


Source: Property Claims Service, MR NatCat*SERVICE*

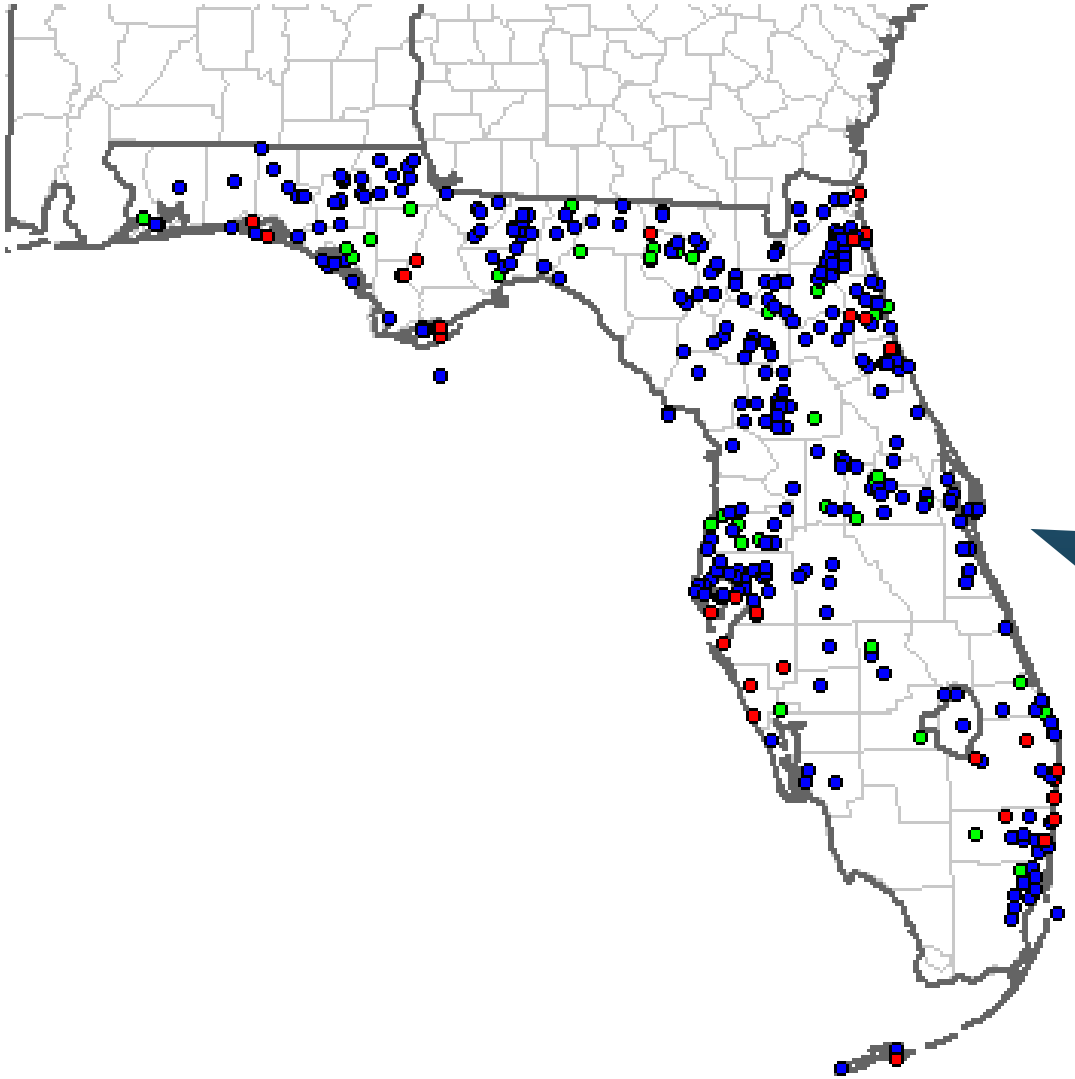
U.S. Tornado Count, 2005-2013*



*Through Dec. 31, 2013.

Source: http://www.spc.noaa.gov/wcm/.

Severe Weather Reports in Florida: 2013



There were 400 severe weather reports in 2013

37 Tornadoes

47 Large Hail Reports

316 High Wind Events

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2013_annual_summary.html#

Sinkholes in FL Are Increasingly Common and Expensive

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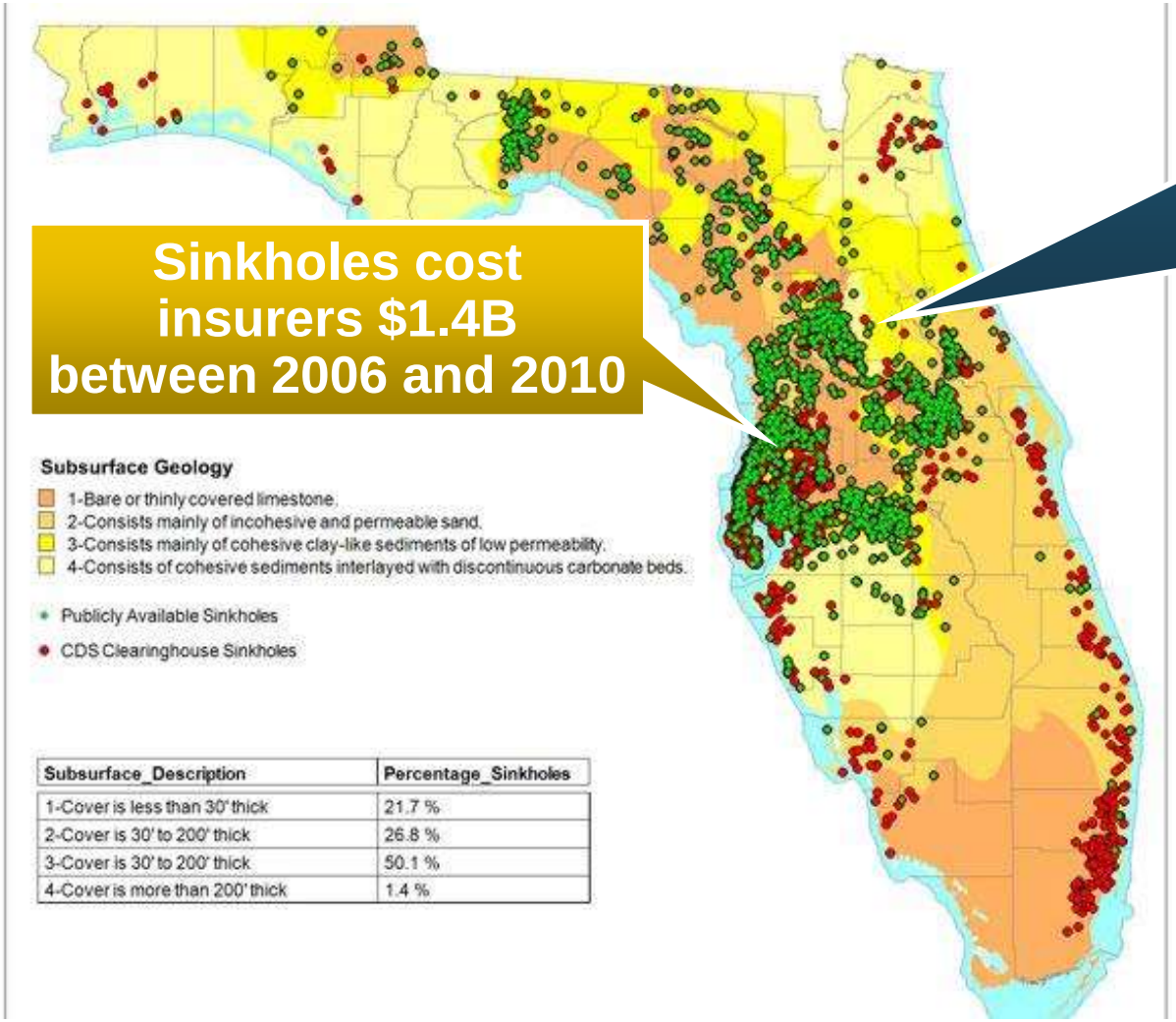

Subsurface_Description	Percentage_Sinkholes
1-Cover is less than 30' thick	21.7 %
2-Cover is 30' to 200' thick	26.8 %
3-Cover is 30' to 200' thick	50.1 %
4-Cover is more than 200' thick	1.4 %

Sinkholes cost insurers $1.4B between 2006 and 2010

Florida has a huge sinkhole problem. FL is one of only 2 states where sinkhole coverage must be included in the standard HO policy

Top 10 Sinkhole Counties

- Pasco
- Hernando
- Hillsborough
- Marion
- Pinellas
- Citrus
- Polk
- Orange
- Seminole
- Lake

Source: Insurance Journal , March 30, 2011, from CDS Business Mapping at http://www.insurancejournal.com/news/southeast/2011/03/30/192278.htm

Convective Loss Events in the U.S.

Overall and insured losses 1980 – 2012 and First Half 2013

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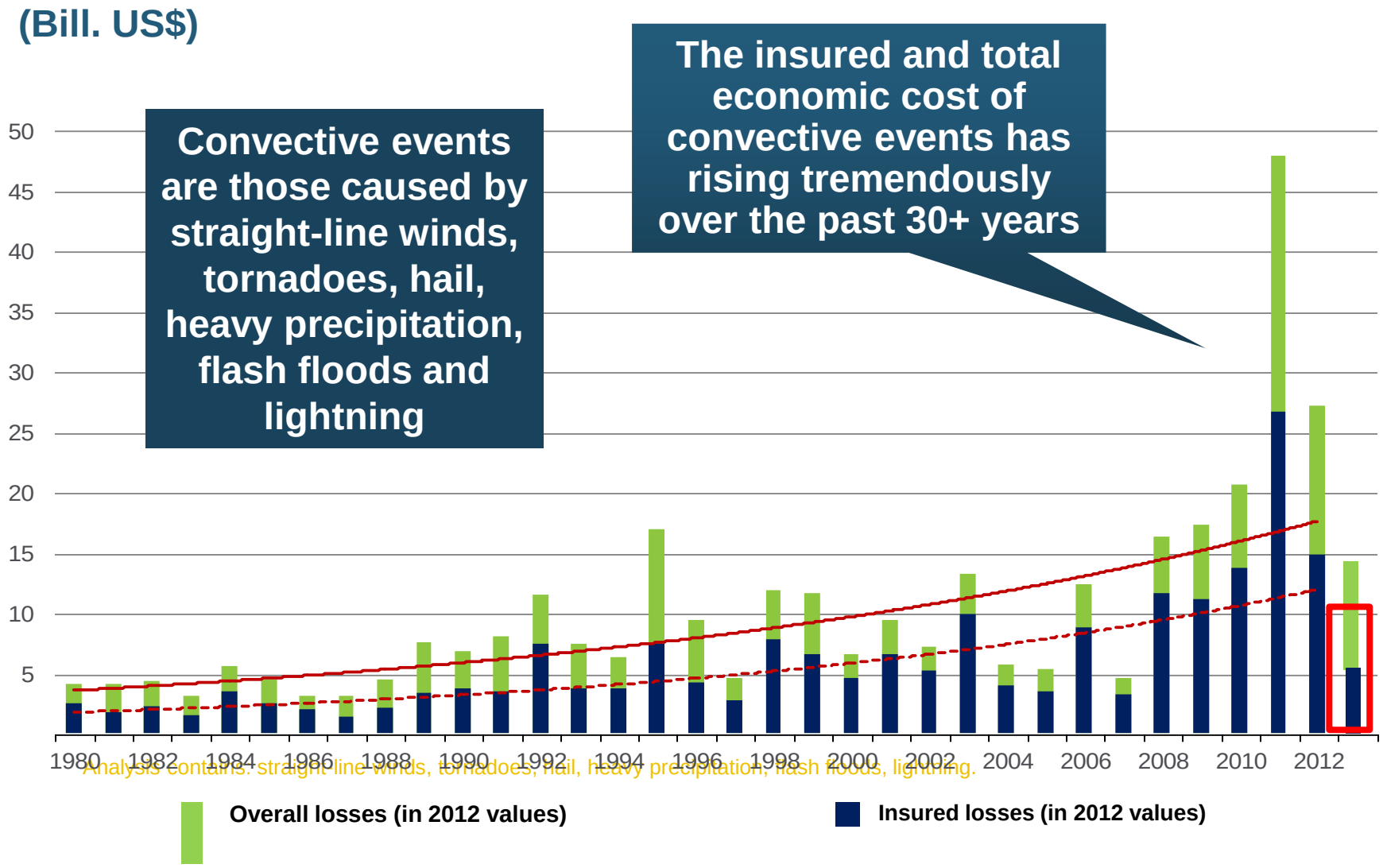

Source: Geo Risks Research, NatCatSERVICE – As at July 2013

New Research Suggests Increase in Convective Activity Is Costly for Insurers

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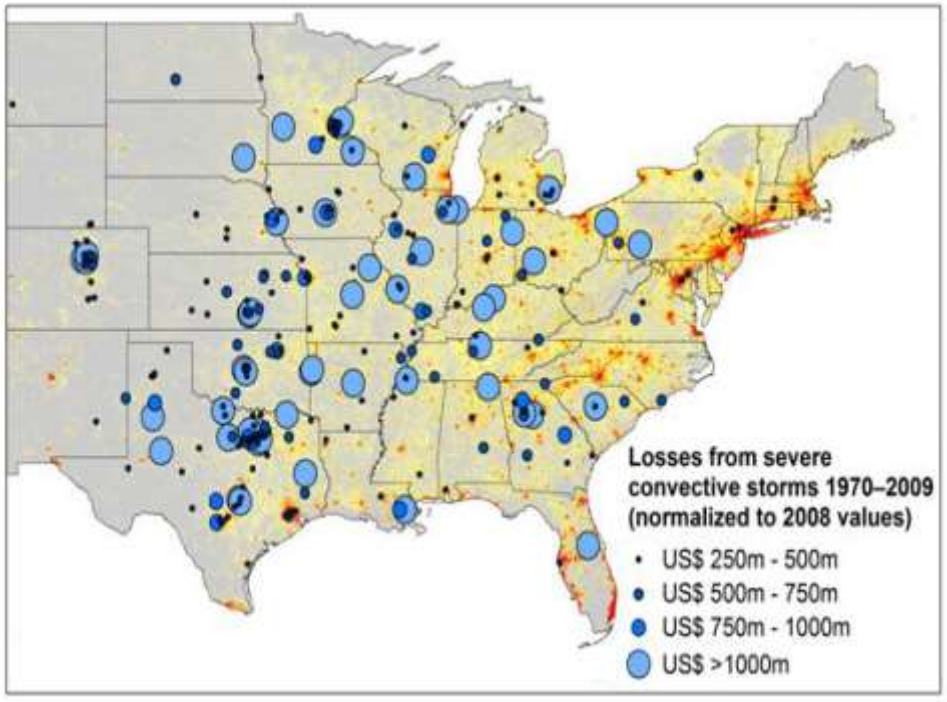
- **Study examines convective (hail, tornado, thundersquall and heavy rainfall) events in the US with losses exceeding US$ 250m in the period 1970–2009 (80% of all losses)**
- **Past losses are normalized (i.e., adjusted) to currently exposed values**
- **After normalization there are still increases of losses**
- **Increases are correlated with the increase in the meteorological potential for severe thunderstorms and its variability**

For the first time research shows that climatic changes have already influenced US thunderstorm losses



Source: Munich Re research paper, Marhc 18, 2013: *Rising Variability in Thunderstorm-Related U.S. Losses as a Reflection of Changes in Large-Scale Thunderstorm Forcing*.

Natural Loss Events: Full Year 2013

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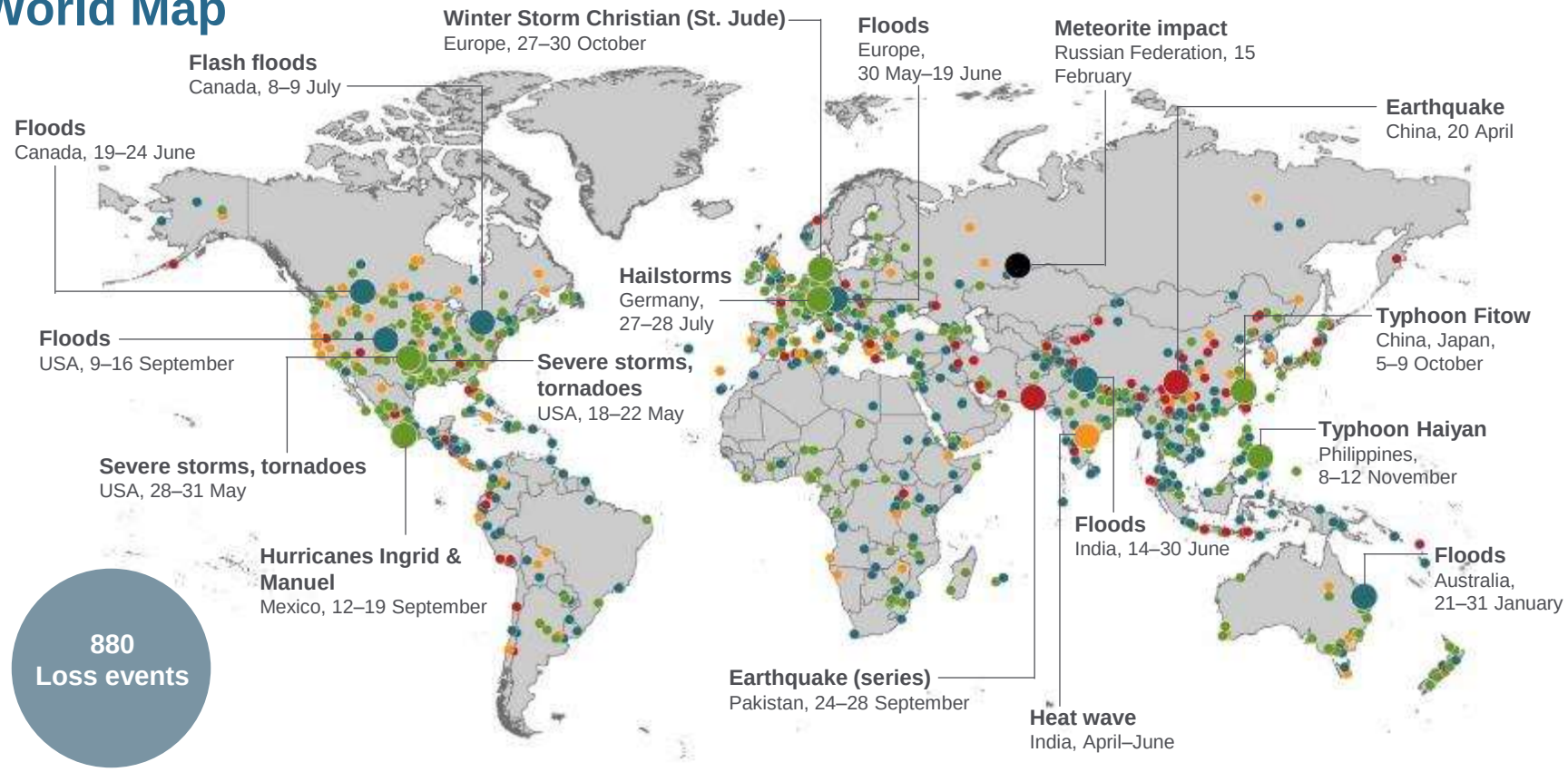
World Map



- Natural catastrophes
- Selection of significant Natural catastrophes
- **Geophysical events** (earthquake, tsunami, volcanic activity)
- **Meteorological events** (storm)
- **Hydrological events** (flood, mass movement)
- **Climatological events** (extreme temperature, drought, wildfire)
- **Extraterrestrial events** (Meteorite impact)

Source: Munich Re Geo Risks Research, NatCat*SERVICE* – as of January 2014.

Natural Disasters Worldwide, 1980 – 2013 (Number of Events)

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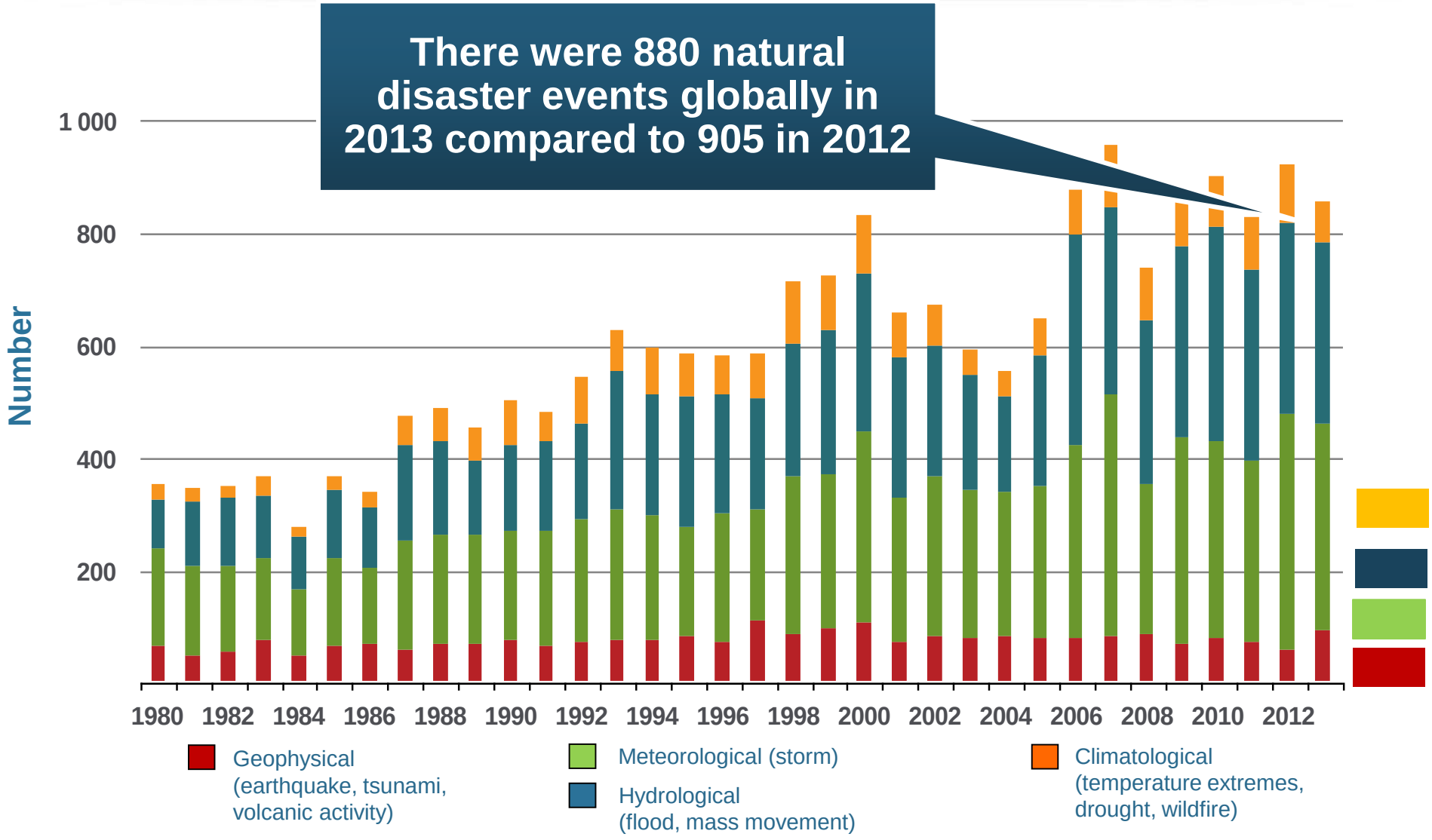

Source: MR NatCat*SERVICE*

Losses Due to Natural Disasters Worldwide, 1980–2013 (Overall & Insured Losses)

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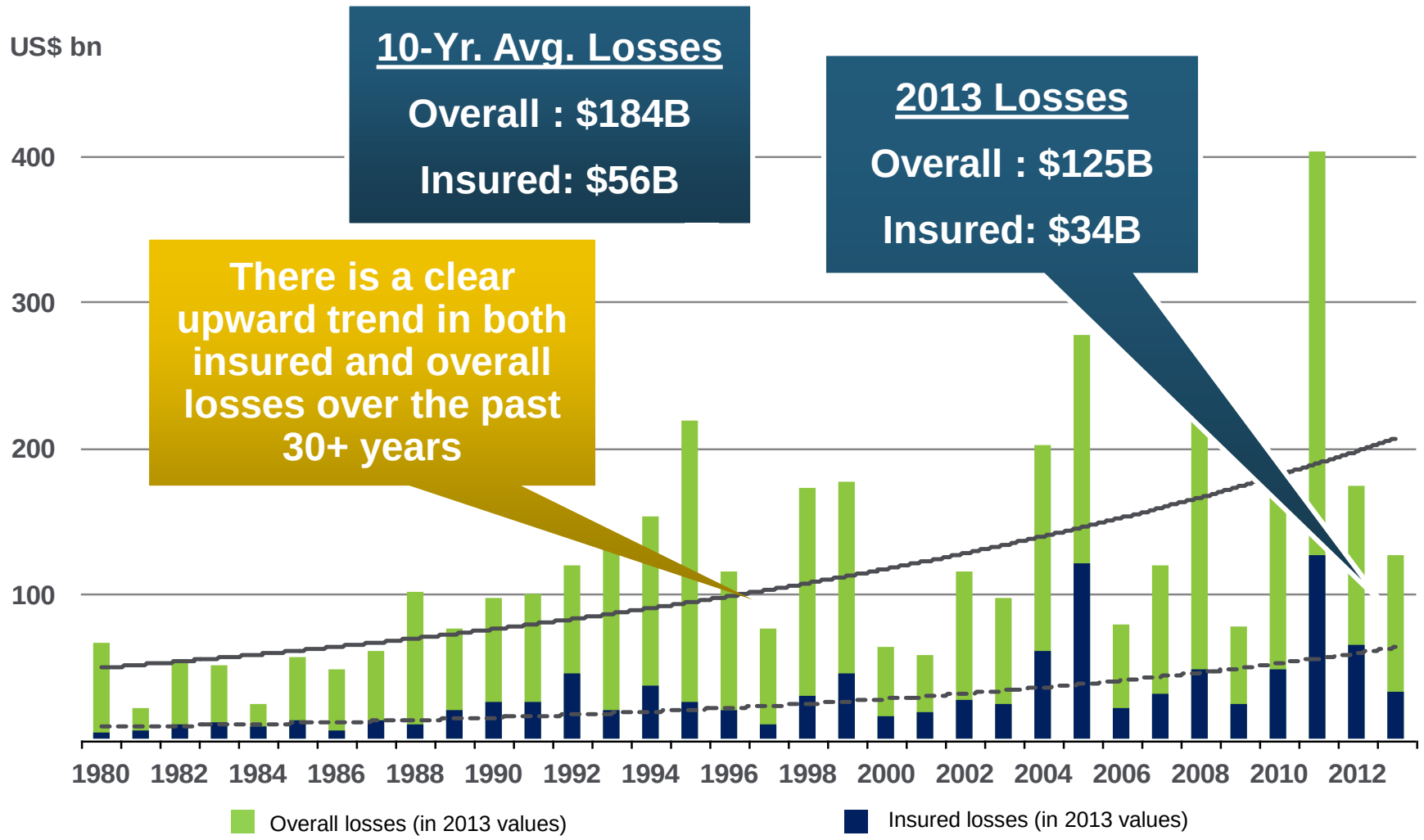
(Overall and Insured Losses)

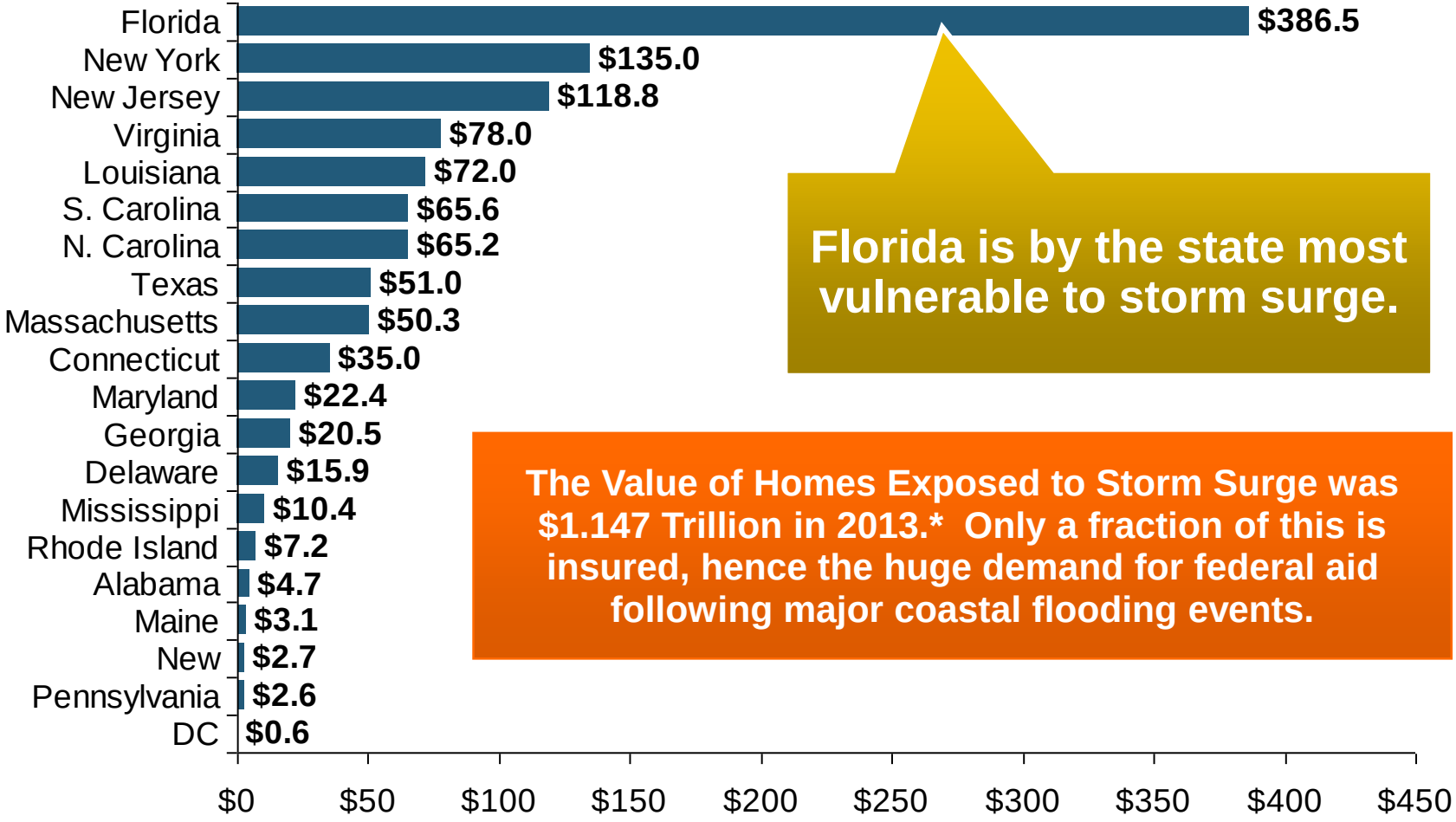
(2013 Dollars, $ Billions)



Source: MR NatCat*SERVICE*

Total Potential Home Value Exposure to Storm Surge Risk in 2013*

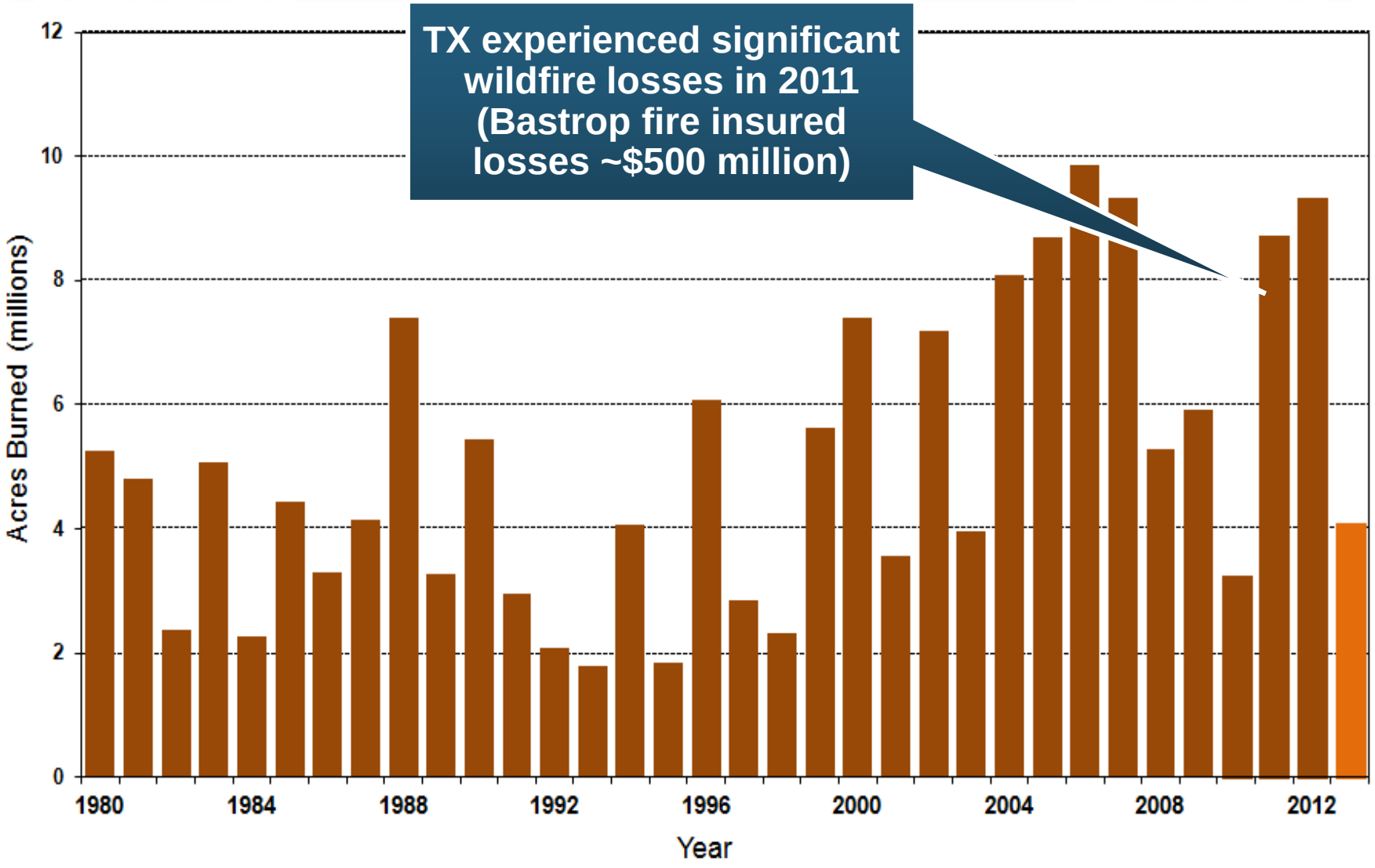
($ Billions)



*Insured and uninsured property. Based on estimated property values as of April 2013.

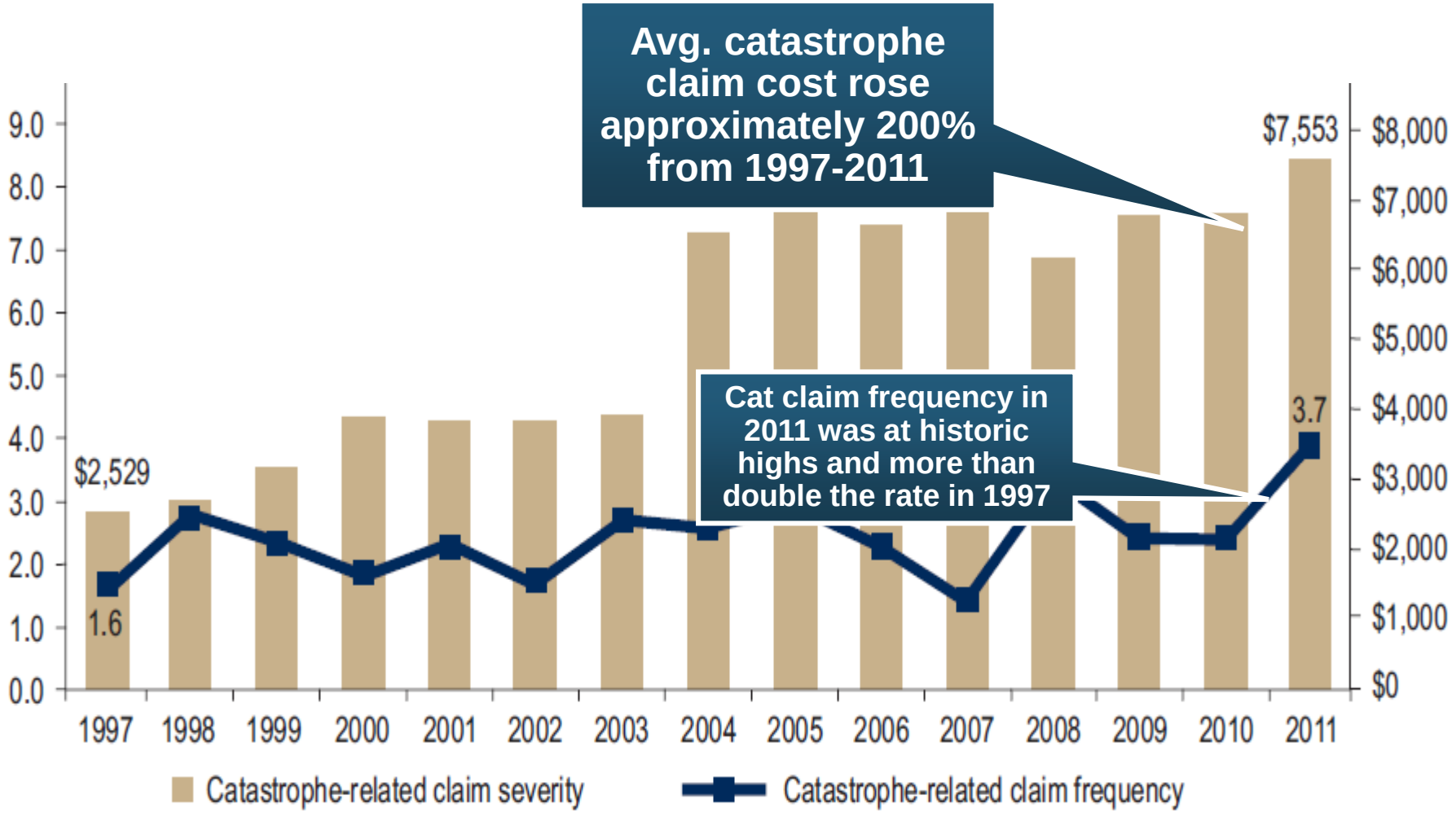
Source: *Storm Surge Report 2013,* CoreLogic.

Number of Acres Burned in Wildfires, 1980 – 2013



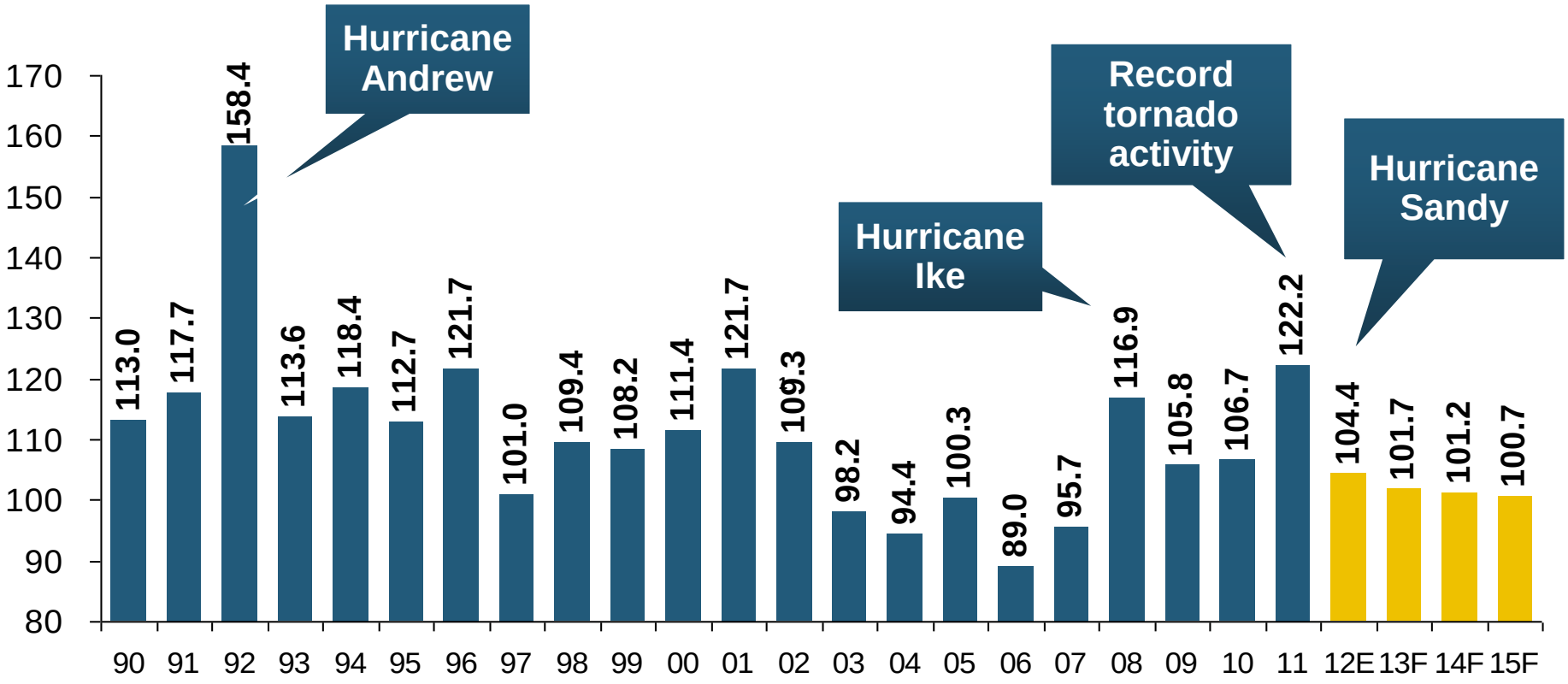
Source: National Interagency Fire Center

Homeowners Insurance Catastrophe-Related Claim Frequency and Severity, 1997—2012*



*All policy forms combined, countrywide.
Source: Insurance Research Council, *Trends in Homeowners Insurance Claims,* Sept. 2012 from ISO Fast Track data.

Homeowners Insurance Combined Ratio: 1990–2015F



Homeowners Performance in 2011/12 Impacted by Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity

Sources: A.M. Best (1990-2011);Conning (2012E-2015F); Insurance Information Institute.

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Flood Insurance

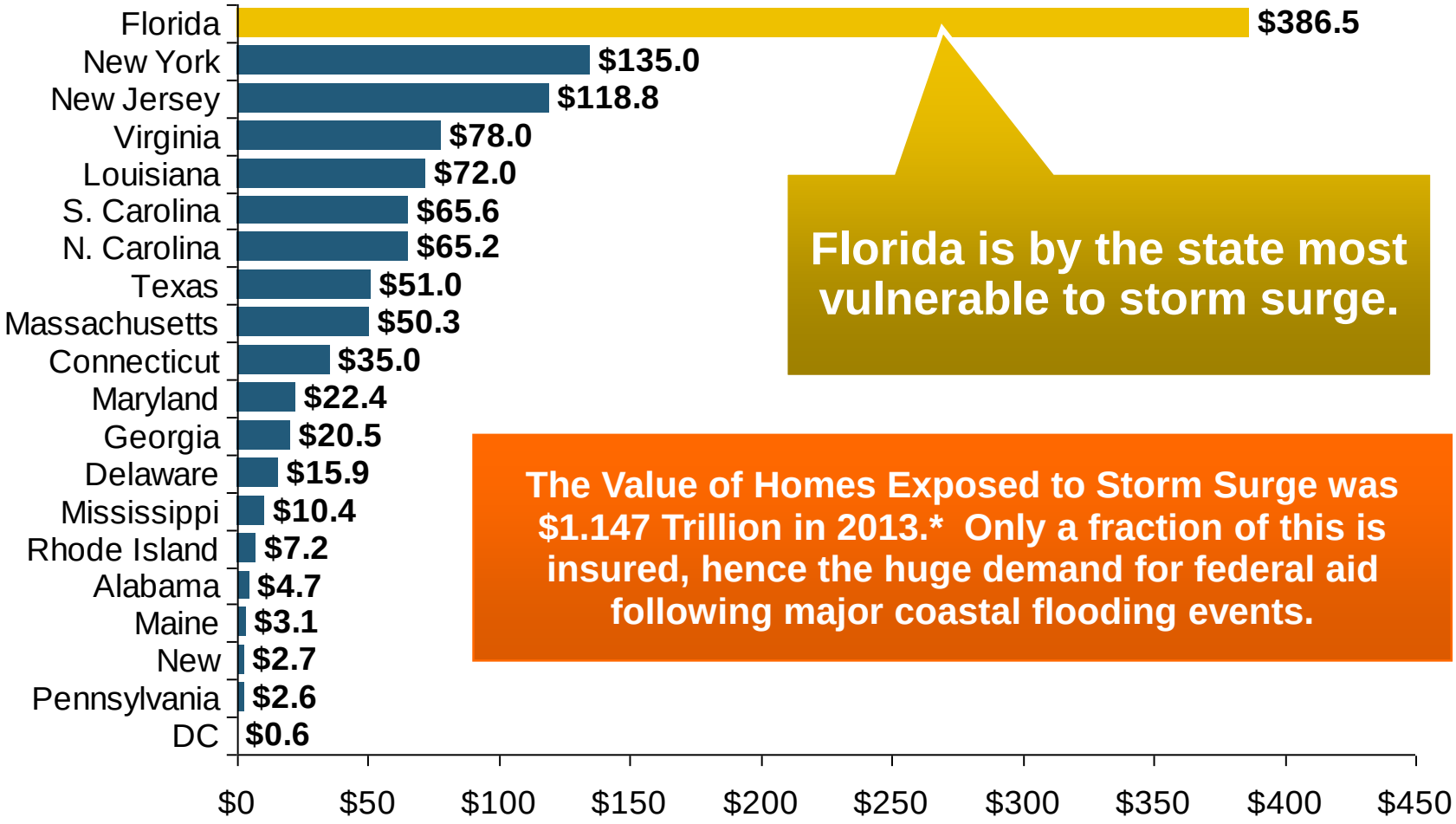
Flood Exposure: Reforms in Danger?

- ***Flood Should Reflect True Risk***
  - ***Keep the Subsidies***
- ***Would Prefer to Purchase from Private Insurers***

Total Potential Home Value Exposure to Storm Surge Risk in 2013*

INSURANCE INFORMATION INSTITUTE

($ Billions)



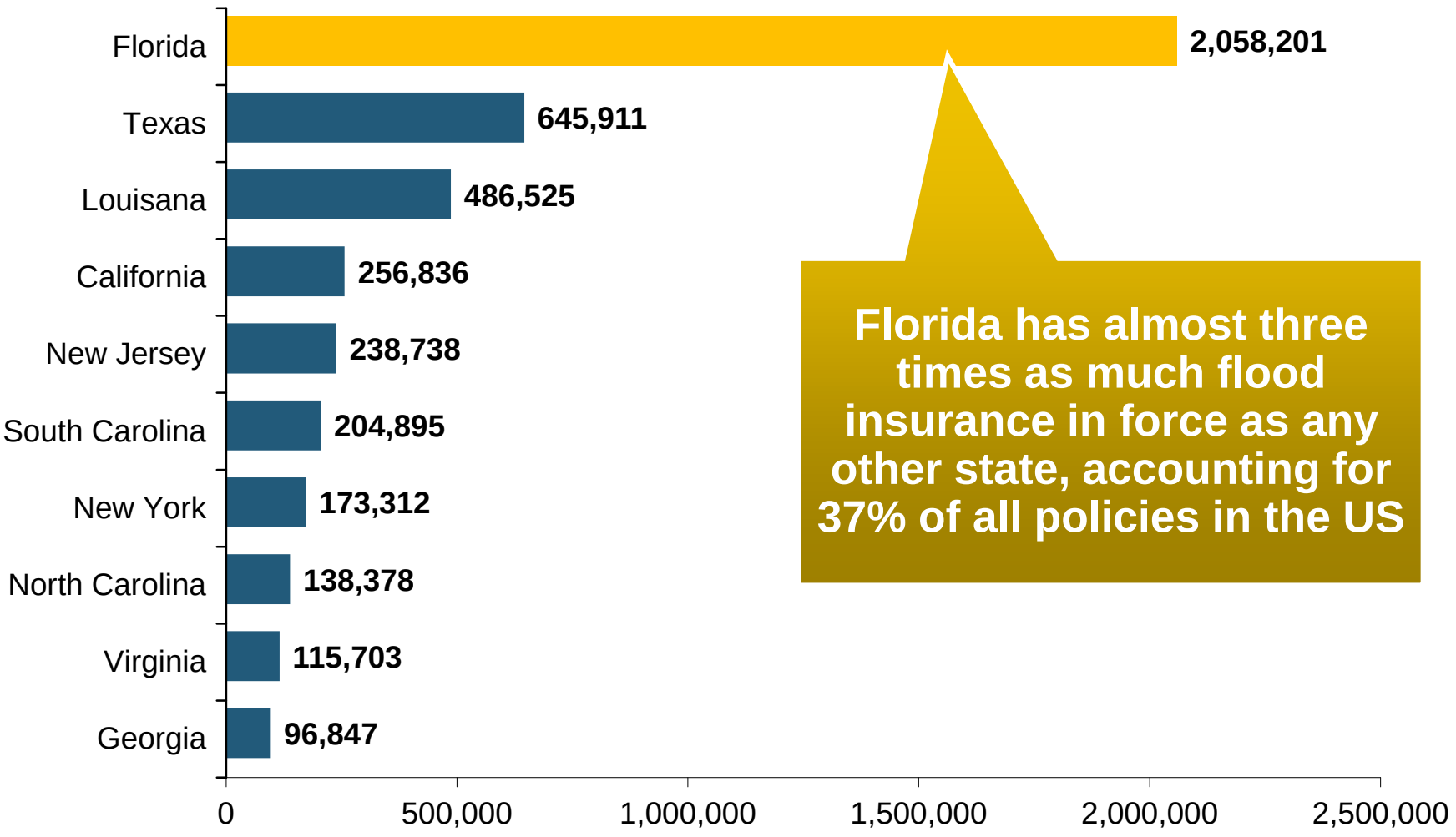
Florida is by the state most vulnerable to storm surge.

The Value of Homes Exposed to Storm Surge was $1.147 Trillion in 2013.* Only a fraction of this is insured, hence the huge demand for federal aid following major coastal flooding events.

*Insured and uninsured property. Based on estimated property values as of April 2013.

Source: *Storm Surge Report 2013,* CoreLogic.

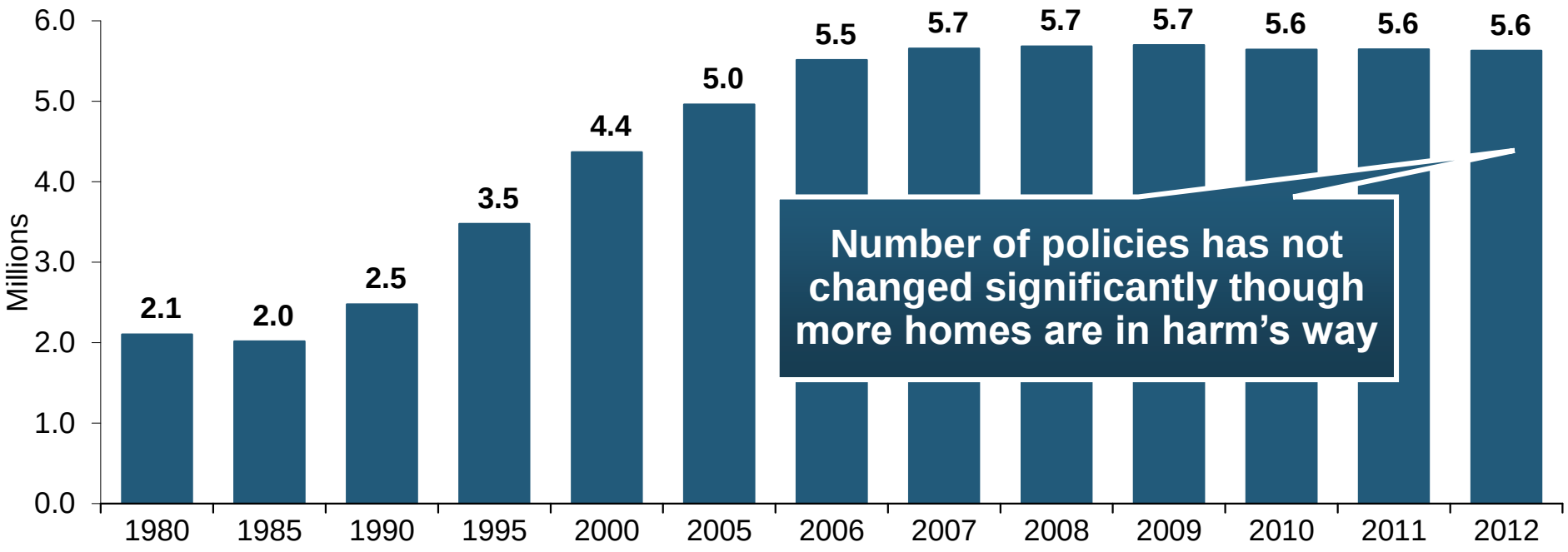
Total NFIP Policies in Force, 2012



Source: U.S. Department of Homeland Security, Federal Emergency Management Agency; Insurance Information Institute.

Growth of NFIP program

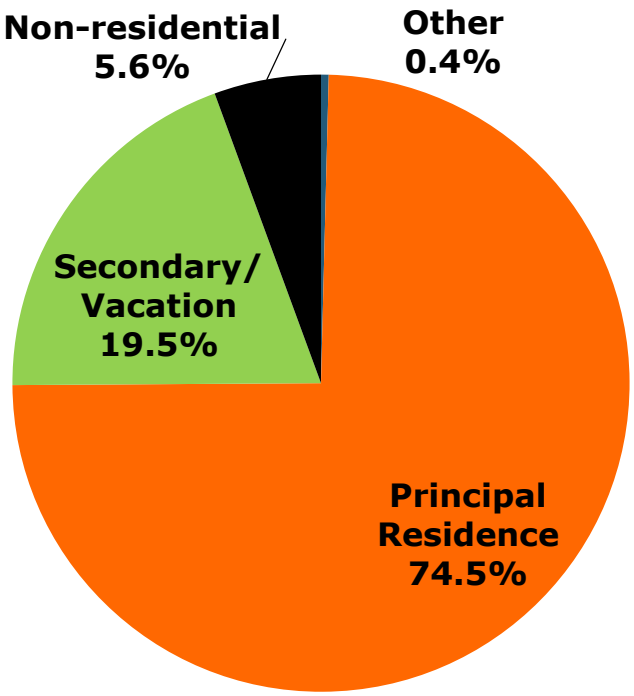
Policies in Force at Year-End



Despite the growth of the program, approximately half of all properties in a flood zone lack flood insurance.

Source: U.S. Department of Homeland Security, Federal Emergency Management Agency; Insurance Information Institute.

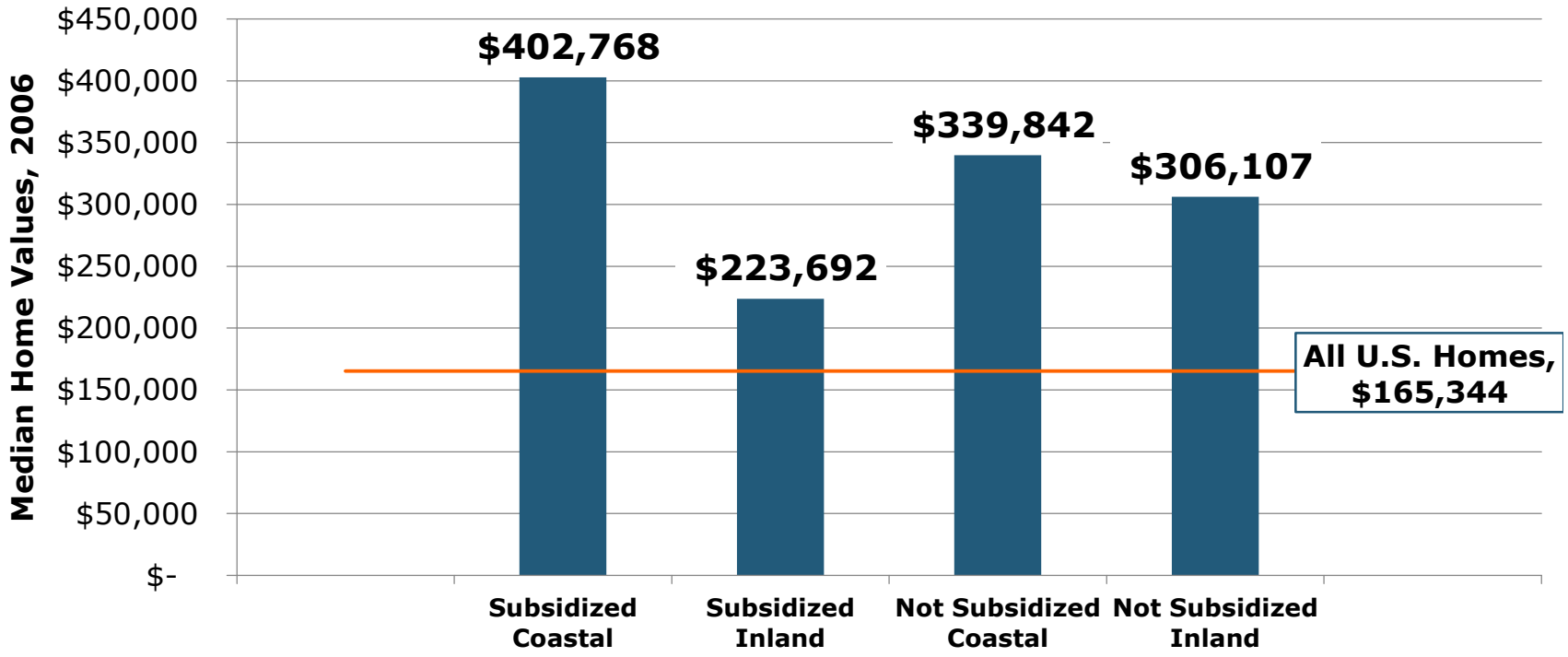
What kind of Buildings Does Flood Insurance Protect?



One-fourth of all flood policies are written on commercial (non-residential) risks or on secondary homes.

Sources: Congressional Budget Office (2007), Insurance Information Institute.

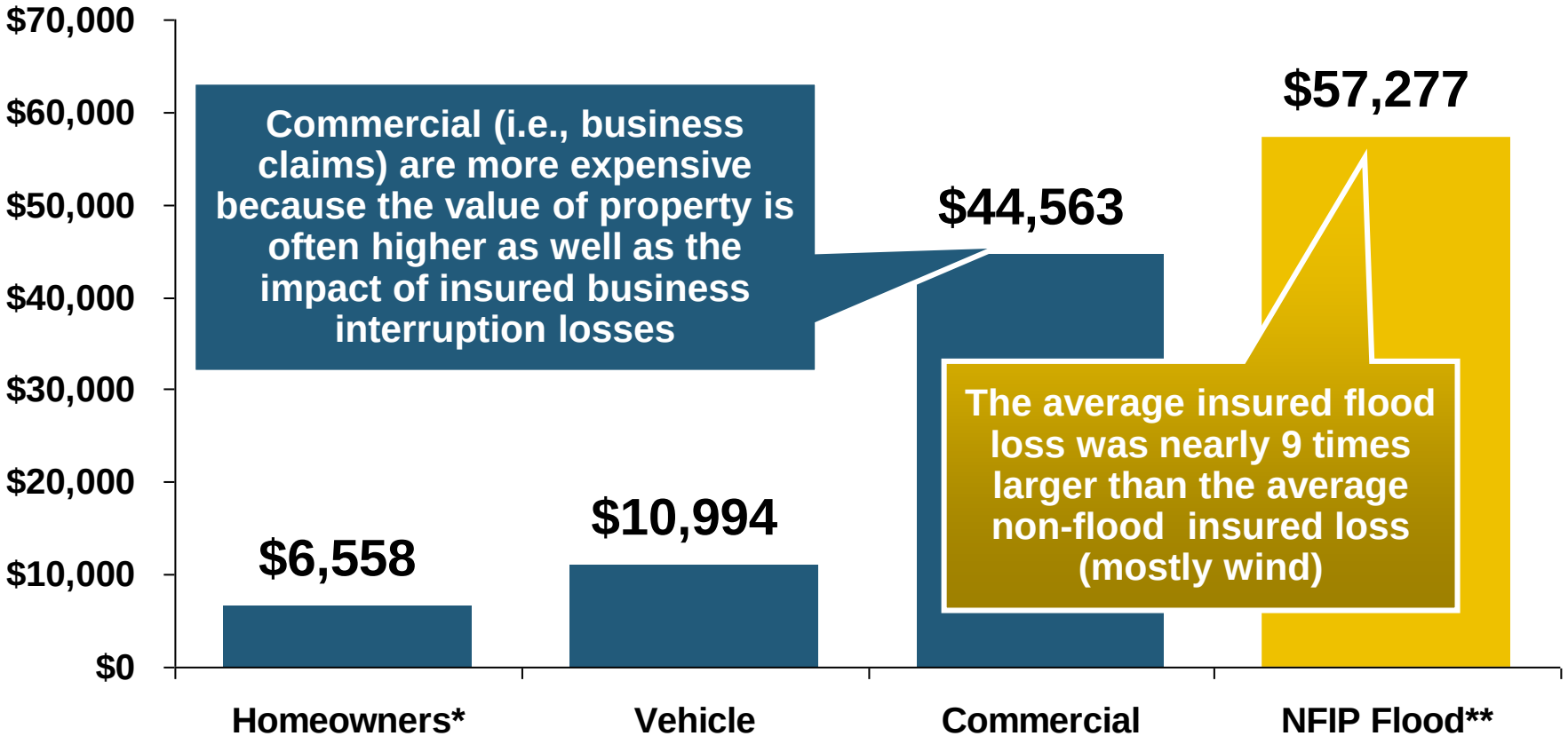
Median Value of Flood Properties



A CBO survey indicated the typical home with flood insurance is worth significantly more than the typical home. The typical subsidized coastal risk was worth more than unsubsidized risks.

Congressional Budget Office 2007 survey of coastal risks, with U.S. owner-occupied home median from Bureau of Census, 2005 American Housing Survey; Insurance Information Institute.

Hurricane Sandy: Average Claim Payment by Type of Claim



Post-Sandy, the I.I.I. worked very hard to make help media, consumers and regulators understand the distinction between a flood claim and a standard homeowners claim. *NFIP is $24B in debt.*

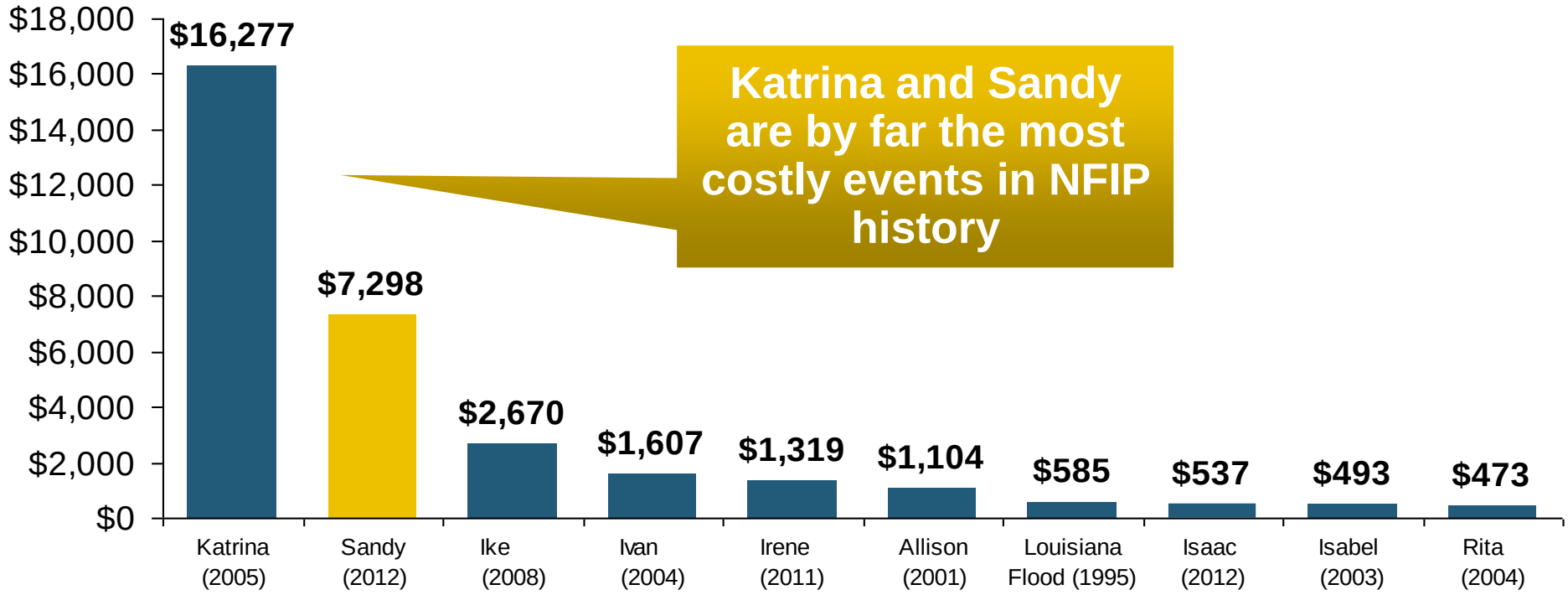
*Includes rental and condo policies (excludes NFIP flood). **As of Oct. 31, 2013.

Sources: Catastrophe loss data is for Catastrophe Serial No. 90 (Oct. 28 – 31, 2012) from PCS as of March 2013; Insurance Information Institute.

Top 12 Most Costly Flood Events by NFIP Payout*

(NFIP Insured Losses, $ Millions)

8 of the 10 most costly events in NFIP history occurred over the past decade (2004–2013); *NFIP deficit now totals $24 billion*

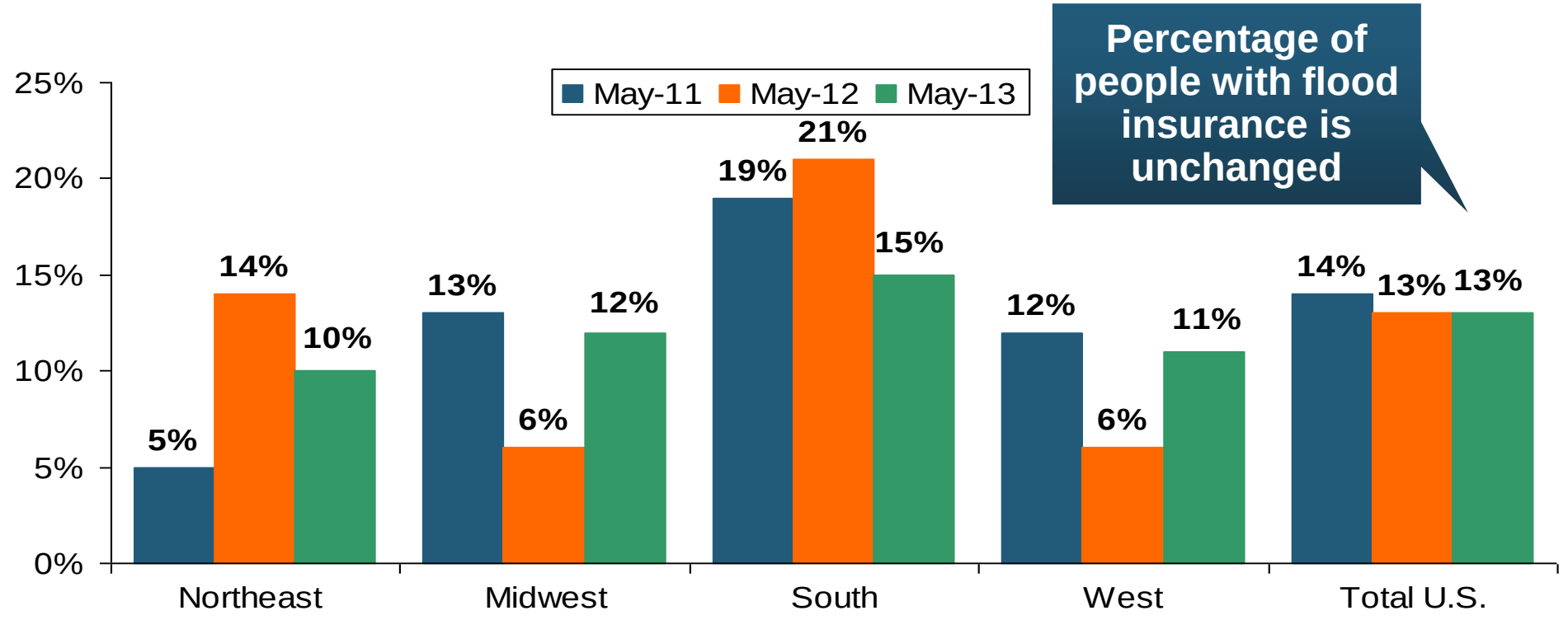


*Expressed in original dollars (not inflation-adjusted).

Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

I.I.I. Poll: Disaster Preparedness

Q. Do you have a separate flood insurance policy?[1]



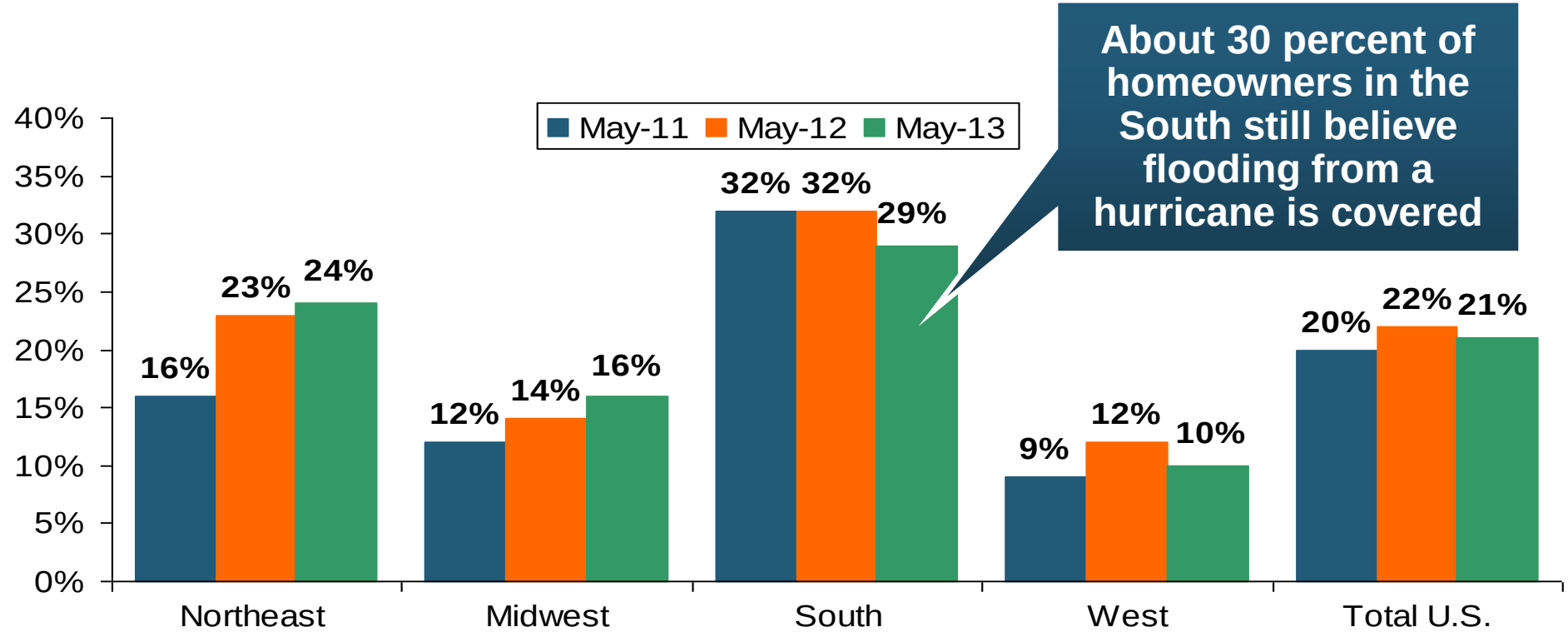
Only 13 percent of American homeowners say they have a flood insurance policy; the percentage is lowest in the Northeast at 10 percent.

[1]Asked of those who have homeowners insurance and who responded "yes".

Source: Insurance Information Institute Annual *Pulse* Survey.

I.I.I. Poll: Disaster Preparedness

Q. Does your homeowners policy cover damage from flooding during a hurricane?[1]



The proportion of homeowners who believe their homeowners policy covers damage from flooding during a hurricane stands at 21 percent. This proportion rises eight percentage points in the South, to 29 percent.

[1]Asked of those who have homeowners insurance and who responded "yes".

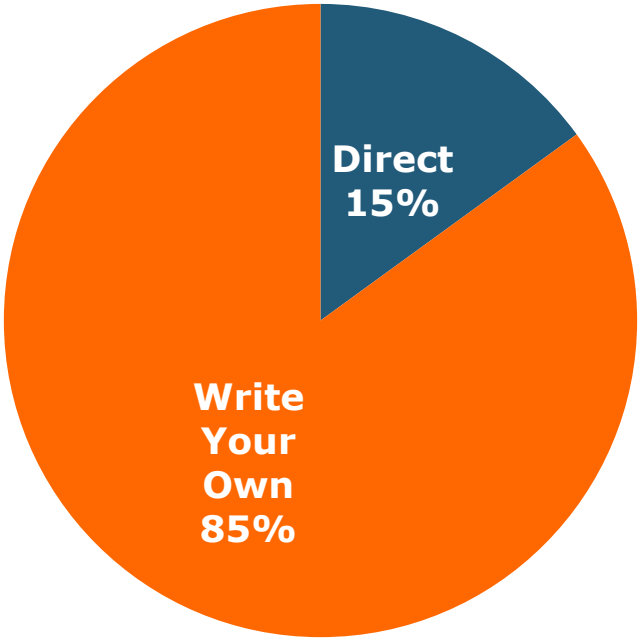
Source: Insurance Information Institute Annual *Pulse* Survey.

Biggert-Waters: Media and Congressional Maelstrom

- **BW-12 Rate Increases to Phase Out Subsidies Began in 2013**
  - **Note: Only 20% of NFIP policies are subsidized**
- **Jan. 1, 2013: Non-Primary/Secondary Residences**
  - **Increases of 25% per year until full-risk rate achieved**
  - ***Reaction: Very muted; Vacation homes/wealthier owners***
- **Oct. 1, 2013: Subsidized Severe or Repetitive Loss Policies and Owners of Business/Non-Residential Properties**
  - **Increases of 25% per year until full-risk rate achieved**
  - ***Reaction: Huge consumer backlash, intense media coverage leading to a Congressional effort to delay BW-12 by 4 years (effectively killing it). Even Maxine Waters supports delay…***
- **Subsidy Lost if Policy Lapses, Severe Repeated, New Policy**
- **I.I.I. Is Explaining the Risks Associated with BW-12 Delay**
- **Future Pvt. Insurer Flood Participation Impacted by BW-12 Debate**
- **I.I.I. Research Report on Issue Due Soon Under BW-12 Section 236 Study Requirement (National Academy of Sciences)**

Success of Write Your Own Program

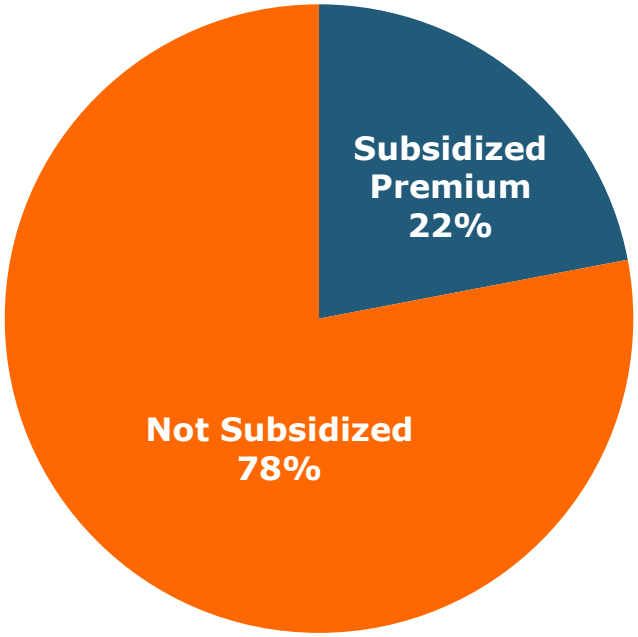
Write Your Own Policies vs. Written Directly by NFIP



More than 80% of flood policies in the NFIP are written through the Write Your Own program, a public-private partnership.

Source: U.S. Department of Homeland Security, Federal Emergency Management Agency; Insurance Information Institute.

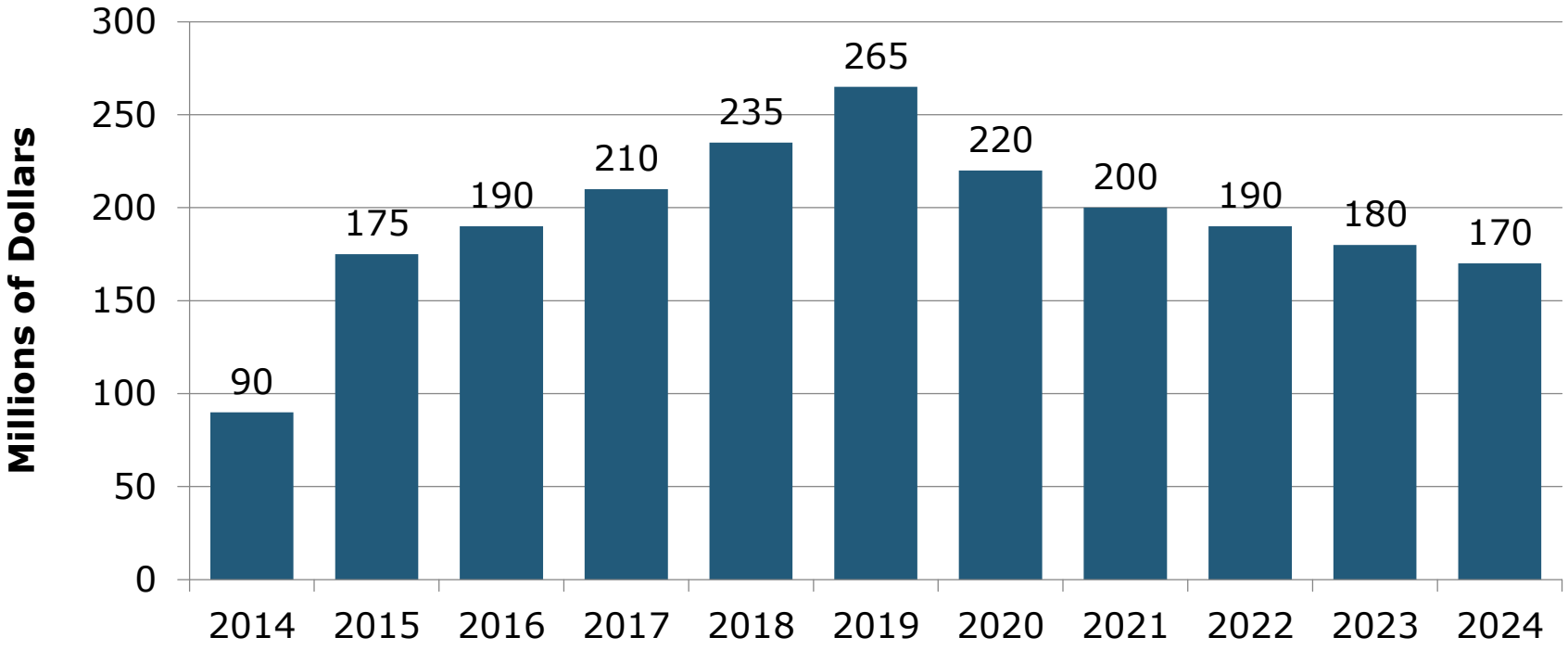
Extent of Flood Insurance Subsidy



The average subsidized policy pays about 40 percent of the full actuarial rate. Eliminating the subsidy would increase program premium by more than 50 percent.

Sources: NFIP 2011 Actuarial Rate Review, Insurance Information Institute.

Cost of Reinstituting Subsidies

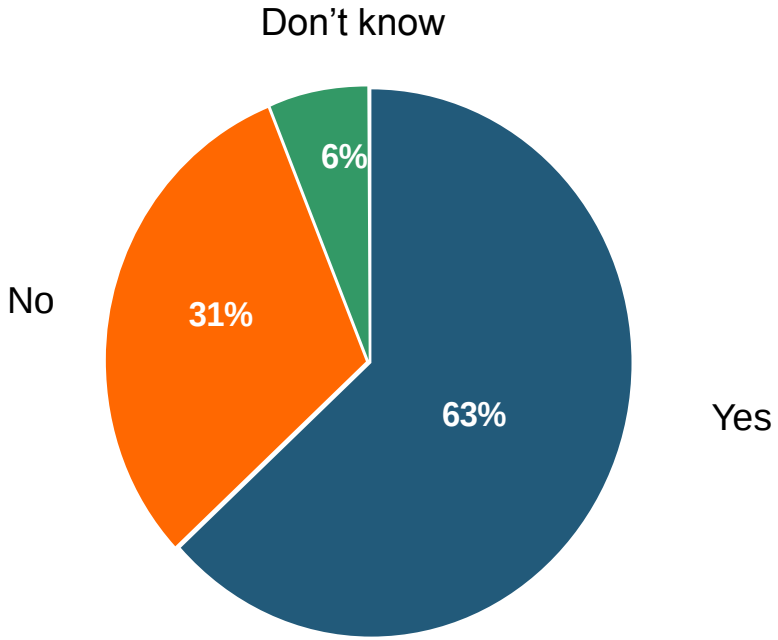


Proposals to reduce rates will create a $2.1B shortfall in the NFIP over 10 years, would cause the NFIP to borrow more from the Treasury and could force a slowdown in claims payments.

Sources: Congressional Budget Office, Insurance Information Institute.

I.I.I. Poll: Flood Insurance

Q. Do you think it is fair that flood insurance premium increases are higher if people who live in high flood risk areas and rebuild their homes do not elevate them?

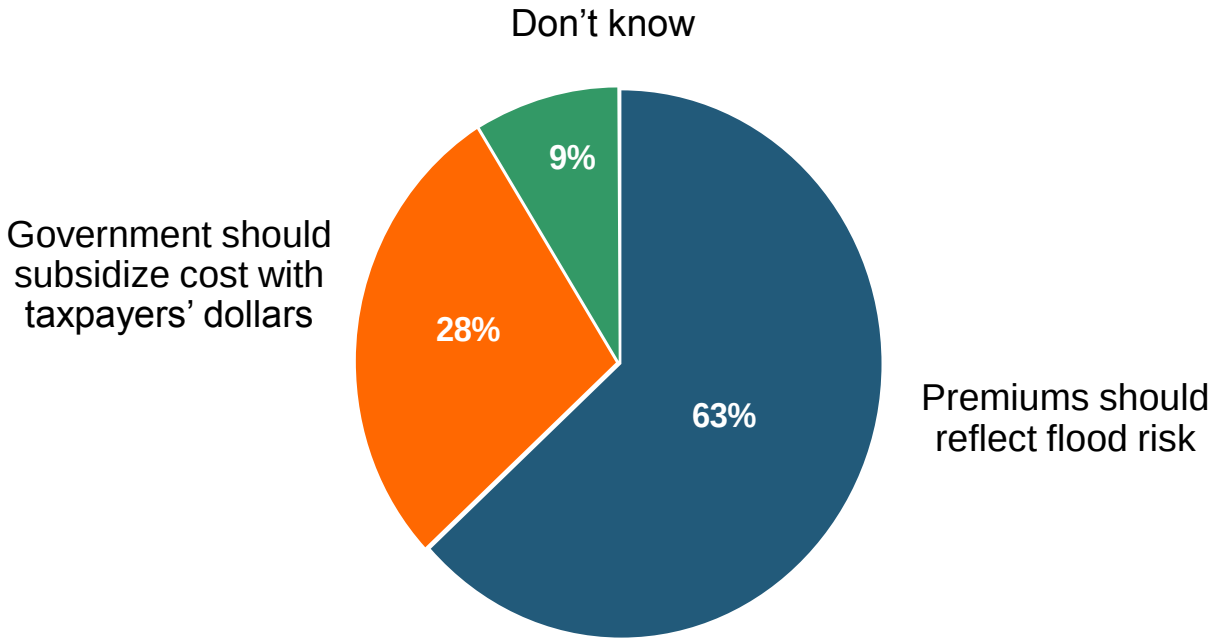


Almost two-thirds of Americans think that it is fair that flood insurance premiums be raised for people who live in high flood risk areas and rebuild their homes after a flood but do not elevate them.

Source: Insurance Information Institute Annual *Pulse* Survey.

I.I.I. Poll: Flood Insurance

Q. Do you think flood insurance premiums should reflect the risk of flooding no matter what the cost or do you think the government should subsidize the cost of flood insurance with taxpayers' dollars?

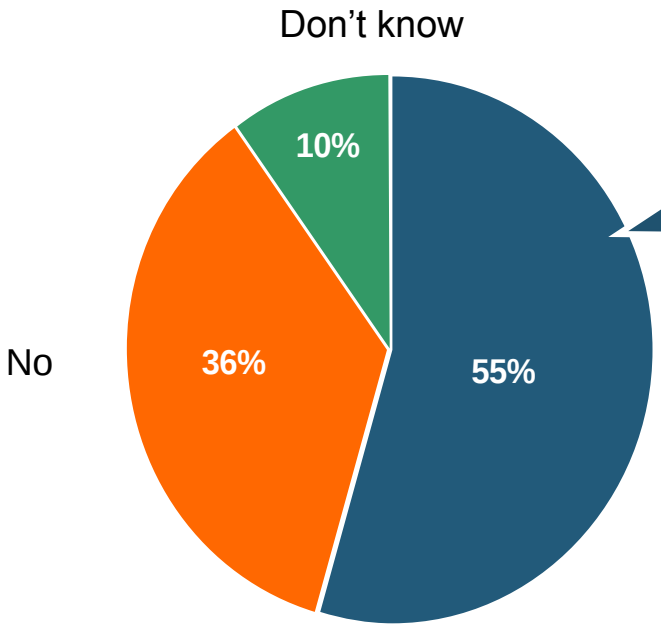


Almost two-thirds of Americans think flood insurance premiums should be raised to reflect the risk of flooding.

Source: Insurance Information Institute Annual *Pulse* Survey (Nov. 2013).

I.I.I. Poll: Flood Insurance

Q. The federal government provides insurance coverage at taxpayer-subsidized rates for damage from floods through the National Flood Insurance Plan. A new law eliminates the subsidy and raises rates. Do you think the rate increase should be repealed?



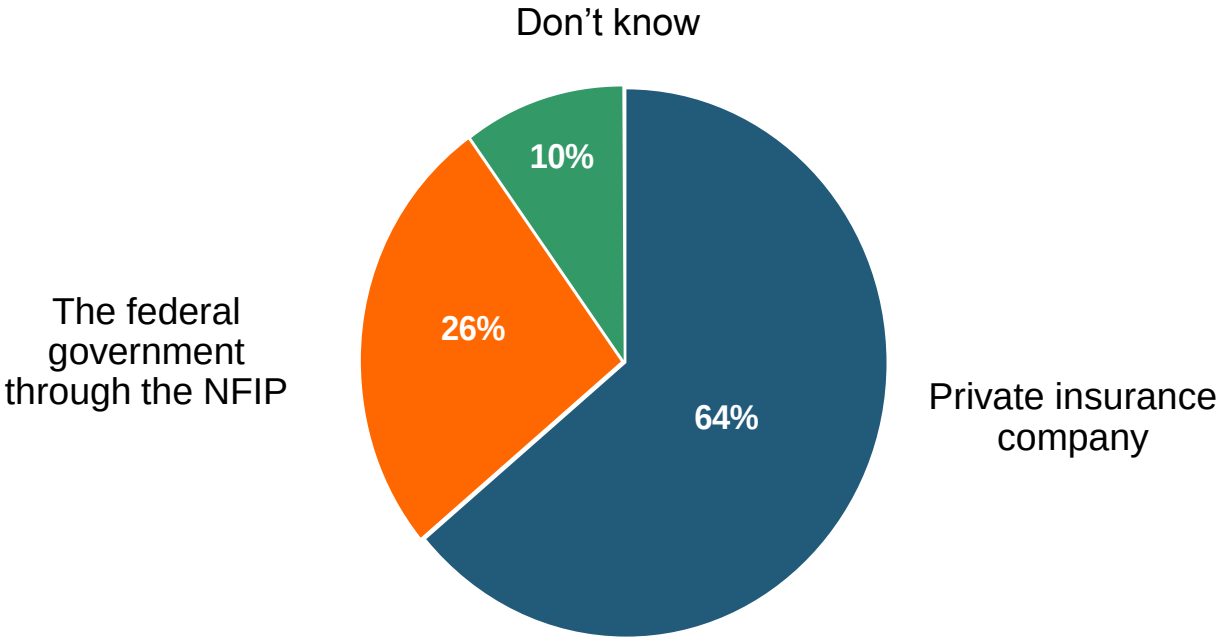
It is inconsistent for the public to support full-risk rates but maintain subsidies, but this exactly mirrors Congressional sentiments, with supporters of BW-12 and even Tea Party conservatives supporting continuation of the subsidies

More than half of Americans polled for the November 2013 Pulse thought that hikes in National Flood Insurance premiums should be repealed.

Source: Insurance Information Institute Annual *Pulse* Survey.

I.I.I. Poll: Flood Insurance

Q. If the costs were similar, would you prefer to buy flood insurance from a private insurance company or from the federal government through the National Flood Insurance Program?



Six out of 10 Americans would prefer to buy flood insurance from a private insurance company as opposed to the federal government, if costs were similar.

Source: Insurance Information Institute Annual *Pulse* Survey.

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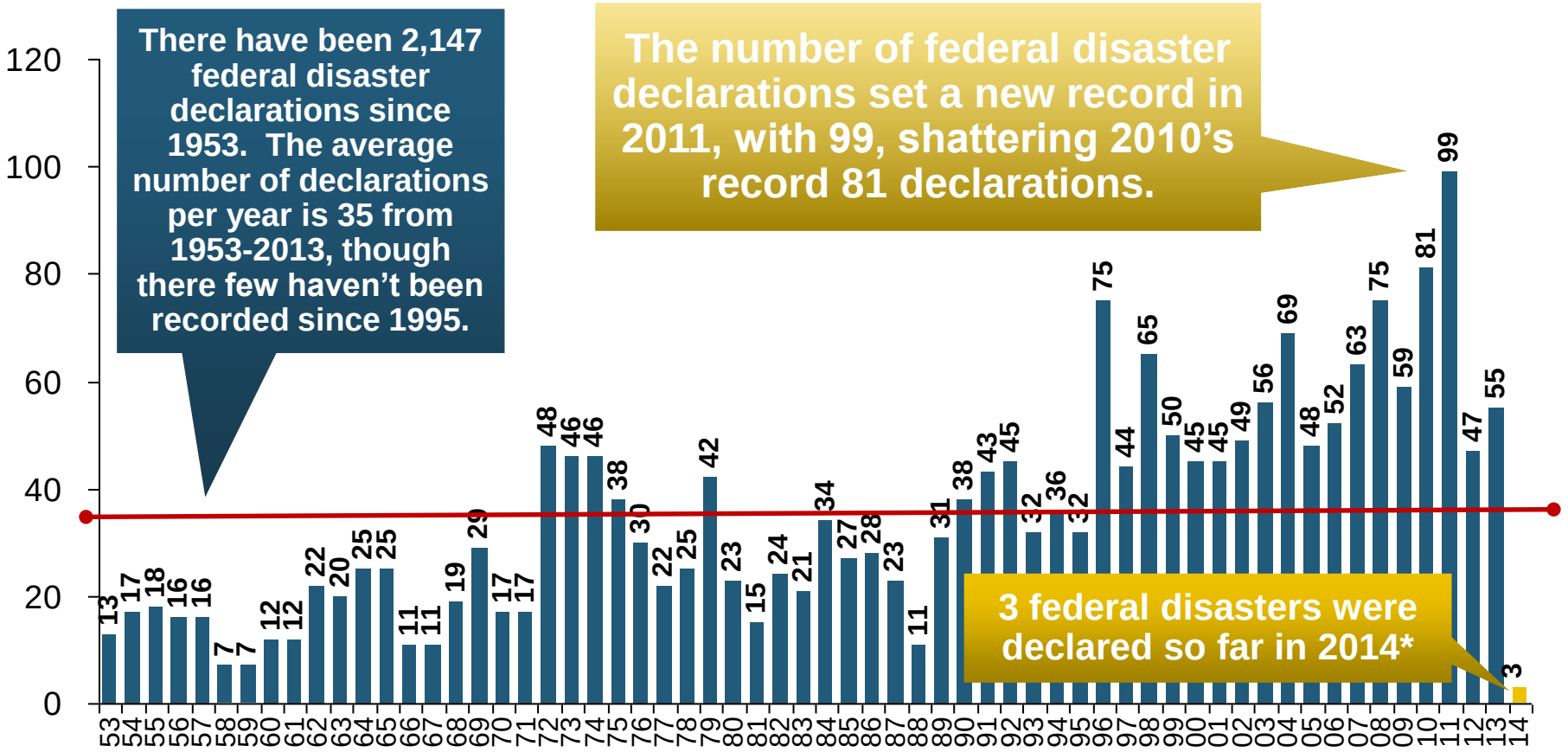
Federal Disaster Declarations Patterns: 1953-2013

Disaster Declarations Set New Records in Recent Years

Number of Federal Major Disaster Declarations, 1953-2014*

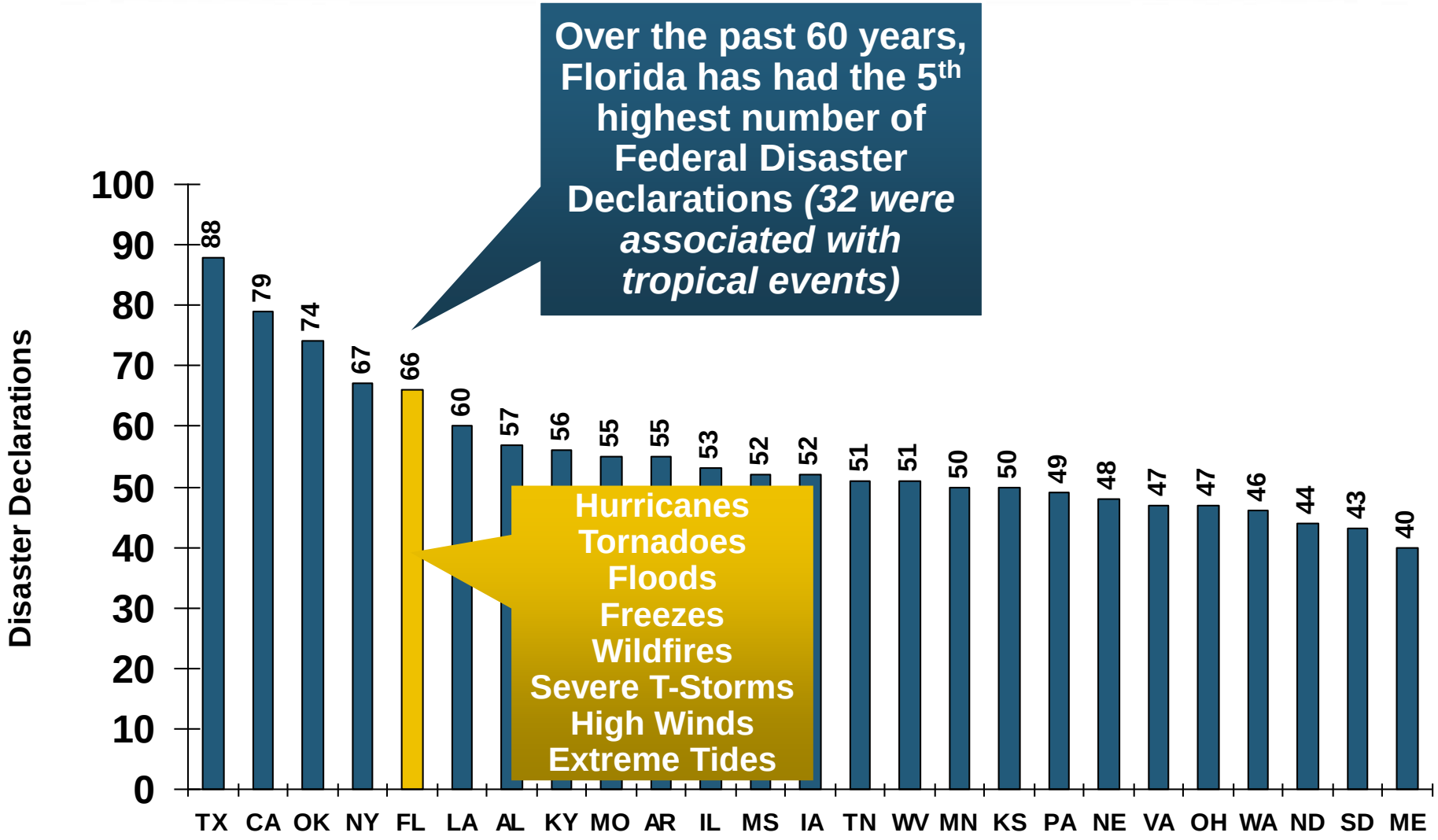


The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 *and* 2011 Before Dropping in 2012/13

*Through January 25, 2014.

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

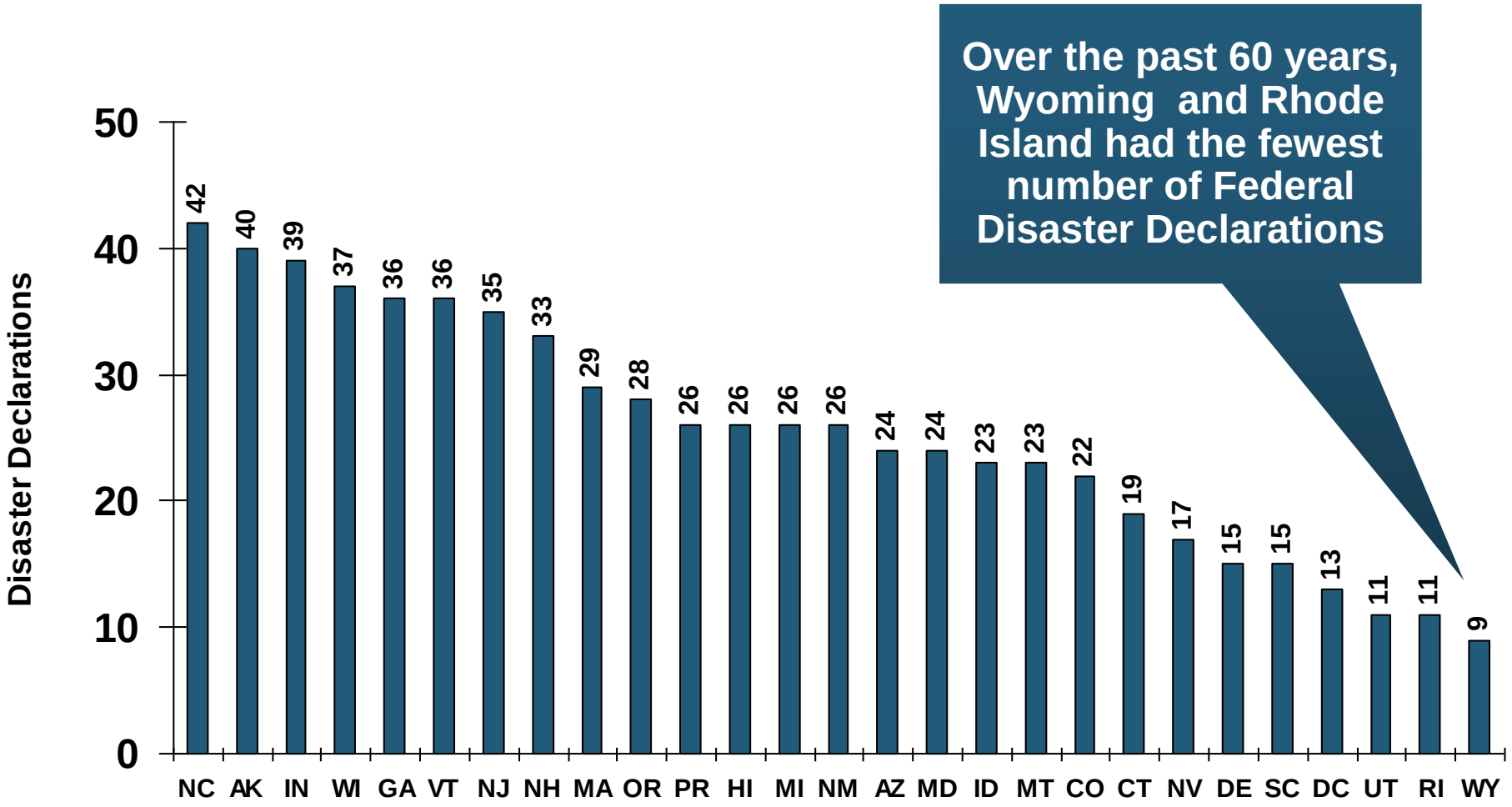
Federal Disasters Declarations by State, 1953 – 2014: Highest 25 States*



*Through Jan. 25, 2014. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

Federal Disasters Declarations by State, 1953 – 2014: Lowest 25 States*



*Through Jan. 25, 2014. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

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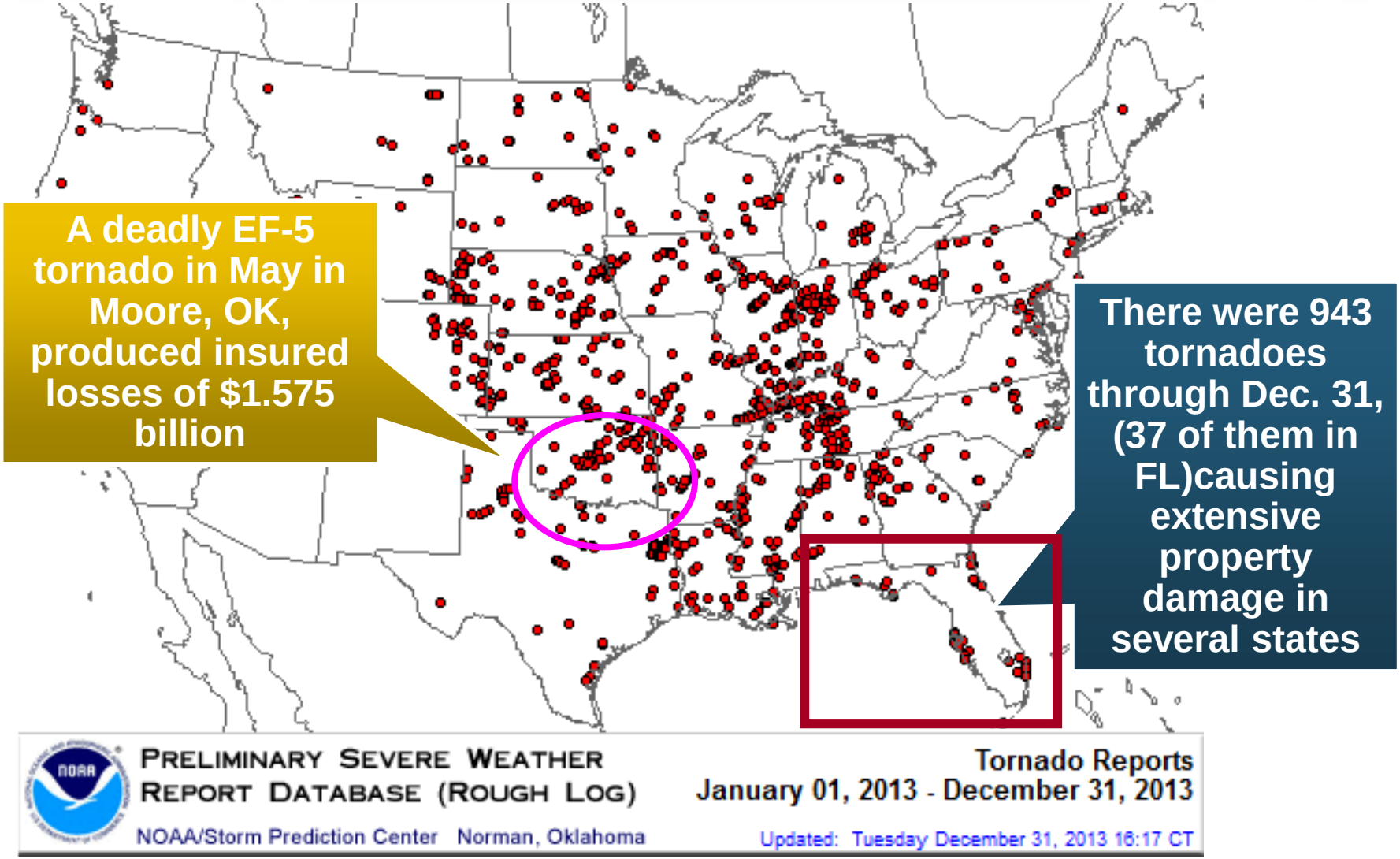
SEVERE WEATHER REPORT UPDATE: 2013

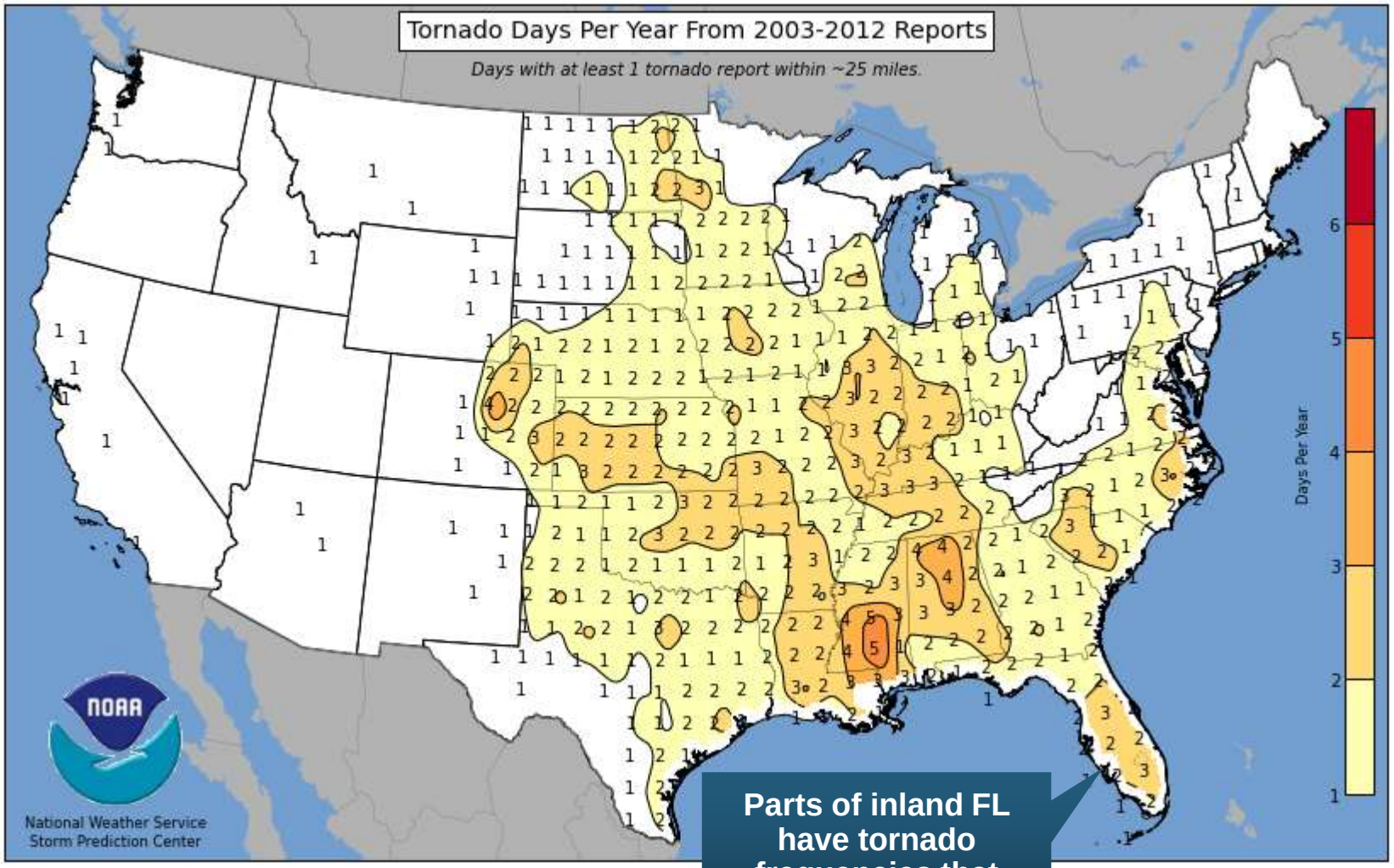
Damage from Tornadoes, Large Hail and High Winds Keep Insurers Busy in Every State—Including Florida

Location of Tornado Reports in 2013



Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2013_annual_summary.html#; PCS.

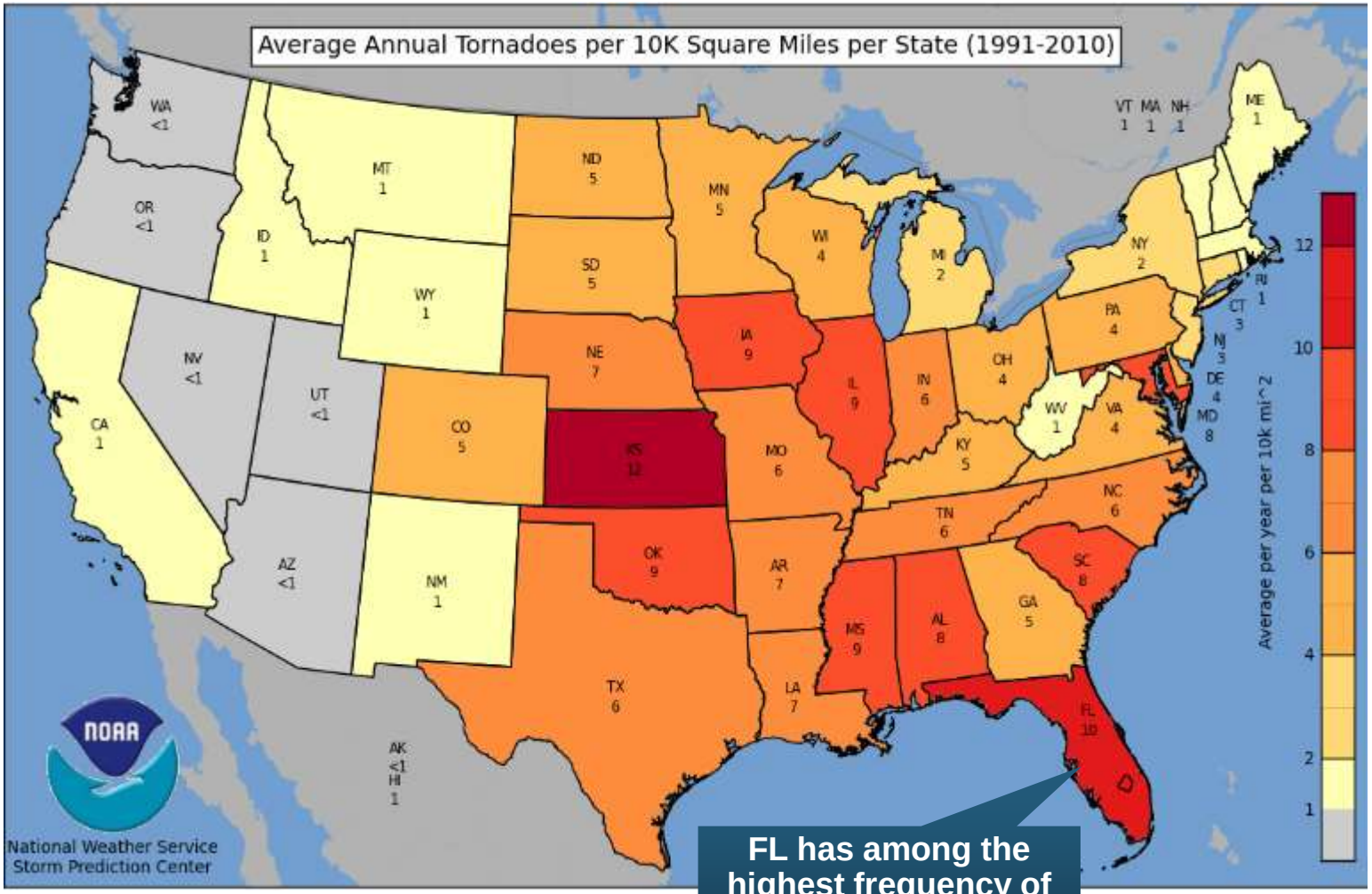
Tornado Days per Year, 2003-2012



Parts of inland FL have tornado frequencies that rival "Tornado Alley"

Source: http://www.spc.noaa.gov/wcm/.

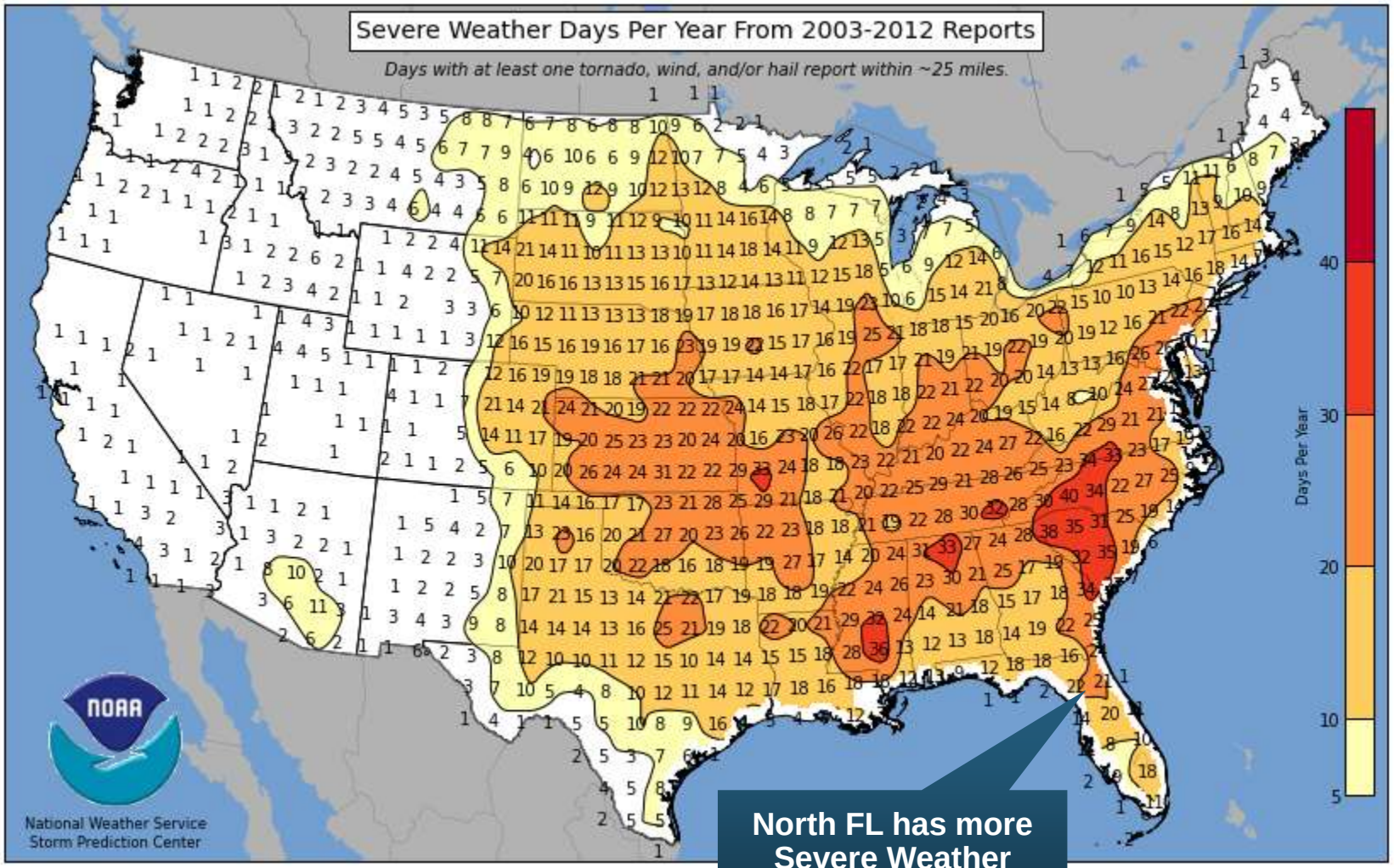
Severe Thunderstorm Wind Days per Year, 2003-2012



FL has among the highest frequency of tornadoes per kilometer in the U.S.

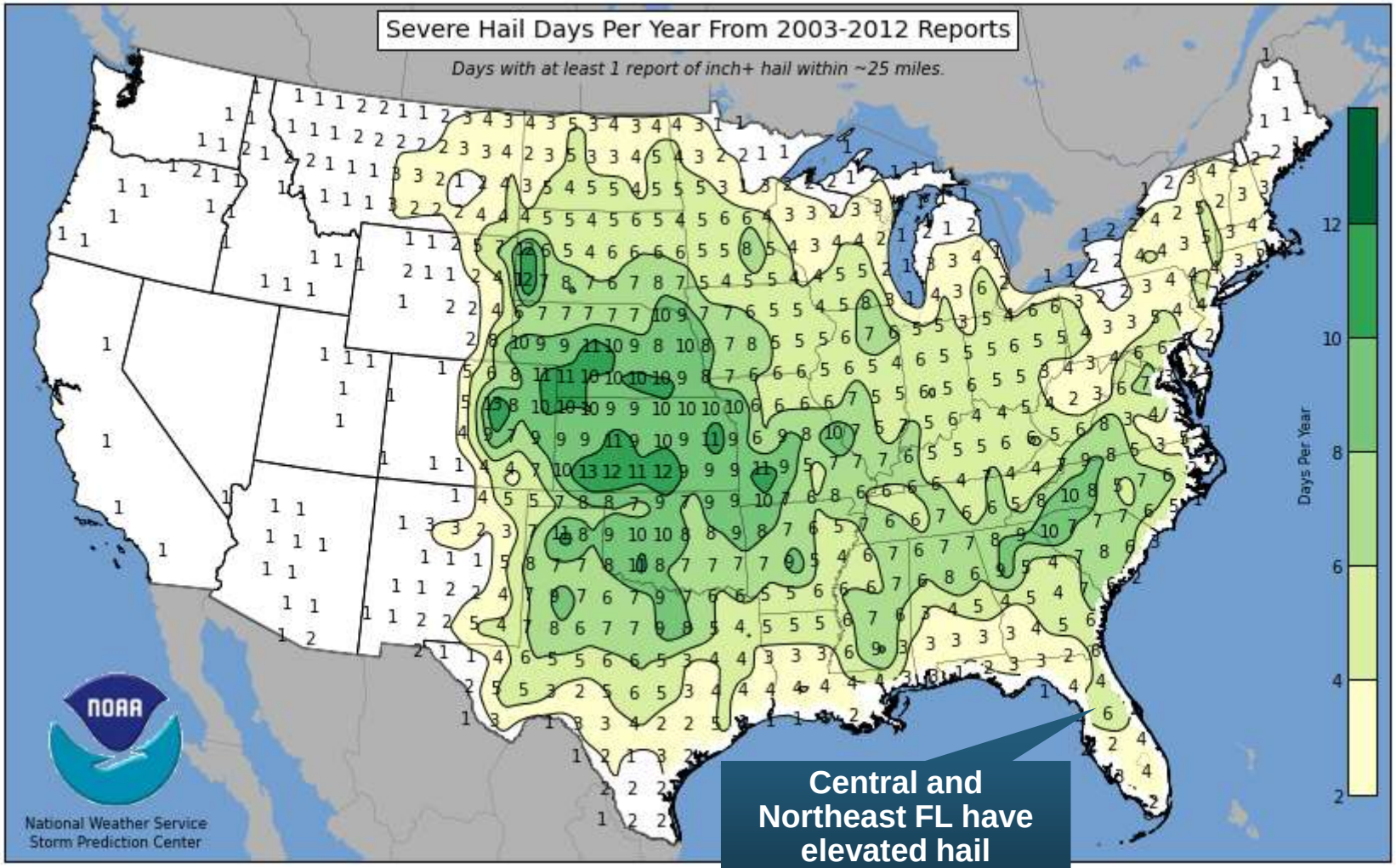
Source: http://www.spc.noaa.gov/wcm/.

Severe Weather Days per Year, 2003-2012



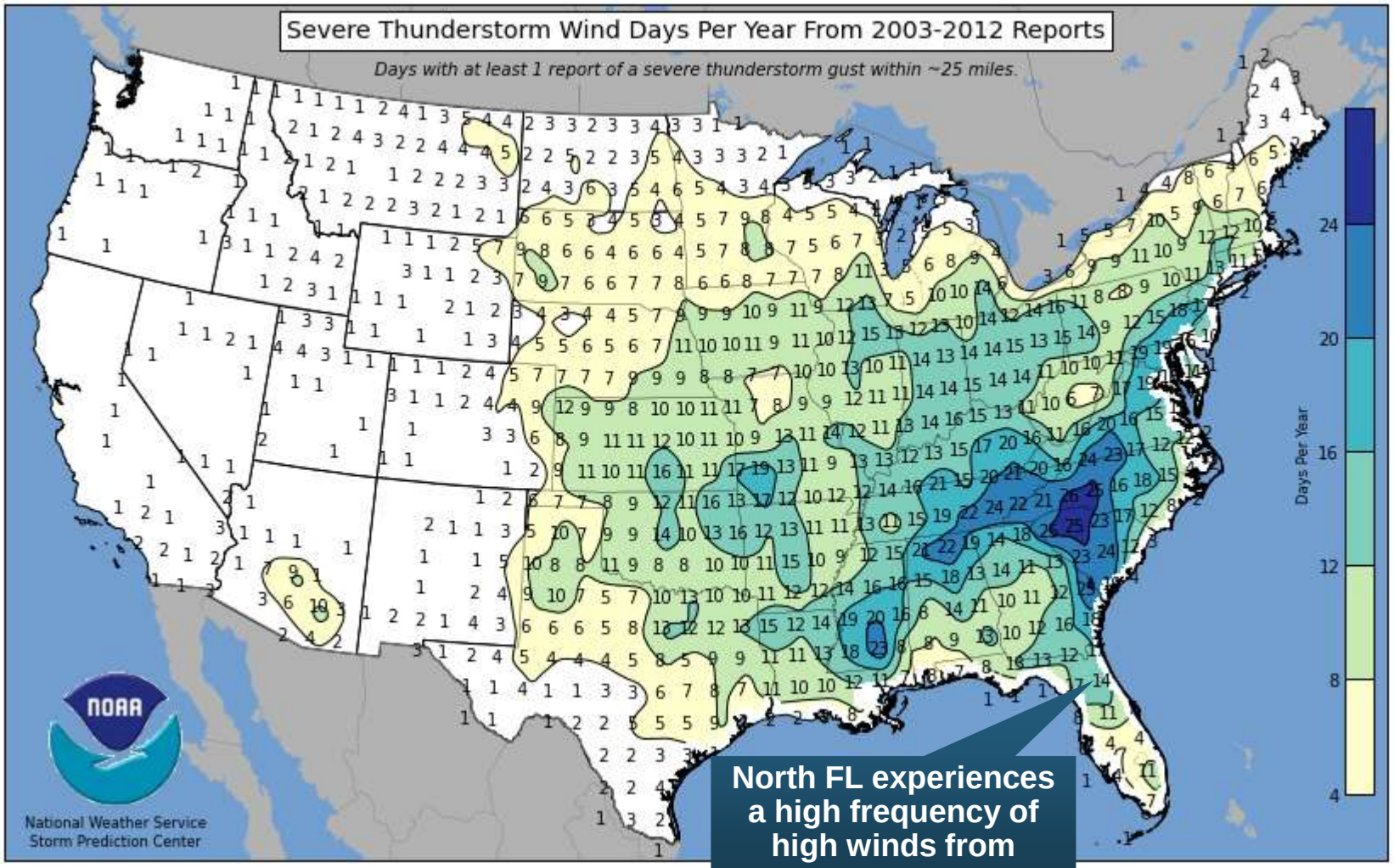
Source: http://www.spc.noaa.gov/wcm/.

Severe Hail Days per Year, 2003-2012



Source: http://www.spc.noaa.gov/wcm/.

Severe Thunderstorm Wind Days per Year, 2003-2012



Source: http://www.spc.noaa.gov/wcm/.

U.S. Thunderstorm Insured Loss Trends, 1980 – 2013

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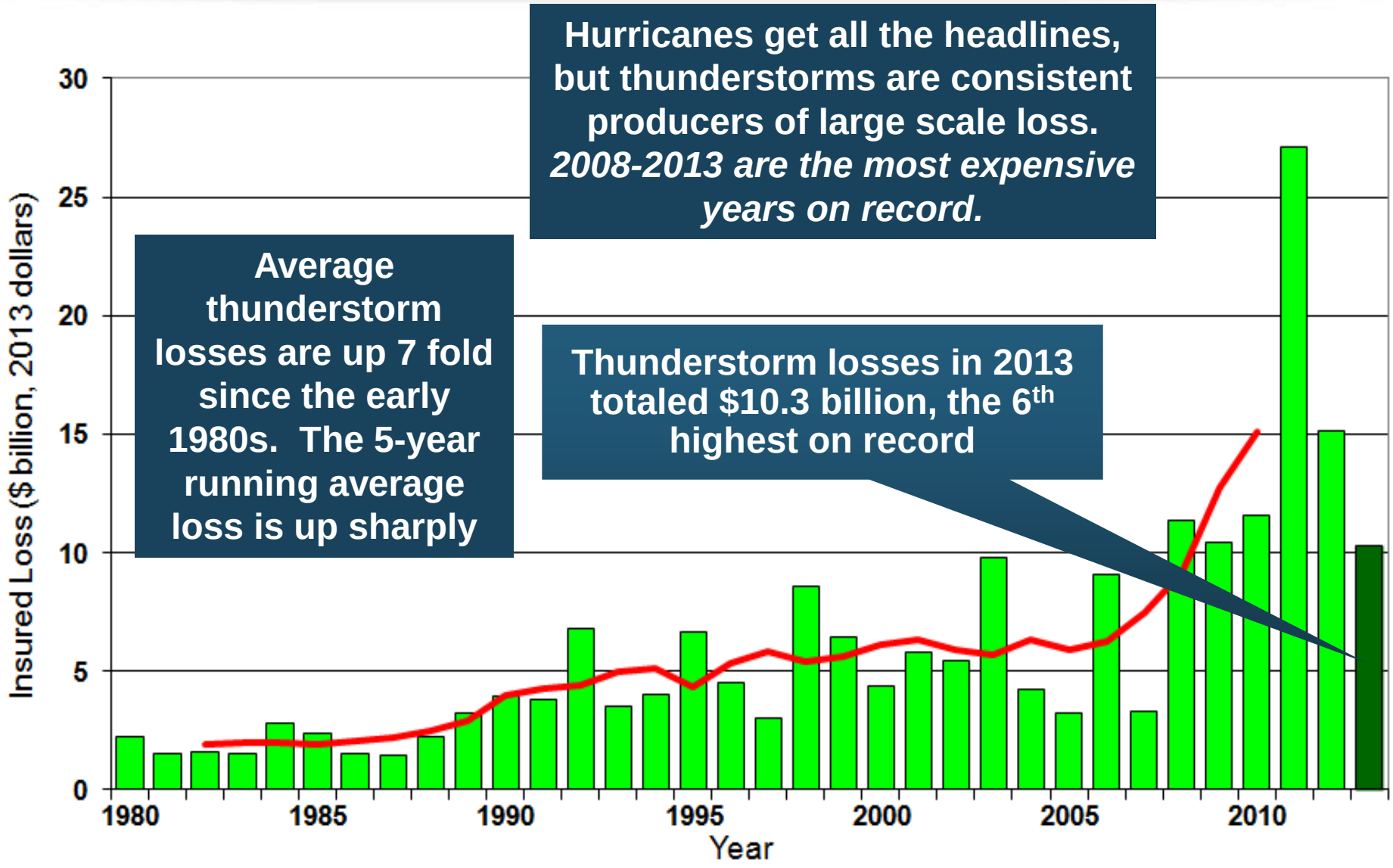
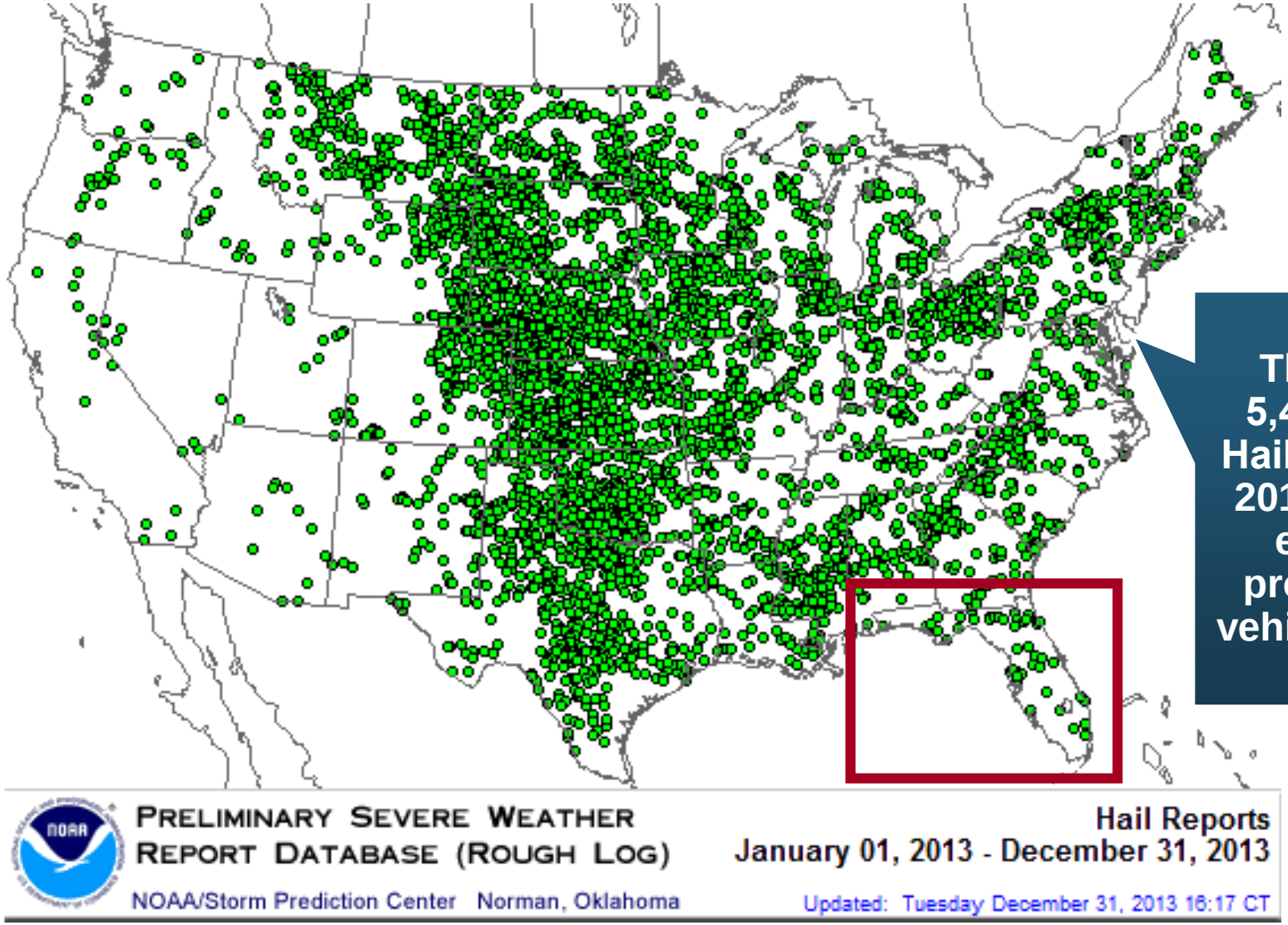


Source: Property Claims Service, and MR NatCat*SERVICE*

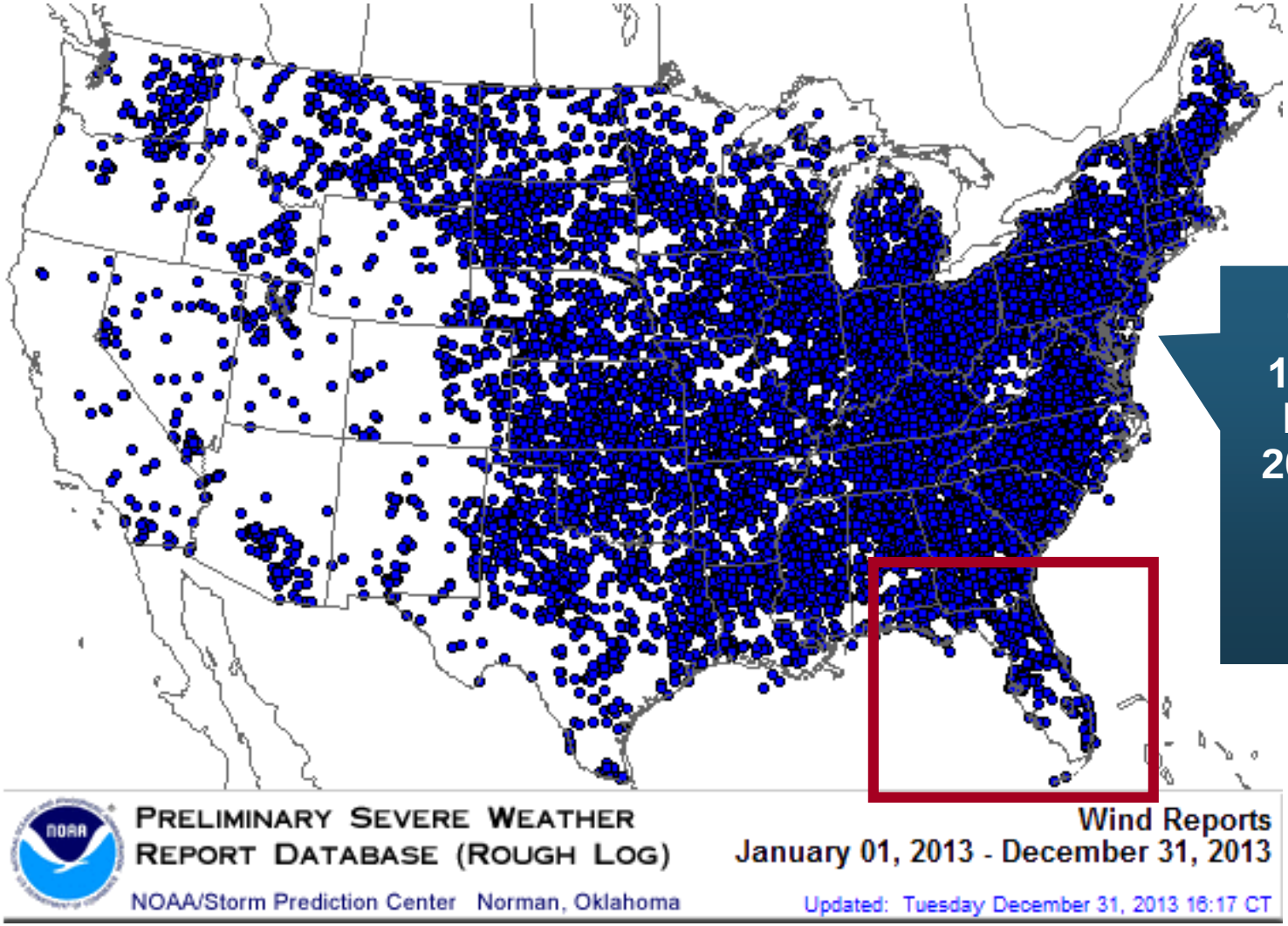
Location of Large Hail Reports: 2013



There were 5,457 "Large Hail" reports in 2013, causing extensive property and vehicle damage

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2013_annual_summary.html#

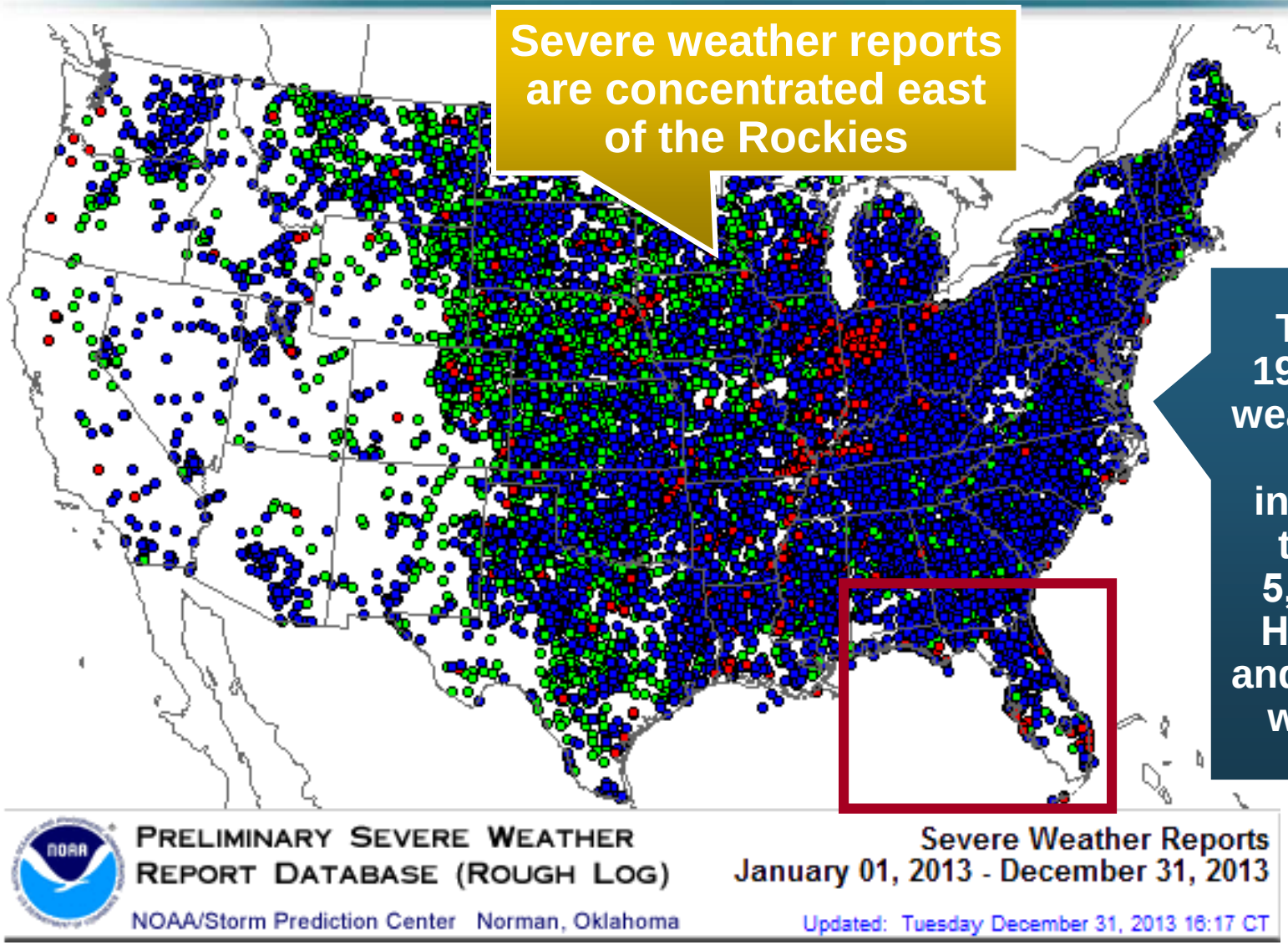
Location of High Wind Reports: 2013



There were 12,942 "Wind Damage" in 2013, causing extensive property damage

Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2013_annual_summary.html#

Severe Weather Reports: 2013



Source: NOAA Storm Prediction Center; http://www.spc.noaa.gov/climo/online/monthly/2013_annual_summary.html#

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Terrorism Update

Boston Marathon Bombings Underscore the Need for Extension of the Terrorism Risk Insurance Program

Download III's Terrorism Insurance Report at:
http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2013.html

Terrorism Risk Insurance Program

- Testified before Senate Banking Cmte. in Sept. 2013
- Testified before House Financial Services Nov. 2013
- Provided testimony at NYC hearing on June 2013
- I.I.I. Accelerated Planned Study on Terrorism Risk and Insurance in the Wake of Boston and Hearings; Was Well Received and Widely Circulated
- Working with Trades, Congressional Staff, GAO & Others

Senate Banking Committee, 9/25/13

House Financial Services Subcommittee, 11/13/13

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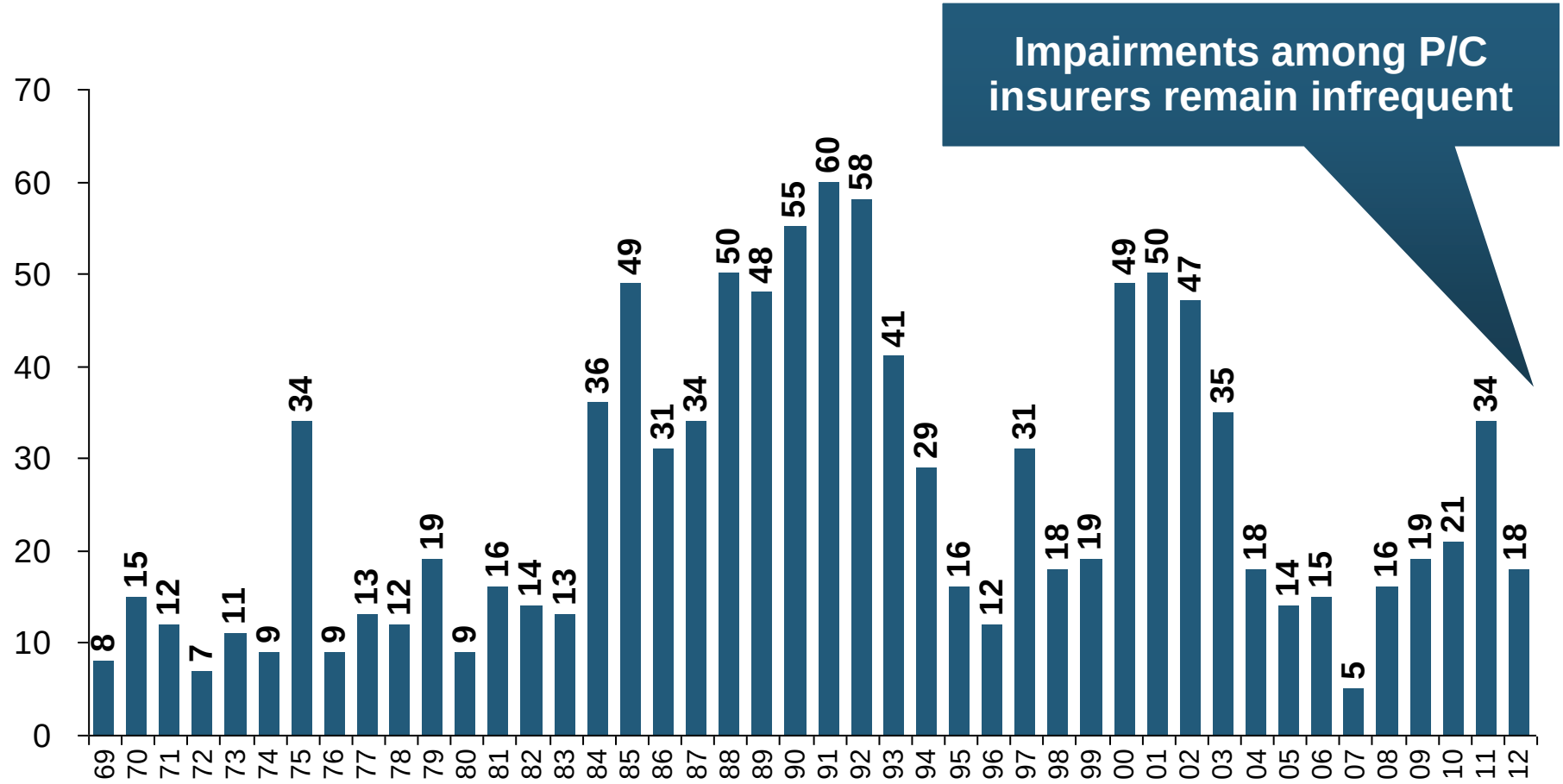
Financial Strength & Underwriting

Cyclical Pattern is P-C Impairment History is Directly Tied to Underwriting, Reserving & Pricing

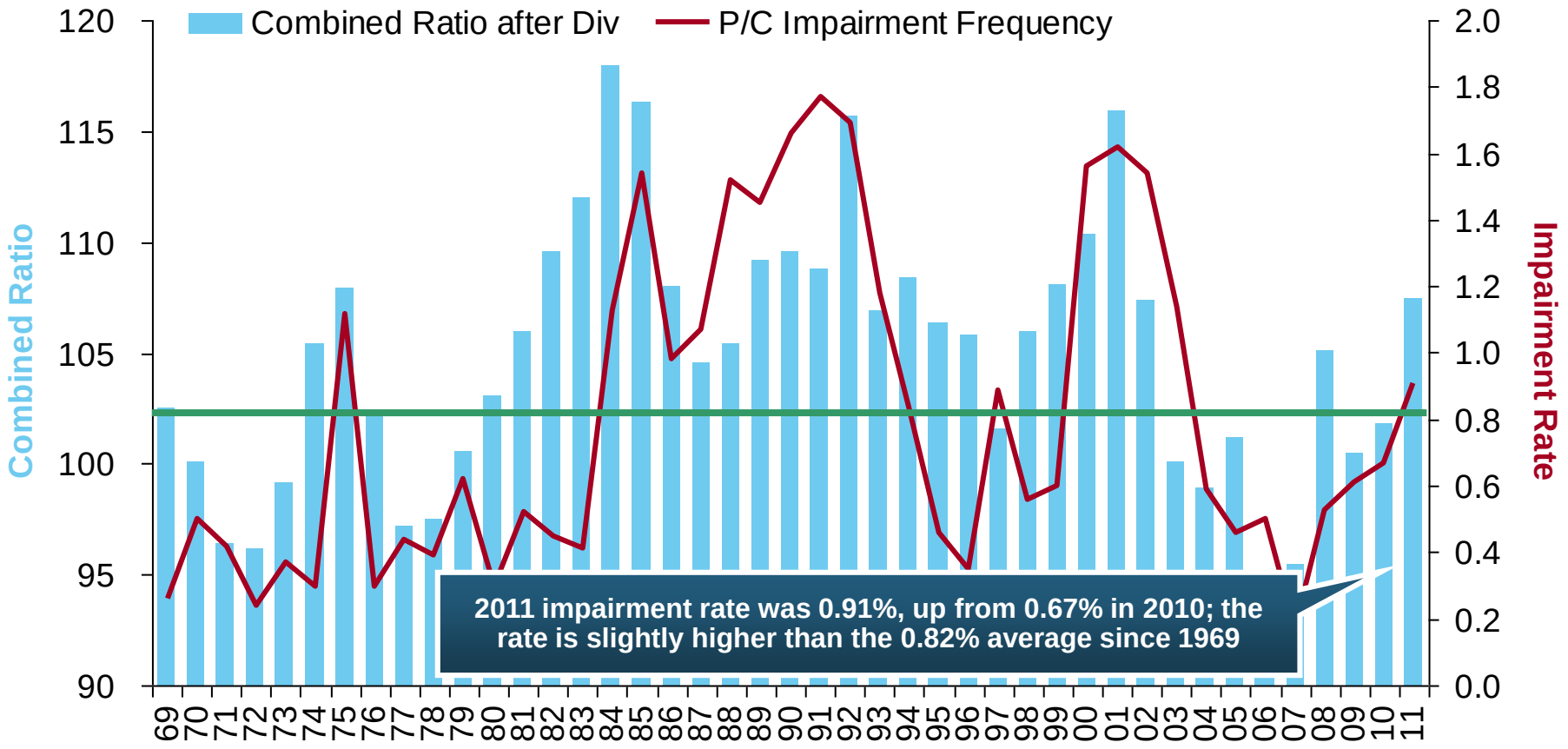
P/C Insurer Impairments, 1969–2012



The Number of Impairments Varies Significantly Over the P/C Insurance Cycle, With Peaks Occurring Well into Hard Markets

Source: A.M. Best Special Report "1969-2011 Impairment Review," June 2012 and March 6, 2013 update; Insurance Info. Institute.

P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2011

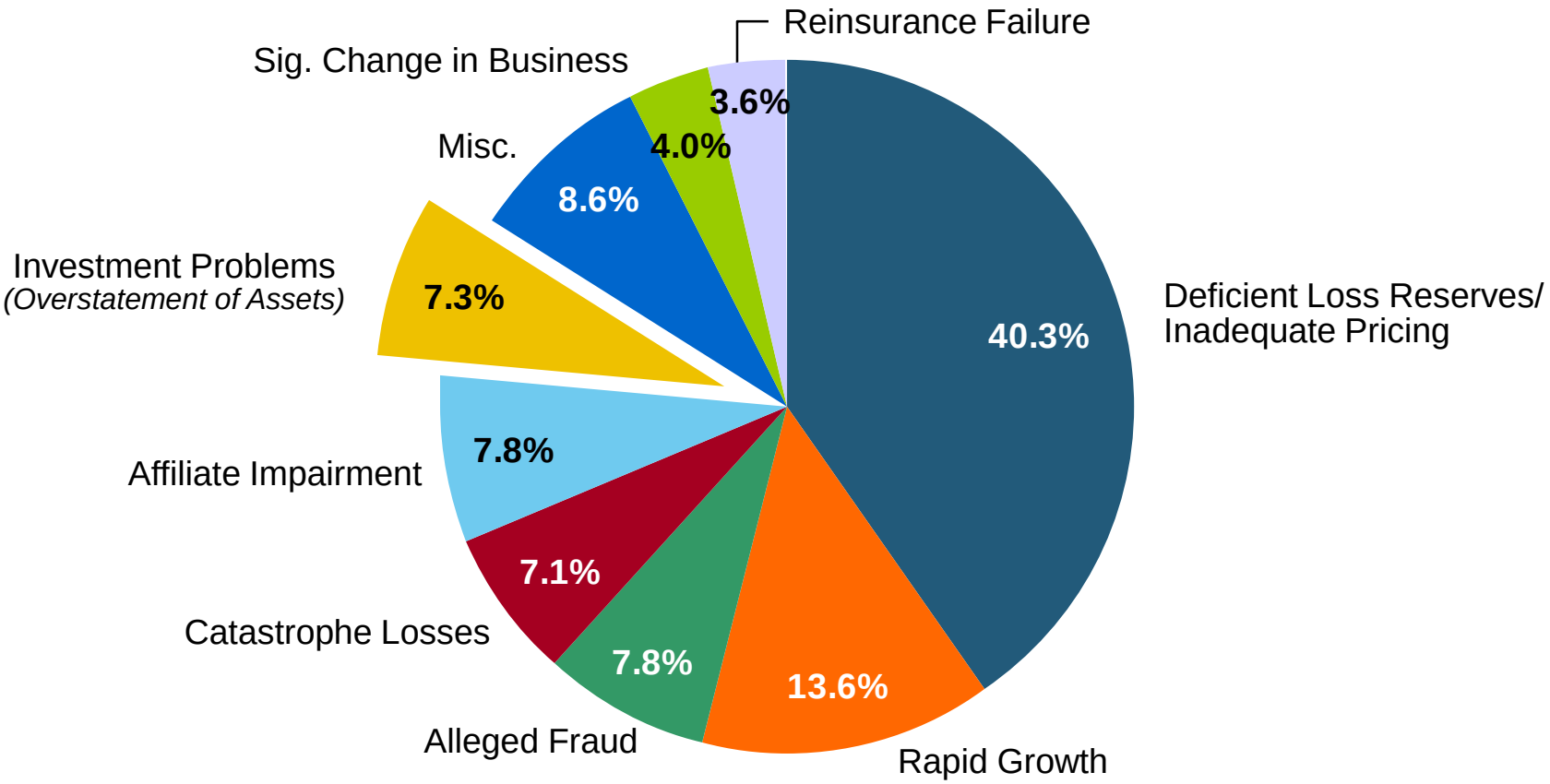


Impairment Rates Are Highly Correlated With Underwriting Performance and Reached Record Lows in 2007; Recent Increase Was Associated Primarily With Mortgage and Financial Guaranty Insurers and Not Representative of the Industry Overall

Source: A.M. Best; Insurance Information Institute

Reasons for US P/C Insurer Impairments, 1969–2010

Historically, Deficient Loss Reserves and Inadequate Pricing Are By Far the Leading Cause of P-C Insurer Impairments. Investment and Catastrophe Losses Play a Much Smaller Role



Source: A.M. Best: *1969-2010 Impairment Review*, Special Report, April 2011.

Top 10 Lines of Business for US P/C Impaired Insurers, 2000–2010

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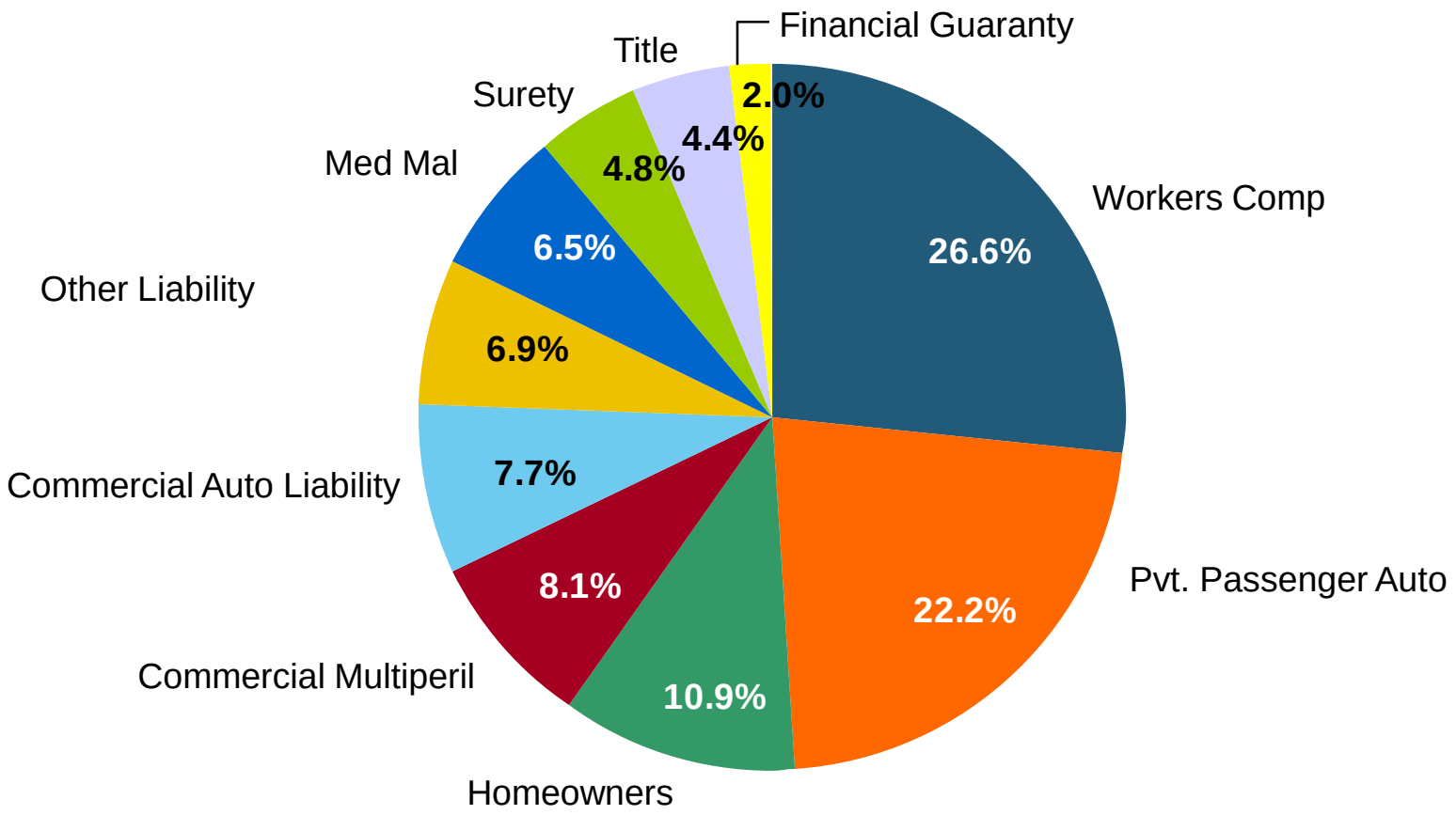
Workers Comp and Pvt. Passenger Auto Account for Nearly Half of the Premium Volume of Impaired Insurers Over the Past Decade



Source: A.M. Best: *1969-2010 Impairment Review*, Special Report, April 2011.

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CYBER RISK

Cyber Risk is a Rapidly Emerging Exposure for Businesses Large and Small in Every Industry

III White Paper:
http://www.iii.org/assets/docs/pdf/paper_CyberRisk_2013.pdf

Data Breaches 2005-2013, by Number of Breaches and Records Exposed

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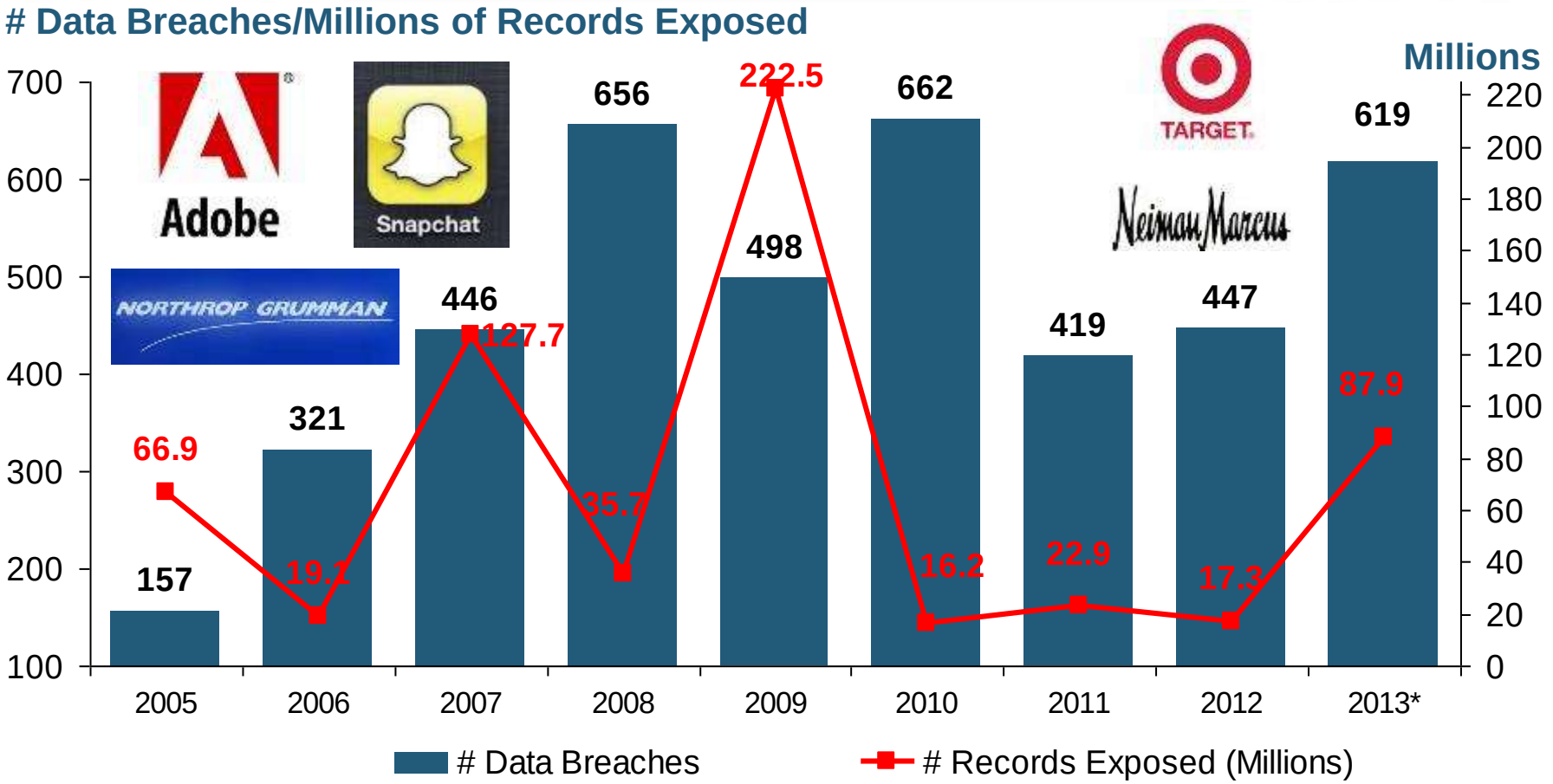

The Total Number of Data Breaches (+38%) and Number of Records Exposed (+408%) in 2013 Soared

* 2013 figures as of Jan. 1, 2014 from the ITRC updated to an additional 30 million records breached (Target) as disclosed in Jan. 2014.
Source: Identity Theft Resource Center.

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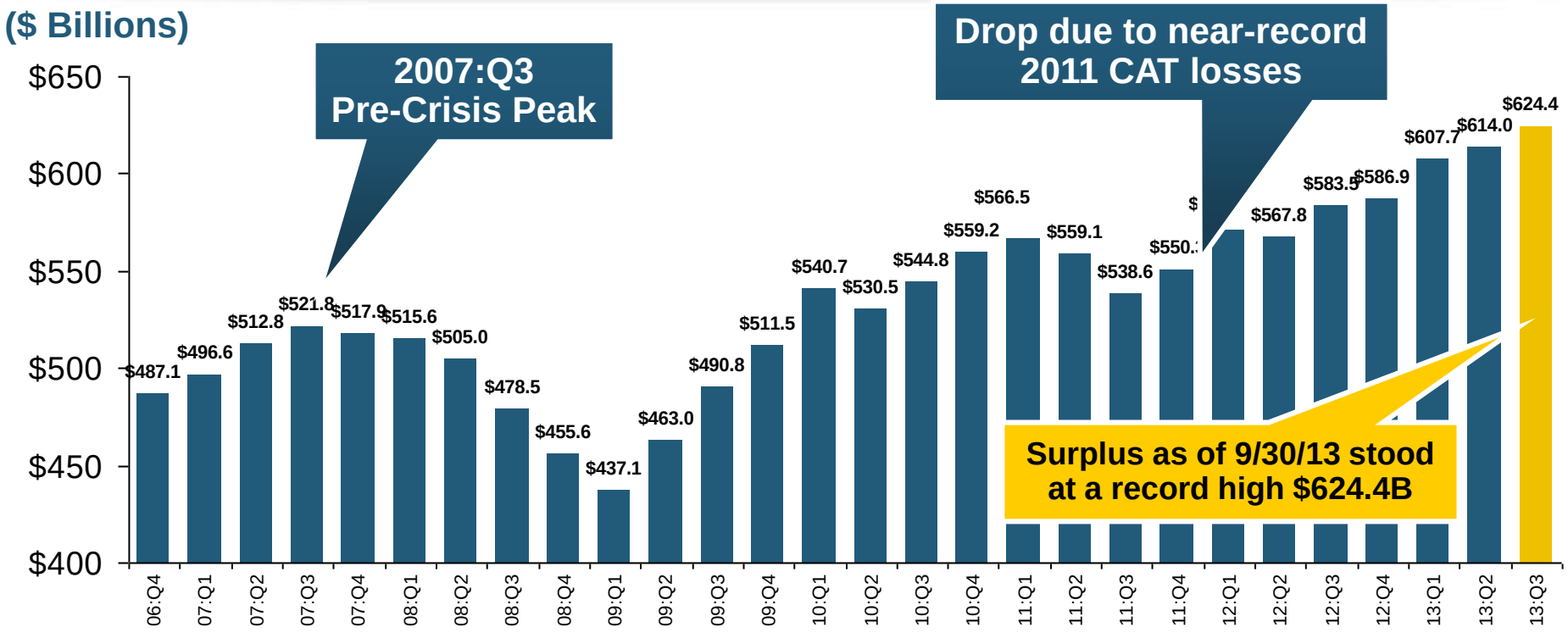
SURPLUS/CAPITAL/CAPACITY

2013 Recorded Yet Another Record High

Policyholder Surplus, 2006:Q4–2013:Q3



The industry now has $1 of surplus for every $0.78 of NPW, close to the strongest claims-paying status in its history.

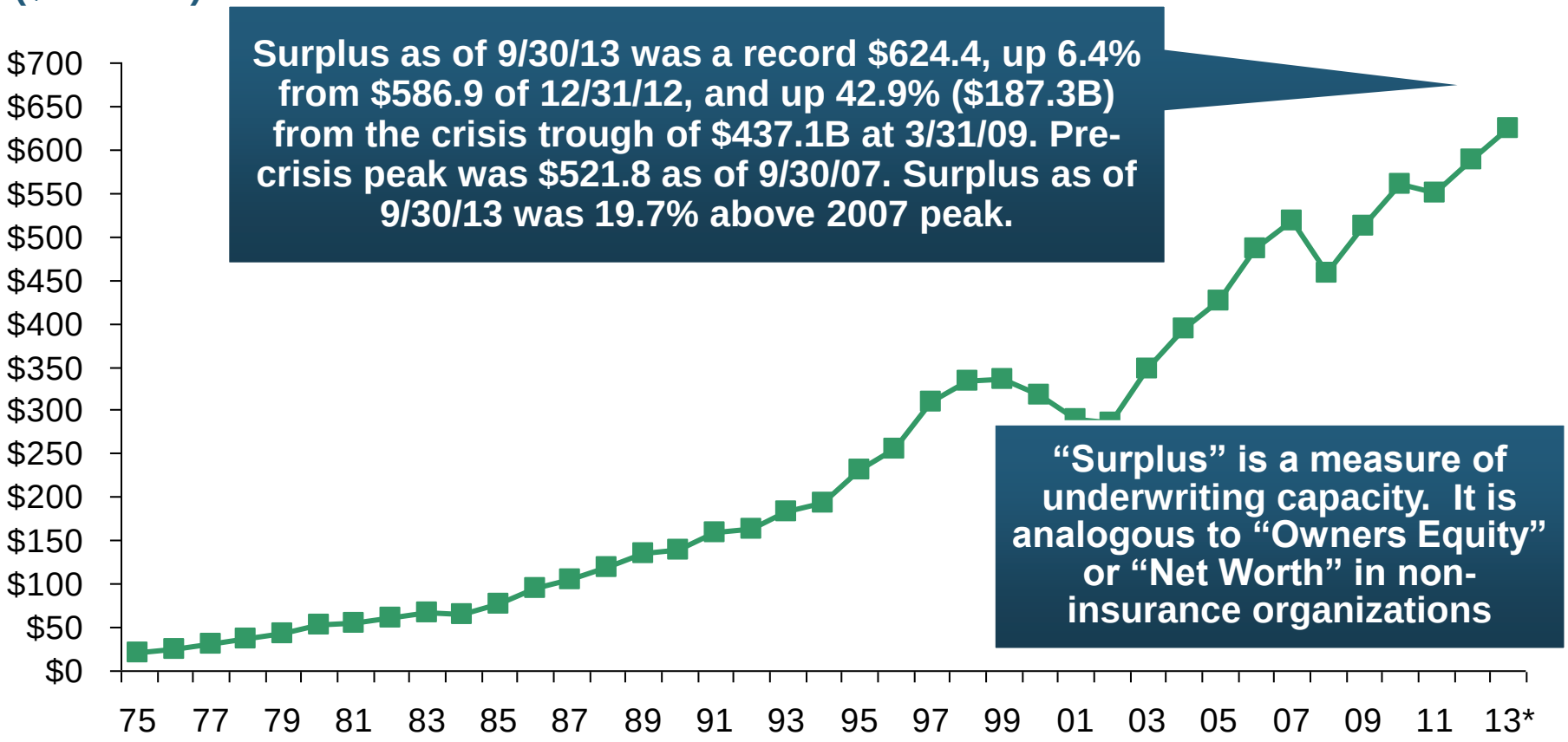
2010:Q1 data includes $22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business .

The P/C insurance industry entered 2014 in very strong financial condition.

Sources: ISO, A.M .Best.

US Policyholder Surplus: 1975–2013*

($ Billions)



Surplus as of 9/30/13 was a record $624.4, up 6.4% from $586.9 of 12/31/12, and up 42.9% ($187.3B) from the crisis trough of $437.1B at 3/31/09. Pre-crisis peak was $521.8 as of 9/30/07. Surplus as of 9/30/13 was 19.7% above 2007 peak.

"Surplus" is a measure of underwriting capacity. It is analogous to "Owners Equity" or "Net Worth" in non-insurance organizations

The Premium-to-Surplus Ratio Stood at $0.78:$1 as of 9/30/13, a Near Record Low (at Least in Recent History)*

* As of 9/30/13.

Source: A.M. Best, ISO, Insurance Information Institute.

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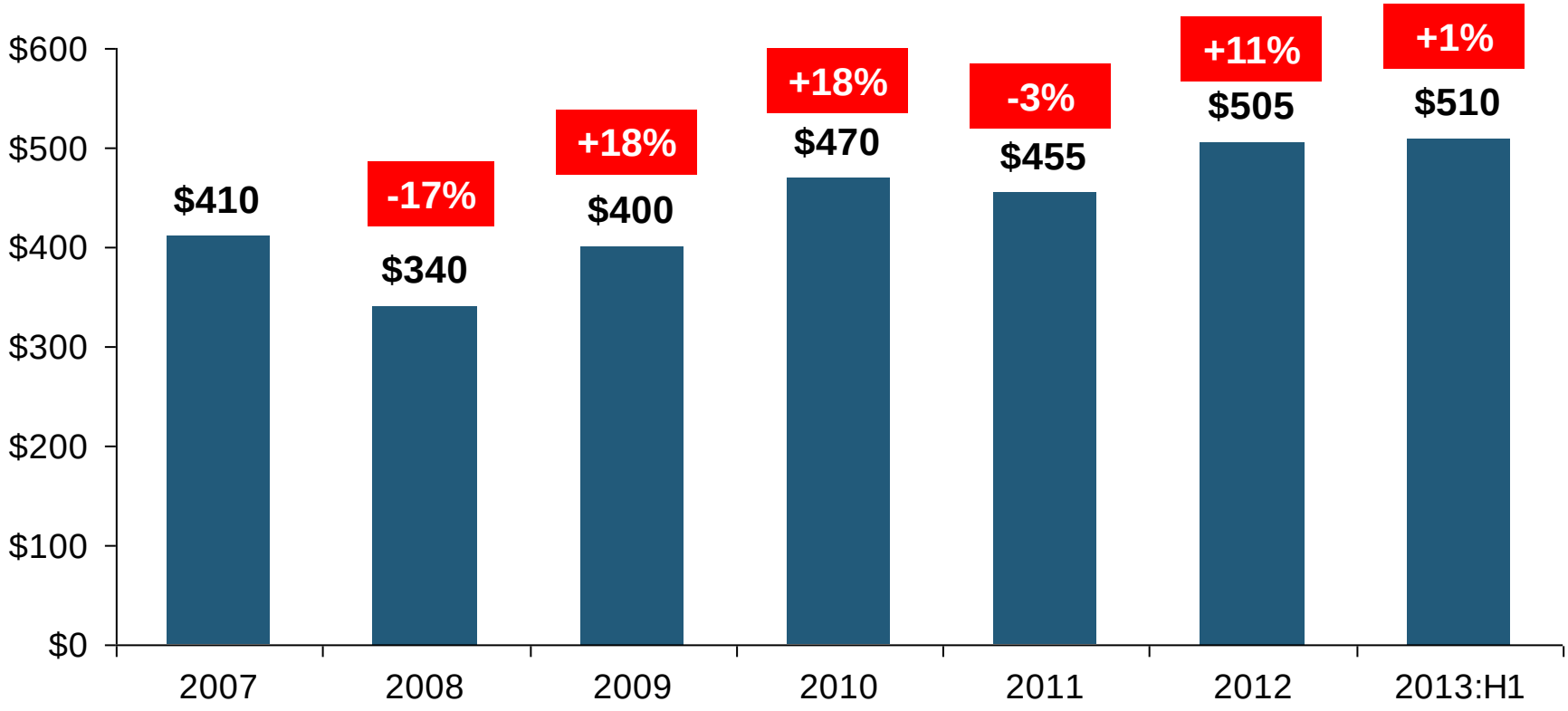
3. REINSURANCE MARKET CONDITIONS

Ample Capacity as Alternative Capital is Transforming the Market

Global Reinsurer Capital, 2007-2013:H1*

($ Billions)

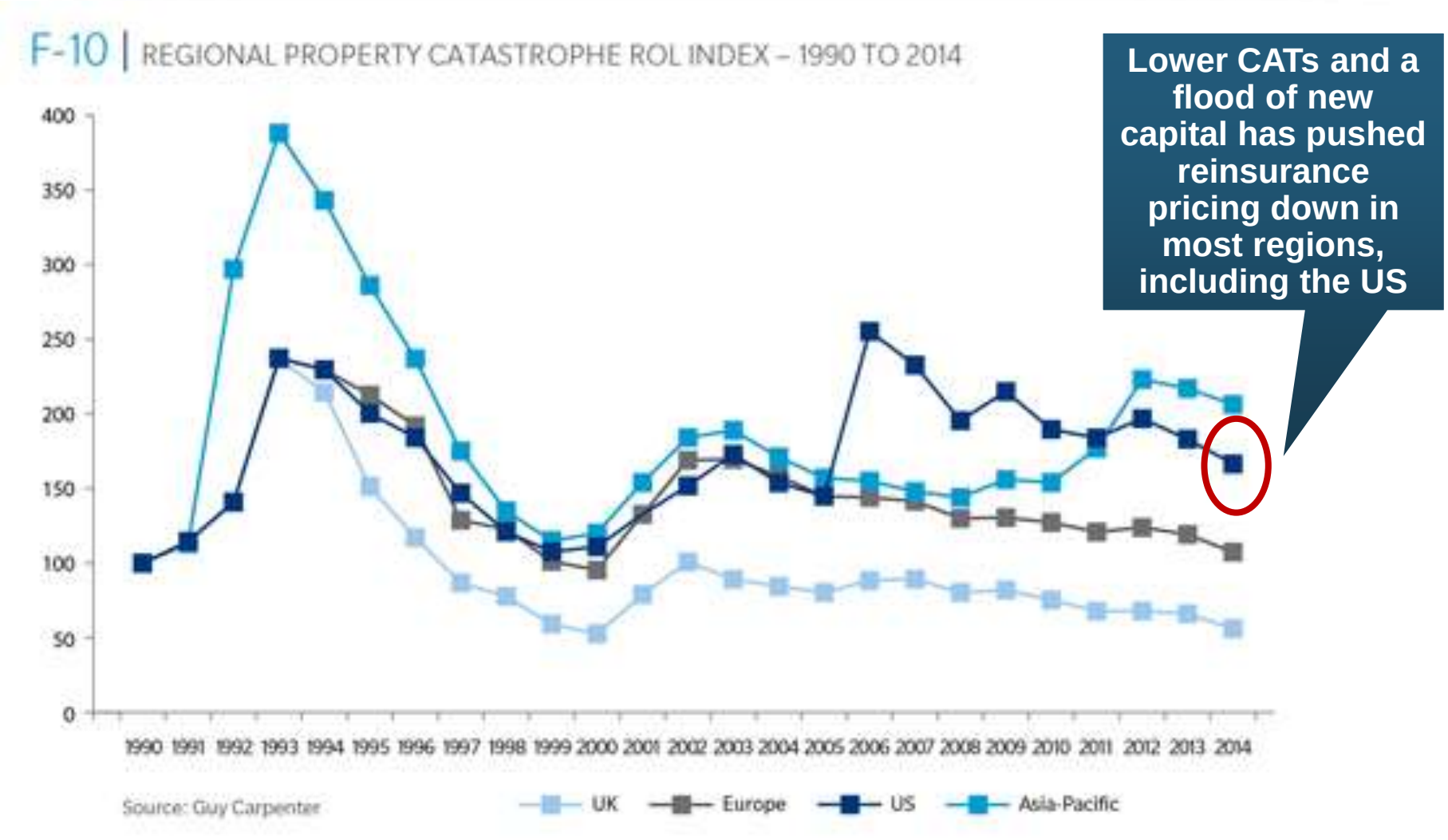


Global Reinsurance Capital Has Been Trending Generally Upward Since the Global Financial Crisis, a Trend that Seems Likely to Continue

*Includes both traditional and non-traditional forms of reinsurance capital.

Source: Aon Benfield Aggregate study for the 6 months ending June 2013; Insurance Information Institute.

Reinsurance Pricing: Rate-on-Line Index by Region, 1990 – 2014*



*As of Jan. 1.
Source: Guy Carpenter

Alternative Capacity as a Percentage of Global Property Catastrophe Reinsurance Limit

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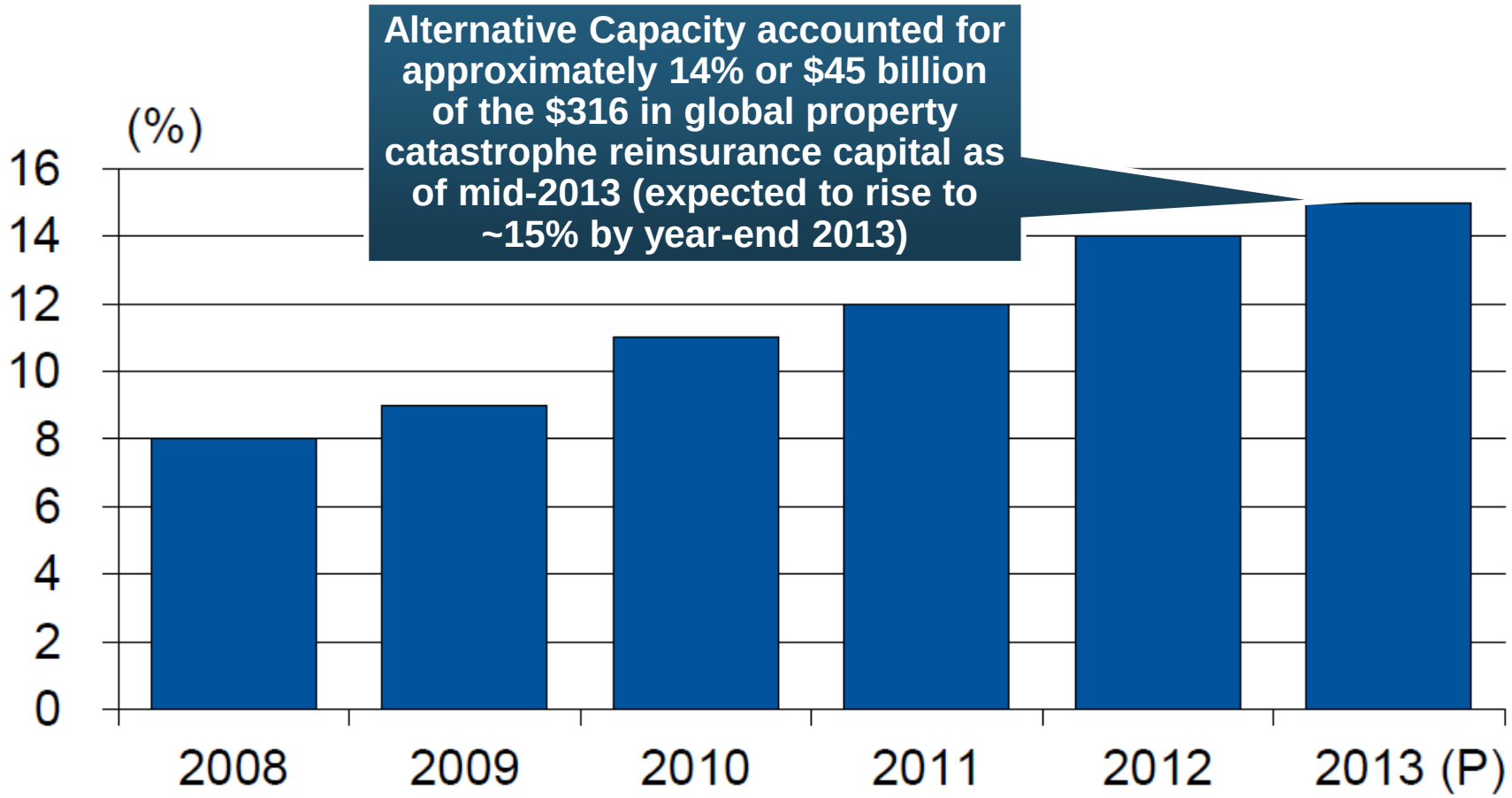
(As of Year End)



Source: Guy Carpenter

Property Catastrophe Reinsurance Capacity by Source as of Mid-2013 ($ Bill)

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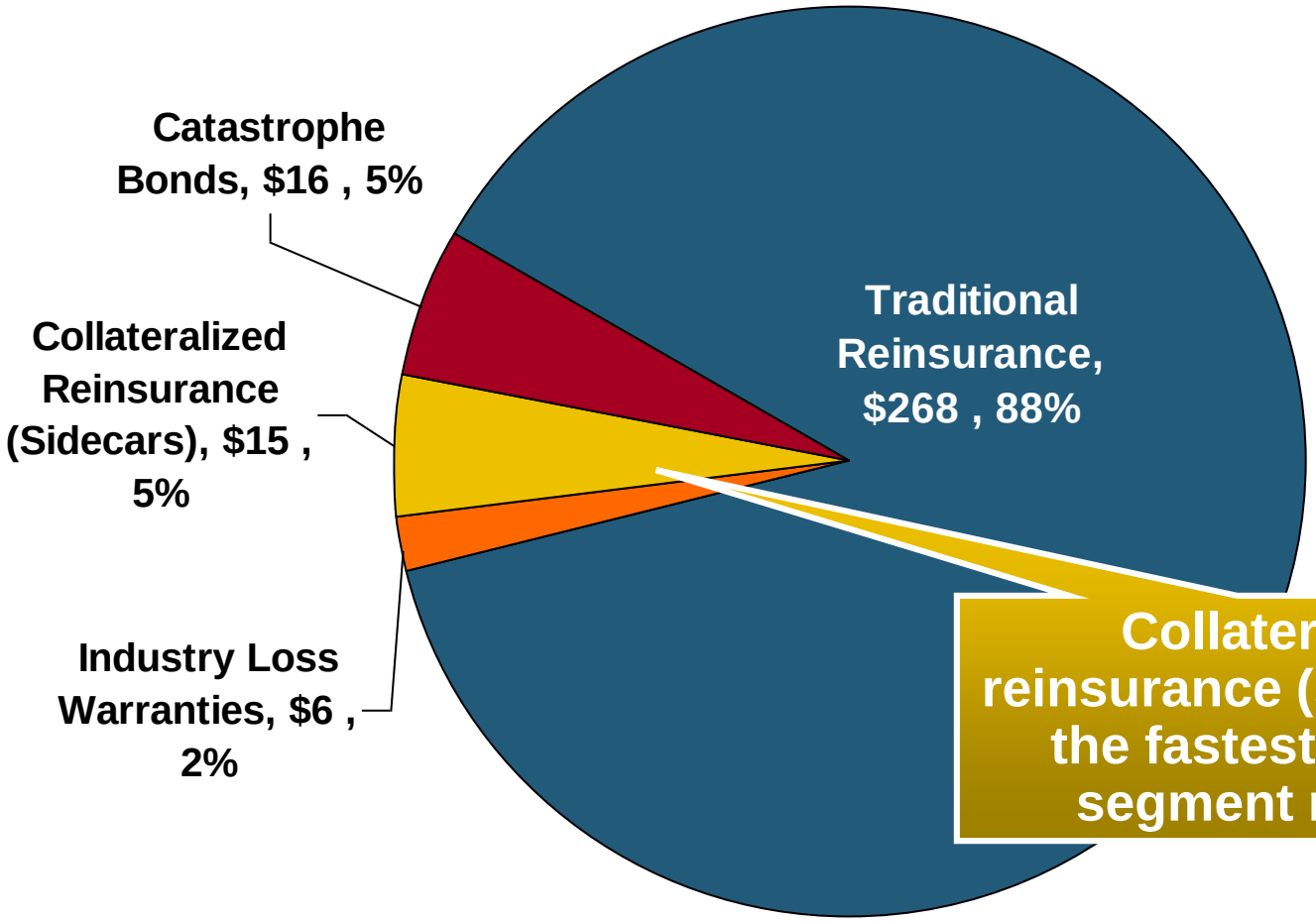
Total = $316 Billion*

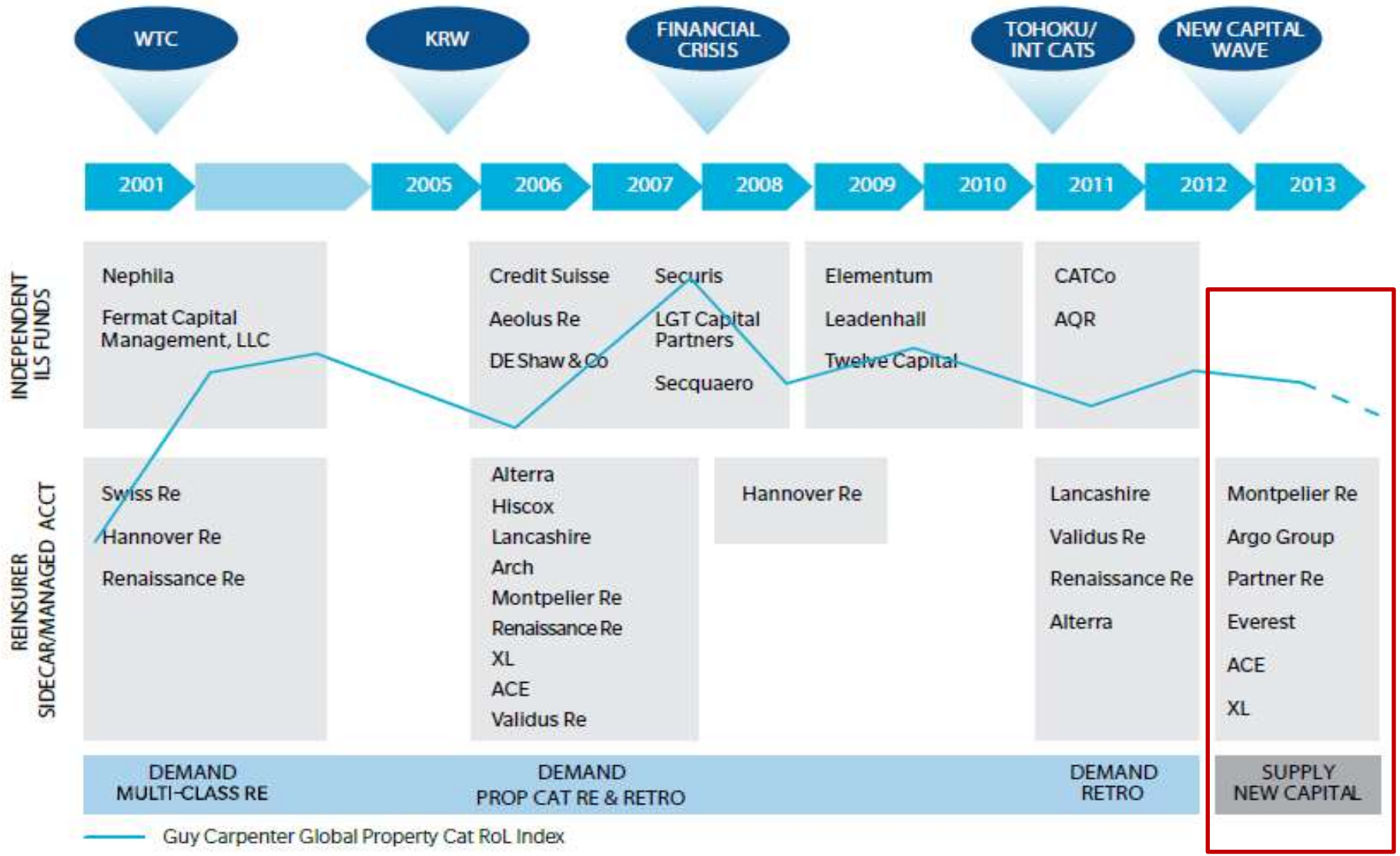


"Convergence Capital" accounted for an estimated $45B or 14% or total property catastrophe reinsurance capacity as of mid-2013, up $10B over the past 18 months (since 1/1/12). Penetration of this type of capacity is growing

Collateralized reinsurance (sidecars) is the fastest growing segment recently

Source: Guy Carpenter; *Mid-Year Market Report,* September 2013; Insurance Information Institute.

Alternative Capacity Development, 2001—2013:H1



Source: Guy Carpenter; *Mid-Year Market Report,* September 2013; Insurance Information Institute.

Non-Traditional Property Catastrophe Limits by Type, YE 2012 vs. YE 2015E

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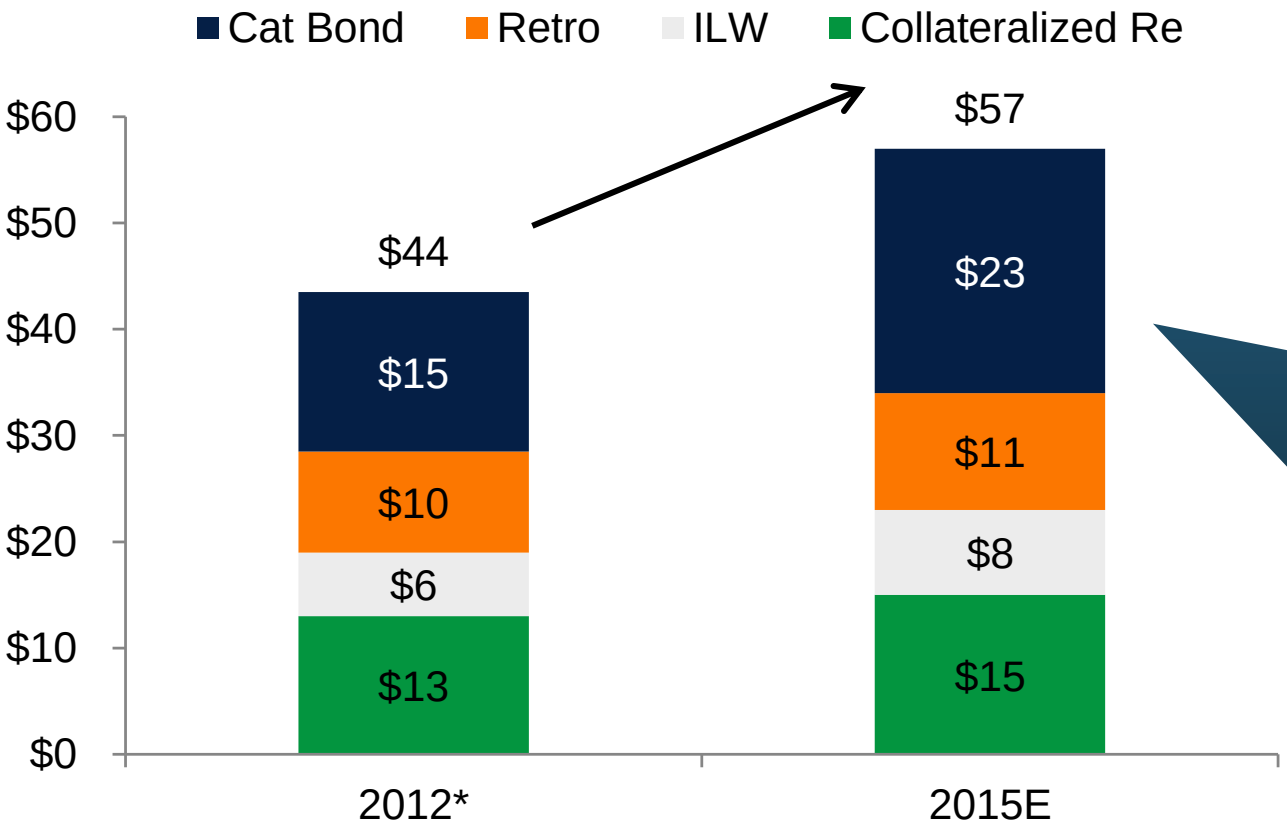
NON-TRADITIONAL P/CAT LIMITS BY TYPE



Alternative capital is expected to rise by 30% by YE 2015 and will ultimately account for 20-30% of total reinsurance spend, according to Guy Carpenter

Source: Guy Carpenter; *As Of Mar-2013

Source: Guy Carpenter; Reinsurance Association of America; Insurance Information Institute.

Catastrophe Bonds: Issuance and Outstanding, 1997- 2013*

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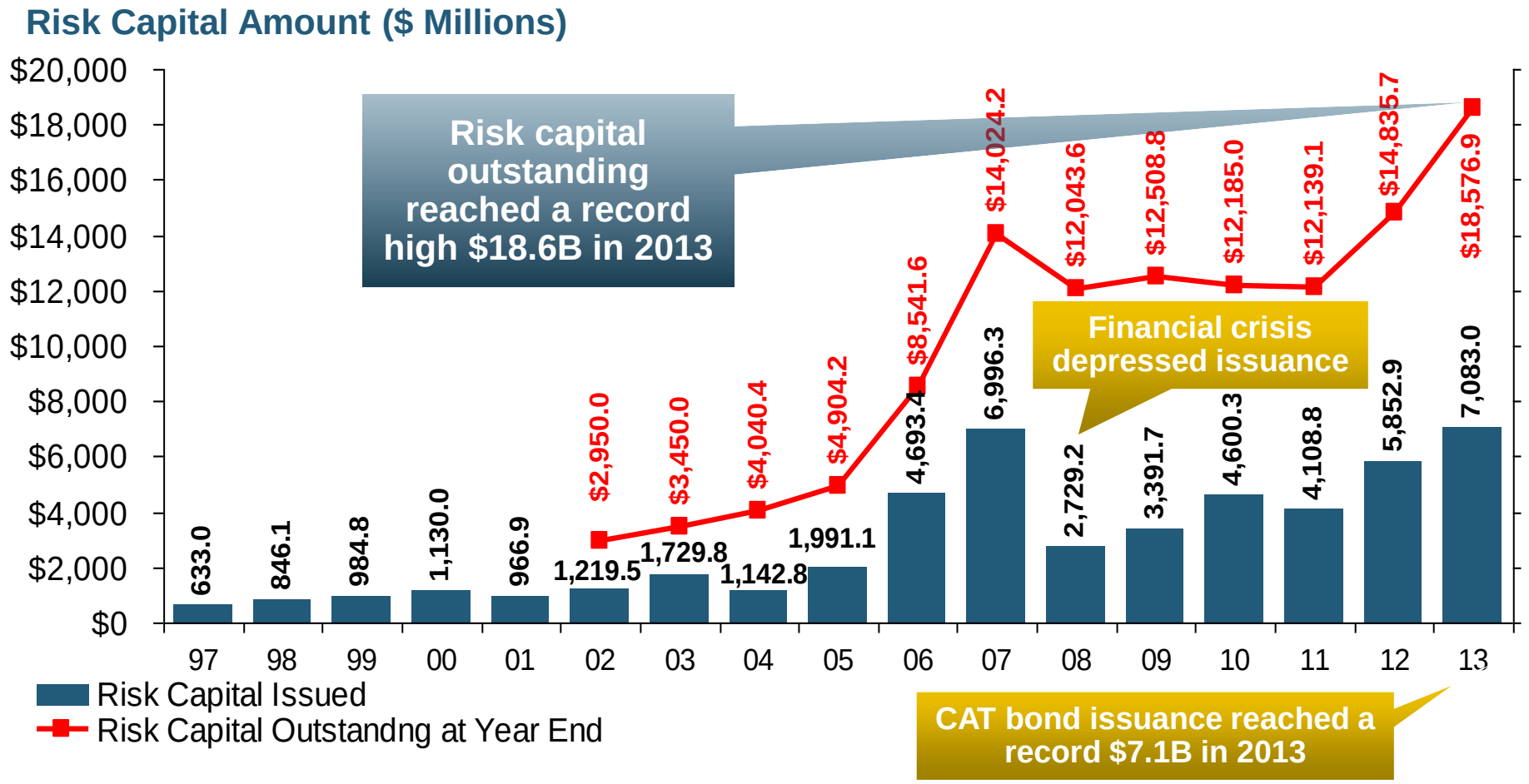

Catastrophe Bond Issuance and Risk Capital Outstanding Reached All-Time Record Highs in 2013

*Through Dec. 31, 2013.
Source: Guy Carpenter; Insurance Information Institute.

CATASTROPHE BONDS, ANNUAL RISK CAPITAL ISSUED, 2002-2013

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($ Billions)

Catastrophe bond issuance hit a new record high in 2013

Source: GC Securities and Guy Carpenter & Company, LLC.

CATASTROPHE BONDS, RISK CAPITAL OUTSTANDING, 2002-2013

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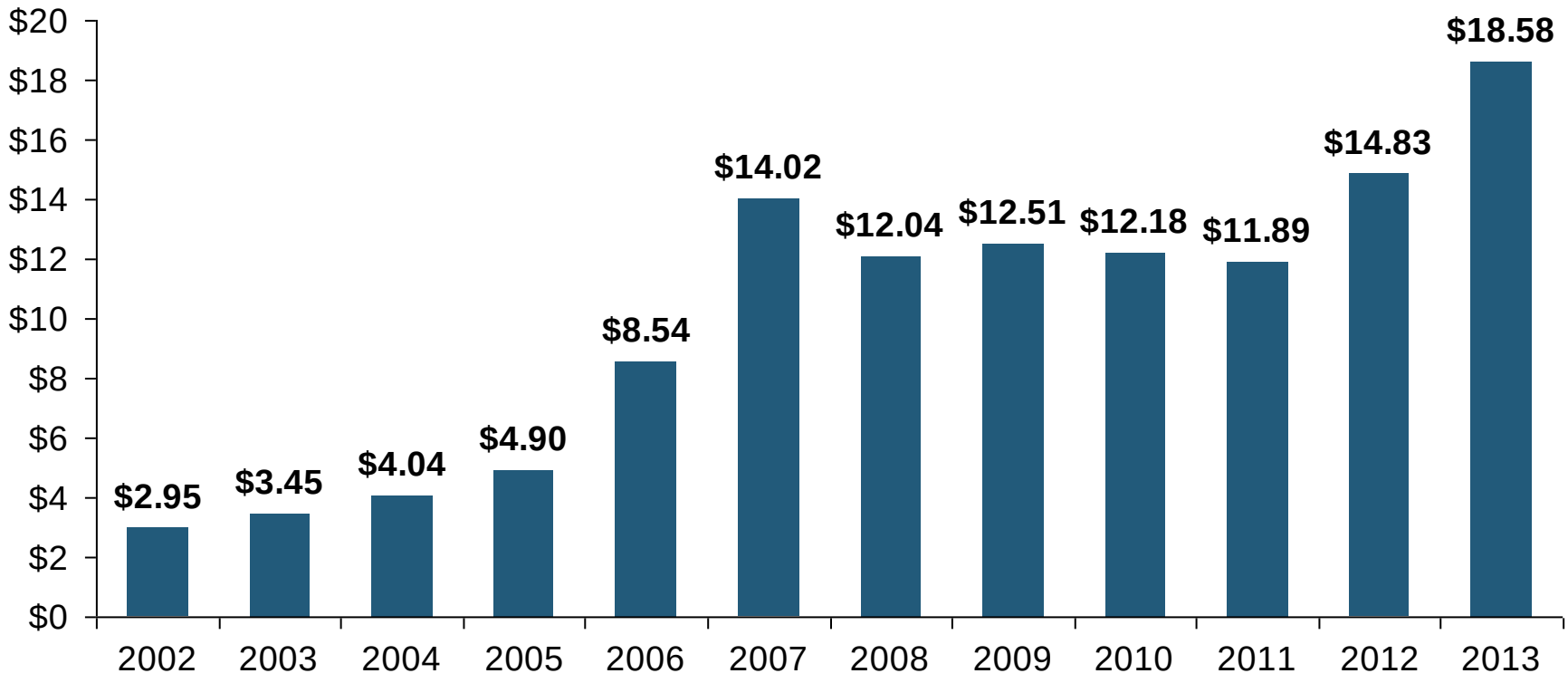
($ Billions)



Catastrophe bond risk capital outstanding hit a new record high in 2013

Source: GC Securities and Guy Carpenter & Company, LLC.

Catastrophe Bond Issuances, First Half 2013

Sponsor	Transaction	Amount ($ Mil.)	2013 Issue Date	Peril
Cincinnati Insurance Group	Skyline Re Ltd.	61.2	January	U.S. Earthquake and Thunderstorm
Nationwide Mutual	Caelus Re 2013	270	March	U.S. Hurricane and Earthquake
Citizens Property Insurance	Everglades Re	250	March	Florida Hurricane
State Farm	Merna Re IV	300	April	U.S. Earthquake
Nationwide Mutual	Caelus Re 2013	320	April	U.S. Hurricane and Earthquake
North Carolina JUA/IUA	Tar Heel Re	500	April	North Carolina Hurricane
Turkish Catastrophe Insurance Pool	Bospherus 1 Re	400	April	Turkey Earthquake
Louisiana Citizens	Pelican Re	140	May	Louisiana Hurricane
American Coastal Insurance Company	Armor Re	183	May	Florida Hurricane
Travelers	Long Point Re III	300	May	Northeast U.S. Hurricane
Florida Municipal Insurance Trust	Sunshine Re	20	May	Florida Hurricane
Allianz	Blue Danube II	175	May	Earthquake
USAA	Residential Re	300	May	U.S. Hurricane, Earthquake, Thunderstorm
Southern Oak	Oak Leaf Re	30	May	Florida Hurricane
Allstate	Sanders Re	350	May	U.S. Hurricane and Earthquake
Amlin AG	Tramline Re II	75	June	U.S. Hurricane/Canada Earthquake
Munich Re	Queen Street VIII Re	75	June	U.S. Hurricane/Australia Cyclone
Assurant	Ibis Re II	185	June	U.S. Hurricane

Sources: Willis Capital Markets & Advisory, Fitch Ratings; Insurance Information Institute.

Sidecar Transactions (Post-Sandy) and Hedge Fund-Backed Reinsurers

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Sidecar Transactions — Post Hurricane Sandy

Sponsor	Transaction	Capital ($ Mil.)	Date
Lancashire	Saltire Re I	250	November 2012
Alterra	New Point V	247	December 2012
RenRe	Upsilon Re II	185	January 2013
Argo	Harambee Re	N.A.	January 2013
Validus	AlphaCat Re 2013	230	January 2013
Everest Re	Mt. Logan Re	250	January 2013
PartnerRe	Lorenz Re	75	March 2013
ACE	Altair Re	95	April 2013

N.A. – Not available.
Source: Company press releases and filings.

Sidecars (collateralized reinsurance) are the fastest growing alternative capital segment, account for about 15% or $5 bill of total property catastrophe reinsurance capital

Hedge Fund-Backed Reinsurers

Company	Initial Capital ($ Mil.)	Operations Date	Major Investors
AQR Re Ltd.	260	Jan. 2012	AQR Capital Management, LLC
Greenlight Capital Re, Ltd.	212	April 2006	Greenlight Capital
PaCRe, Ltd.	500	April 2012	Paulson & Co., Validus
S.A.C. Re Holdings Ltd.	500	July 2012	S.A.C. Capital Advisors, Capital Z Partners III LP
Third Point Reinsurance Co. Ltd.	750	Jan. 2012	Third Point LLC, Kelso & Co, Pine Brook Road Partners

Source: Company press releases and filings.

More hedge fund money is coming into the business

Sources: Willis Capital Markets & Advisory, Fitch Ratings; Insurance Information Institute.

(Re) Insurers Investing in Insurance Linked Securities (ILS) Fund Managers

(Re)insurer	Asset Manager/Fund
Alleghany	Ares Management
Allied World	Aeolus Capital Management
Amlin	Leadenhall Capital Partners
Aspen Re	Cartesian Iris Re
Hannover Re	Leine Investment
Lancashire	Saltire Management
Montpelier Re	Blue Capital Management
Munich Re	MEAG Munich Ergo
RenaissanceRe	RenaissanceRe Ventures
SCOR	Atropos
Transatlantic	Pillar Capital Holdings
Validus	AlphaCat Fund
XL	Stone Point Capital

Several (re)insurers have formed asset managers or invested in independent asset managers that are focused on managing catastrophe/ILS funds for outside investors. These asset managers invest third party capital in instruments with returns linked to property catastrophe reinsurance retrocession and ILS contracts.

Sources: Willis Capital Markets & Advisory, Fitch Ratings; Insurance Information Institute.

Alternative Reinsurance Capital Summary

- **Alternative Reinsurance Here to Stay**
  - ➢Capital markets have effectively discovered reinsurance another "asset class," in part due to Federal Reserve's unprecedented actions since the financial crisis to keep interest rates low across the entire yield curve.

  - ➢A convergence of the reinsurance and capital markets persists with many companies both providing and using alternative forms of risk transfer to supplement the traditional balance sheet, transforming several reinsurers into risk asset managers. These structures include catastrophe bonds (cat bonds), collateralized quota-share reinsurance vehicles (sidecars), industry loss warranties (ILWs), hedge fund-supported reinsurers and asset managers investing in insurance-linked securities (ILS).

- **Property Catastrophe Drives Market:**
  - ➢ The nature of property catastrophe risk as being highly modeled and commoditized serves as an important economic force driving its transfer into the capital markets. Casualty (re)insurance lines have had limited movement into the alternative reinsurance market thus far, as the less standardized and more specialized nature of these longer term risks makes them better suited for more permanent traditional capacity providers.

Sources: Fitch Ratings, *Alternative Reinsurance Market Update,* September 5, 2013; Insurance Information Institute.

Alternative Reinsurance Capital Summary (continued)

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- **Strong Investor Demand**
  - ➢Comparatively high potential returns of catastrophe risk through cat bonds and sidecar investments are particularly attractive to investors, although this spread has been shrinking due to increased investor demand. However, the lack of correlation between catastrophe losses and returns on other major asset classes should continue to contribute to strong demand from investors, which include hedge funds, private equity and institutional investors.

- **Shock (i.e., Large Loss) Event Could Alter Market**
  - ➢One area of uncertainty is how investors would react to an environment of *less favorable catastrophe risk spreads* or a *large unexpected catastrophe loss*, either of which could cause capital to retreat. This risk is likely higher for hedge fund capital, as pension fund capital tends to be more permanent, given their long-term investment outlook and more diversified risk exposure.
- **Mixed Impact to Reinsurers' Ratings:**
  - ➢Fitch views the growth and acceptance of alternative reinsurance as a mixed impact for the credit quality of reinsurers' ratings. Favorably, these products can be used to manage reinsurers' exposure and capital and serve as a source of fee income. Negatively, alternative coverage represents competition for traditional reinsurers that, in conjunction with the strong overall capitalization of the reinsurance industry, have worked to notably dampen reinsurance pricing

Sources: Fitch Ratings, *Alternative Reinsurance Market Update,* September 5, 2013.

Alternative Reinsurance Capital Summary (continued)

- **Sponsors Benefit From New Issuance:**
  - ➢As investor demand has continued to grow for catastrophe bonds, sponsors have been able to offer deals at considerably lower coupon rates and with increasingly favorable structures that suit individual company needs. These market conditions are likely to drive further issuance of cat bonds in the near term if (re)insurers believe they can produce a cost-effective alternative to supplement their reinsurance program. As of midyear, 2013 is on track to produce a record amount of catastrophe bond issuance.

- **Sidecars Continue to Provide Capacity:**
  - ➢Several sidecars emerged late in 2012 and early into 2013 following Hurricane Sandy. These vehicles were opportunistically seeking to capitalize on any potential improvements in property catastrophe pricing. However, they also represented several newer entrants into the alternative reinsurance space looking to participate in what continues to be an important and growing segment of the reinsurance market.

Sources: Fitch Ratings, *Alternative Reinsurance Market Update,* September 5, 2013.

Questions Arising from Influence of Alternative Capital

- **Could Pension Fund Money Swamp Traditional Capacity?**
  - US private pension funds hold ~$7 trillion in assets
  - 2% allocation = $140 billion
  - Global property cat capital = ~$316 bill as of mid-2013
- **Do New Investors Have a Lower Cost of Capital?**
  - New capacity expects 6-8% rate of return compared to 8-10% for traditional reinsurance, according to Dowling & Partners
- **Will Reinsurance Pricing Become More Closely Linked to Interest Rates?**
- **Will the New Capital Exit if:**
  - ILS sustain losses from major CAT events
  - Interest rates rise

Alternative Capital: Important Definitions

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Alternative Reinsurance Market

Alternative reinsurance is effectively any form of managing and transferring (re)insurance risk through the use of the capital markets rather than the traditional reinsurance market. These nontraditional structures commonly include catastrophe bonds (cat bonds), collateralized quota-share reinsurance vehicles (sidecars) and industry loss warranties (ILWs).

Alternatives to traditional reinsurance essentially began following Hurricane Andrew, with the introduction of exchange traded insurance options in 1992, the first cat bond in 1994, and later sidecars in 2001, following the events of Sept. 11, 2001. However, the market began to grow significantly following Hurricane Katrina in 2005, as (re)insurers were essentially forced to increase issuances of catastrophe bonds and expand the use of sidecars in order to absorb underwriting capacity as retrocession availability became more scarce and expensive.

Catastrophe Bonds

Cat bonds are bonds issued by an insurer with a condition that if the issuer suffers a catastrophe loss greater than a specified amount, the obligation to pay interest/principal is deferred or forgiven, thus effectively prompting a default on the bond. Cat bonds allow sponsors (most often a (re)insurer) to transfer a portion of its catastrophe risk to the capital markets through securities purchased by investors and actively traded in the secondary market.

Favorably for the sponsor, cat bonds offer collateralized (most often invested in U.S. Treasury Money Market Funds) protection that is locked in at a fixed cost over multiple years (typically two to four years). This allows the (re)insurer to be less subject to changing reinsurance market conditions. For the investor, cat bonds offer a comparatively high yield and an opportunity to diversify their portfolios. This is due to the lack of correlation between catastrophe losses and returns on other major asset classes that are tied to more macroeconomic and financial market conditions.

Sidecars

Sidecars are special-purpose reinsurers that provide dedicated collateralized quota-share reinsurance, often for a single ceding company that transfers a portion of its underwriting risk (and related capital investment), and in turn receives a ceding commission. They also can be a source of fee income for the reinsurers that underwrite or provide management services to such third-party risk vehicles.

Sidecar vehicles are often established by traditional reinsurers as a means to tap into the external capacity offered by the capital markets from hedge funds, investment banks, private equity and other opportunistic investors and increase the efficiency and diversification of the company's reinsurance program. They typically have a limited life expectancy and are often wound up when market conditions deteriorate, after which any remaining capital funds are returned to investors and the sponsor.

Industry Loss Warranties

ILWs are a type of private reinsurance or derivative contract through which one party (often an insurer) will purchase protection based on the total loss arising from an event to the entire insurance industry rather than their own losses. The buyer pays a premium to the company that writes the ILW cover (often a reinsurer or hedge fund) and in return receives coverage for a specified limit if industry losses exceed the predefined amount under the ILW trigger.

Sources: Fitch Ratings; Insurance Information Institute.

Insurance Information Institute Online:

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