



# **Overview & Outlook for the P/C Insurance Industry**

## ***Northwest Insurance Review & Forecast***

**Insurance Information Institute**

**September 25, 2014**

**Download at [www.iii.org/presentations](http://www.iii.org/presentations)**

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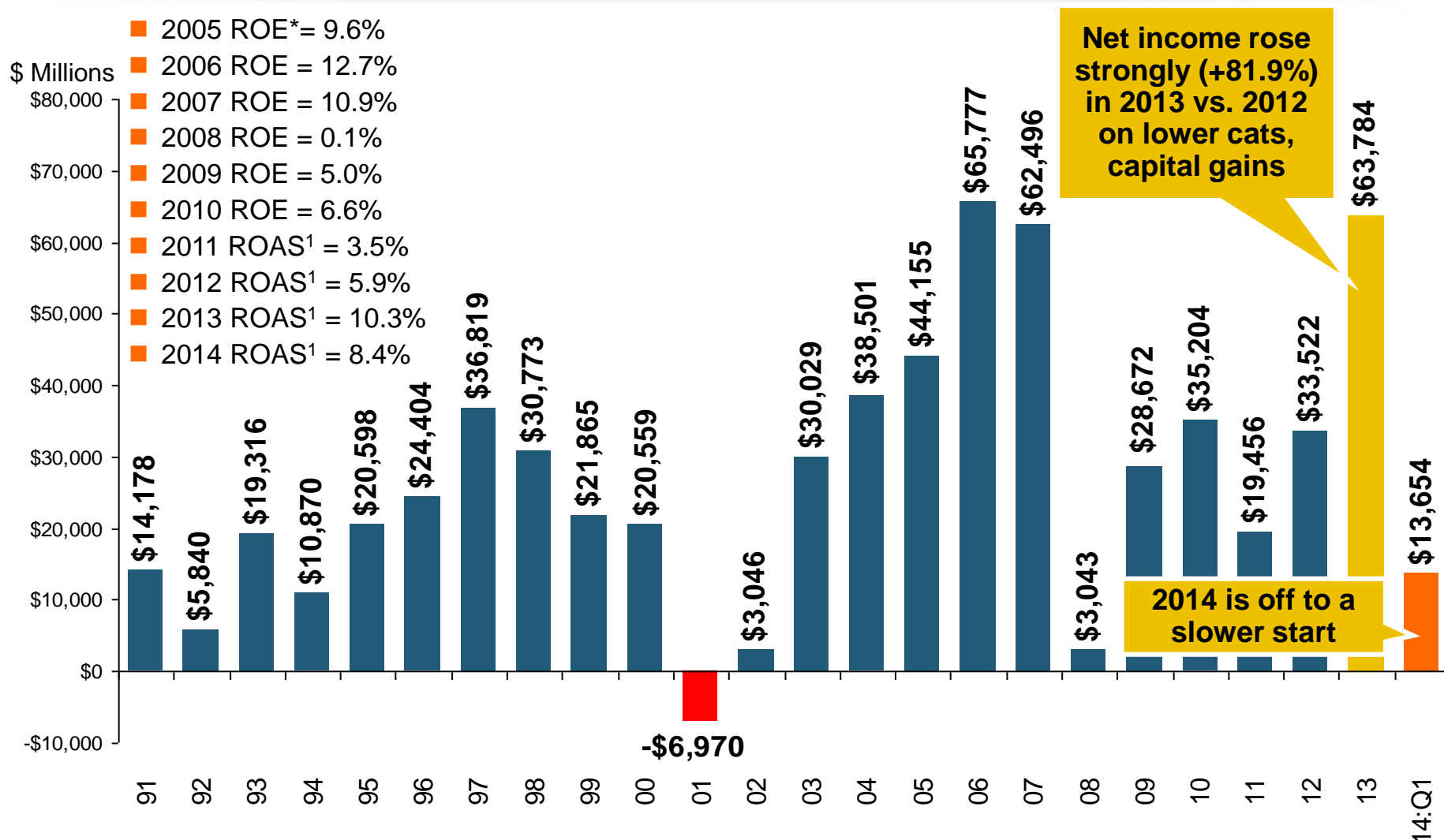


# **P/C Insurance Industry: *Financial Update***

**2013 Was the Industry's Best Year  
in the Post-Crisis Era**

***2014 Performance is Reasonably Good***

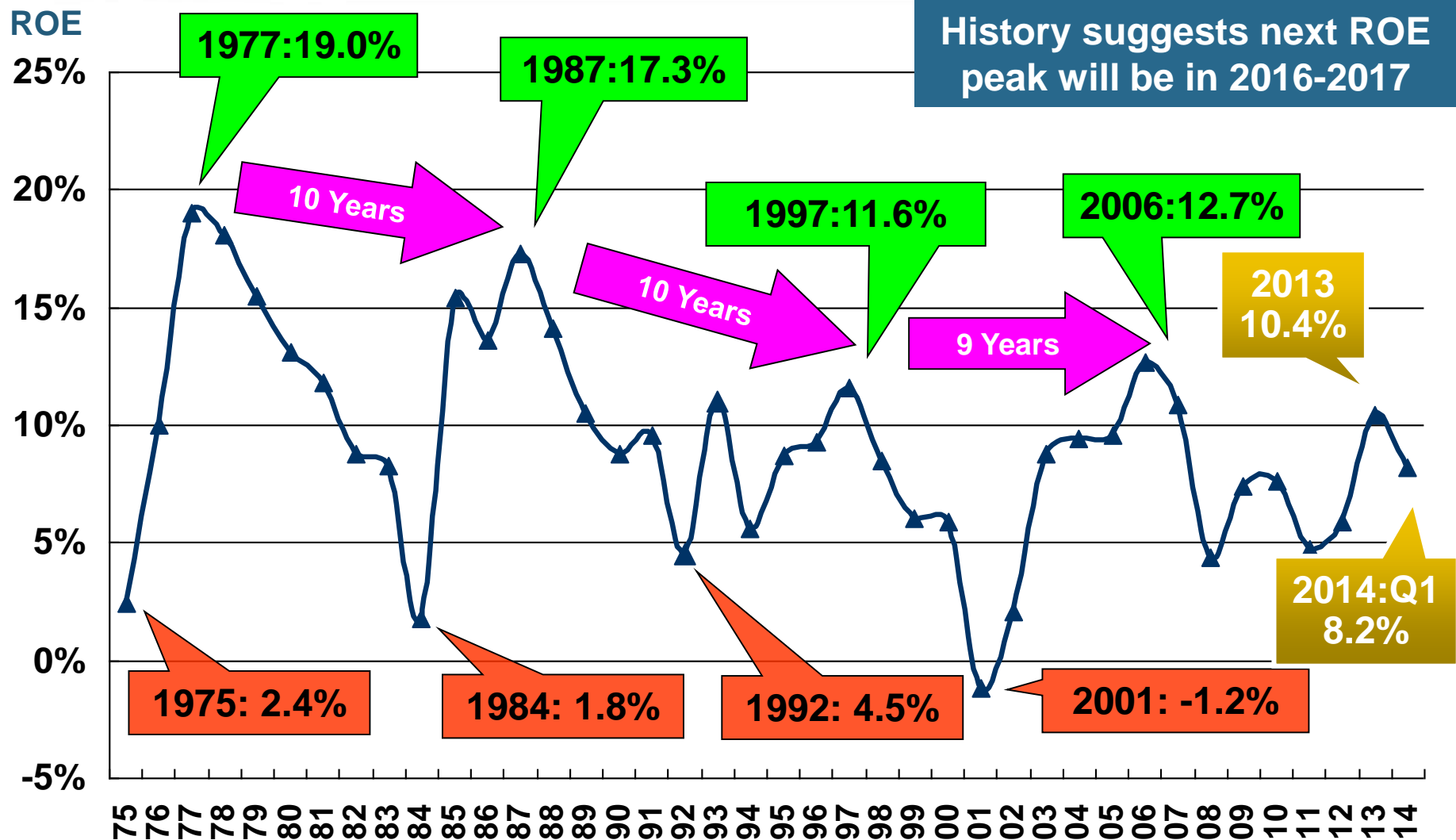
# P/C Industry Net Income After Taxes 1991–2014:Q1



• ROE figures are GAAP; <sup>1</sup>Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields an 8.2% ROAS through 2014:Q1, 9.8% ROAS in 2013, 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

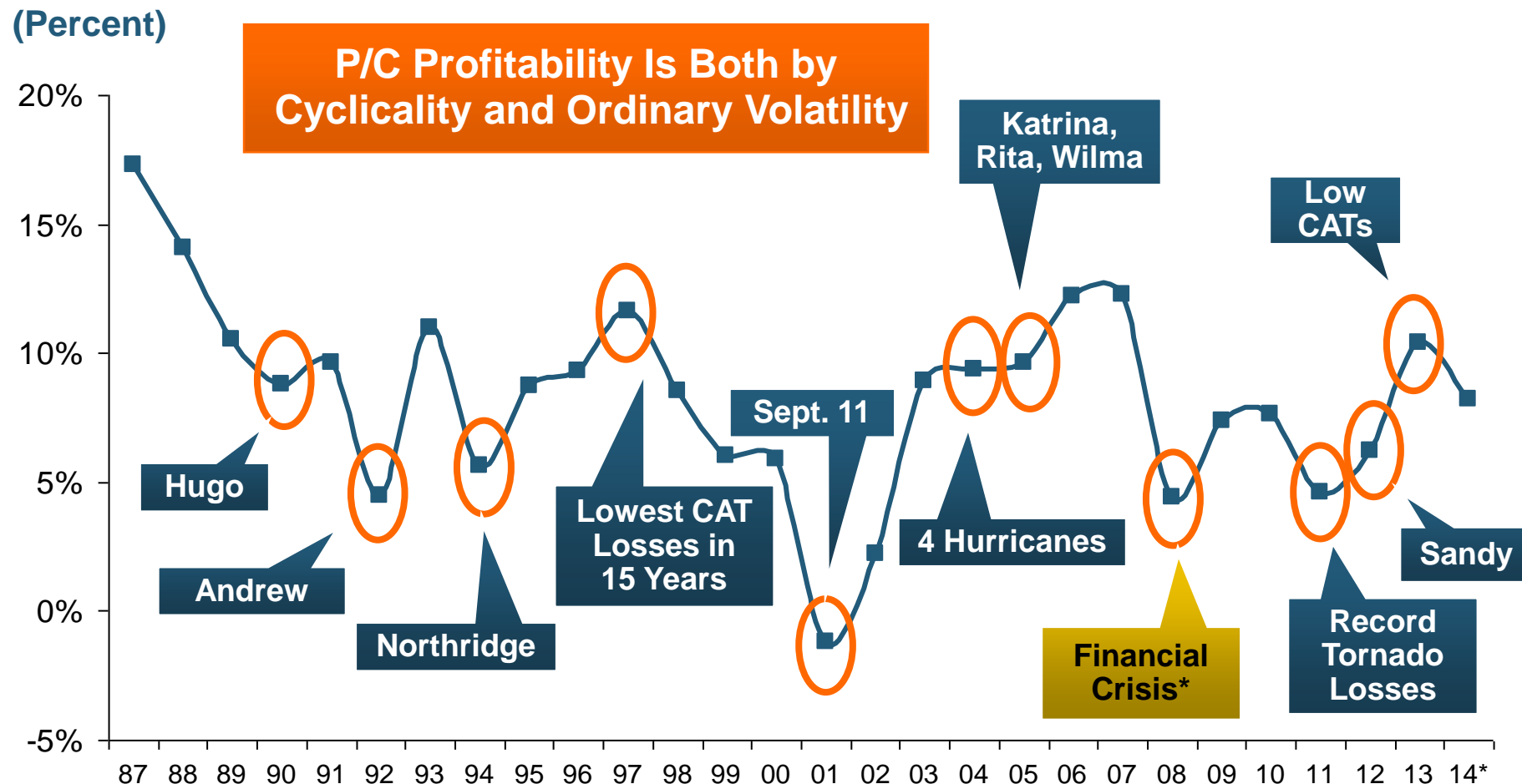
# Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014:Q1\*



\*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

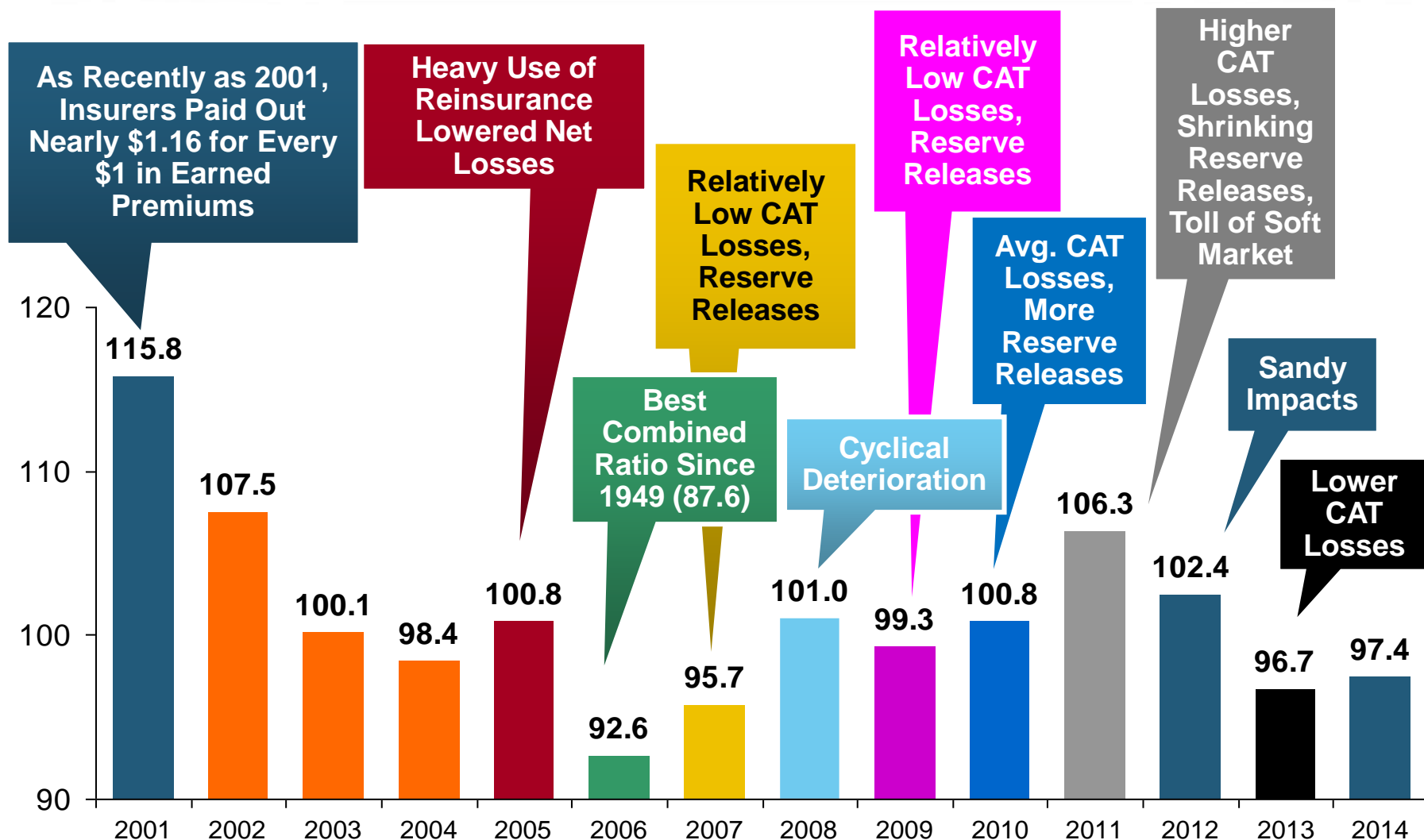
Source: Insurance Information Institute; NAIC, ISO, A.M. Best.

# ROE: Property/Casualty Insurance by Major Event, 1987–2014:Q1



\* Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2014 figure is through Q1:2014.  
Sources: ISO, *Fortune*; Insurance Information Institute.

# P/C Insurance Industry Combined Ratio, 2001–2014:Q1\*



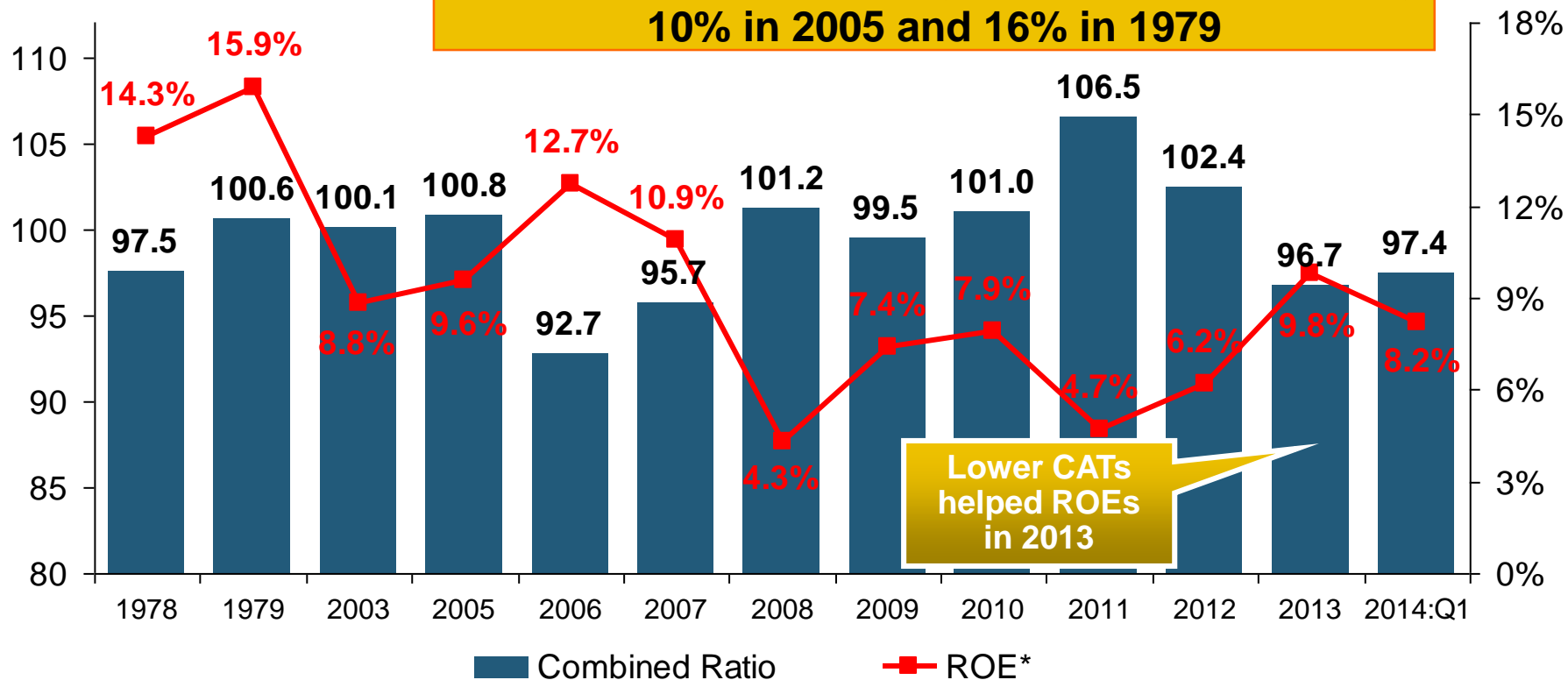
\* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013:= 96.1; 2014:Q1 = 97.3.

Sources: A.M. Best, ISO.

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

## Combined Ratio / ROE

**A combined ratio of about 100 generates an ROE of ~7.0% in 2012/13, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979**



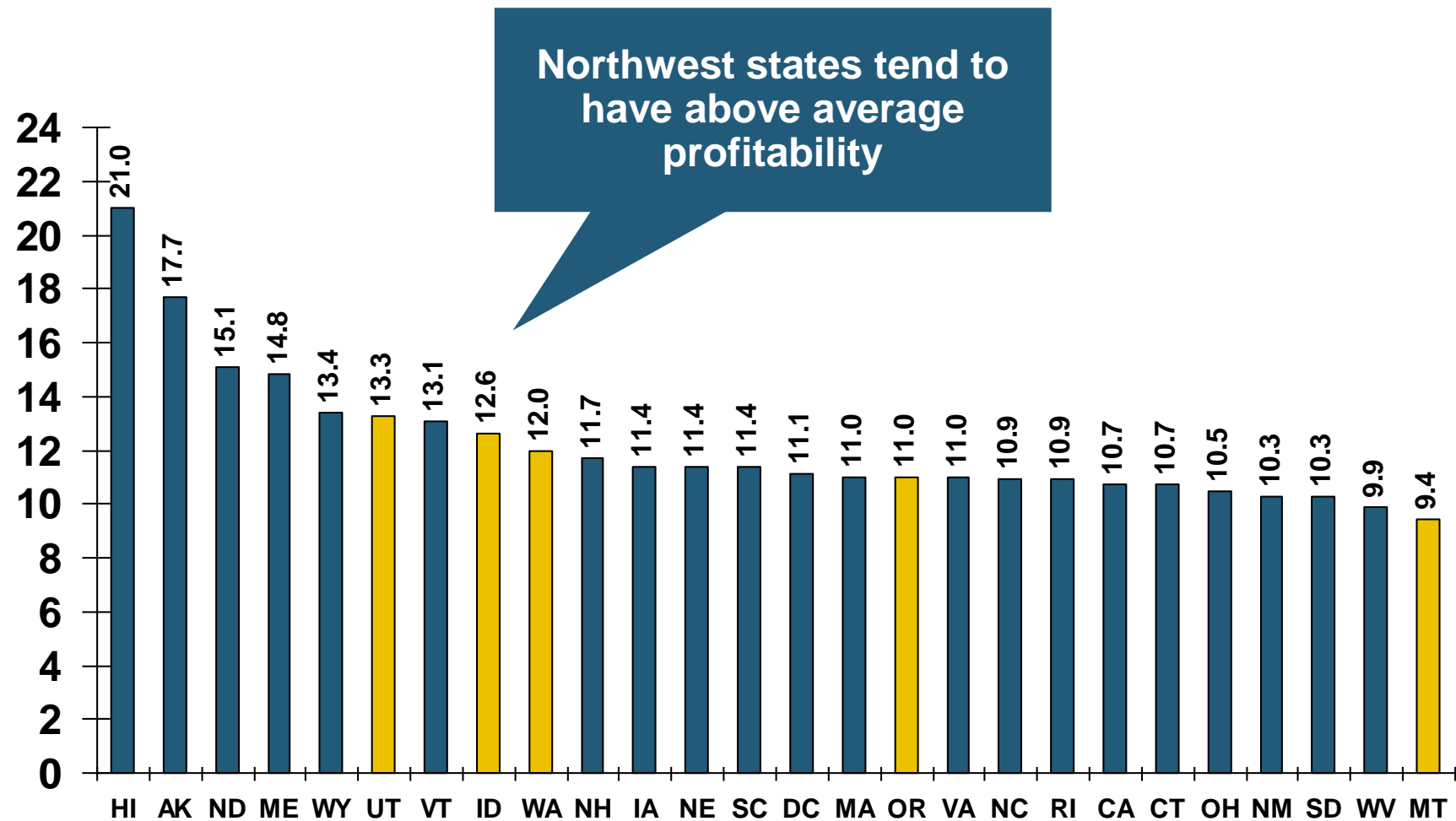
Lower CATs helped ROEs in 2013

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

\* 2008 -2014 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014:Q1 combined ratio including M&FG insurers is 97.3; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.

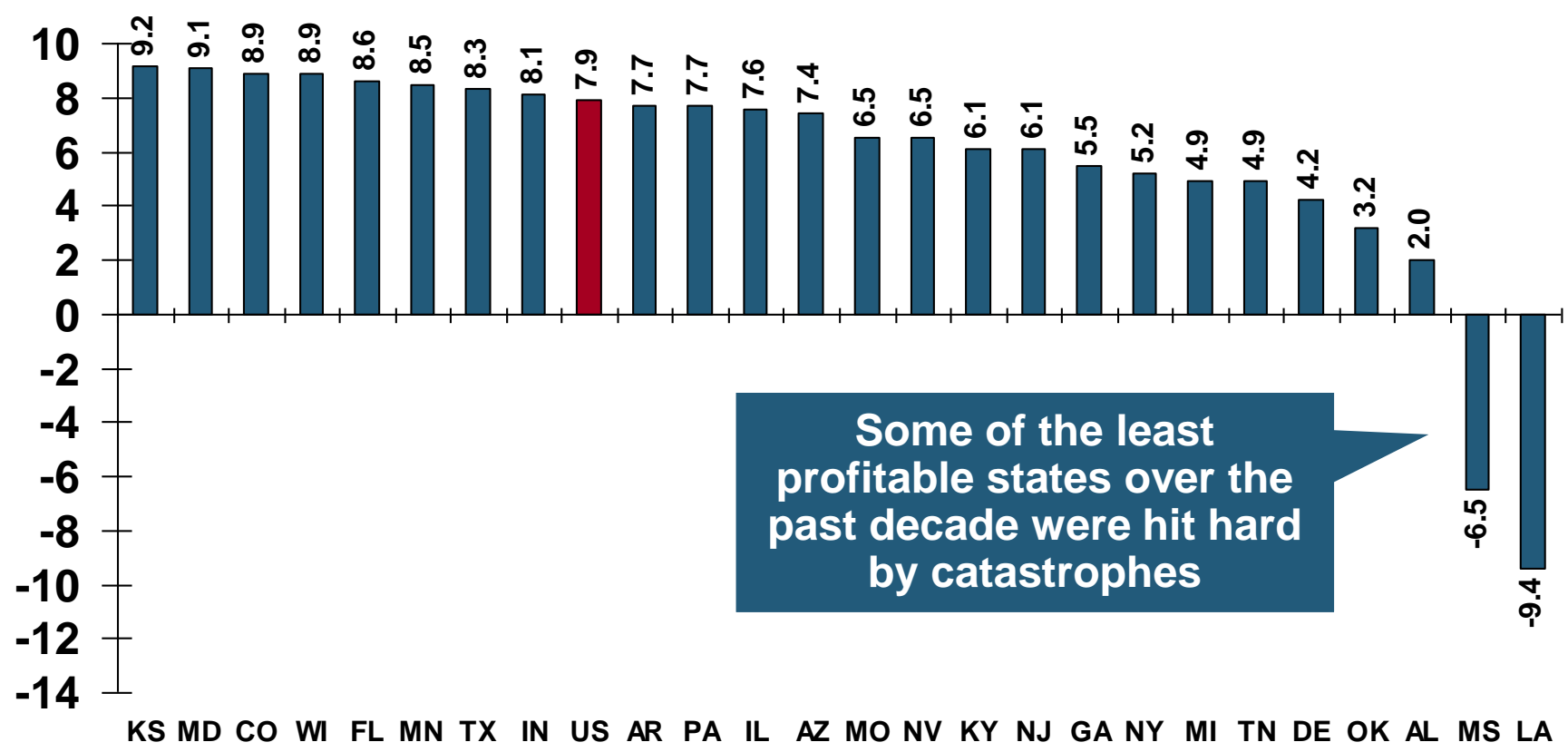
Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

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





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

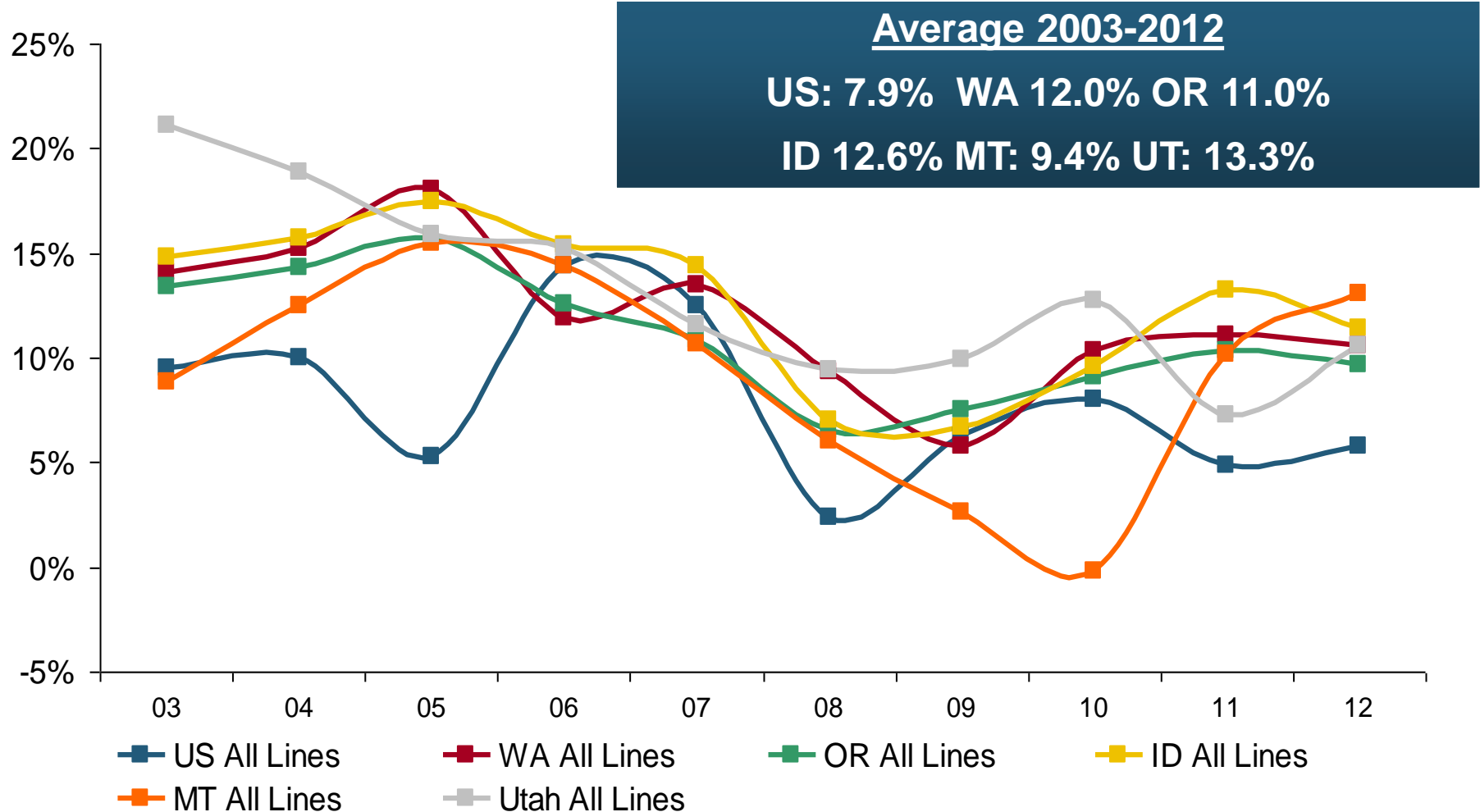


# **Profitability and Growth in Commercial Lines**

**Analysis by Line for WA,OR,  
MT, ID and UT**

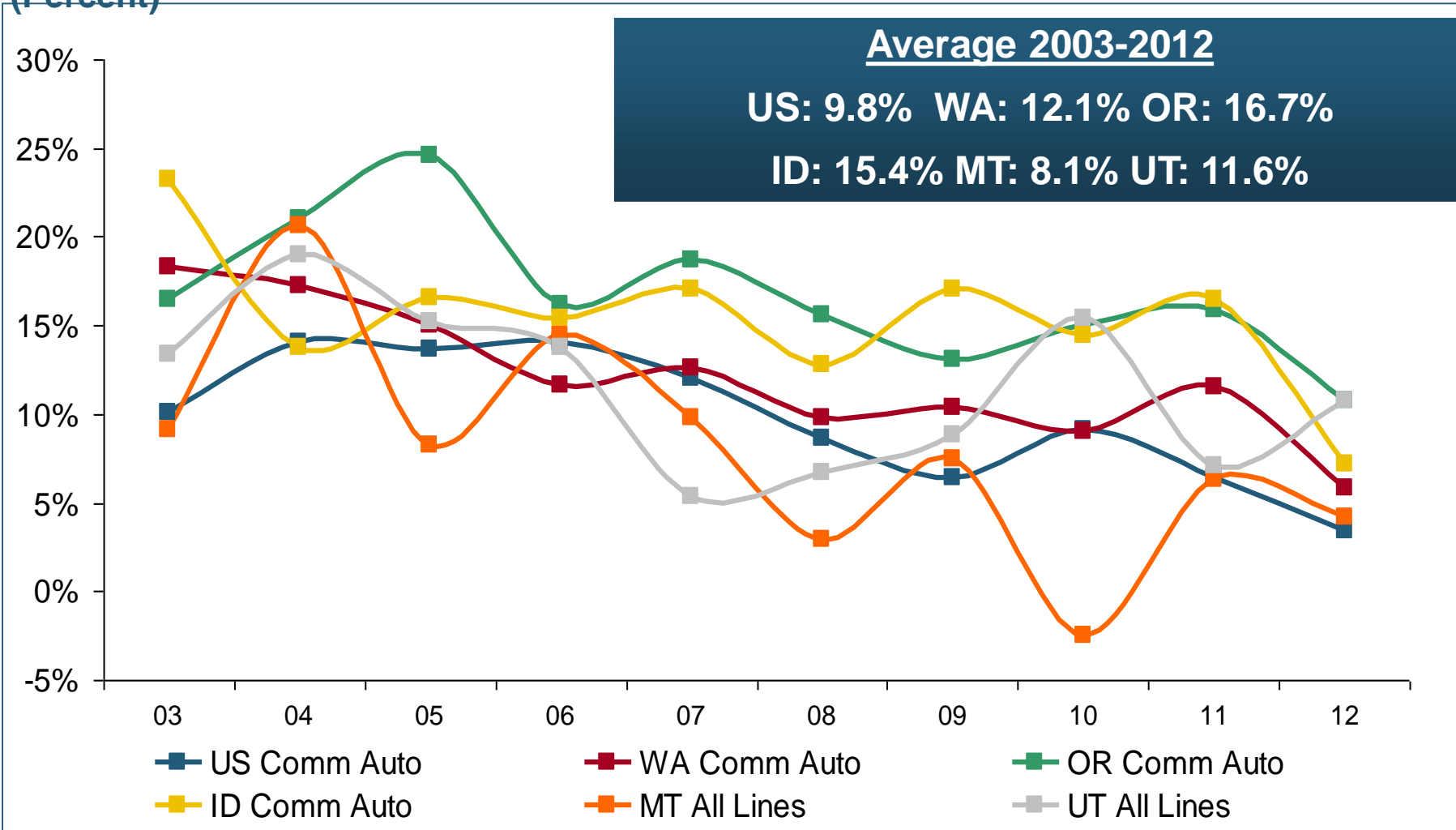
# RNW All Lines: WA, OR, ID, MT and UT vs. U.S., 2003-2012

(Percent)



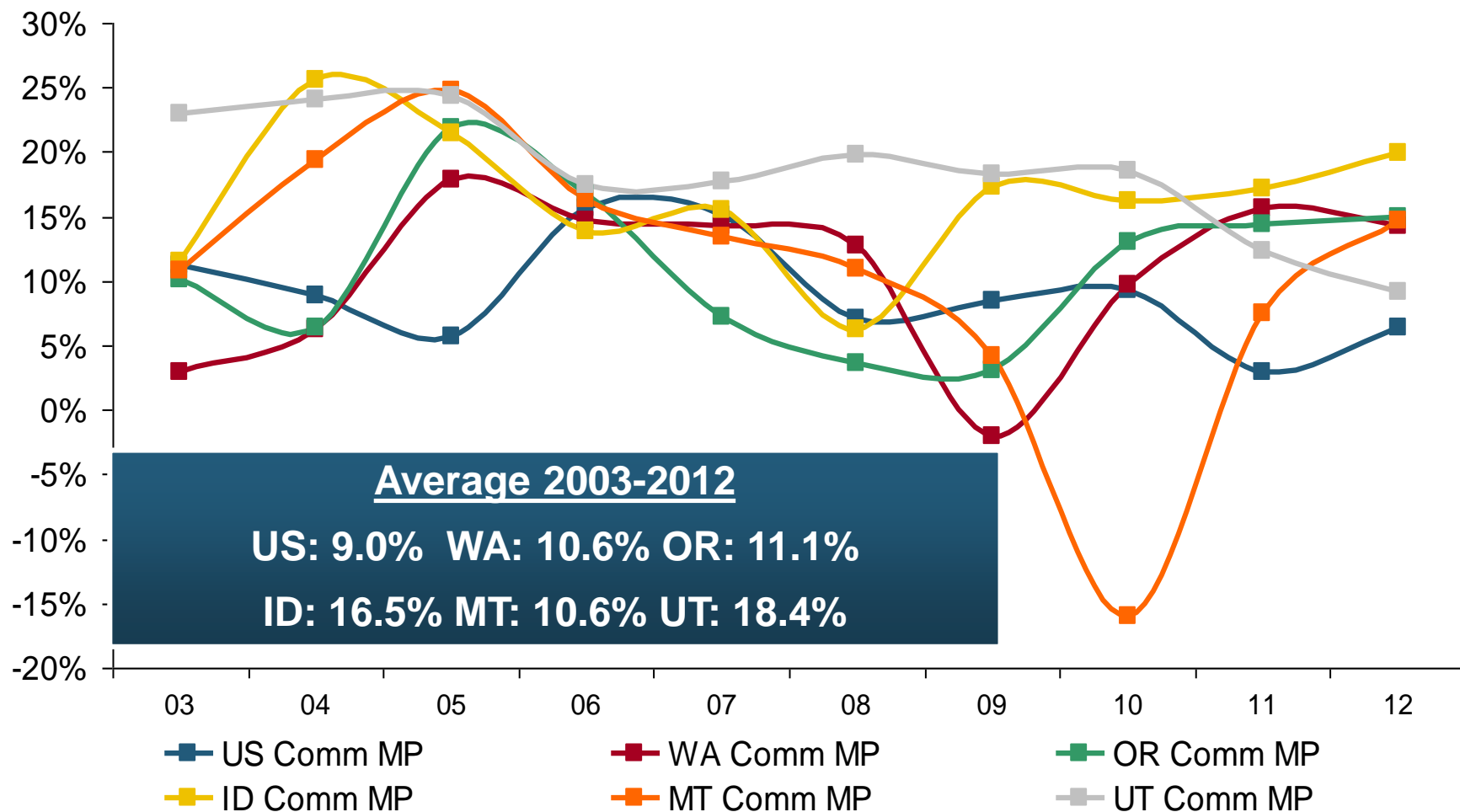
# RNW Comm. Auto: WA, OR, ID, MT and UT vs. U.S., 2003-2012

(Percent)



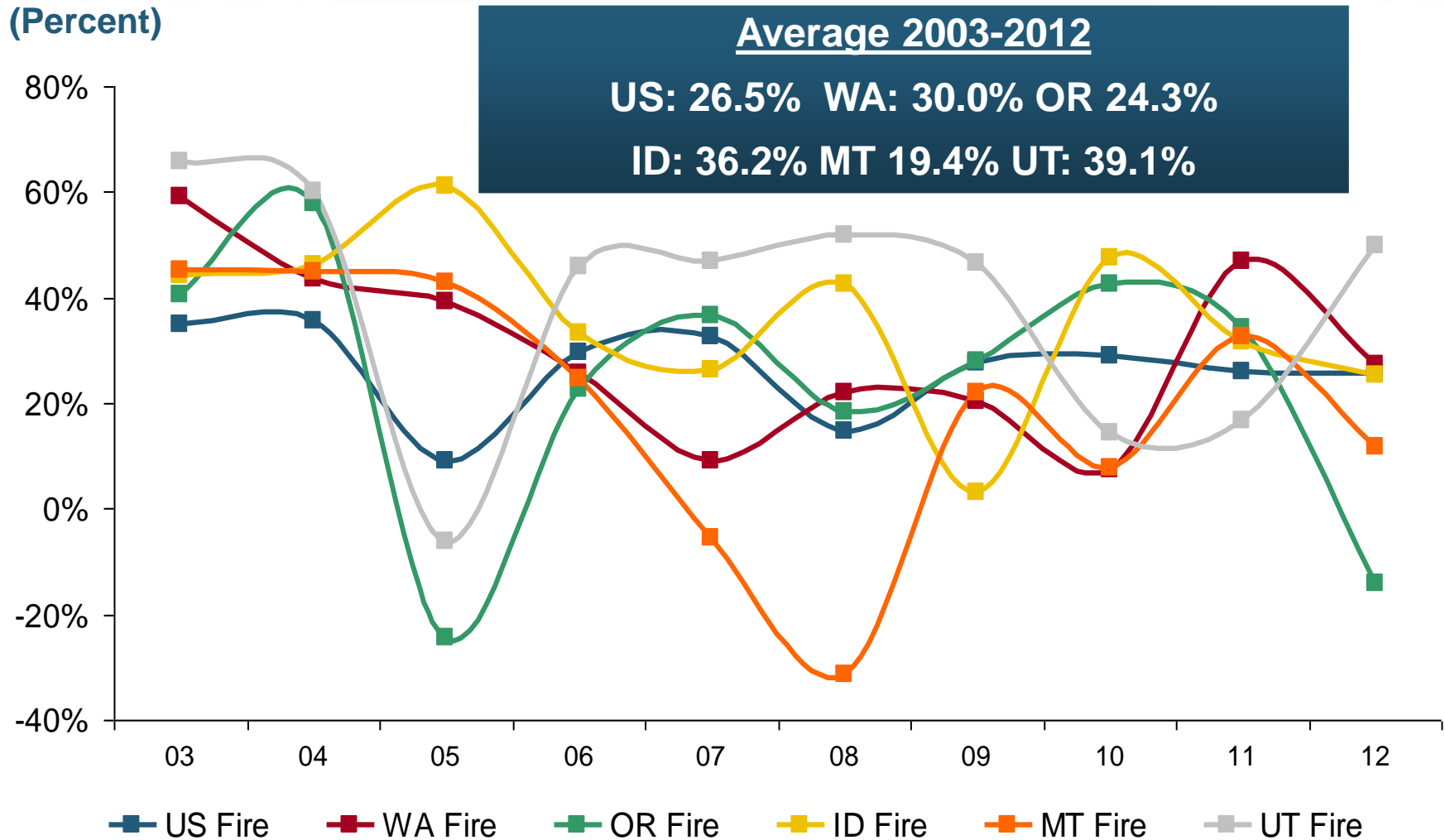
# RNW Comm. MP: WA, OR, ID, MT and UT vs. U.S., 2003-2012

(Percent)



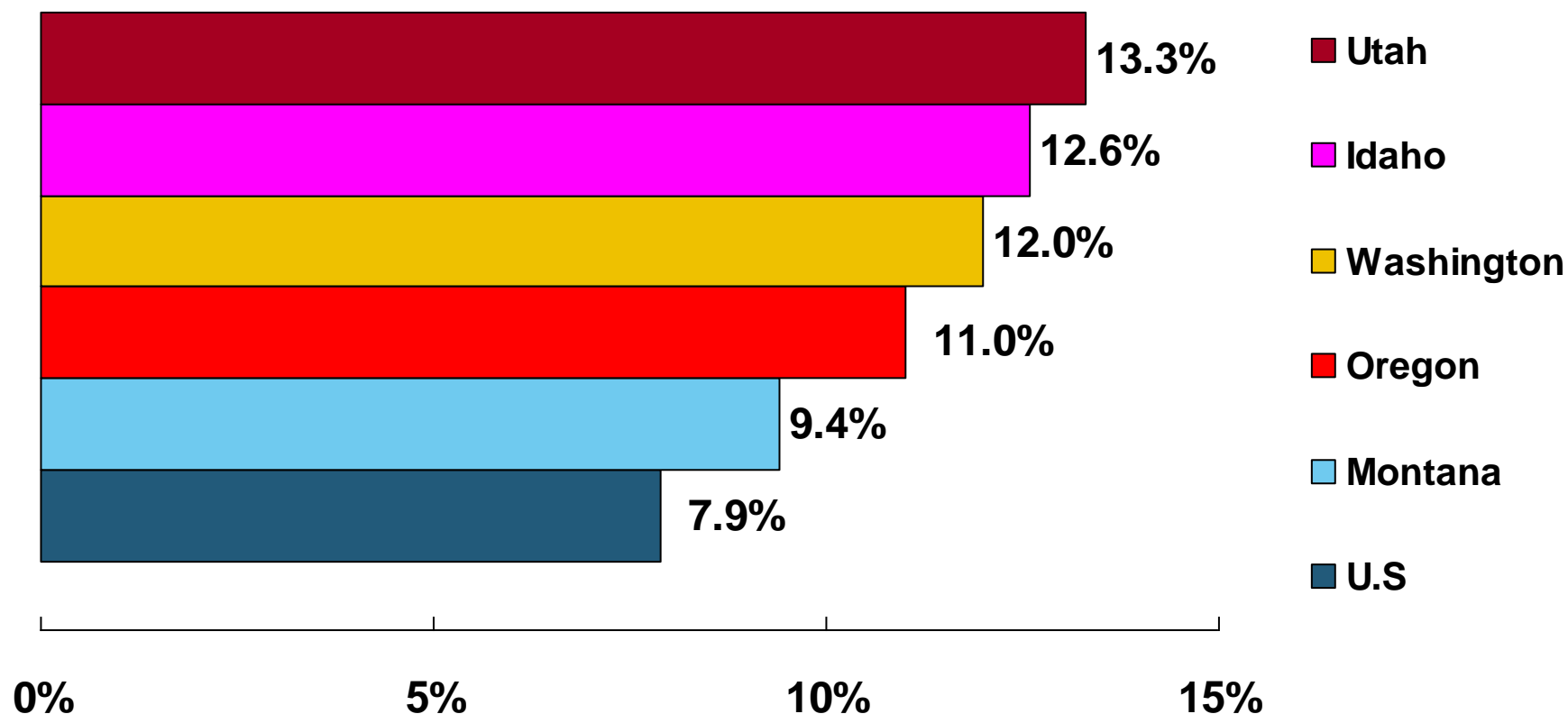
# RNW Fire: WA, OR, ID, MT and UT vs. U.S., 2003-2012

(Percent)



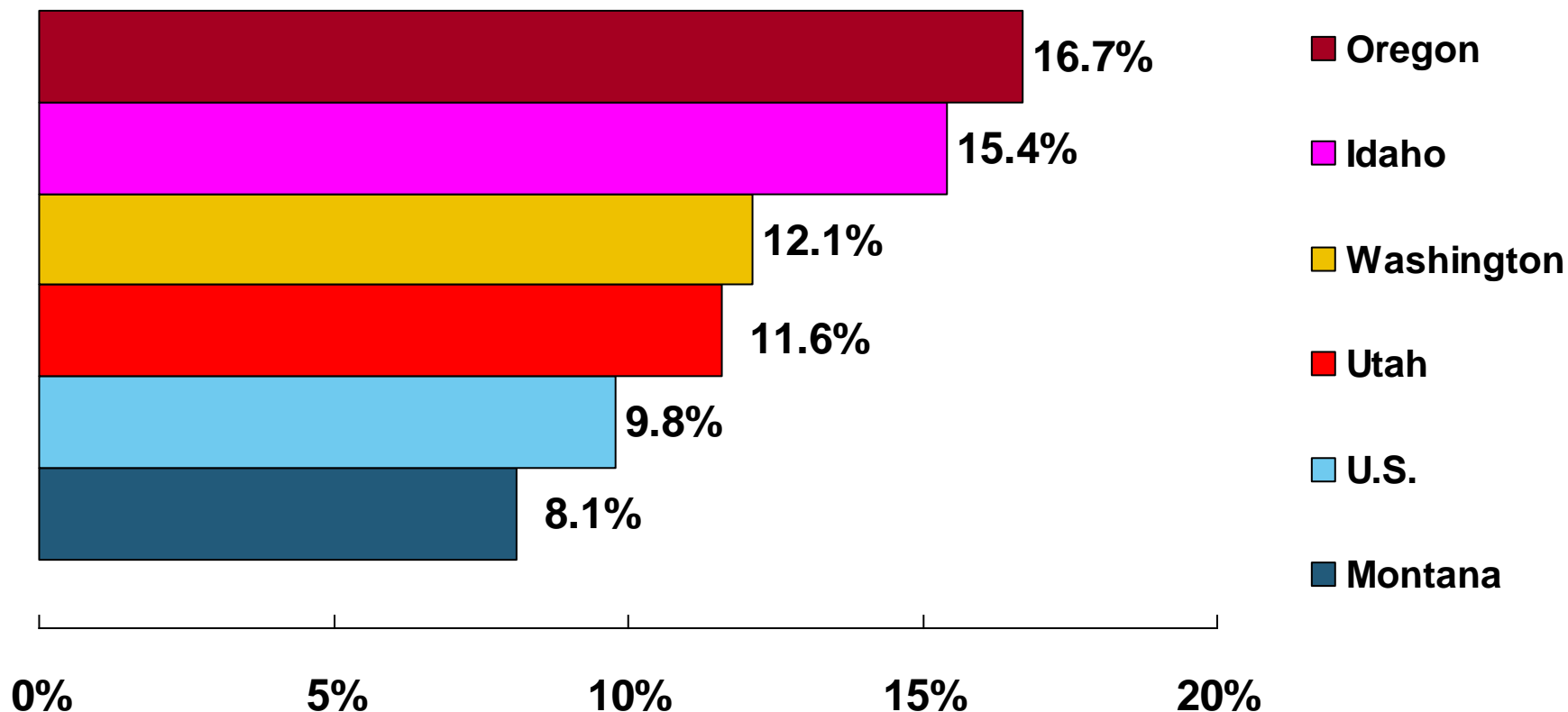
# All Lines: 10-Year Average RNW WA, OR, ID, MT and UT vs. U.S.

2003-2012



# Comm. Auto: 10-Year Average RNW WA, OR, ID, MT and UT vs. U.S.

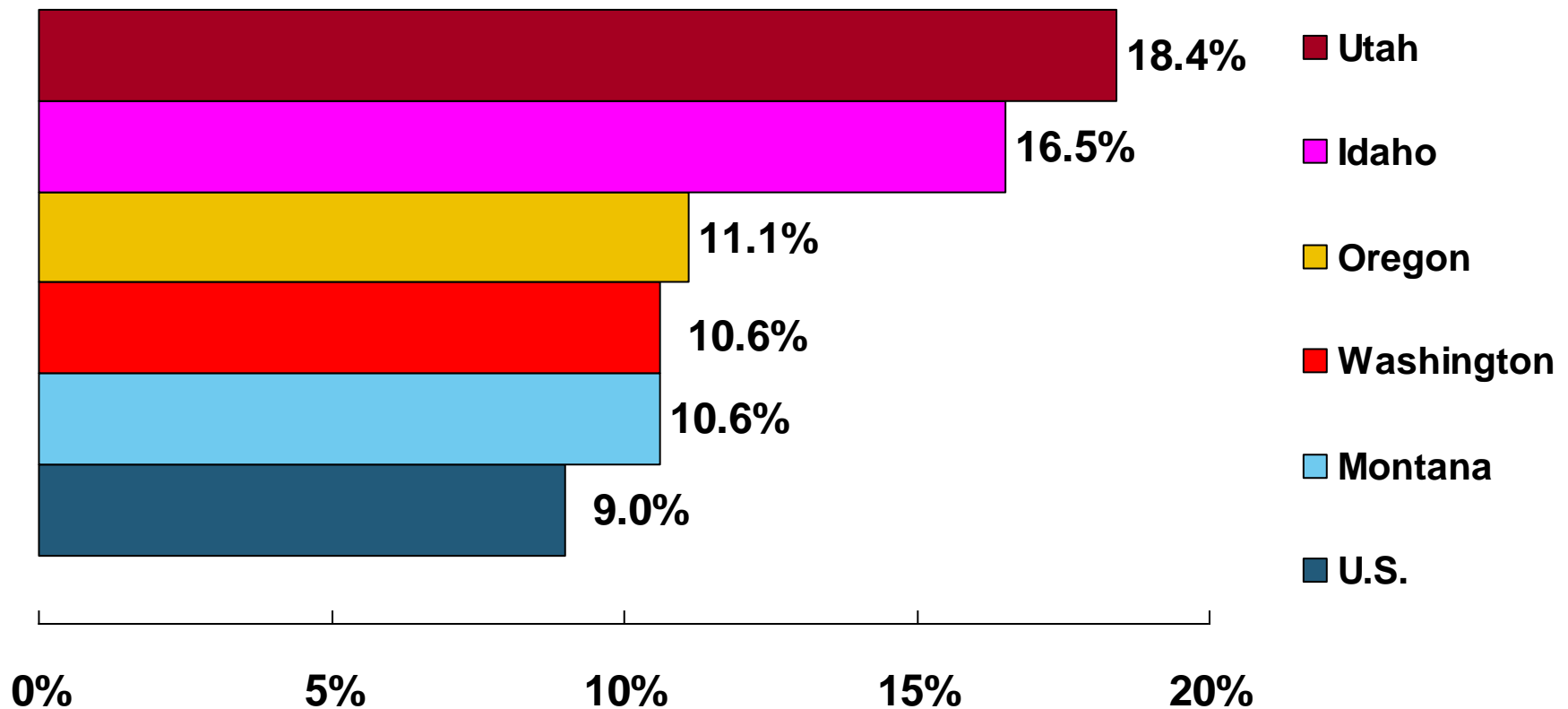
2003-2012





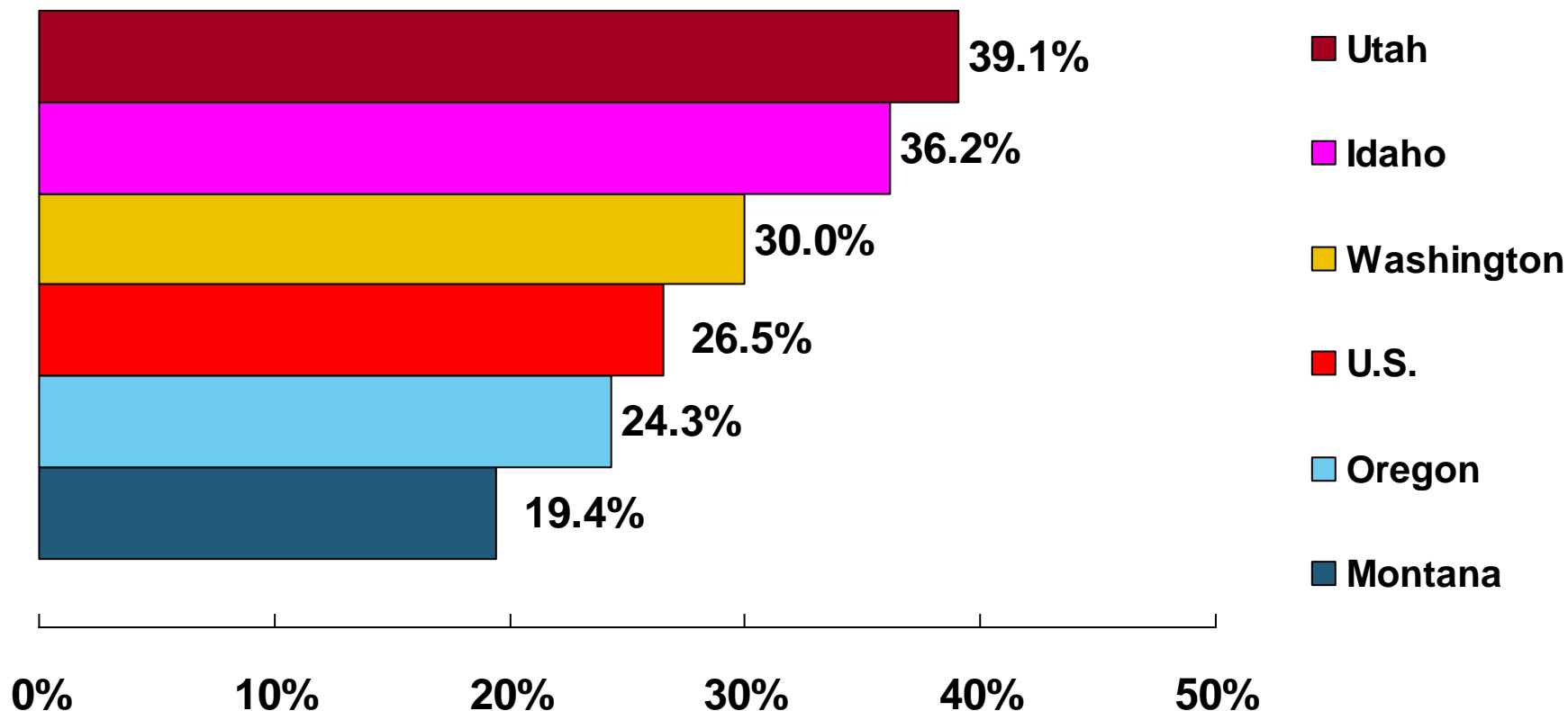
# Comm. MP: 10-Year Average RNW WA, OR, ID, MT and UT vs. U.S.

2003-2012



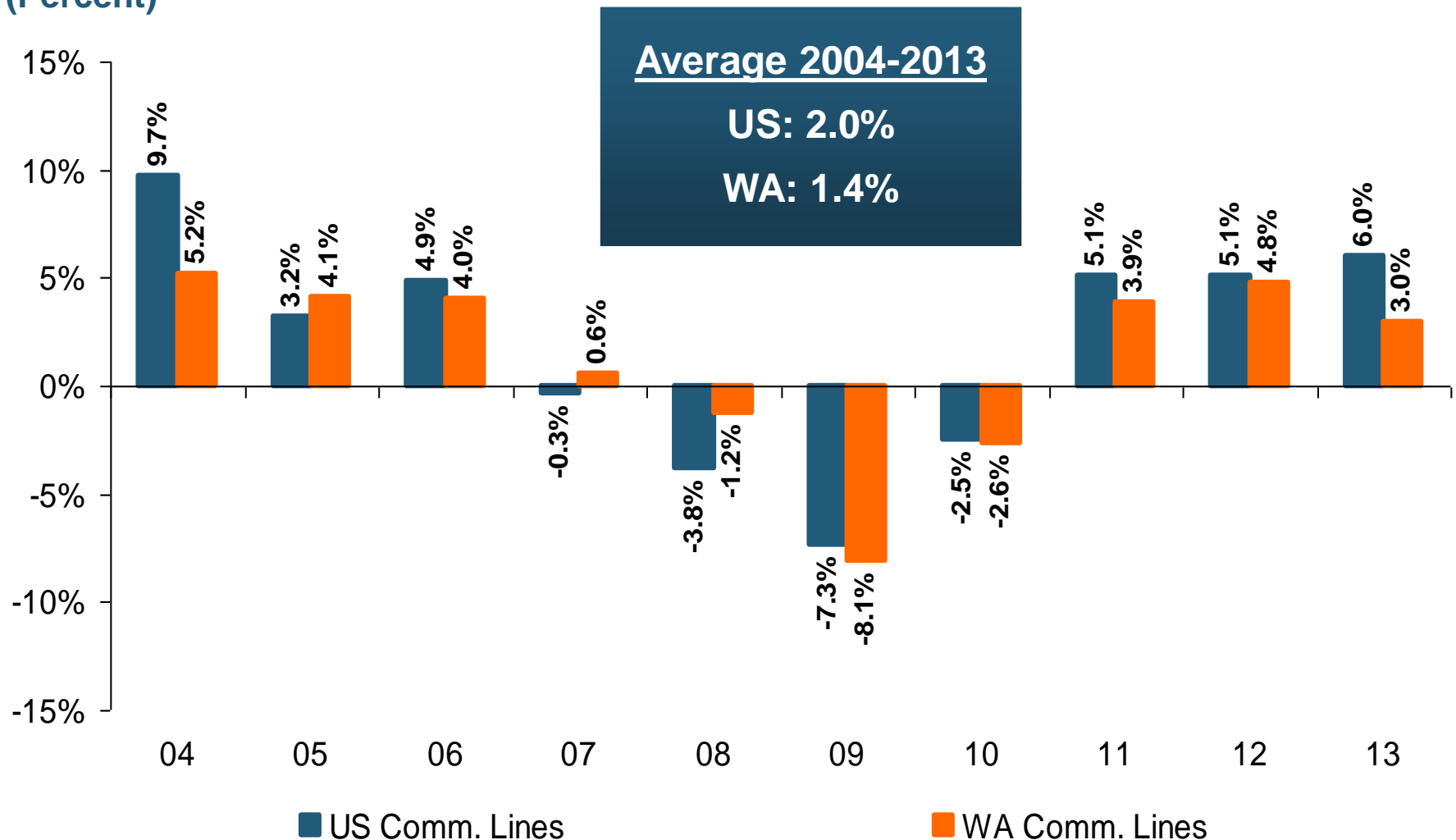
# Fire: 10-Year Average RNW WA,OR, ID, MT and UT vs. U.S.

2003-2012



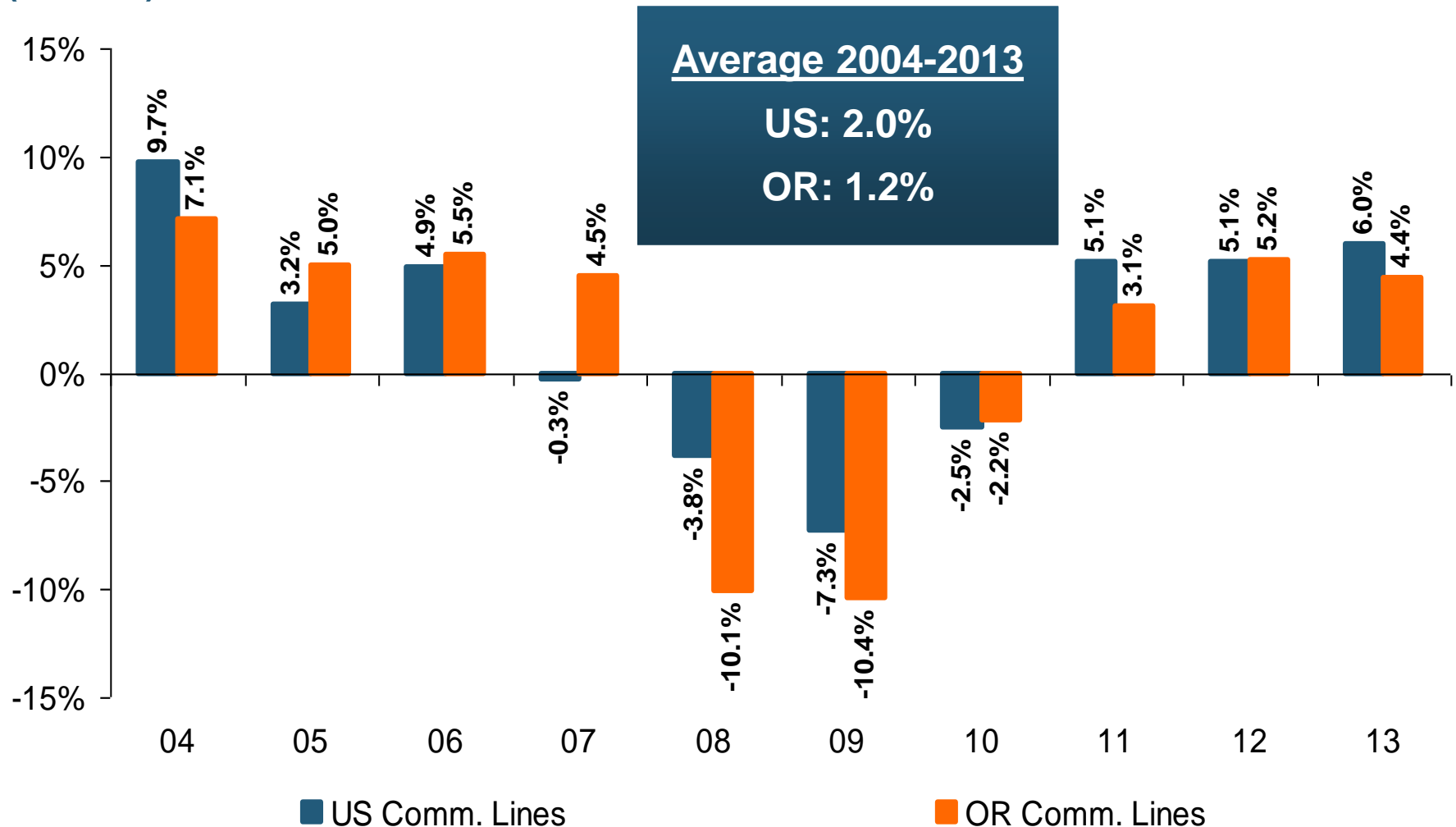
# Comm. Lines DWP Growth: WA vs. U.S 2004-2013

(Percent)



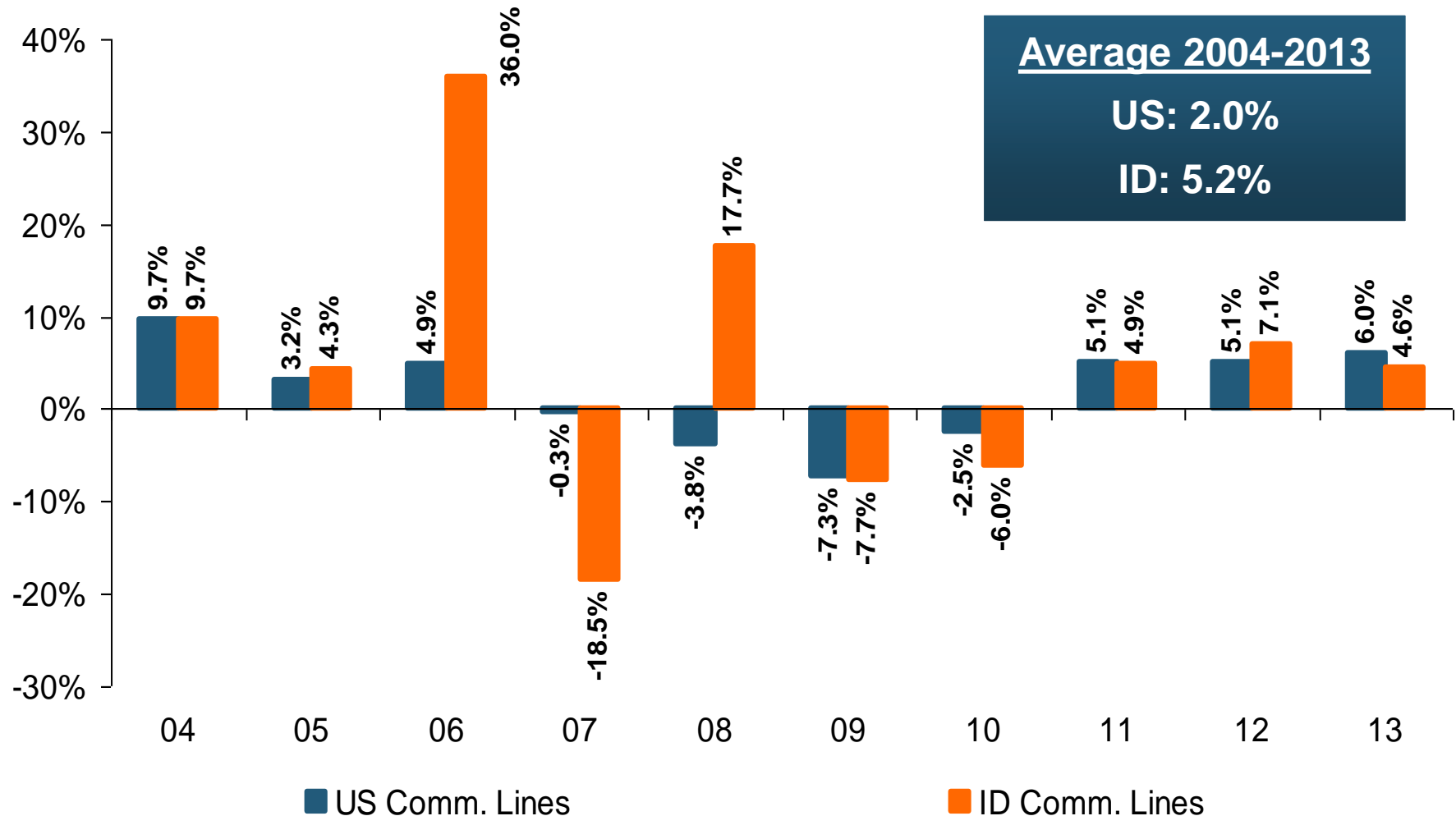
# Comm. Lines DWP Growth: OR vs. U.S 2004-2013

(Percent)



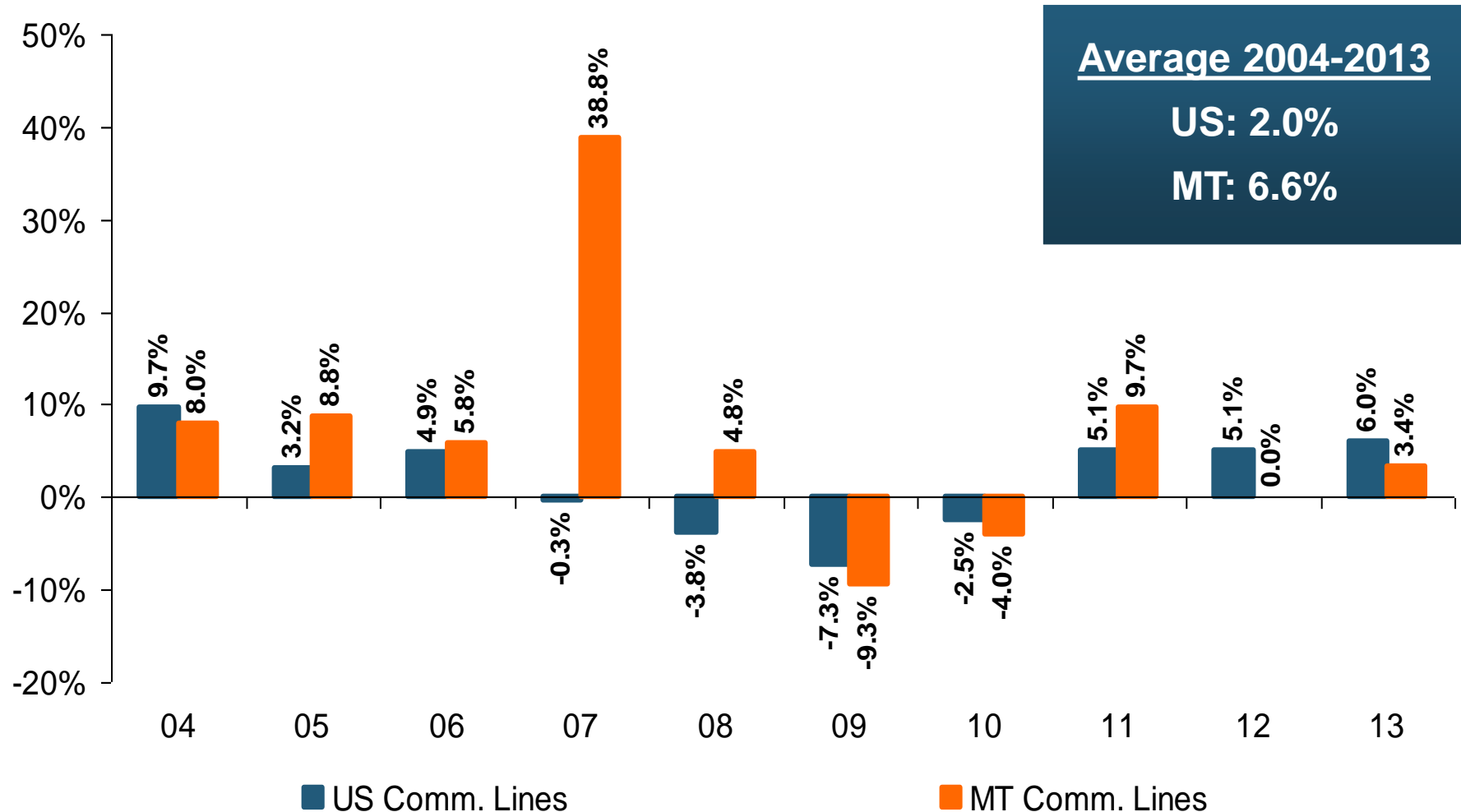
# Comm. Lines DWP Growth: ID vs. U.S 2004-2013

(Percent)



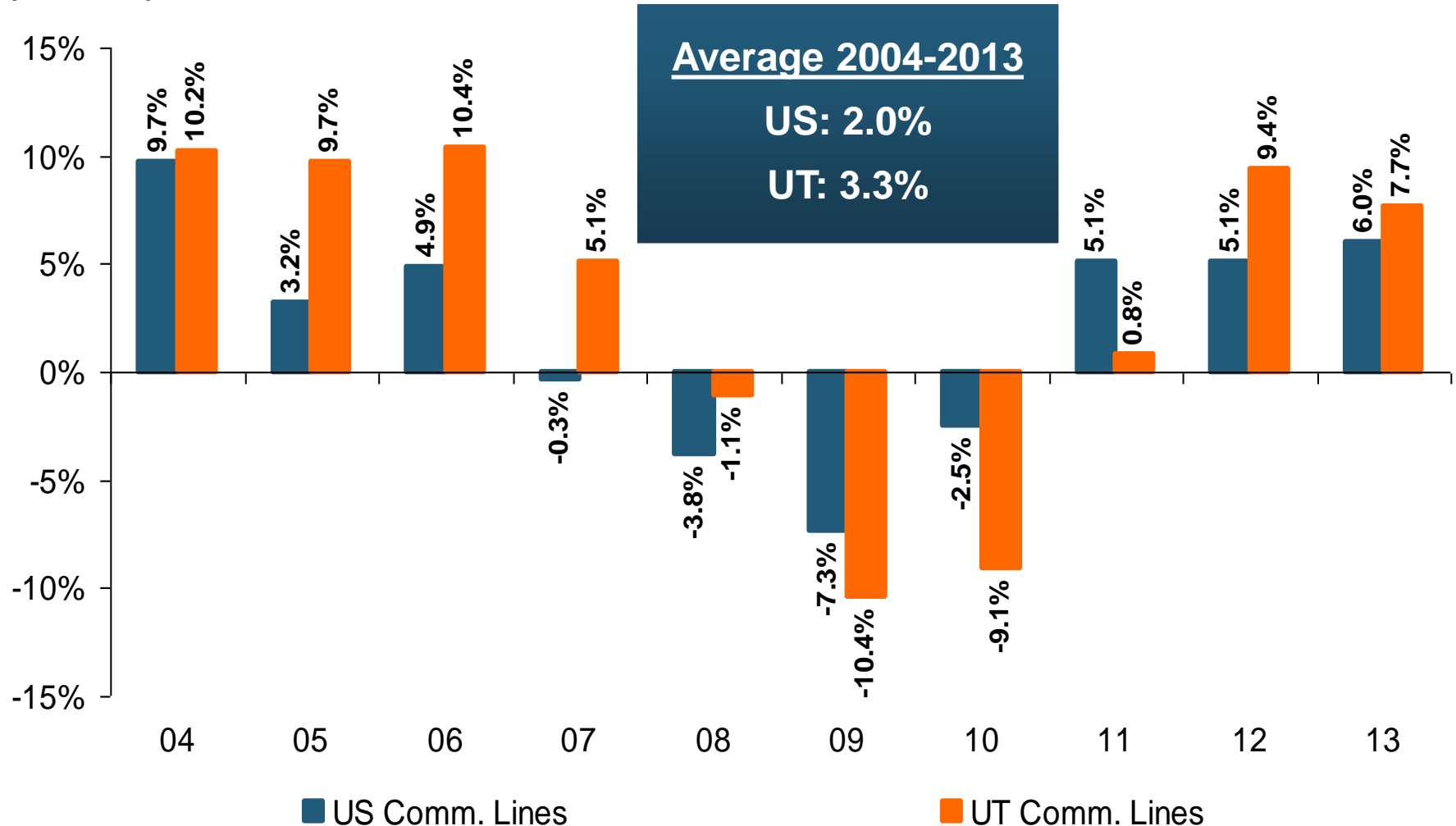
# Comm. Lines DWP Growth: MT vs. U.S 2004-2013

(Percent)



# Comm. Lines DWP Growth: UT vs. U.S 2004-2013

(Percent)



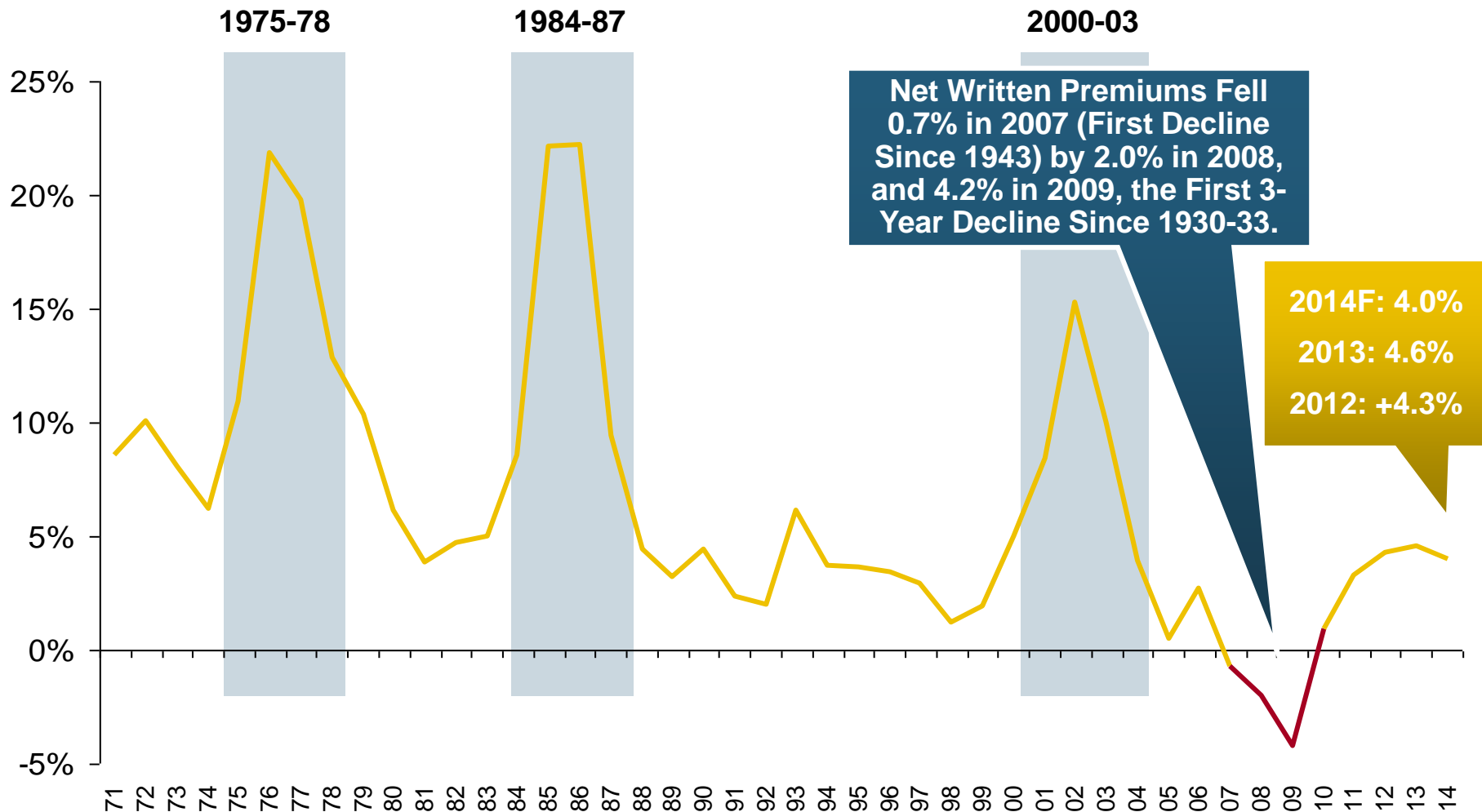
# **Growth Analysis by State and Business Segment**

**Post-Crisis Paradox?**  
***Premium Growth Varies  
Tremendously by State***



# Net Premium Growth: Annual Change, 1971—2014F

(Percent)

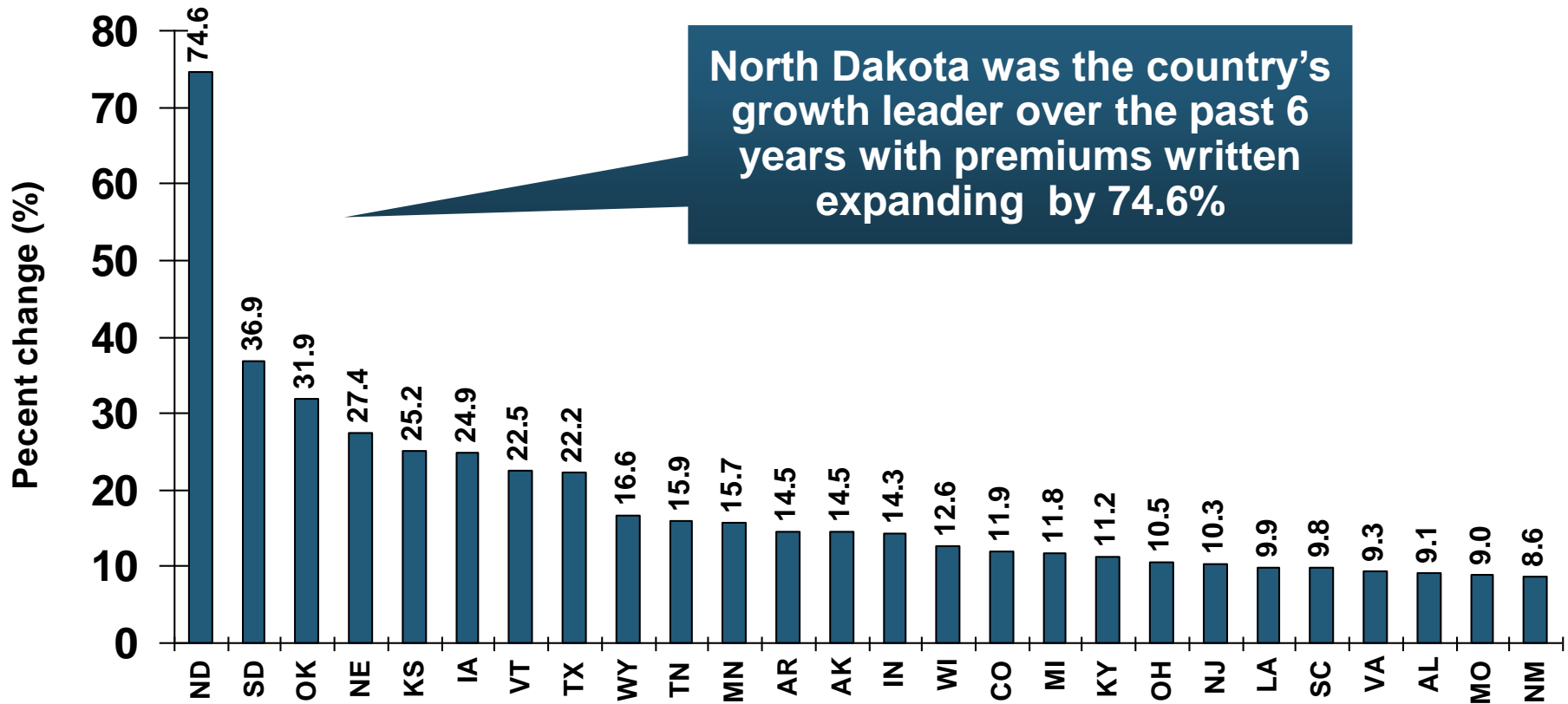


Shaded areas denote "hard market" periods

Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

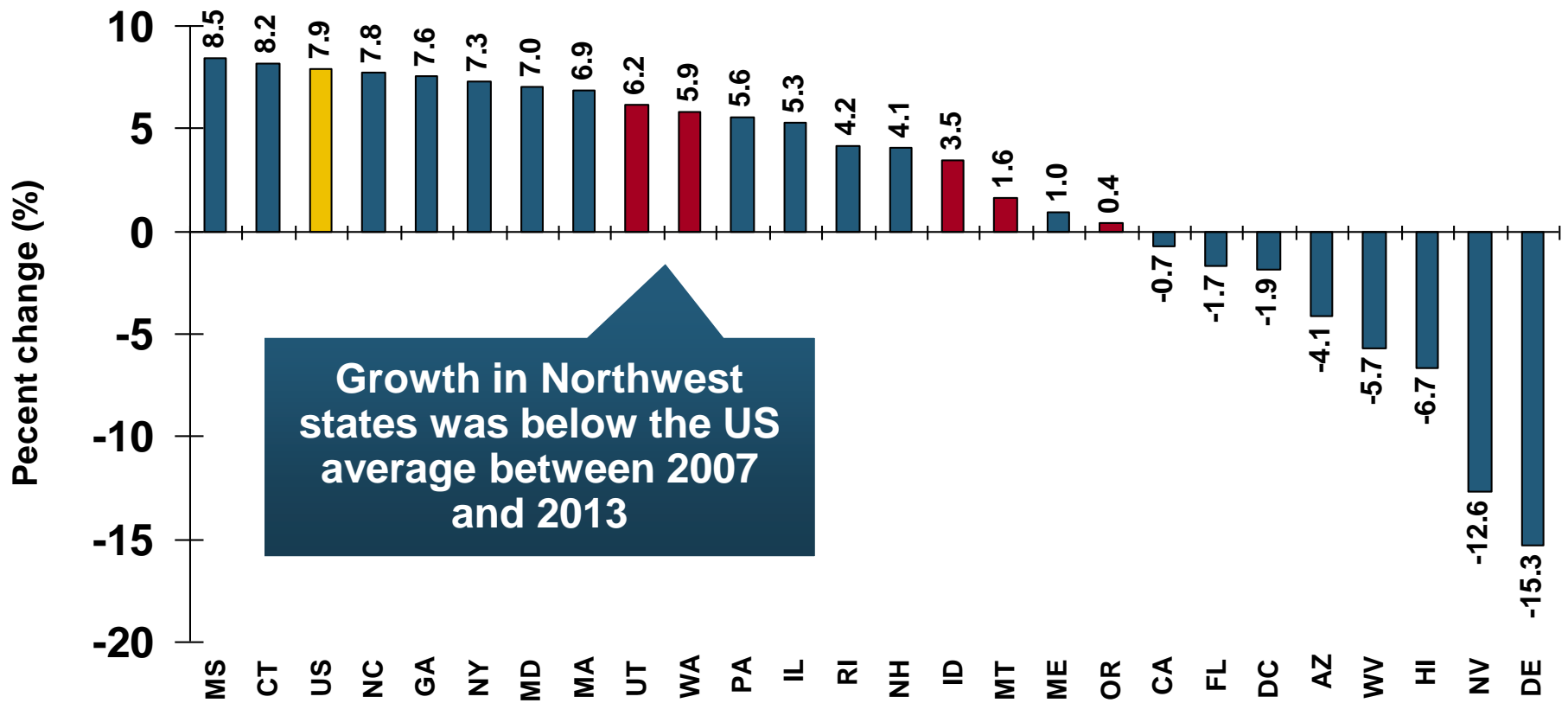
# Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

## Top 25 States



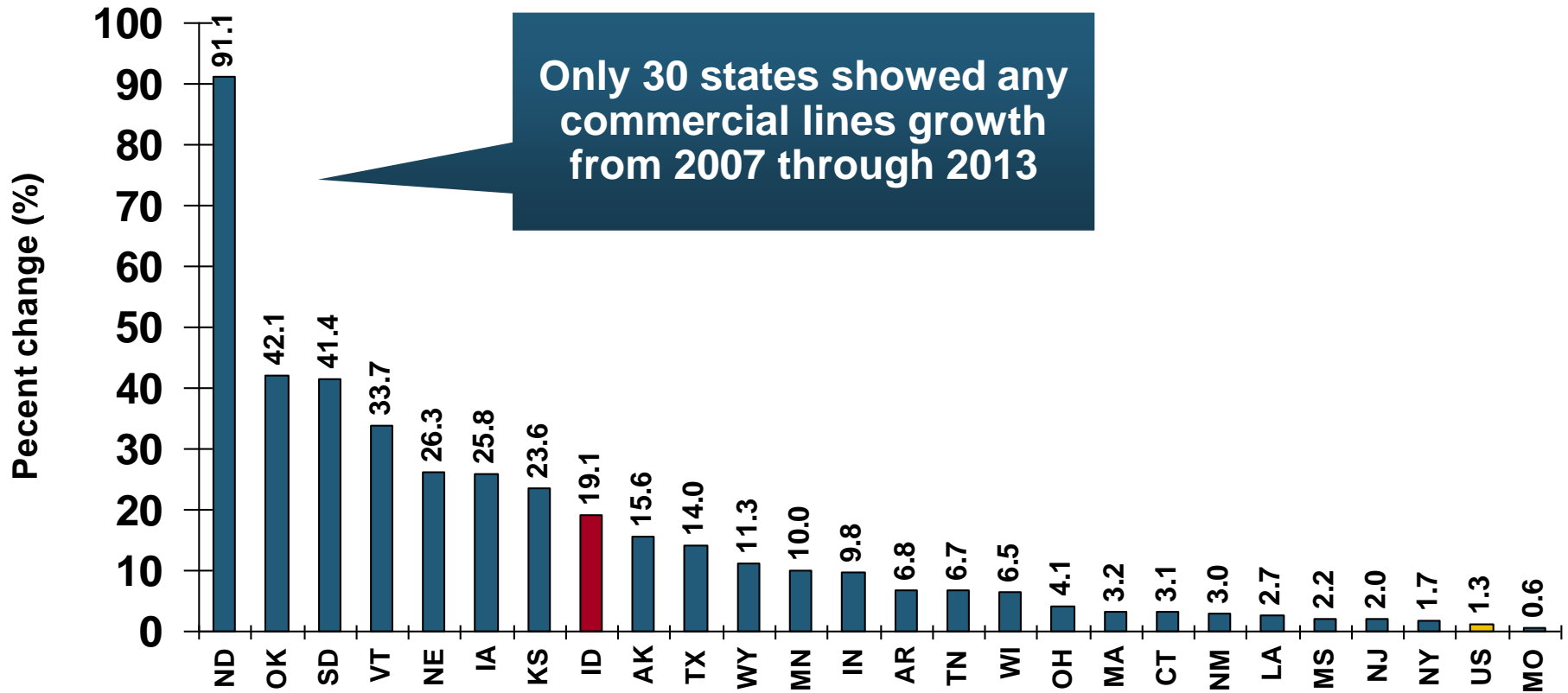
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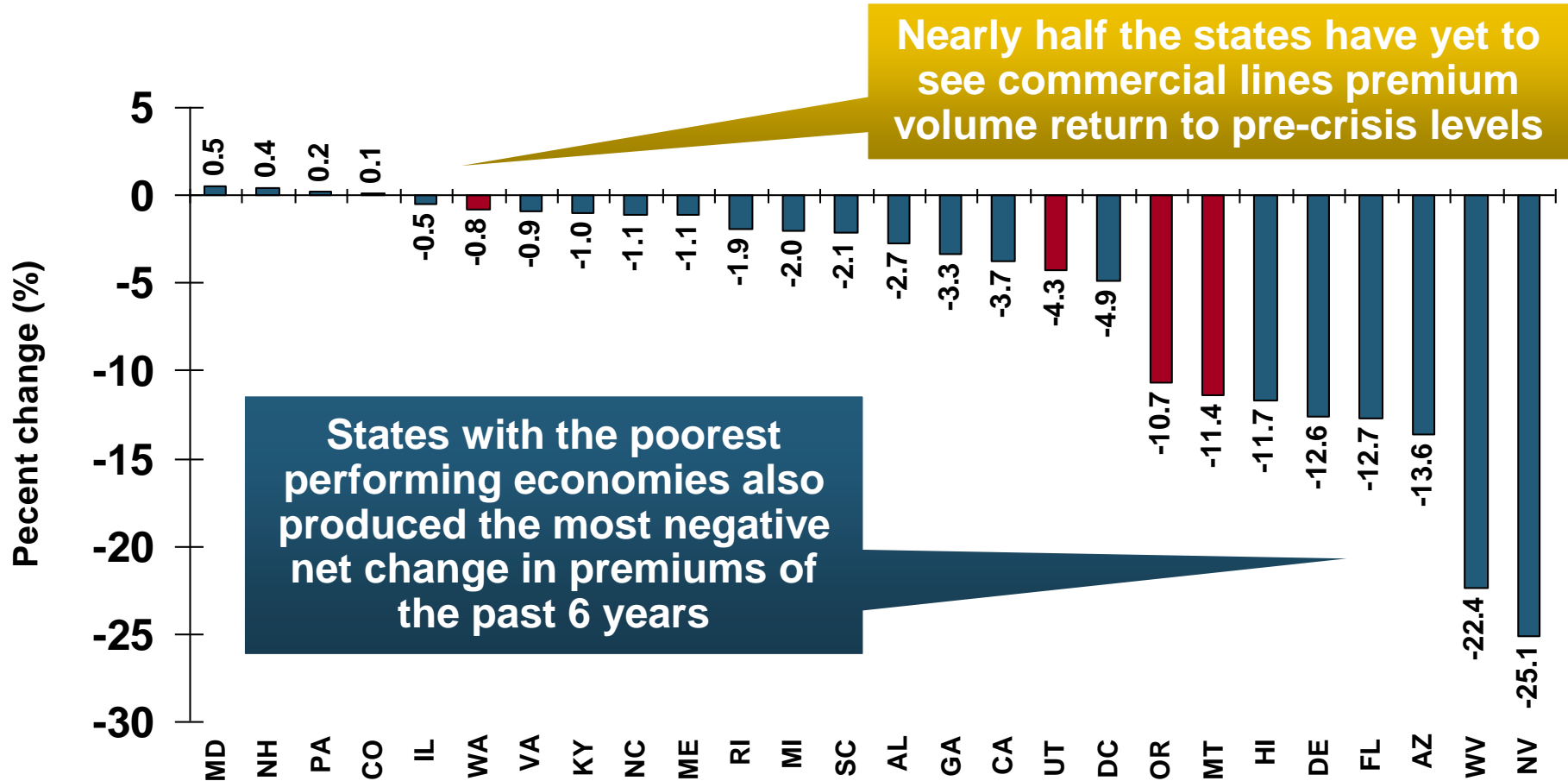
# Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013

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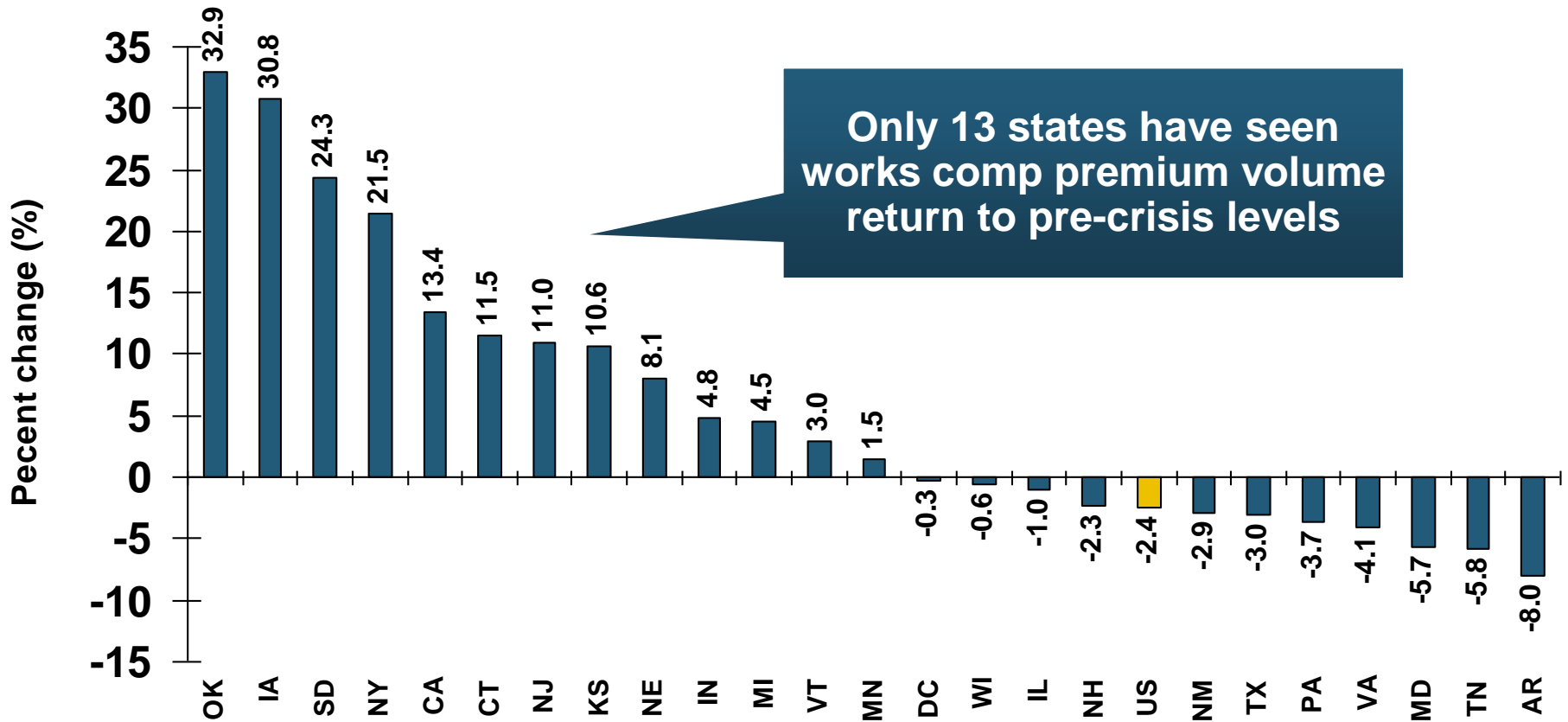
# Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013

## Bottom 25 States



# Direct Premiums Written: Workers' Comp Percent Change by State, 2007-2013\*

## Top 25 States

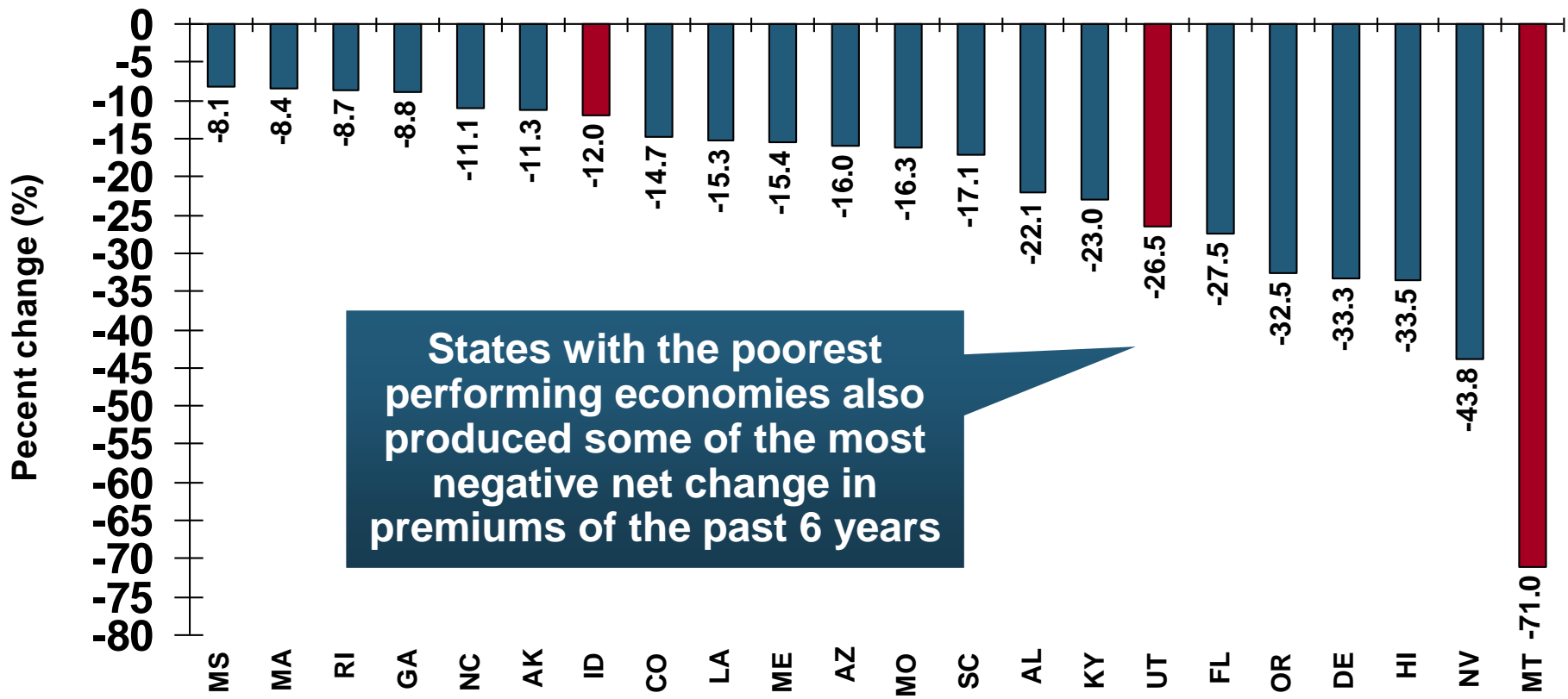


\*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Worker's Comp Percent Change by State, 2007-2013\*

## Bottom 25 States



\*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.

# Percentage of Carriers Using Predictive Analytics by Major P/C Line, 2013

Predictive analytics is more like to be used in personal lines, but commercial lines use is growing

82% of insurers report using predictive analytics in at least one line. 18% do not use it all.

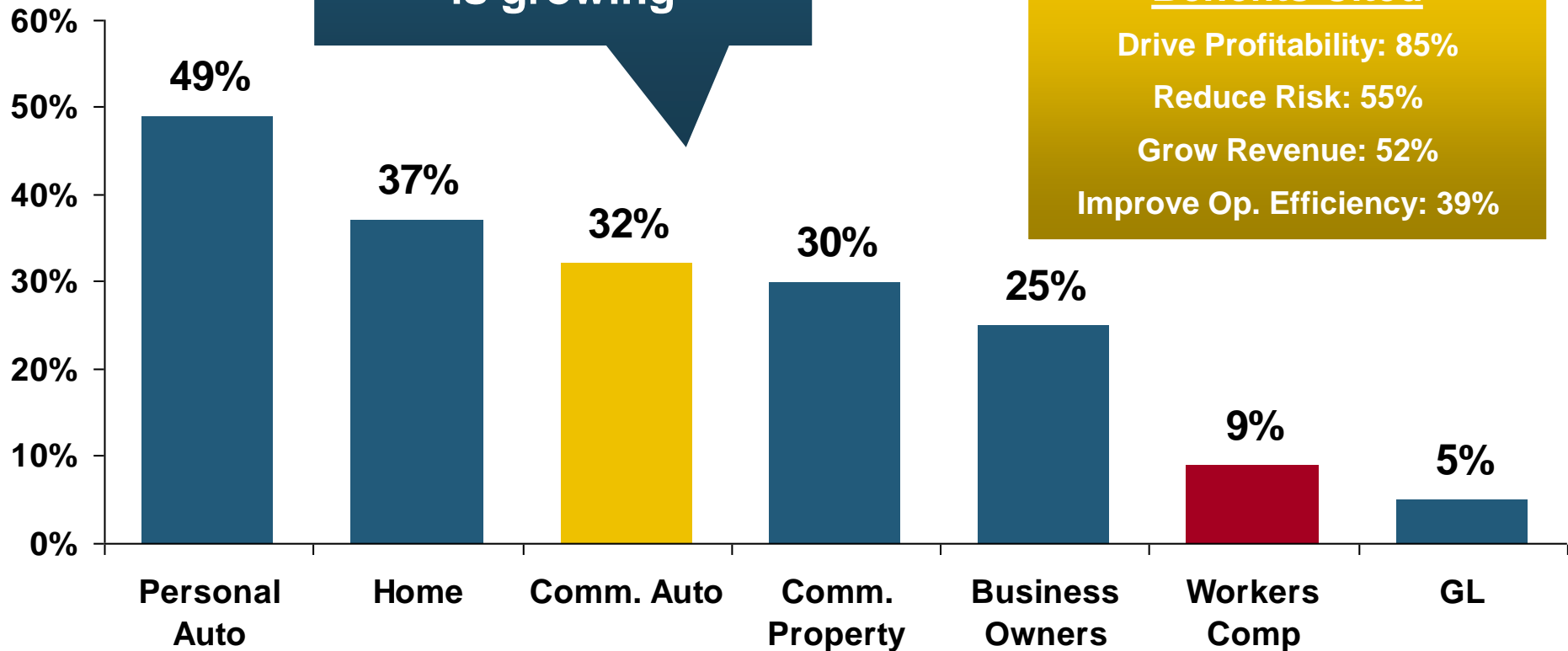
## Benefits Cited

Drive Profitability: 85%

Reduce Risk: 55%

Grow Revenue: 52%

Improve Op. Efficiency: 39%

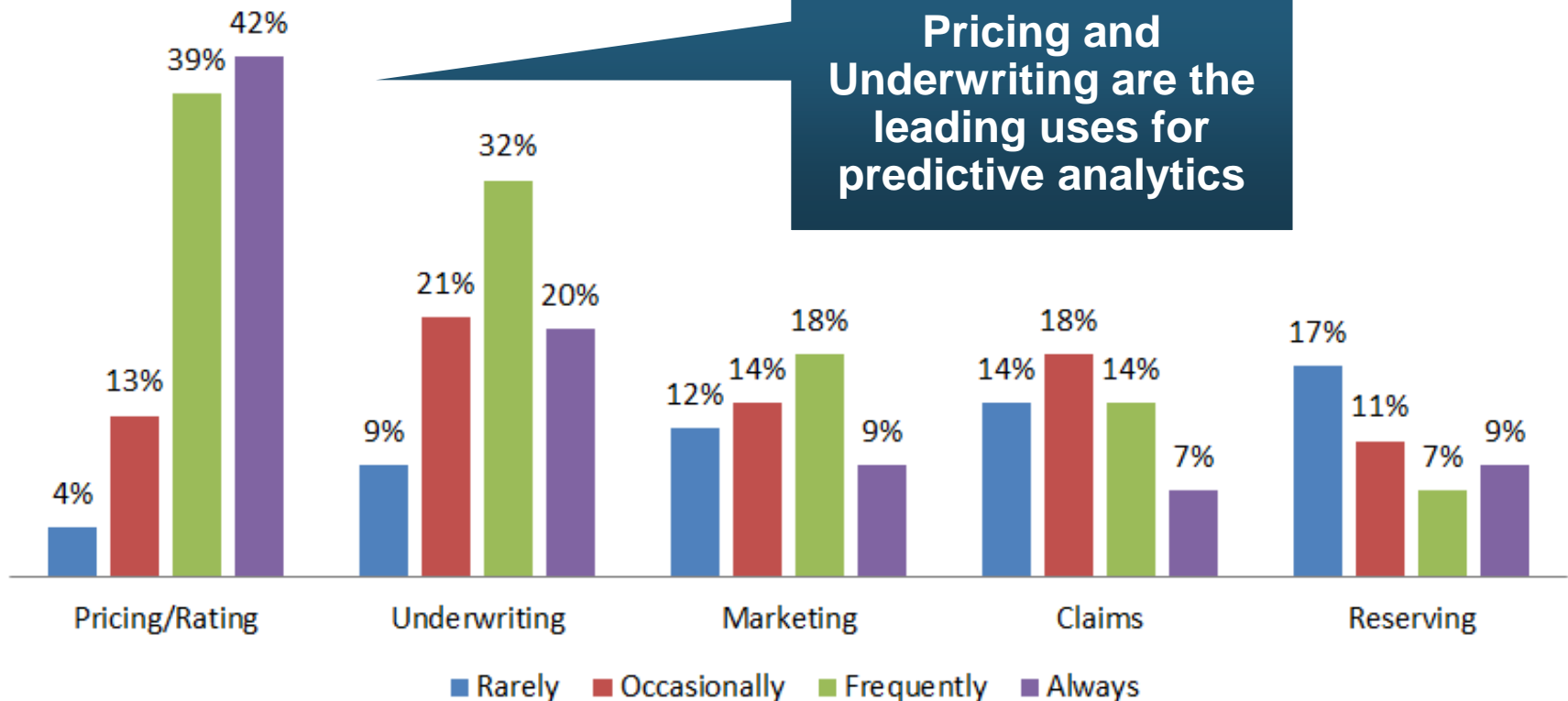




# Uses of Predictive Analytics by Function

## Uses of Predictive Modeling

Pricing and Underwriting are the leading uses for predictive analytics



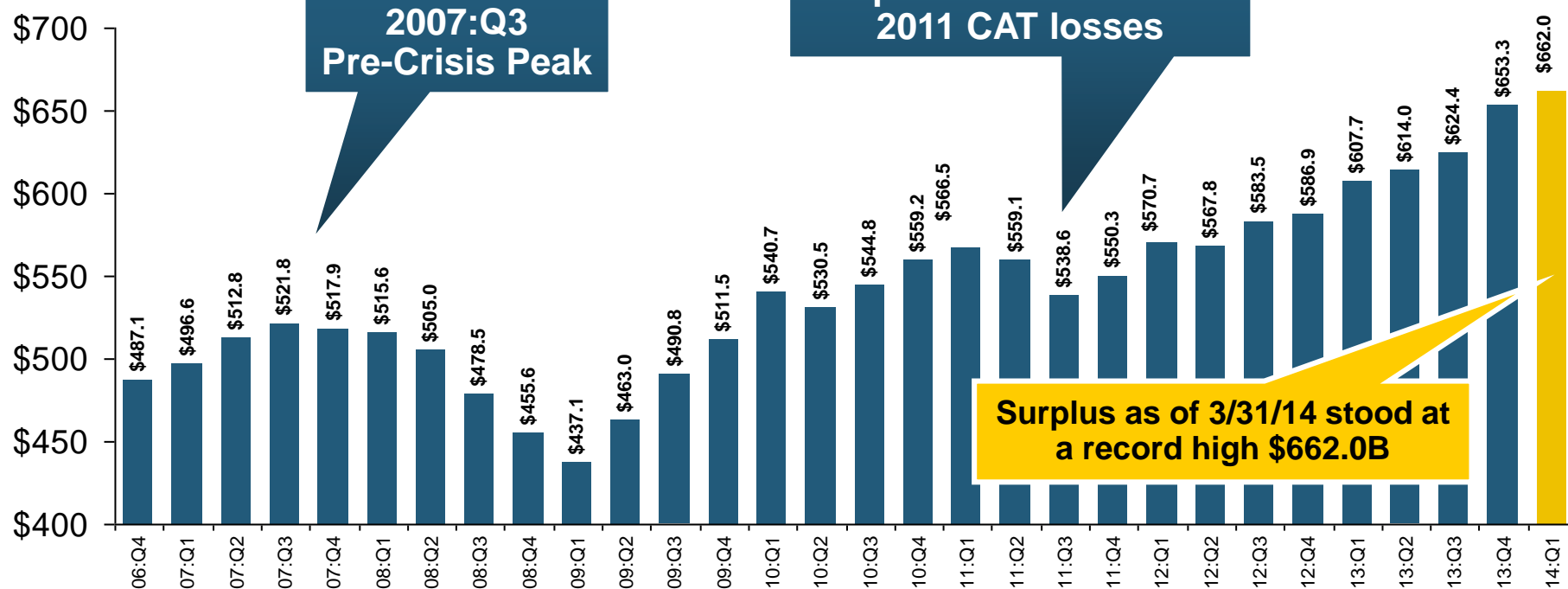
Source: Earnix/ISO September 2013 Survey

# **CAPITAL & CAPACITY**

**Primary Insurance and  
Reinsurance Markets Are  
Well Capitalized**

# Policyholder Surplus, 2006:Q4–2014:Q1

(\$ Billions)



**The industry now has \$1 of surplus for every \$0.73 of NPW, close to the strongest claims-paying status in its history.**

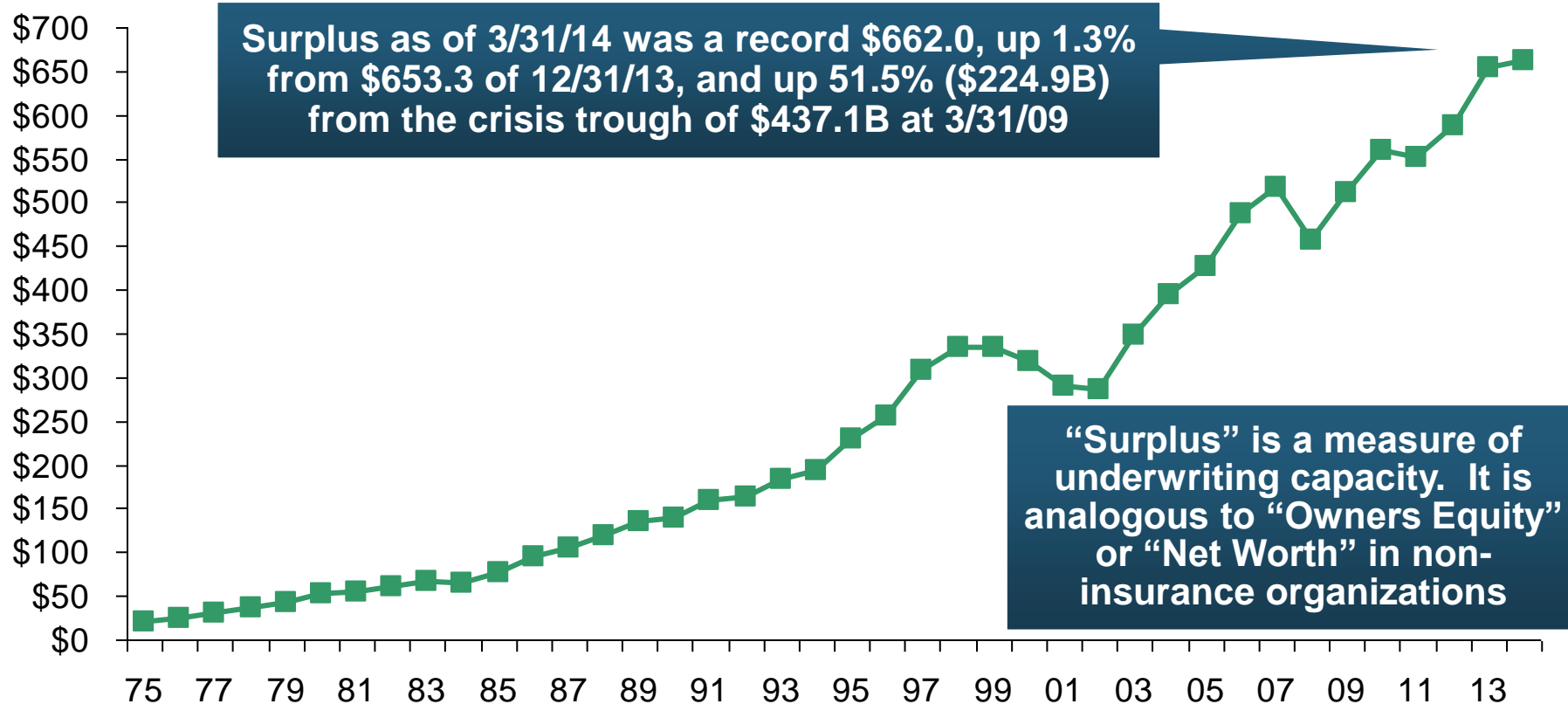
2010:Q1 data includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

Sources: ISO, A.M. Best.

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

# US Policyholder Surplus: 1975–2014\*

(\$ Billions)



**The Premium-to-Surplus Ratio Stood at \$0.73:\$1 as of 3/31/14, a Near Record Low (at Least in Recent History)**

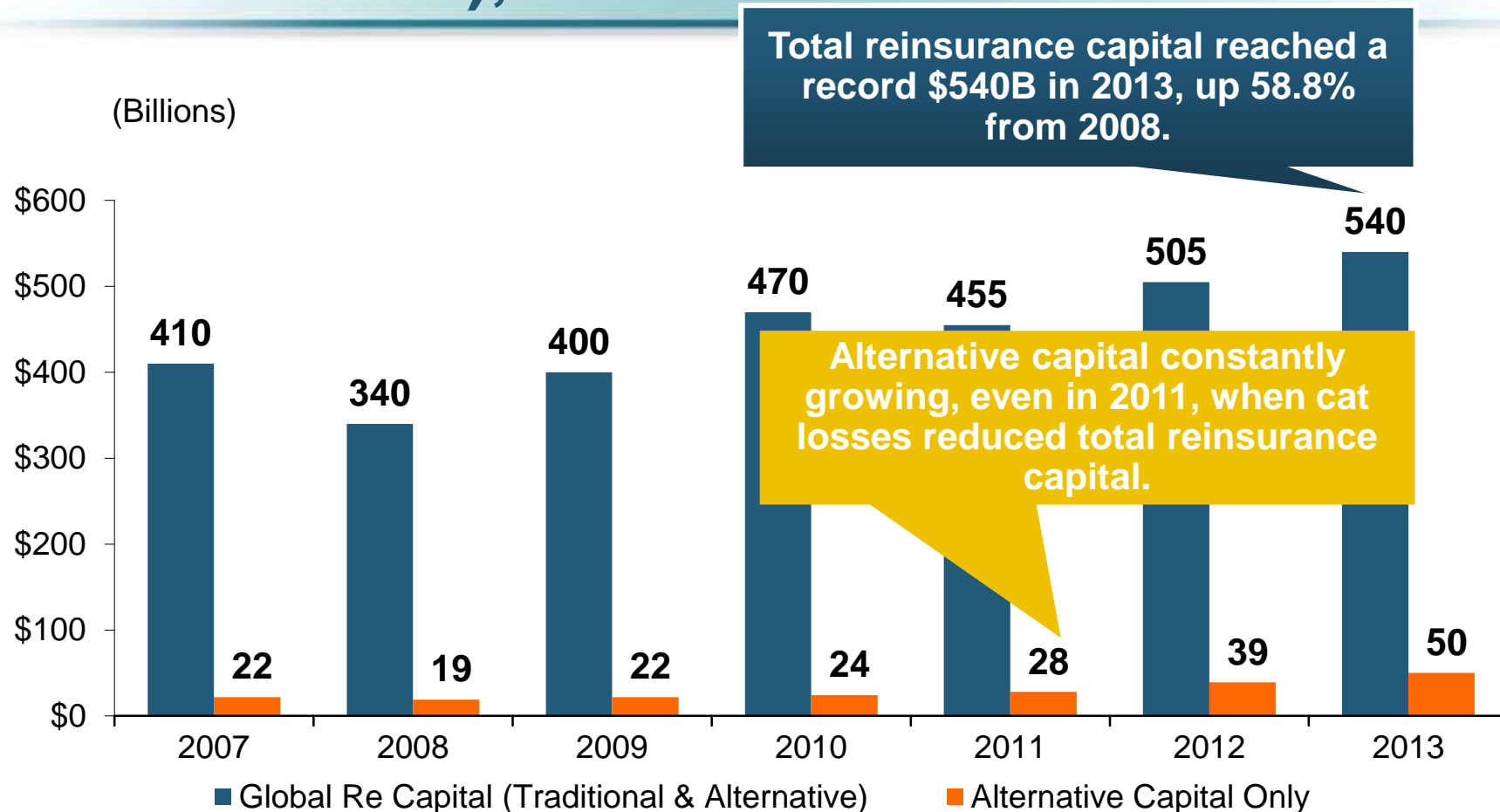
\* As of 3/31/14.

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

# **ALTERNATIVE CAPITAL & REINSURANCE MARKETS**

**Impact Is Focused on Well-  
Modelled Property Risks**

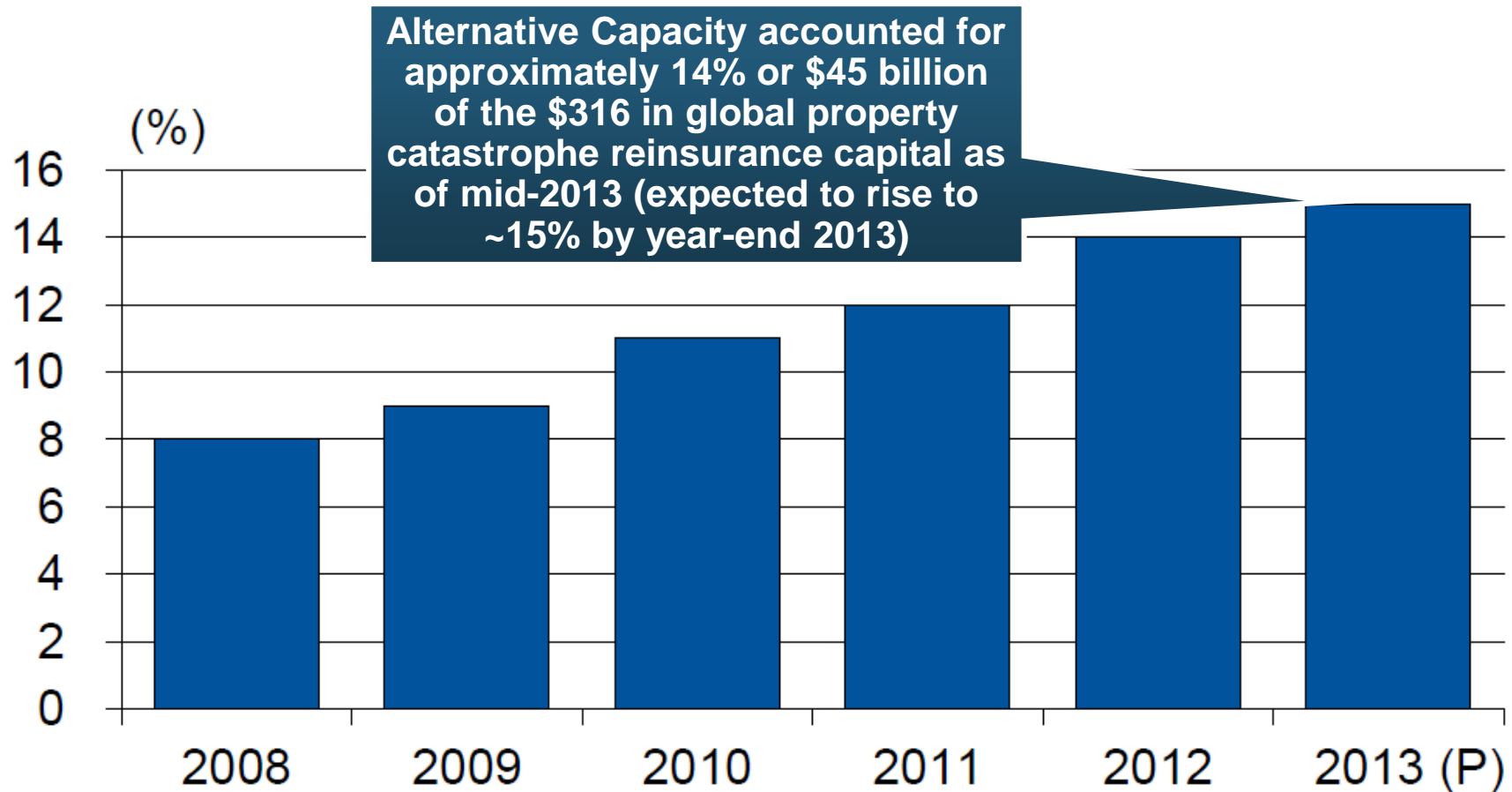
# Global Reinsurance Capital (Traditional and Alternative), 2007 - 2013



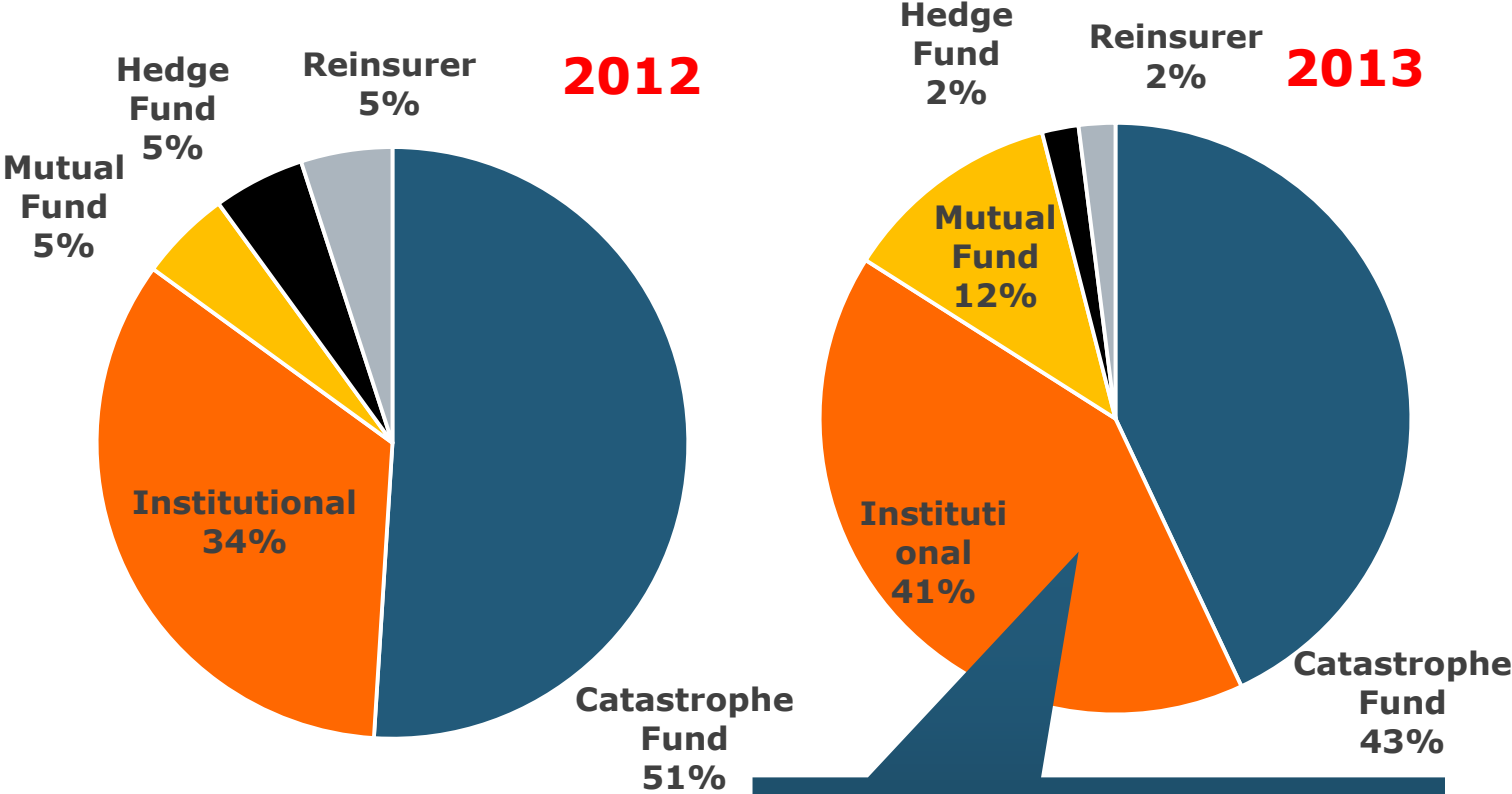
**But alternative capacity has grown 163% since 2008, to \$50B. It has grown 79% in the past two years.**

# Alternative Capacity as a Percentage of Global Property Catastrophe Reinsurance Limit

(As of Year End)



# Investor by Category

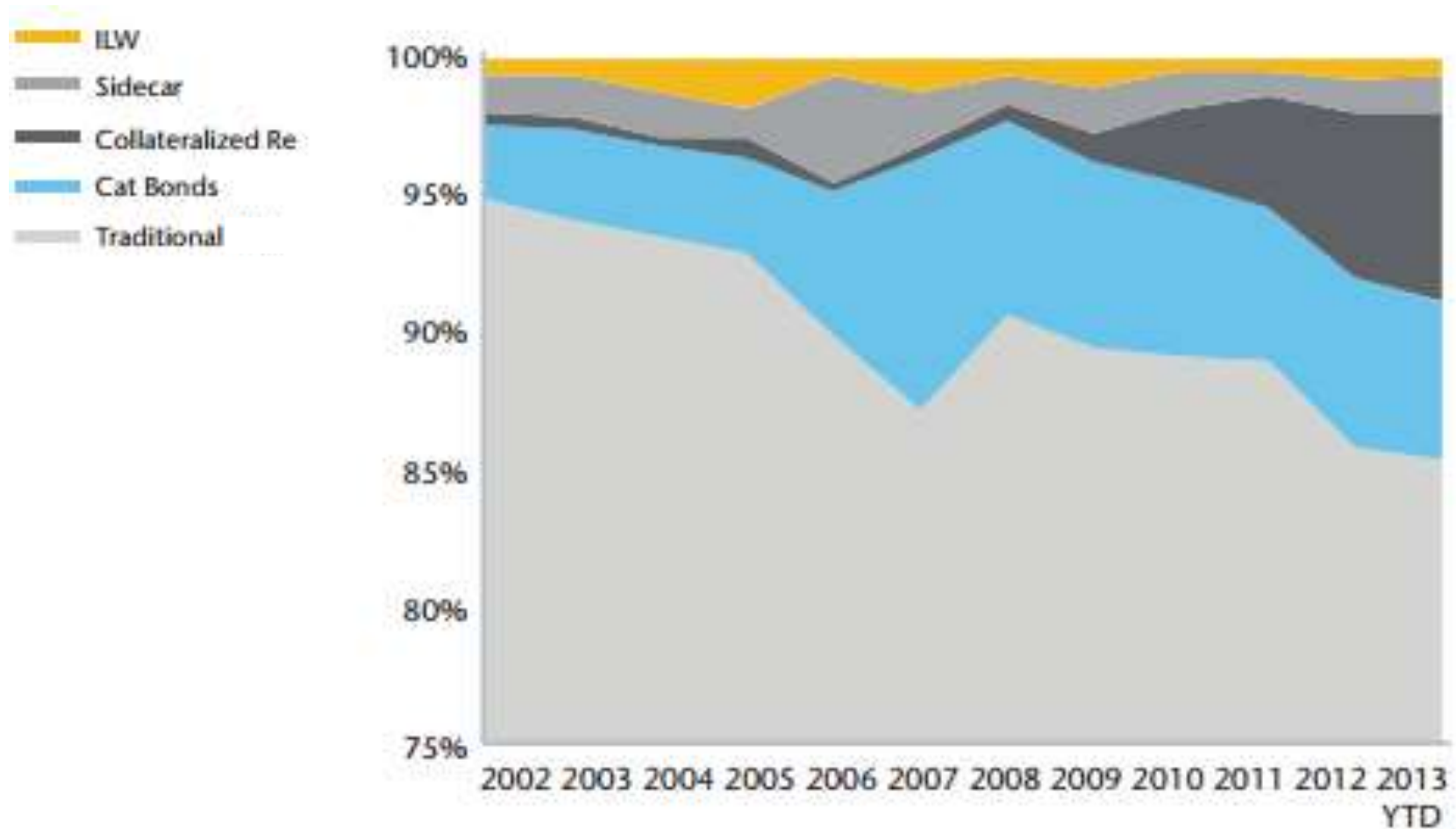


**Institutional investors are accounting for a larger share of alternative reinsurance investors**

Years ended June 30.  
Source: Aon Benfield Securities; Insurance Information Institute.



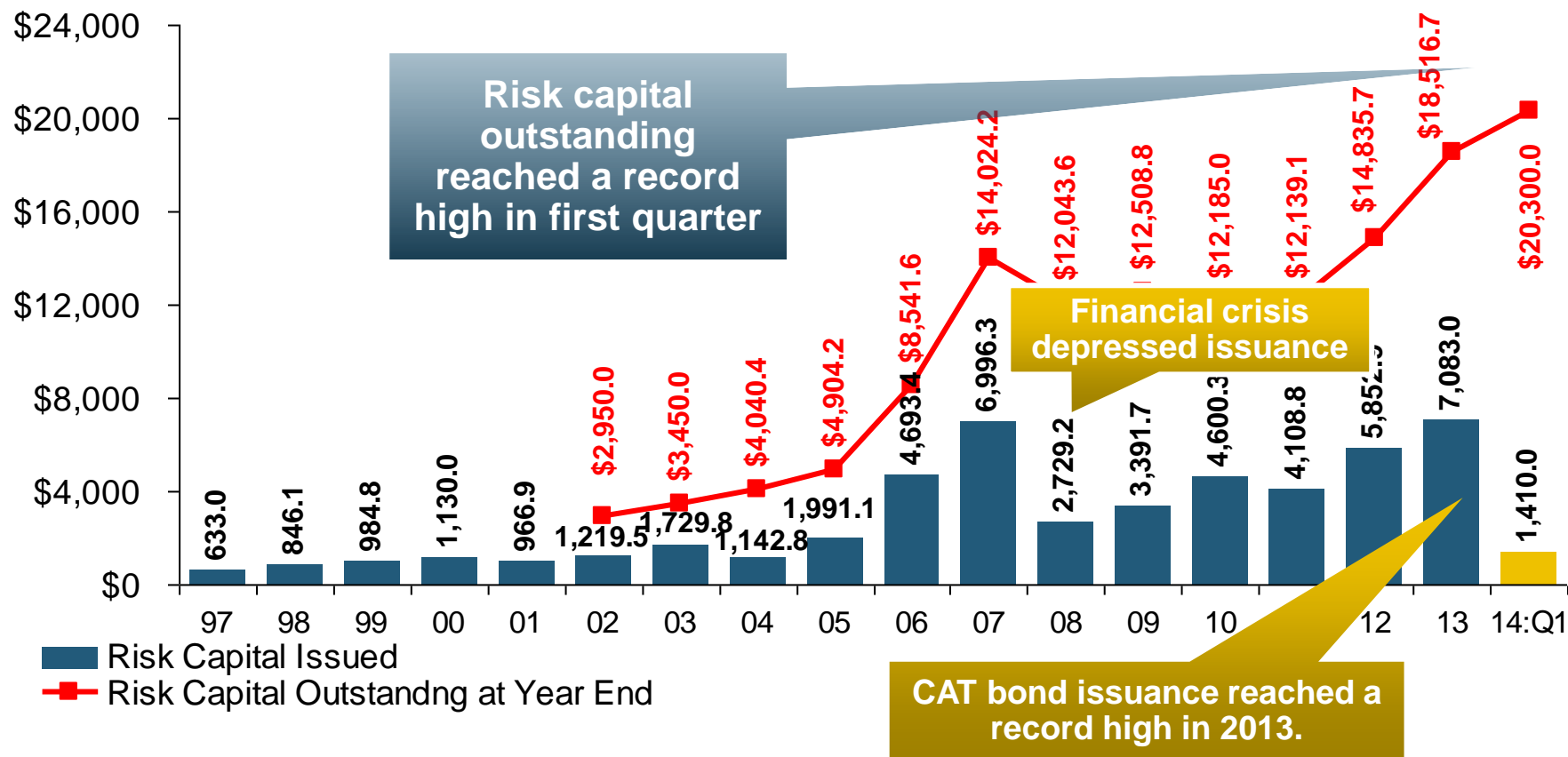
# Alternative Risk Transfer: Market Growth



**Since 2009, market share of collateralized reinsurance has grown faster than cat bonds or other forms of risk transfer**

# Catastrophe Bonds: Issuance and Outstanding, 1997- 2014:Q1

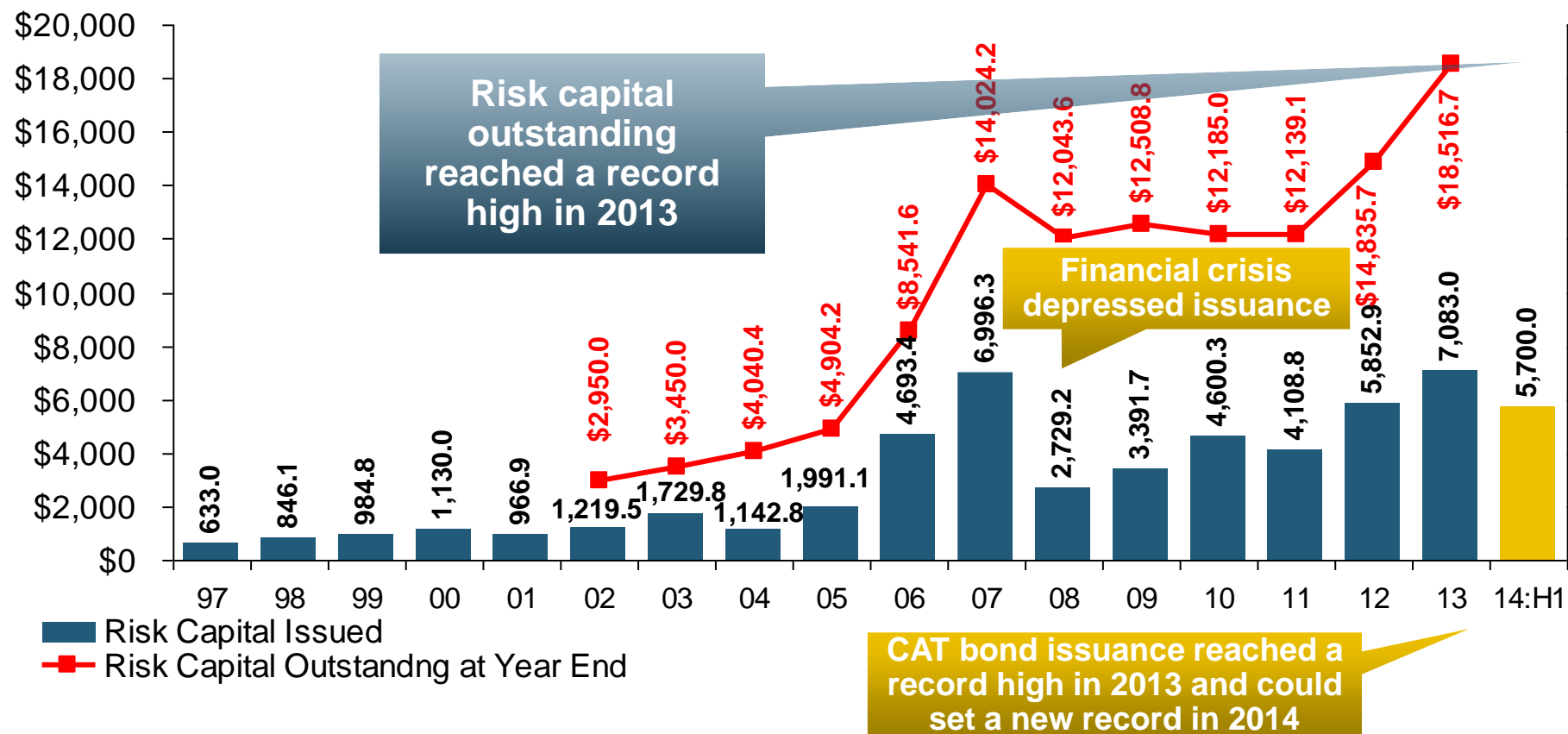
## Risk Capital Amount (\$ Millions)



**Second Quarter 2014 Will Set a Record – Nearly \$4.6 Billion Issued**

# Catastrophe Bonds: Issuance and Outstanding, 1997- 2014:Q2\*

## Risk Capital Amount (\$ Millions)

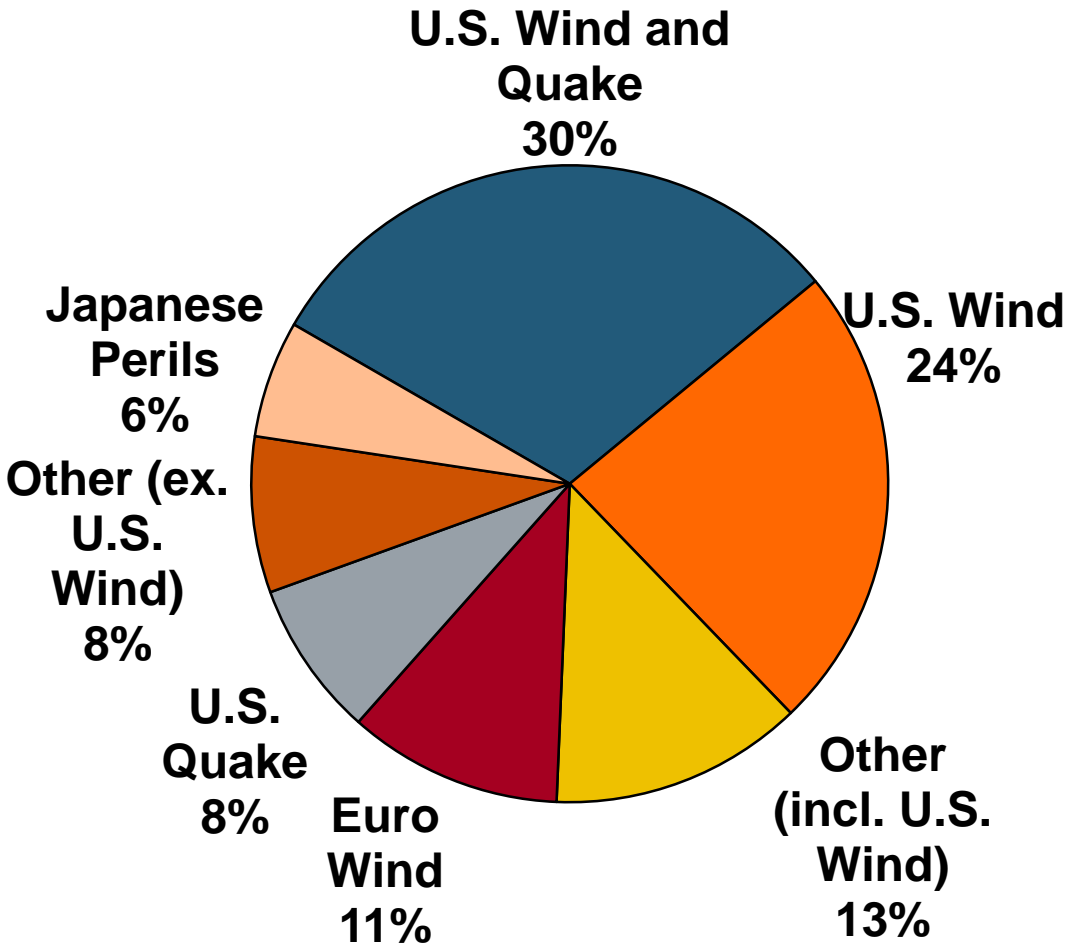


**Catastrophe Bond Issuance Is Approaching Pre-Crisis Levels While Risk Capital Outstanding Stands at an All-Time Record**

\*Through June 30, 2014.

Source: Guy Carpenter; Insurance Information Institute.

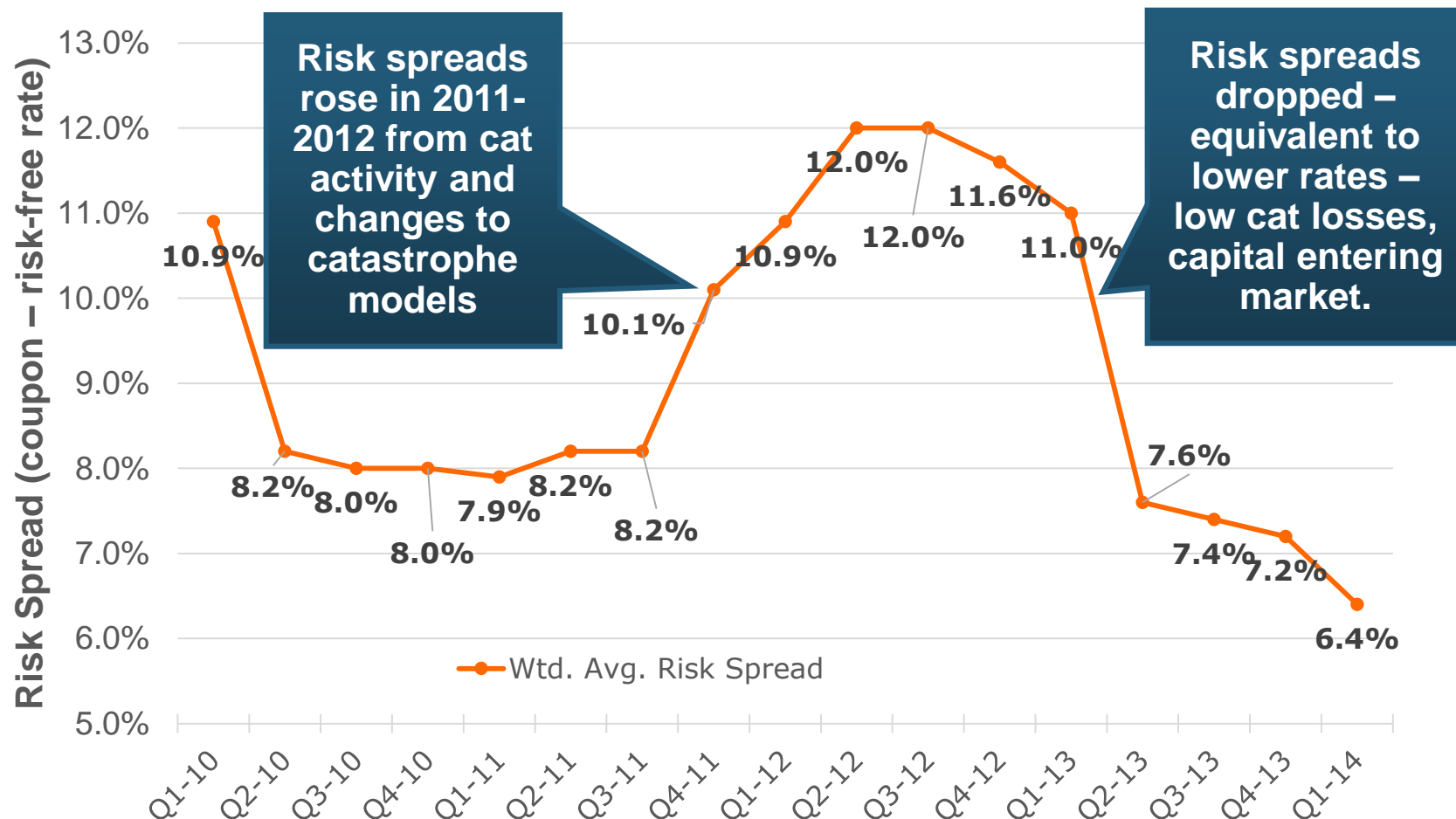
Catastrophe bonds are heavily concentrated in U.S. hurricane exposures. Two-thirds of catastrophe risks outstanding cover U.S. wind risks.



Source: Willis Capital Markets.

# U.S. Wind-Exposed Risk Premium\*

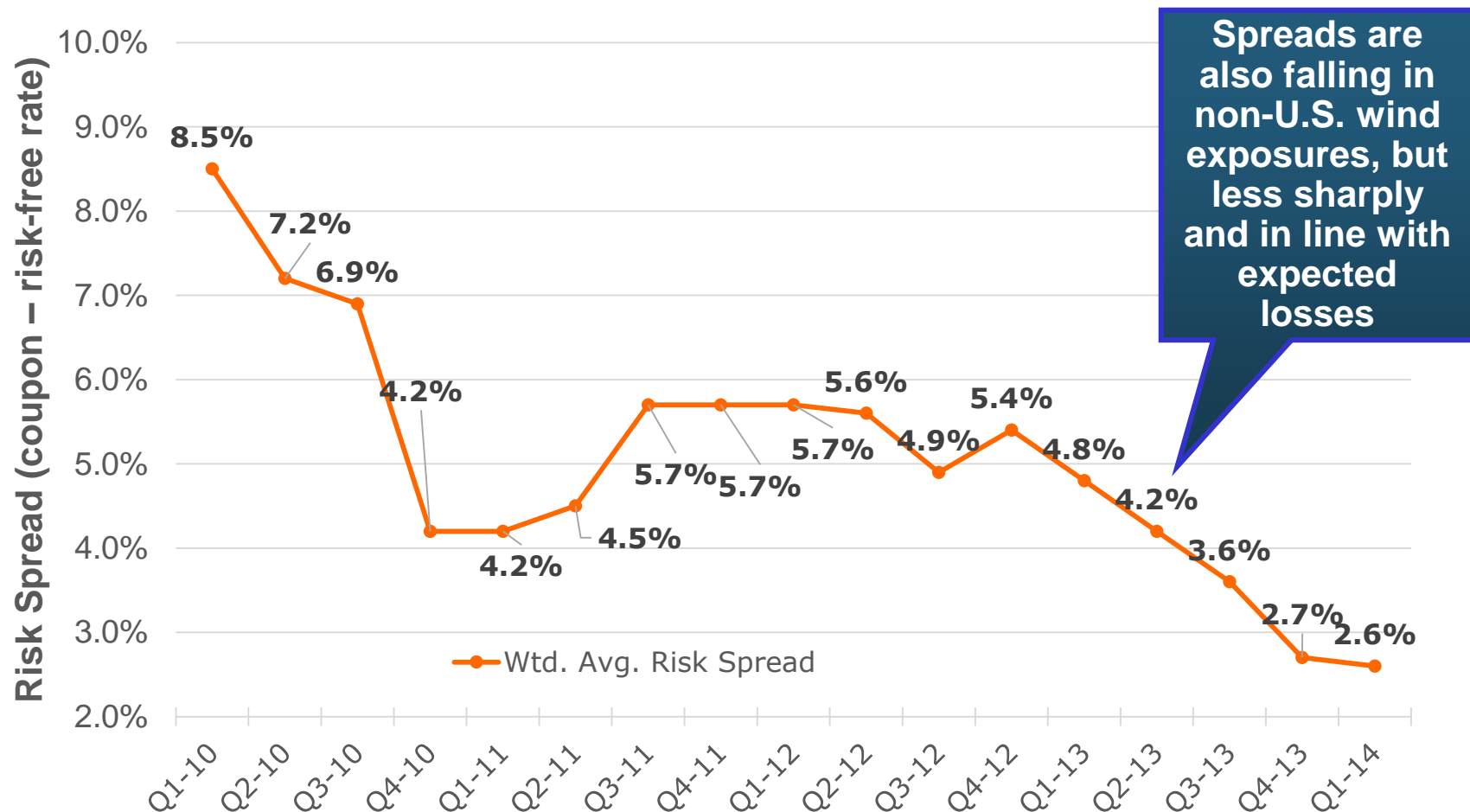
## 2010:Q1 to 2014: Q1



\* Trailing 12-month average

SOURCE: Willis Capital Markets, Insurance Information Institute.

# Non-U.S. Wind-Exposed Risk Premium\* 2010:Q1-2014: Q1

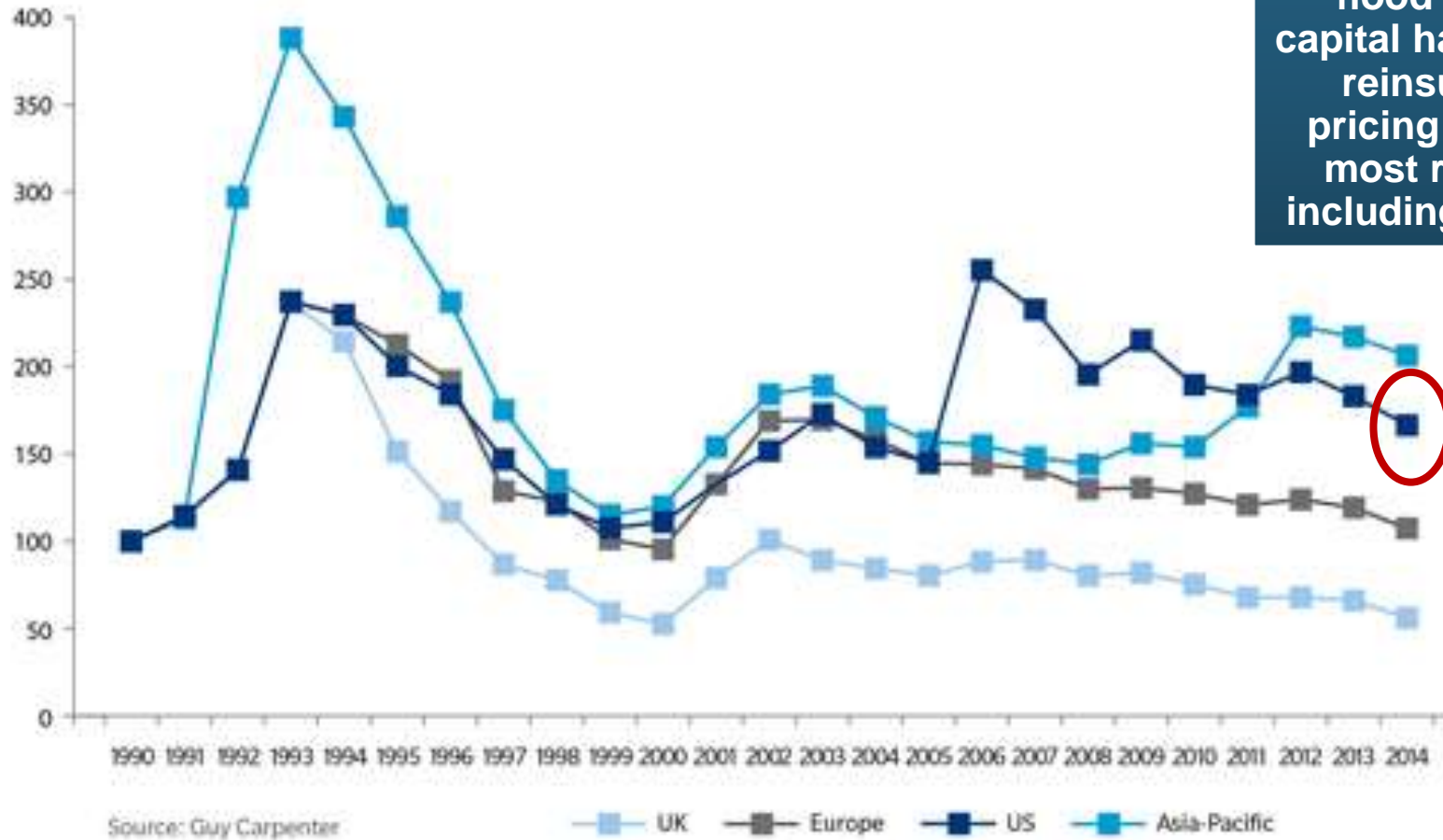


\* Trailing 12-month average.

SOURCE: Willis Capital Markets, Insurance Information Institute.

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

F-10 | REGIONAL PROPERTY CATASTROPHE ROL INDEX – 1990 TO 2014



Lower CATs and a flood of new capital has pushed reinsurance pricing down in most regions, including the U.S.

\*As of Jan. 1.

Source: Guy Carpenter

# Notable Cat Bond Events

Bond	Sponsor	Event(s)	Loss to Investors
<b>Kelvin Ltd.</b>	Koch Energy	U.S. Winter 2000-01	\$5 million
<b>George Town Re</b>	St. Paul Re	9/11, Hurricane Floyd, European wind	\$1 million
<b>KAMP Re</b>	Zurich	Hurricane Katrina (2005)	\$144 million
<b>Avalon Re</b>	Oil Casualty	Katrina, 2005 fuel depot explosion, NYC street collapse	\$13 million
<b>Ajax</b>	Aspen Re	2008 Lehman bankruptcy	\$72 million
<b>Carillon</b>	Munich Re	2008 Lehman bankruptcy	\$31 million
<b>Newton Re</b>	Catlin	2008 Lehman bankruptcy	\$4 million
<b>Willow</b>	Allstate	2008 Lehman bankruptcy	\$10 million
<b>Muteki Ltd.</b>	Munich Re for Zenkyoren	2011 Tohoku earthquake	\$300 million
<b>Vega Capital</b>	Swiss Re	2011 Tohoku earthquake	\$16 million
<b>Mariah Re</b>	American Family	2011 tornadoes	\$200 million <sup>1</sup>
<b>Vega Capital</b>	Swiss Re	Superstorm Sandy (2012)	\$7 million
<b>Successor X</b>	Swiss Re	Superstorm Sandy (2012)	\$15 million <sup>2</sup>

**Most events have been relatively small. Four were counterparty risks related to the Lehman Brothers bankruptcy in 2008.**

1 (In litigation) 2 Estimated

Source: Munich Re



# Questions Arising from Influence of Alternative Capital

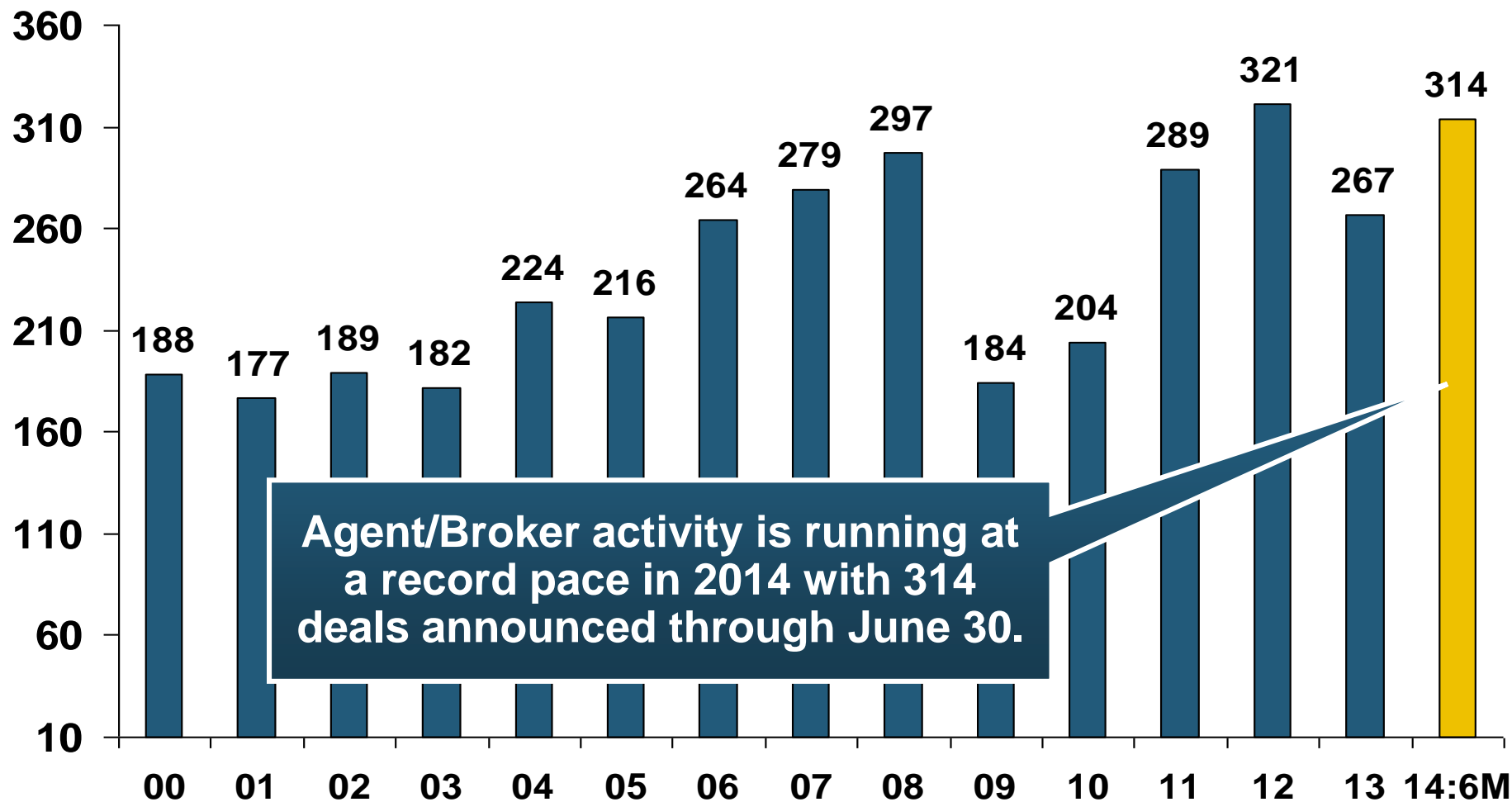
- **What Will Happen When Investors Face Large-Scale Losses?**
- **What Happens When Interest Rates Rise?**
- **Does ILS Have a Higher Propensity to Litigate?**
- **How Much Lower Will Risk Premiums Shrink/ROLs Fall?**
- **Will There Be Spillover Into Casualty Reinsurance?**
- **Will Alternative Capital Drive Consolidation?**

# **Agent/Broker Consolidation Trends**

**M&A Activity is on the Rise Again in the  
Aftermath of the Great Recession**

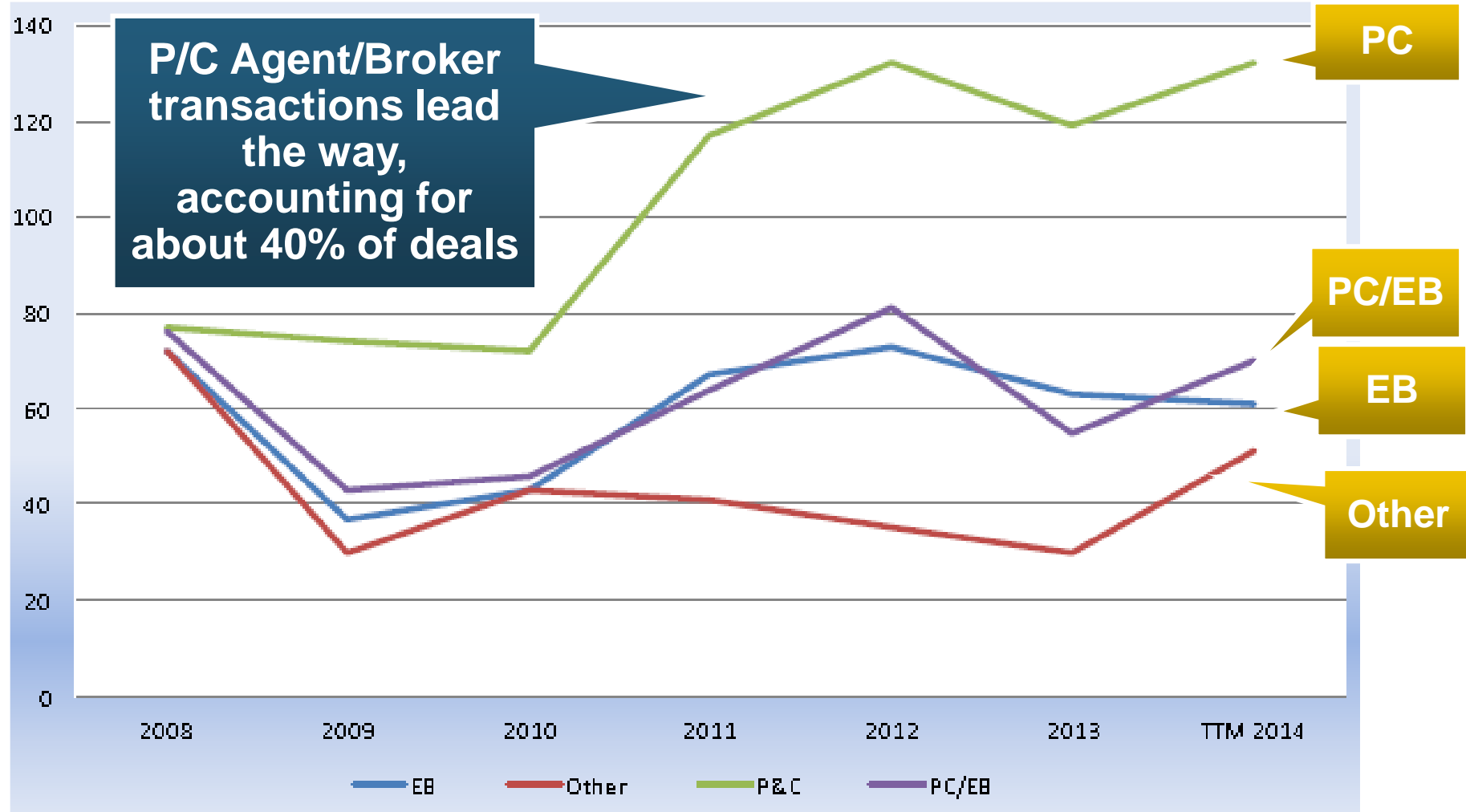
# Agent/Broker M&A Deals, 2000-2014:6M

## Number of Deals

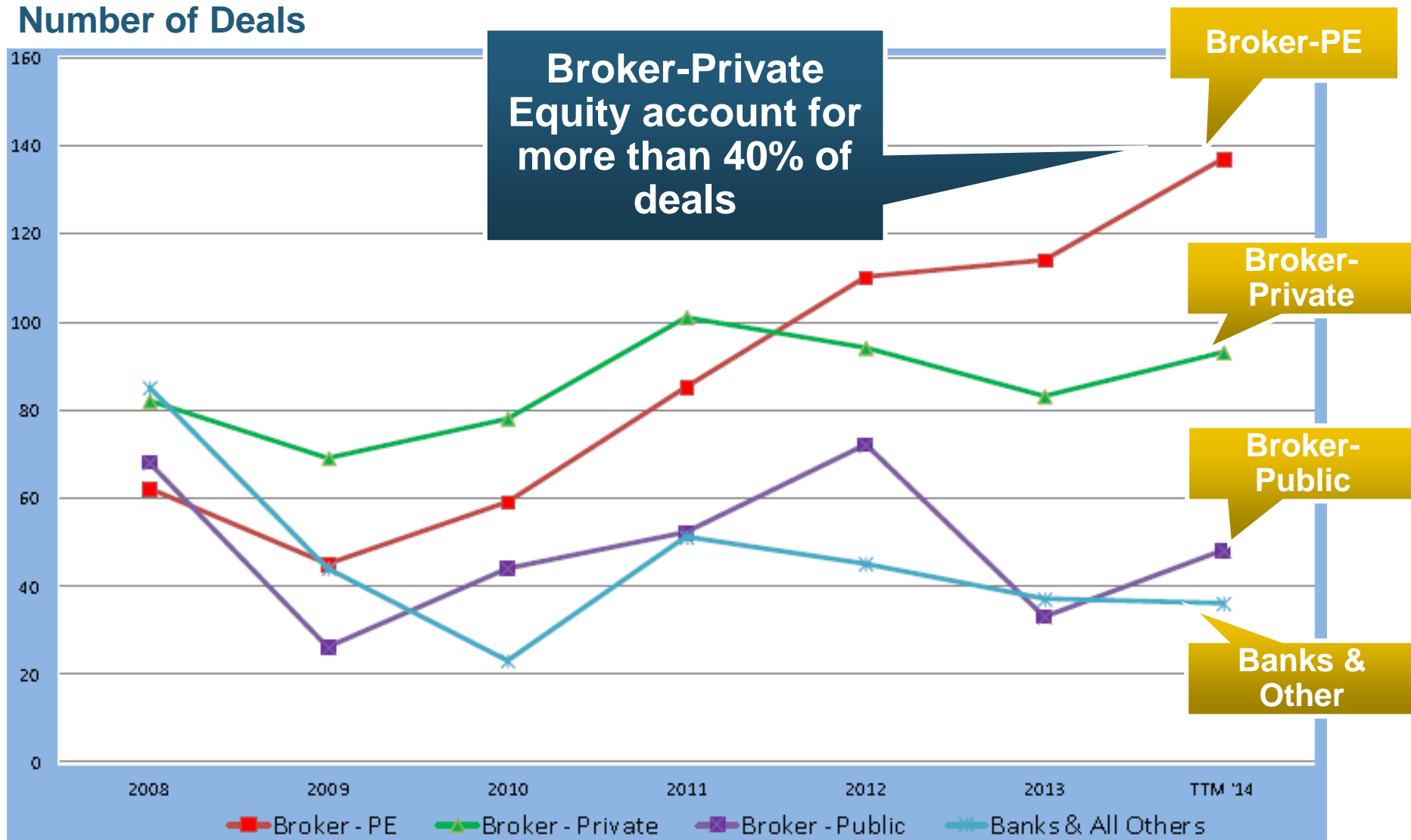


# Announced Agent/Broker Transactions by Seller Type, 2008-2014:6M

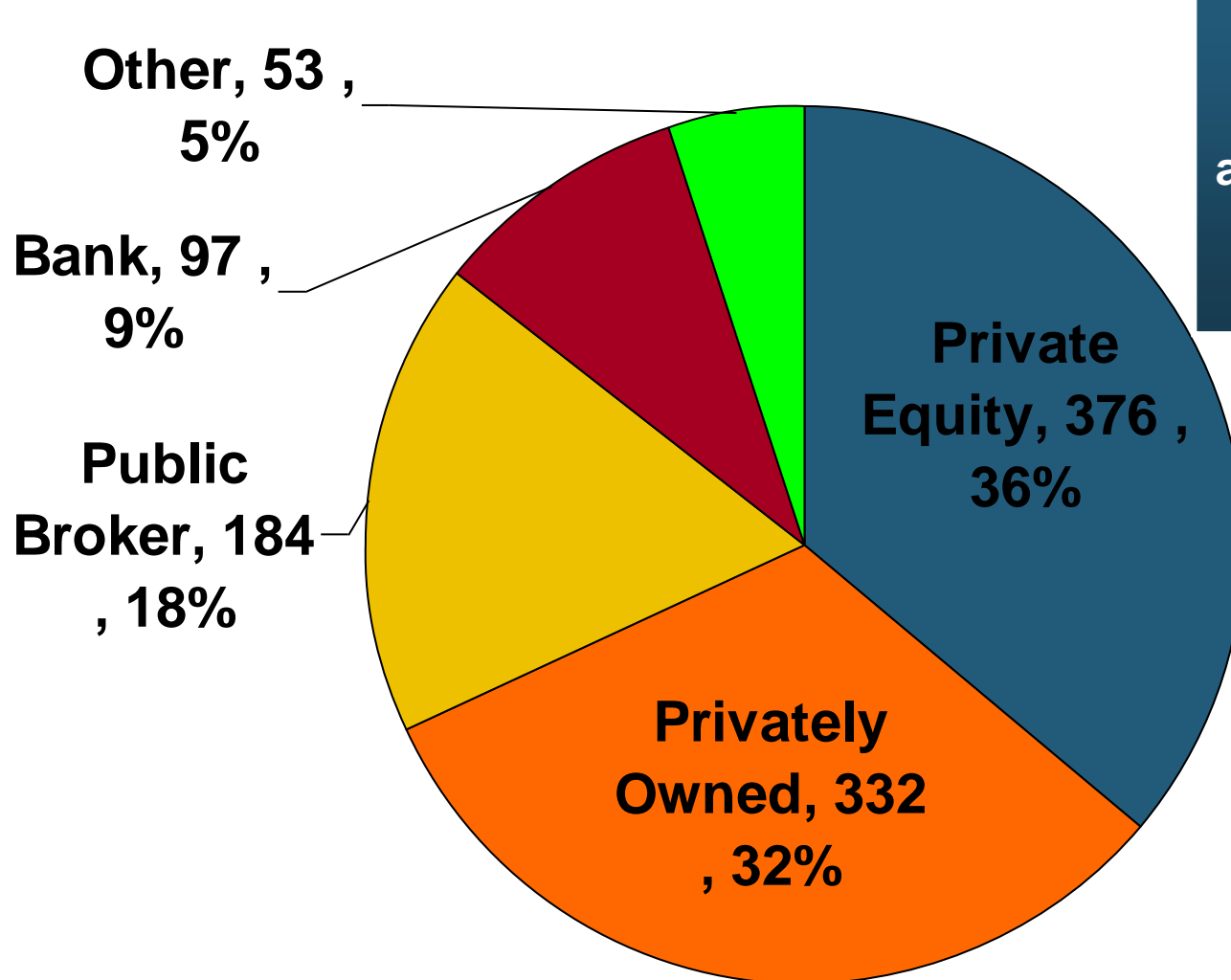
## Number of Deals



# Announced Agent/Broker Transactions by Buyer Type, 2008-2014:6M



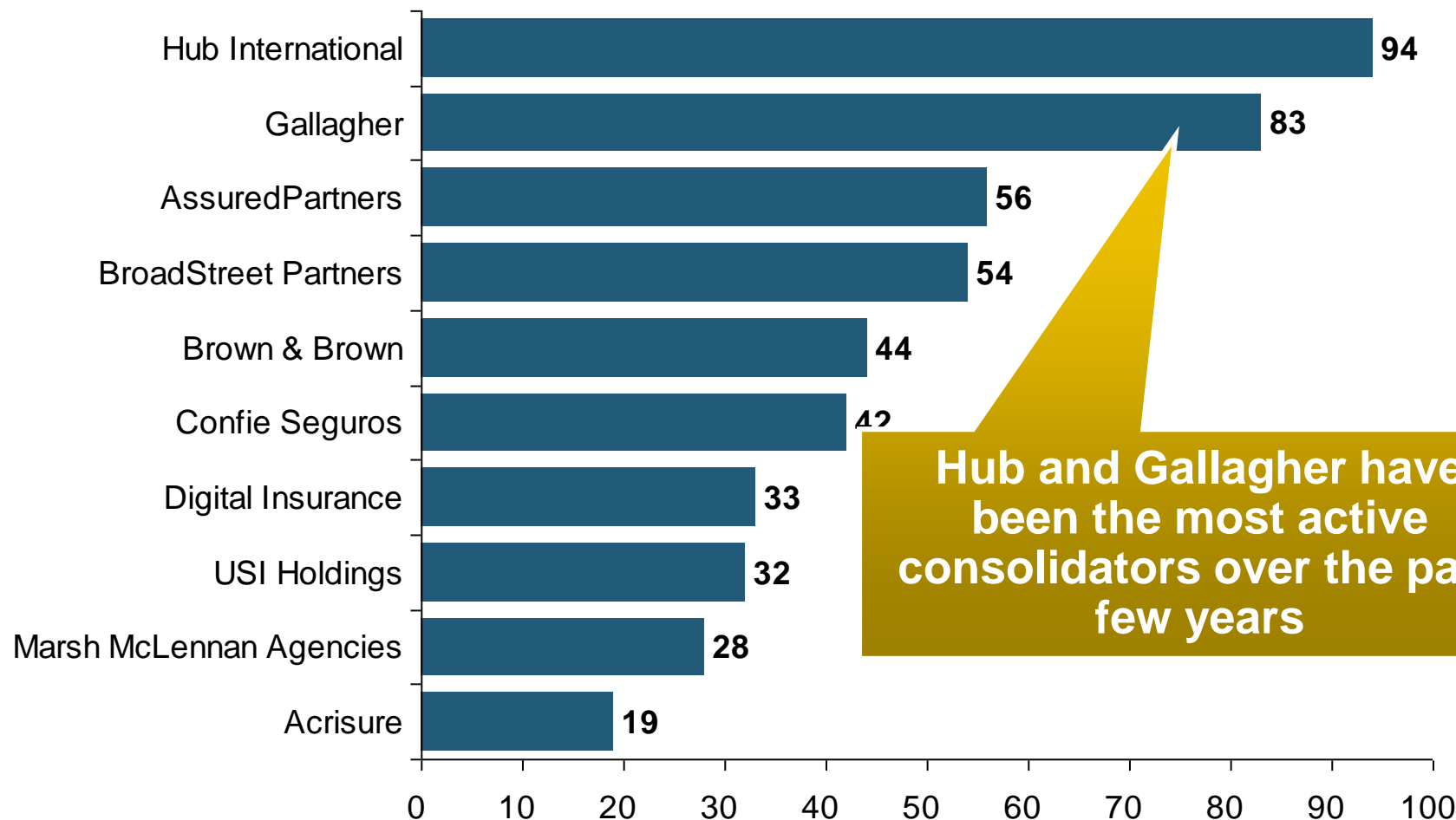
# Agent/Broker Consolidators by Type, 2011 – 2014:6M



Private Equity and Privately Owned agencies/brokers accounted for 68% of the 1,042 transactions from 2011 through mid-2014

# Top 10 Most Active Agent/Broker Buyers, 2011 – 2014:6M

(Number of Transactions)



# **The Strength of the Economy Will Influence P/C Insurer Growth Opportunities**

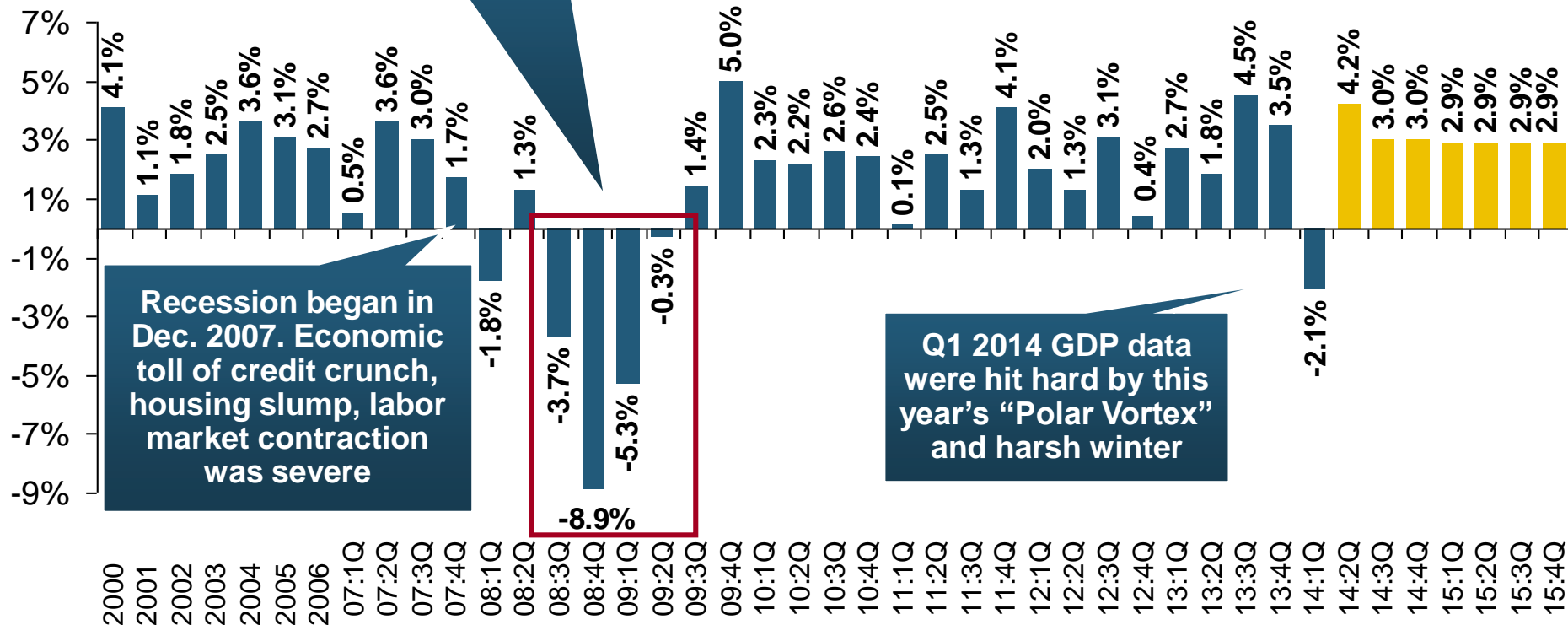
**Economic Growth in the Northwest  
Outpace the Overall US**



# US Real GDP Growth\*

## Real GDP Growth (%)

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%

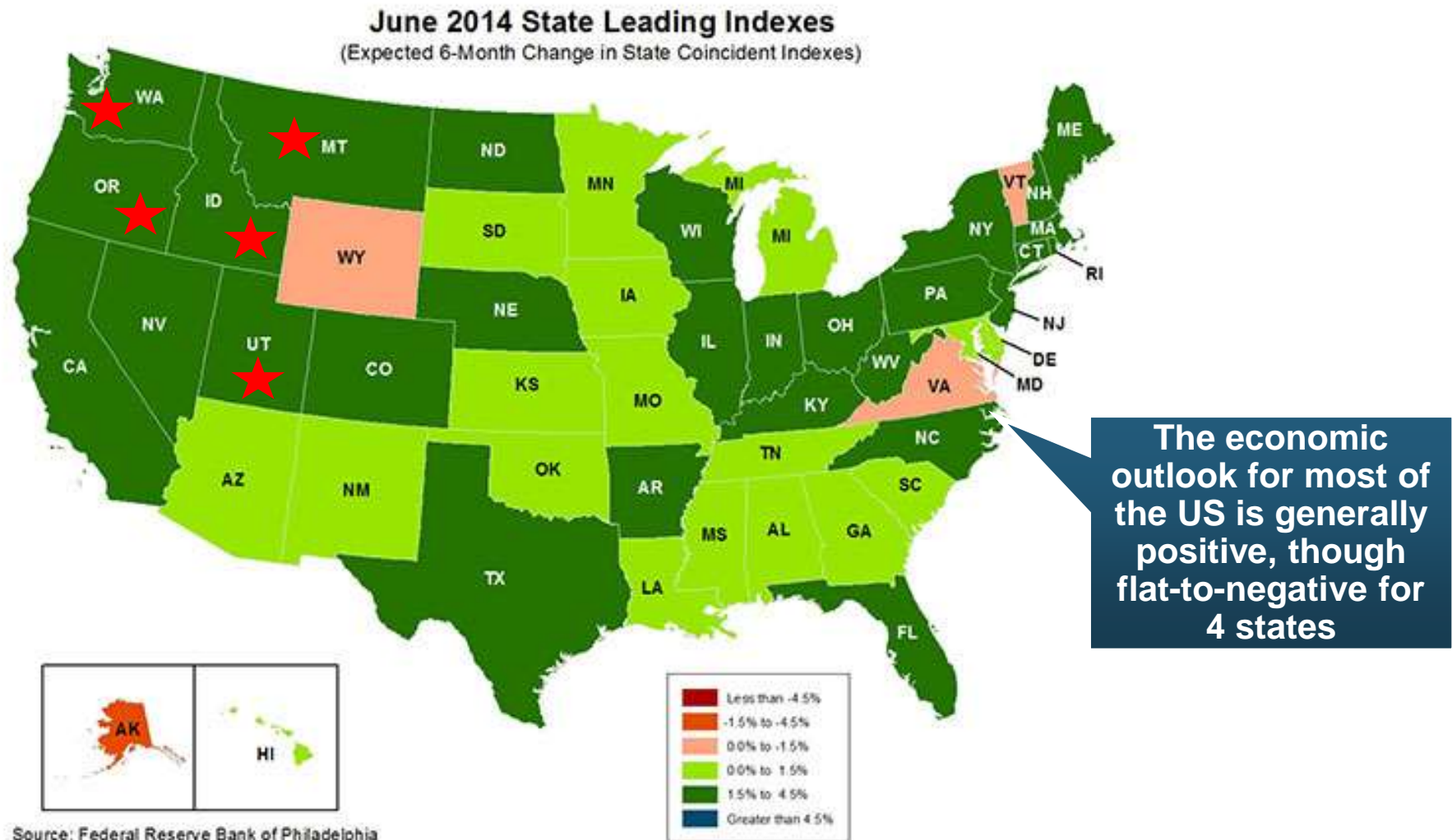


**Demand for Insurance Should Increase in 2014/15 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly**

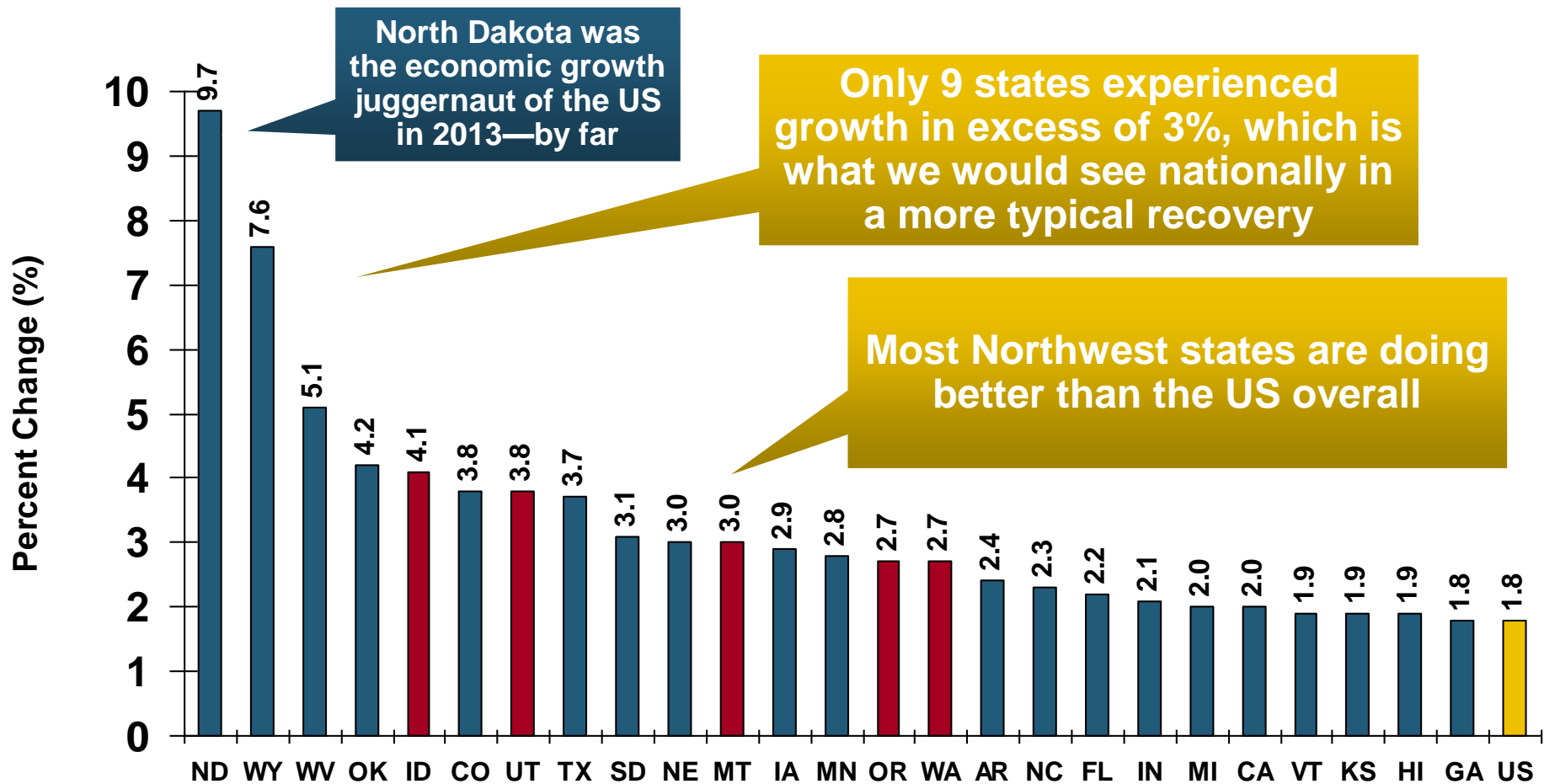
\* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 9/14; Insurance Information Institute.

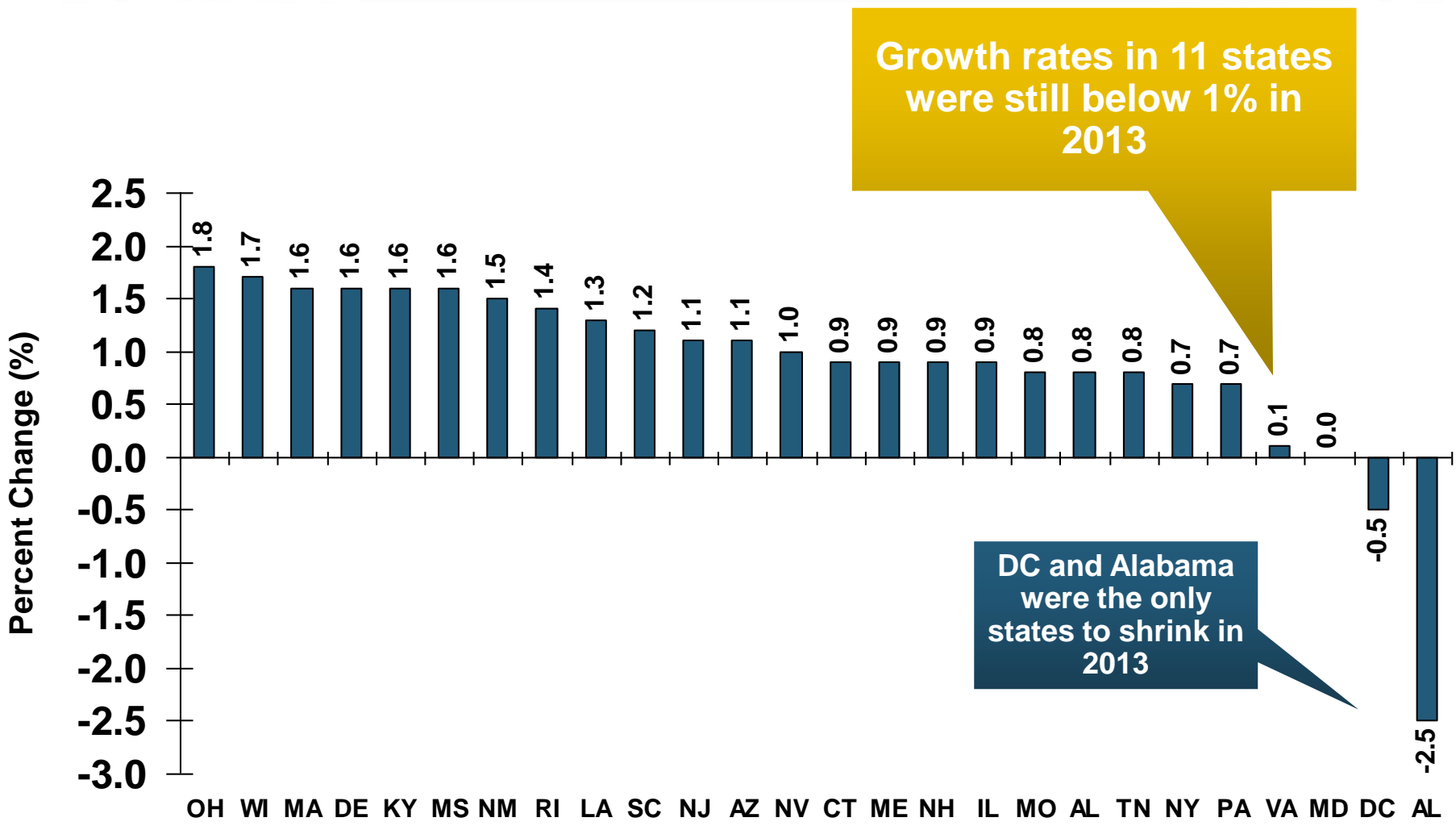
# State-by-State Leading Indicators through 2014:Q4



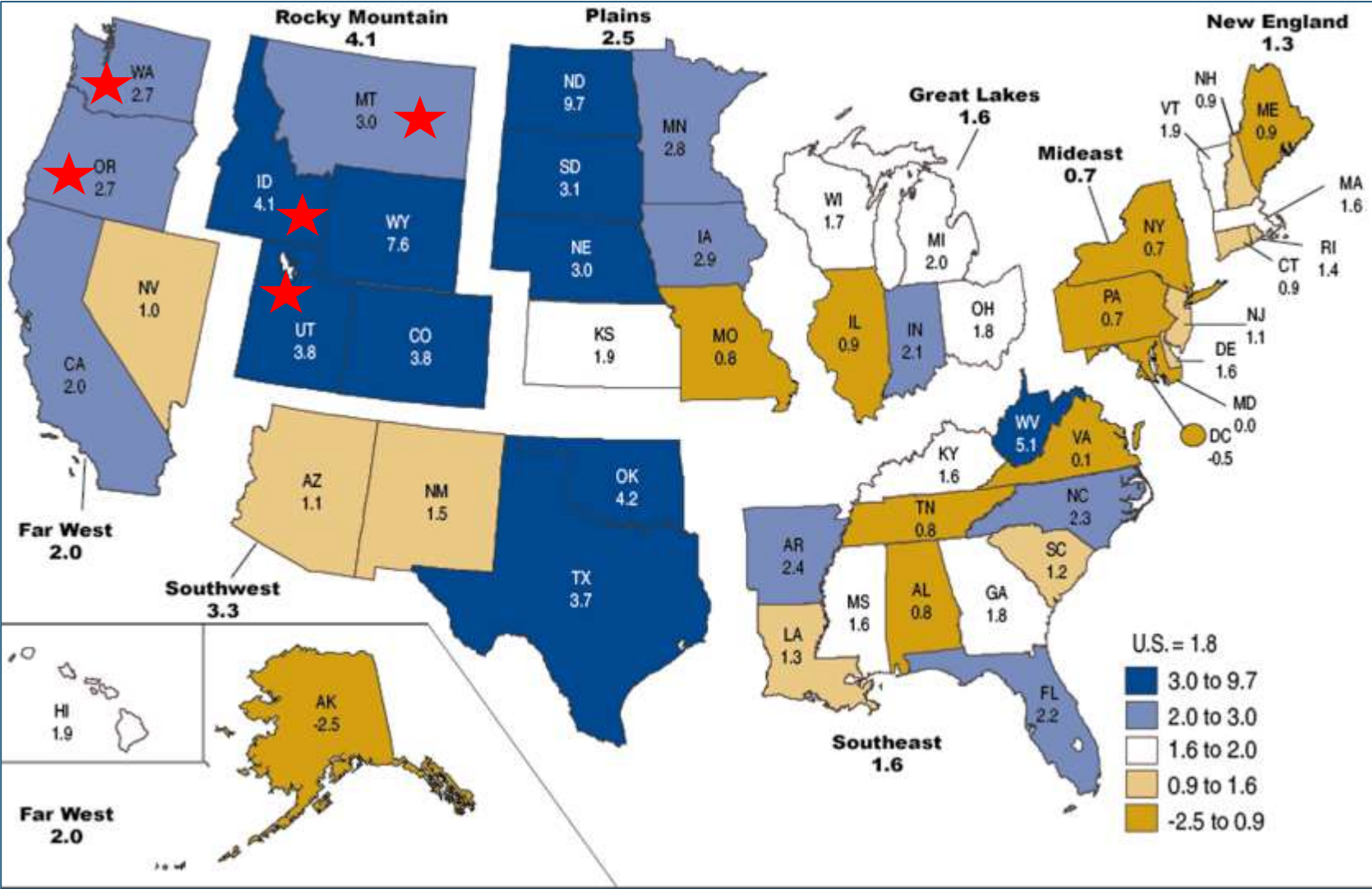
# Real GDP by State Percent Change, 2013: Highest 25 States



# Real GDP by State Percent Change, 2013: Lowest 25 States



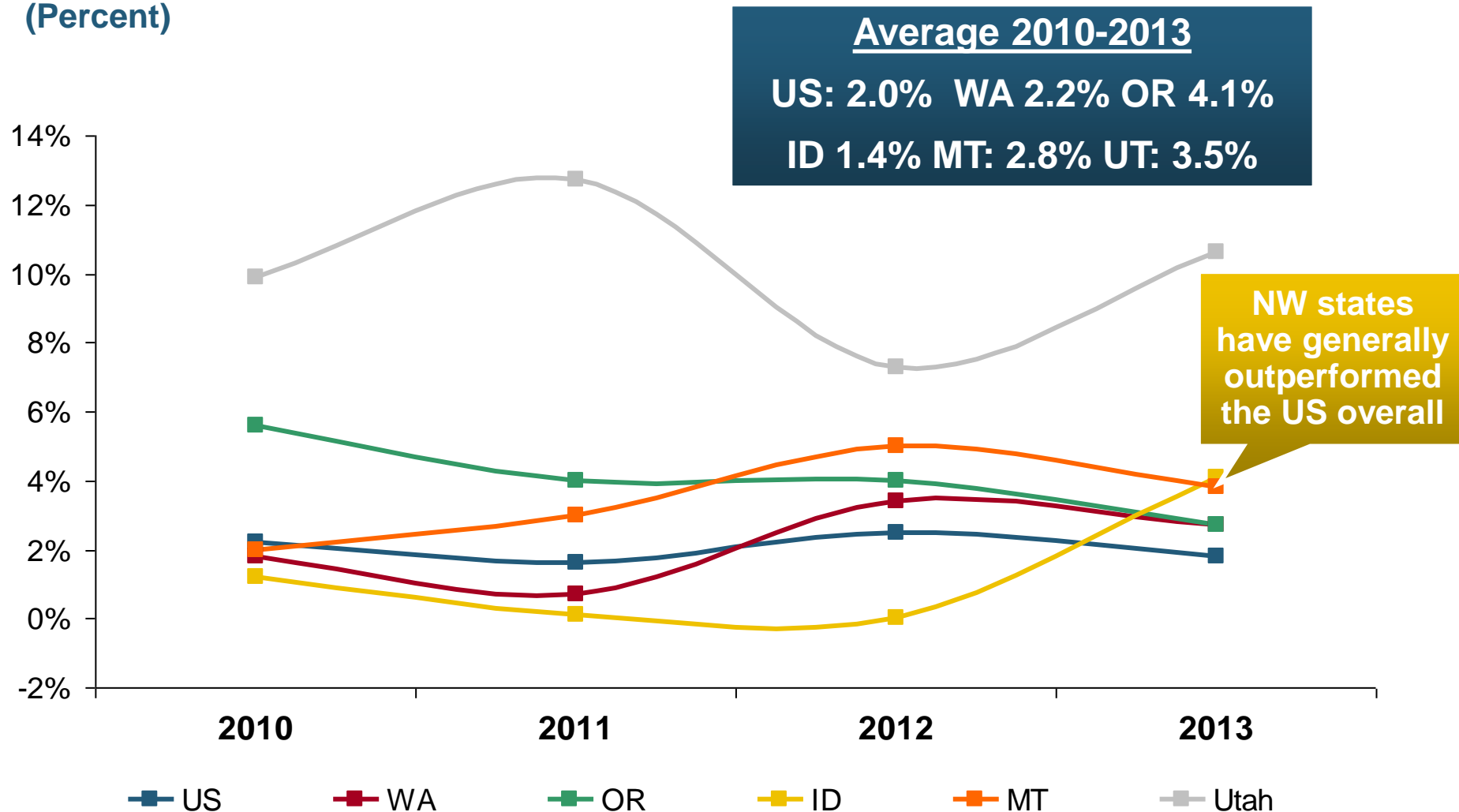
# Percent Change in Real GDP by State, 2013



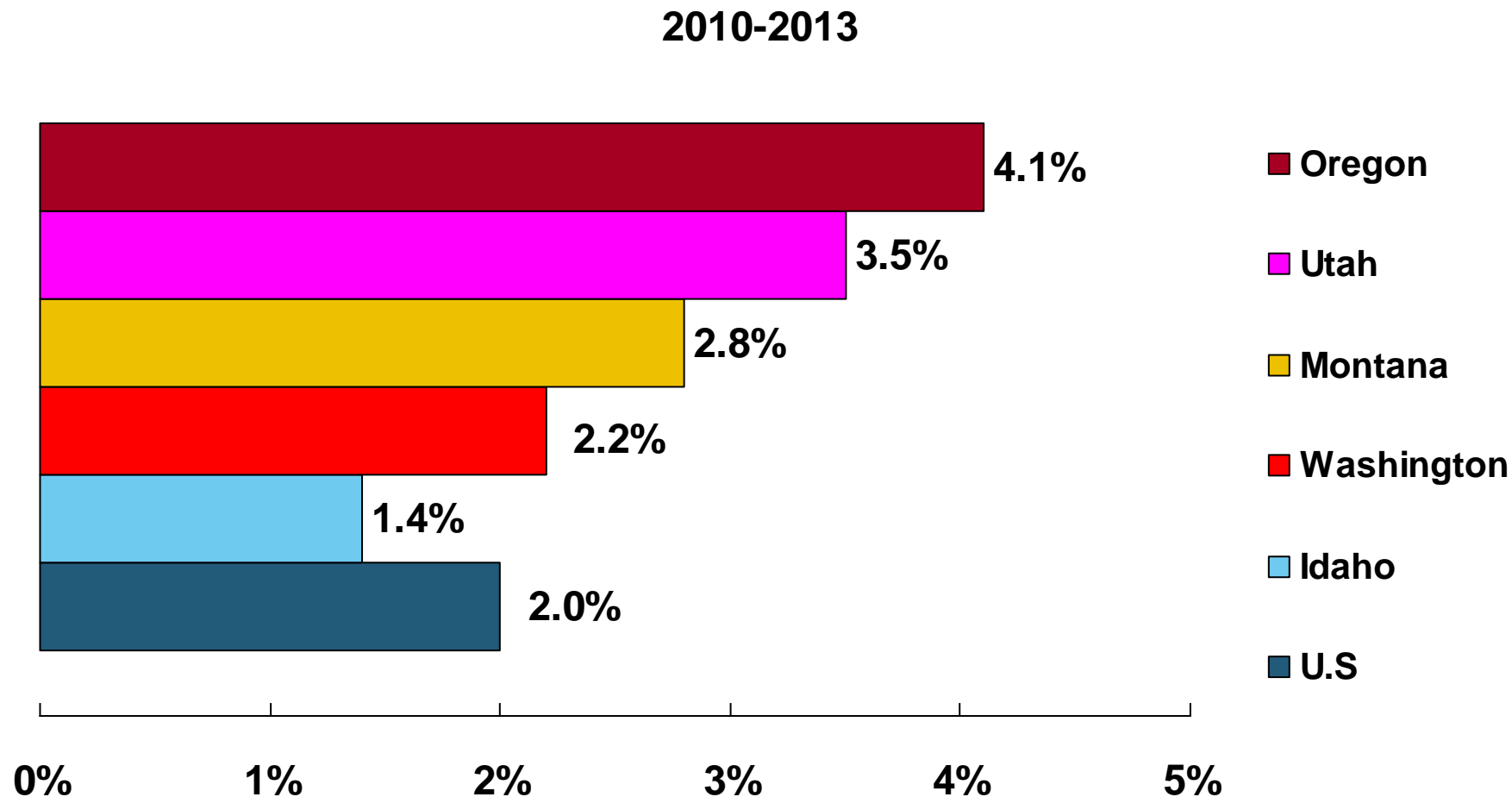
Sources: [US Bureau of Economic Analysis](#); Insurance Information Institute.

# State GDP Growth: WA, OR, ID, MT and UT vs. U.S., 2010-2013

(Percent)



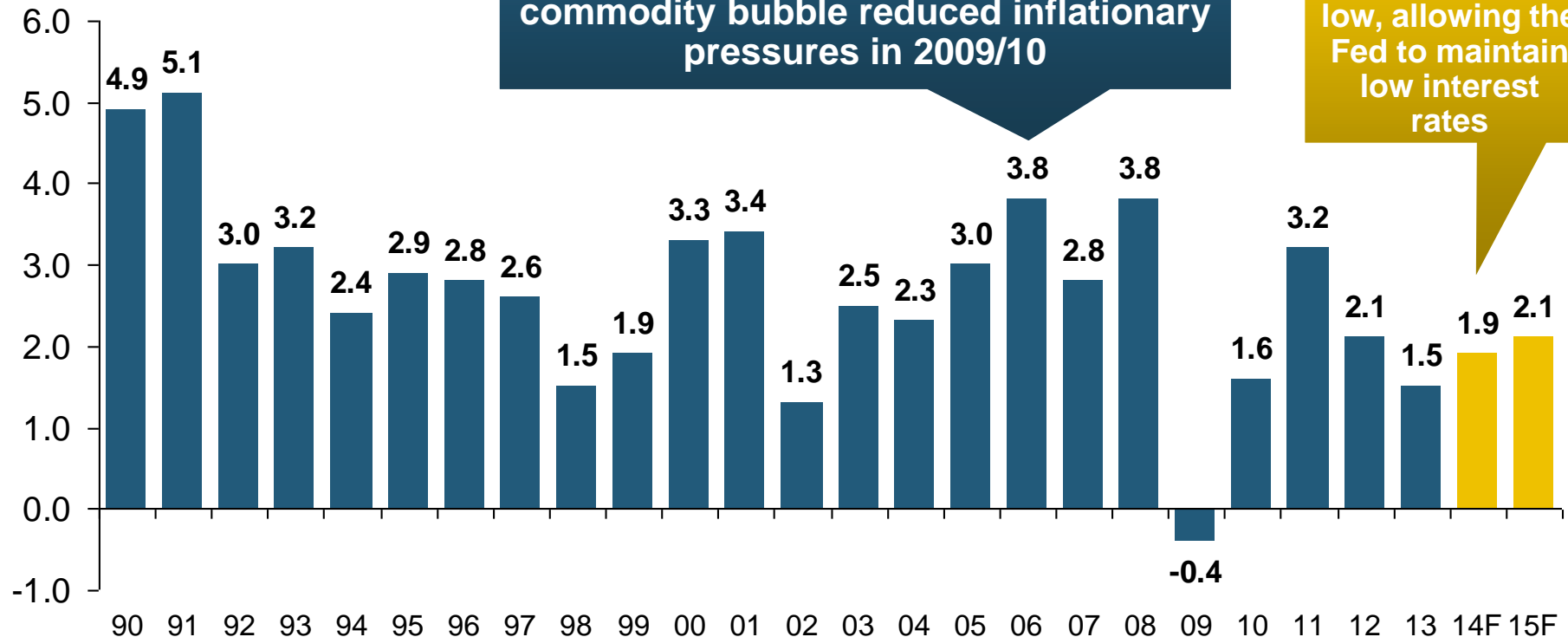
# GDP: 4-Year Average WA, OR, ID, MT and UT vs. U.S.





# Annual Inflation Rates, (CPI-U, %), 1990–2015F

## Annual Inflation Rates (%)

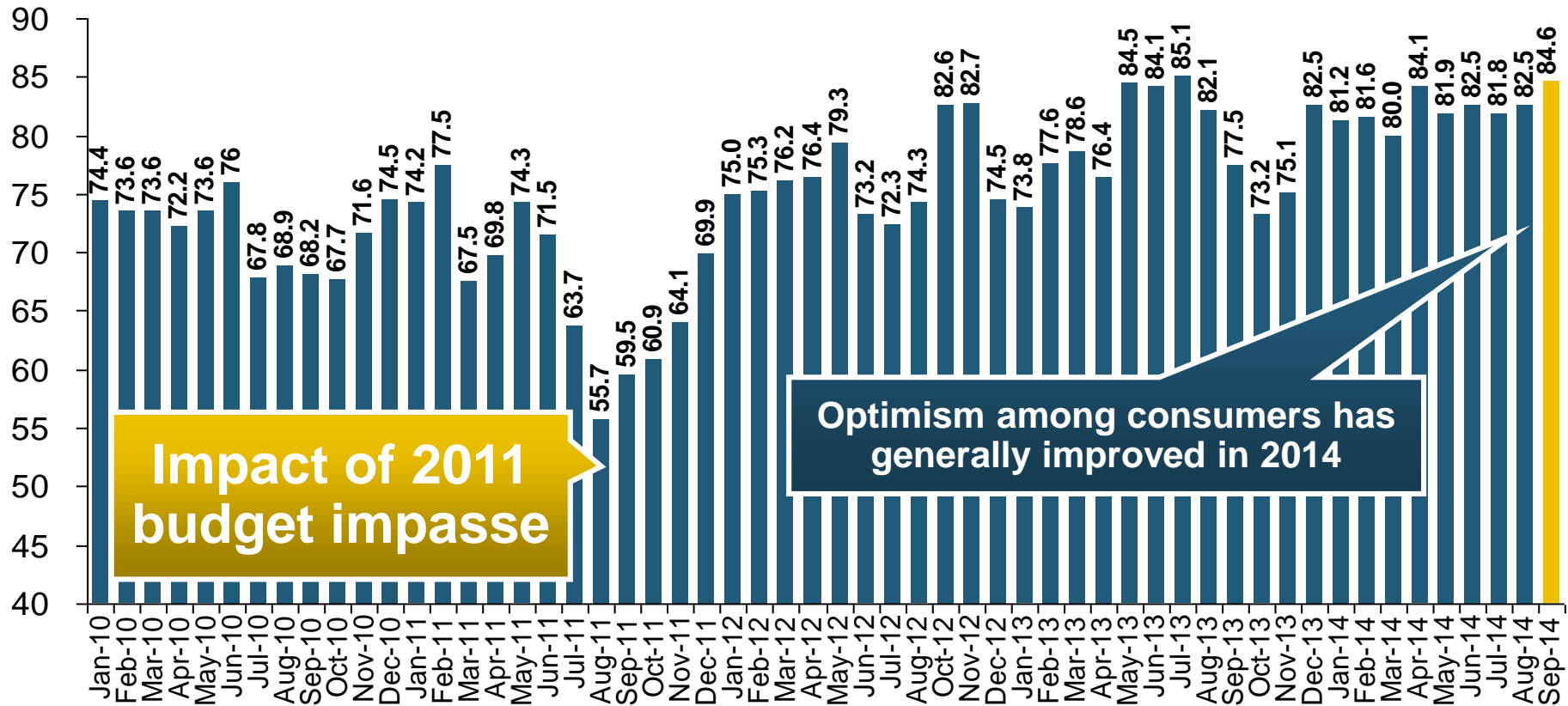


The slack in the U.S. economy suggests that inflationary pressures should remain subdued for an extended period of times. Energy, health care and commodity prices, plus U.S. debt burden, remain longer-run concerns



# Consumer Sentiment Survey (1966 = 100)

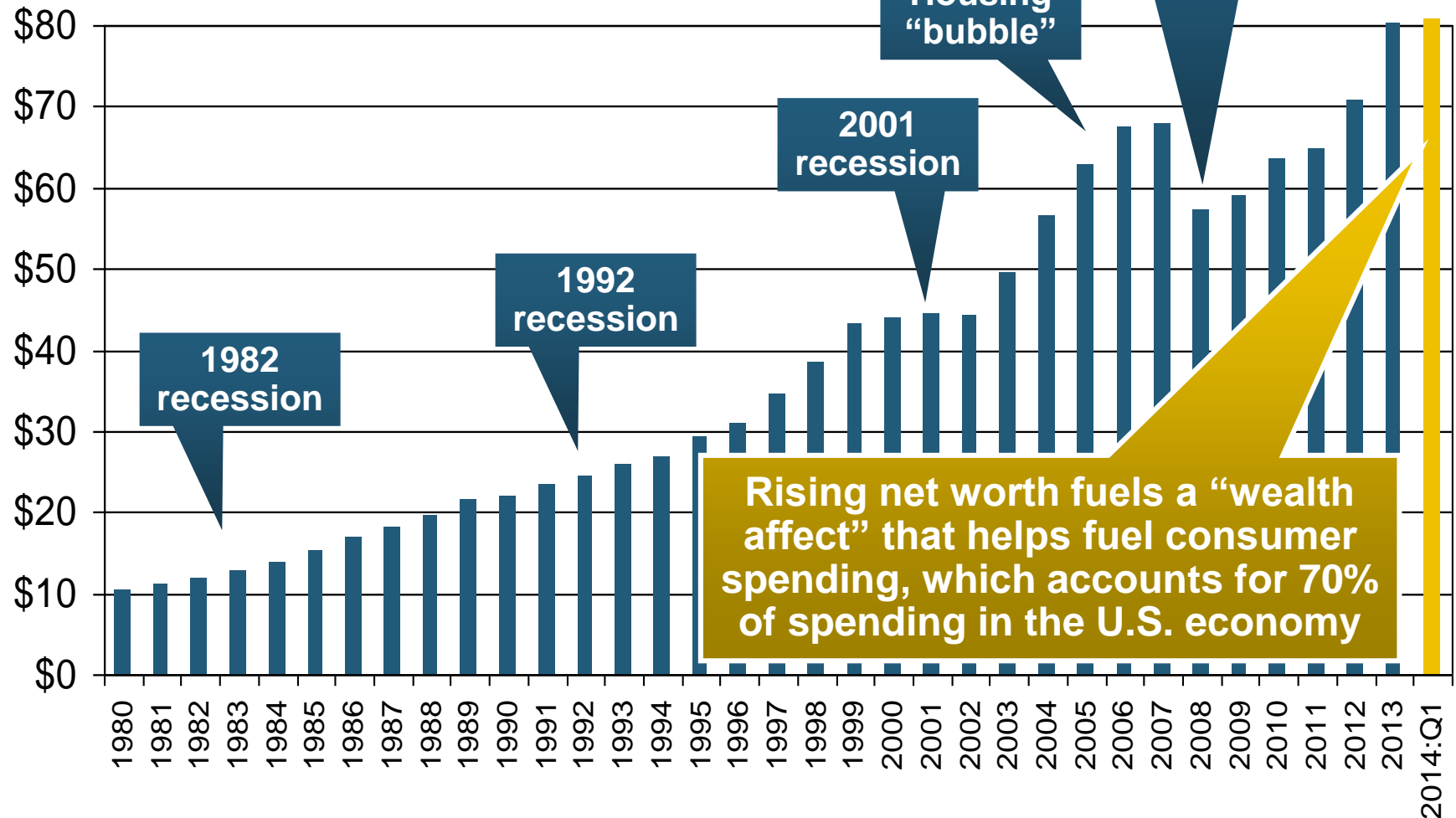
January 2010 through September 2014



Consumer confidence had been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially over the past 2+ years, though uncertainty in Washington sometimes takes a toll.

# Net Worth of Households\* Recently Hit A Historic High

\$ Trillions



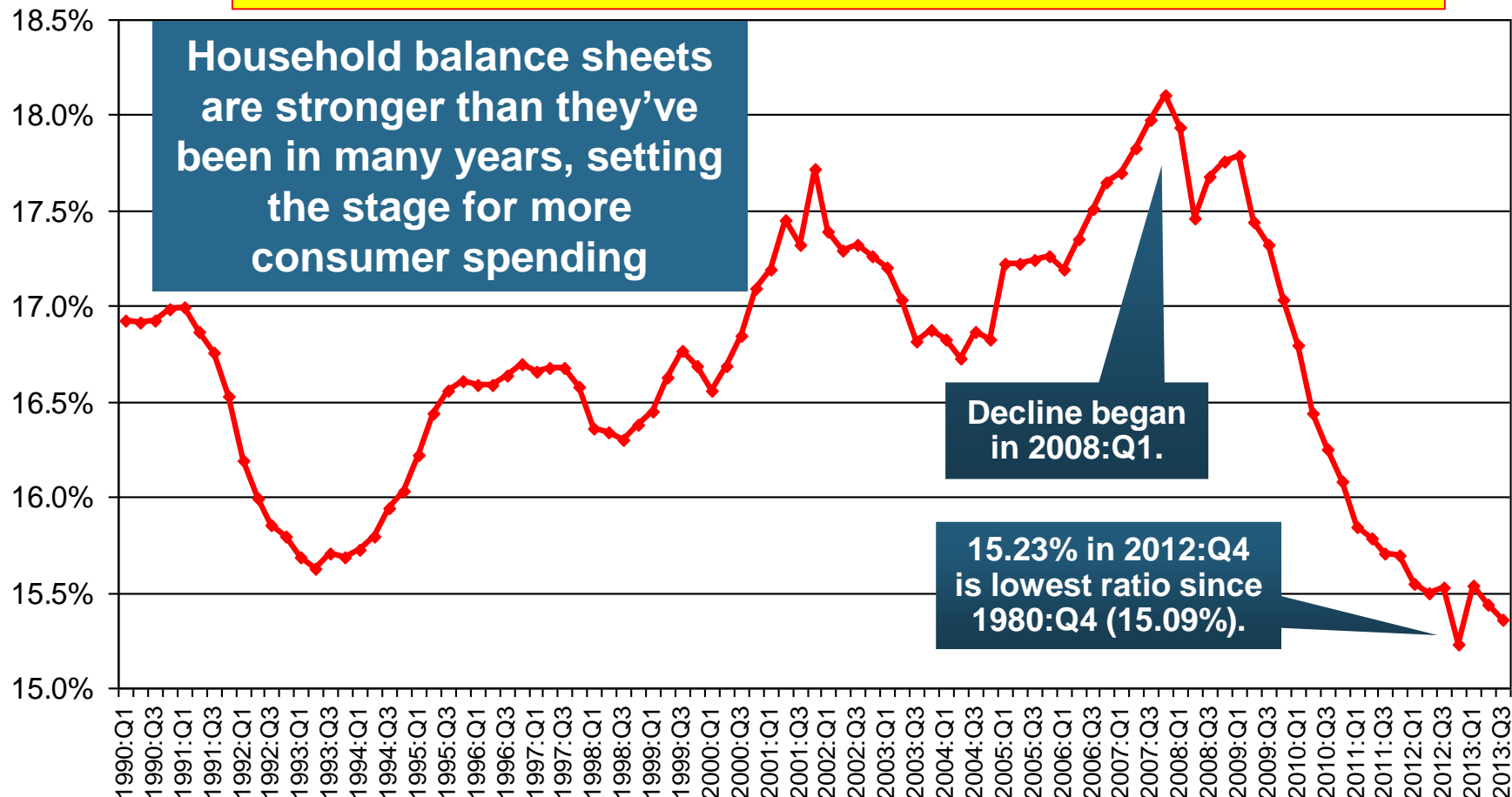
\*Includes nonprofit organizations. Data are not seasonally adjusted or inflation-adjusted.

Source: Federal Reserve Board: <http://www.federalreserve.gov/releases/z1/current/z1r-5.pdf> ; Insurance Information Institute.

# Household Financial Obligations Ratio Recently Hit A Historic Low

Financial  
Obligations  
Ratio

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

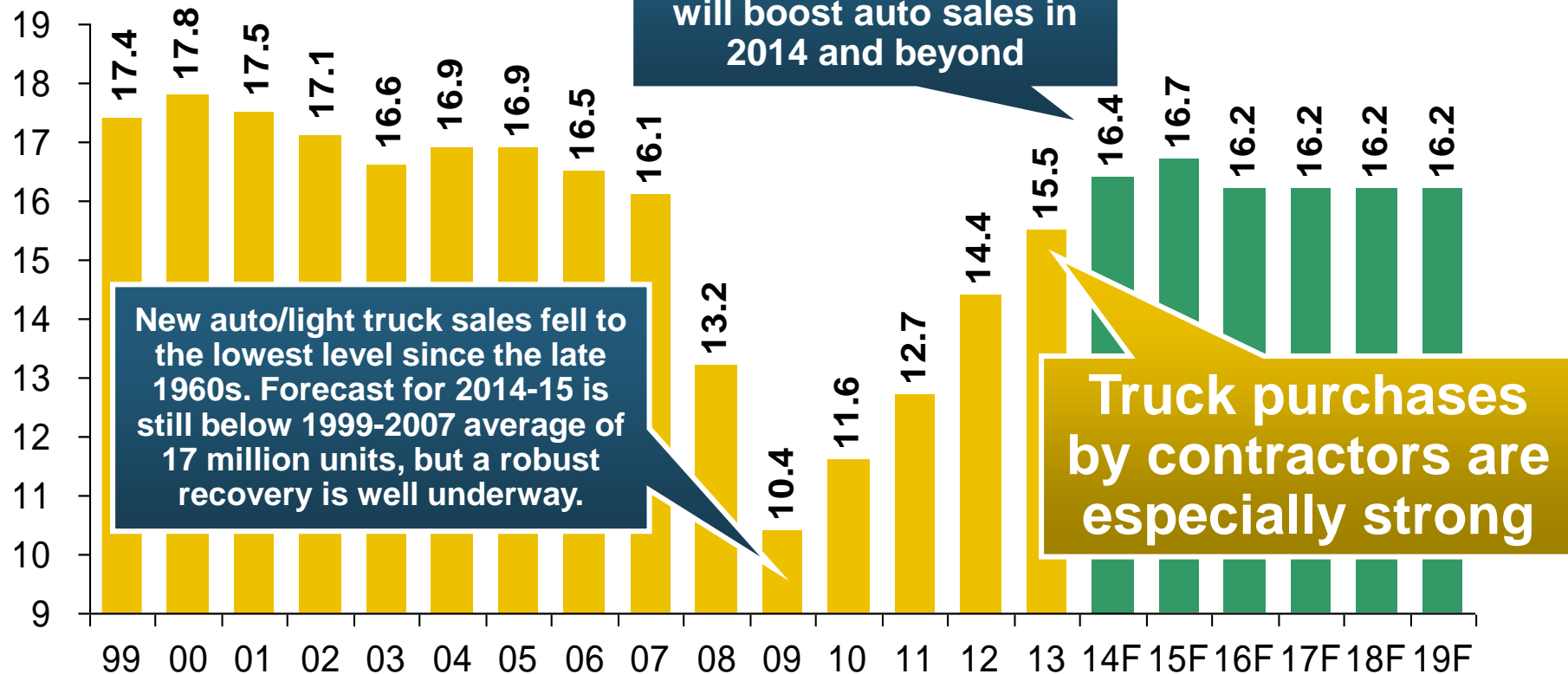


\*through 2013:Q3 (data posted on Dec 13, 2013)

Source: Federal Reserve Board, at <http://www.federalreserve.gov/releases/housedebt>

# Auto/Light Truck Sales, 1999-2019F

(Millions of Units)



**Car/Light Truck Sales Will Continue to Recover from the 2009 Low Point, Bolstering the Auto Insurer Growth and the Manufacturing Sector Along With Workers Comp Exposures**

# Monthly Change\* in Auto Insurance Prices, January 2005 - December 2013

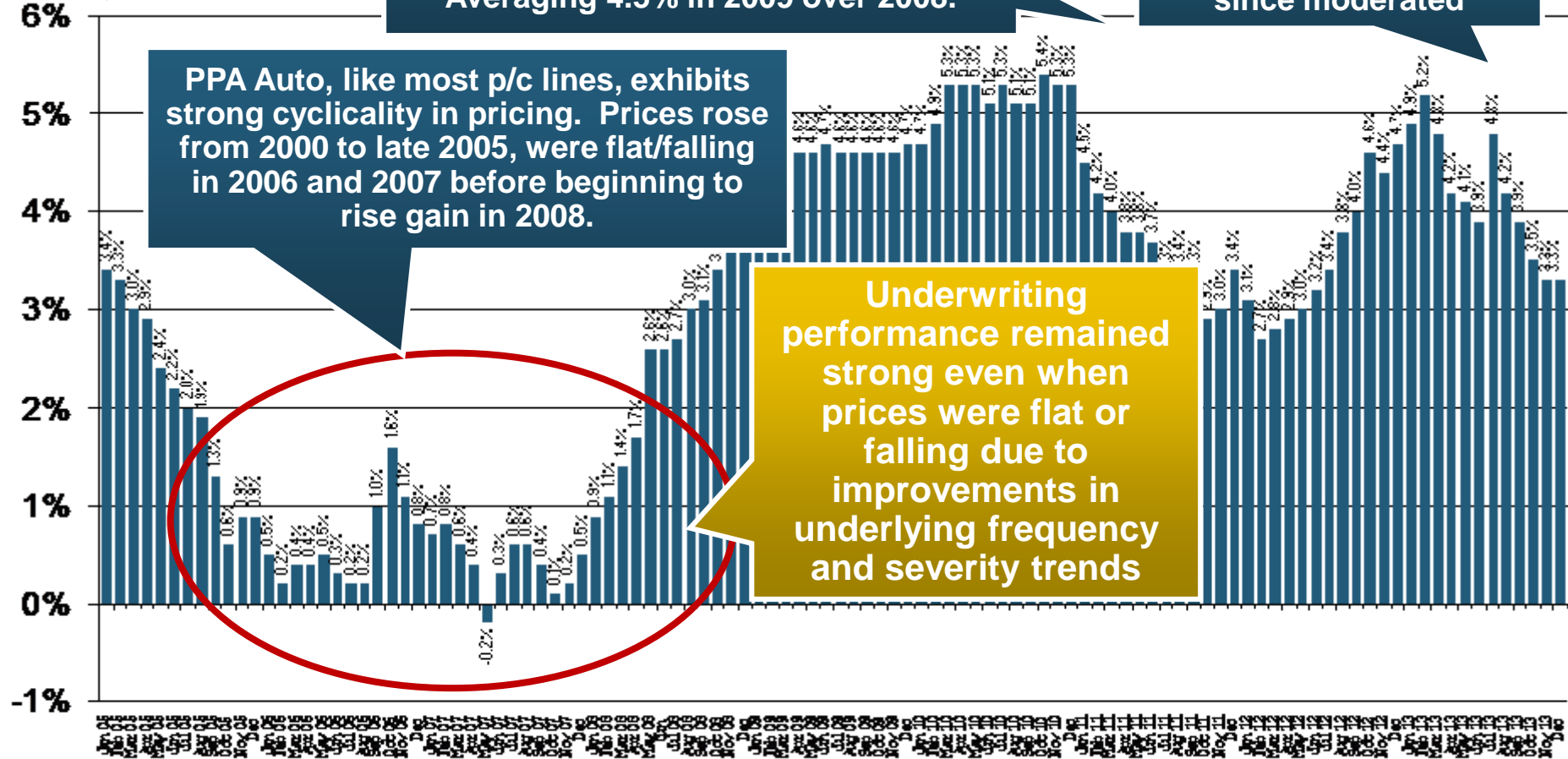
(Percent Change from same month, prior year)

Auto Insurance Price Increases Averaged 5.1% in 2010 over 2009, After Averaging 4.5% in 2009 over 2008.

Pricing weakened in 2011, strengthened in 2012/early 2013 but has since moderated

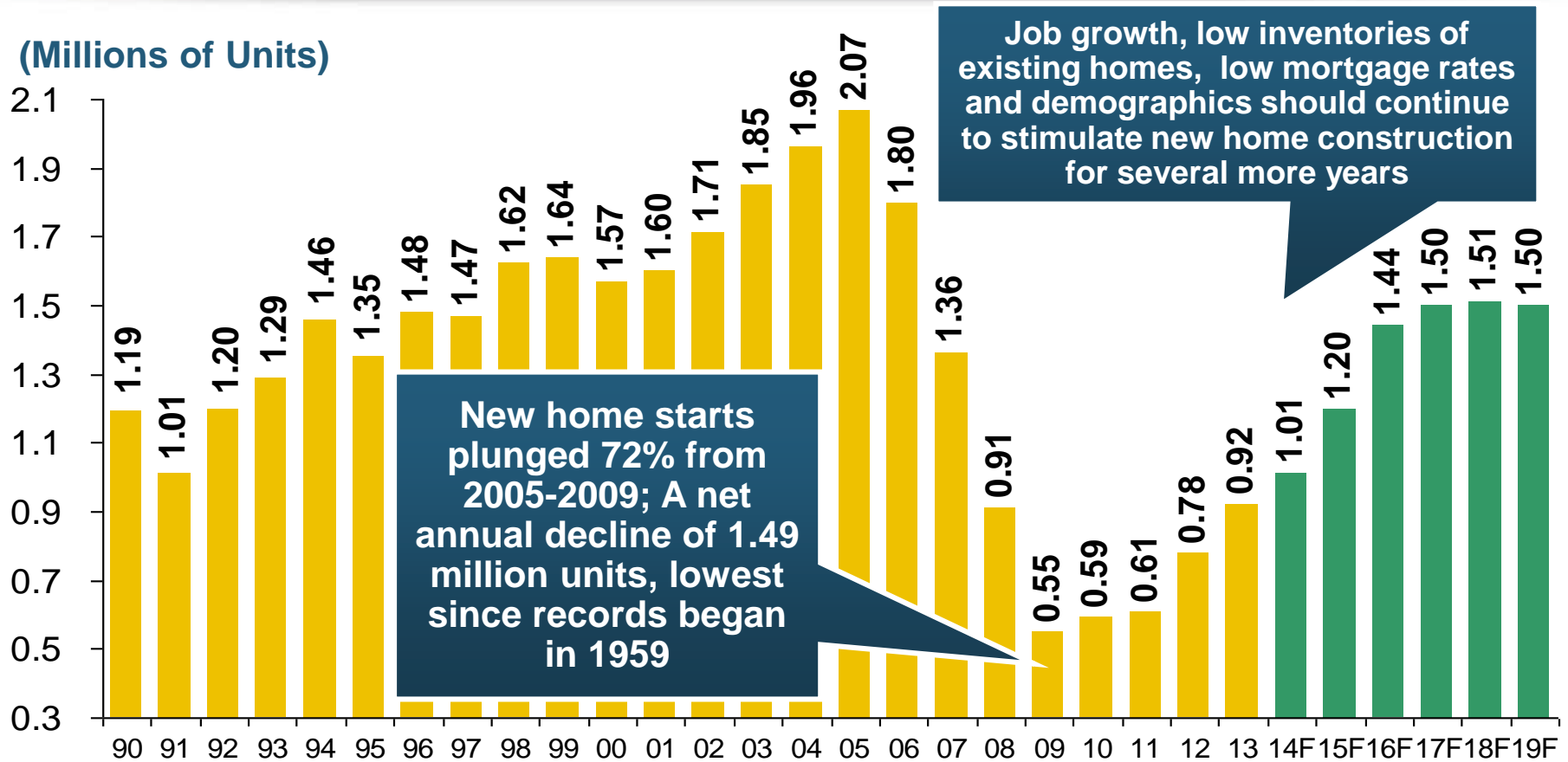
PPA Auto, like most p/c lines, exhibits strong cyclical in pricing. Prices rose from 2000 to late 2005, were flat/falling in 2006 and 2007 before beginning to rise again in 2008.

Underwriting performance remained strong even when prices were flat or falling due to improvements in underlying frequency and severity trends



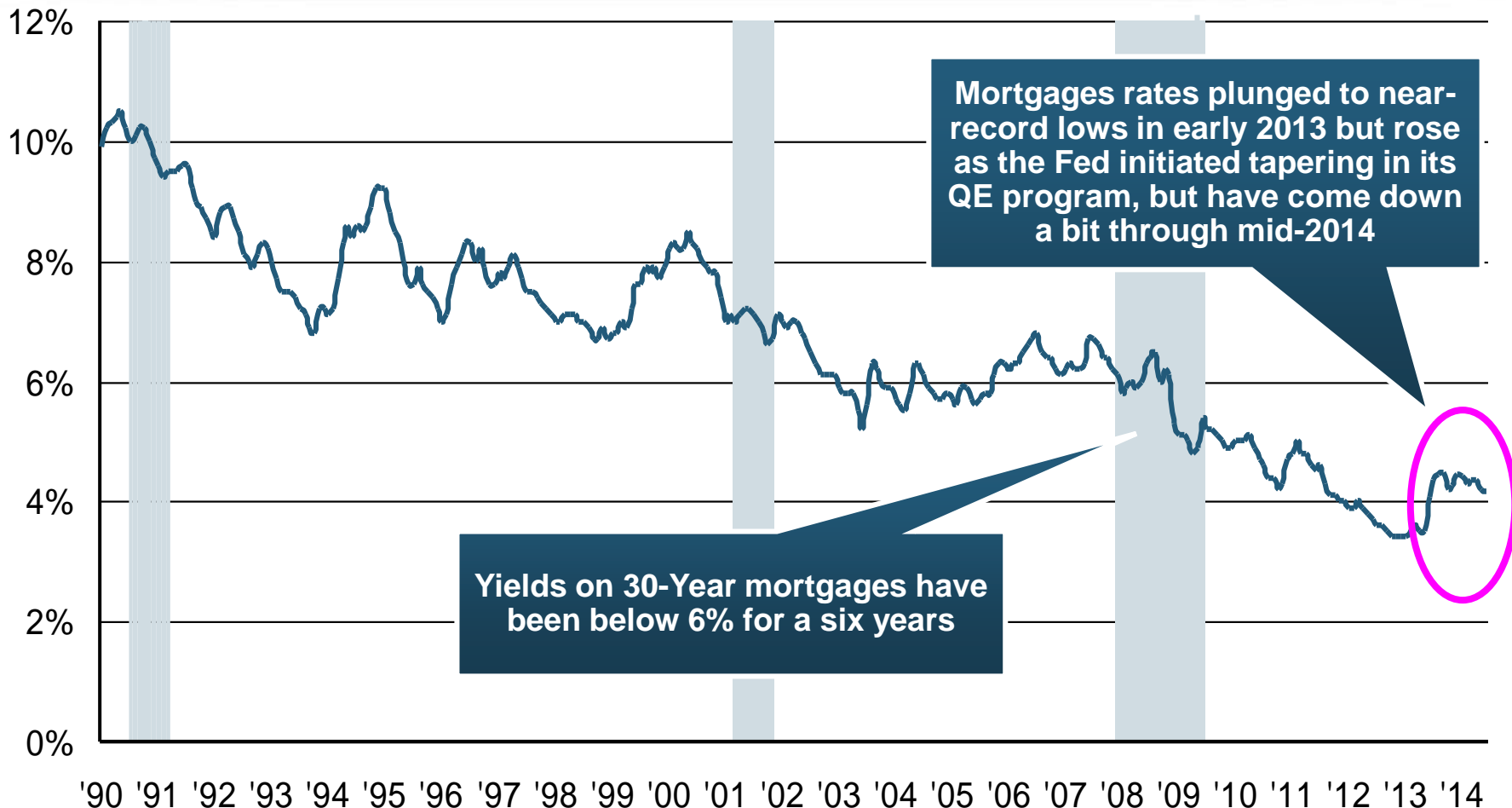
\*Percentage change from same month in prior year, seasonally adjusted.  
Sources: US Bureau of Labor Statistics; Insurance Information Institute

# 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**

# Interest Rate on Convention 30-Year Mortgages: Up a Bit, 1990–2014\*



**Rising mortgage interest rates have impacted home sales but are unlikely to derail the recovery on housing**

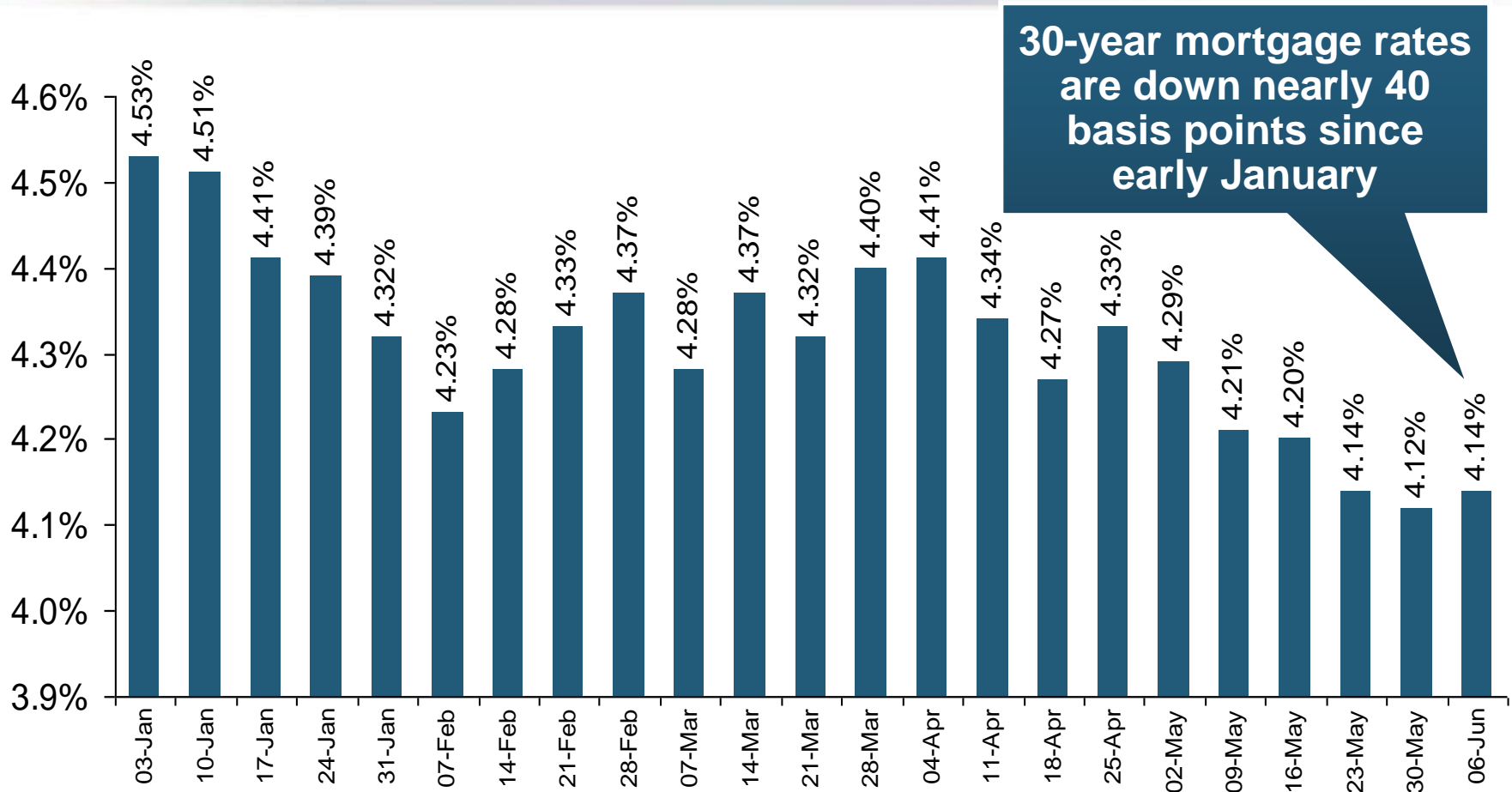
\*Monthly, through June 2014.

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.

# 30-Year Mortgages in 2014 Are Falling! What Will Be the Impact on Construction?



**Mortgage Interest Rates Were Expected to Continue to Rise as the Fed Pursued Tapering and the Economy Recovered; Rates Are Still Low by Historical Standards**

\*Weekly through June 5, 2014.

Sources: Federal Reserve Bank at <http://www.federalreserve.gov/releases/h15/data.htm>; Insurance Information Institutes.

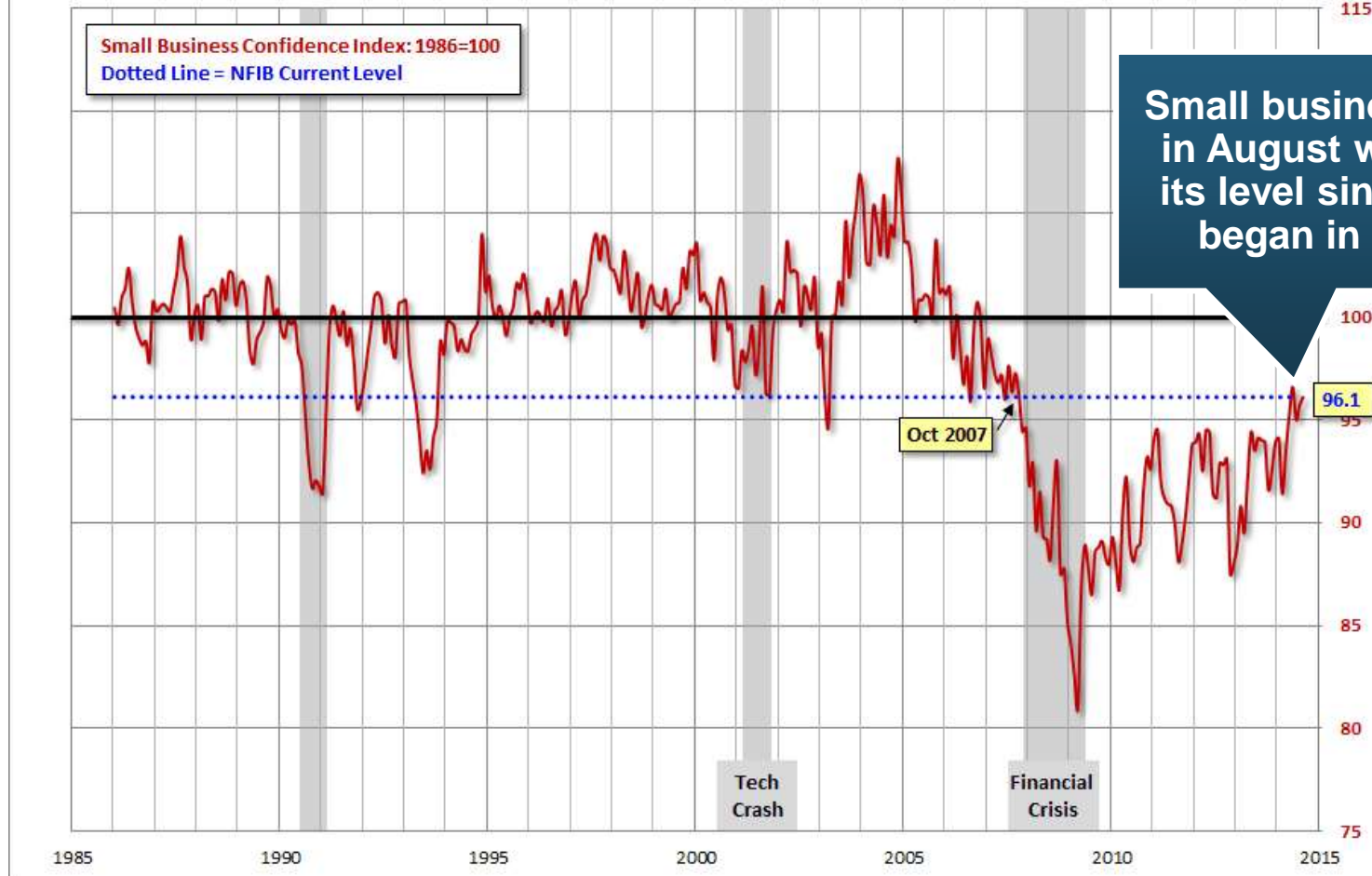


# NFIB Small Business Optimism Index

January 1985 through August 2014

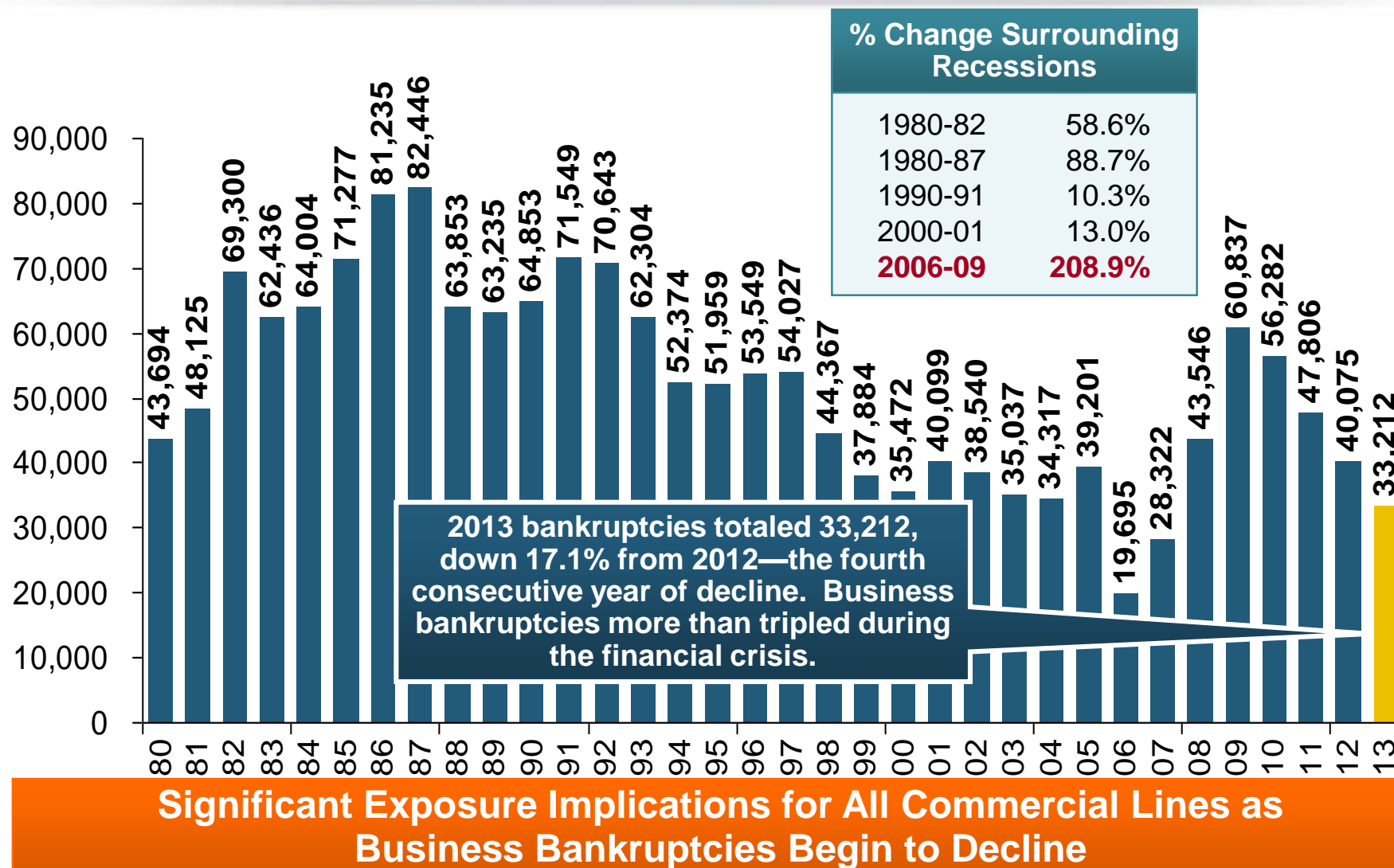
NFIB Small Business Optimism Index  
with Recessions Highlighted

dshort.com  
September 2014  
Data through August



Small business optimism in August was nearly at its level since the crisis began in Dec. 2007.

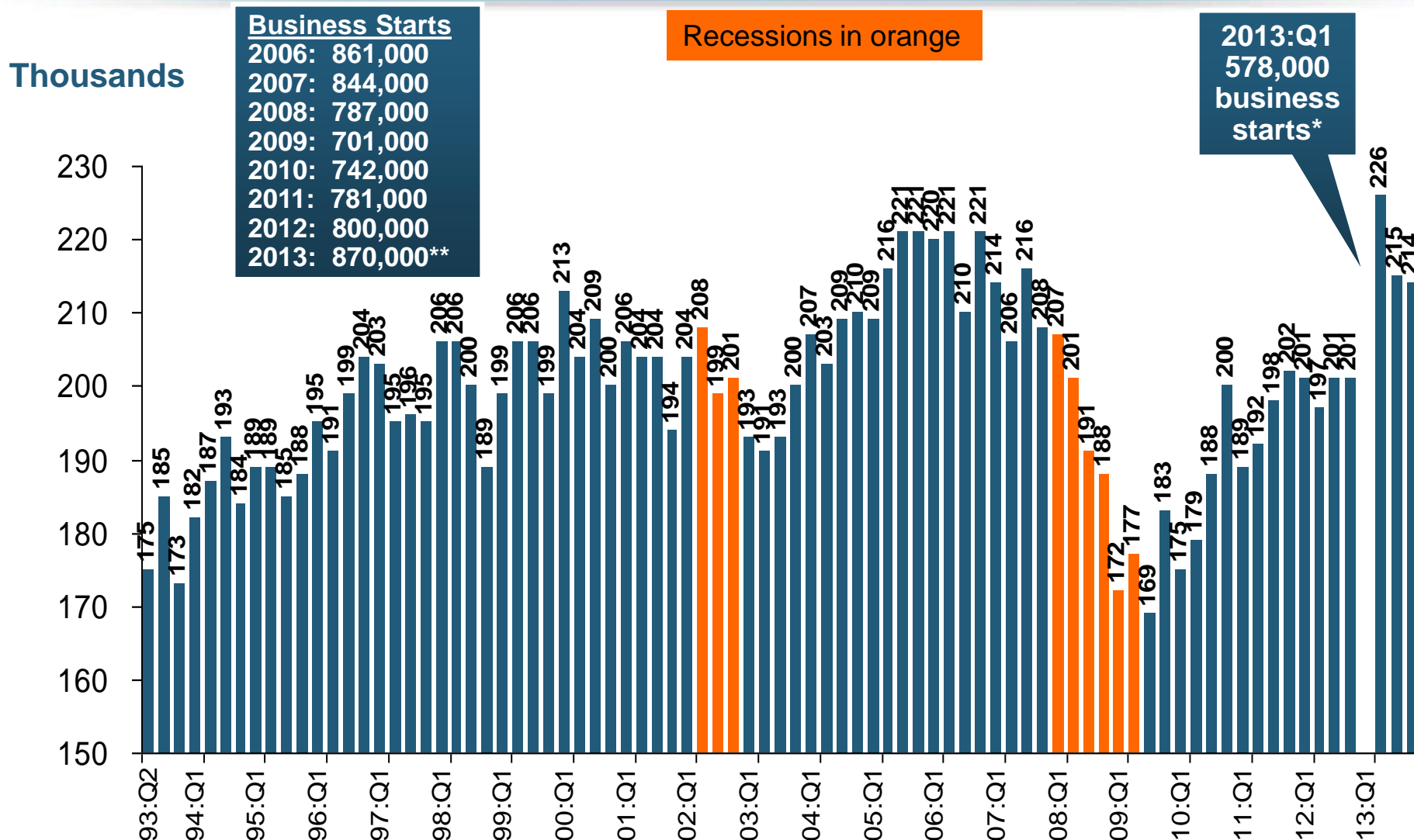
# Business Bankruptcy Filings, 1980-2013



Sources: American Bankruptcy Institute (1980-2012) at

<http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633>; 2013 data from United States Courts at <http://news.uscourts.gov>; Insurance Information Institute.

# Private Sector Business Starts: 1993:Q2 – 2013:Q4\* As Strong as Ever?

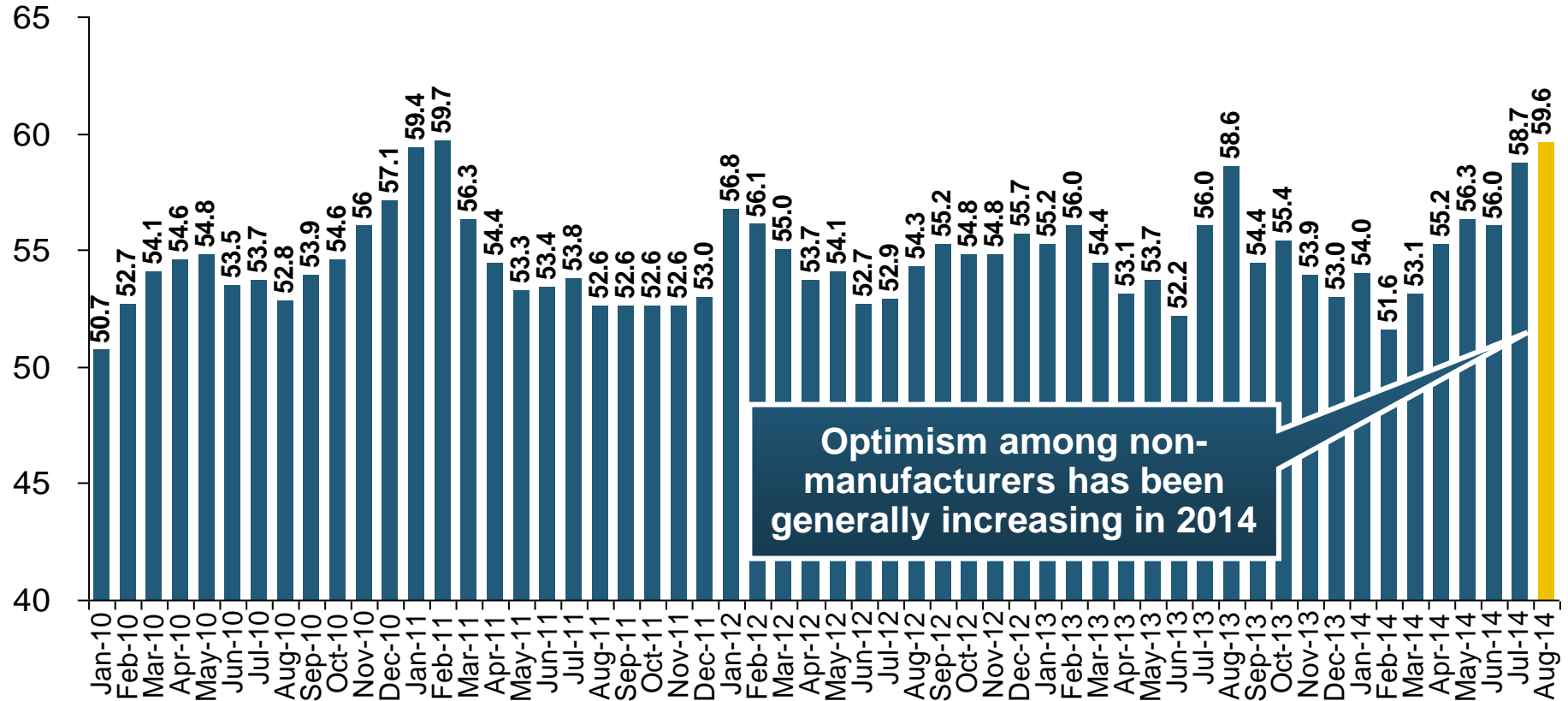


\*Data posted Apr 29, 2014, the latest available; a classification change in 2013:Q1 resulted in a report of 578,000 businesses started in that quarter. Seasonally adjusted. \*\*2014 number assumes 1<sup>st</sup> quarter equaled average of other three quarters

Sources: Bureau of Labor Statistics, <http://www.bls.gov/news.release/cewbd.t08.htm>. NBER (recession dates)

# ISM Non-Manufacturing Index (Values > 50 Indicate Expansion)

January 2010 through August 2014



**Non-manufacturing industries have been expanding and adding jobs. This trend is likely to continue through 2014.**

# 12 Industries for the Next 10 Years: Insurance Solutions Needed

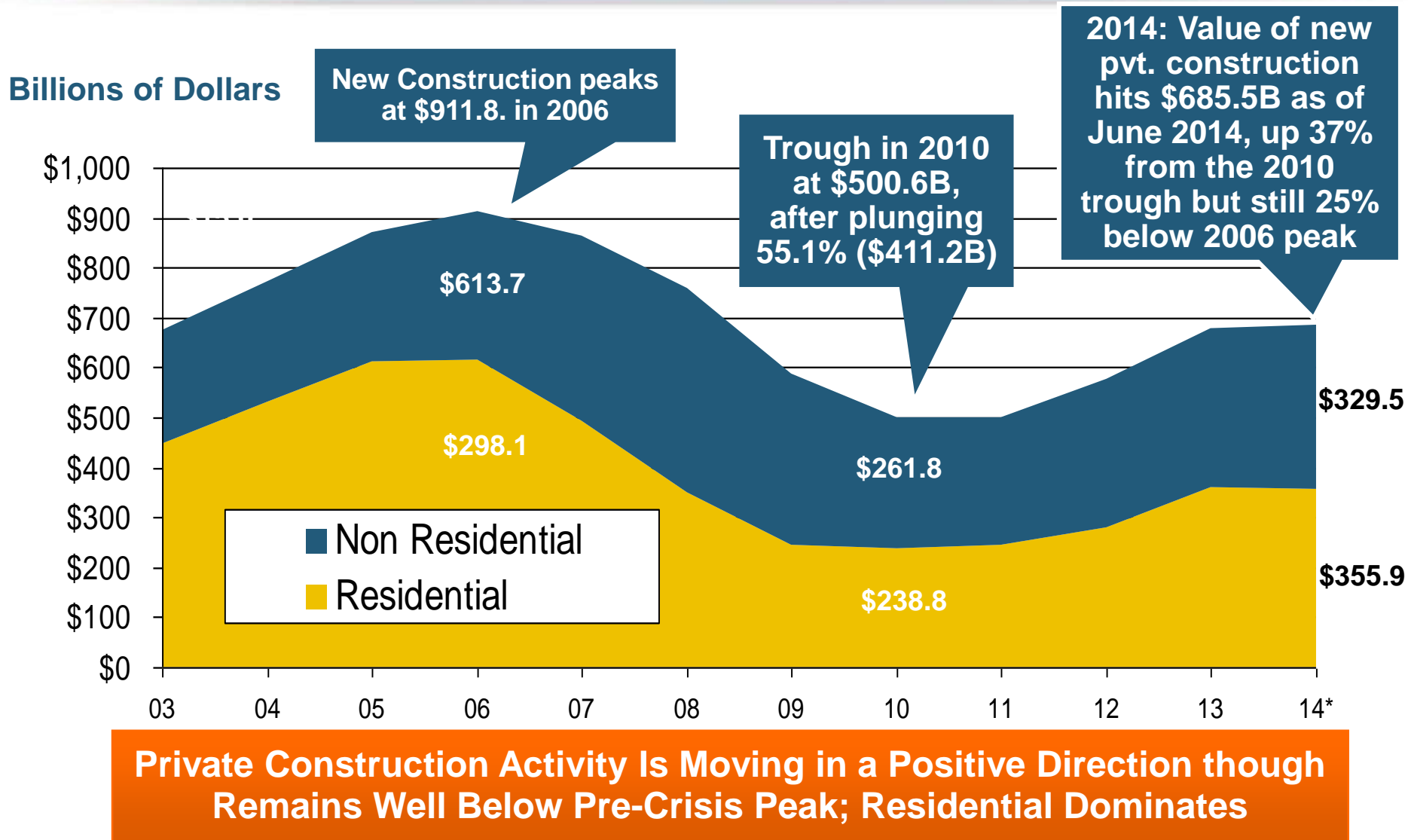
Health Care
Health Sciences
Energy (Traditional)
Alternative Energy
Petrochemical
Agriculture
Natural Resources
Technology (incl. Biotechnology)
Light Manufacturing
Insourced Manufacturing
Export-Oriented Industries
Shipping ( <i>Rail, Marine, Trucking, Pipelines</i> )

Many industries are poised for growth, though insurers' ability to capitalize on these industries varies widely

# **CONSTRUCTION INDUSTRY OVERVIEW & OUTLOOK**

**The Construction Sector Is  
Critical to the Economy and  
the P/C Insurance Industry**

# Value of New Private Construction: Residential & Nonresidential, 2003-2014\*

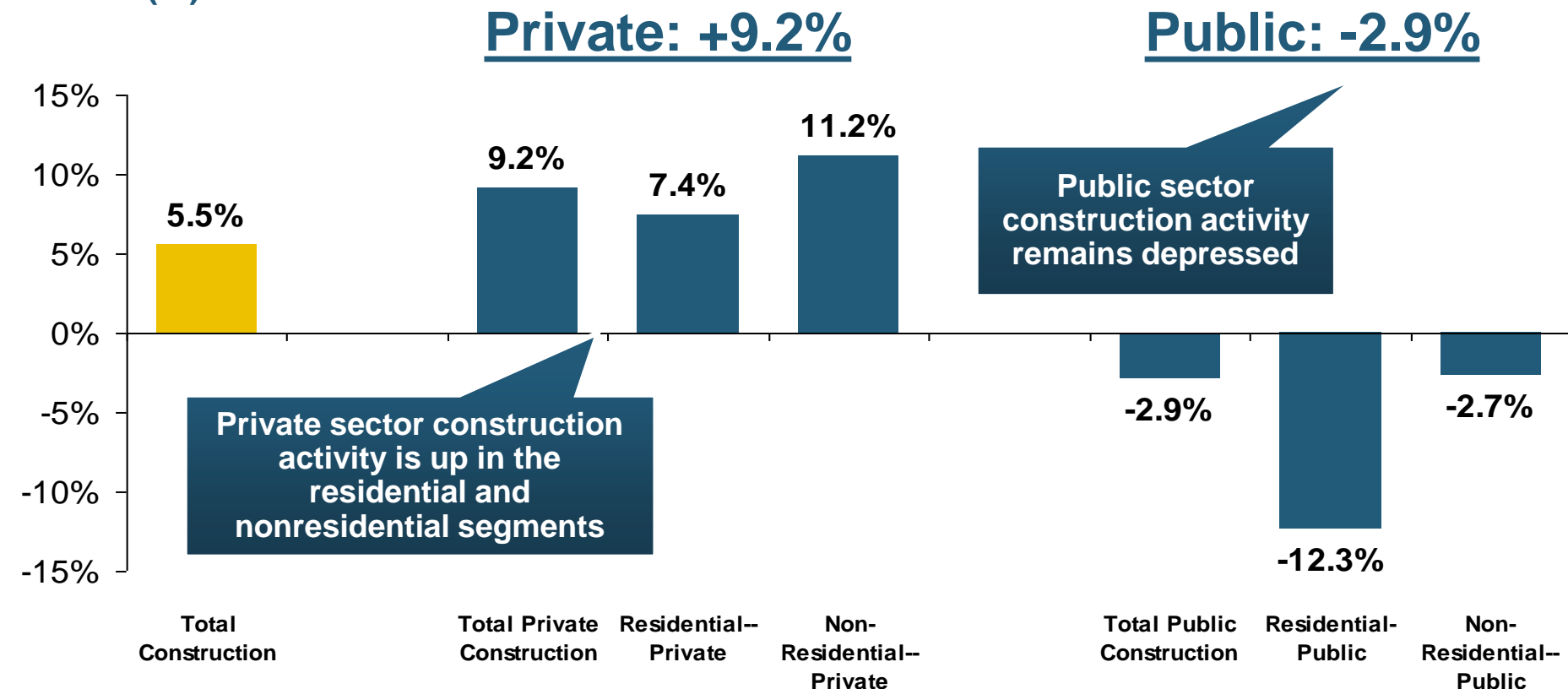


\*2014 figure is a seasonally adjusted annual rate as of June.

Sources: US Department of Commerce; Insurance Information Institute.

# Value of Construction Put in Place, June 2014 vs. June 2013\*

Growth (%)



**Overall Construction Activity is Up, But Growth Is Almost Entirely in the Private Sector as State/Local Government Budget Woes Continue**

\*seasonally adjusted

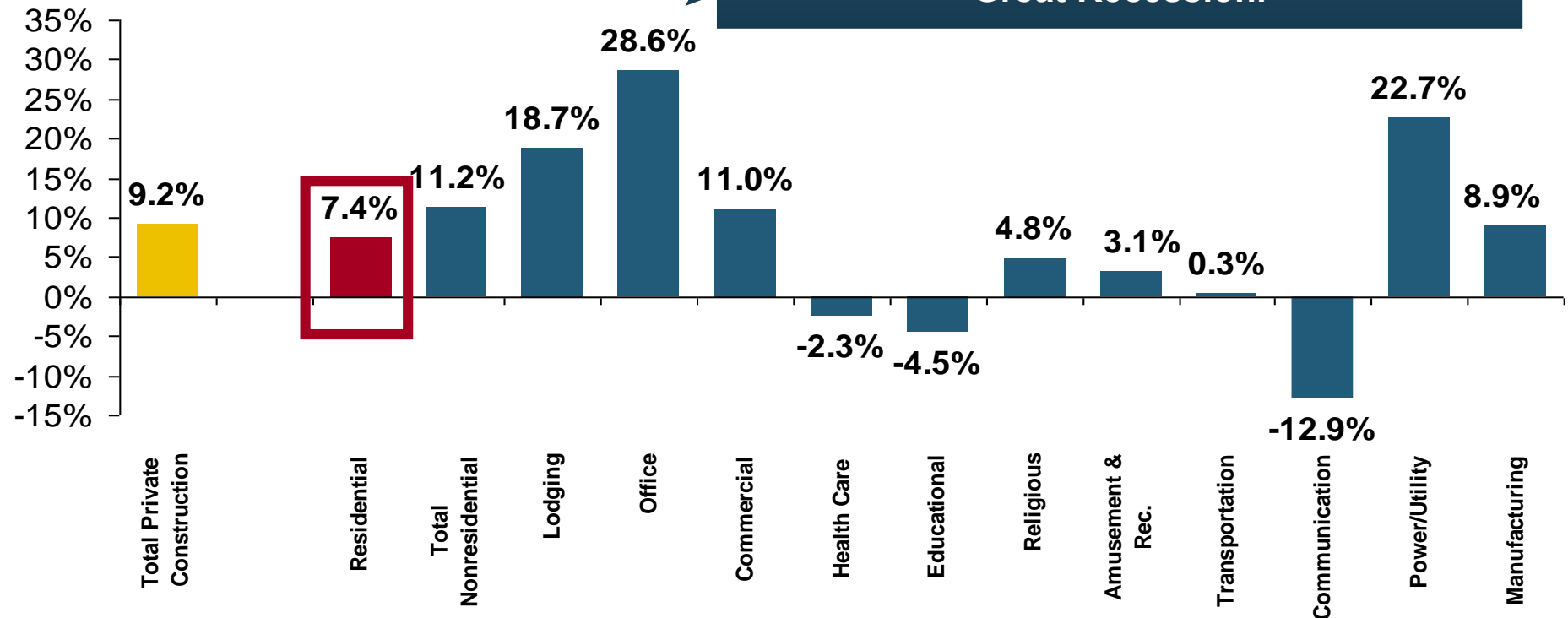
Source: U.S. Census Bureau, <http://www.census.gov/construction/c30/c30index.html> ; Insurance Information Institute.



# Value of Private Construction Put in Place, by Segment, June 2014 vs. June 2013\*

Growth (%)

Led by the Office, Lodging and Power/Utility segments, Private sector construction activity is rising after plunging during the "Great Recession."



**Private Construction Activity is Up in Many Segments, Including the Key Residential Construction Sector; Bodes Well for the Remainder of 2014**

\*seasonally adjusted

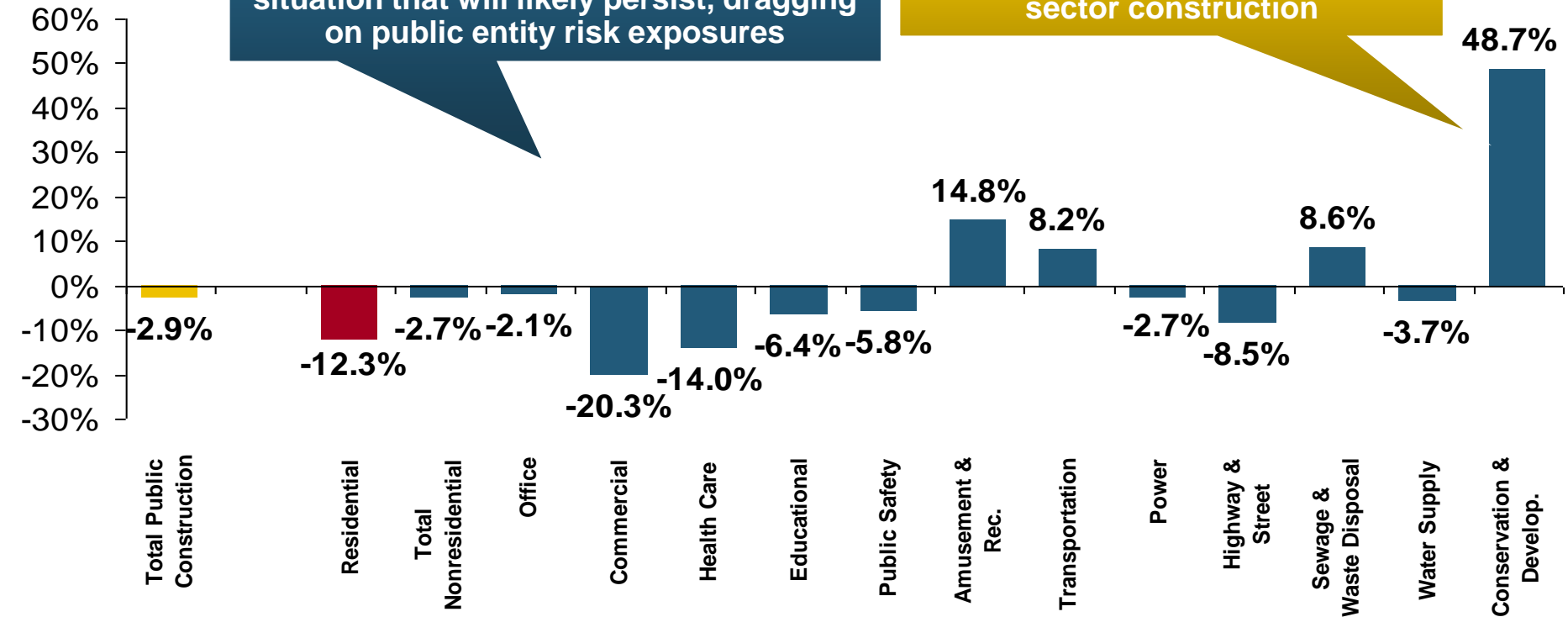
Source: U.S. Census Bureau, <http://www.census.gov/construction/c30/c30index.html> ; Insurance Information Institute.

# Value of Public Construction Put in Place, by Segment, June 2014 vs. June 2013\*

Growth (%)

Public sector construction activity is down substantially in many segments, a situation that will likely persist, dragging on public entity risk exposures

Amusement & Recreation, Sewage & Waste Disposal and Conservation projects lead public sector construction



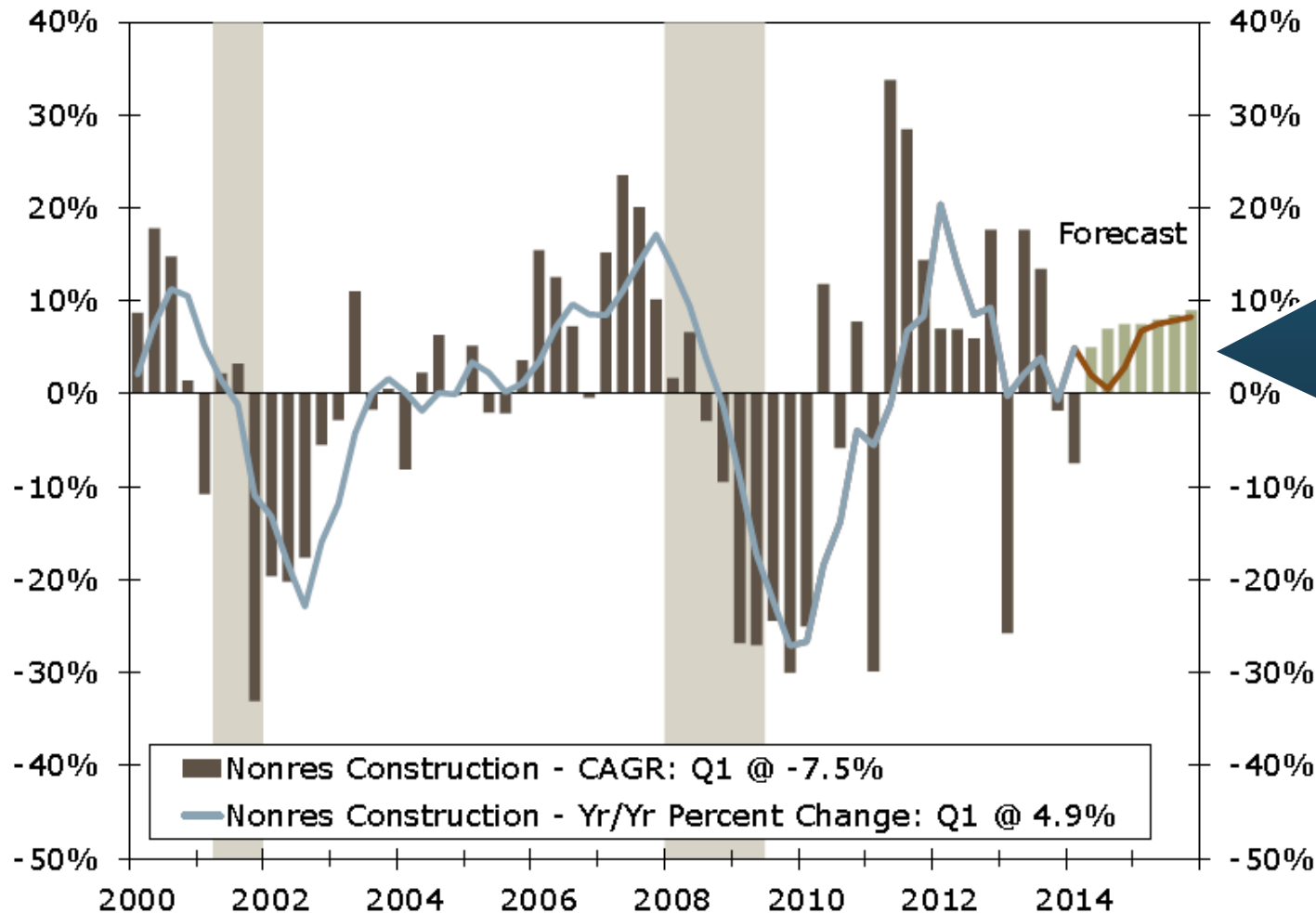
**Public Construction Activity is Down in Many Segments as State and Local Budgets Remain Under Stress; Improvement Possible in 2015.**

\*seasonally adjusted

Source: U.S. Census Bureau, <http://www.census.gov/construction/c30/c30index.html> ; Insurance Information Institute.

# Real (Inflation-Adjusted) Nonresidential Construction, 2000-2014\*

(Bar = CAGR; Line = Y/Y Growth Rate)

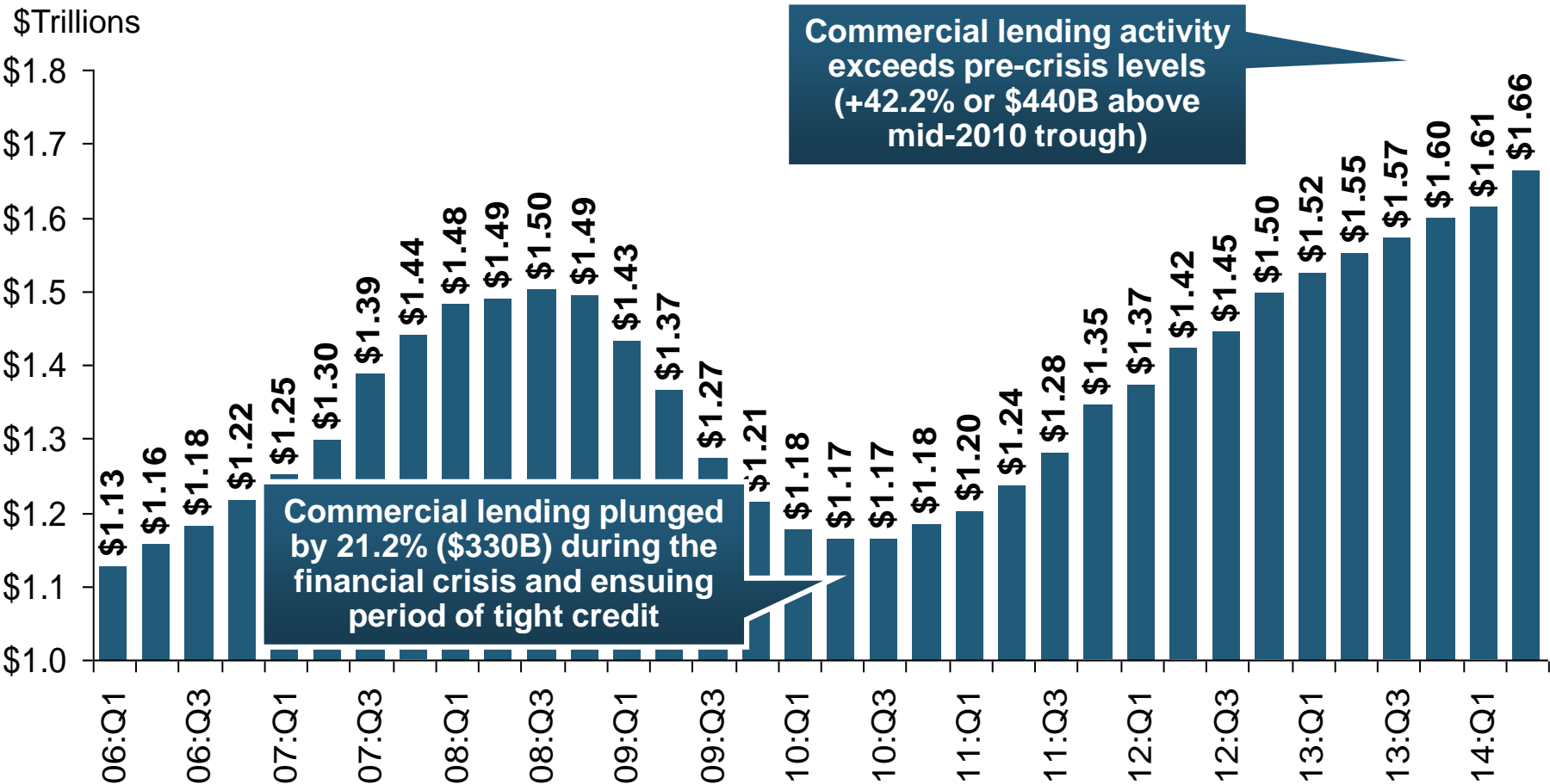


Construction activity has generally been positive since late 2010 but has occasionally been erratic. Forecast is for slowing improving growth

\*Through Q1 2014.

Source: US Dept. of Commerce; Wells Fargo Securities (June 6, 2014 research report).

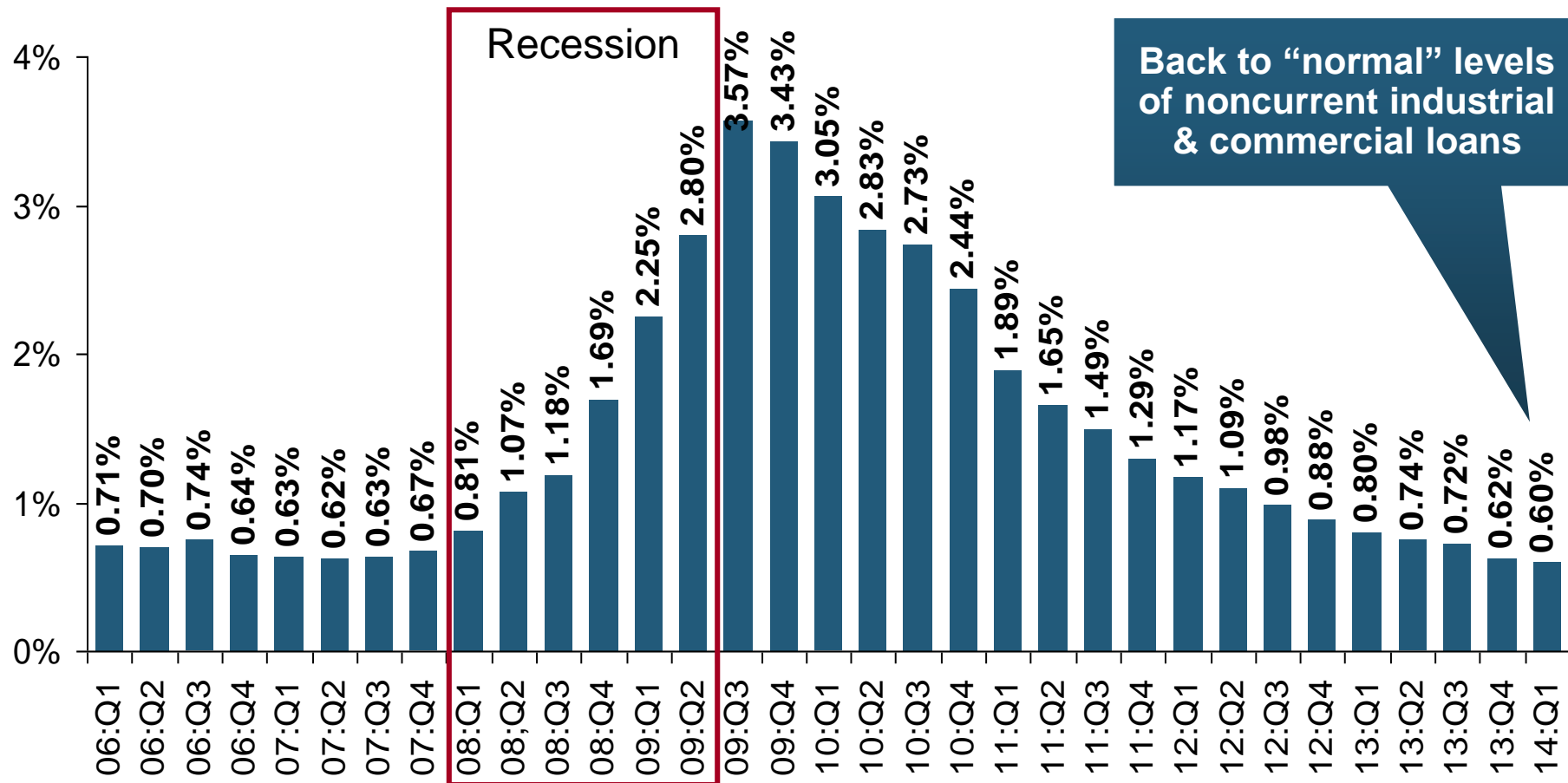
# Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2014:Q2



**Outstanding Commercial Loan Volume Has Been Growing for Over 3 Years and Is Now Nearly Back to Early Recession Levels. Bodes Very Well for the Creation of Current and Future Commercial Insurance Exposures**

Source: FDIC at <http://www2.fdic.gov/qbp/> (Loan Performance spreadsheet); Insurance Information Institute.

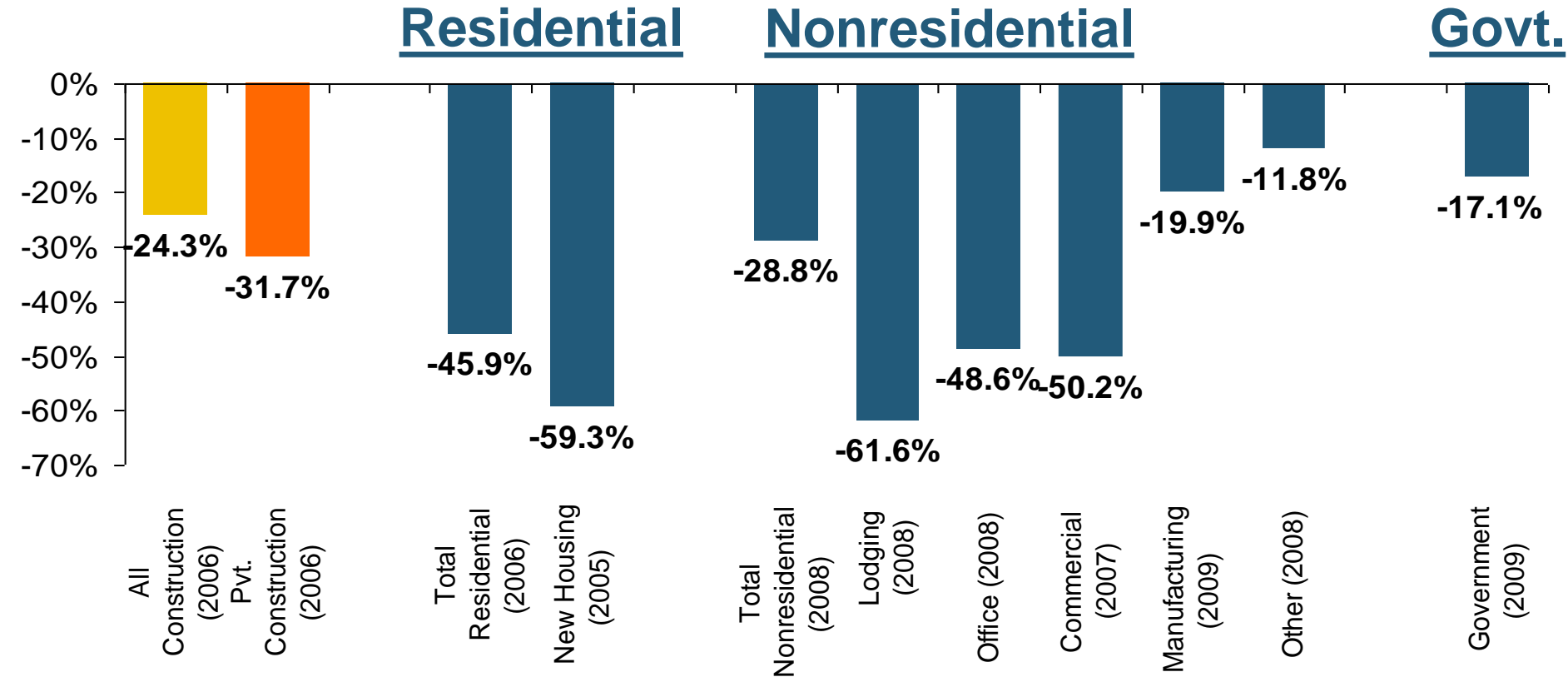
# Percent of Non-current Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2014:Q1



**Non-current loans (those past due 90 days or more or in nonaccrual status) are below even pre-recession levels, fueling bank willingness to lend.**

# Change from Peak in New Construction Expenditures to 2013\*

Change (%)



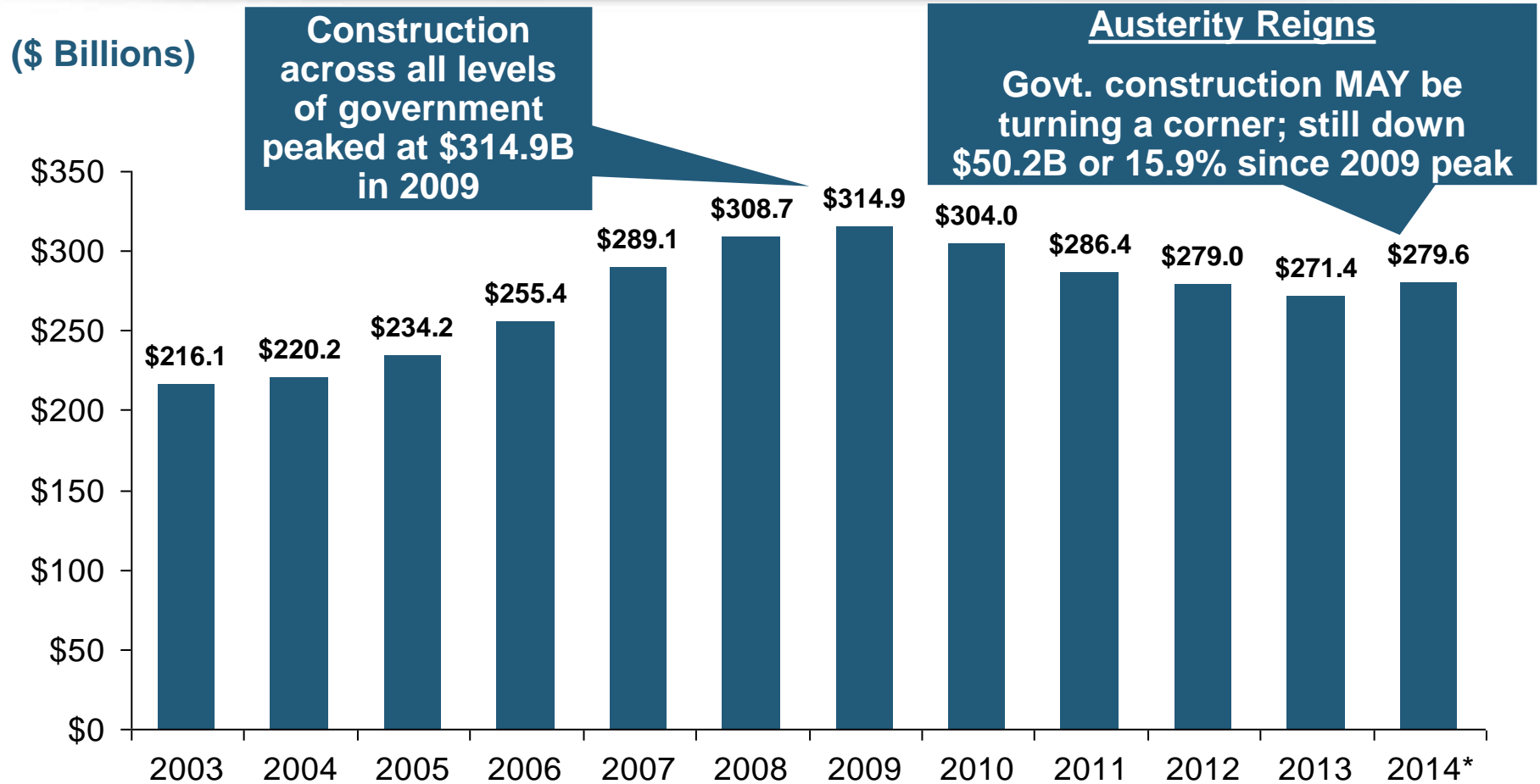
**Despite Recent Improvements, Construction Activity (and Employment) Remains Far Below Pre-Crisis Peaks**

Note: Year in parentheses is the year of peak expenditure.

\*2013 figure is a seasonally adjusted annual rate as of June.

Sources: US Department of Commerce; Insurance Information Institute.

# Value of New Federal, State and Local Government Construction: 2003-2014\*

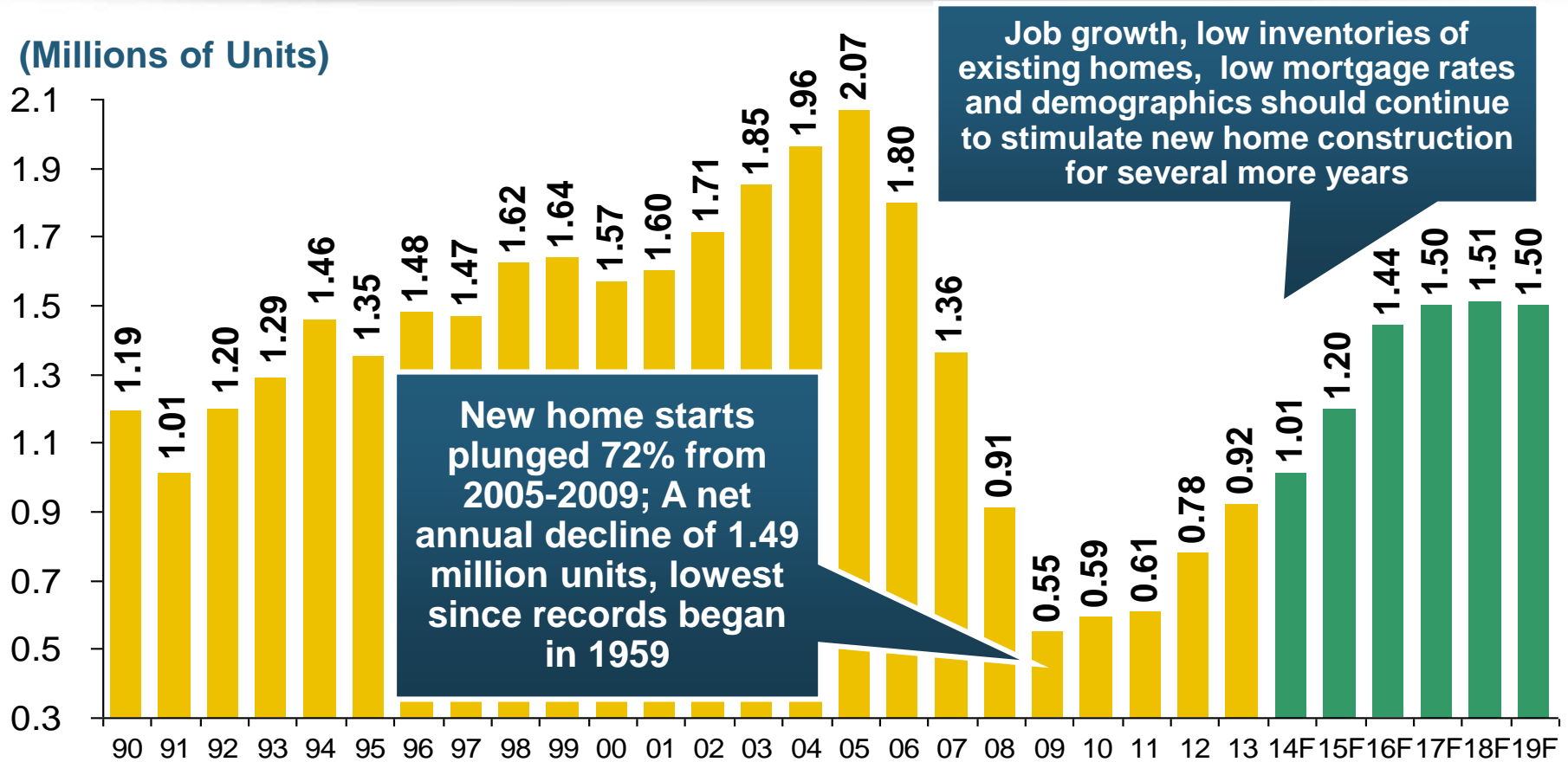


**Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Contracted As State/Local Governments Grappled with Deficits and Federal Sequestration**

\*2014 figure is a seasonally adjusted annual rate as of July; [http://www.census.gov/construction/c30/historical\\_data.html](http://www.census.gov/construction/c30/historical_data.html)

Sources: US Department of Commerce; Insurance Information Institute.

# New Private Housing Starts, 1990-2019F

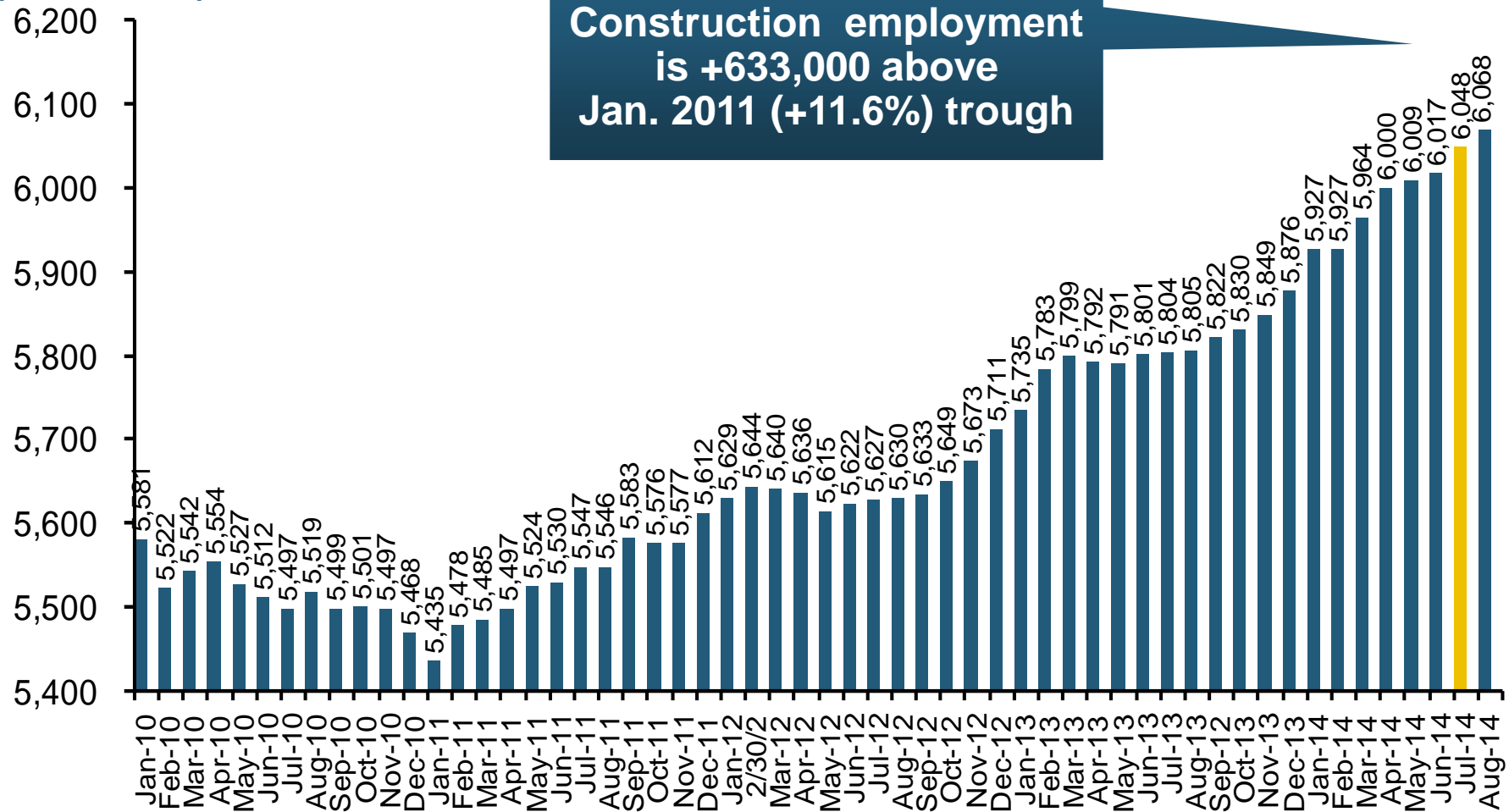


**Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure**



# Construction Employment, Jan. 2010—August 2014\*

(Thousands)



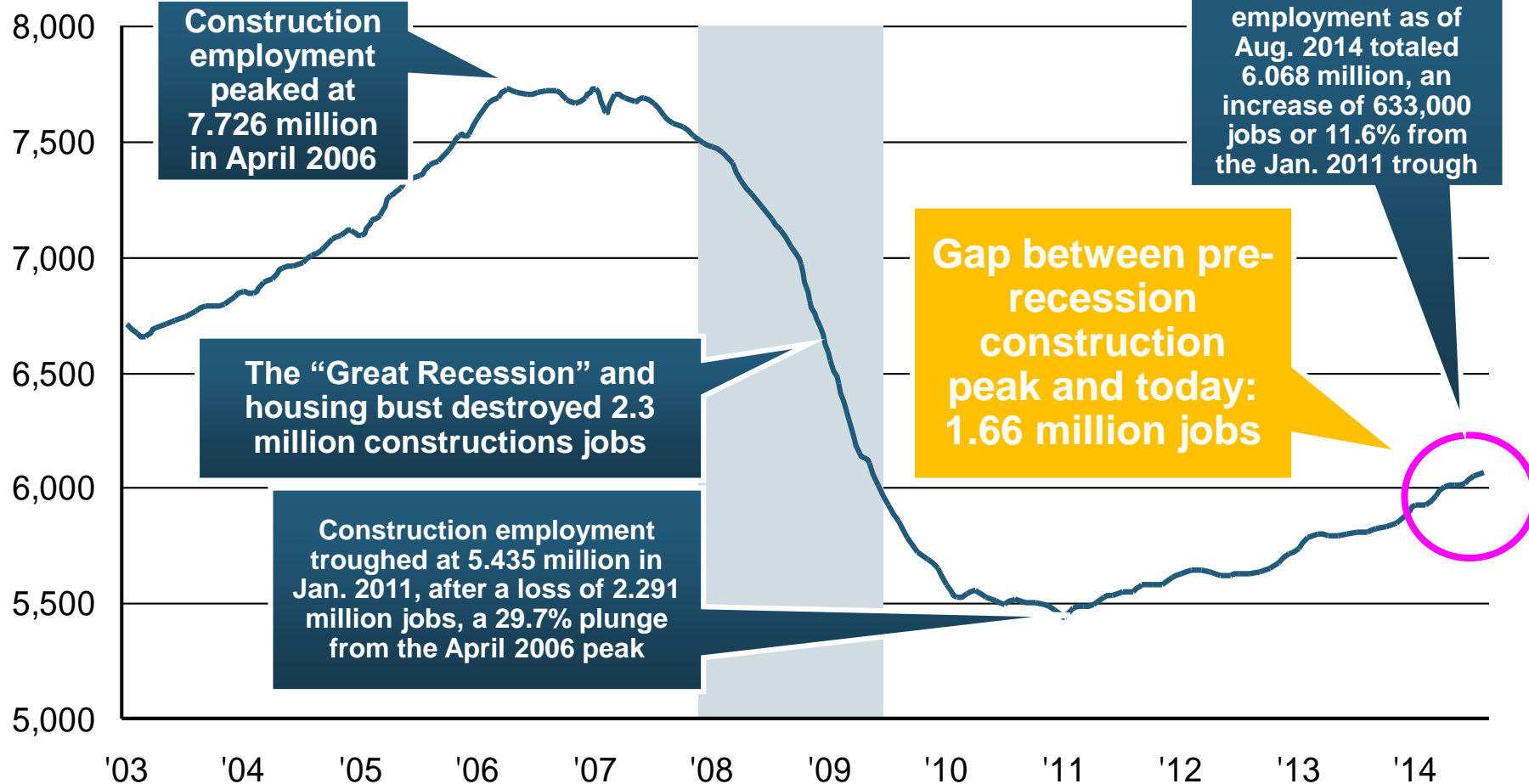
**Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.**

\*Seasonally adjusted.

Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.

# Construction Employment, Jan. 2003–August 2014

(Thousands)

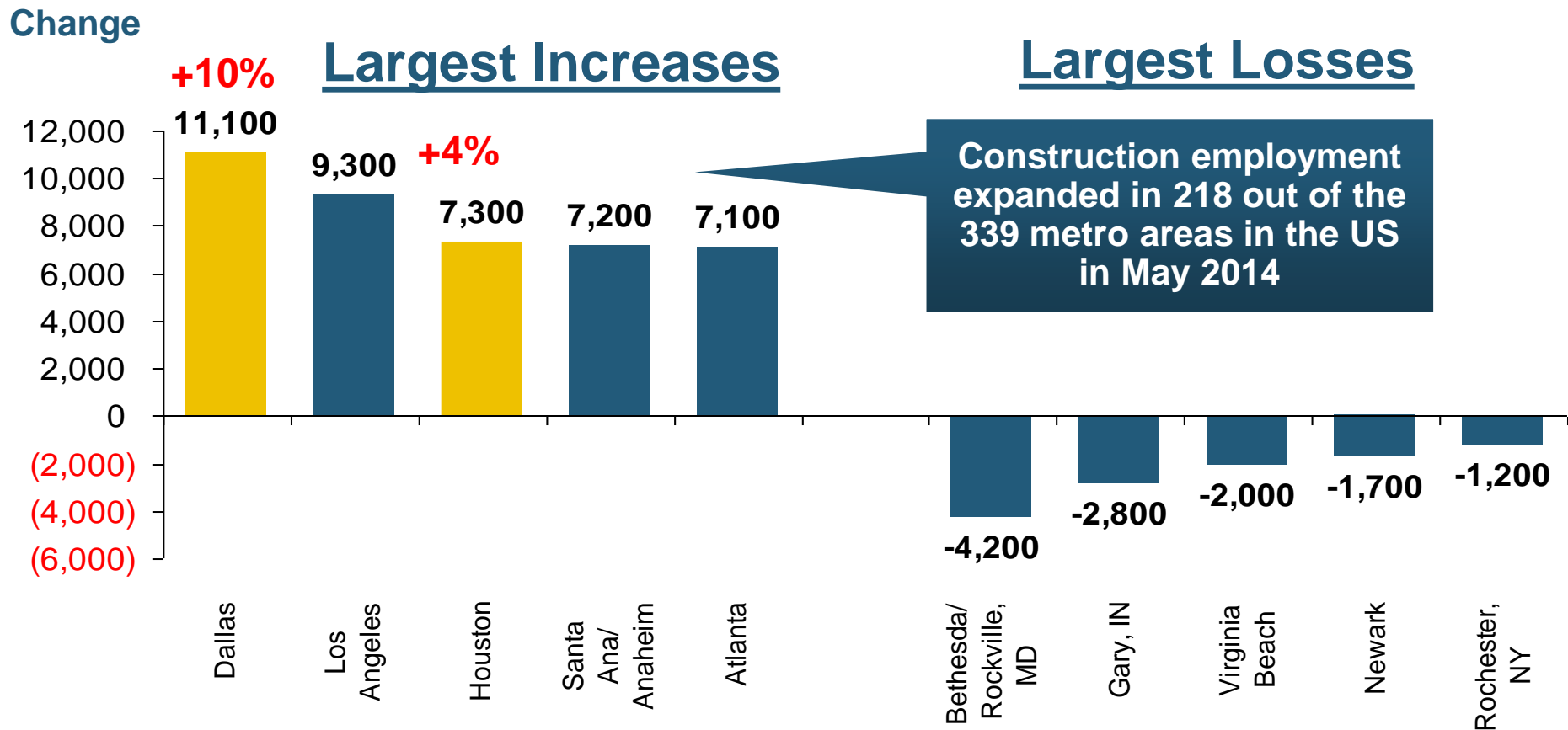


**The Construction Sector Could Be a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.**

Note: Recession indicated by gray shaded column.

Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

# Construction Jobs: Largest Gains & Losses by Metro Area, May 2014 vs. May 2013\*



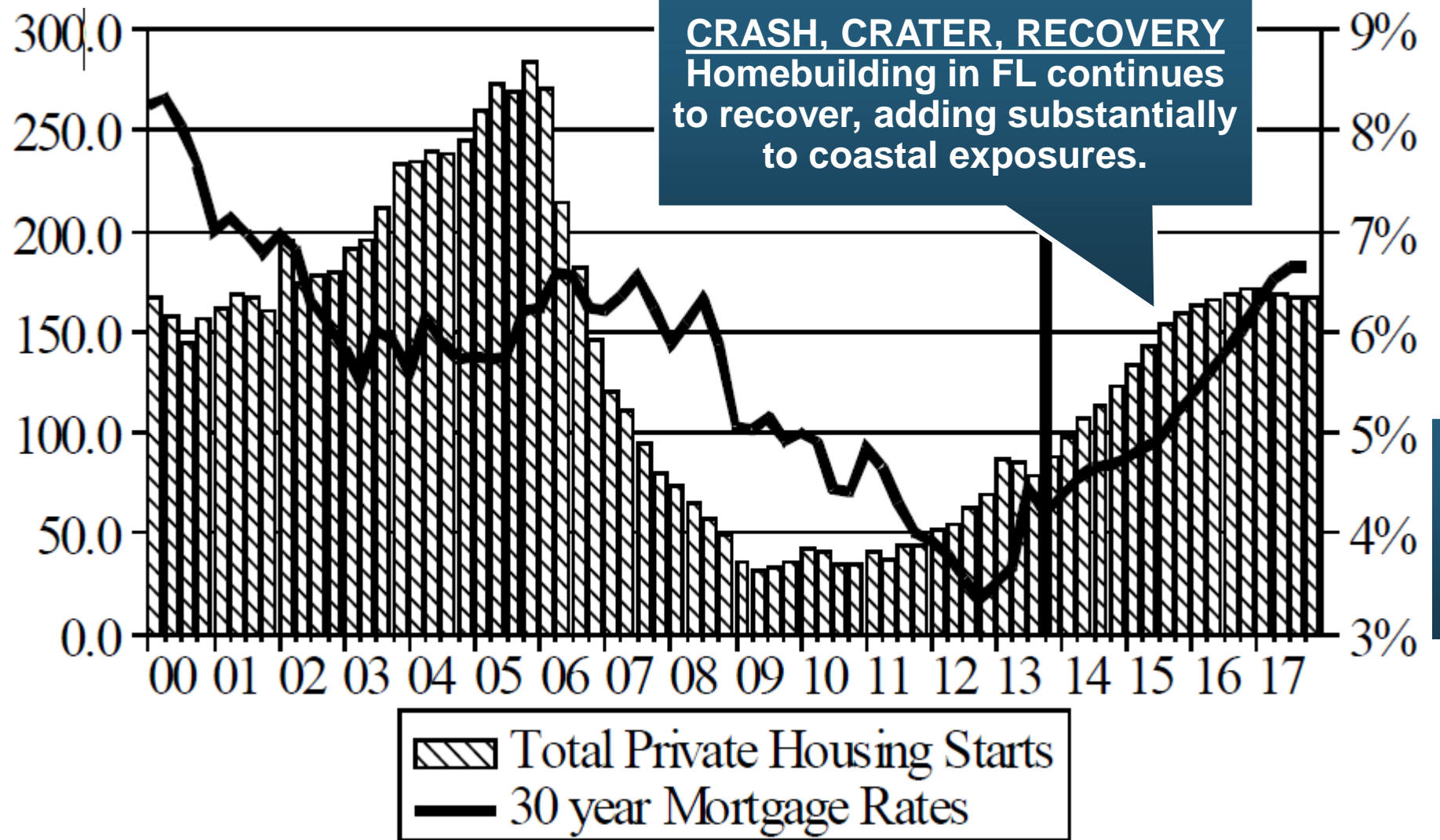
**Construction Employment Is Expanding—Albeit Modestly—in Much of the US**

\*Seasonally adjusted;

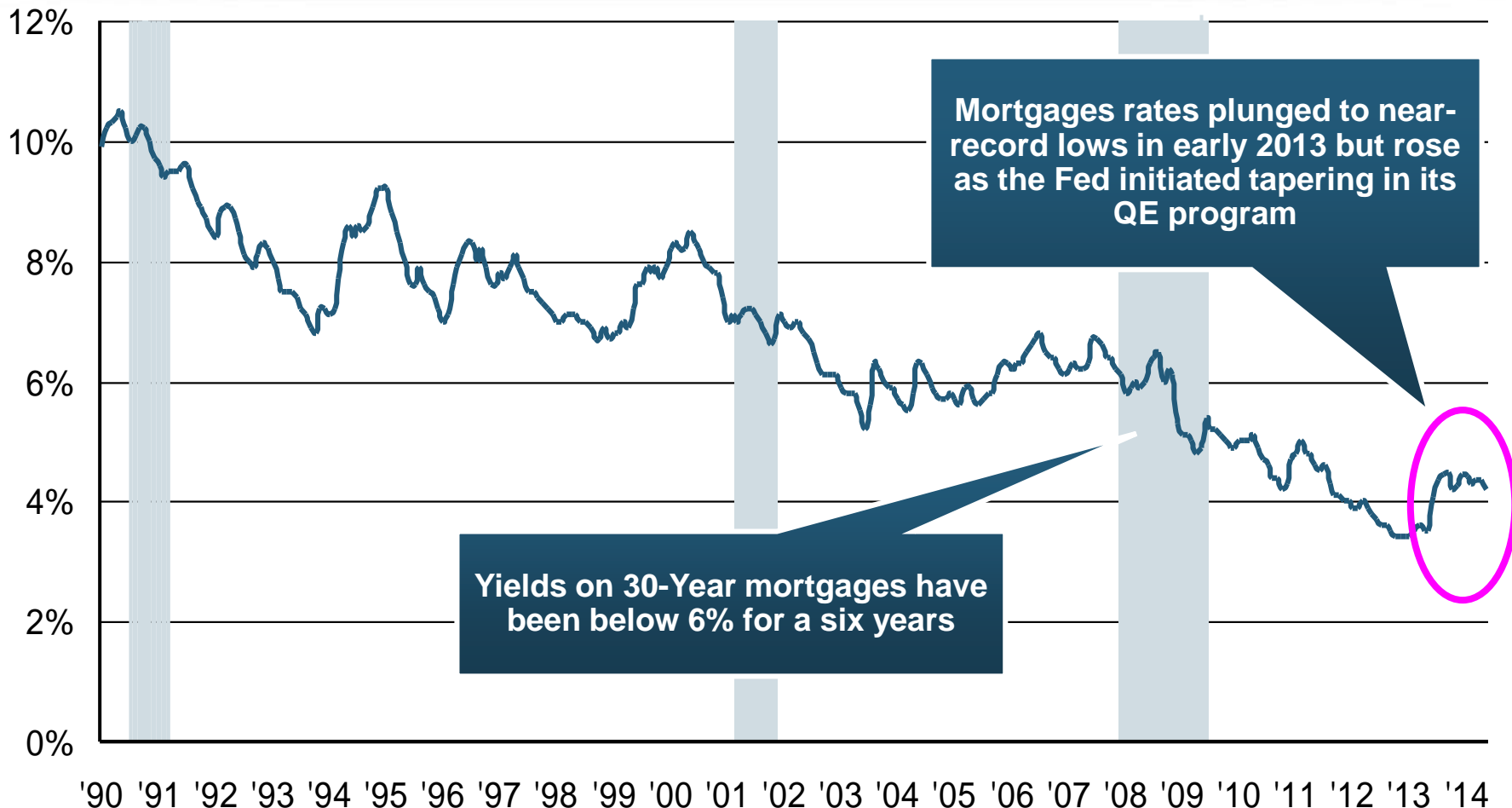
Source: Associated General Contractors: [http://www.agc.org/galleries/news/Metro\\_Empl\\_1404\\_Rank.pdf](http://www.agc.org/galleries/news/Metro_Empl_1404_Rank.pdf); Ins. Information Institute.

# Florida Total Private Housing Starts, 2000 – 2017F

(Thousands of Units)



# Interest Rate on Convention 30-Year Mortgages: Up a Bit, 1990–2014\*



**Rising mortgage interest rates have impacted home sales but are unlikely to derail the recovery on housing**

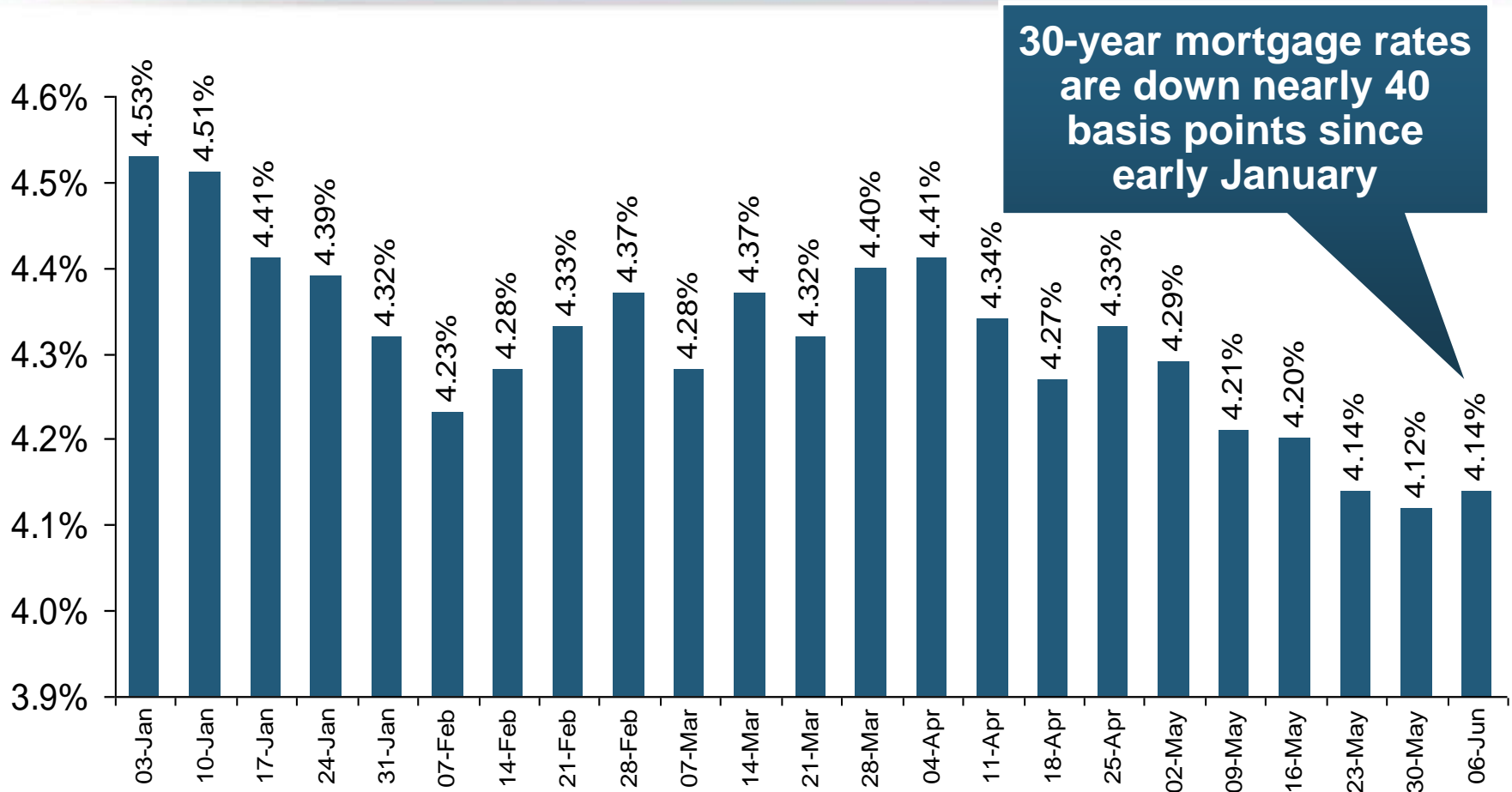
\*Monthly, through May 2014.

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.

# 30-Year Mortgages in 2014 Are Falling! What Will Be the Impact on Construction?



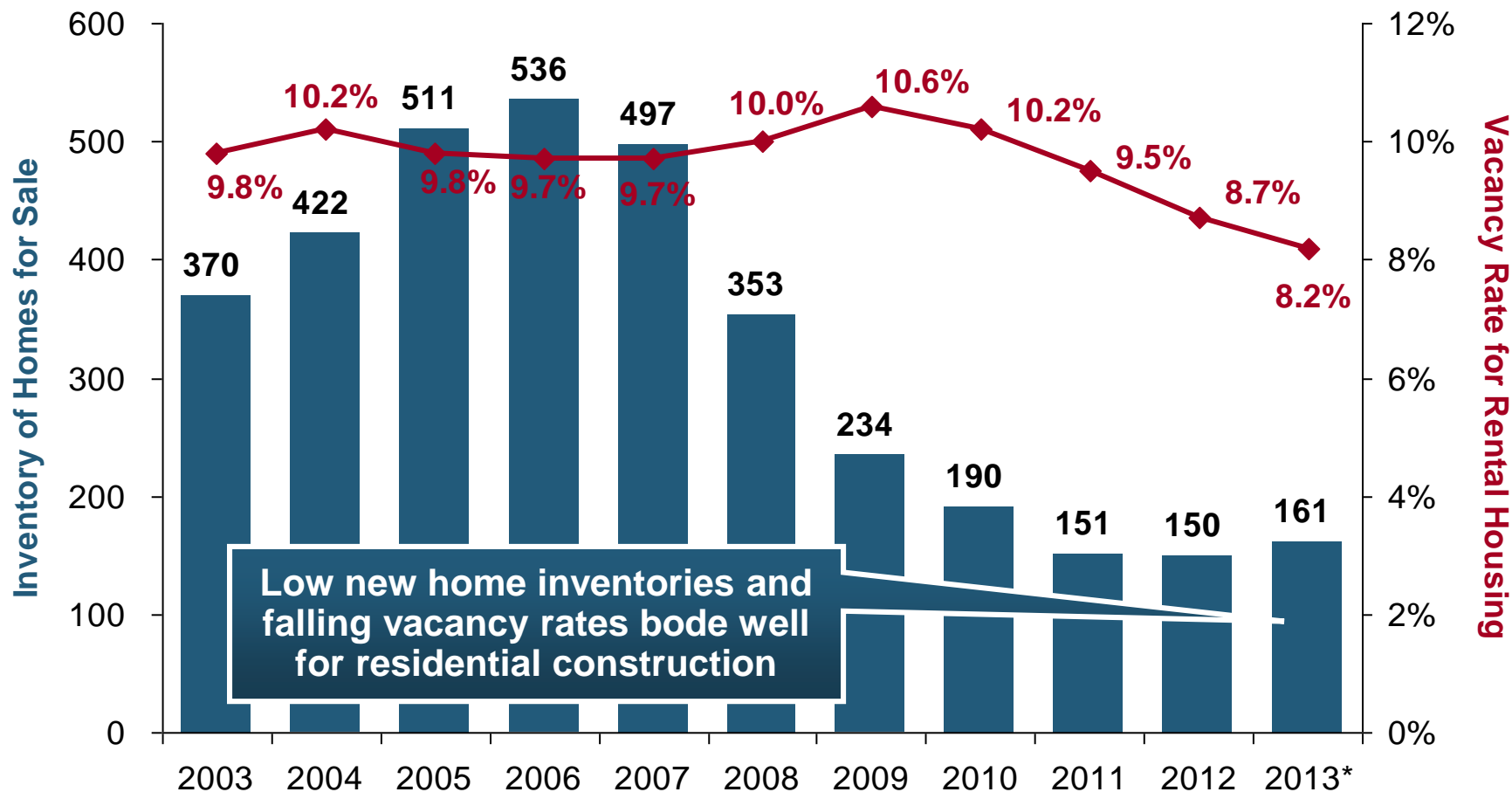
**Mortgage Interest Rates Were Expected to Continue to Rise as the Fed Pursued Tapering and the Economy Recovered; Rates Are Still Low by Historical Standards**

\*Weekly through June 5, 2014.

Sources: Federal Reserve Bank at <http://www.federalreserve.gov/releases/h15/data.htm>; Insurance Information Institutes.

# New Home Inventories and Rental Vacancy Rates, 2003-2013\*

(Thousands)

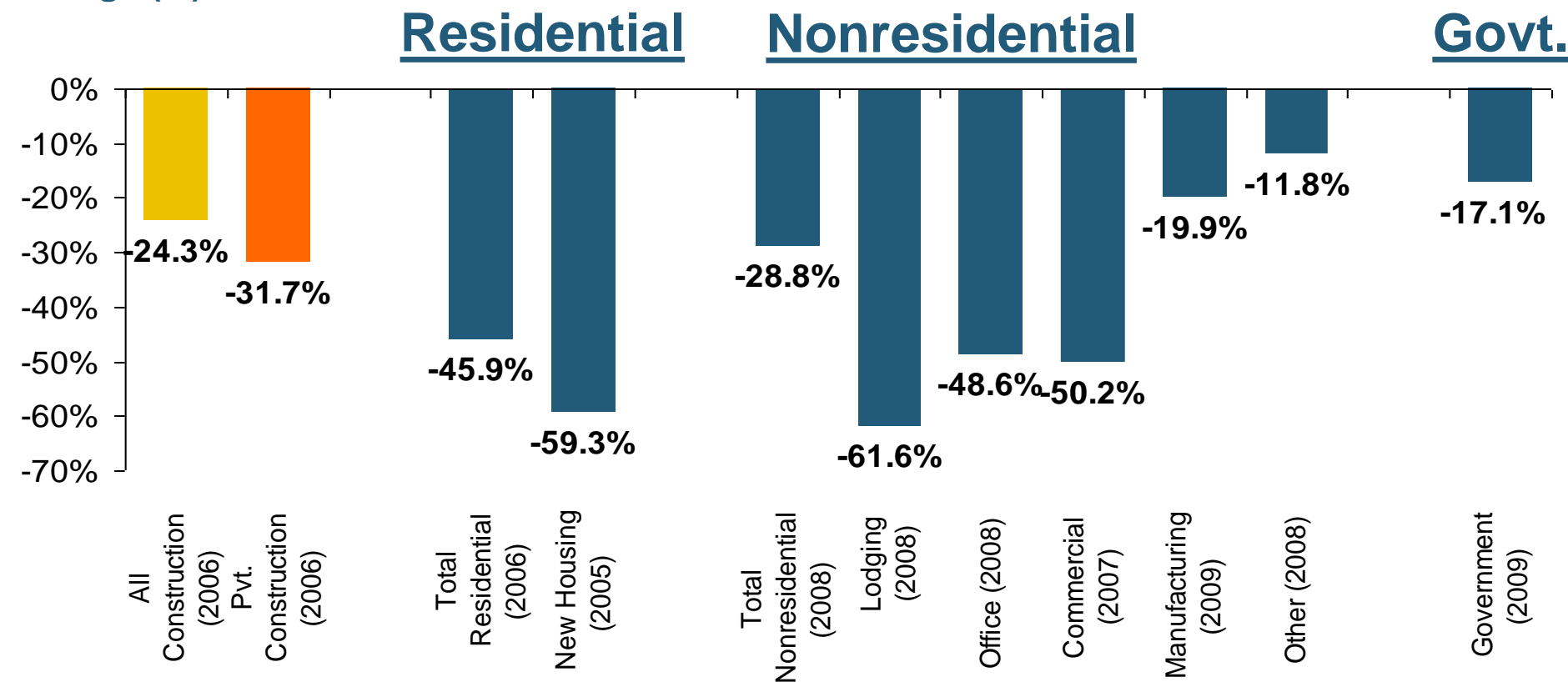


\*2013 figure is a seasonally adjusted annual rate as of June.

Sources: US Department of Commerce; Insurance Information Institute.

# Change from Peak in New Construction Expenditures to 2013\*

Change (%)



**Despite Recent Improvements, Construction Activity (and Employment) Remains Far Below Pre-Crisis Peaks**

Note: Year in parentheses is the year of peak expenditure.

\*2013 figure is a seasonally adjusted annual rate as of June.

Sources: US Department of Commerce; Insurance Information Institute.



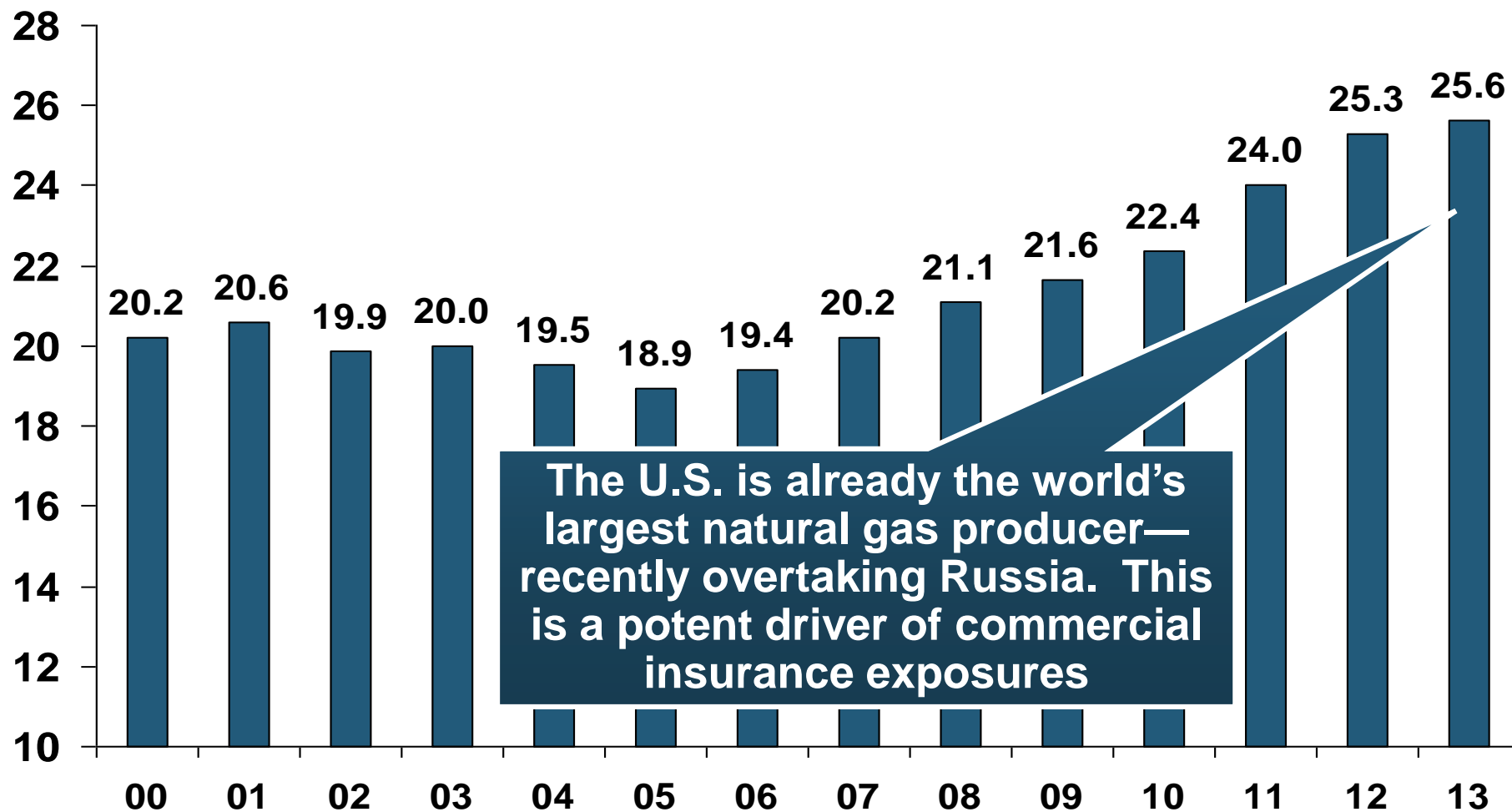
# **ENERGY SECTOR: OIL, GAS & INFRASTRUCTURE IS BRIGHT**

**US Is Becoming an Energy  
Powerhouse; Domestic Demand  
and Exports Are Key**

***Need Infrastructure Investment***

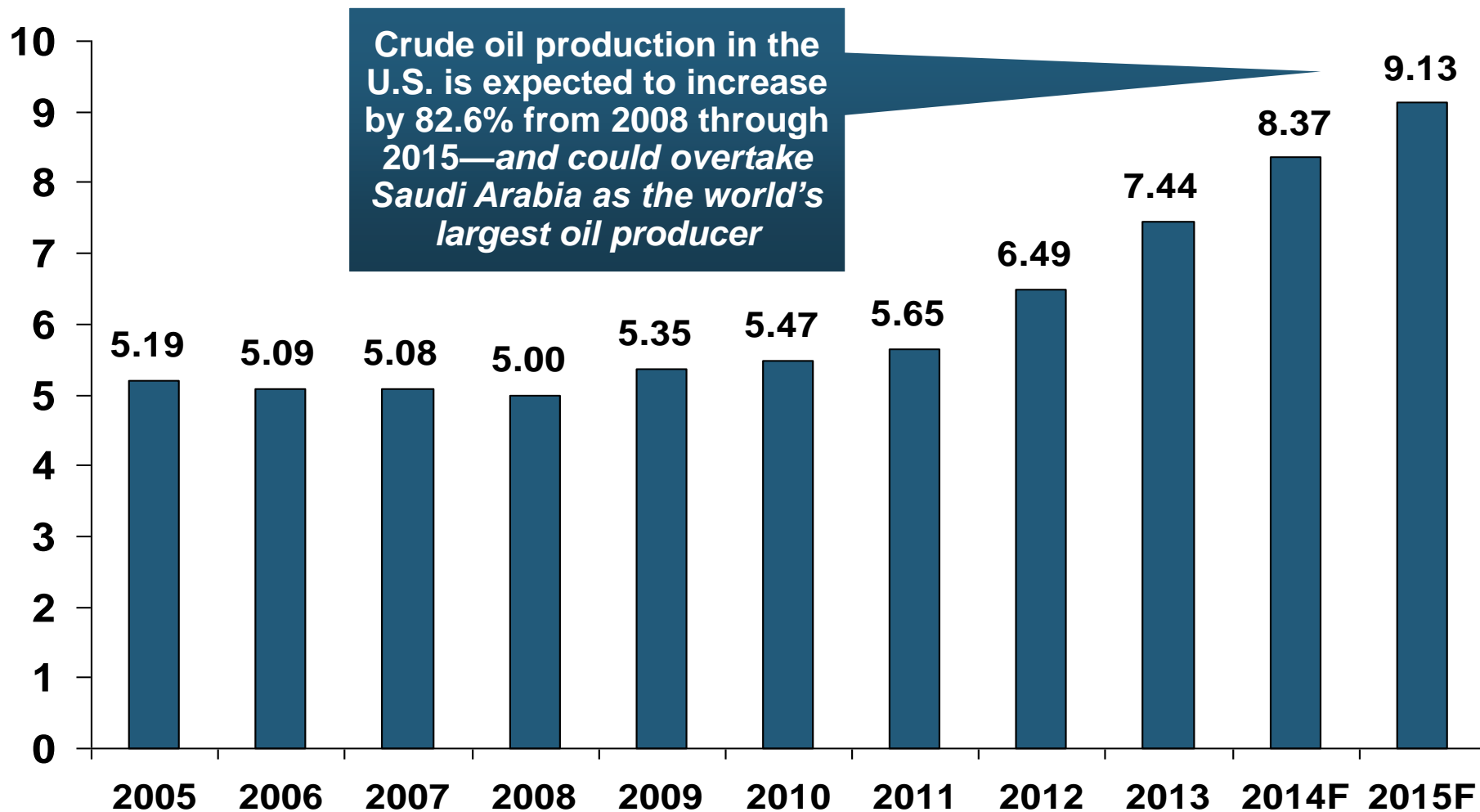
# U.S. Natural Gas Production, 2000-2013

Trillions of Cubic Ft. per Year



# U.S. Crude Oil Production, 2005-2015P

Millions of Barrels per Day

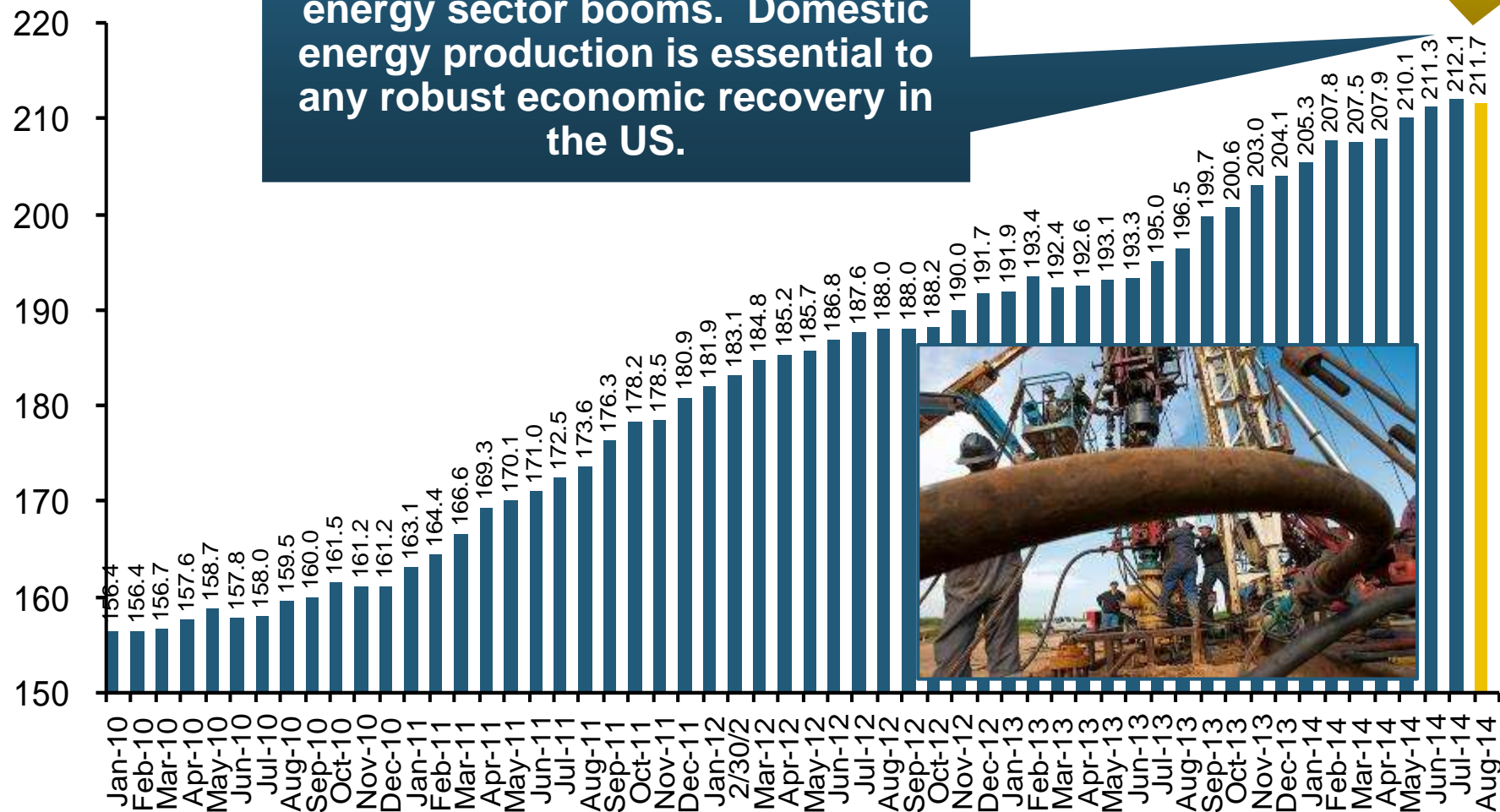


# Oil & Gas Extraction Employment, Jan. 2010—August 2014\*

(Thousands)

Oil and gas extraction employment is up 35.4% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

Highest since mid-1986

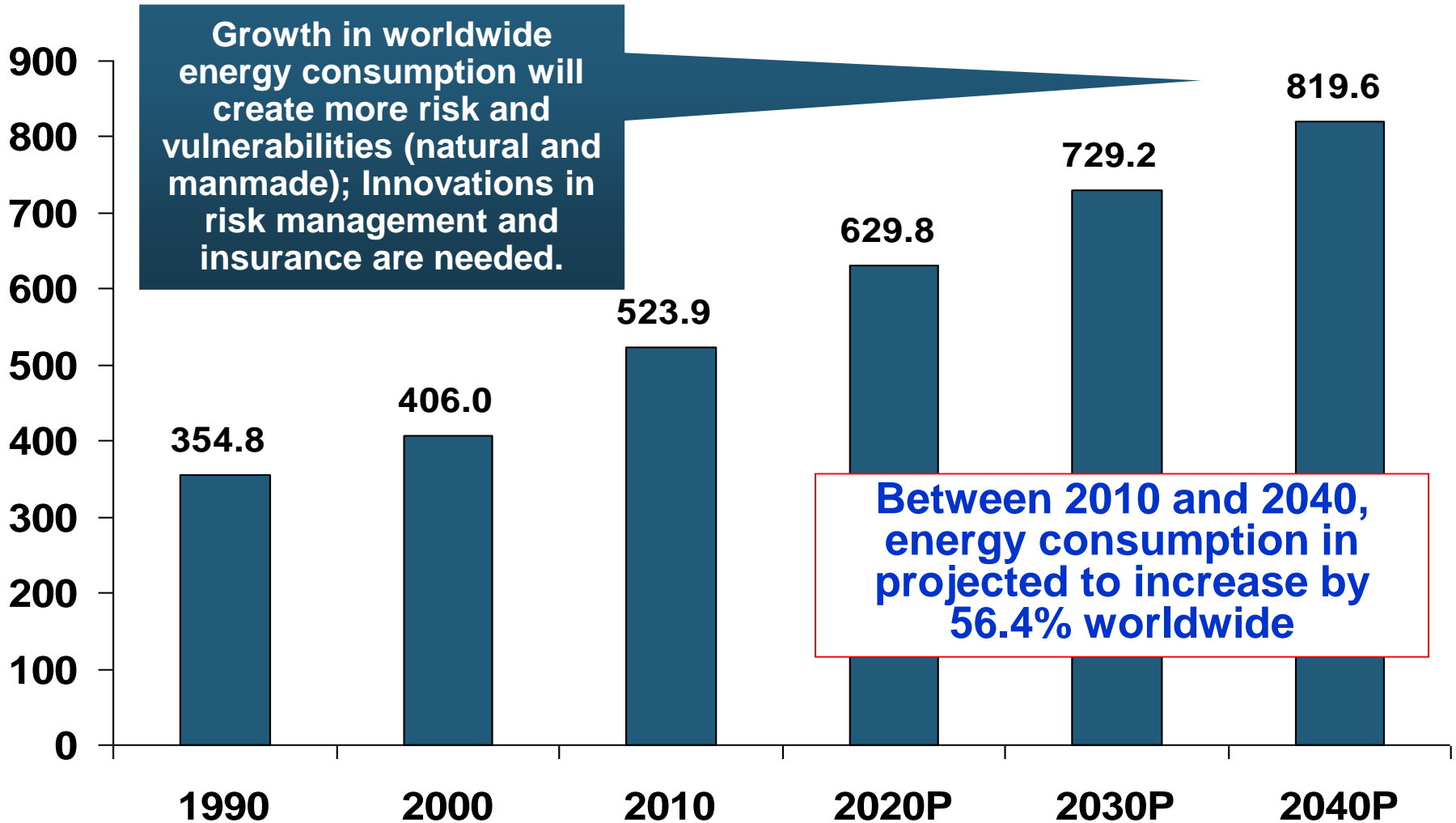


\*Seasonally adjusted

Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.

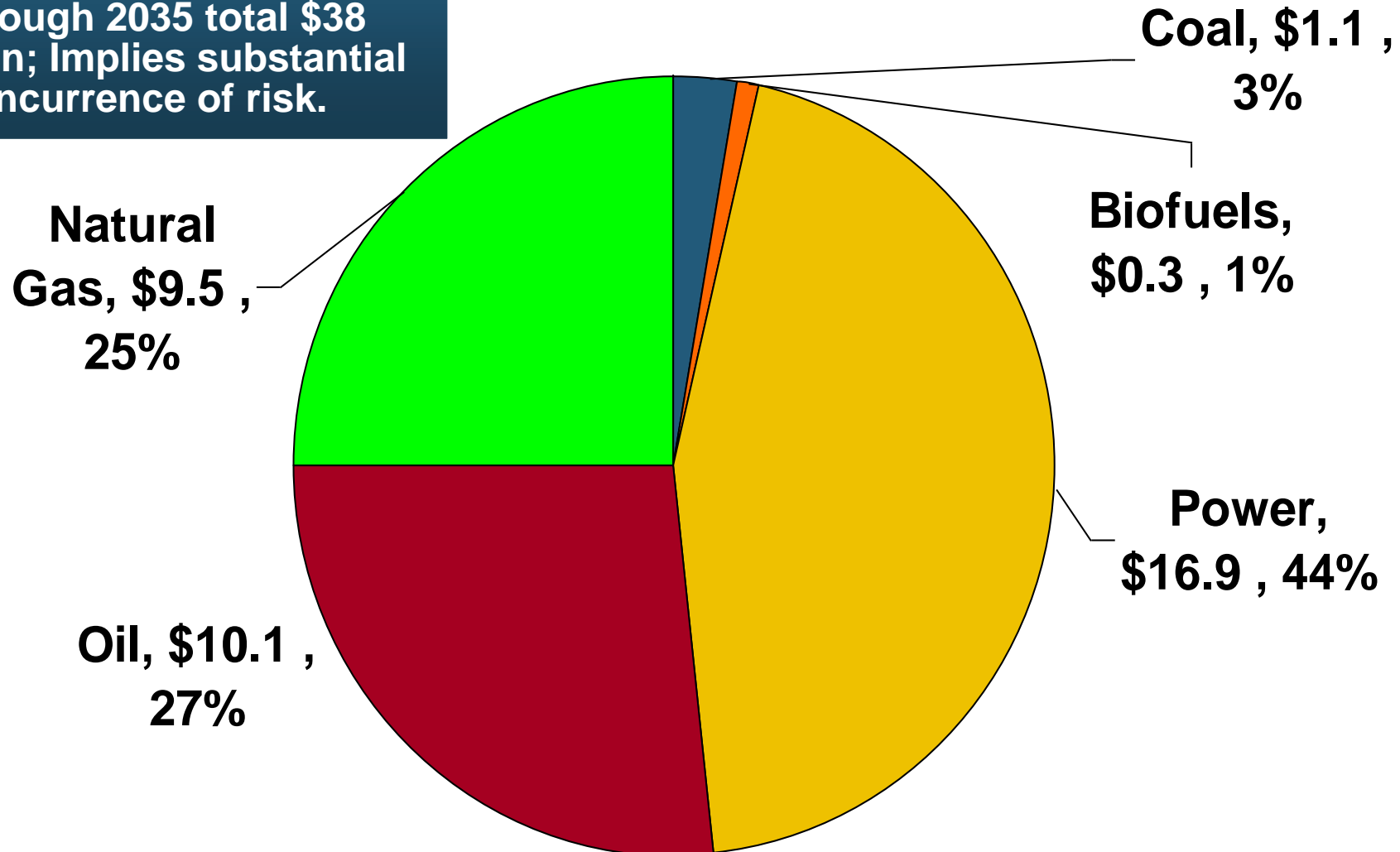
# World Primary Energy Consumption, 1990-2040P

## Quadrillion BTUs

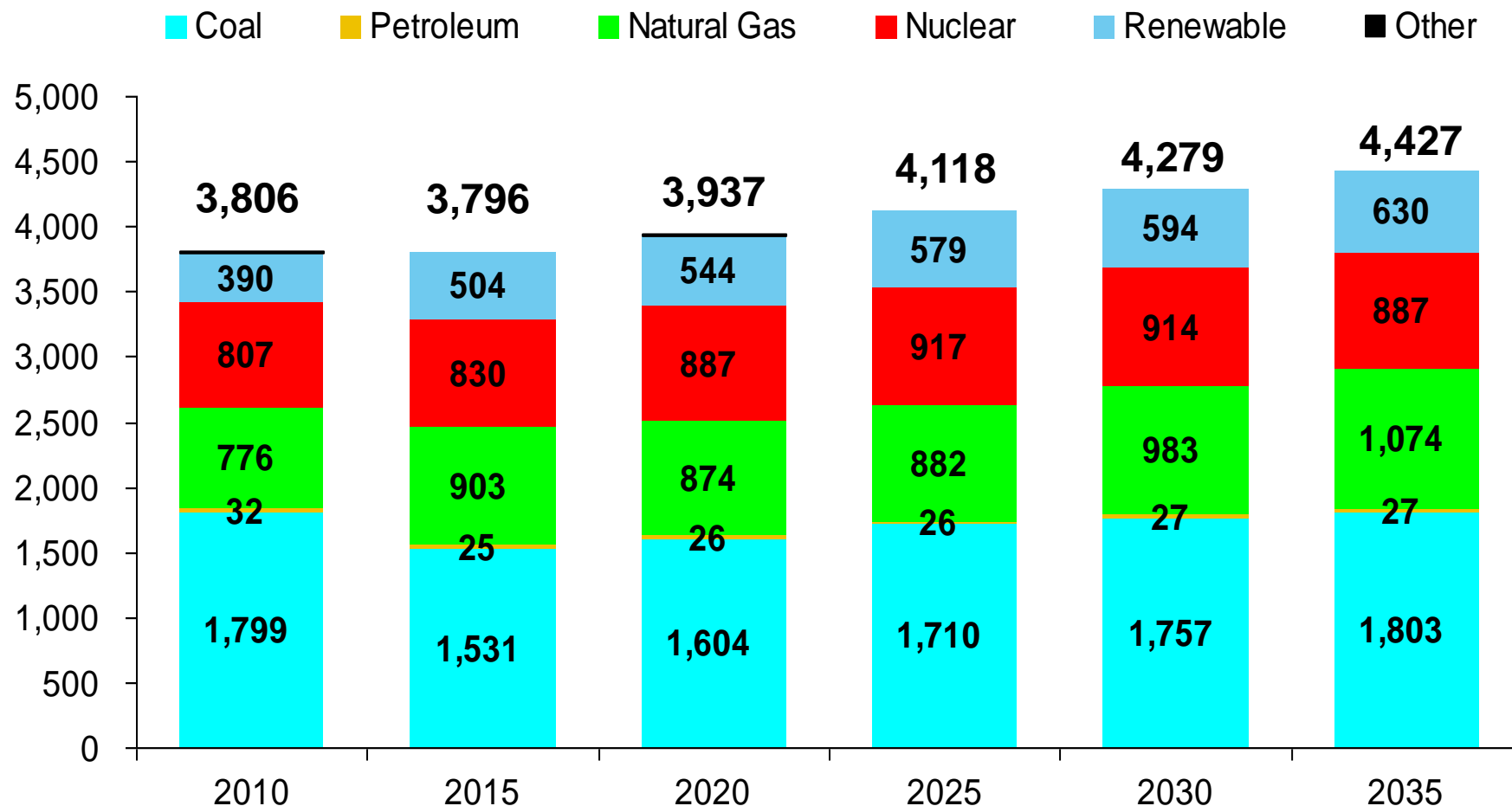


# Cumulative Projected Investment in Global Energy Infrastructure, 2011-2035 (\$ Trill.)

**Projected energy infrastructure investment through 2035 total \$38 trillion; Implies substantial incurrence of risk.**

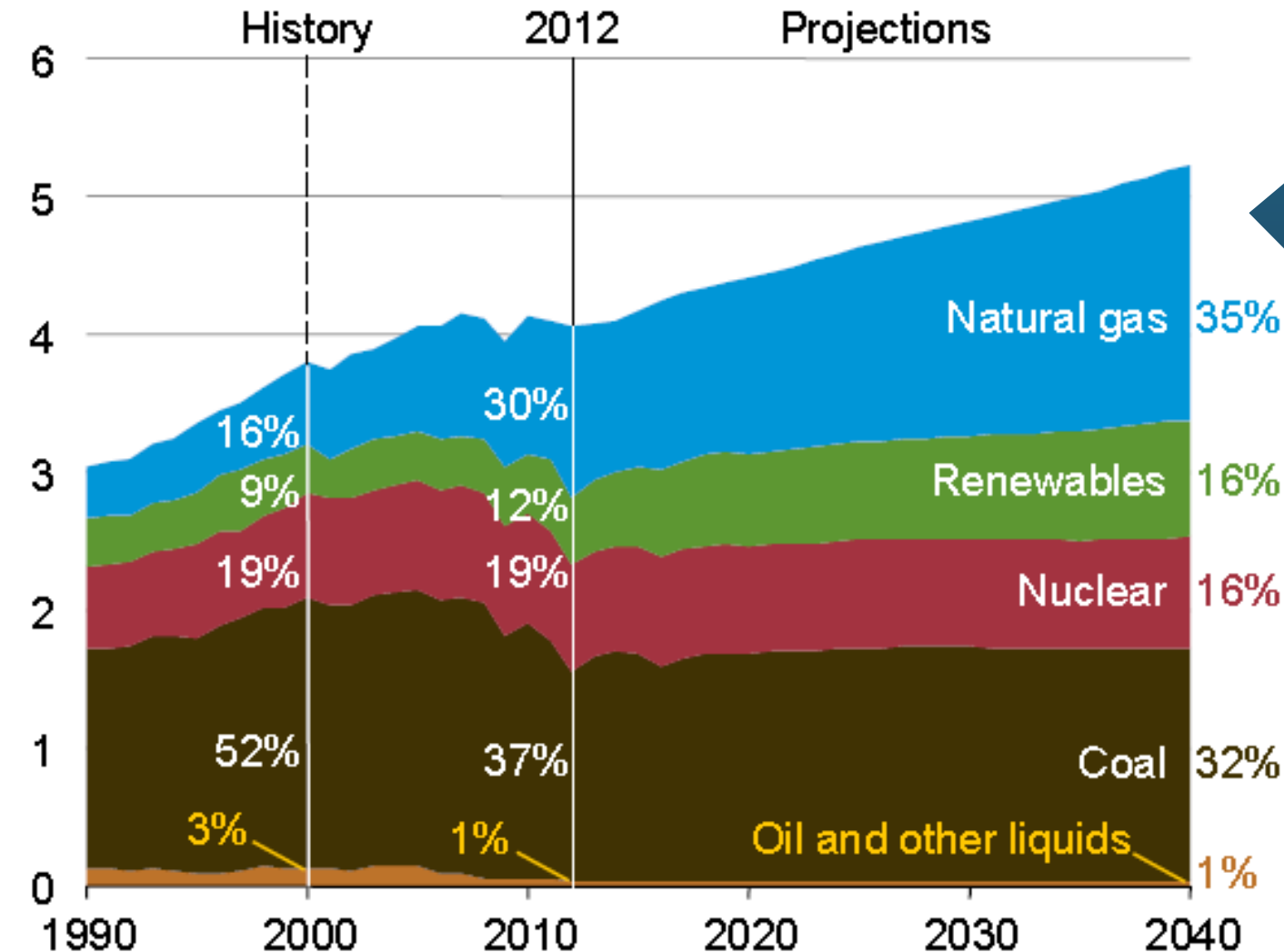


# US Electric Power Generation by Fuel Source, 2010-2035F (Billions of Kilowatt Hours)



**Demand for Electricity Is Expected to Grow at a 0.6% Annual Rate Through 2035. Renewables and Natural Gas Will Account for an Increasing Share of Fuel Source**

# U.S. Electricity Generation by Fuel, 1990-2040F (Trillions of Kilowatt Hours)



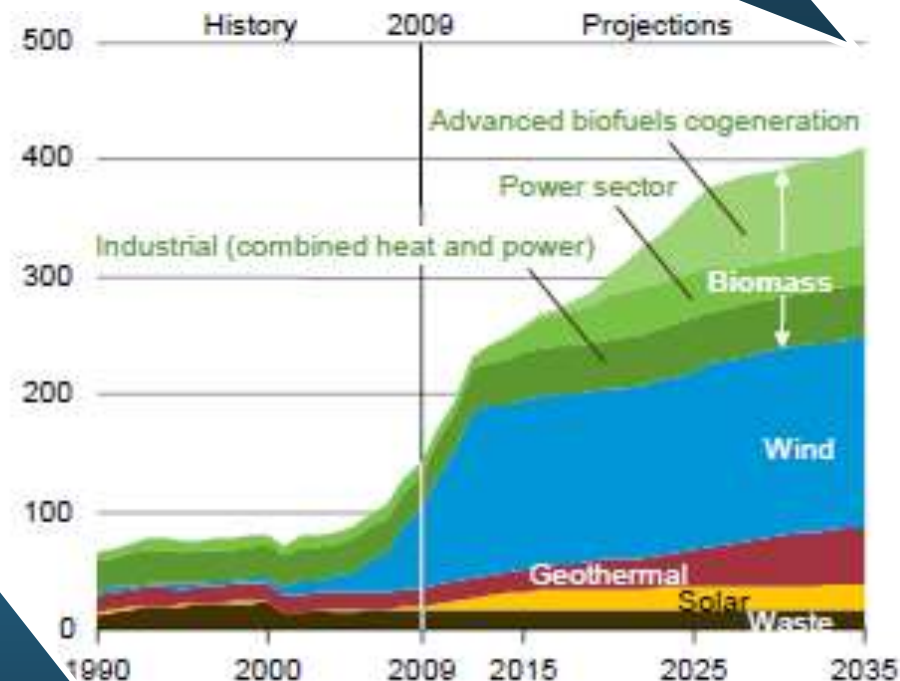
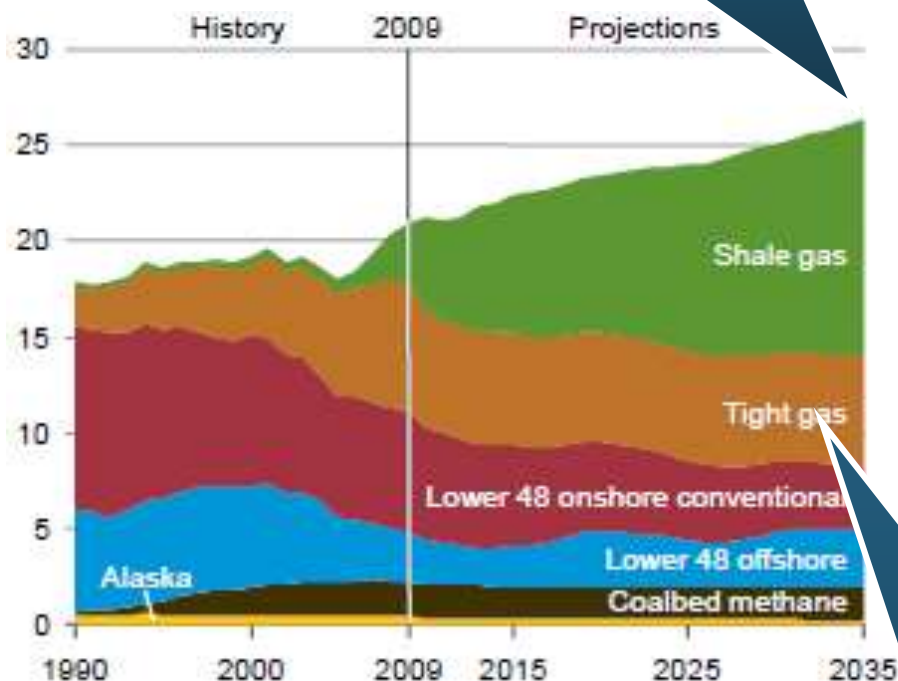
Natural gas share of fossil fired generation will grow rapidly (more investment needed). Coal fired generation will remain flat but its share will fall due to abundant gas and EPA carbon regulations



# US Natural Gas Production and Non-Hydro Renewable Electricity Generation, 1990-2035

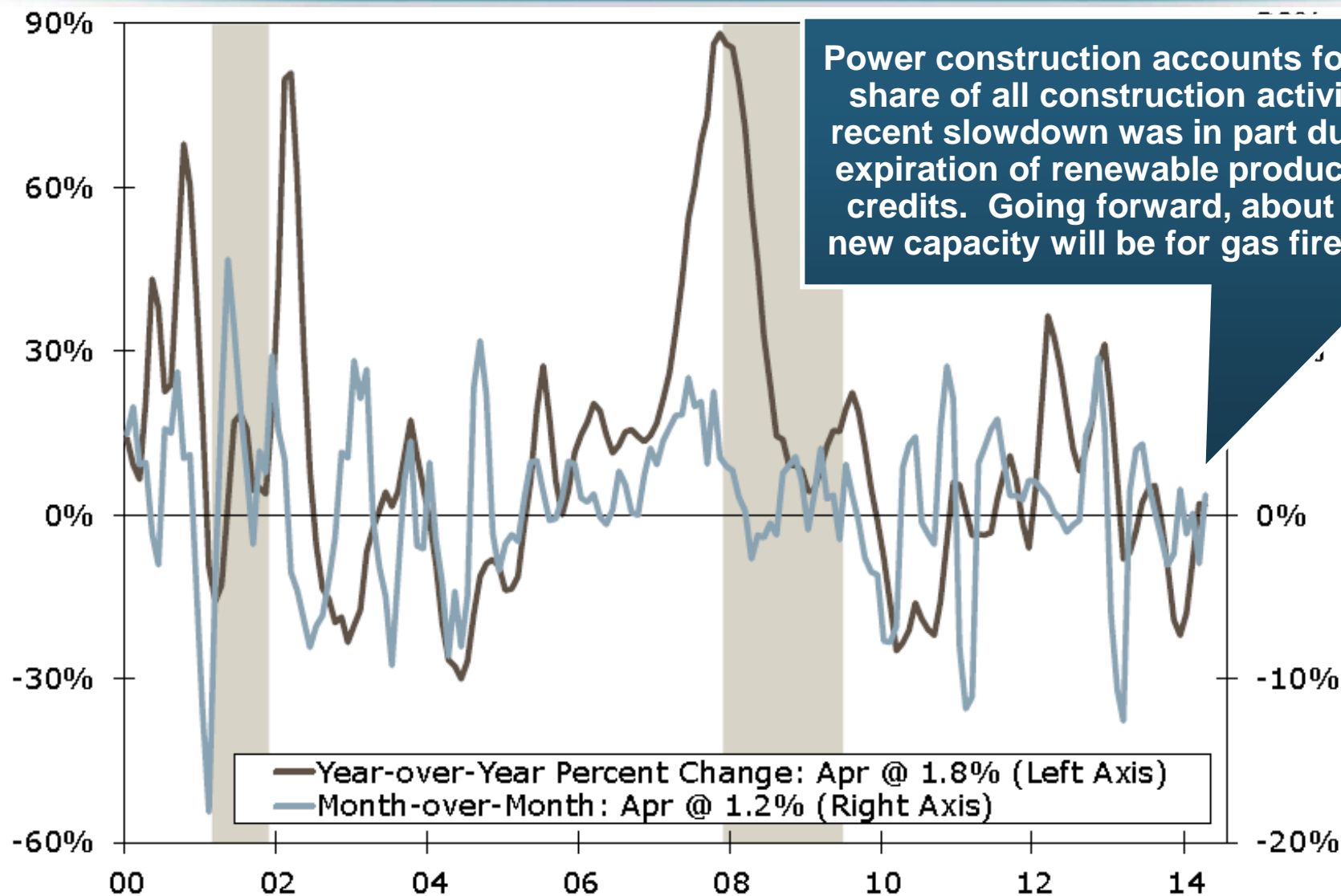
Shale gas production is expected to grow rapidly in the US

Wind is expected to account for the majority of renewable electricity generation



Tight gas production involves controversial hydraulic fracturing (fracking) techniques

# U.S. Private Power Construction, 2000-2014\* (% Change, 3-Month Moving Avg.)



\*Through April 2014.

Source: US Dept. of Commerce; Energy Information Administration, Wells Fargo Securities (June 6, 2014 research report).

# **MANUFACTURING SECTOR OVERVIEW & OUTLOOK**

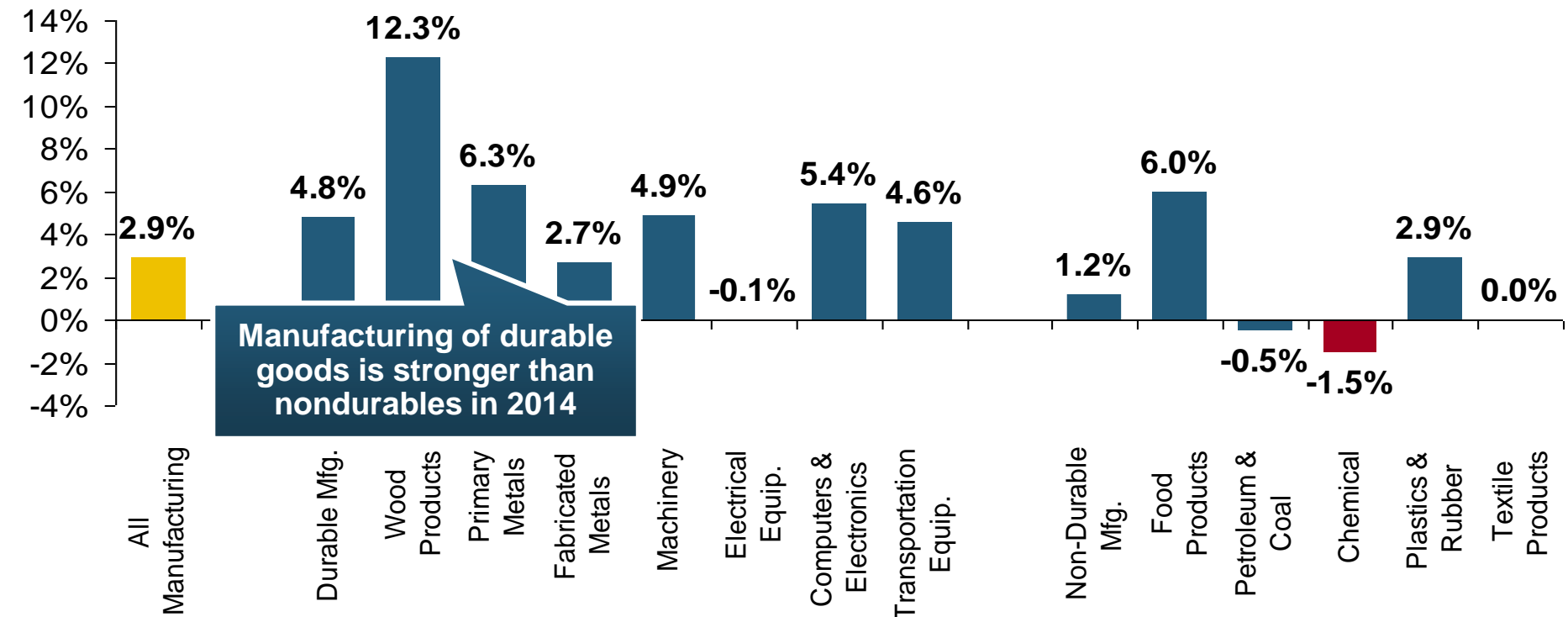
**The U.S. Is Experiencing a Mini  
Manufacturing Renaissance That  
Is Benefitting the US Economy  
and the P/C Insurance Industry**

# Manufacturing Growth for Selected Sectors, 2014 vs. 2013\*

Growth (%)

**Durables: +4.8%**

**Non-Durables: +0.9%**



**Manufacturing Is Expanding—Albeit Slowly—Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages**

\*Seasonally adjusted; Date are YTD comparing data through July 2014 to the same period in 2013.

Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders*, <http://www.census.gov/manufacturing/m3/>

# Dollar Value\* of Manufacturers' Shipments Monthly, Jan. 1992—July 2014

\$ Millions

\$500,000

\$400,000

\$300,000

\$200,000

The value of Manufacturing Shipments in July 2014 was \$507.4B—a new record high.

Jan-92 Jan-93 Jan-94 Jan-95 Jan-96 Jan-97 Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 12-Jan 13-Jan 14-Jan

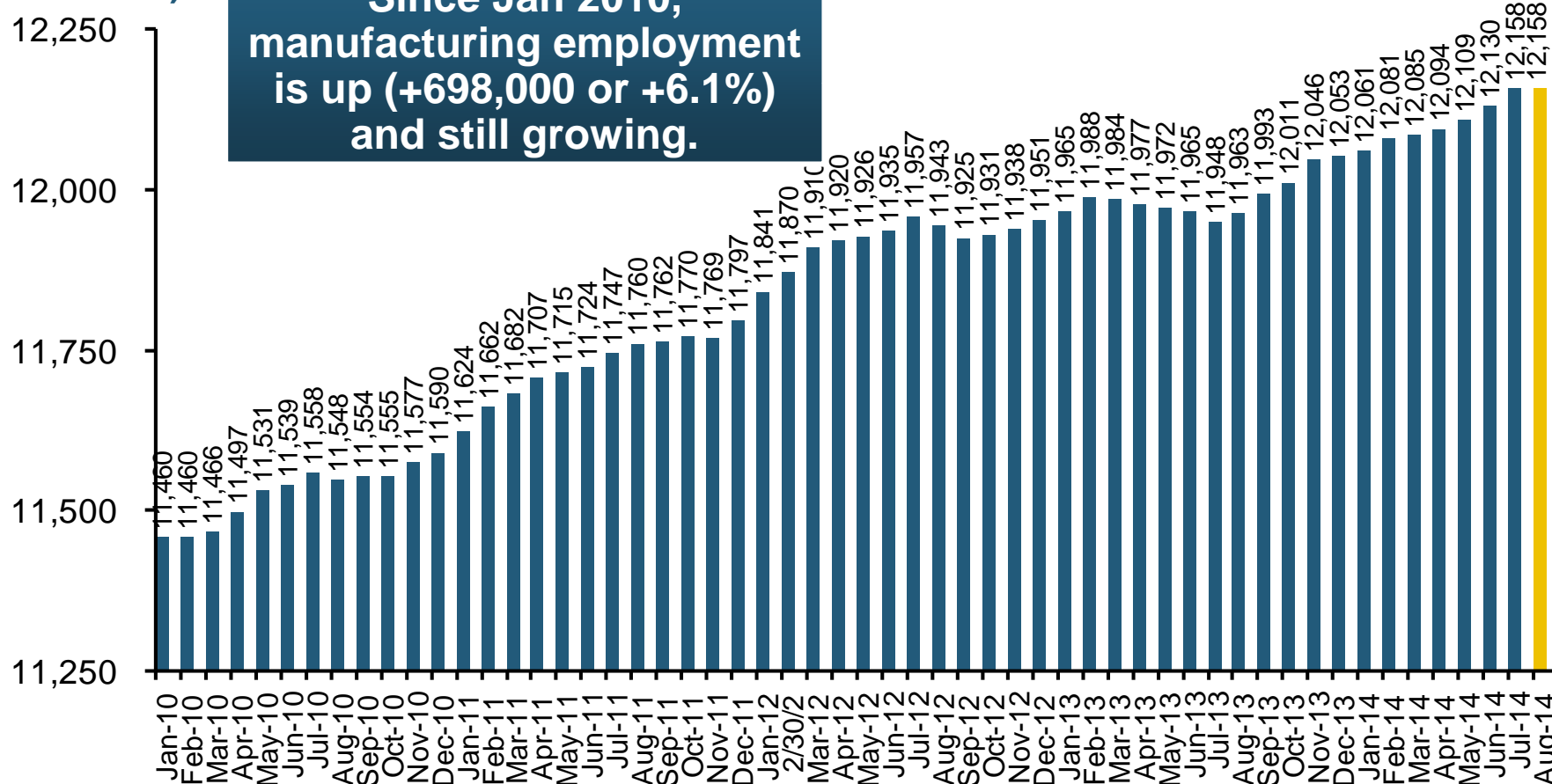
**Monthly shipments in July 2014 exceeded the pre-crisis (July 2008) peak. Manufacturing is energy-intensive and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property, and various Liability Coverages.**

\* Seasonally adjusted; Data published Sept. 4, 2014.

Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders*, <http://www.census.gov/manufacturing/m3/>

# Manufacturing Employment, Jan. 2010—August 2014\*

(Thousands)



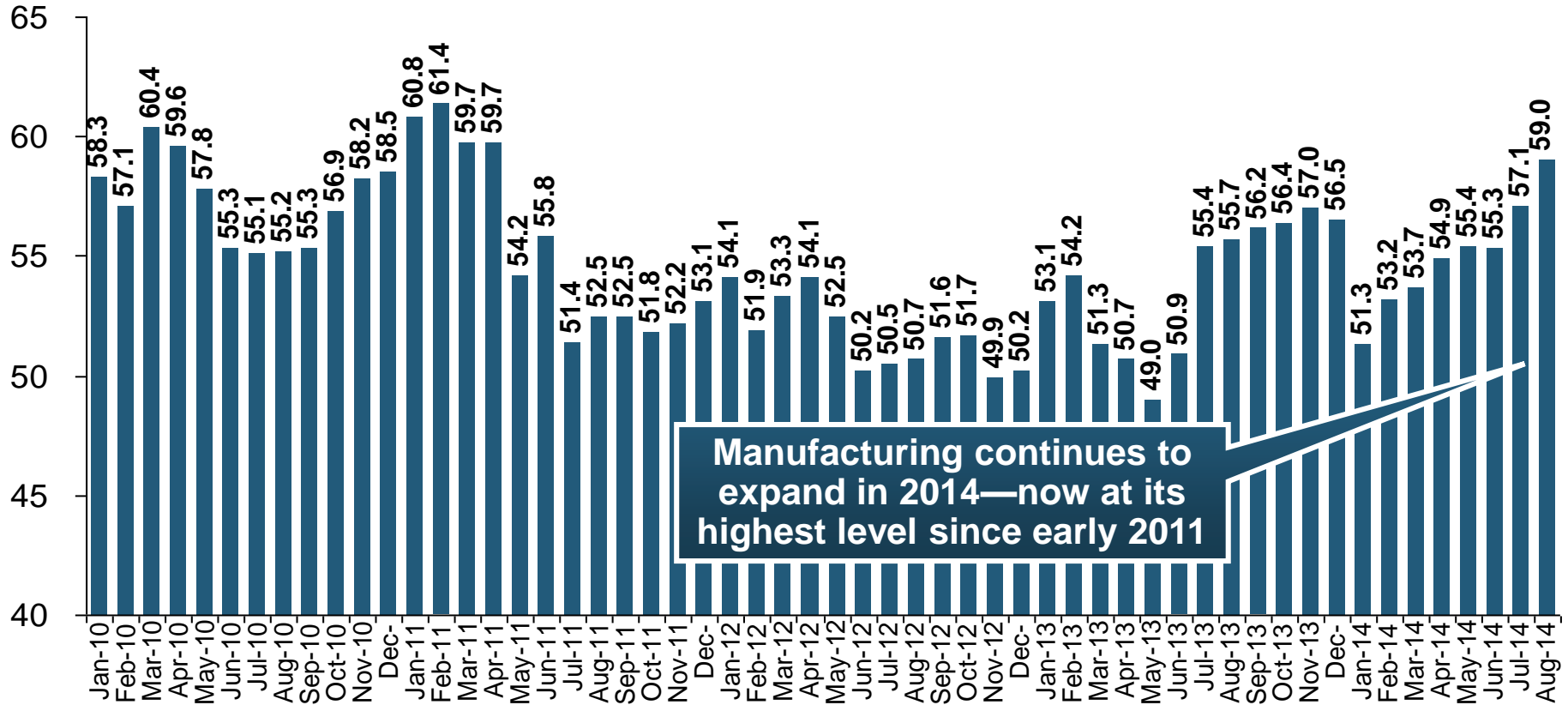
**Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.**

\*Seasonally adjusted.

Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.

# ISM Manufacturing Index (Values > 50 Indicate Expansion)

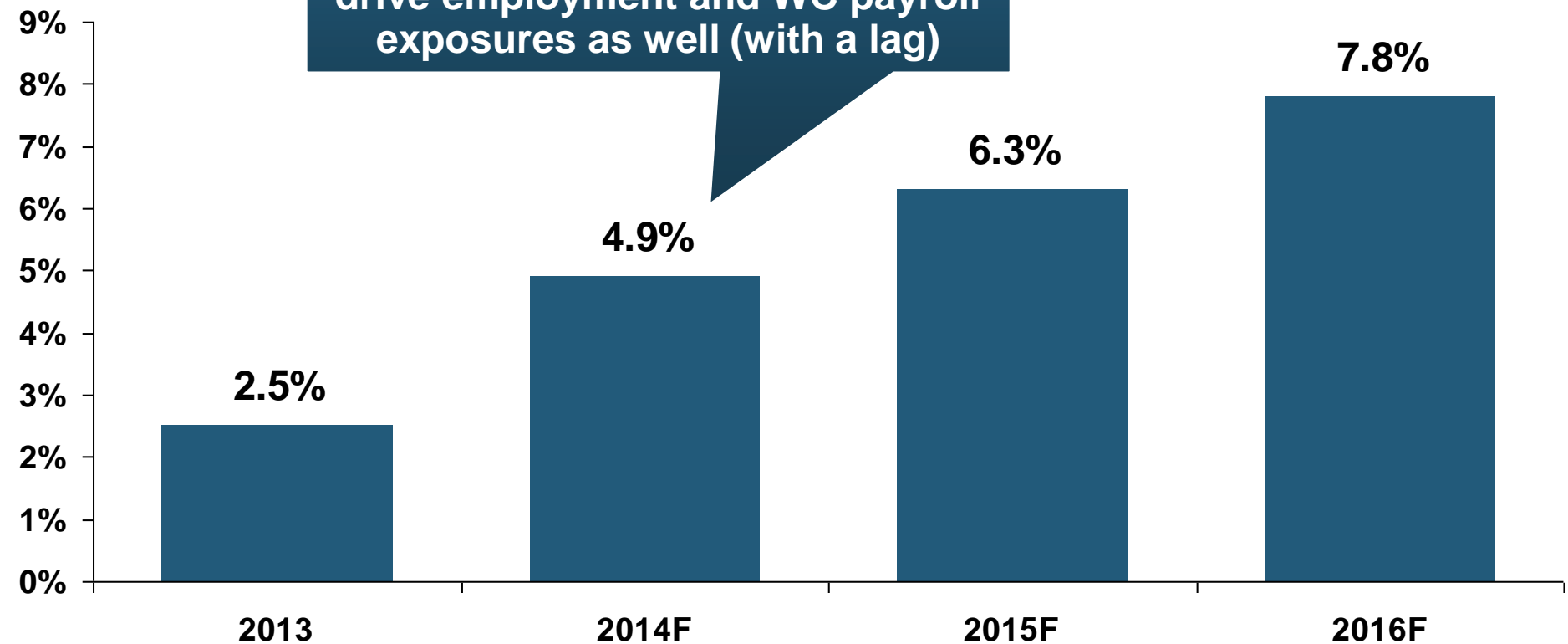
January 2010 through August 2014



**The manufacturing sector expanded for 54 of the 56 months from Jan. 2010 through Aug. 2014. Pace of recovery has been uneven due to economic turbulence in the U.S., Europe and China.**

# Business Investment: Expected to Accelerate, Fueling Commercial Exposure Growth

Accelerating business investment will be a potent driver of commercial property and liability insurance exposures and should drive employment and WC payroll exposures as well (with a lag)

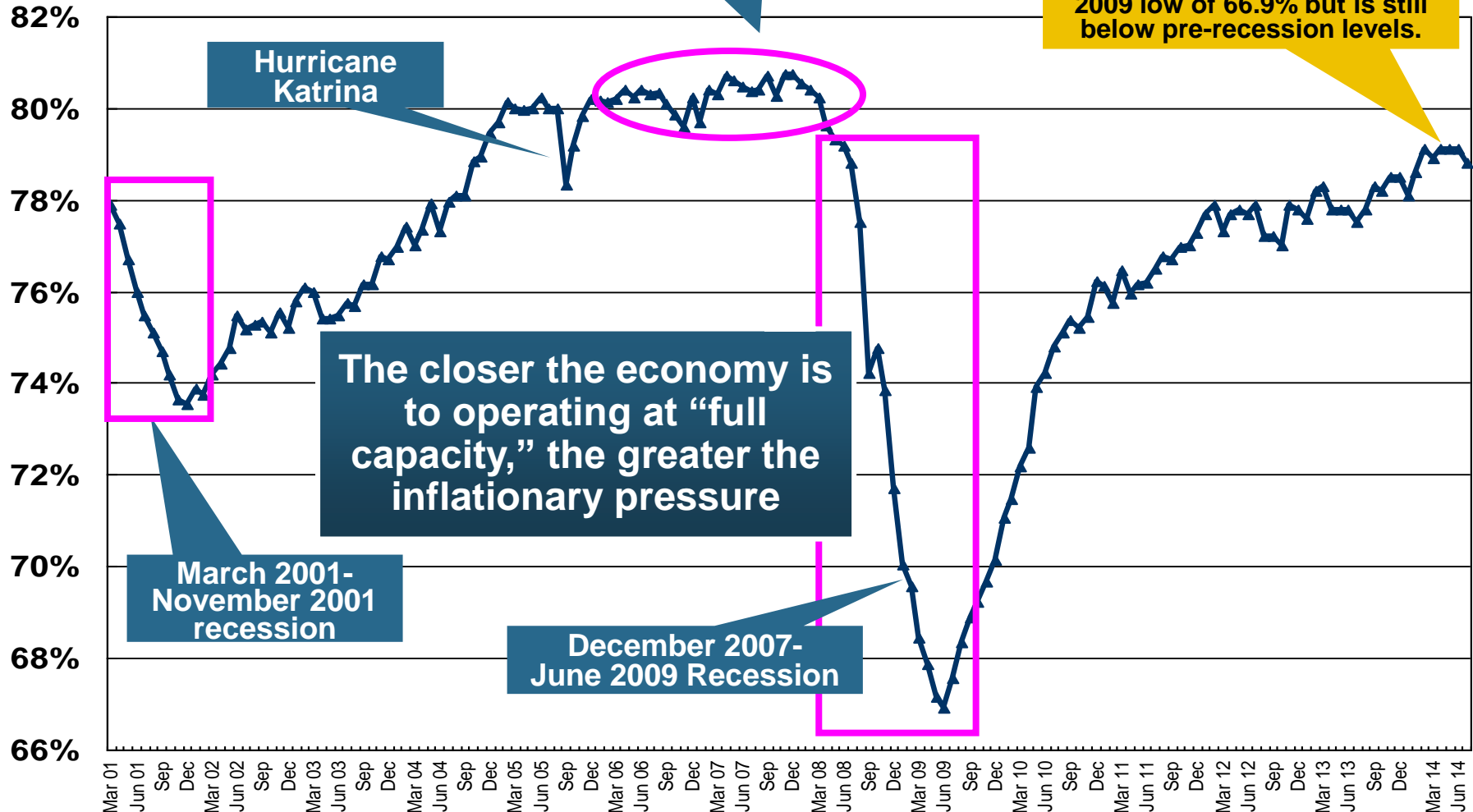




# Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

March 2001 through Aug. 2014

Percent of Industrial Capacity



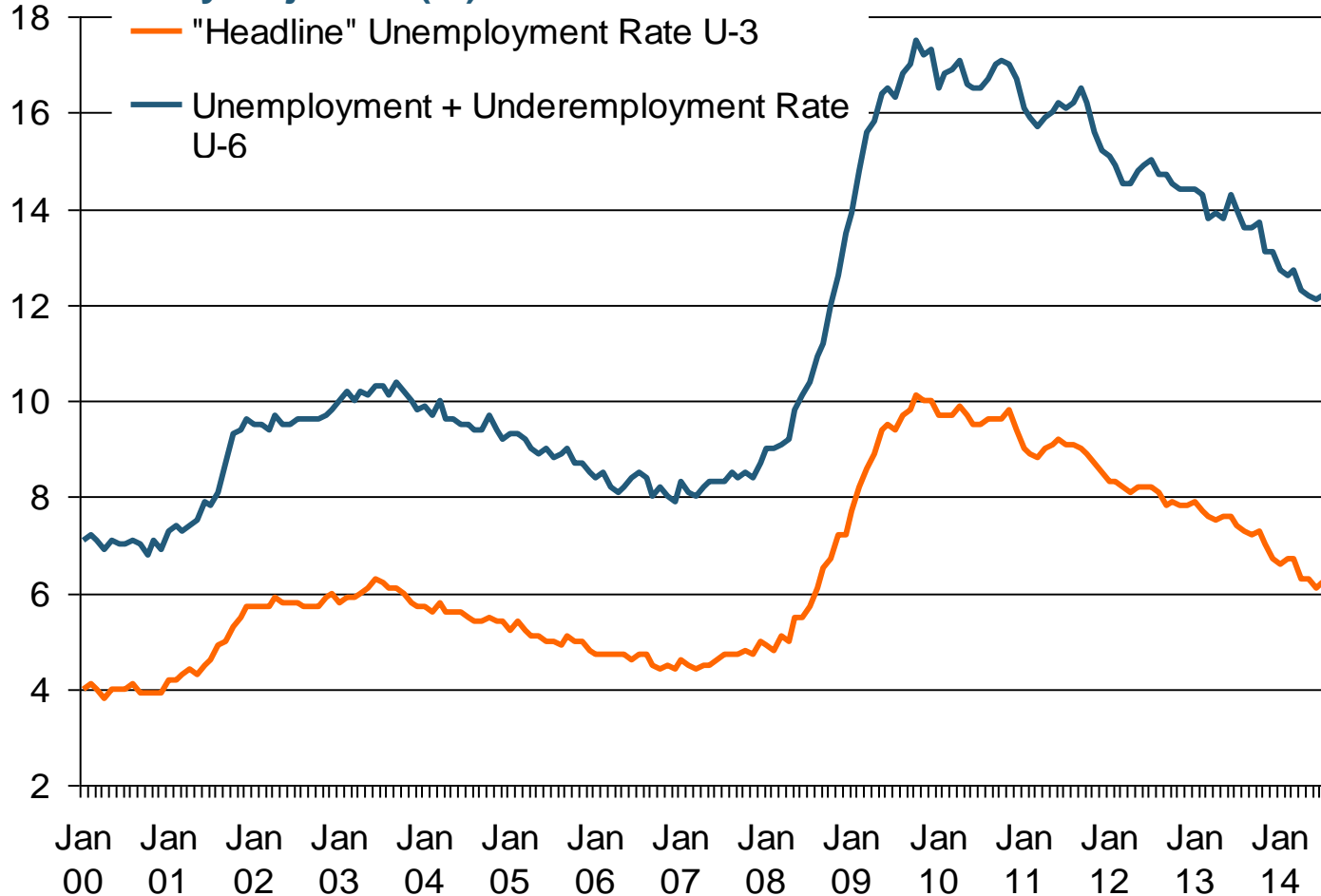
Source: Federal Reserve Board statistical releases at <http://www.federalreserve.gov/releases/g17/Current/default.htm>.

# **Labor Market Trends**

**Massive Job Losses Sapped the  
Economy and Commercial/Personal  
Lines Exposure, But Trend is  
Improving**

# Unemployment and Underemployment Rates: Still Too High, But Falling

January 2000 through Aug. 2014,  
Seasonally Adjusted (%)



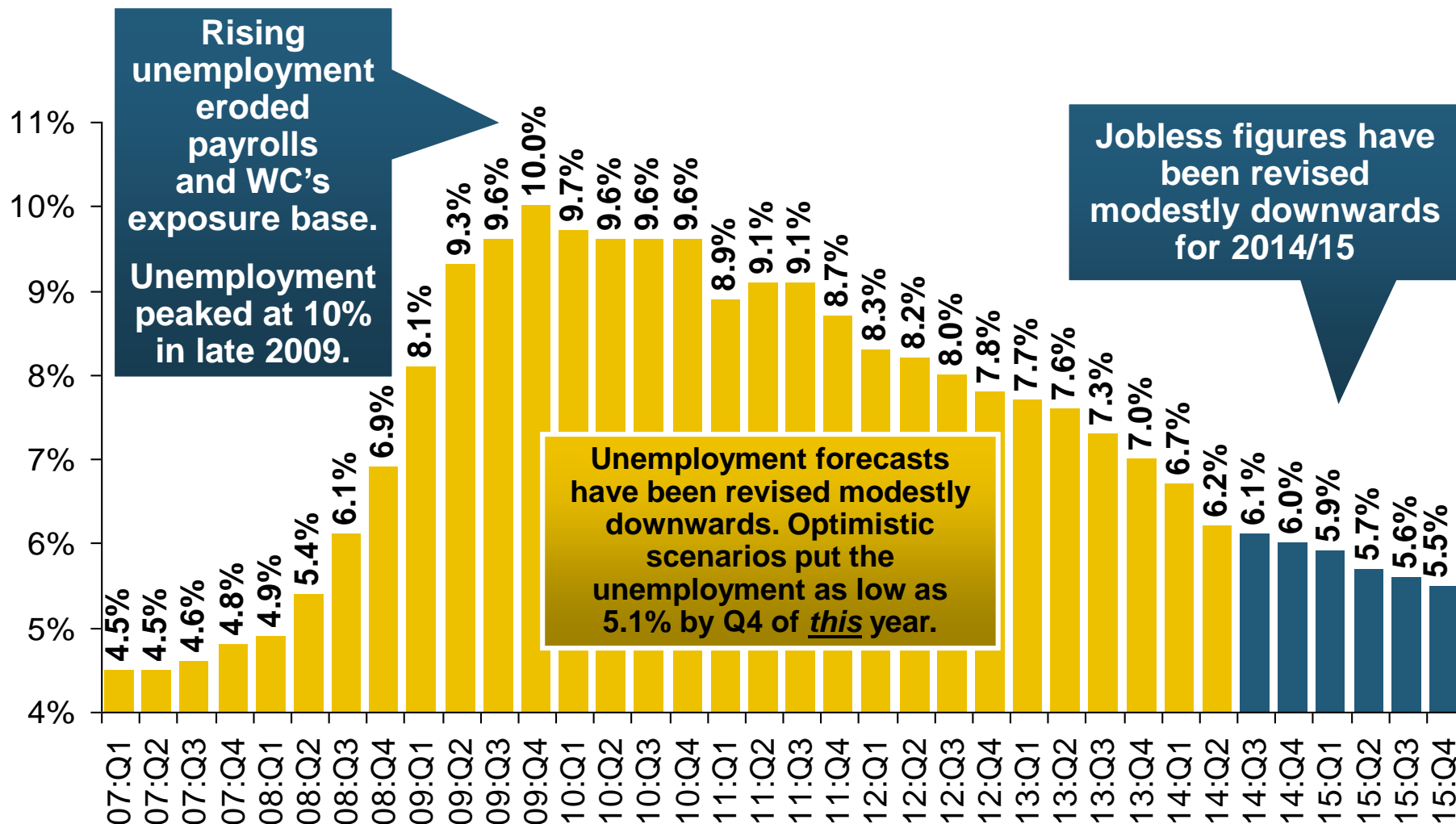
U-6 went from 8.0% in March 2007 to 17.5% in October 2009; Stood at 12.0% in Aug. 2014. 8% to 10% is "normal."

"Headline" unemployment was 6.1% in Aug. 2014. 4.5% to 6% is "normal."

**Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market is now clearly improving.**

# US Unemployment Rate Forecast

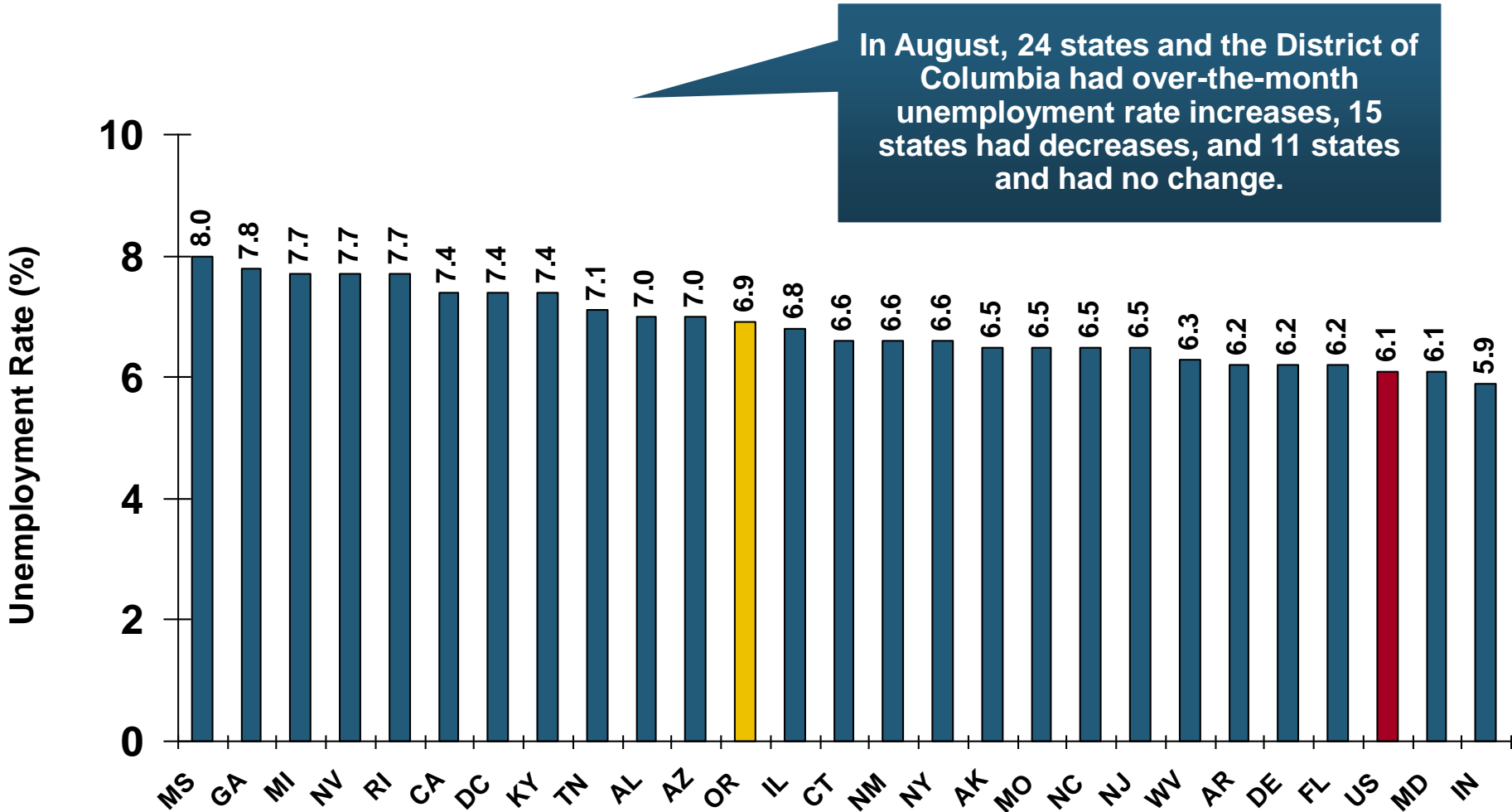
2007:Q1 to 2015:Q4F\*



\* ■ = actual; ■ = forecasts

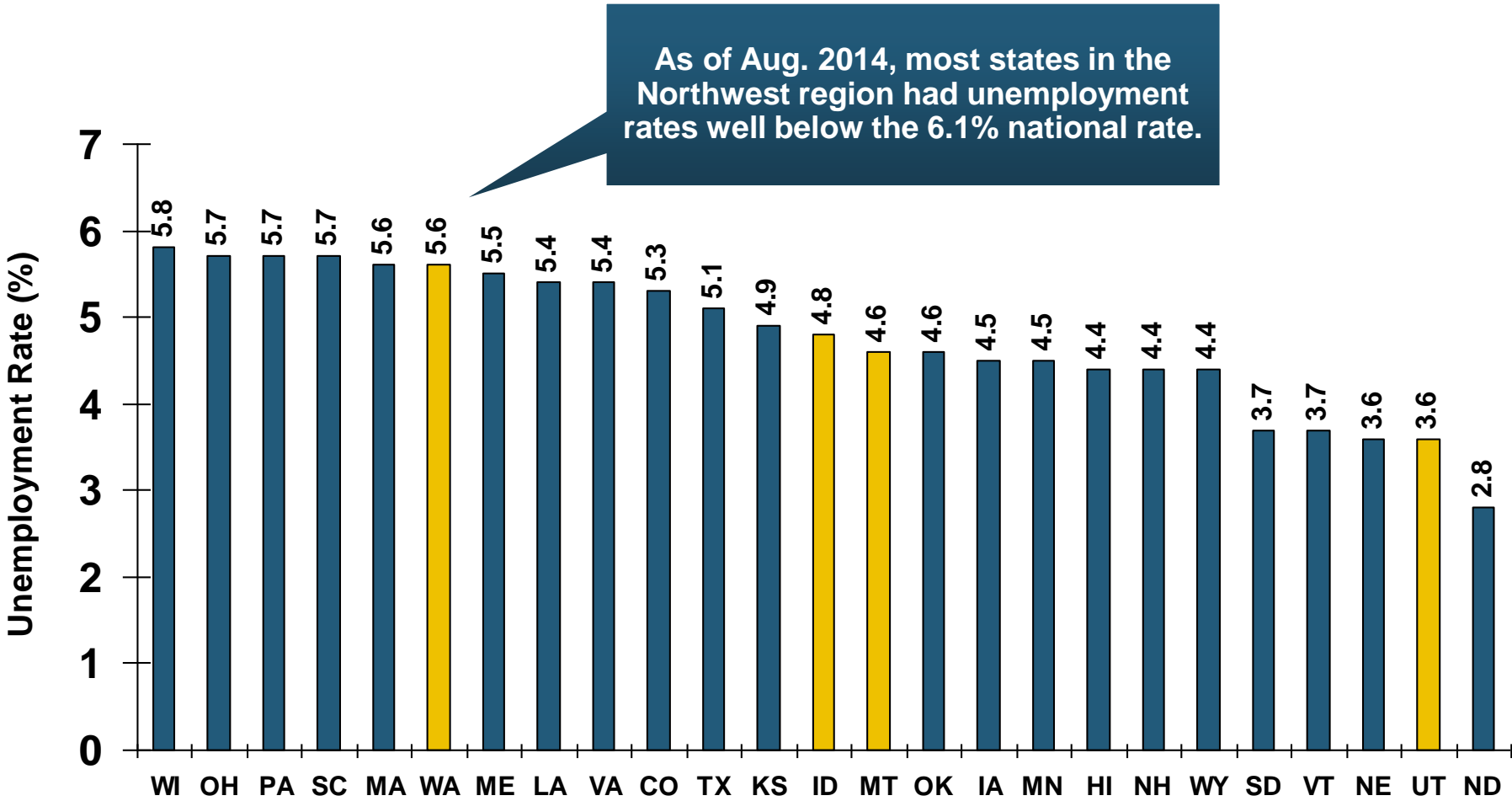
Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (9/14 edition); Insurance Information Institute.

# Unemployment Rates by State, August 2014: Highest 25 States\*



\*Provisional figures for August 2014, seasonally adjusted.  
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

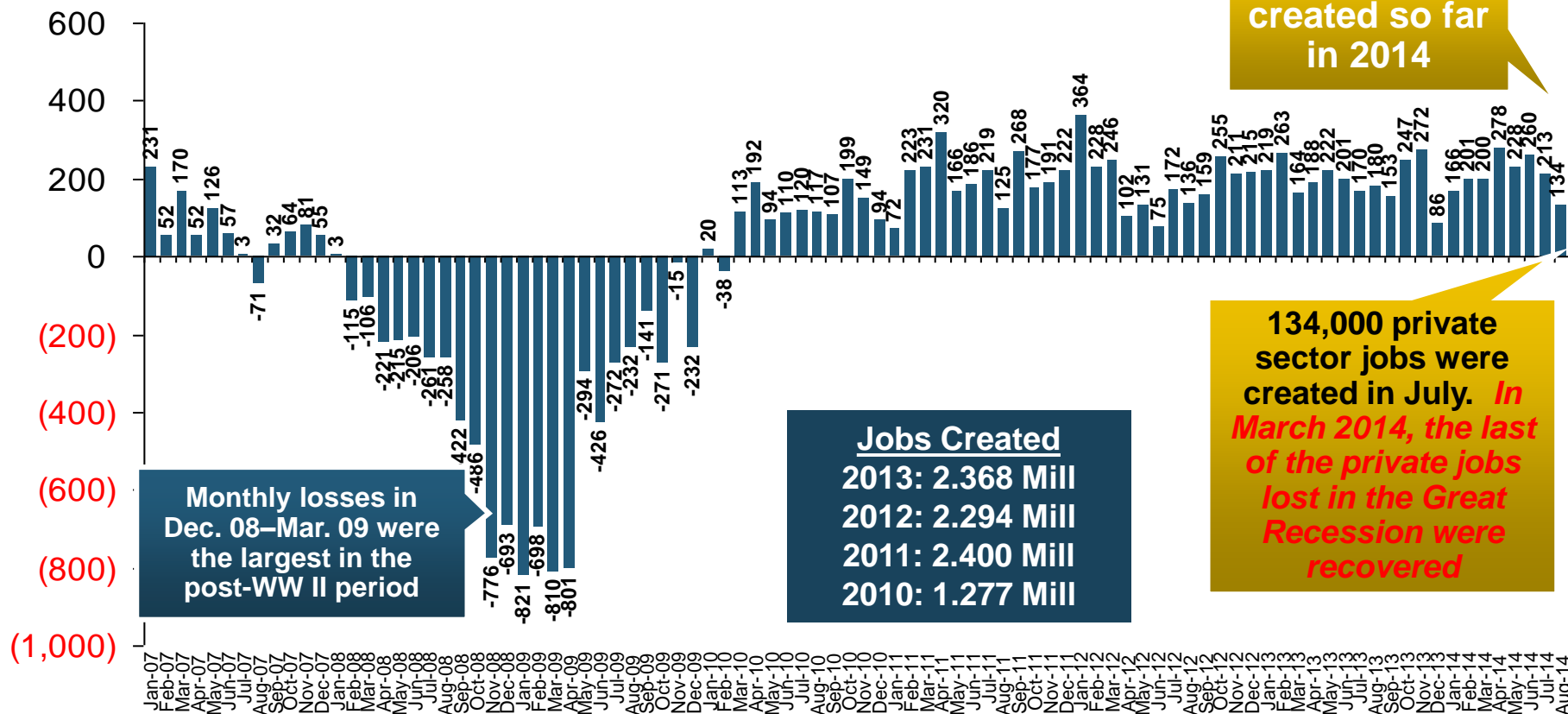
# Unemployment Rates by State, August 2014: Lowest 25 States\*



\*Provisional figures for August 2014, seasonally adjusted.  
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

# Monthly Change in Private Employment

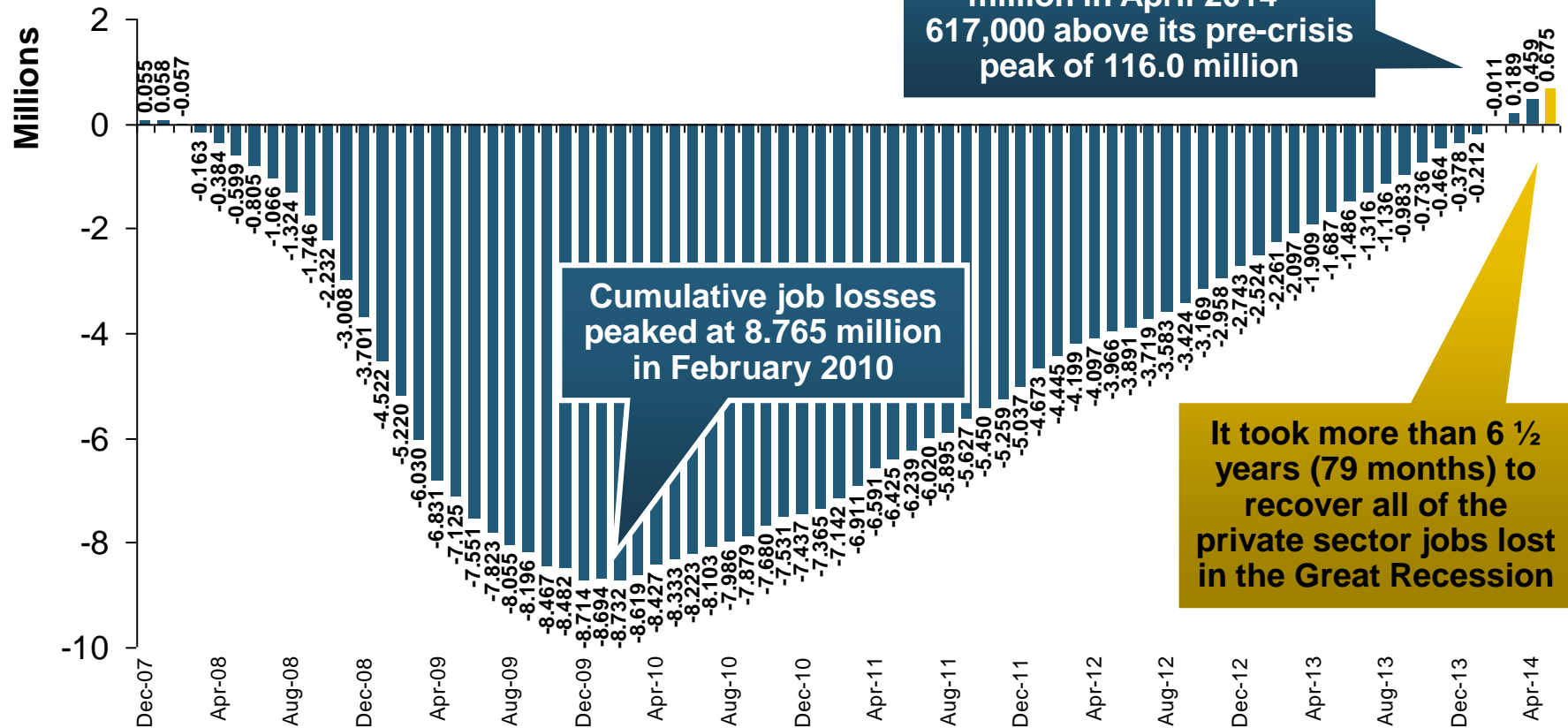
January 2007 through August 2014 (Thousands, Seasonally Adjusted)



**Private Employers Added 10.02 million Jobs Since Jan. 2010 After Having Shed 5.01 Million Jobs in 2009 and 3.76 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)**

# Cumulative Change in Private Employment: Dec. 2007—May 2014

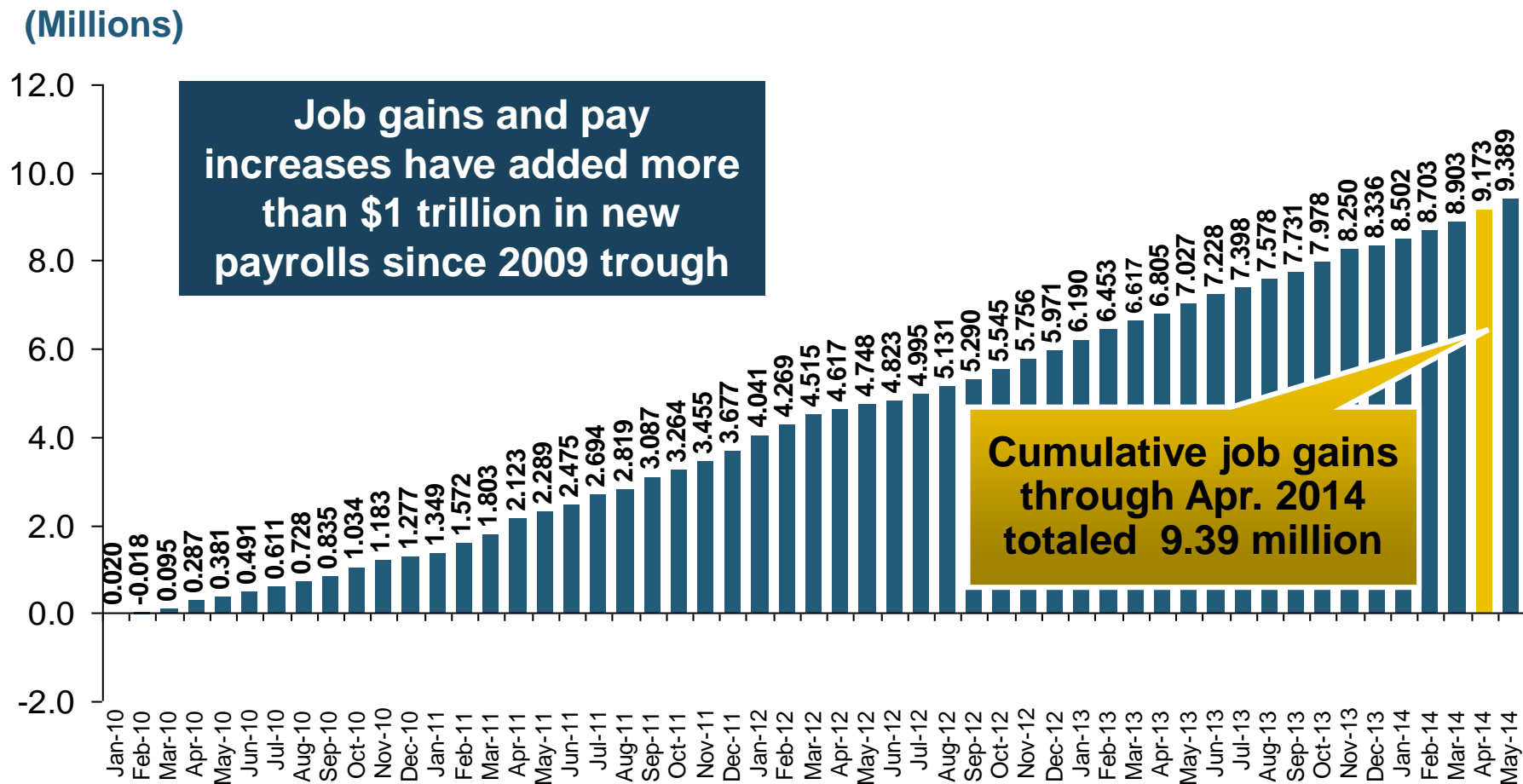
December 2007 through May 2014 (Millions)



**Private Employers Added 9.39 million Jobs Since Jan. 2010 After Having Shed 4.98 Million Jobs in 2009 and 3.80 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)**



# Cumulative Change in Private Sector Employment: Jan. 2010—May 2014

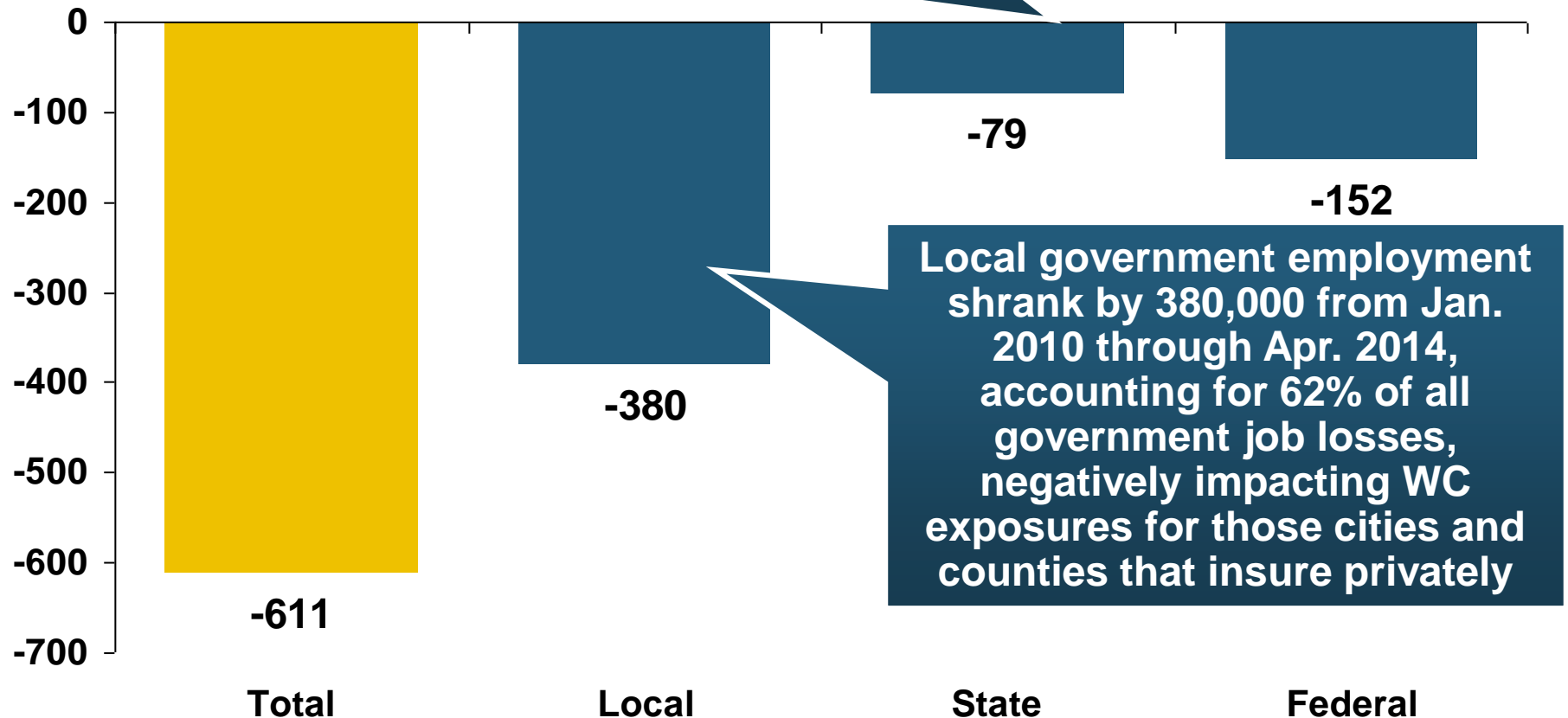


**Private Employers Added 9.39 million Jobs Since Jan. 2010 After Having Shed 4.98 Million Jobs in 2009 and 3.80 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)**

# Net Change in Government Employment: Jan. 2010—Apr. 2014

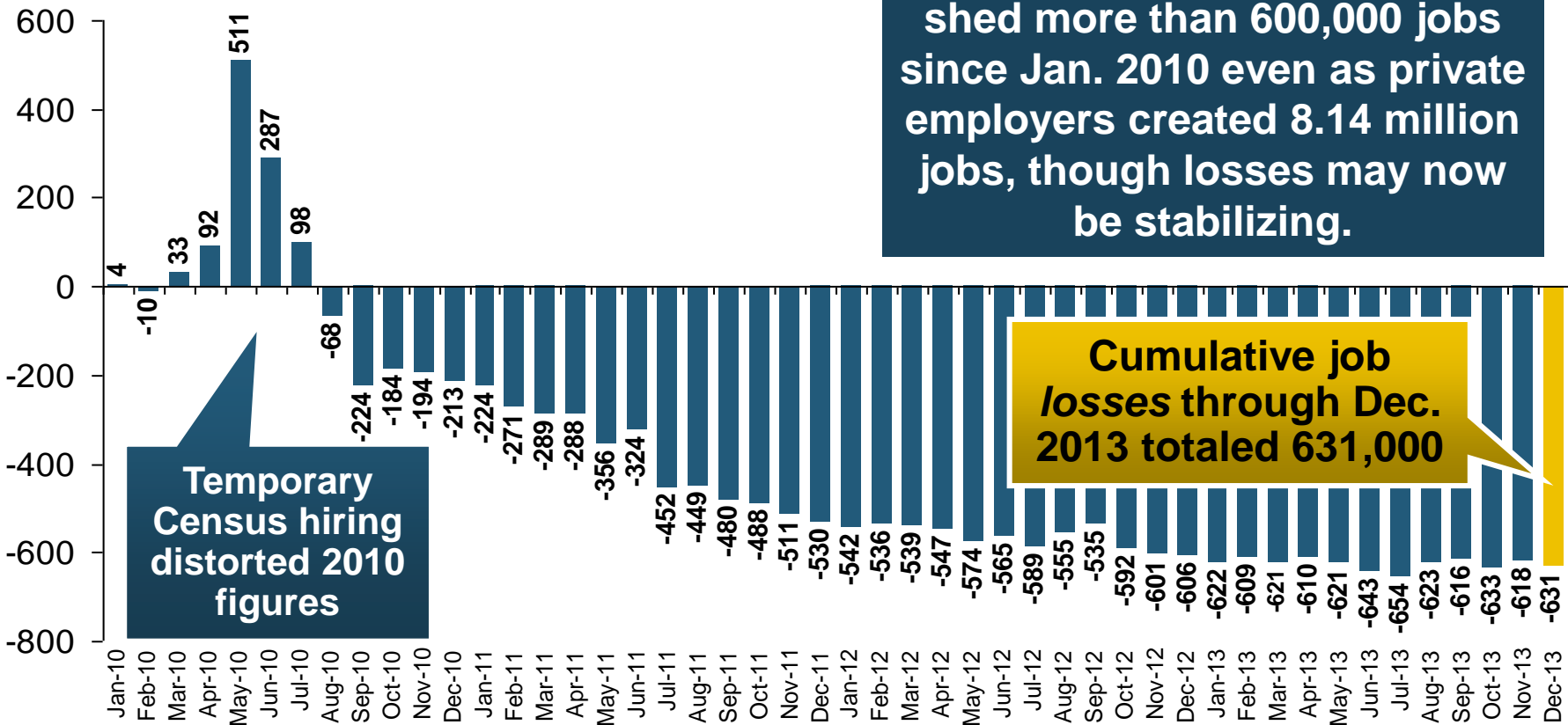
(Thousands)

State government employment fell by 1.5% since the end of 2009 but is recovering while Federal employment is down by 5.3% and deteriorating



# Cumulative Change in Government Employment: Jan. 2010—Dec. 2013

January 2010 through Dec. 2013\* (Millions)



**Government at all levels has shed more than 600,000 jobs since Jan. 2010 even as private employers created 8.14 million jobs, though losses may now be stabilizing.**

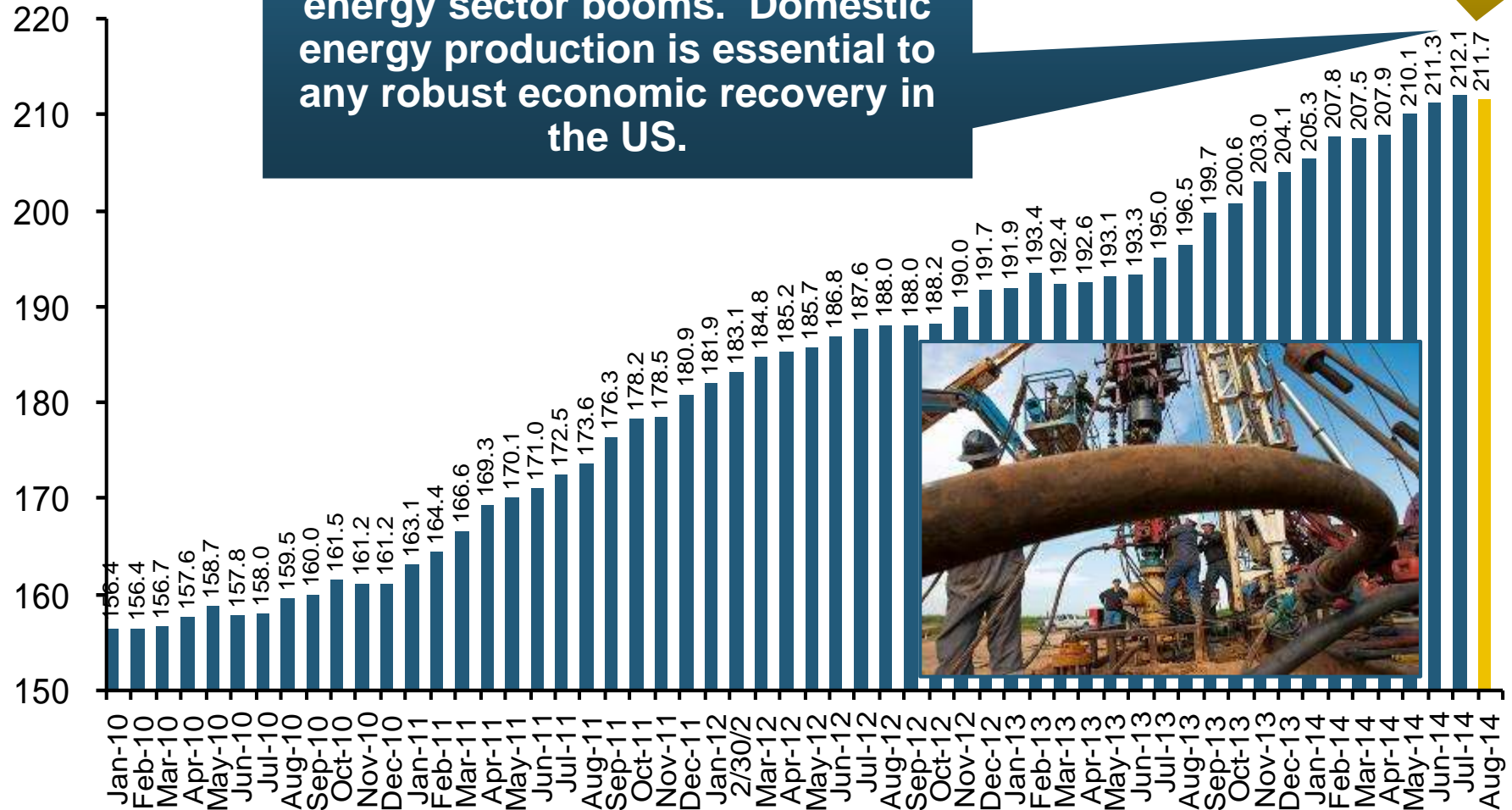
**Governments at All Levels are Under Severe Fiscal Strain As Tax Receipts Plunged and Pension Obligations Soared During the Financial Crisis: Sequestration Will Add to this Toll**

# Oil & Gas Extraction Employment, Jan. 2010—August 2014\*

(Thousands)

Oil and gas extraction employment is up 35.4% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

Highest since mid-1986

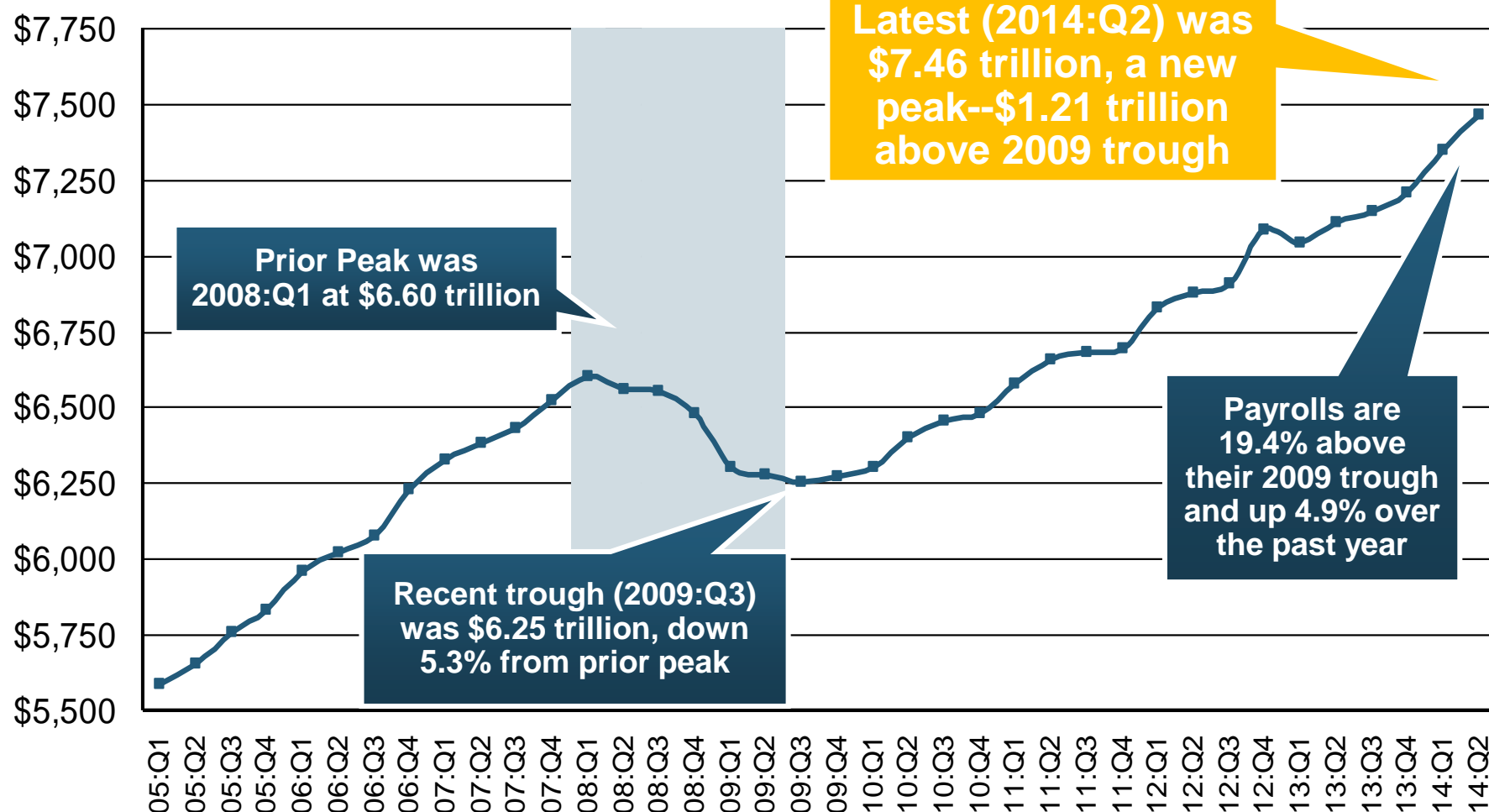


\*Seasonally adjusted

Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.

# Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2014:Q2

Billions



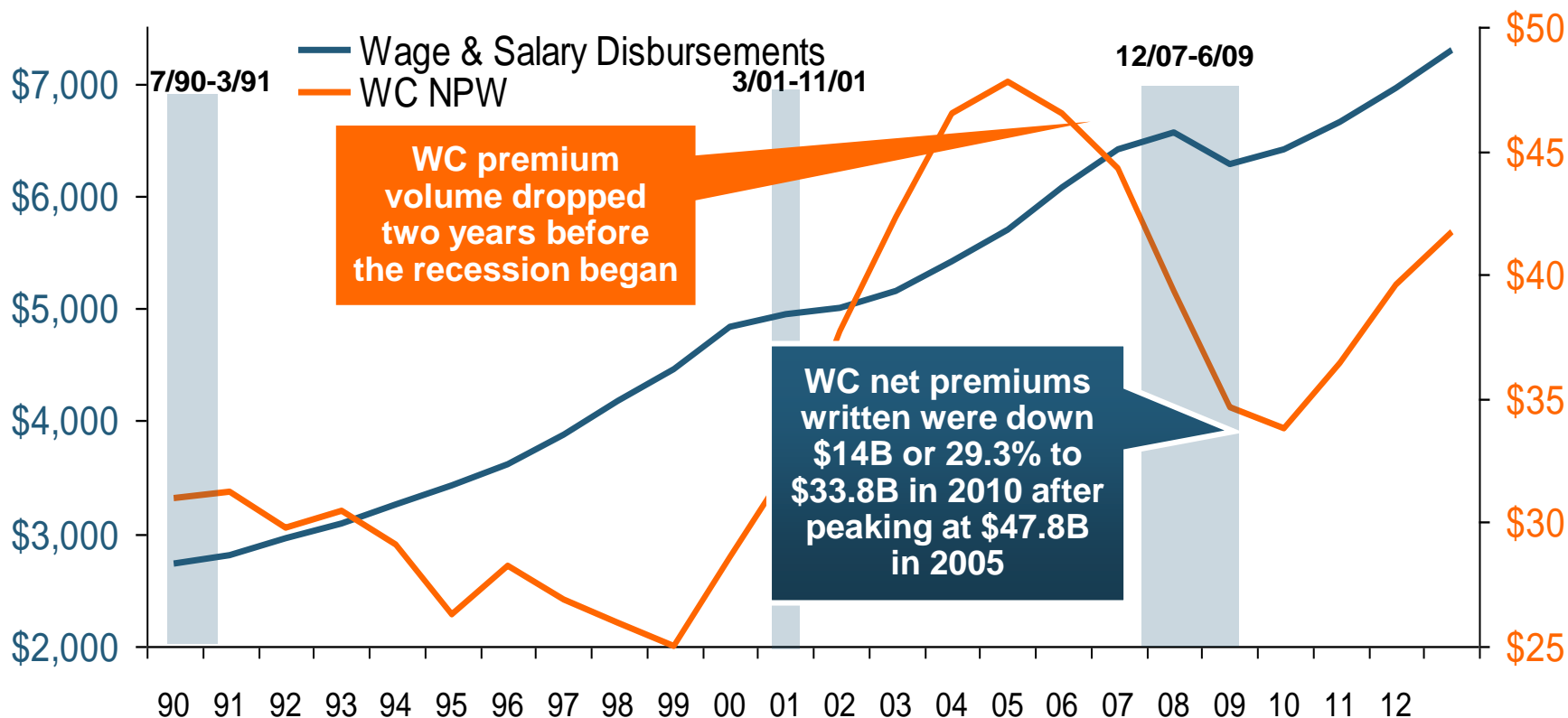
Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

Sources: <http://research.stlouisfed.org/fred2/series/WASCUR>; National Bureau of Economic Research (recession dates); Insurance Information Institute.

# Payroll vs. Workers Comp Net Written Premiums, 1990-2013P

**Payroll Base\***  
**\$Billions**

**WC NWP**  
**\$Billions**



**Continued Payroll Growth and Rate Gains Suggest WC NWP Will Grow Again in 2014; +8.6% Growth Estimated for 2013**

\*Private employment; Shaded areas indicate recessions. WC premiums for 2012 are I.I.I. estimate based YTD 2013 actuals.

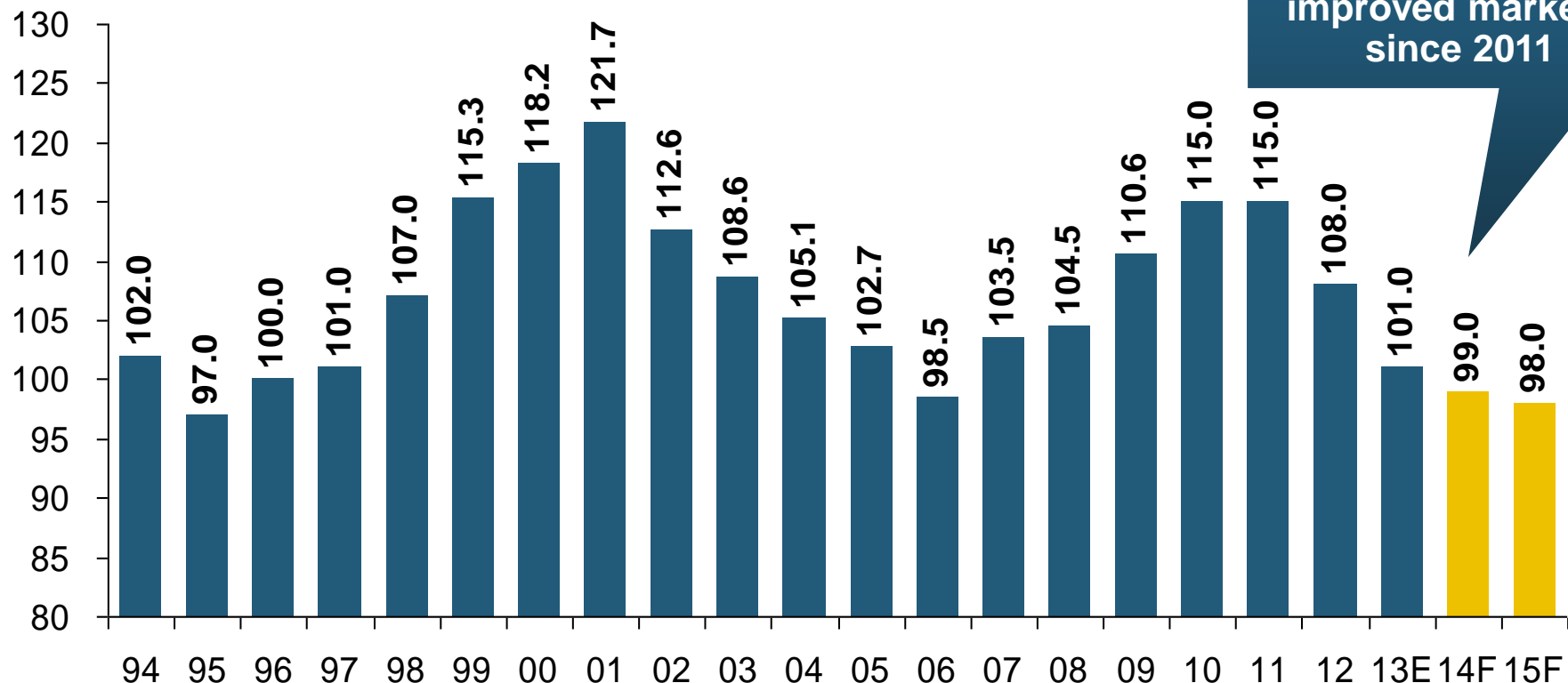
Sources: NBER (recessions); Federal Reserve Bank of St. Louis at <http://research.stlouisfed.org/fred2/series/WASCUR> ; NCCI; I.I.I.



# **Workers Compensation Operating Environment**

**Workers Comp Results Have Improved  
Substantially in Recent Years**

# Workers Compensation Combined Ratio: 1994–2015F

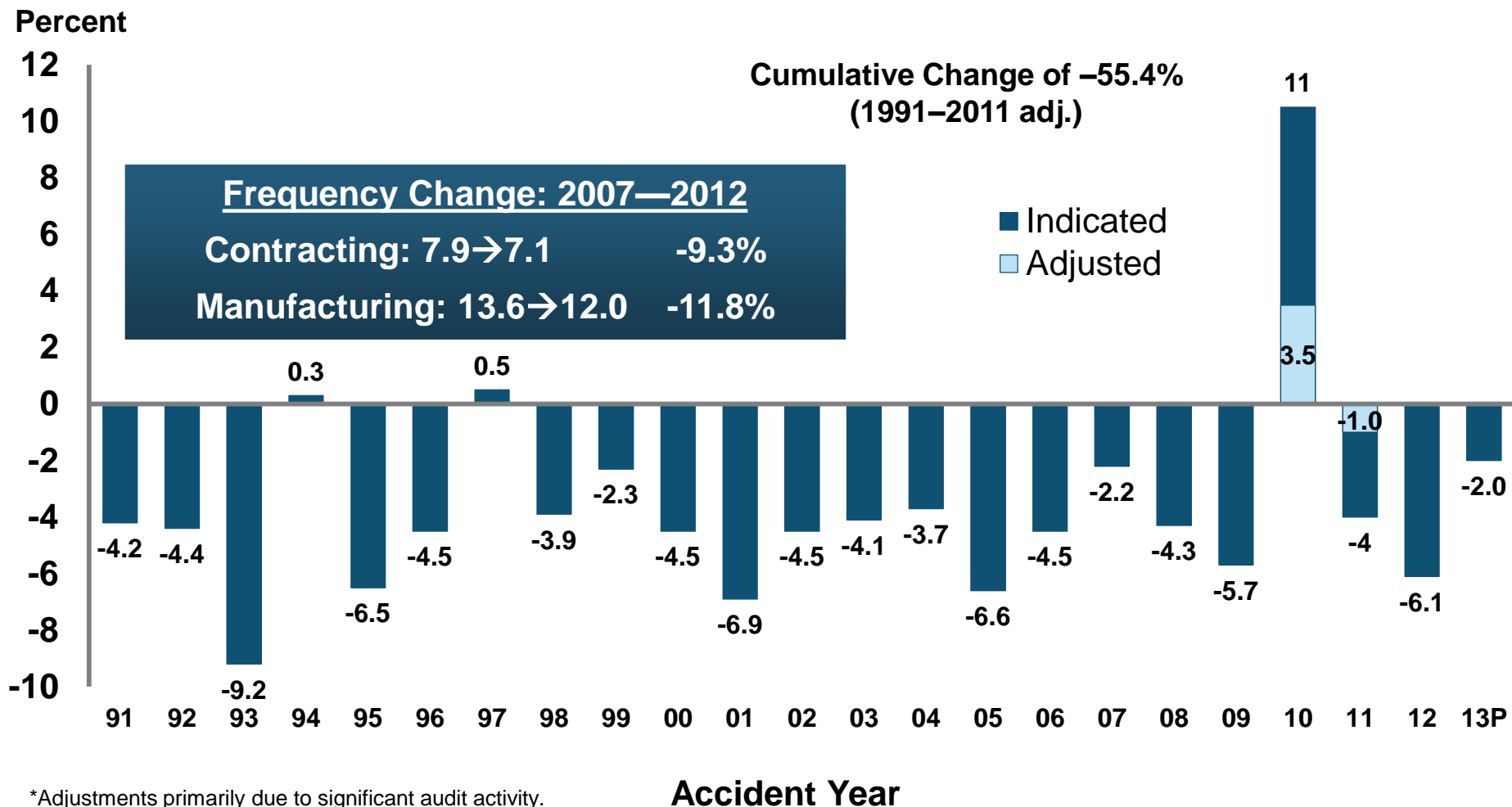


**Workers Comp Results Began to Improve in 2012.  
Underwriting Results Deteriorated Markedly from 2007-  
2010/11 and Were the Worst They Had Been in a Decade.**



# Workers Compensation Lost-Time Claim Frequency Declined in 2013

## Lost-Time Claims



\*Adjustments primarily due to significant audit activity.

2013p: Preliminary based on data valued as of 12/31/2013

1991–2012: Based on data through 12/31/2012, developed to ultimate

Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies

Frequency is the number of lost-time claims per \$1M pure premium at current wage and voluntary loss cost level

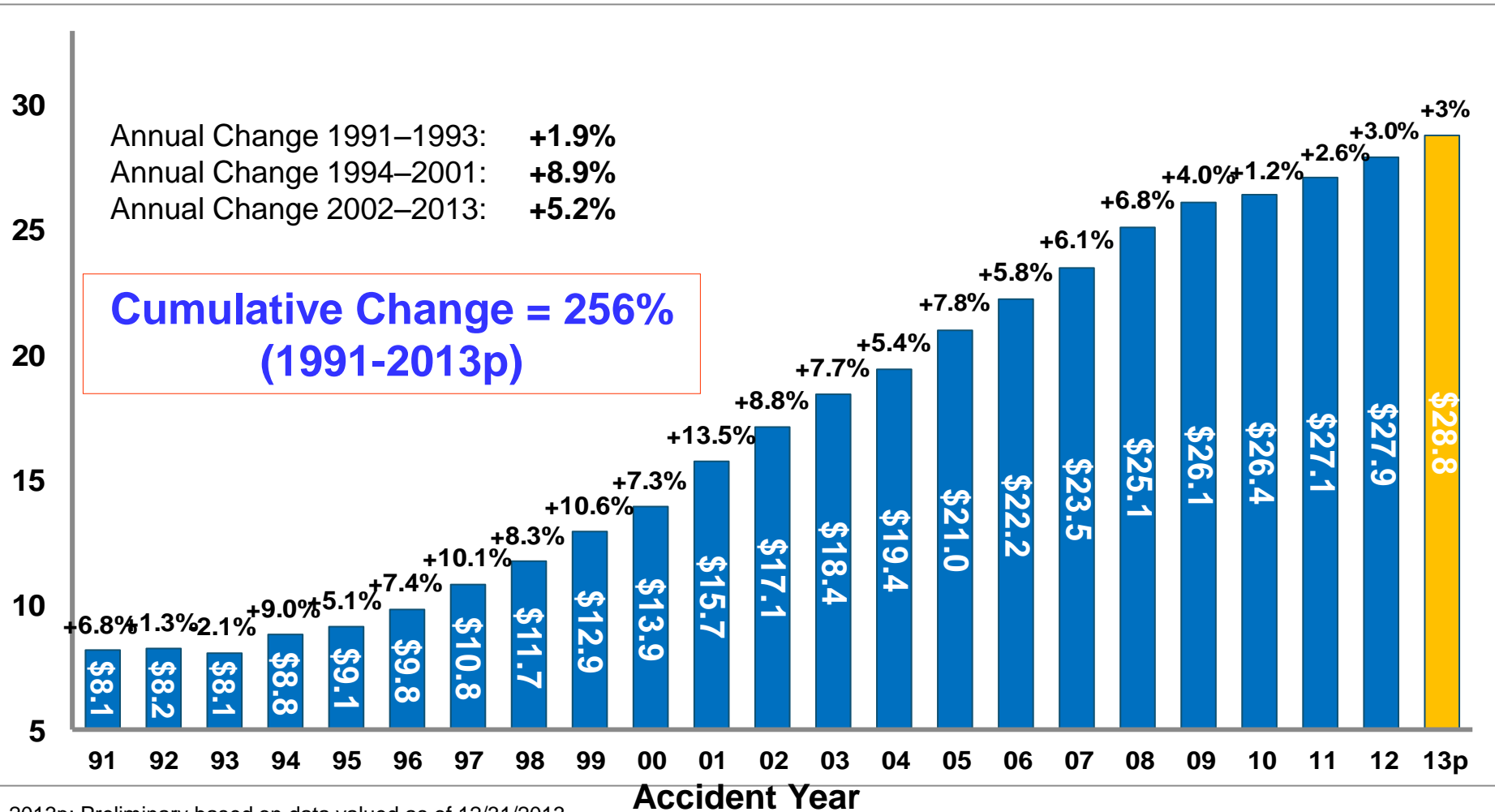
Source: NCCI.

# Workers Compensation Medical Severity

## Moderate Increase in 2013

Medical  
Claim Cost (\$000s)

### Average Medical Cost per Lost-Time Claim

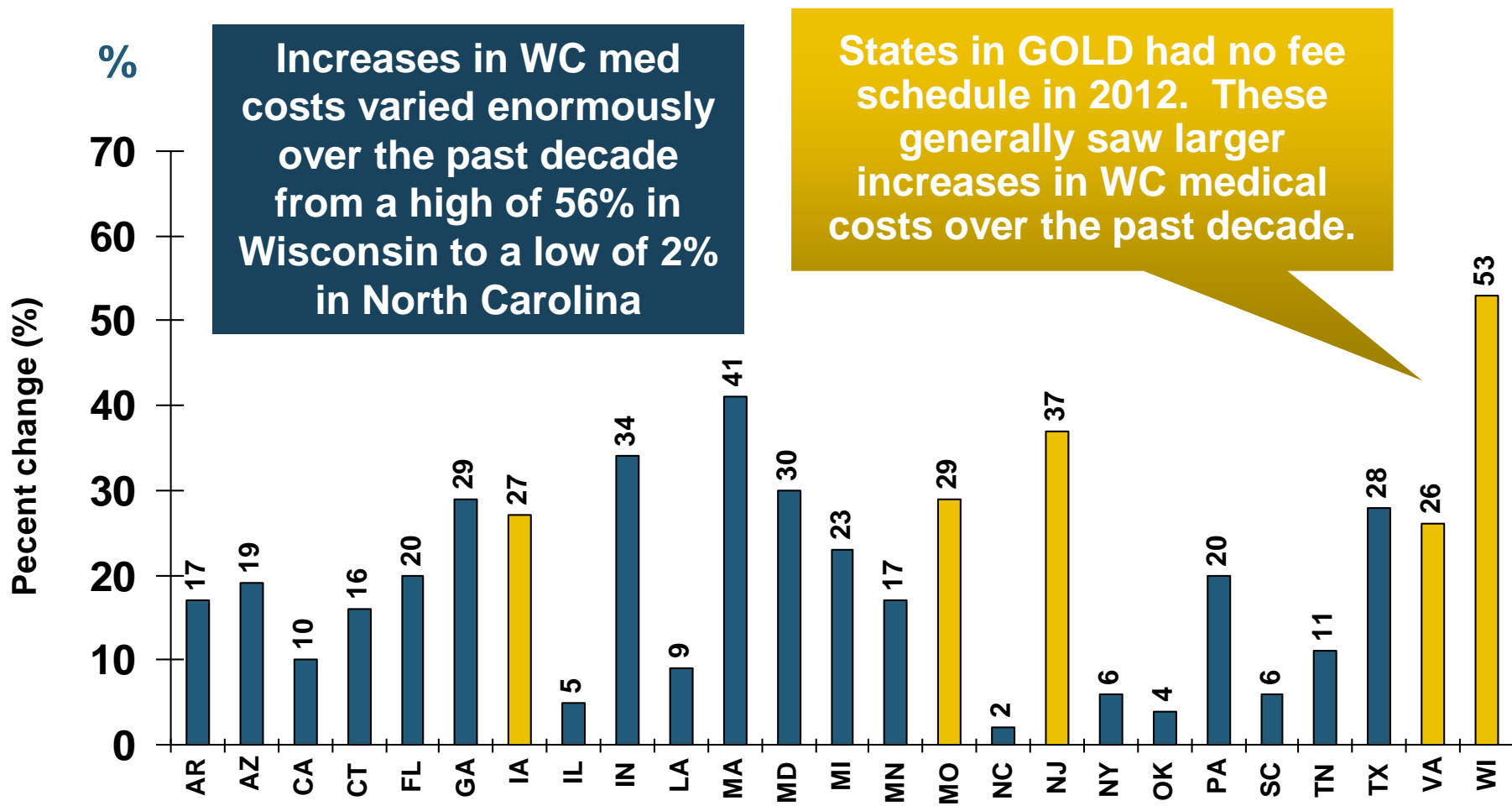


2013p: Preliminary based on data valued as of 12/31/2013.

1991-2012: Based on data through 12/31/2012, developed to ultimate

Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

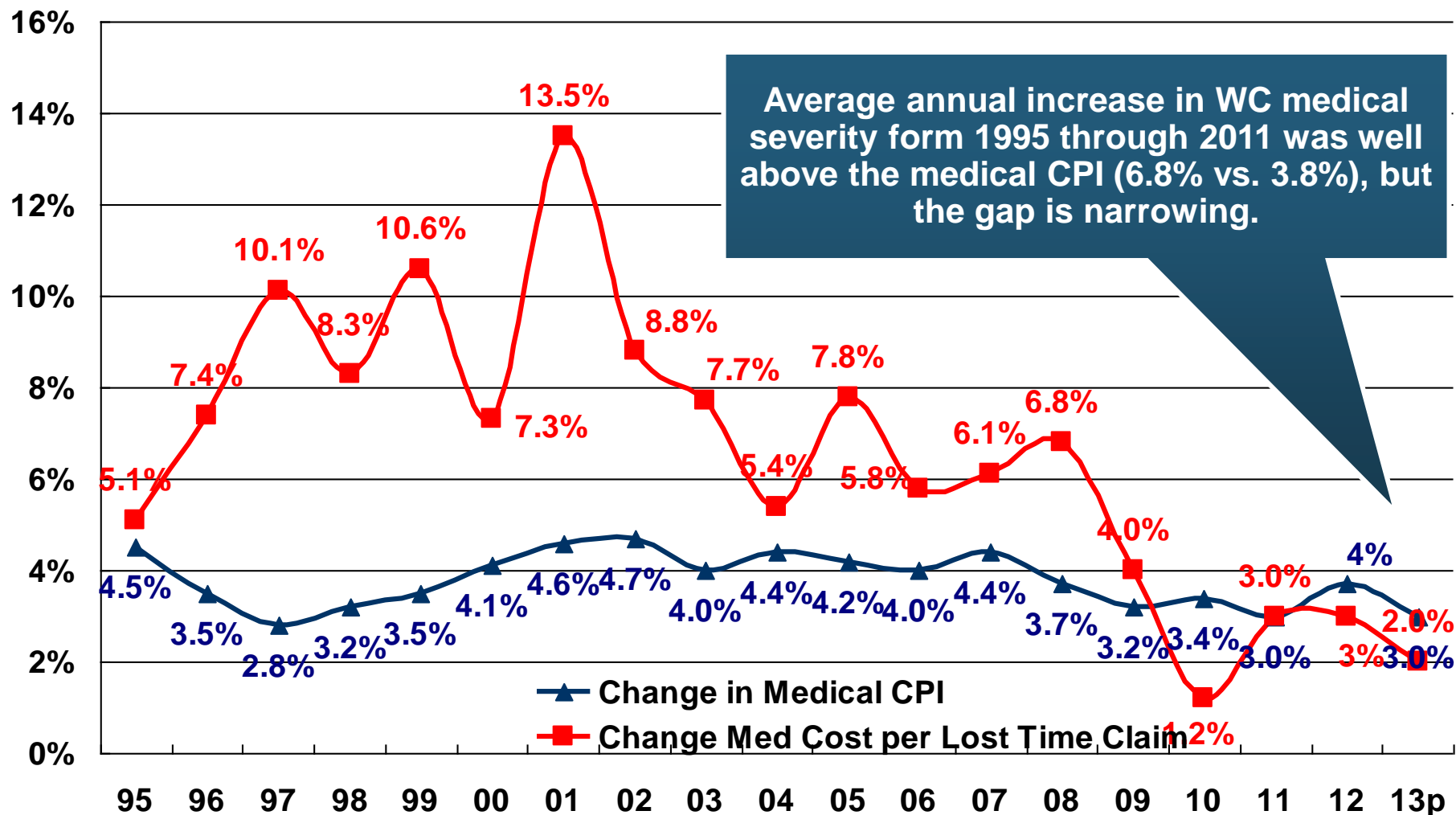
# Change in Price Paid for Medical Professional Services in WC, 2002-2012\*



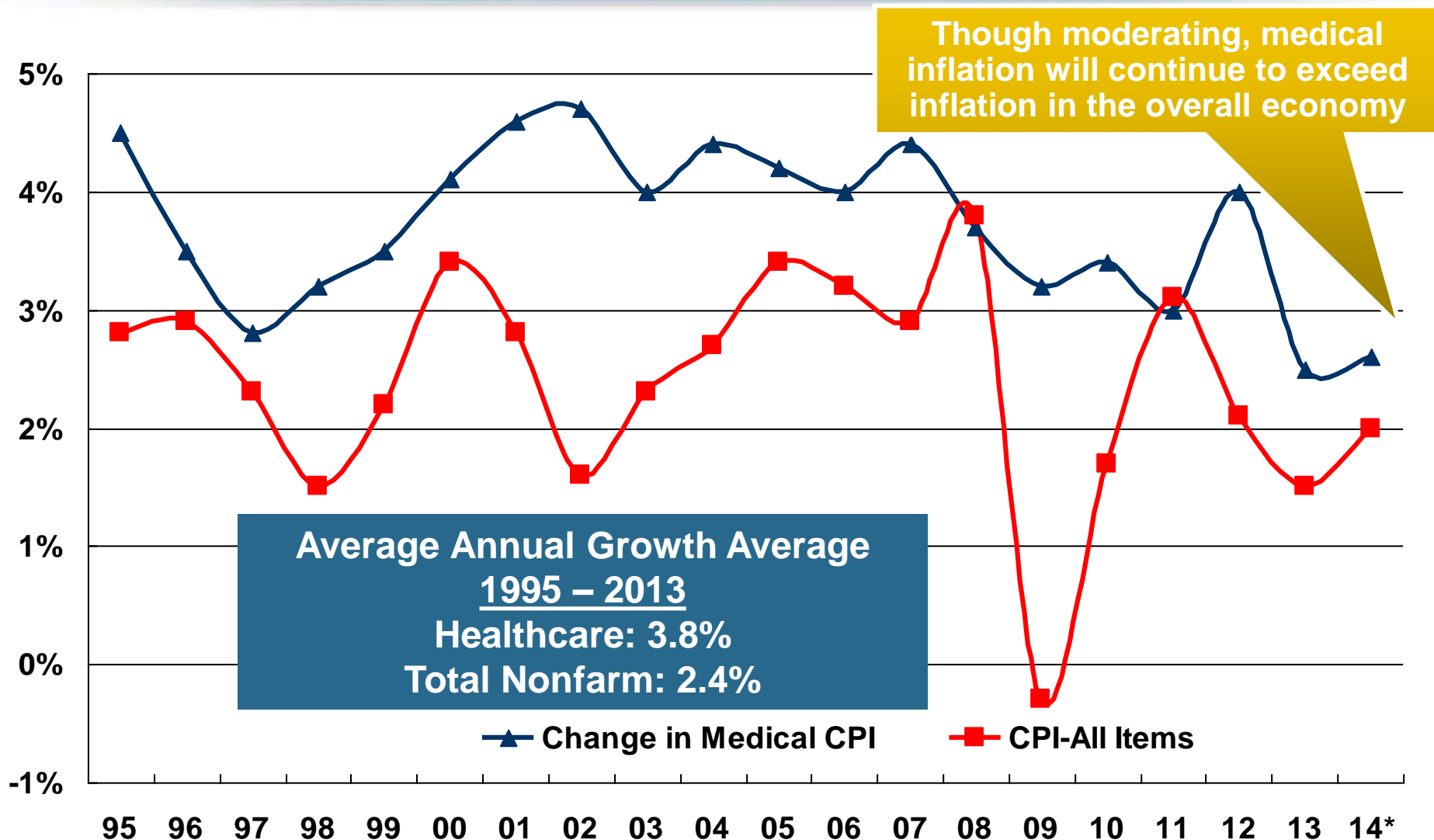
\*Data are preliminary as of 6/30/12.

Sources: Workers Compensation Research Institute, *WCRI Medical Price Index for Workers Compensation, 5<sup>th</sup> Edition*; Ins. Info. Institute. 131

# WC Medical Severity Generally Outpaces the Medical CPI Rate



# Medical Cost Inflation vs. Overall CPI, 1995 – 2014\*

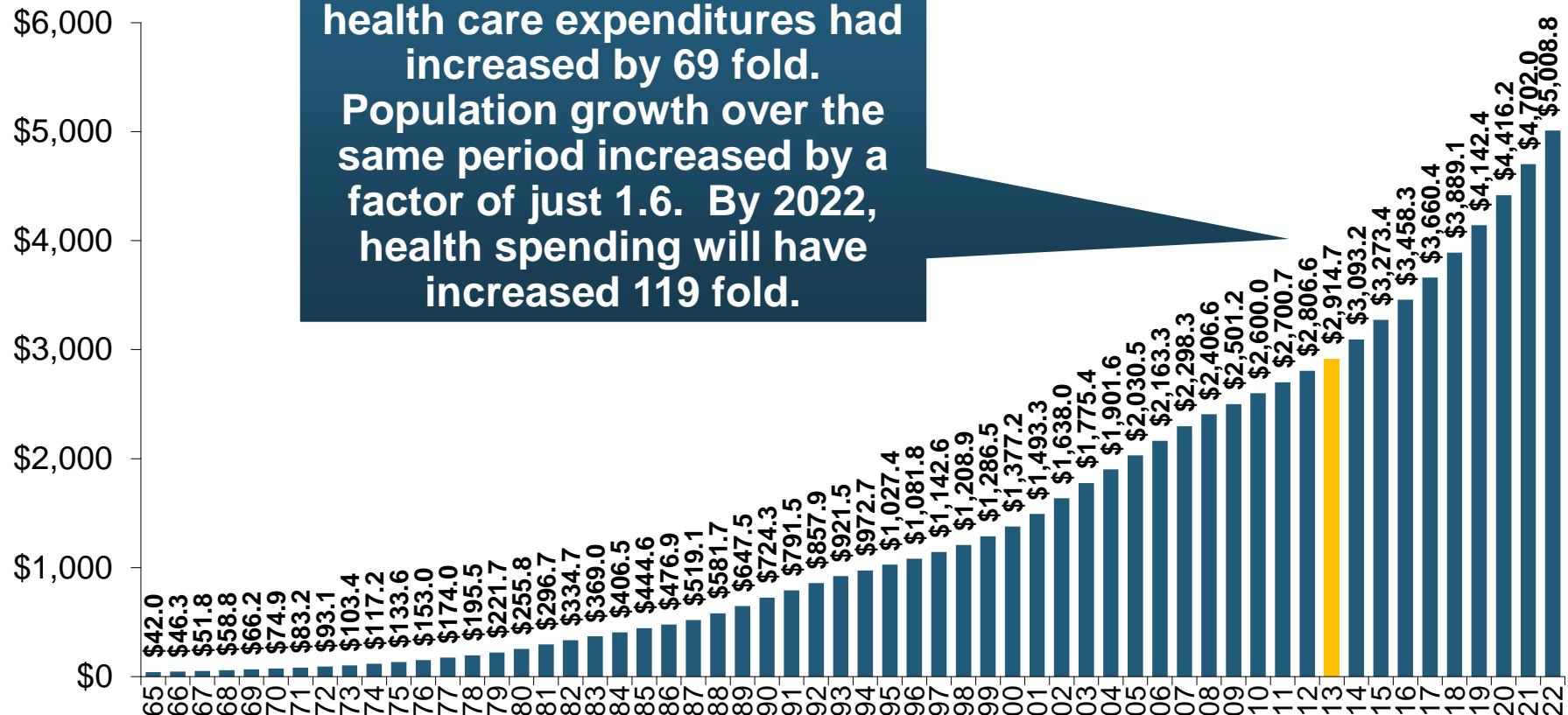


\*July 2014 compared to July 2013.

Sources: Med CPI from US Bureau of Labor Statistics, WC med severity from NCCI based on NCCI states.

# U.S. Health Care Expenditures, 1965–2022F

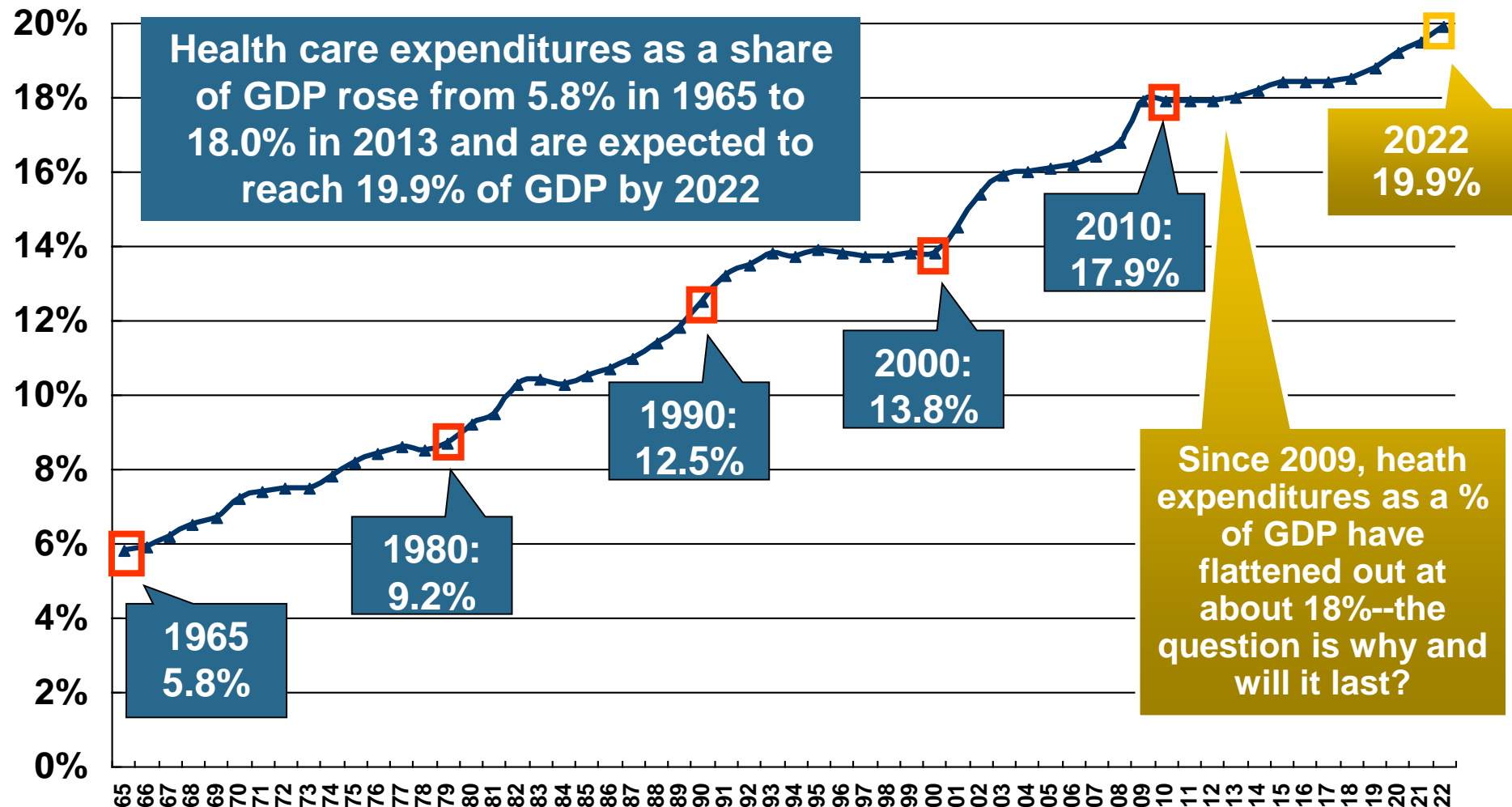
\$ Billions



**U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth**

# National Health Care Expenditures as a Share of GDP, 1965 – 2022F\*

% of GDP

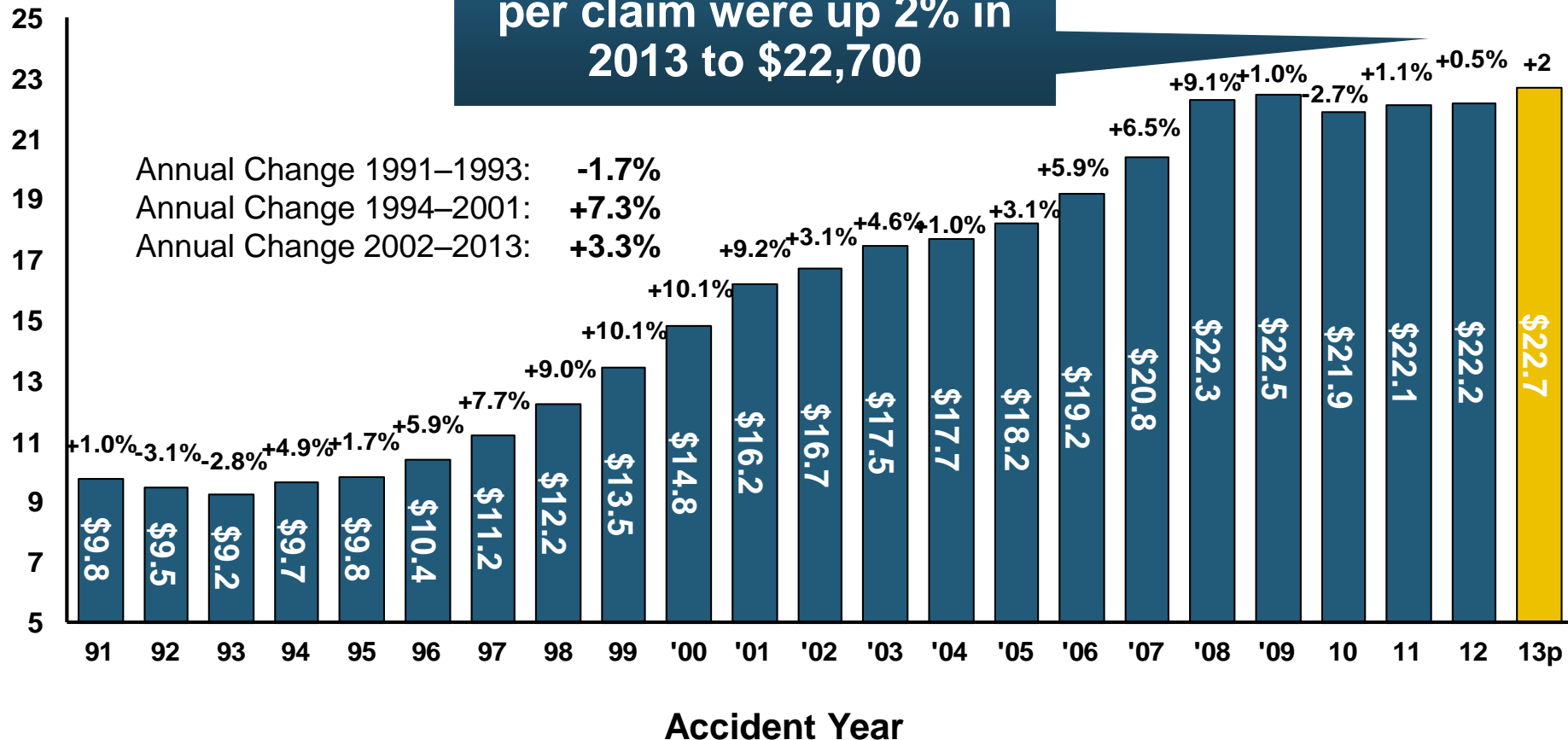


# Workers Comp Indemnity Claim Costs: Small Increase in 2013

## Average Indemnity Cost per Lost-Time Claim

Indemnity  
Claim Cost (\$ 000s)

Average indemnity costs  
per claim were up 2% in  
2013 to \$22,700



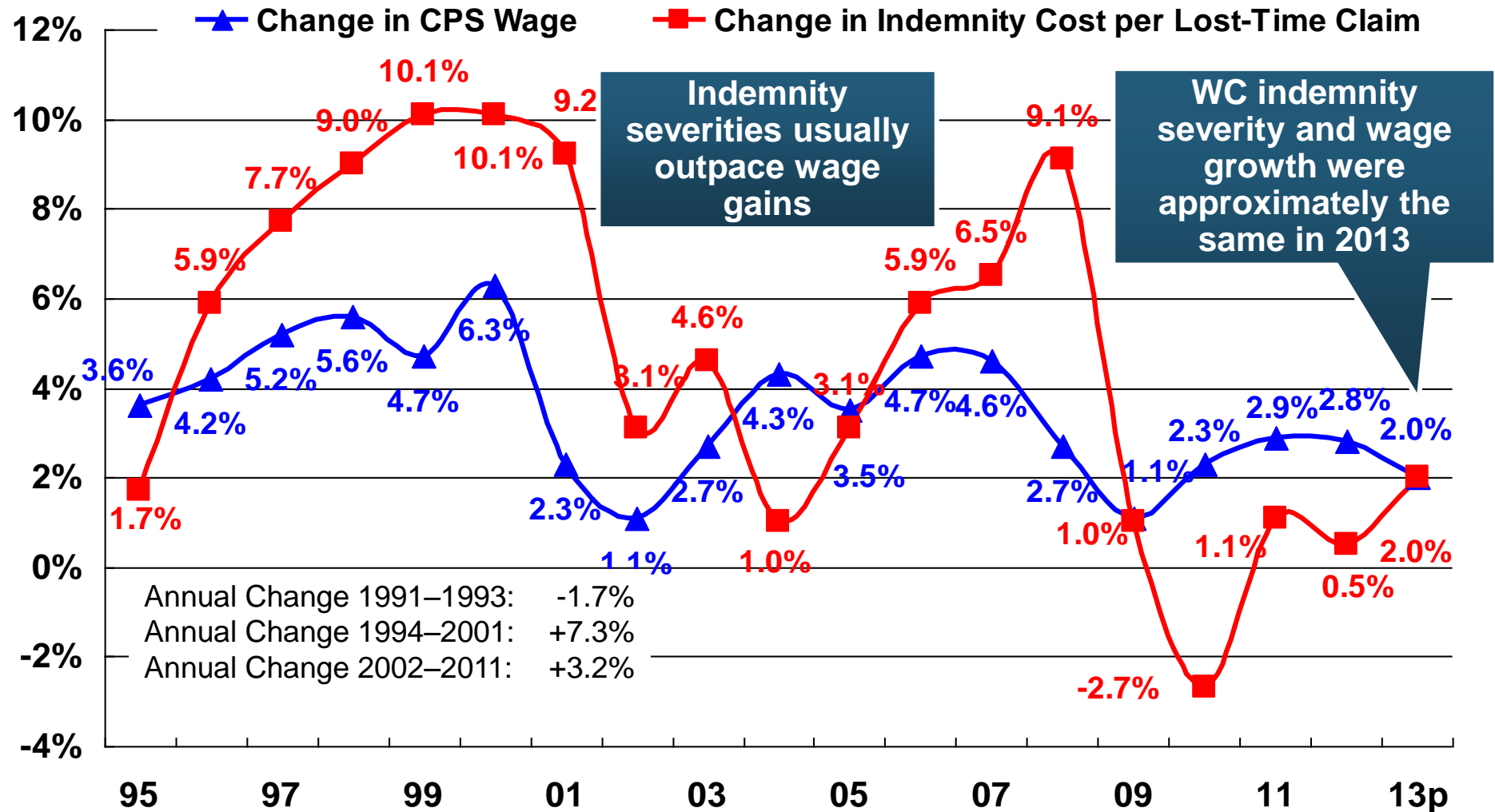
2013p: Preliminary based on data valued as of 12/31/2013.

1991-2011: Based on data through 12/31/2011, developed to ultimate

Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.



# WC Indemnity Severity vs. Wage Inflation, 1995 -2013p

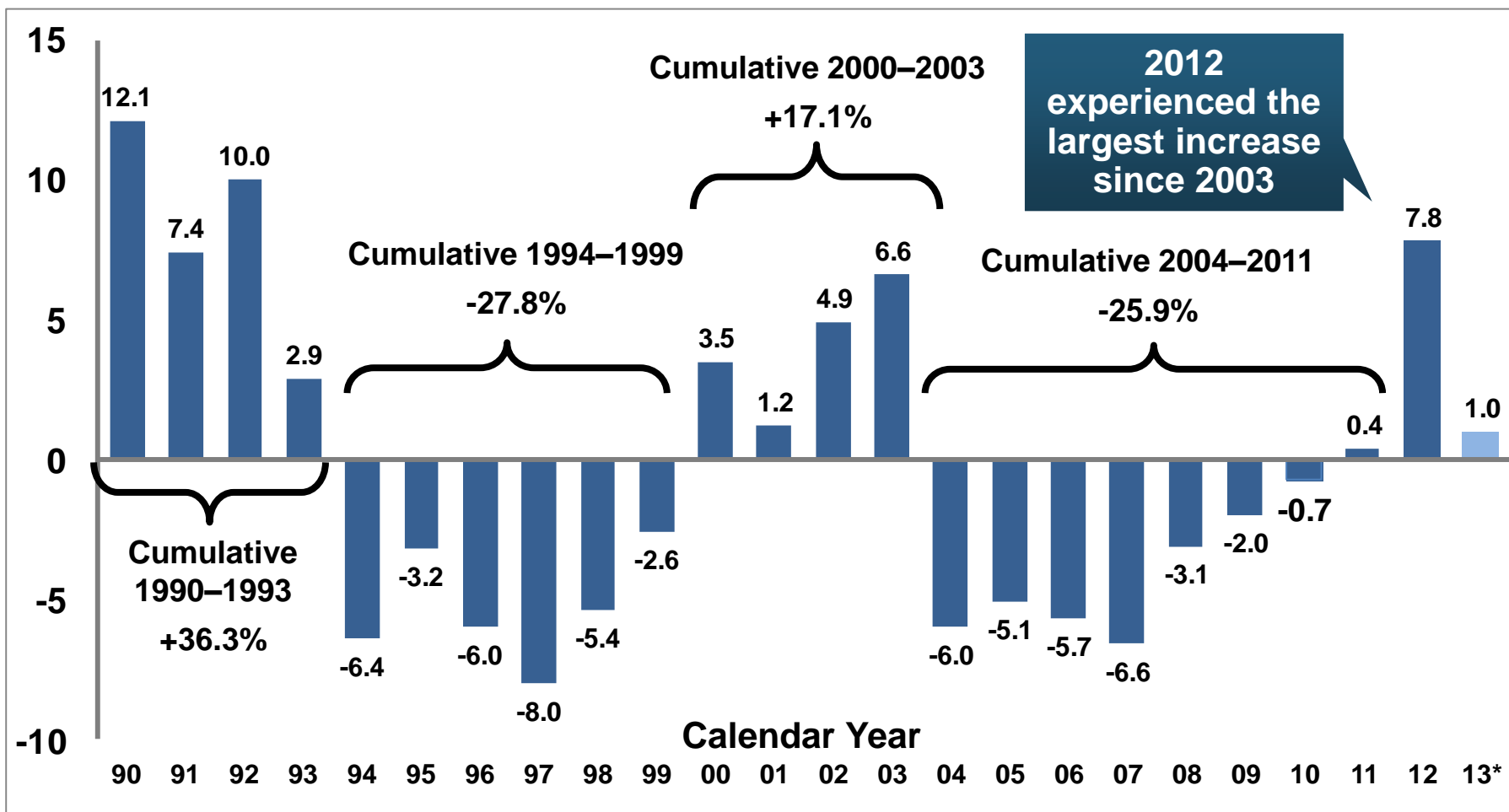


2013p: Preliminary based on data valued as of 12/31/2013; 1991-2012: Based on data through 12/31/2012, developed to ultimate. Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies. CPS = Current Population Survey.  
 Source: NCCI.

# Average Approved Bureau Rates/Loss Costs

## History of Average WC Bureau Rate/Loss Cost Level Changes

Percent (%)



\*States approved through 4/15/123

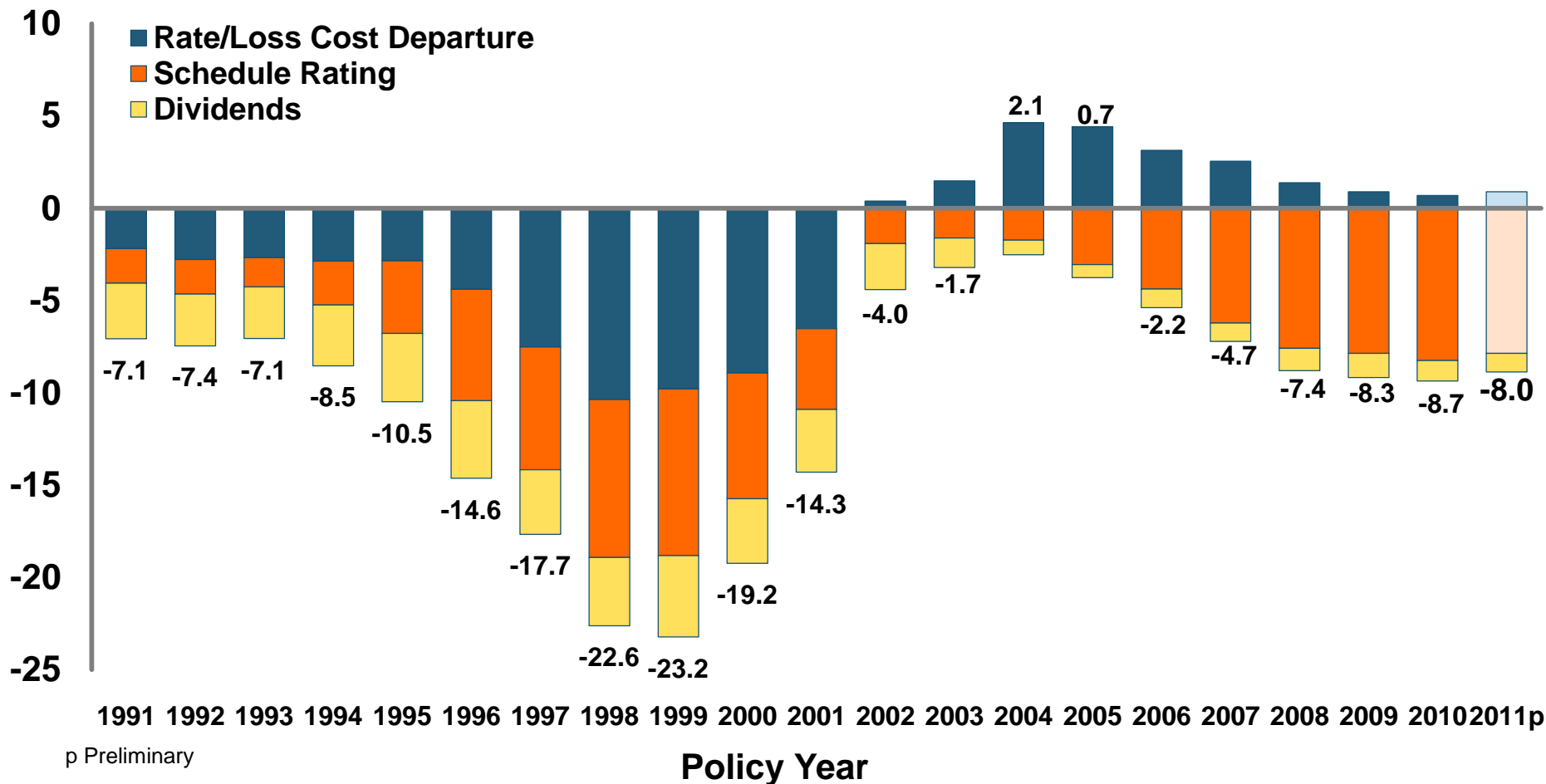
Note: Countrywide approved changes in advisory rates, loss costs and assigned risk rates as filed by applicable rating organization.

Source: NCCI.

# Impact of Discounting on Workers Compensation Premium

## NCCI States—Private Carriers

Percent



p Preliminary

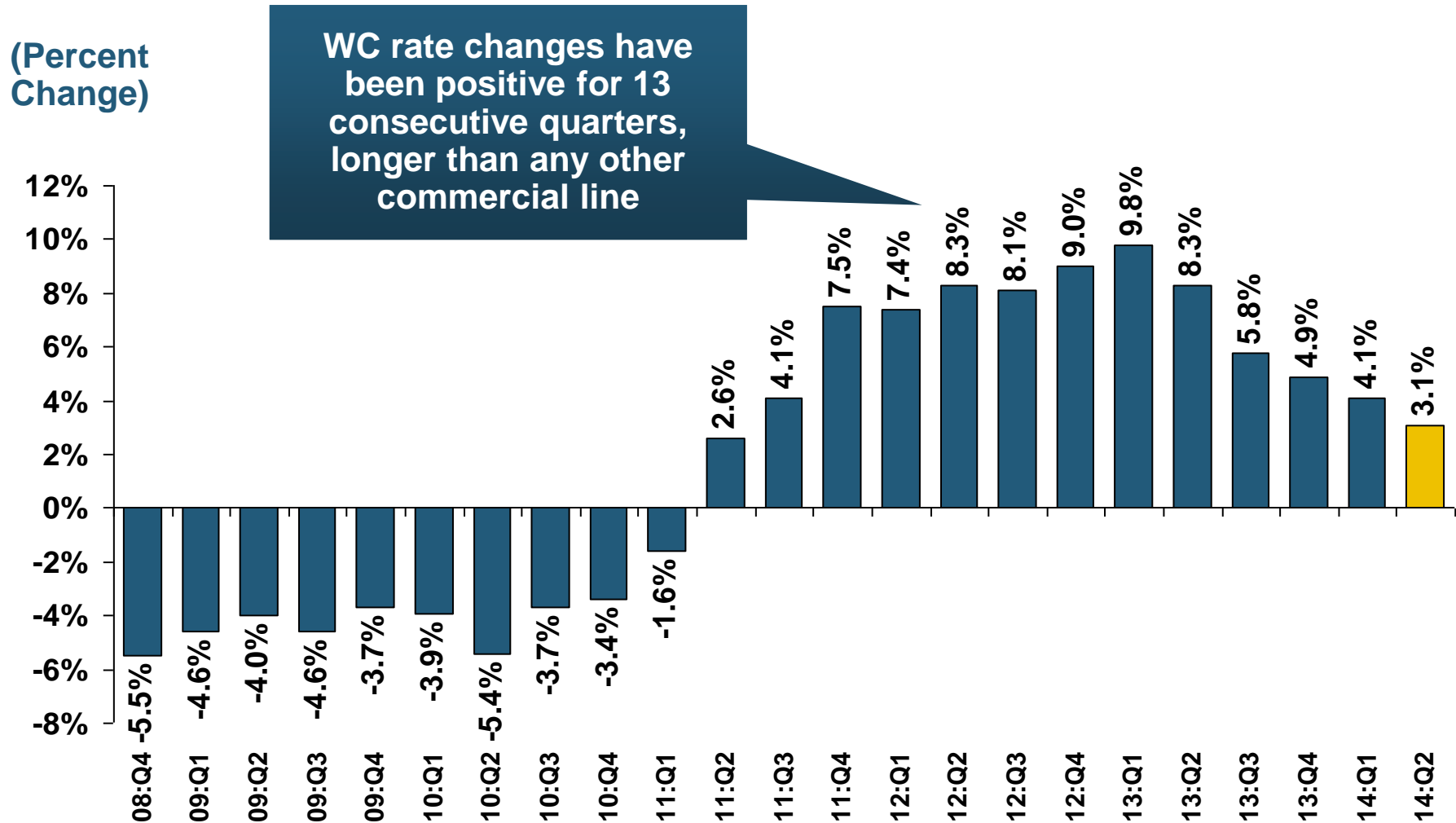
Dividend ratios are based on calendar year statistics

NCCI benchmark level does not include an underwriting contingency provision

Based on data through 12/31/2011 for the states where NCCI provides ratemaking services

Source: NCCI.

# Workers Comp Rate Changes, 2008:Q4 – 2014:Q2



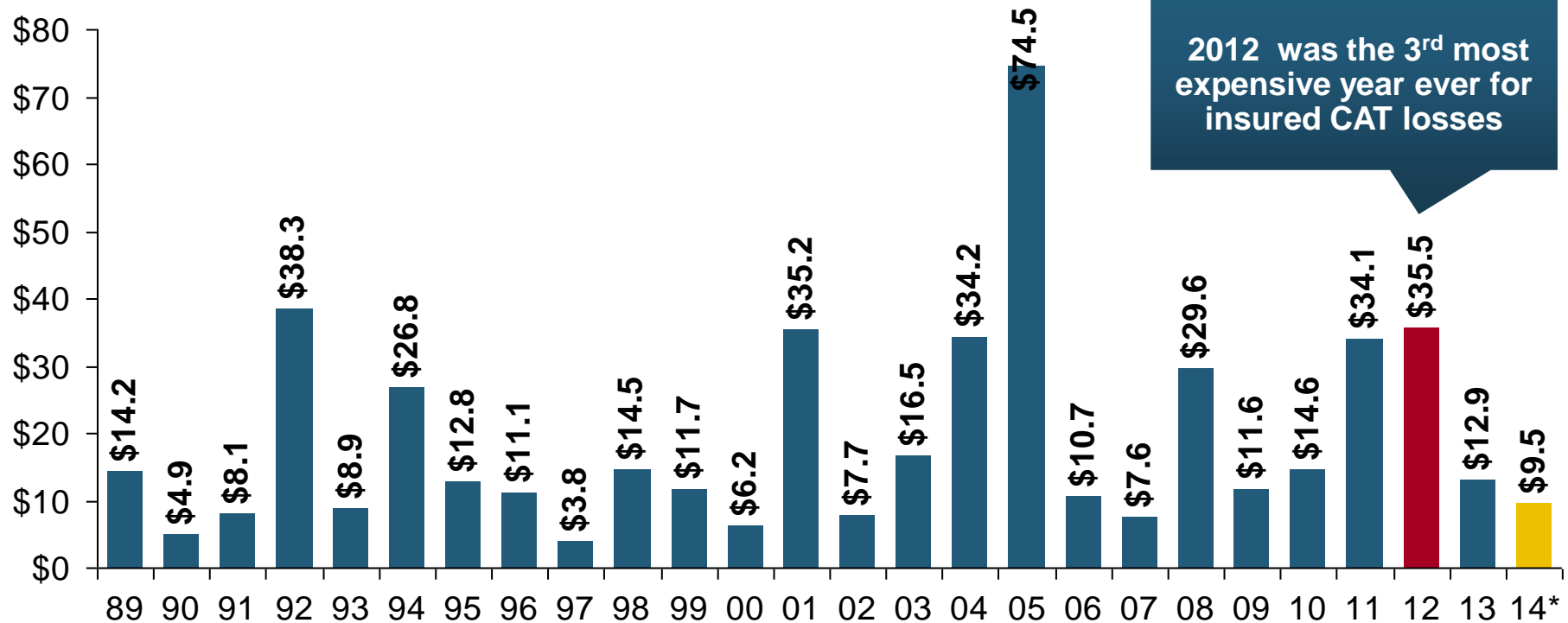
Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.  
Source: Council of Insurance Agents and Brokers; Information Institute.

# **U.S. Insured Catastrophe Loss Update**

**2013 Was a Welcome Respite from the  
High Catastrophe Losses in Recent Years**  
***2014 Losses Are Running Above 2013***

# U.S. Insured Catastrophe Losses

(\$ Billions, \$ 2013)



2012 was the 3<sup>rd</sup> most expensive year ever for insured CAT losses

**2013 Was a Welcome Respite from 2012, the 3<sup>rd</sup> Costliest Year for Insured Disaster Losses in US History. Longer-term Trend is for more—not fewer—Costly Events**

\$9.5 billion in insured CAT losses through June 30

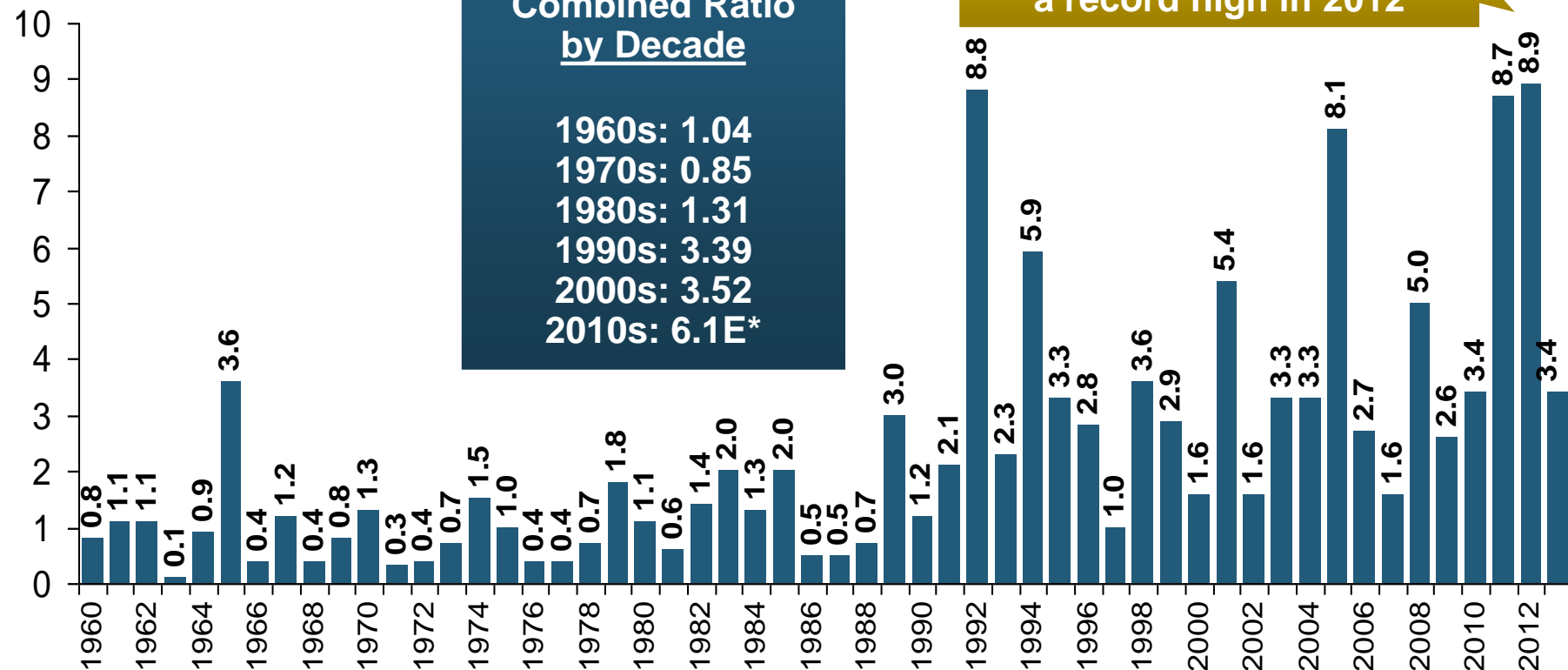
\*Through 6/30/14.

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\*

## Combined Ratio Points



**The Catastrophe Loss Component of Private Insurer Losses Has Increased Sharply in Recent Decades**

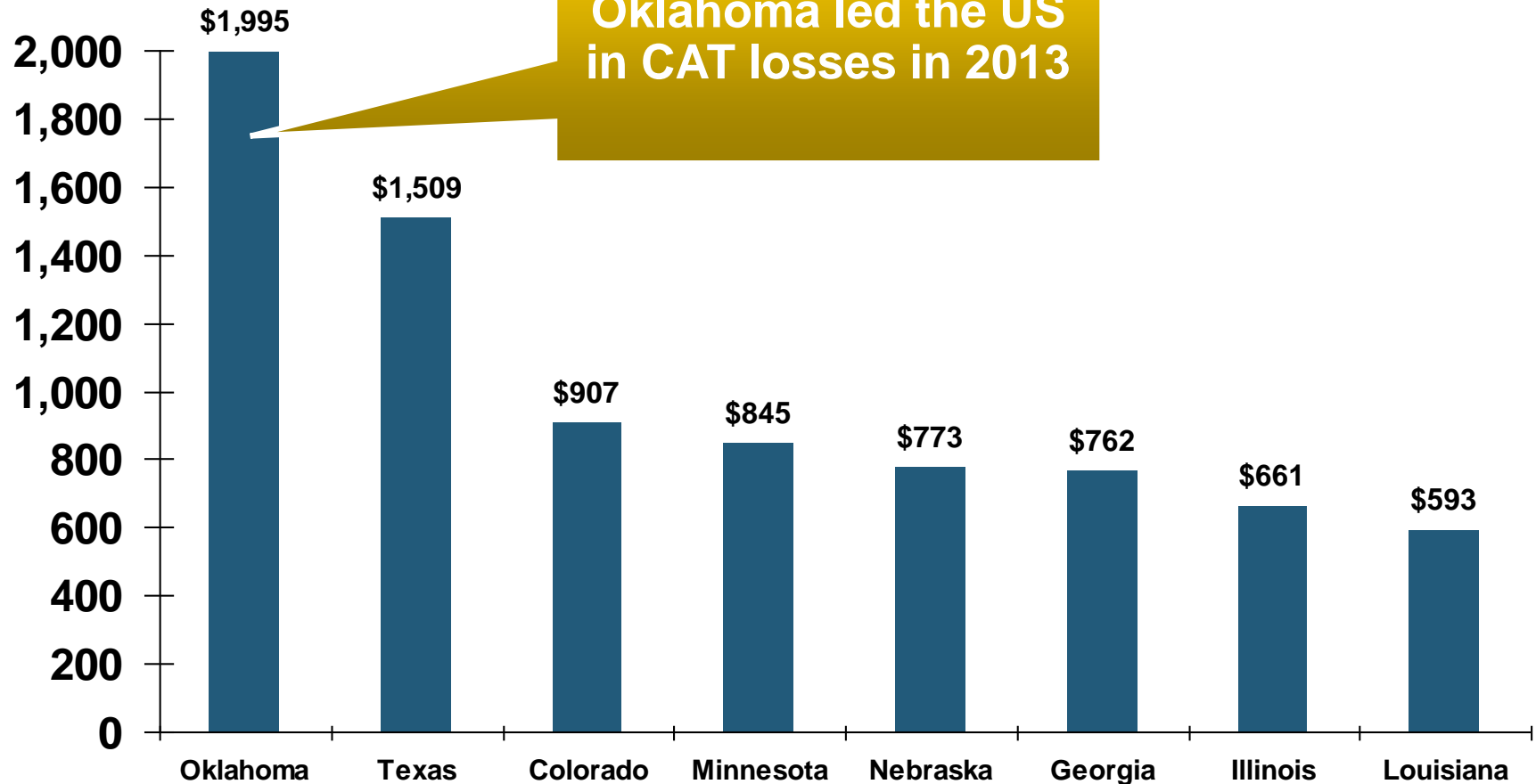
\*2010s represent 2010-2013.

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

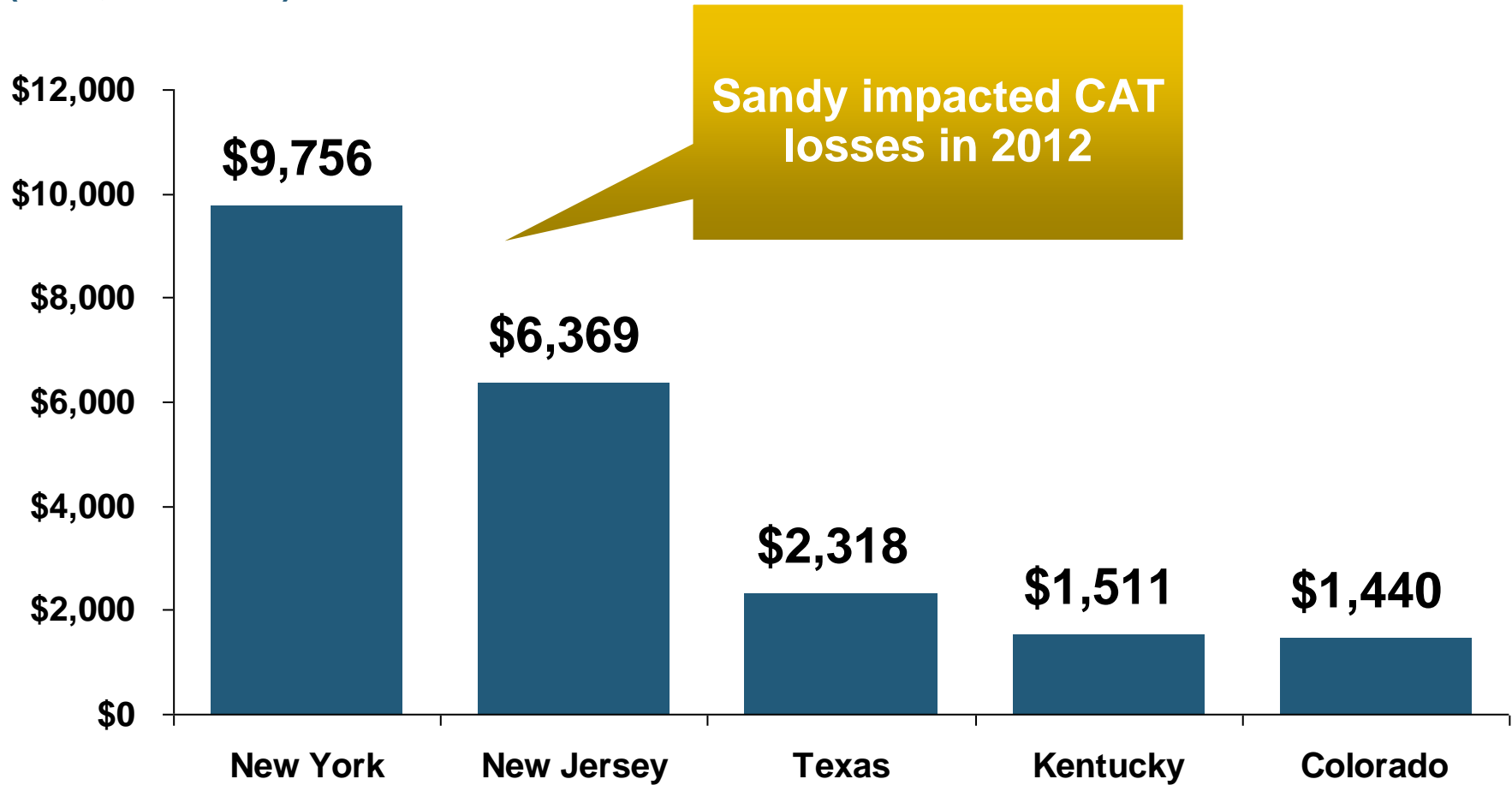
\$ Millions





# Top 5 States by Insured Catastrophe Losses in 2012\*

(2012, \$ Billions)



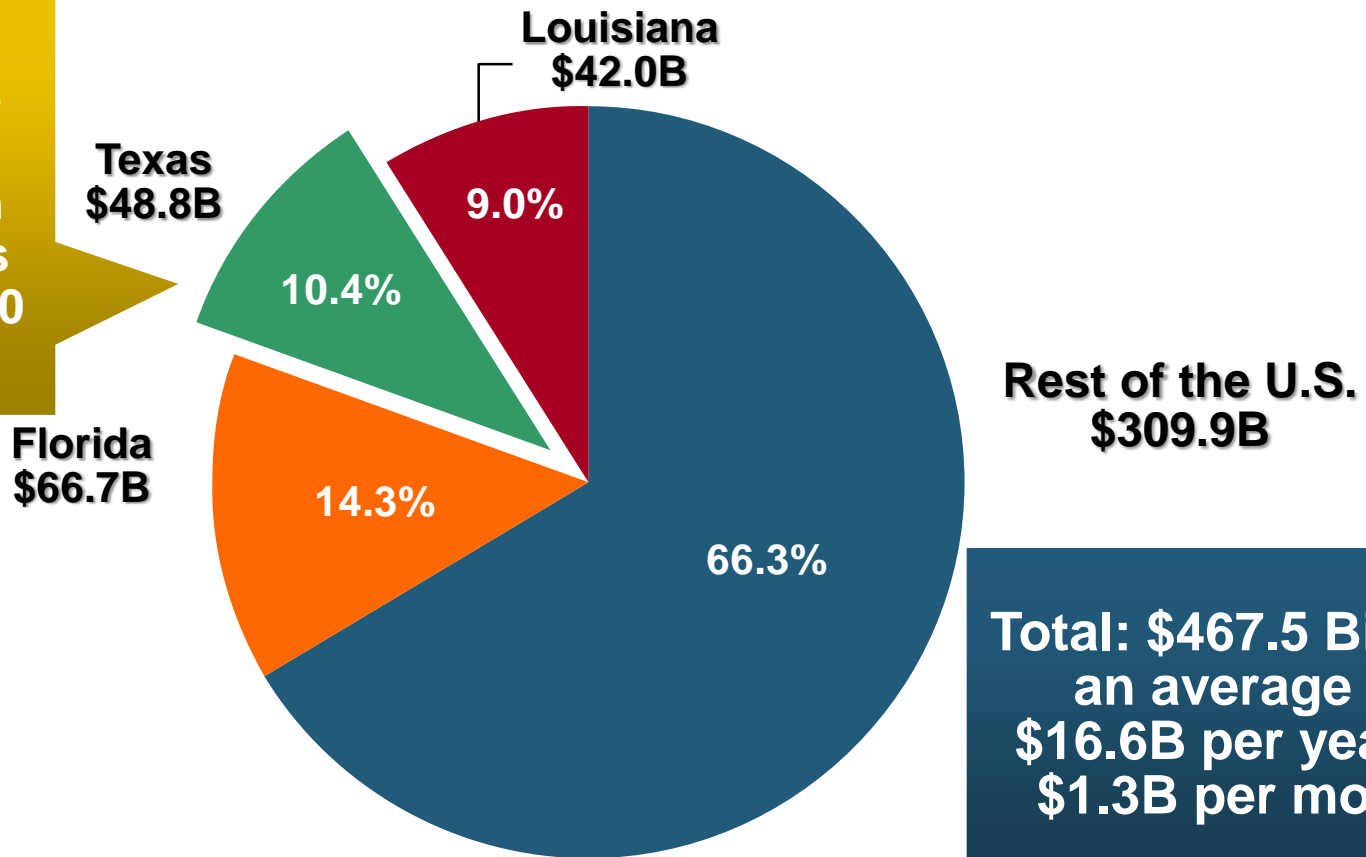
\*Includes catastrophe losses of at least \$25 million.

Sources: PCS unit of ISO; Insurance Information Institute.

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

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

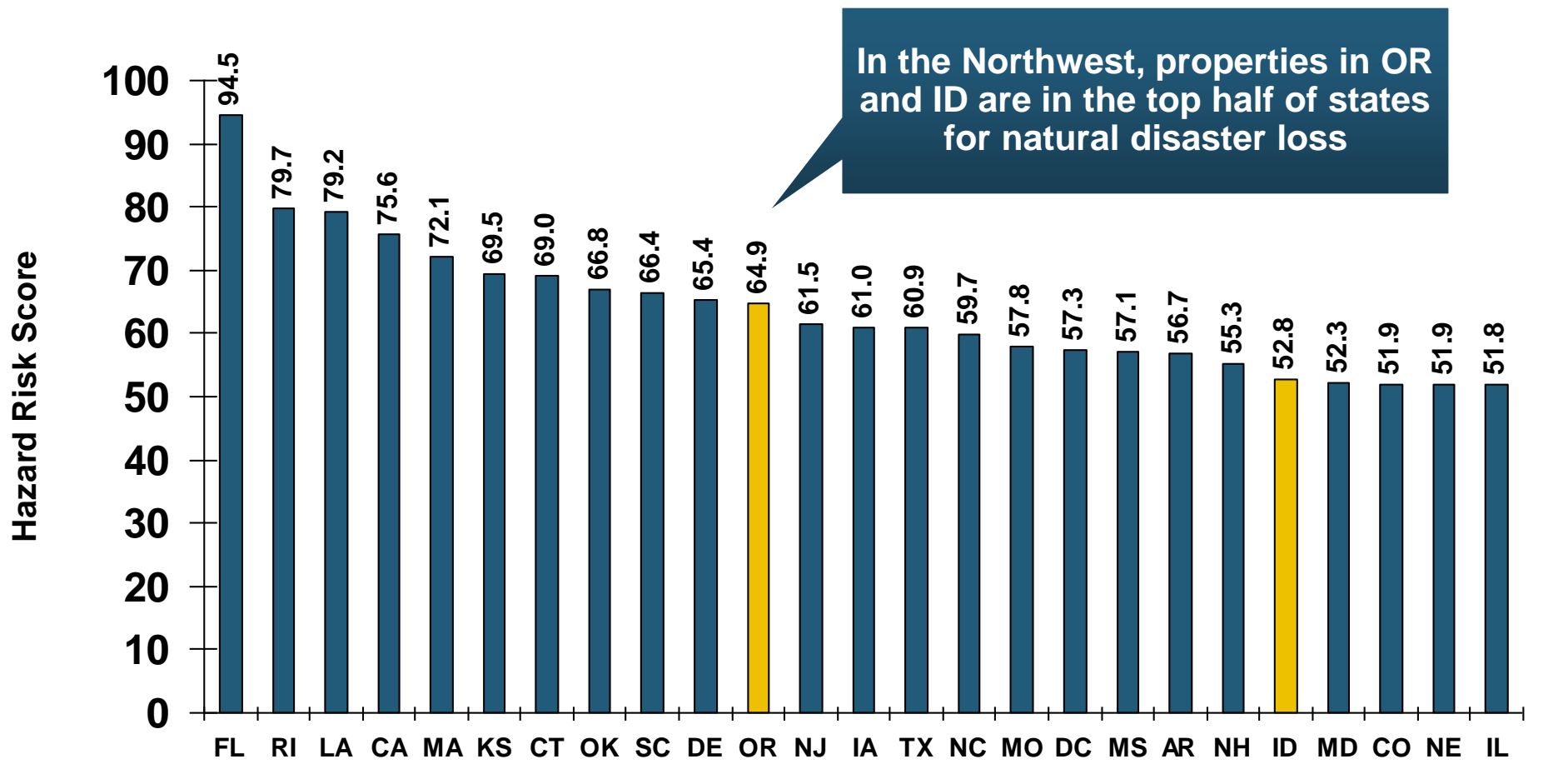
TX is the 2<sup>nd</sup> costliest state for CATs, with nearly \$50B in insured losses over the past 30 years



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

# Natural Hazard Risk Scores, 2014

## Highest 25 States\*



Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

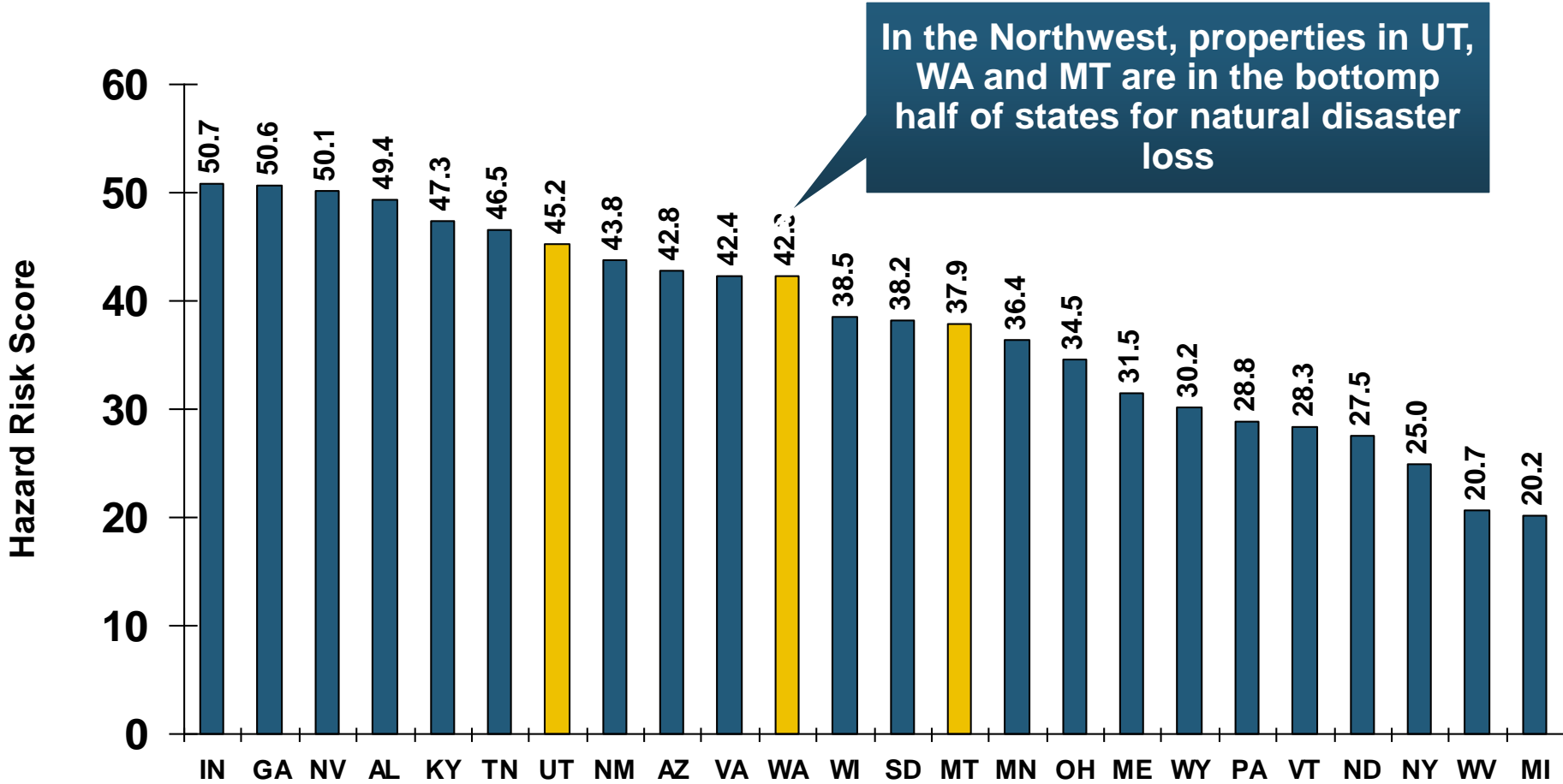
\*Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.

Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.

147

# Natural Hazard Risk Scores, 2014

## Bottom 24 States\*



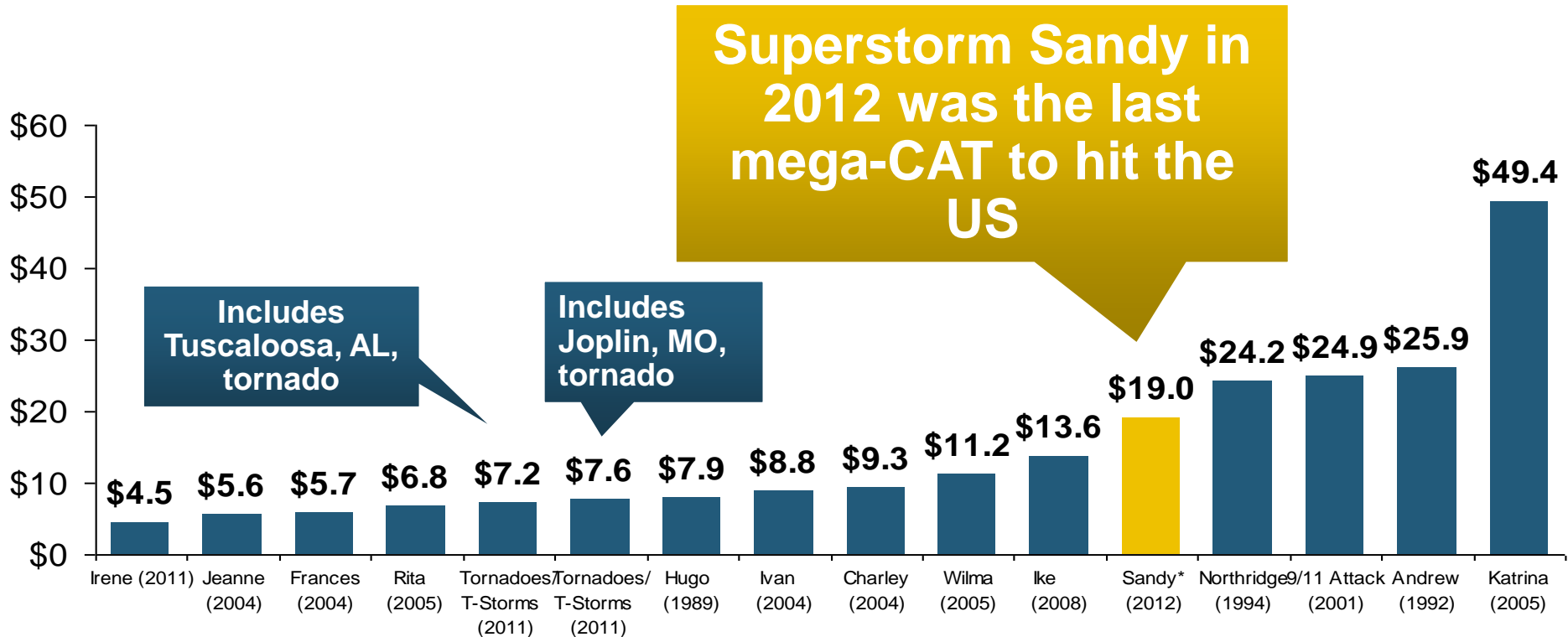
Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

\*Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.

Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.

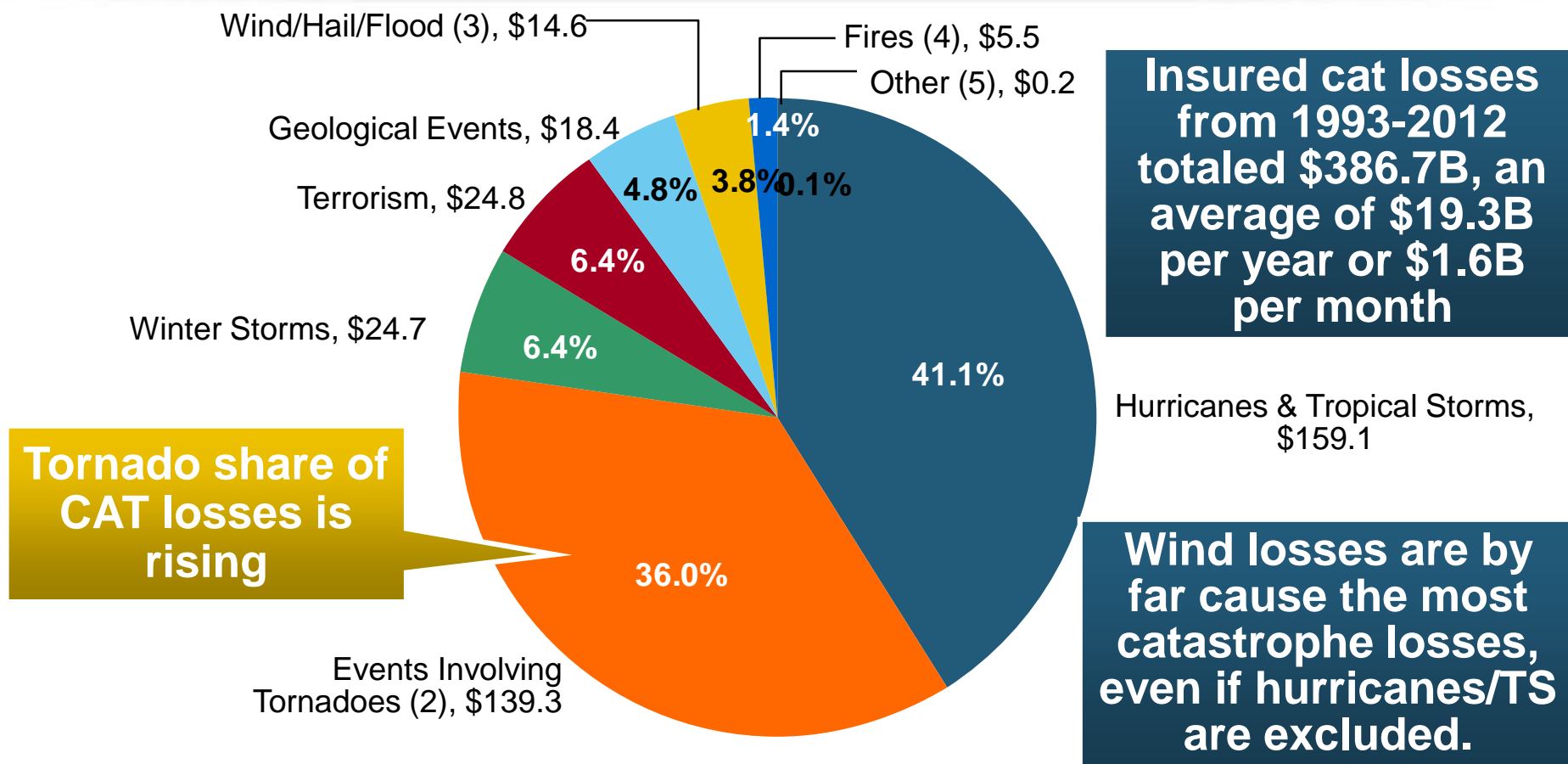
# Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2013 Dollars, \$ Billions)



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

# Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1994–2013<sup>1</sup>

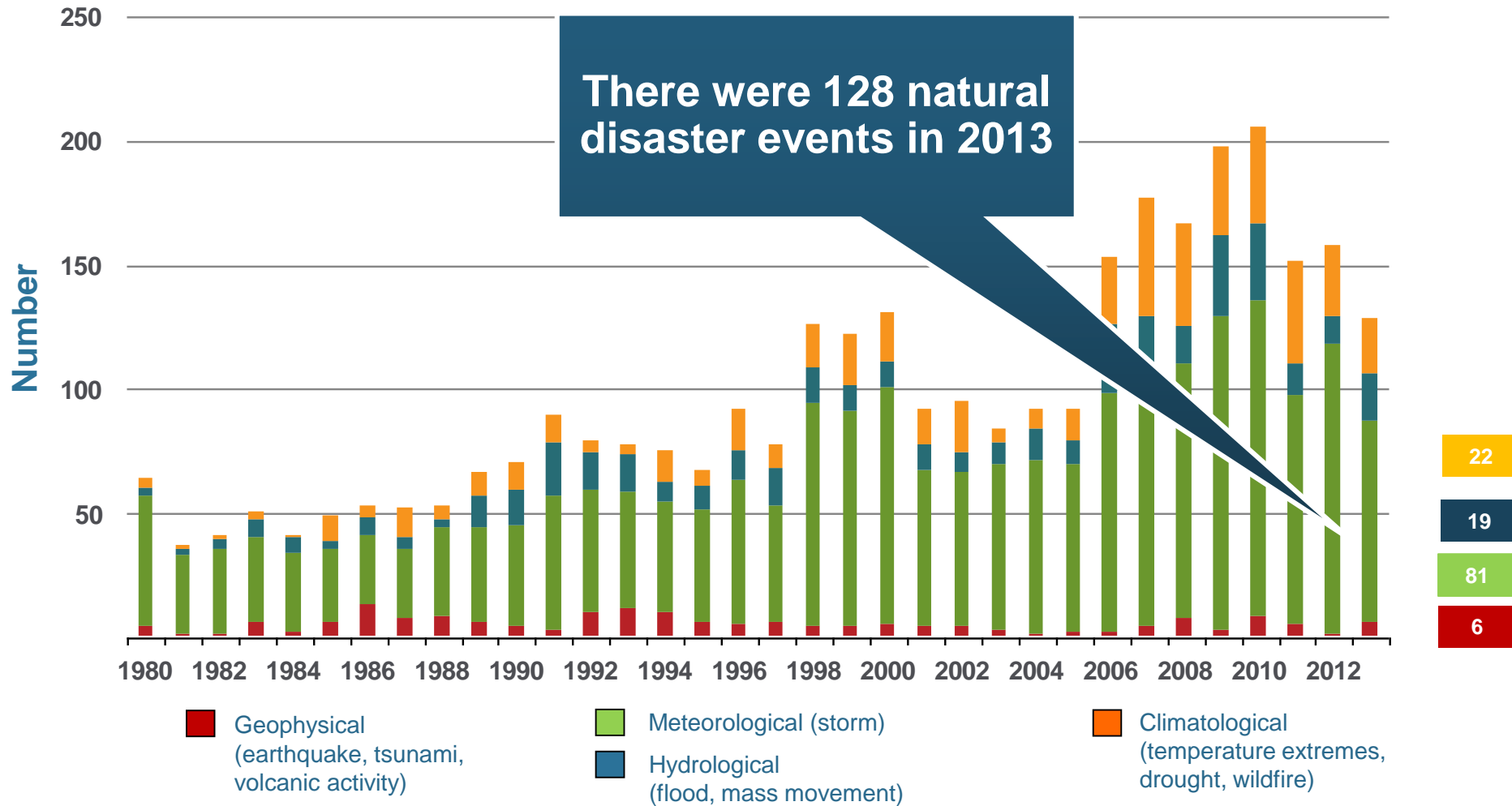


1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2013 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO's Property Claim Services Unit.

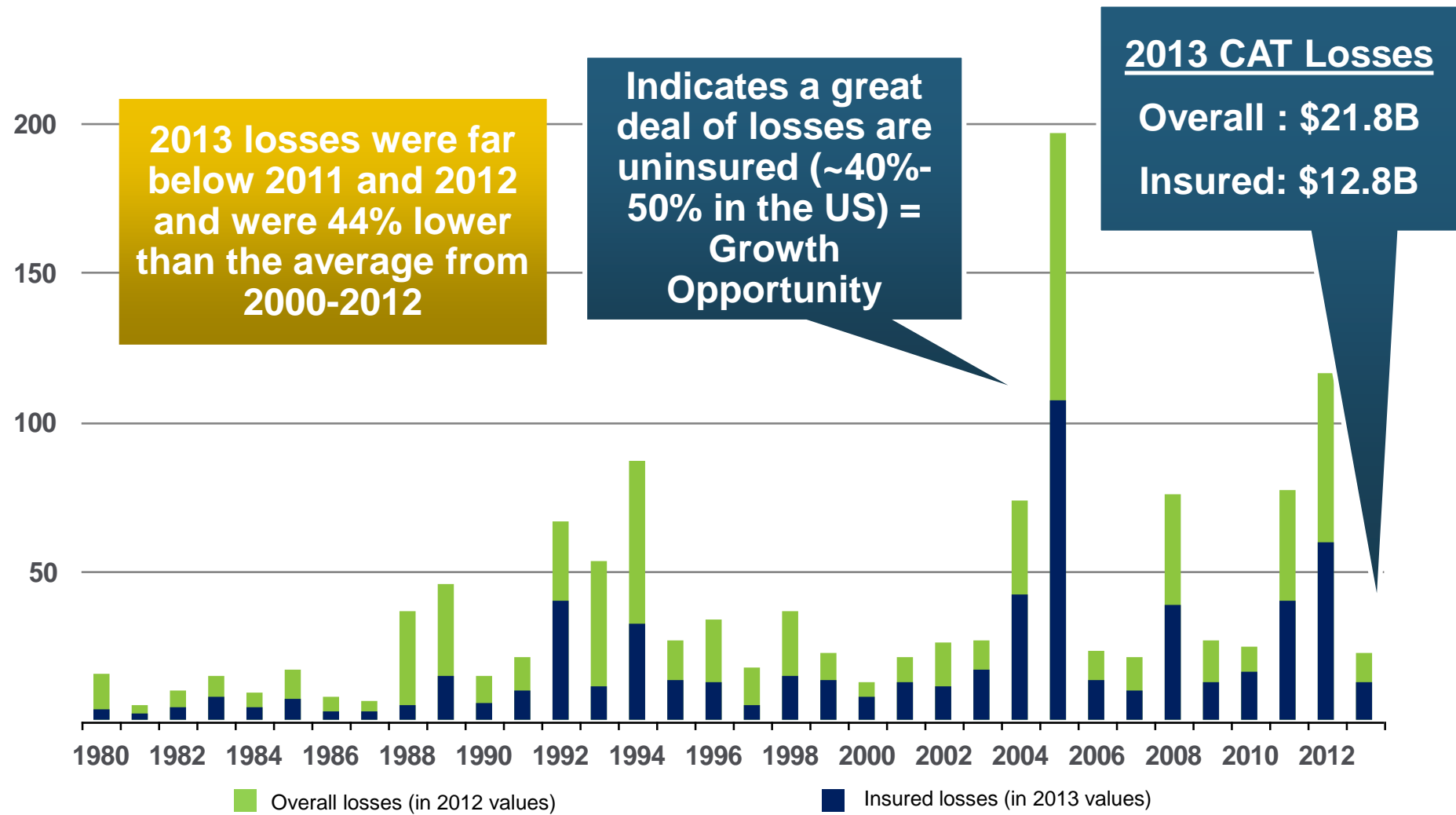
# Natural Disasters in the United States, 1980 – 2013

Number of Events (Annual Totals 1980 – 2013)



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

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





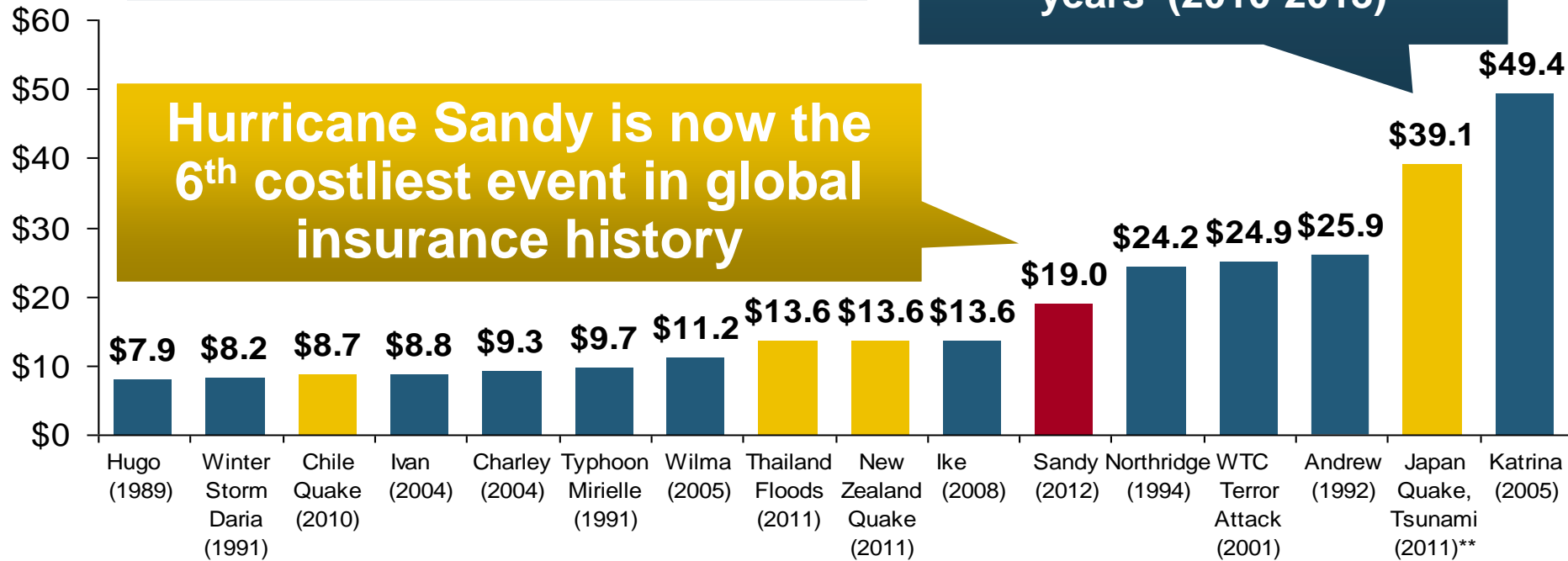
# Top 16 Most Costly World Insurance Losses, 1970-2013\*

(Insured Losses, 2013 Dollars, \$ Billions)

**2012 insured CAT Losses totaled \$60B; Economic losses totaled \$140B, according to Swiss Re**

**5 of the top 14 most expensive catastrophes in world history have occurred within the most recent 4 years (2010-2013)**

**Hurricane Sandy is now the 6<sup>th</sup> costliest event in global insurance history**

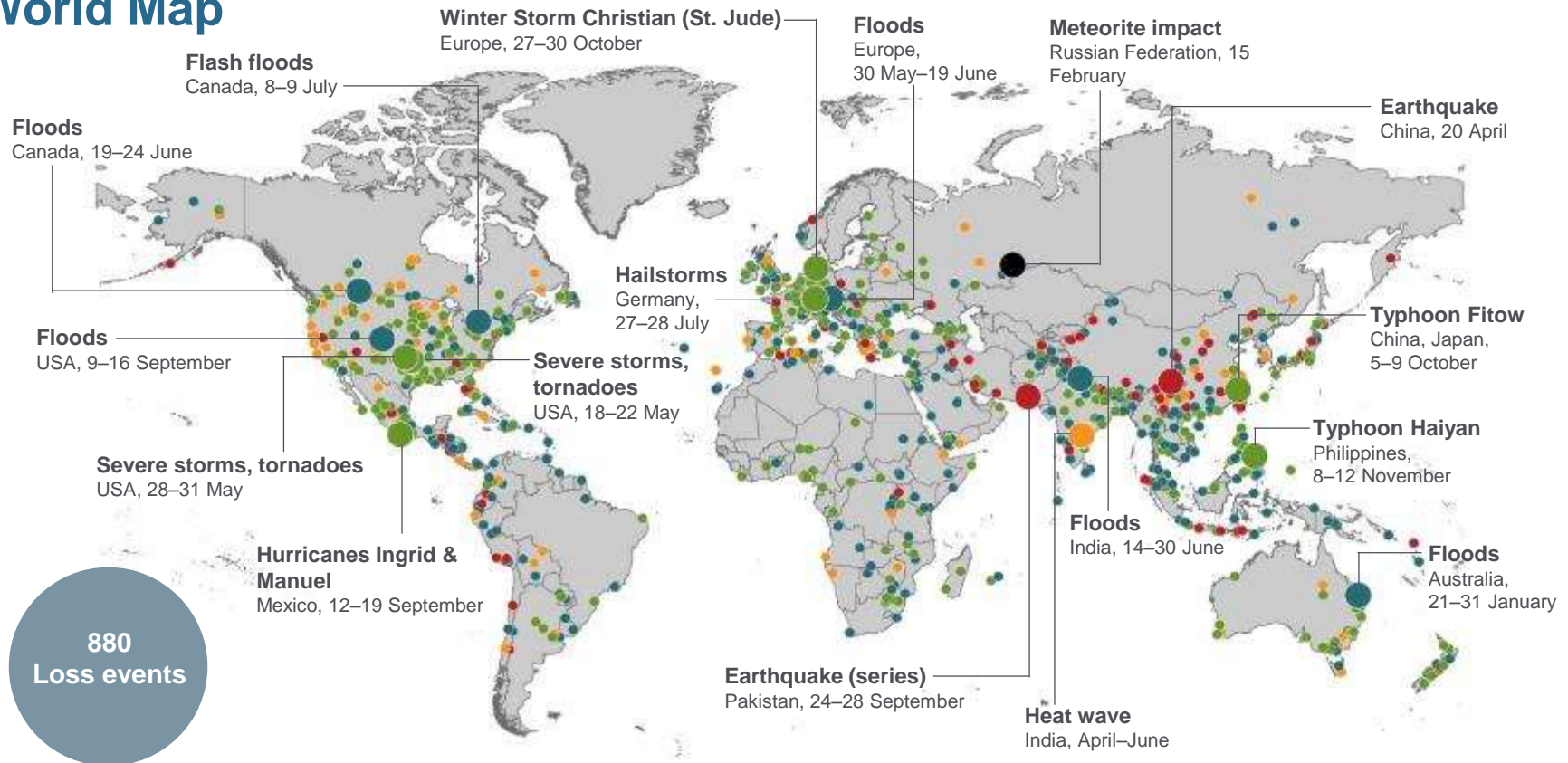


\*Figures do not include federally insured flood losses.

Sources: Munich Re; Swiss Re; Insurance Information Institute research.

# Natural Loss Events: Full Year 2013

## World Map



○ **Natural catastrophes**

○ **Selection of significant  
Natural catastrophes**

● **Geophysical events**  
(earthquake, tsunami, volcanic activity)

● **Meteorological events**  
(storm)

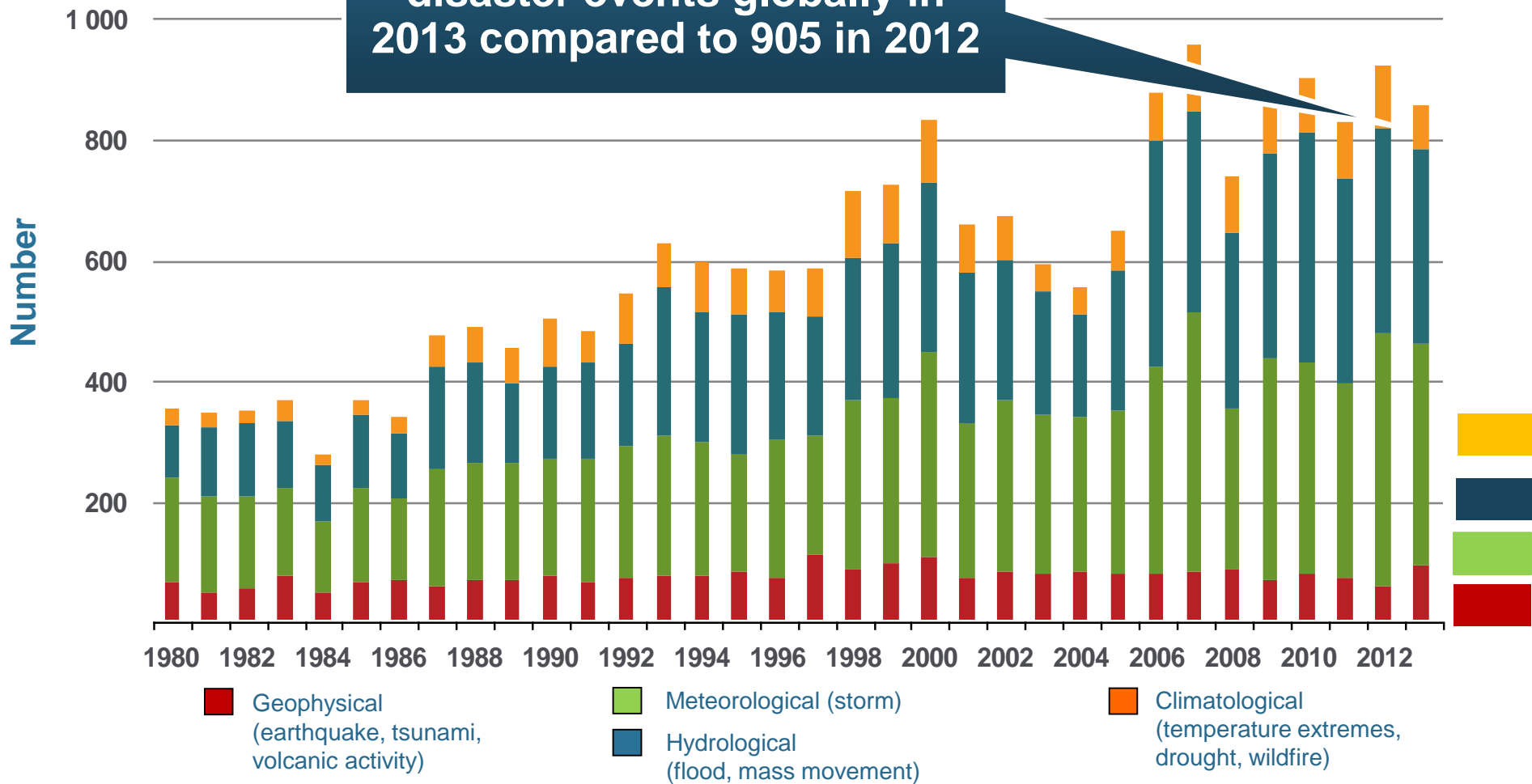
● **Hydrological events**  
(flood, mass movement)

● **Climatological events**  
(extreme temperature, drought, wildfire)

● **Extraterrestrial events**  
(Meteorite impact)

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

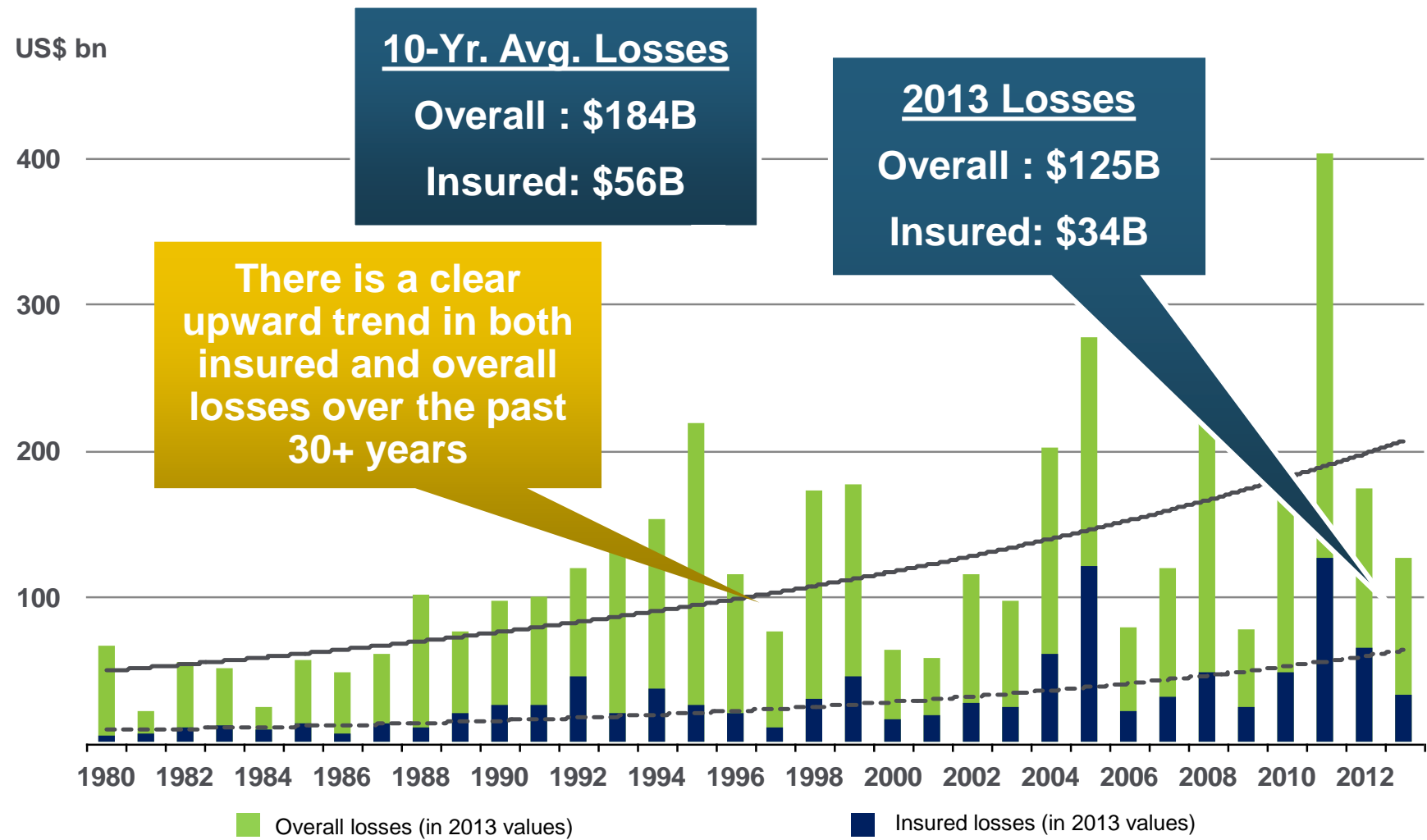
There were 880 natural  
disaster events globally in  
2013 compared to 905 in 2012



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

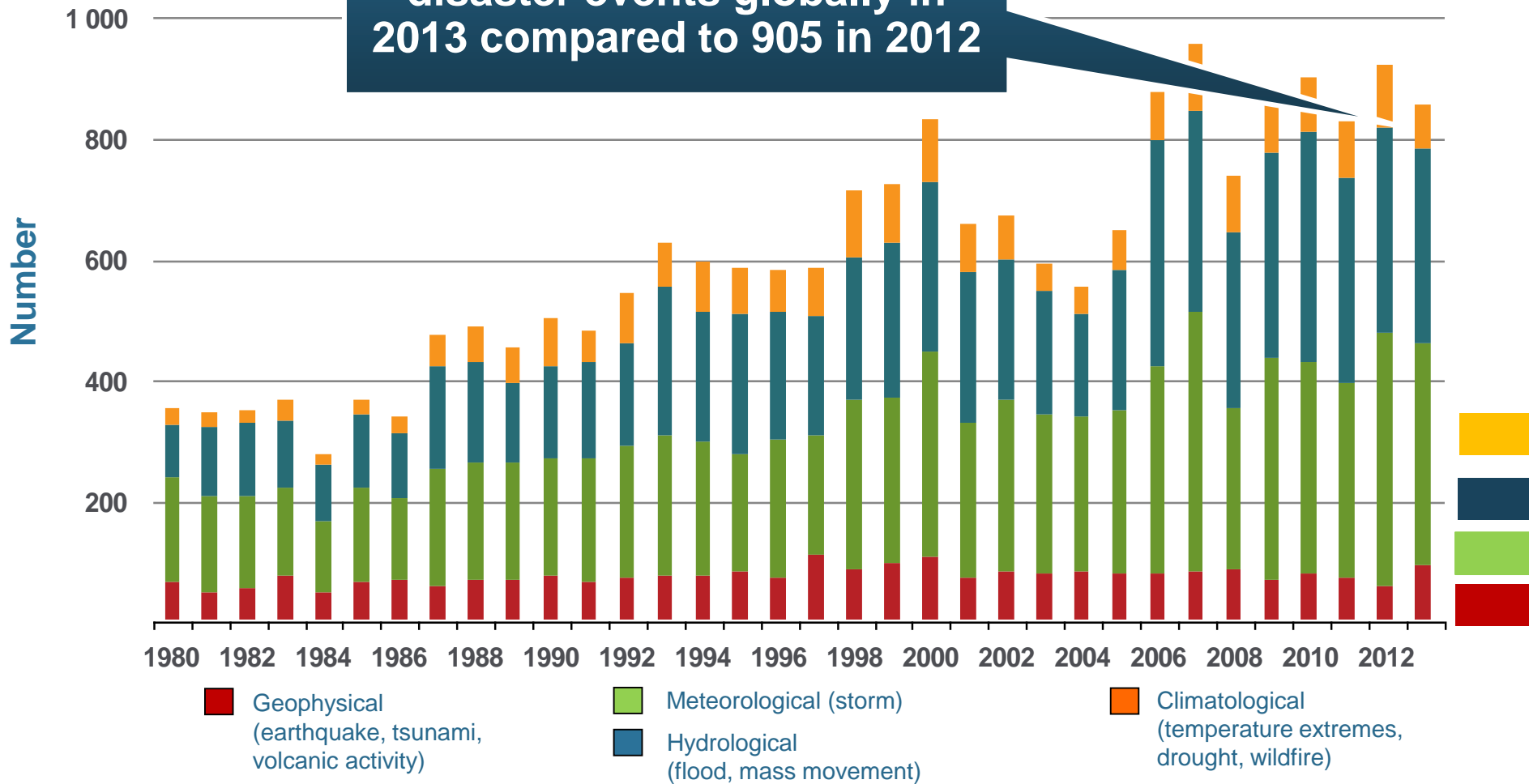
(Overall and Insured Losses)

(2013 Dollars, \$ Billions)



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

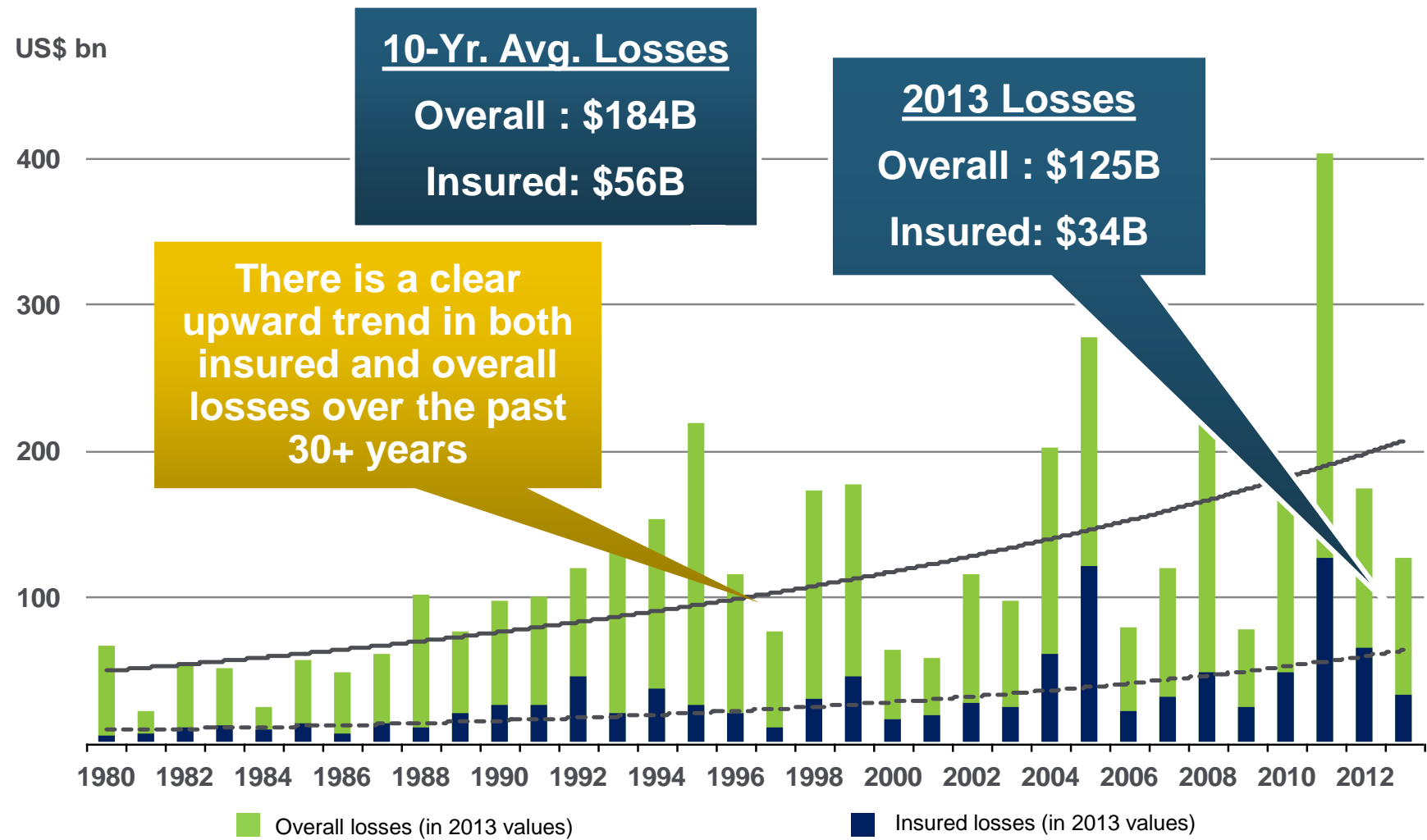
There were 880 natural  
disaster events globally in  
2013 compared to 905 in 2012



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

(Overall and Insured Losses)

(2013 Dollars, \$ Billions)



# Natural Disaster Losses in the US, by Type, Jan. 1 – June 30, 2014

<b>As of July 1, 2014</b>	<b>Number of Events</b>	<b>Fatalities</b>	<b>Estimated Overall Losses (US \$m)</b>	<b>Estimated Insured Losses (US \$m)</b>
<b>Severe Thunderstorm</b>	33	65	9,100	6,700
<b>Winter Storms &amp; Cold Waves</b>	11	84	3,400	2,400
<b>Flood, flash flood</b>	10	1	10	-
<b>Earthquake &amp; Geophysical, landslides</b>	5	44	20	-
<b>Tropical Cyclone</b>	-	-	-	-
<b>Wildfire, Heat Waves, &amp; Drought</b>	8	1	770	-
<b>Totals</b>	<b>67</b>	<b>195</b>	<b>13,300</b>	<b>9,100</b>

# 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)
<b>Severe Thunderstorm</b>	<b>69</b>	<b>110</b>	<b>16,341</b>	<b>10,274</b>
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
<b>Totals</b>	<b>128</b>	<b>207</b>	<b>21,825</b>	<b>12,794</b>



# Significant Natural Catastrophes, 2013

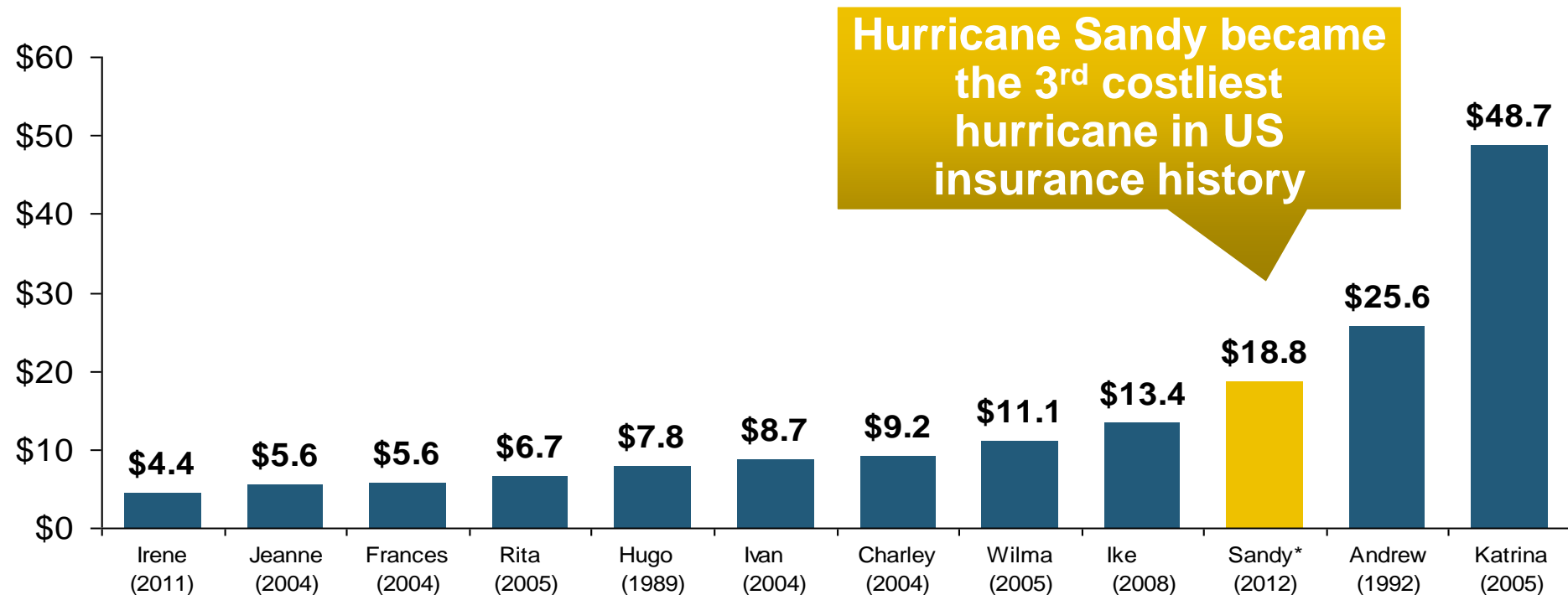
(Events with \$1 billion economic loss and/or 50 fatalities)

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

# 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 10 years (2004—2013)**

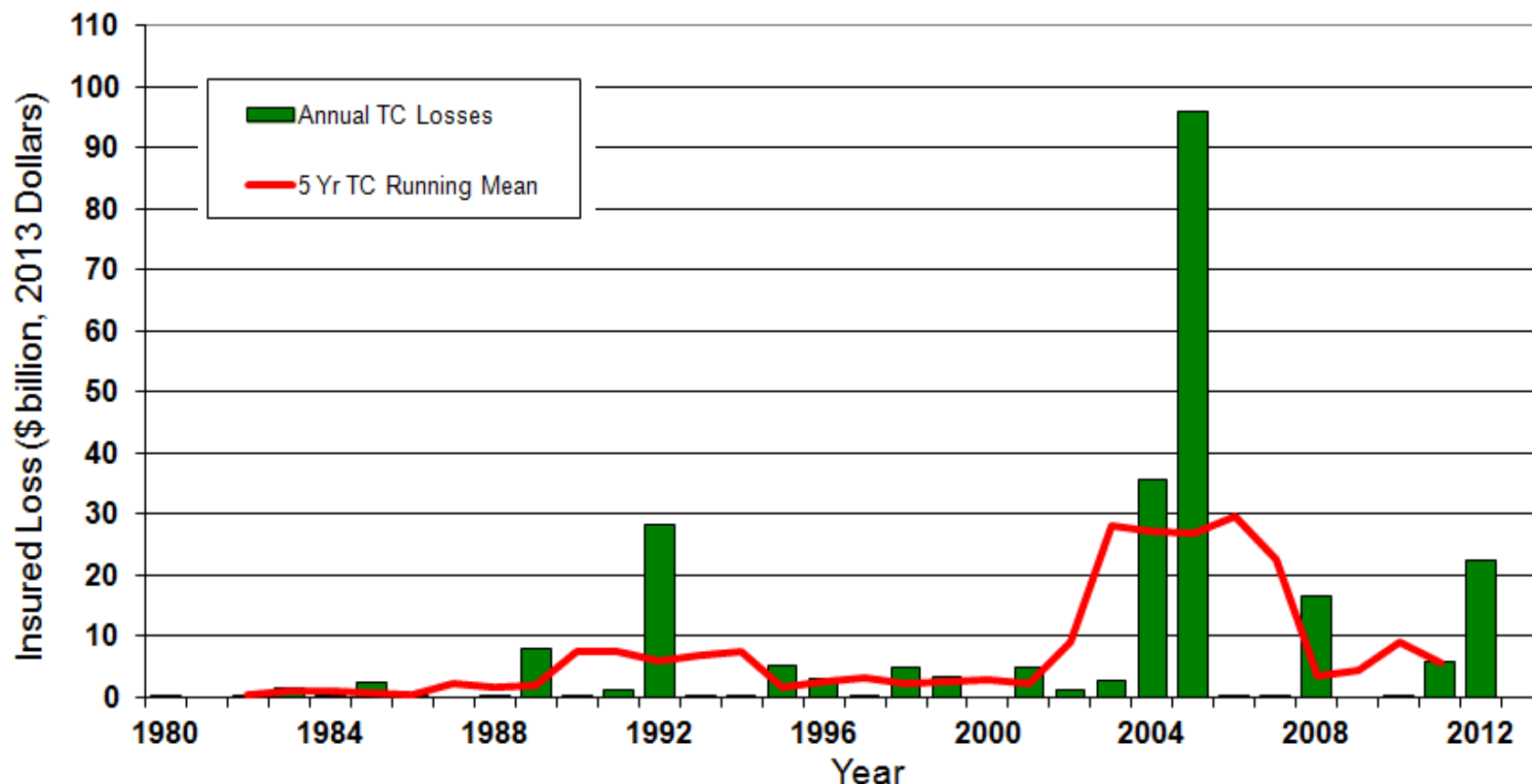


\*PCS estimate as of 4/12/13.

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

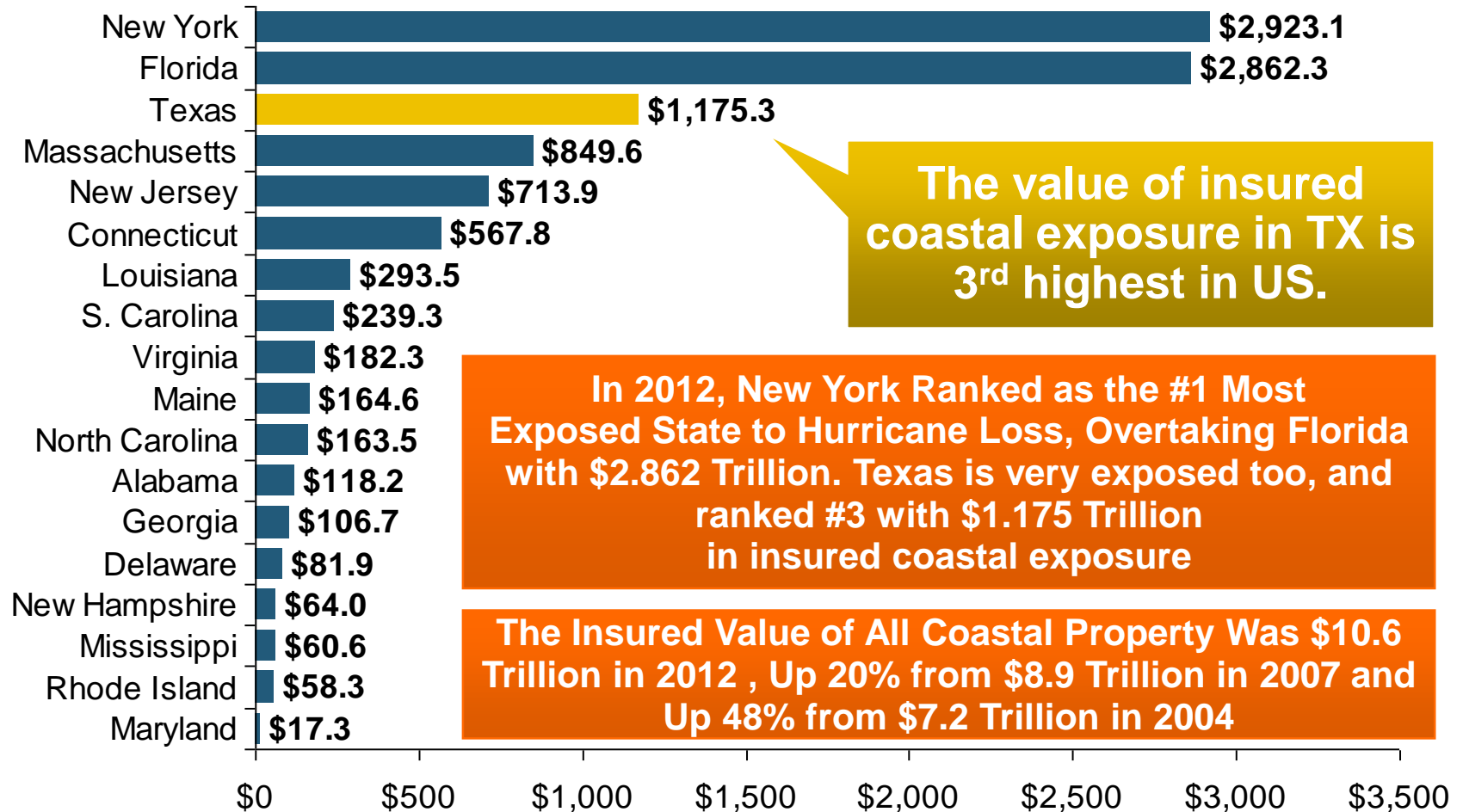
# Insured US Tropical Cyclone Losses, 1980 - 2013

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



# Total Value of Insured Coastal Exposure in 2012

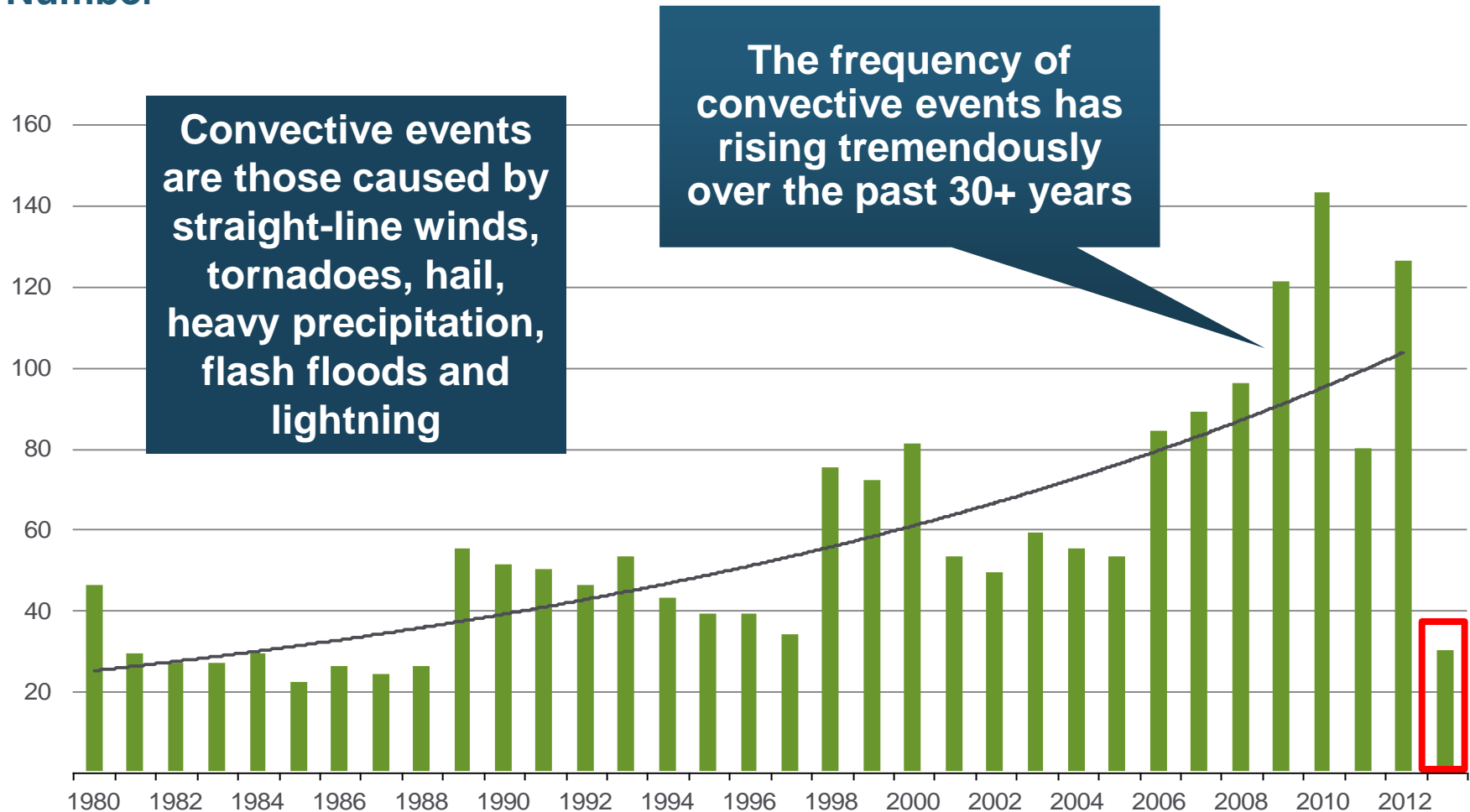
(2012, \$ Billions)



# Convective Loss Events in the U.S.

Number of events 1980 – 2012 and First Half 2013

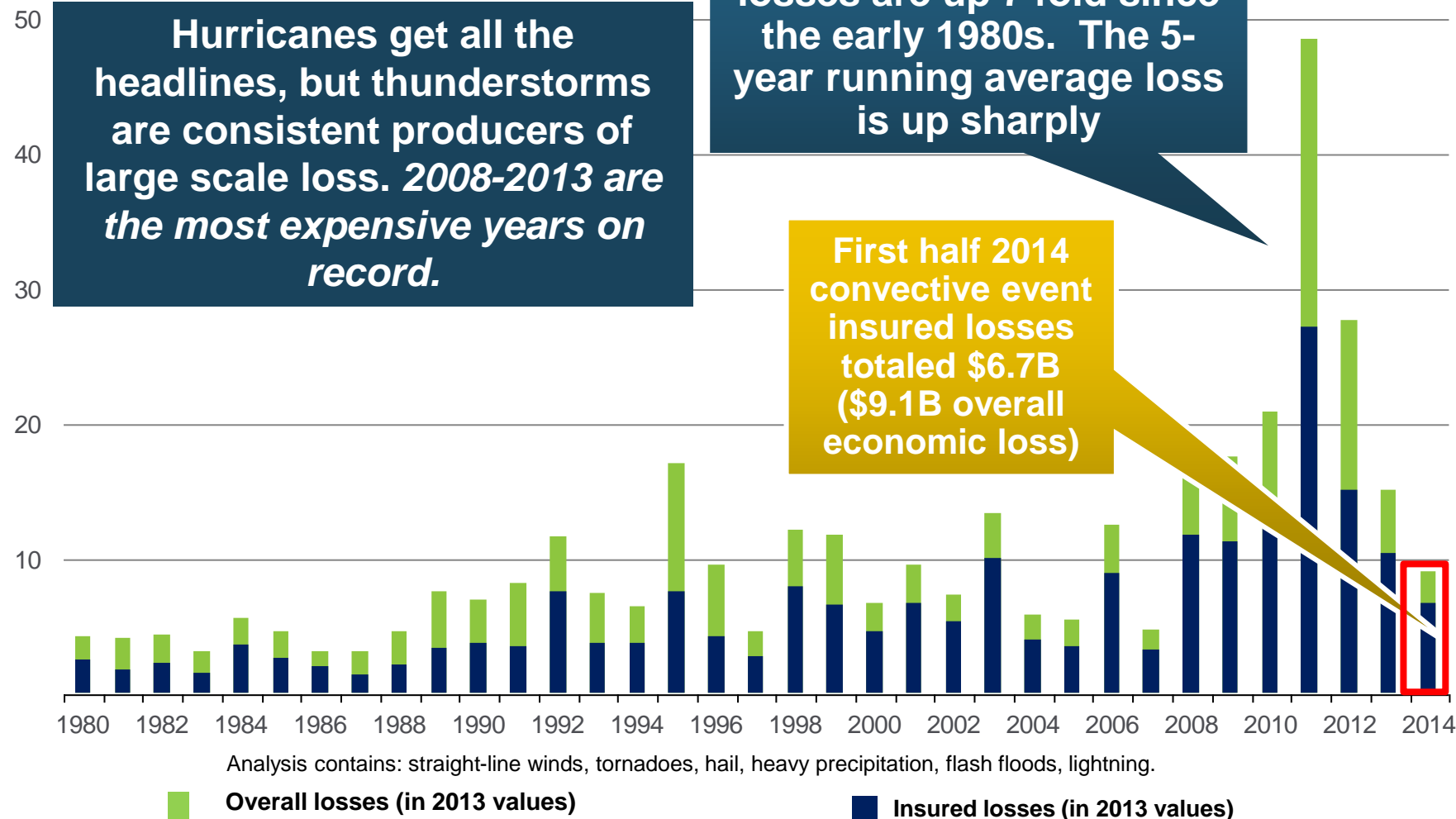
Number



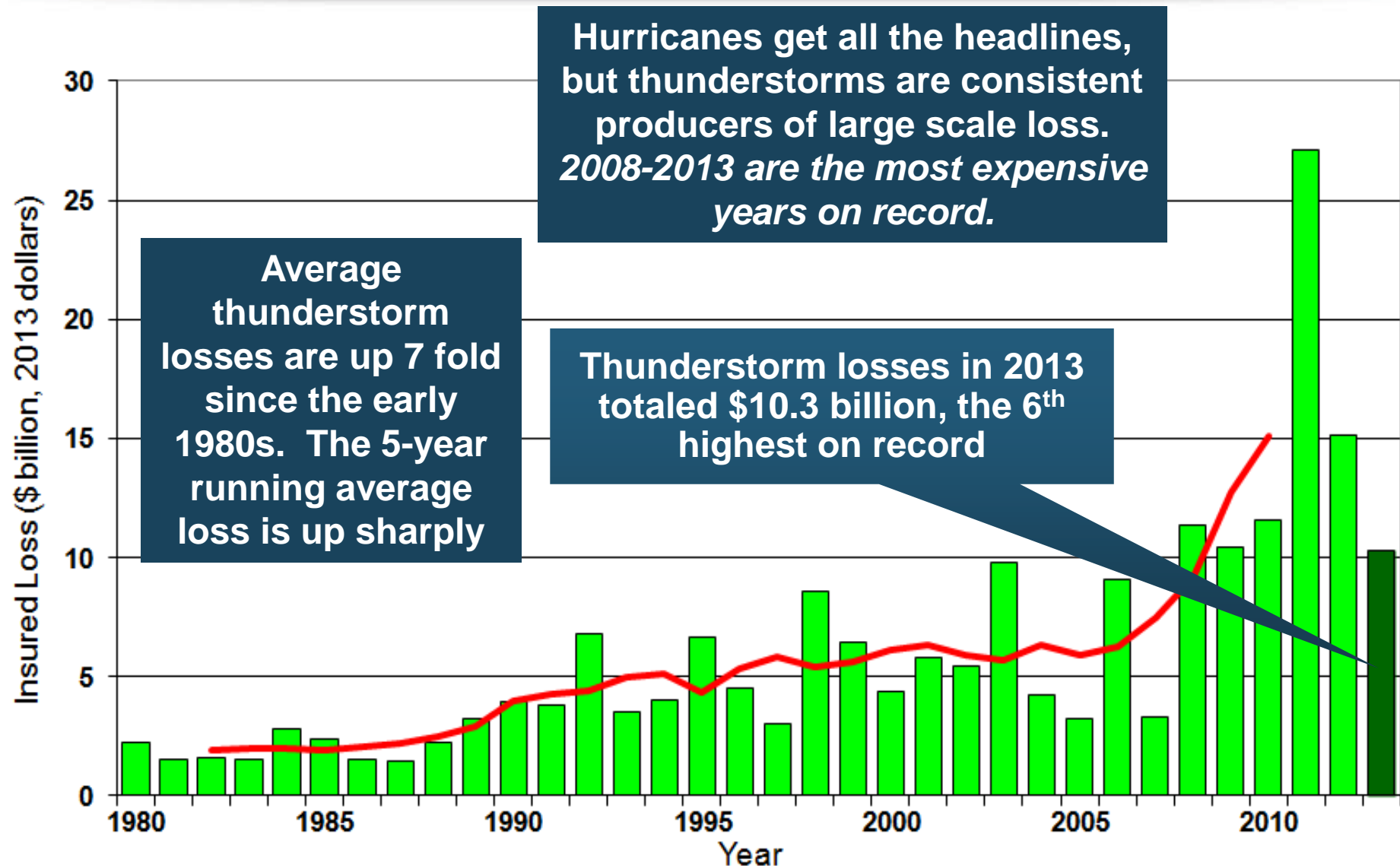
# Convective Loss Events in the U.S.

Overall and insured losses 1980 – 2013 and First Half 2014

(Bill. US\$)



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



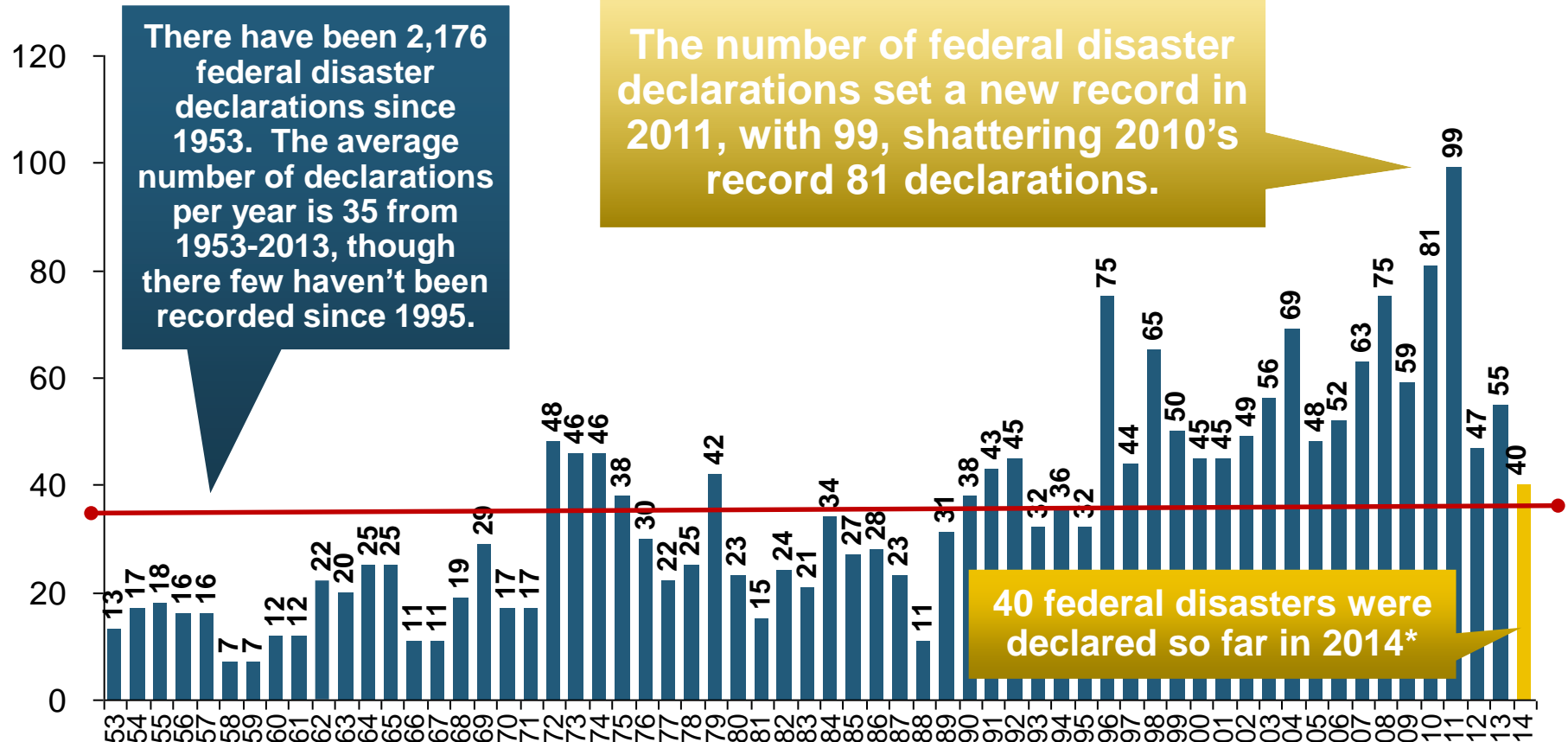


# **Federal Disaster Declarations Patterns: 1953-2014**

**Disaster Declarations Set New  
Records in Recent Years**



# Number of Federal Major Disaster Declarations, 1953-2014\*

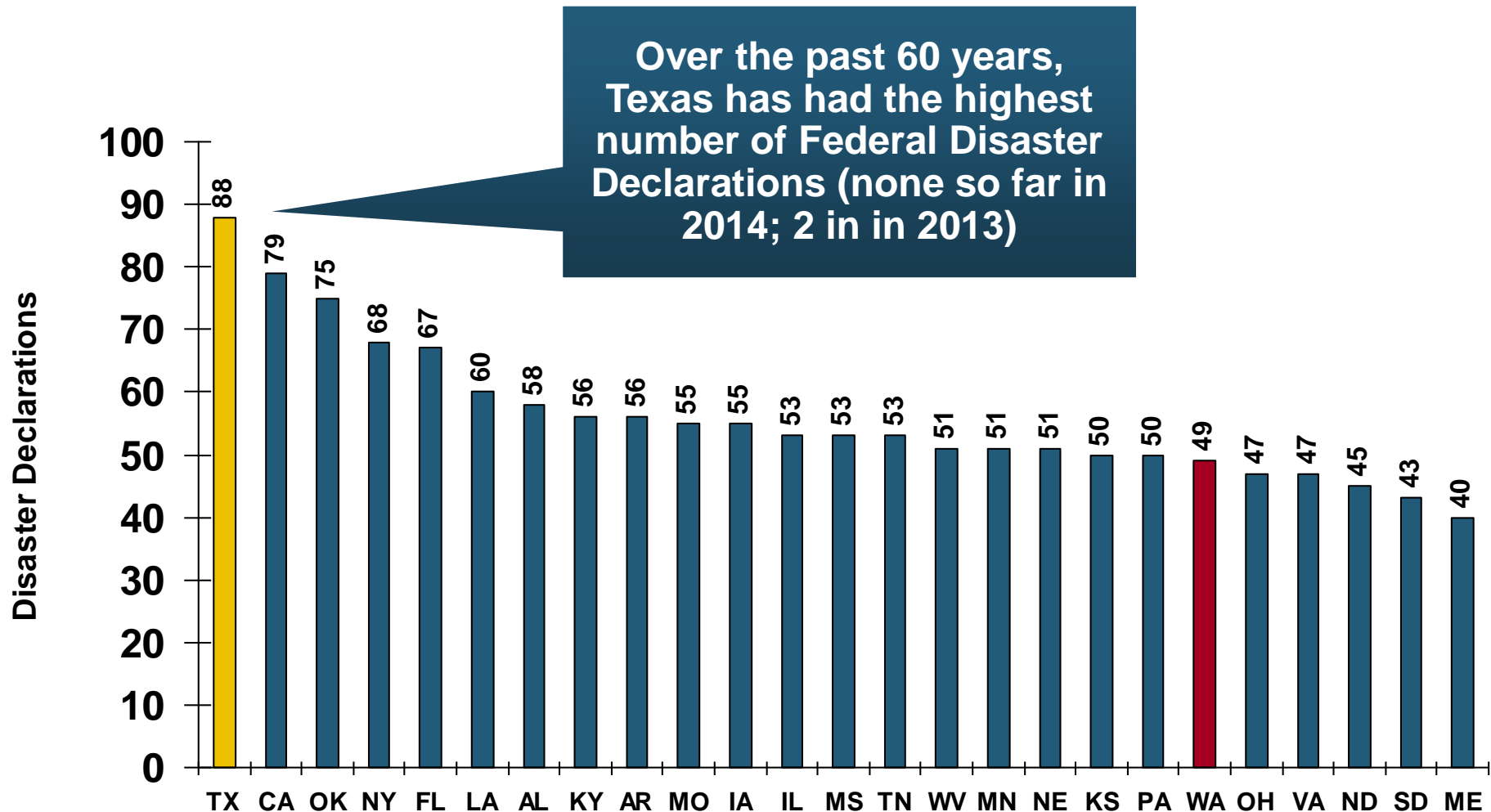


**The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 *and* 2011 Before Dropping in 2012/13**

\*Through September 2, 2014.

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

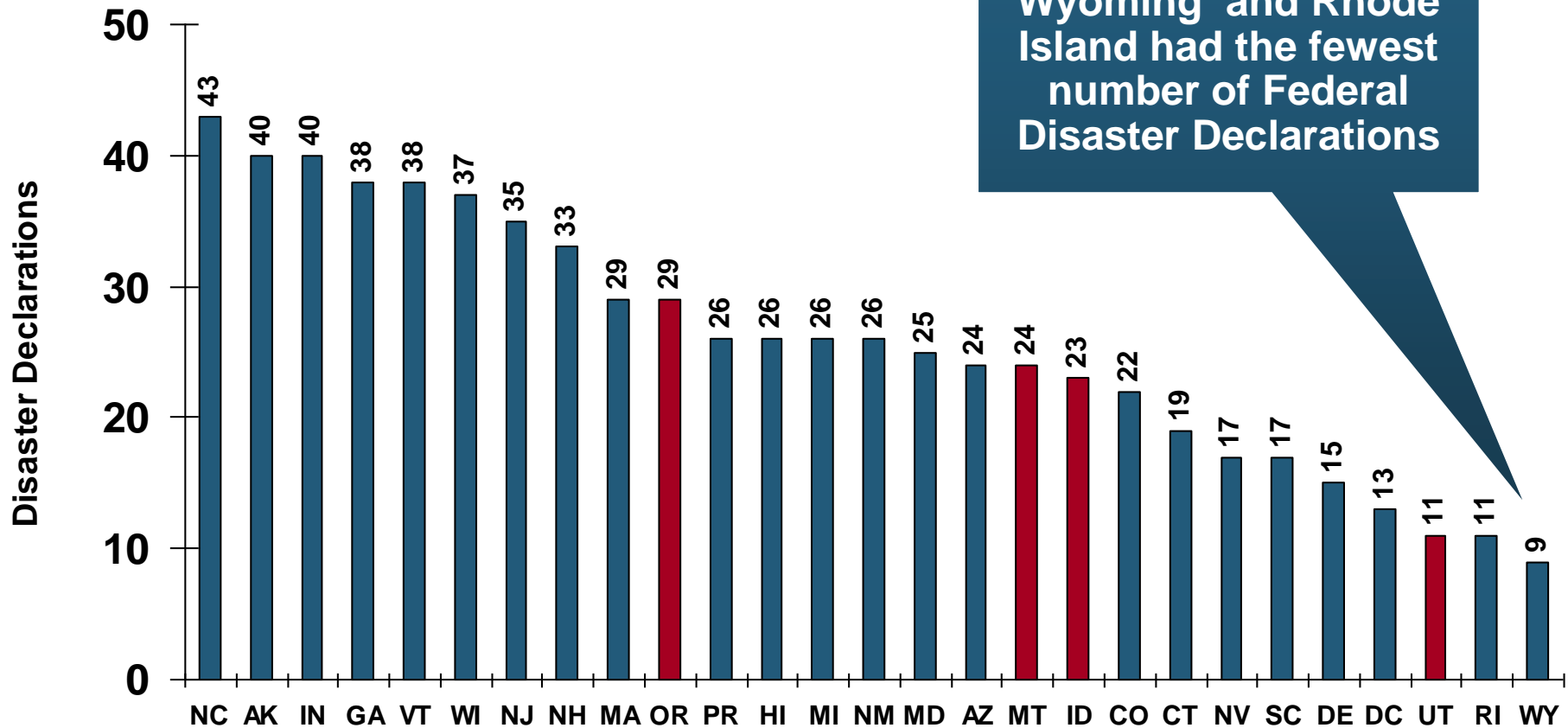
# Federal Disasters Declarations by State, 1953 – 2014: Highest 25 States\*



\*Through Sept. 2, 2014. Includes Puerto Rico and the District of Columbia.

Source: FEMA: [http://www.fema.gov/news/disaster\\_totals\\_annual.fema](http://www.fema.gov/news/disaster_totals_annual.fema); Insurance Information Institute.

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



\*Through Sept. 2, 2014. Includes Puerto Rico and the District of Columbia.

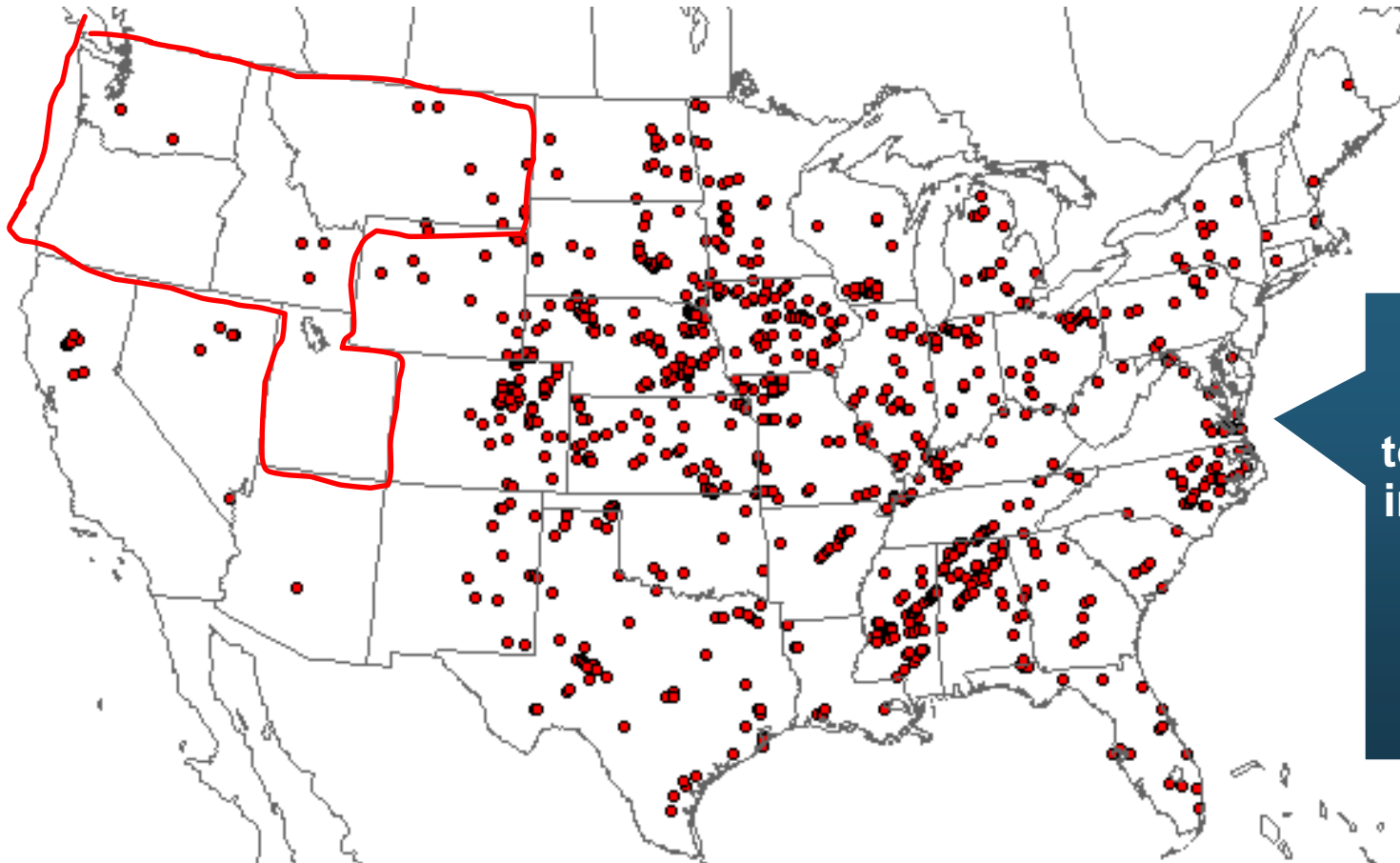
Source: FEMA: [http://www.fema.gov/news/disaster\\_totals\\_annual.fema](http://www.fema.gov/news/disaster_totals_annual.fema); Insurance Information Institute.



## SEVERE WEATHER REPORT UPDATE: 2014

*Damage from Tornadoes, Large Hail  
and High Winds Keep Insurers Busy*

# Location of Tornado Reports in 2014: Through September 21, 2014



There have been 924 tornadoes so far in 2014, causing extensive property damage in several states



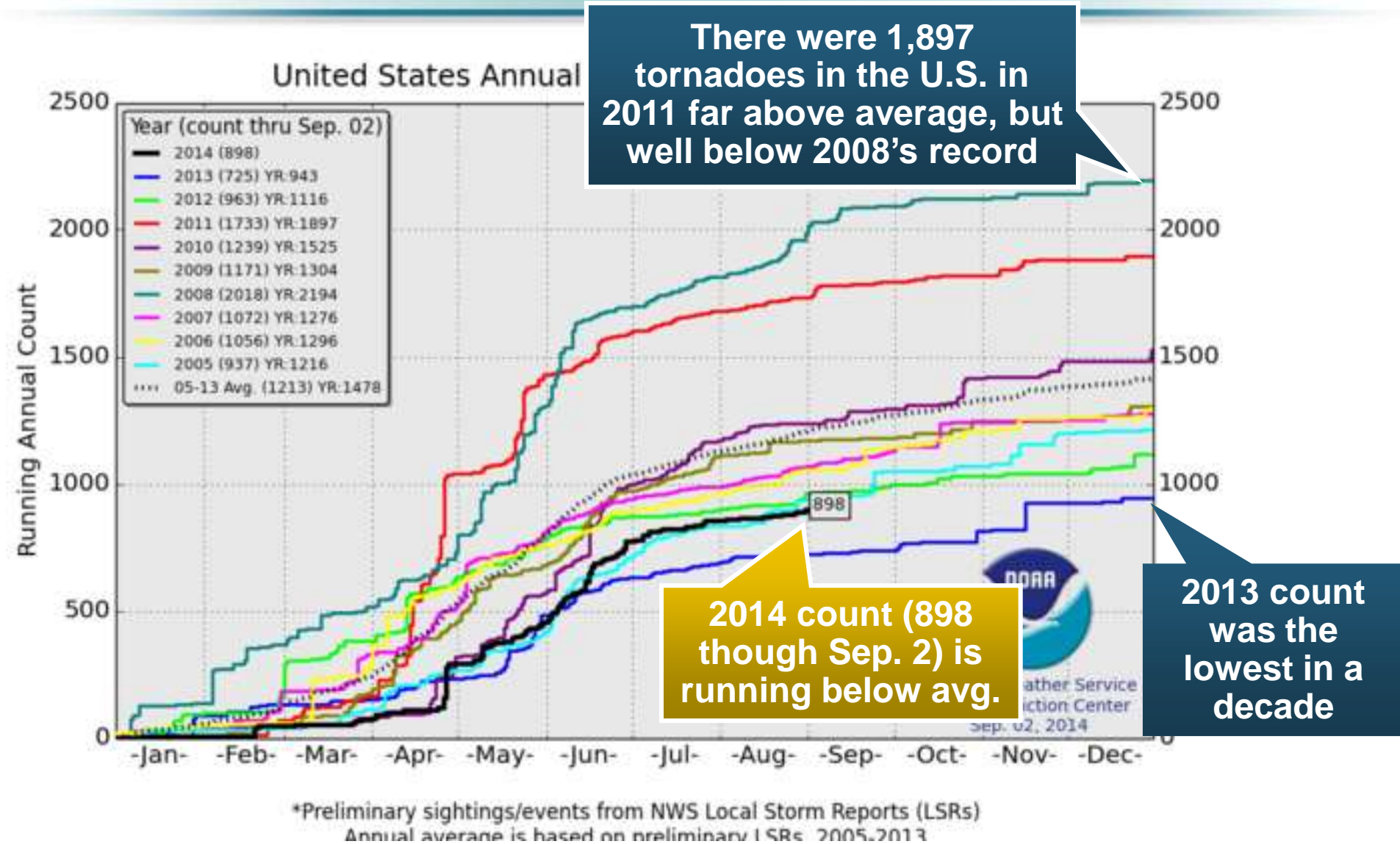
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Tornado Reports  
January 01, 2014 - September 21, 2014

Updated: Sunday September 21, 2014 11:55 CT

# U.S. Tornado Count, 2005-2014\*

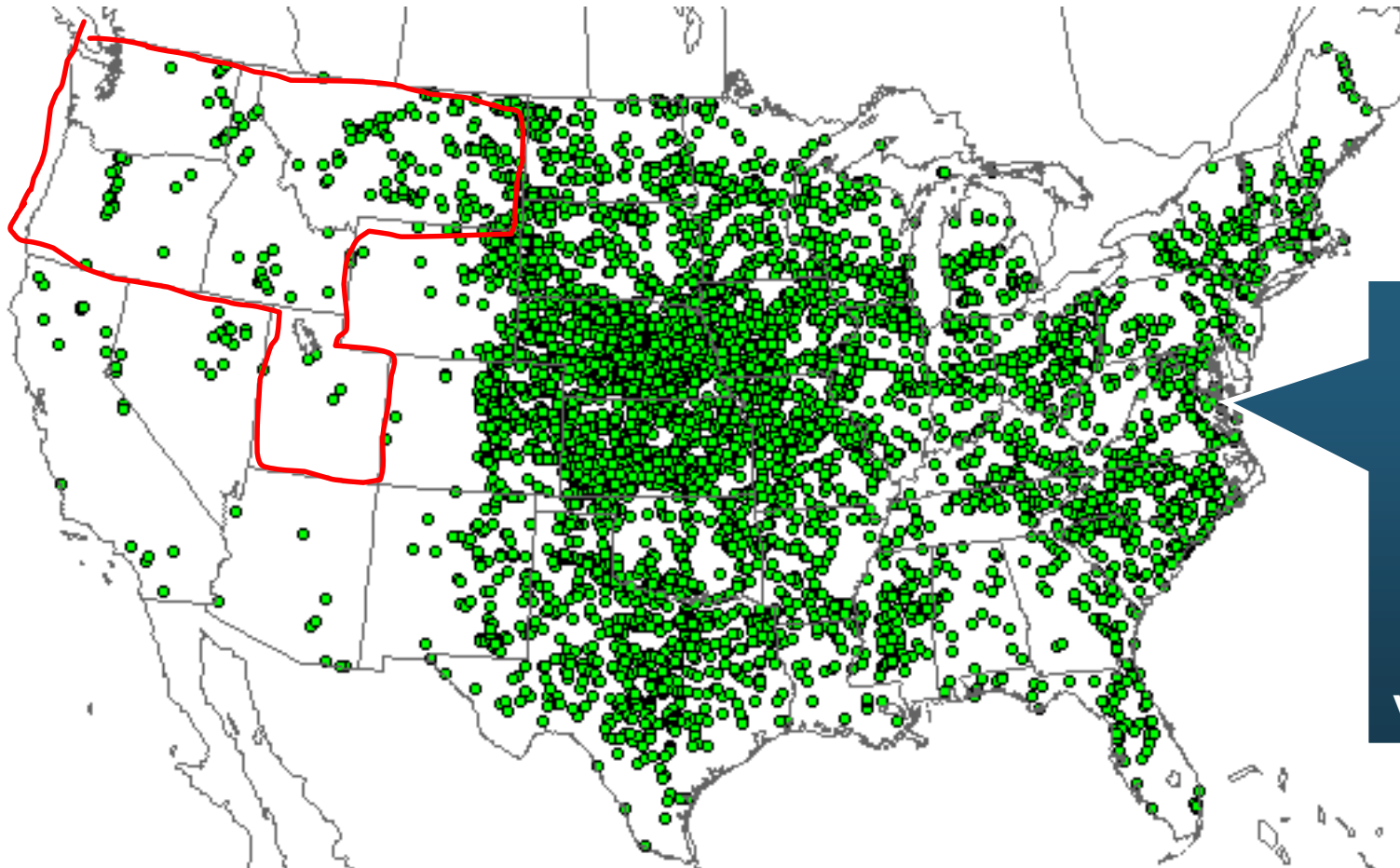


\*Through Sept. 2, 2014.

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



# Location of Large Hail Reports: Through September 21, 2014



There have been 5,162 “Large Hail” reports in the US so far in 2014, causing extensive property and vehicle damage



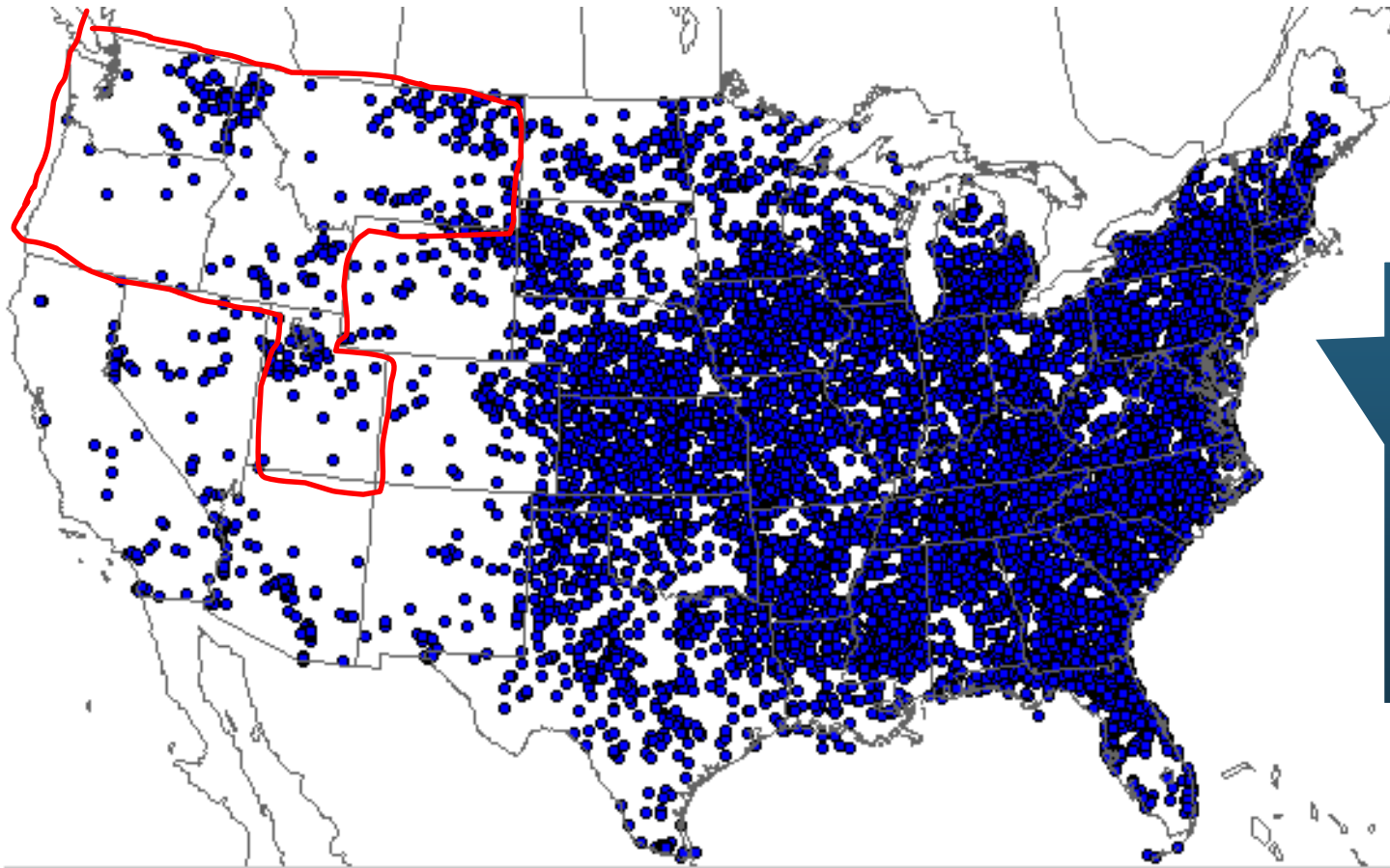
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Hail Reports  
January 01, 2014 - September 21, 2014

Updated: Sunday September 21, 2014 11:55 CT

# Location of High Wind Reports: Through September 21, 2014



There have been 10,876 “Wind Damage” so far in 2014, causing extensive property damage



PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

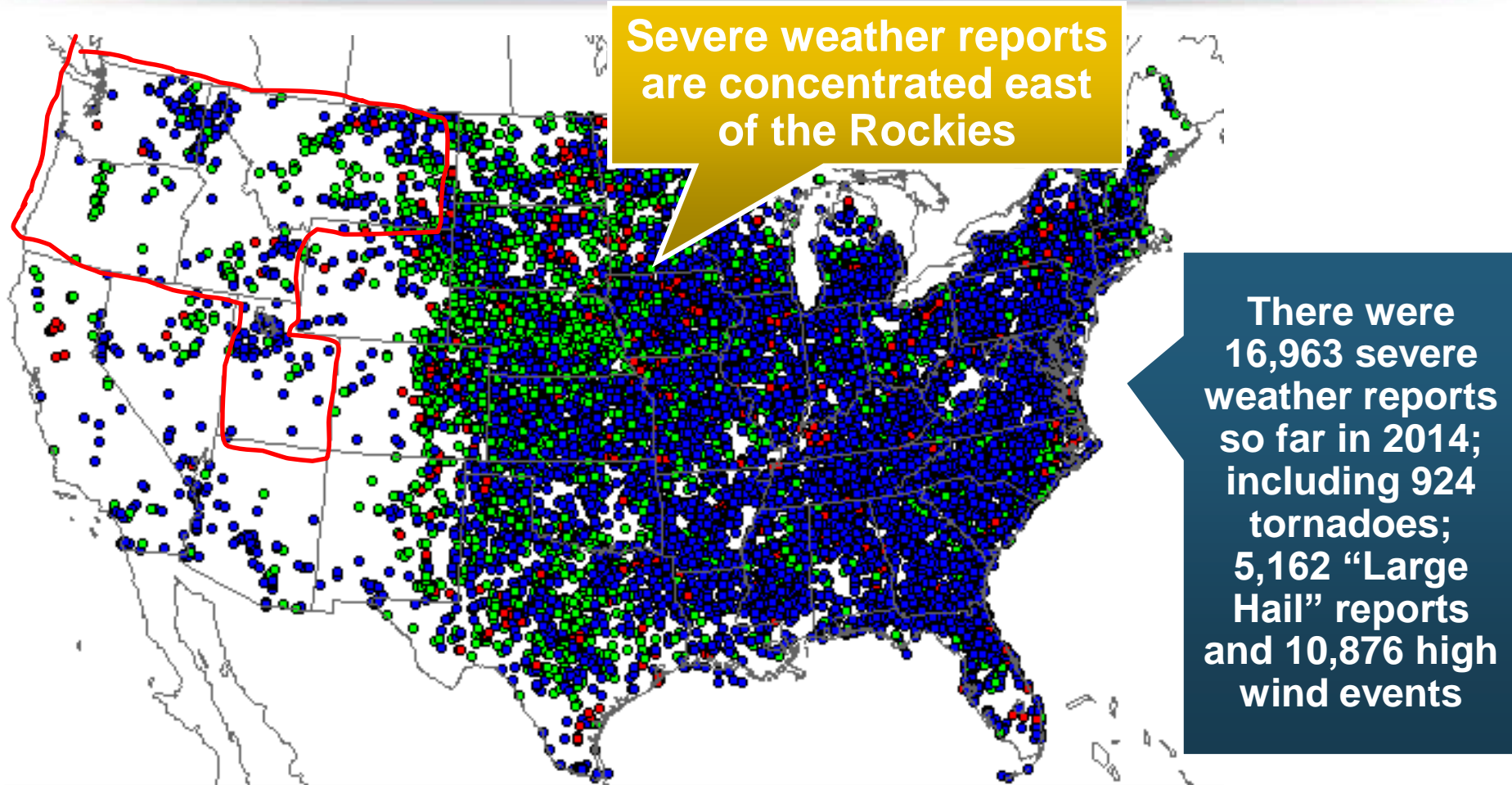
NOAA/Storm Prediction Center Norman, Oklahoma

Wind Reports  
January 01, 2014 - September 21, 2014

Updated: Sunday September 21, 2014 11:55 CT



# Severe Weather Reports: Through September 21, 2014



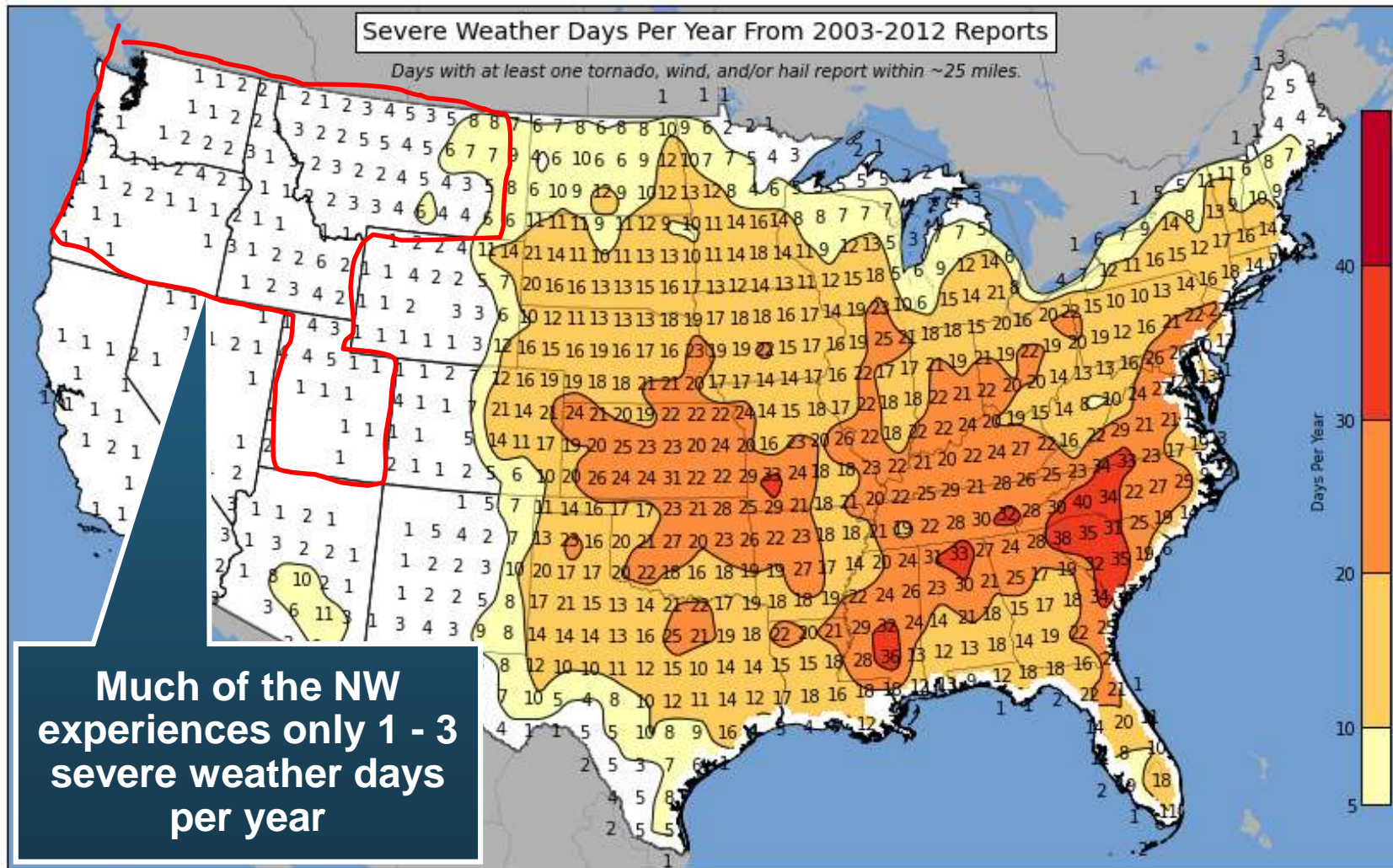
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

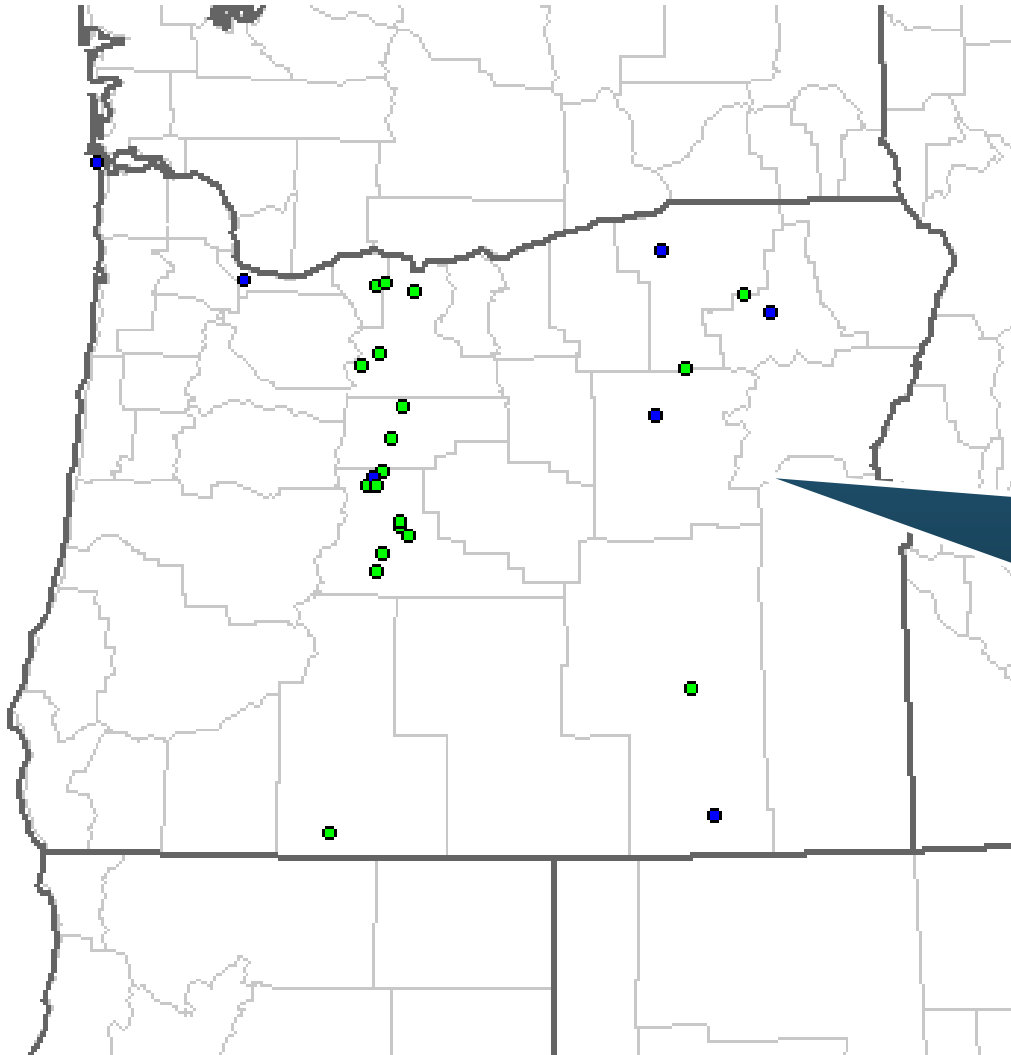
Severe Weather Reports  
January 01, 2014 - September 21, 2014

Updated: Sunday September 21, 2014 11:55 CT

# Severe Weather Days in the Northwest: Annual Average, 2003-2012



# Severe Weather Reports in Oregon: Through September 21, 2014



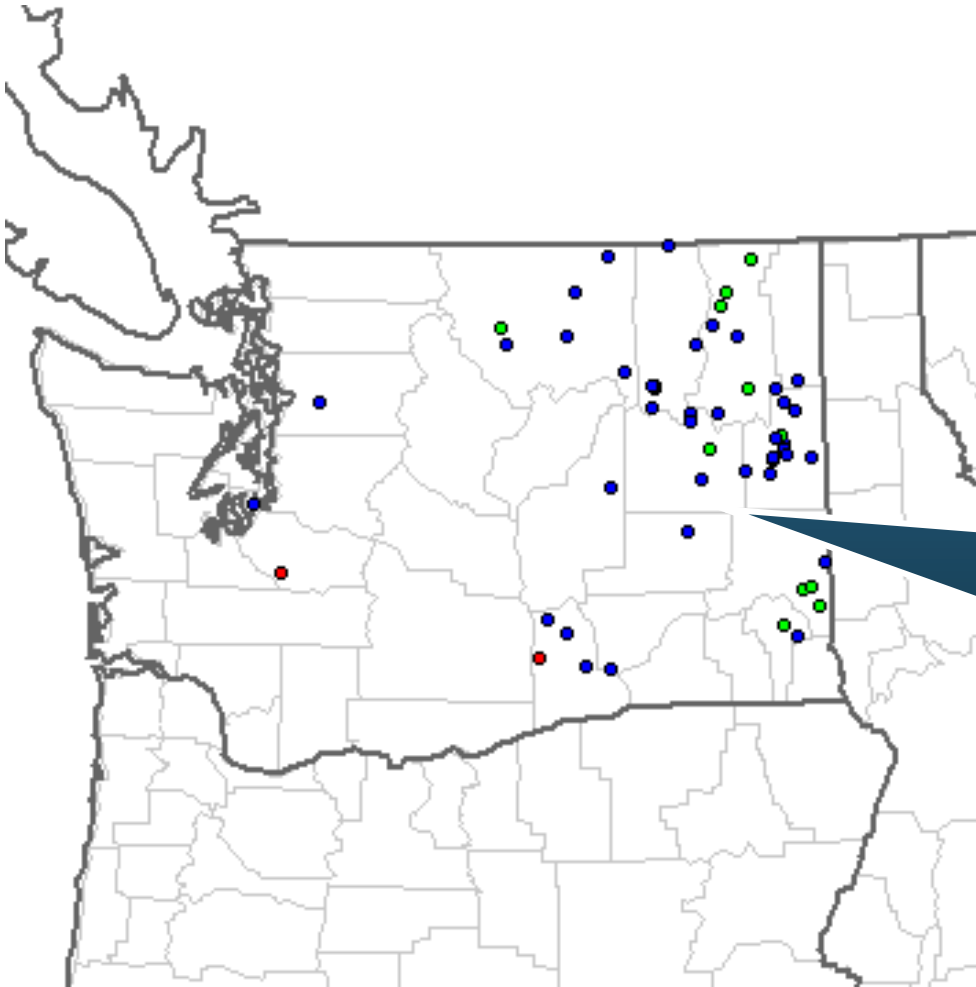
**27 severe weather  
reports through 9/21/14**

**0 Tornadoes**

**20 Large Hail Reports**

**7 High Wind Events**

# Severe Weather Reports in Washington: Through September 21, 2014



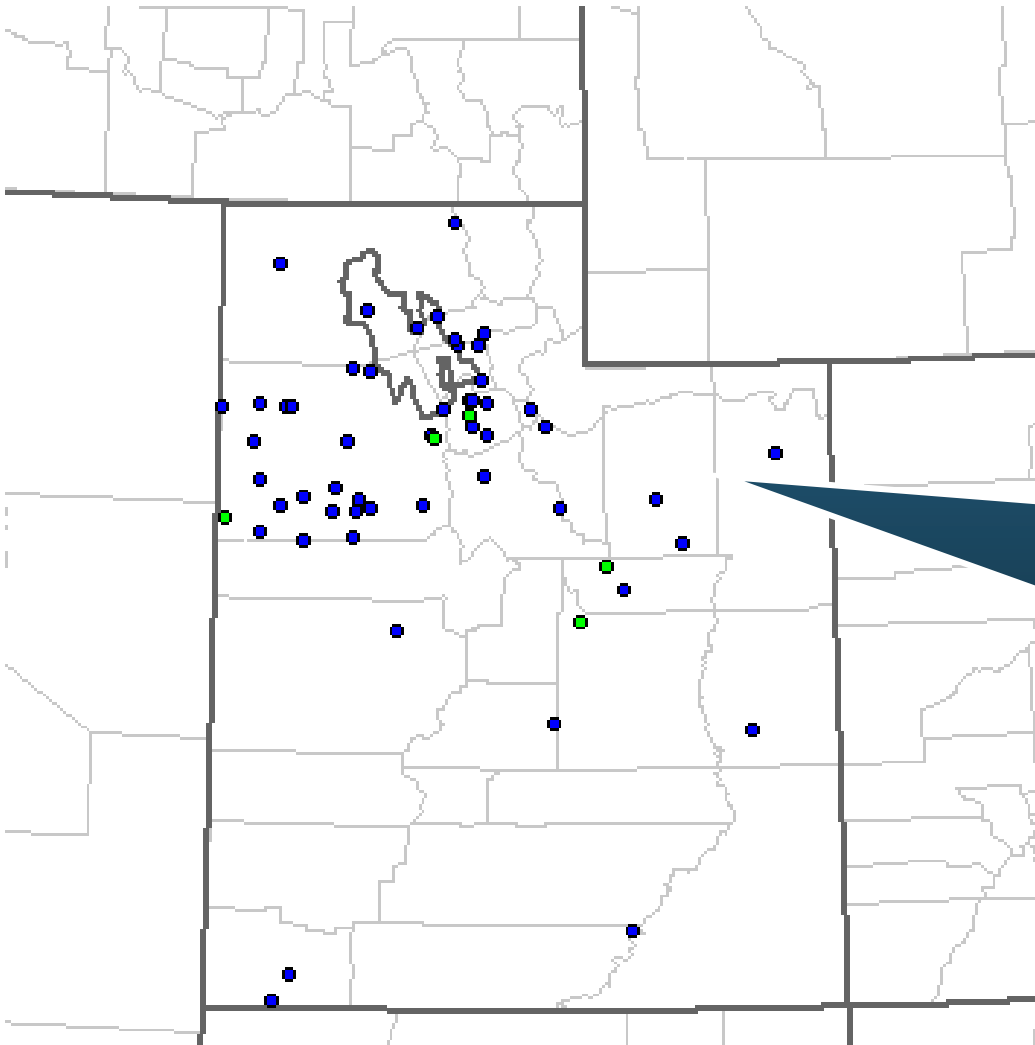
**63 severe weather  
reports through 9/21/14**

**2 Tornadoes**

**12 Large Hail Reports**

**49 High Wind Events**

# Severe Weather Reports in Utah: Through September 21, 2014



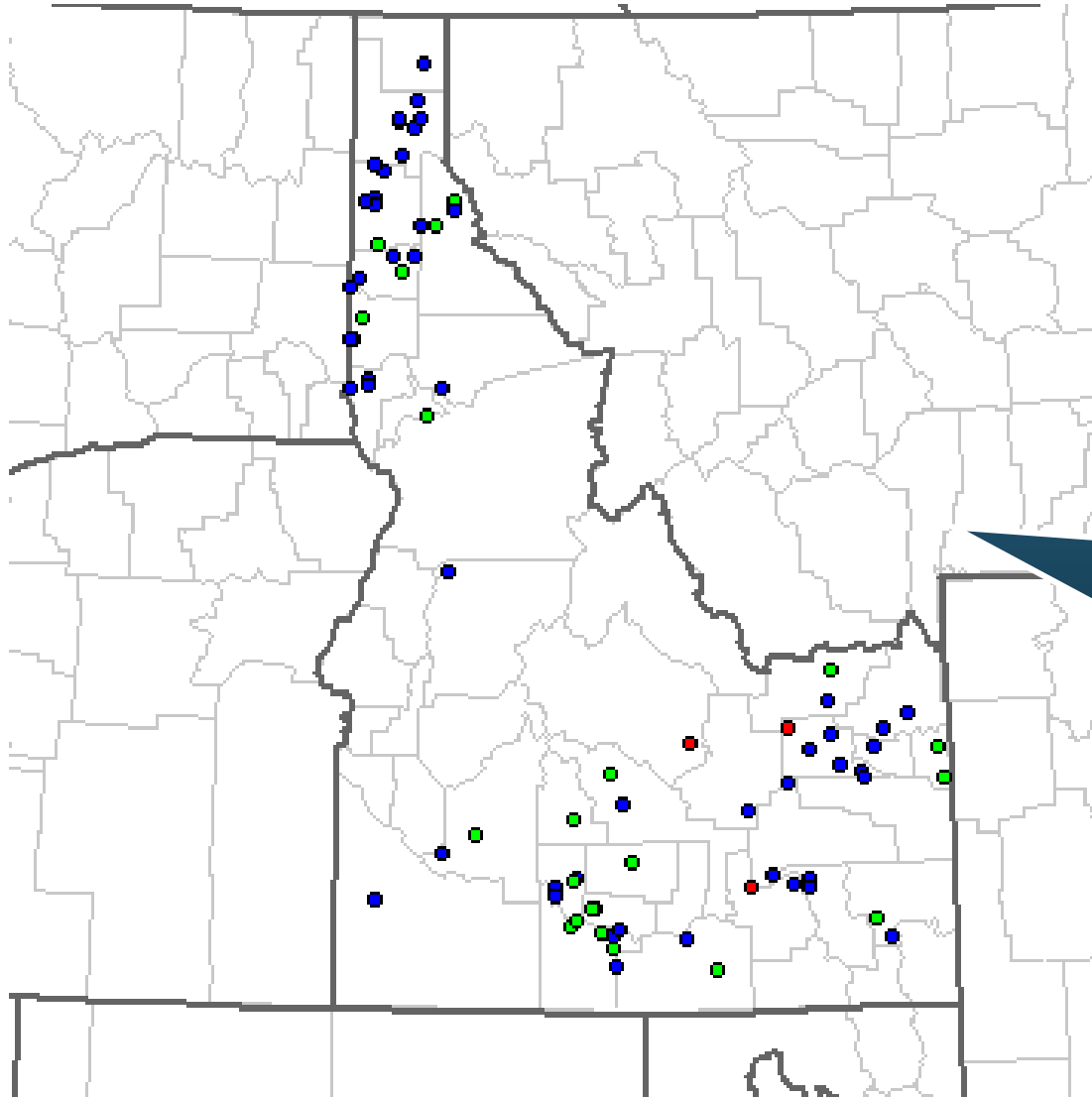
**65 severe weather  
reports through 9/21/14**

**0 Tornadoes**

**5 Large Hail Reports**

**60 High Wind Events**

# Severe Weather Reports in Idaho: Through September 21, 2014



**90 severe weather  
reports through 9/21/14**

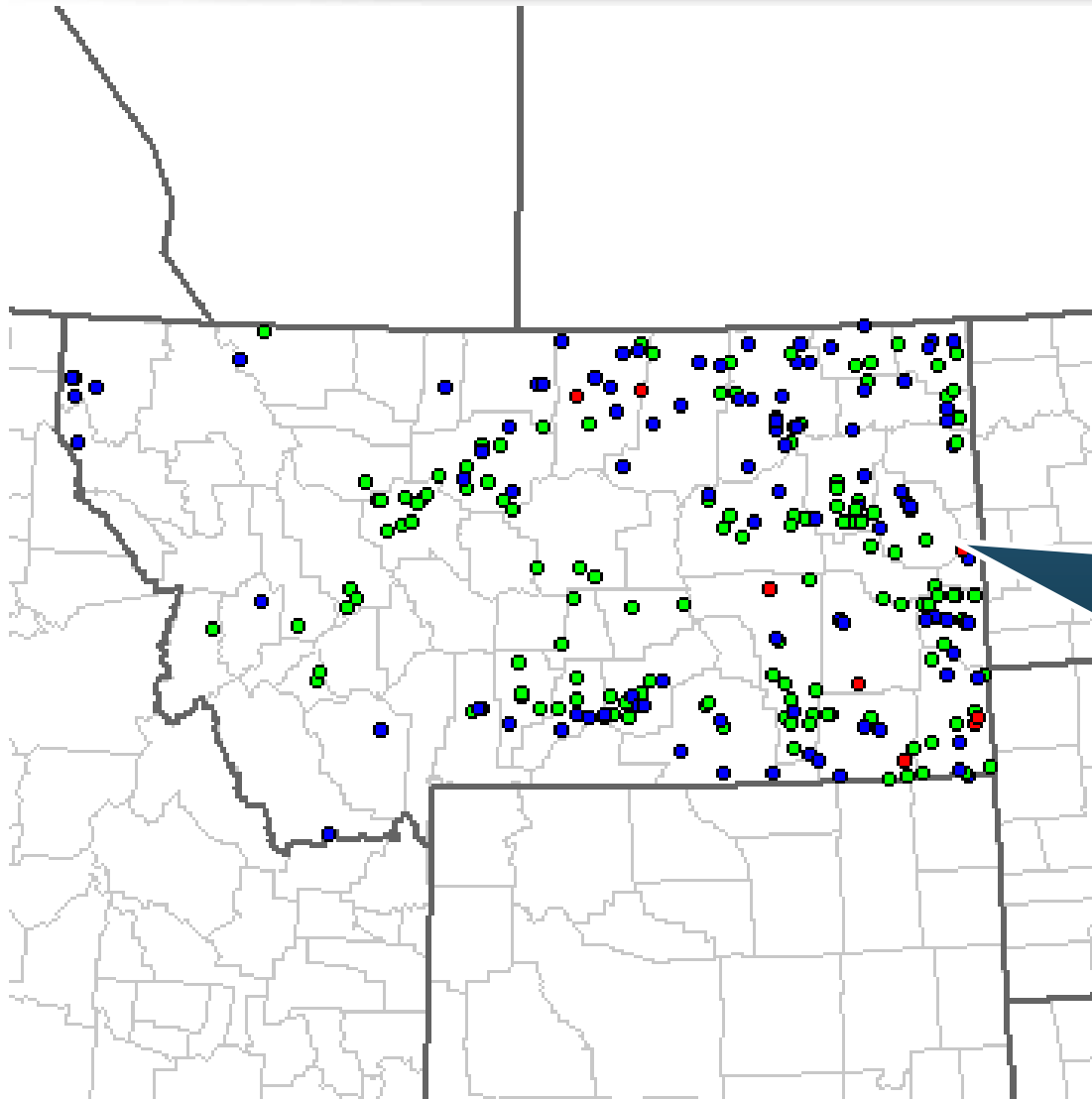
**3 Tornadoes**

**26 Large Hail Reports**

**61 High Wind Events**



# Severe Weather Reports in Montana: Through September 21, 2014



# Terrorism Update

## TRIA's Success

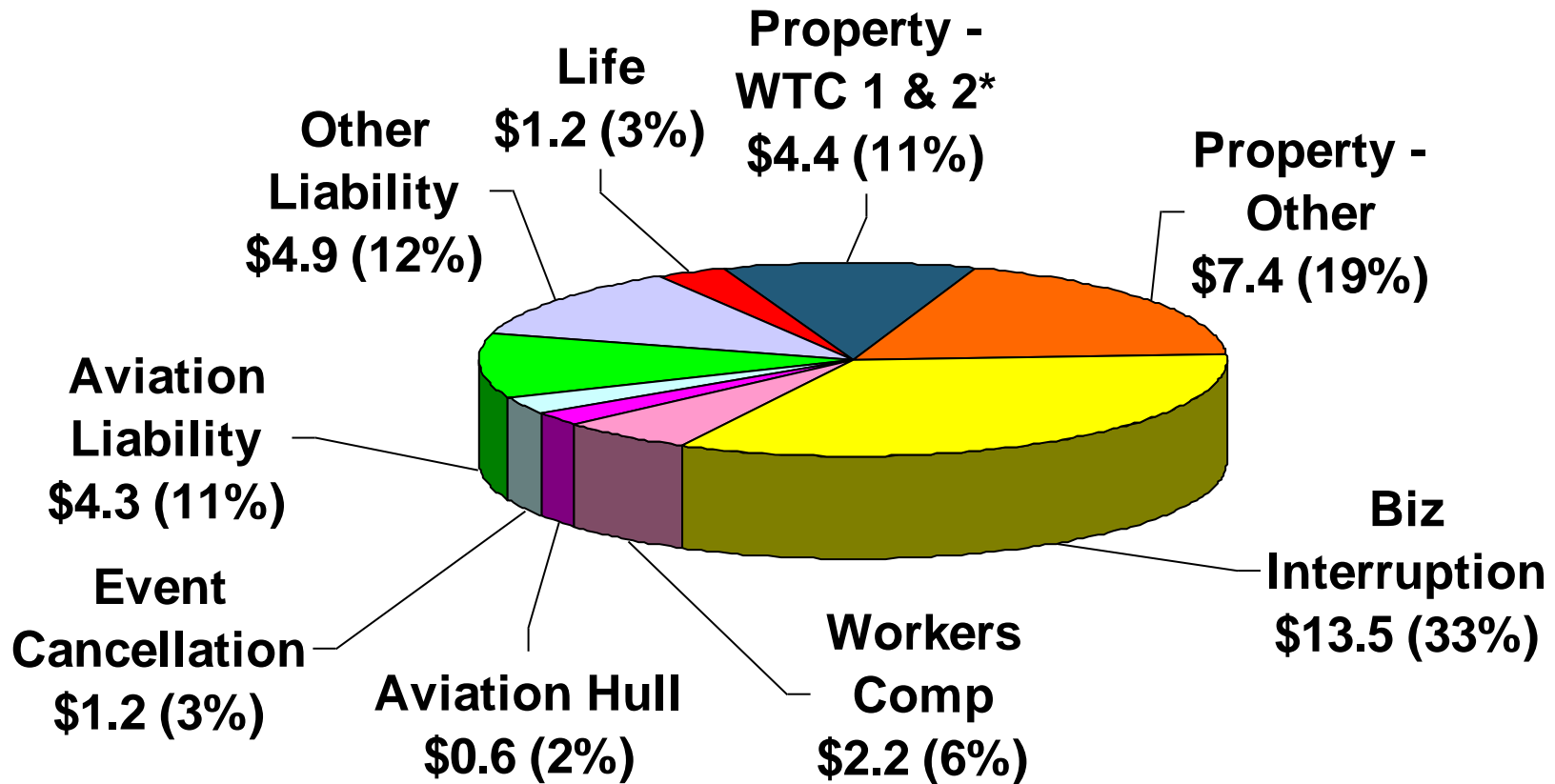
## Consequences of Expiration

***Download III's Terrorism Insurance Report at:***  
***[http://www.iii.org/white\\_papers/terrorism-risk-a-constant-threat-2014.html](http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2014.html)***



# Loss Distribution by Type of Insurance from Sept. 11 Terrorist Attack (\$ 2013)

(\$ Billions)



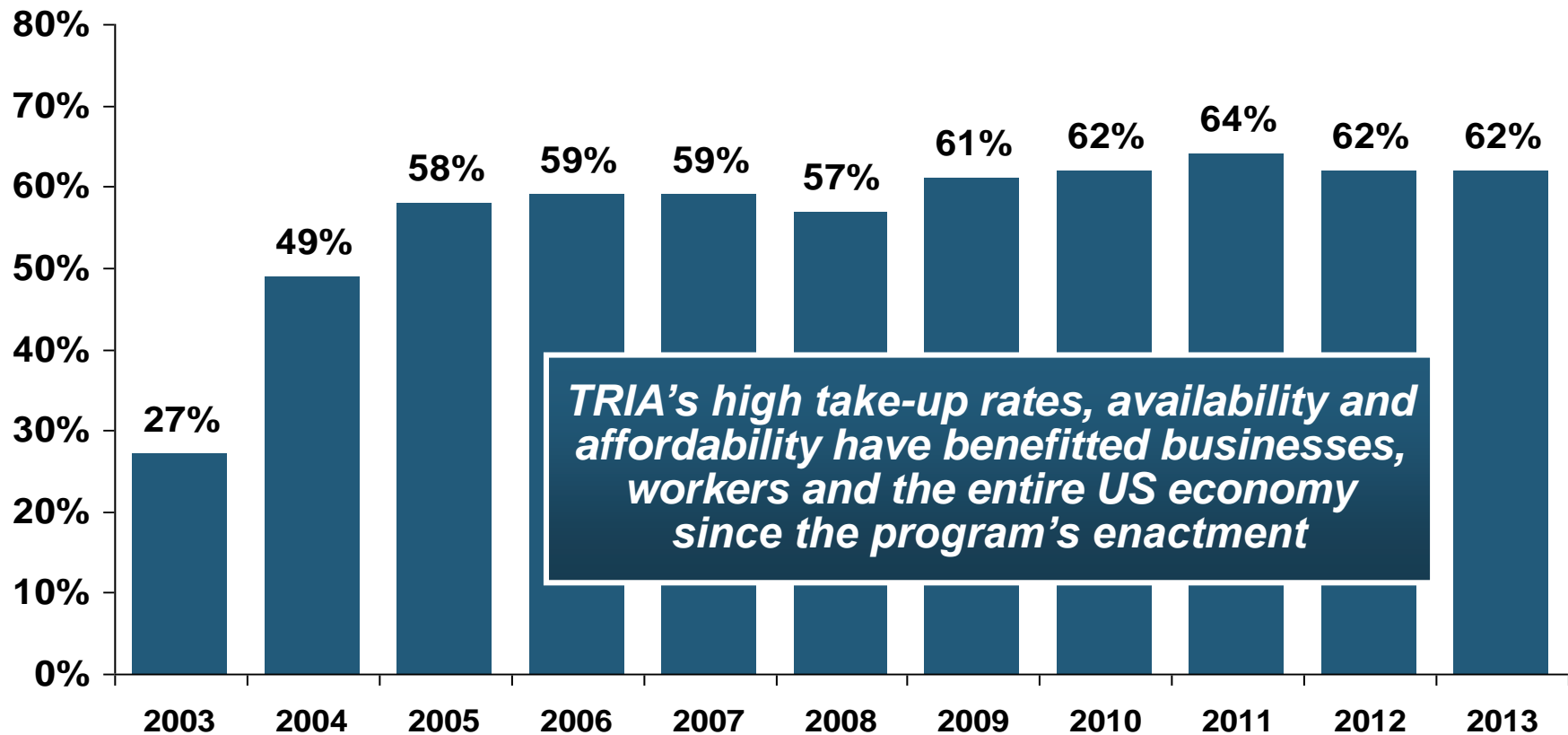
**Total Insured Losses Estimate: \$42.9B\*\***

\*Loss total does not include March 2010 New York City settlement of up to \$657.5 million to compensate approximately 10,000 Ground Zero workers or any subsequent settlements.

\*\*\$32.5 billion in 2001 dollars.

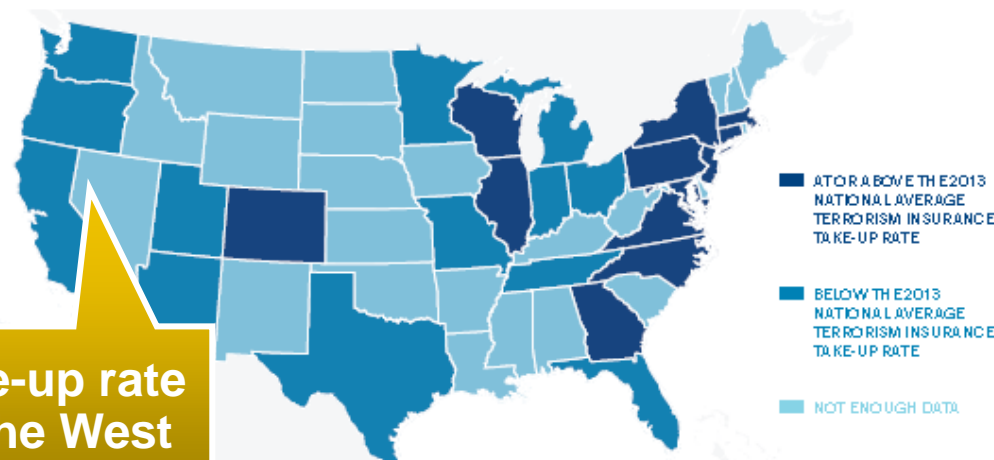
Source: Insurance Information Institute.

# Terrorism Insurance Take-up Rates, By Year, 2003-2013



**In 2003, the first year TRIA was in effect, the terrorism take-up rate was 27 percent. Since then, it has increased steadily, remaining in the low 60 percent range since 2009.**

# Terrorism Insurance Take-Up Rates by State for 2013\*



**Take-up rate  
in the West  
is 55%**

ARIZONA	CALIFORNIA	COLORADO	CONNECTICUT	DISTRICT OF COLUMBIA	FLORIDA
53%	56%	62%	71%	79%	47%
GEORGIA	HAWAII	ILLINOIS	INDIANA	MARYLAND	MASSACHUSETTS
73%	36%	73%	42%	81%	84%
MICHIGAN	MINNESOTA	MISSOURI	NEW JERSEY	NEW YORK	NORTH CAROLINA
41%	57%	50%	79%	80%	62%
OHIO	OREGON	PENNSYLVANIA	TENNESSEE	TEXAS	UTAH
44%	45%	74%	61%	54%	47%
VIRGINIA	WASHINGTON	WISCONSIN			
77%	60%	80%			

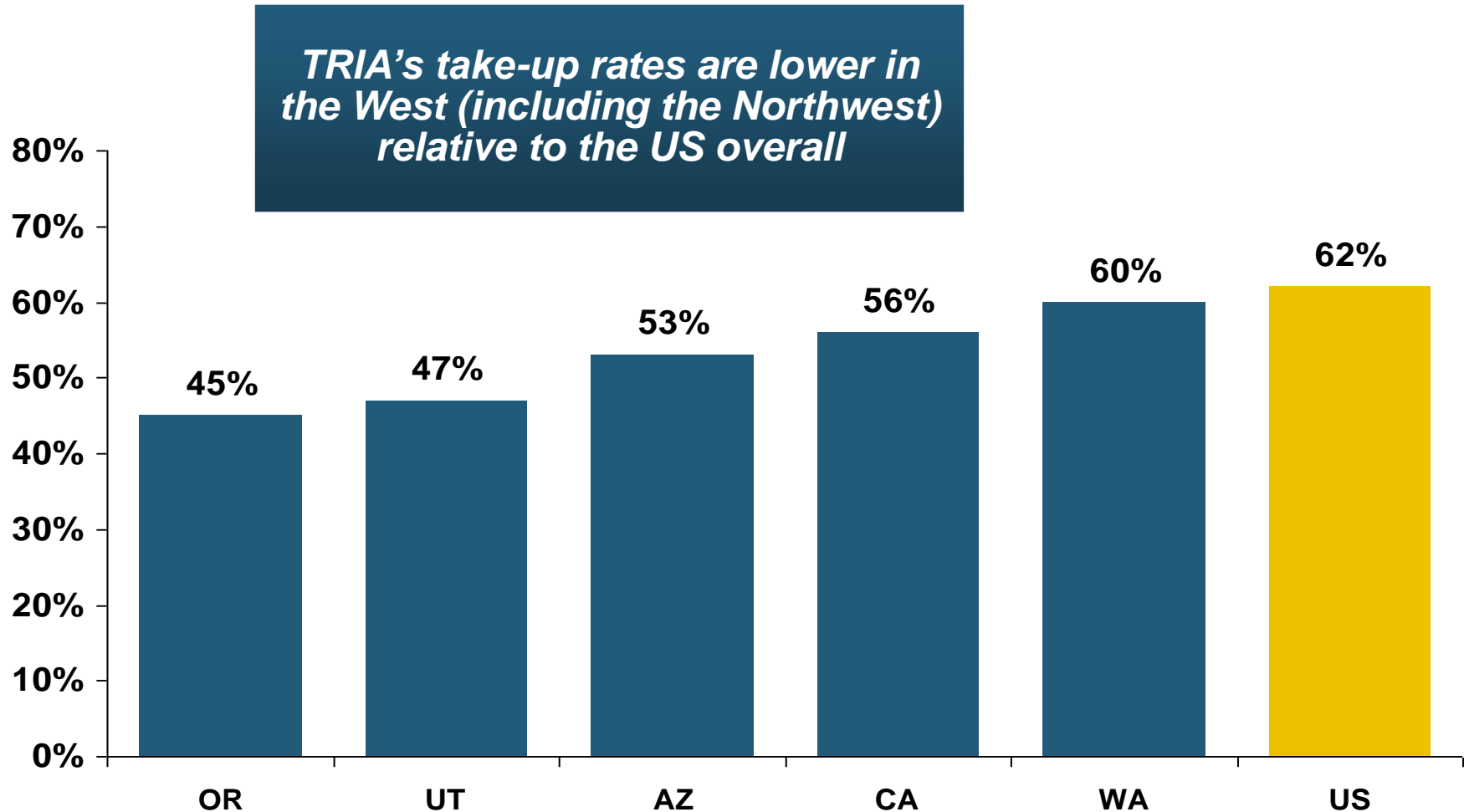
The 27 states listed met the minimum threshold of available 2013 peer data.

**The overall US take-up rate for terrorism coverage was 62% in 2013 and ranged from a low of 41% in Michigan to a high of 84% in Massachusetts (where demand likely increased due to the April 2013 Boston Marathon bombing)**

\*Data for 27 states with sufficient data.

Source: Marsh 2014 Terrorism Risk Insurance Report; Insurance Information Institute.

# Terrorism Take-up Rates for Selected Western States: vs. US in 2013



Note: Insufficient data available for ID and MT.

Source: Marsh Global Analytics, *2014 Terrorism Risk Insurance Report*, April 2014; Insurance Information Institute.

# Terrorism Risk Insurance Program

- Testified before House Financial Services Nov. 2013
- Testified before Senate Banking Cmte. in Sept. 2013
- Provided testimony at NYC hearing in June 2013
- Provided Capitol Hill Joint House/Senate Staff Briefing in April 2014
- I.I.I. Published Several Updates to its Study on Terrorism Risk and Insurance



Senate Banking Committee, 9/25/13



House Financial Services  
Subcommittee, 11/13/13

# I.I.I. White Paper (March 2014): *Terrorism Risk: A Constant Threat*



## TERRORISM RISK: A CONSTANT THREAT

Impacts for Property/Casualty Insurers

MARCH 2014

Robert P. Hartwig, Ph.D., CPCU  
President  
(212) 348-6520  
bobh@iii.org

Claire Wilkinson  
Consultant  
(817) 459-6497  
claire.w@iii.org

- Detailed history of TRIA
- How TRIA works
- Assessing the threat of terrorism
- Terrorism market conditions
- Global perspective
- Download at [http://www.iii.org/white\\_papers/terrorism-risk-a-constant-threat-2014.html](http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2014.html)

# Summary of President's Working Group Report on TRIA

- Insurance for terrorism risk is available and affordable
  - ◆ Availability/affordability have not changed appreciably since 2010
- Prices for terrorism risk insurance vary considerably depending on the policyholder's industry and location of risk
- Prices have declined since TRIA was enacted
  - ◆ Currently ~3% to 5% of commercial property insurance premiums
- Take-up rates have improved since adoption of TRIA
  - ◆ Overall take-up rate is steady at ~60% (62% in 2013 per Marsh)
- *Market capacity is currently tightening given uncertainty over TRIA reauthorization*
- *The private market does not have the capacity to provide reinsurance for terror risk to the extent currently provided by TRIA*
- *In the absence of TRIA, terrorism risk insurance would likely be less available. Coverage that would be available likely would be more costly and/or limited in scope*

# Framing the Issue and Educating Policymakers: A Timeline

- Education Efforts Pay Off
  - ◆ Senate Banking Committee unanimously reports out TRIA bill 22-0
  - ◆ House Financial Services Committee passes bill
  - ◆ Senate passes bill with strong support; Votes 93-4 to reauthorize on 7/17
- Key addition to bills: clarification on certification process, cyber terrorism
- Where do we go from here? Are difference between the bills bridgeable?
  - ◆ Reauthorization terms differ (Senate: 7yrs; House: 5yrs)
  - ◆ Bifurcation of NBCR and conventional
  - ◆ Trigger points (\$100M vs. \$500M)
- Clock is running: After July 31, the House is in session for only 12 days before the election
  - ◆ Lame duck for enactment? Even that's in jeopardy!



# Initial Market Response to Potential TRIA Expiration

- Carriers monitoring and modeling WC exposure aggregations across their portfolio and correlated lines of business such as property or life and health (both on an individual client basis and in the aggregate)
- Carrier declinations have occurred because they are “overlined” in a particular zip code or city
- Many carriers attached NCCI Endorsement WC00 01 14 (Notification Endorsement of Pending Law Change to Terrorism Risk Insurance Program Reauthorization Act of 2007) or an equivalent for non-NCCI states.
- For some high-profile clients or those in urban areas and/or with high employee concentrations, carriers issued short term policies set to expire at the same time as TRIPRA
- Regarding non-WC lines (including select XSWC placements), policyholders were faced with new or broadened exclusionary wording on GL, umbrella, and XS forms

# **CAT OF THE FUTURE? *CYBER RISK***

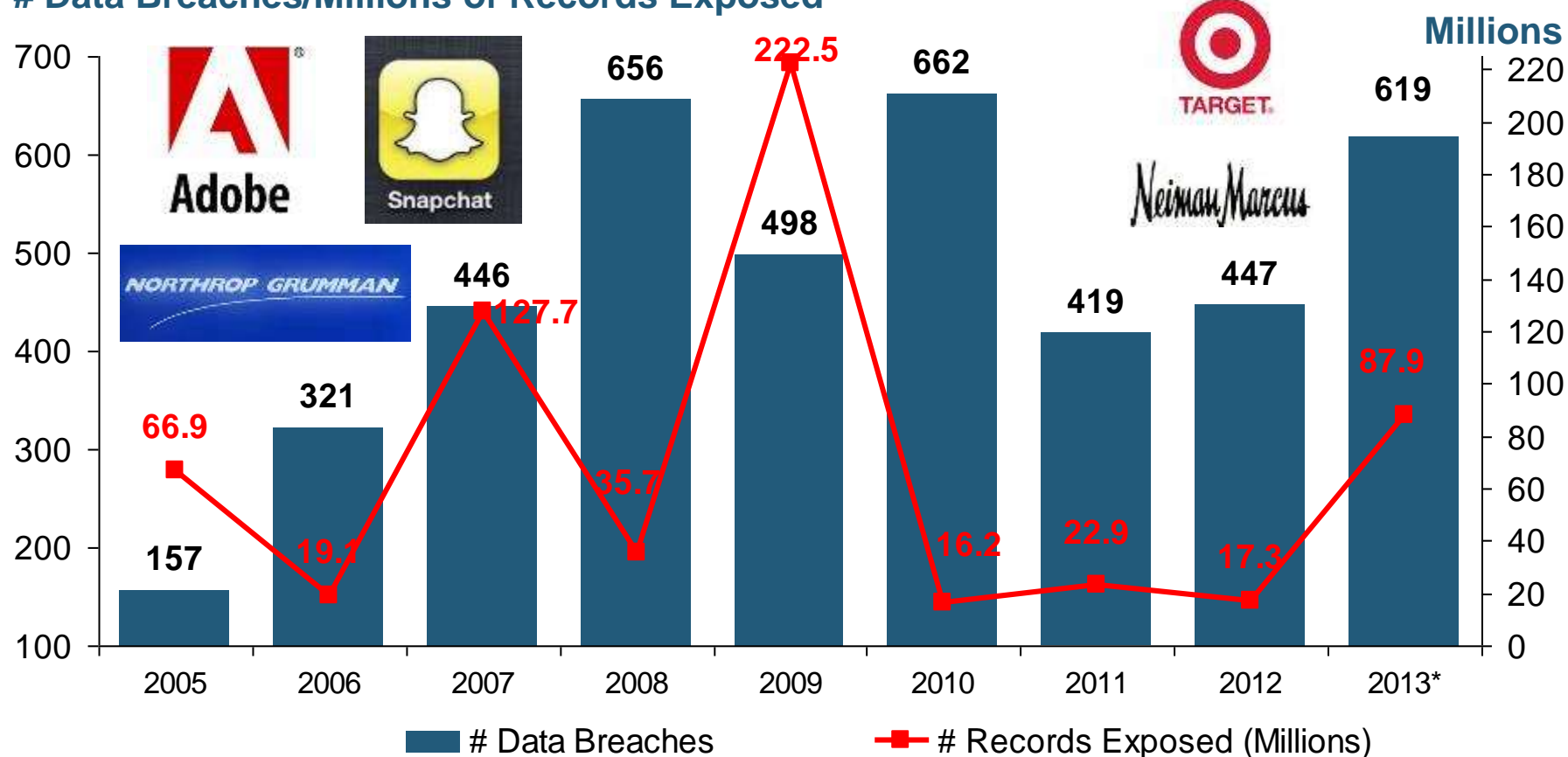
**Cyber Risk is a Rapidly Emerging  
Exposure for Businesses Large  
and Small in Every Industry**

**NEW III White Paper:**

[http://www.iii.org/assets/docs/pdf/paper\\_CyberRisk\\_2013.pdf](http://www.iii.org/assets/docs/pdf/paper_CyberRisk_2013.pdf)

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

# Data Breaches/Millions of Records Exposed

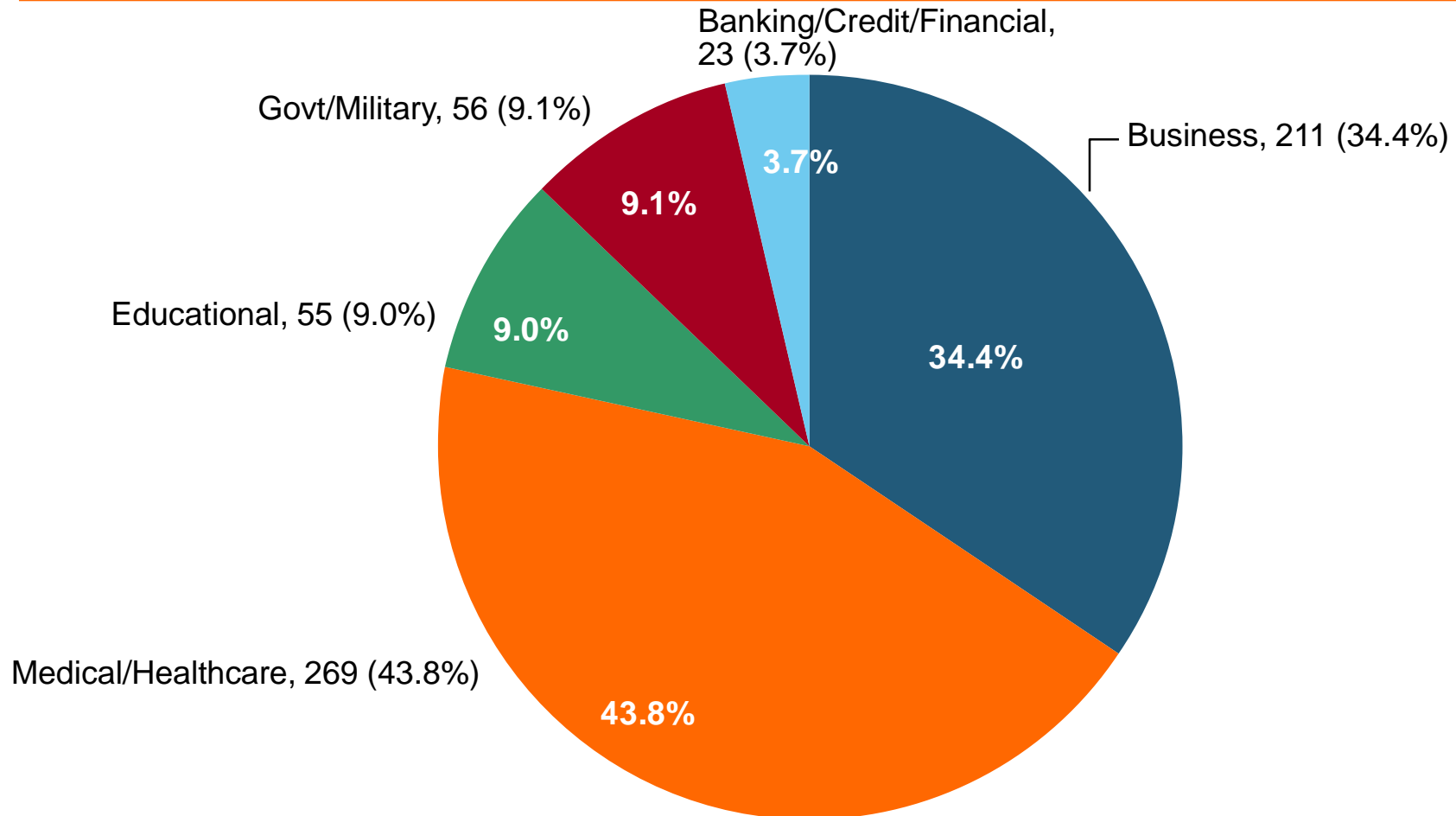


**The Total Number of Data Breaches (+38%) and Number of Records Exposed (+408%) in 2013 Soared**

\* 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.

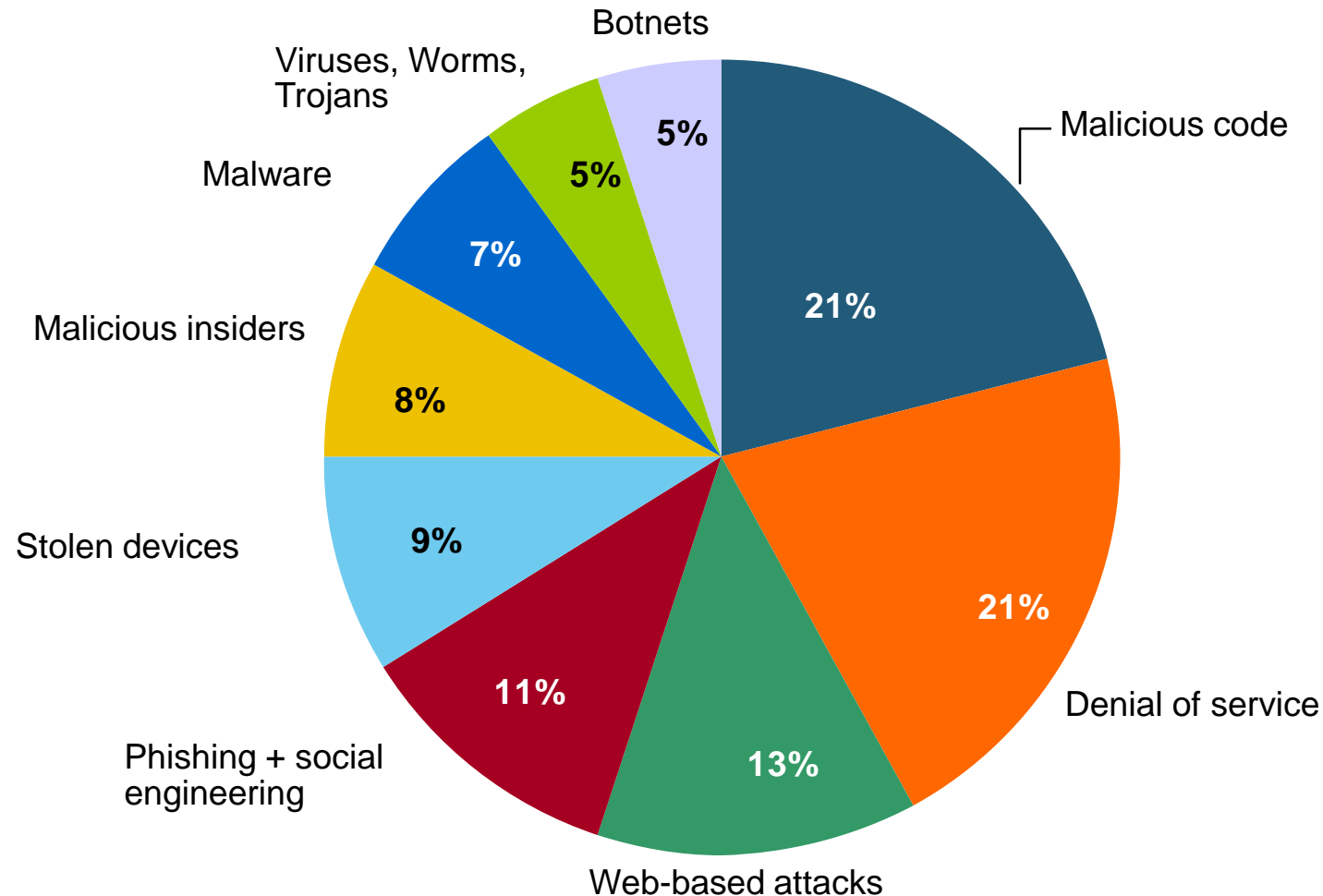
# 2013 Data Breaches By Business Category, By Number of Breaches

The majority of the 614 data breaches in 2013 affected business and medical/healthcare organizations, according to the Identity Theft Resource Center.



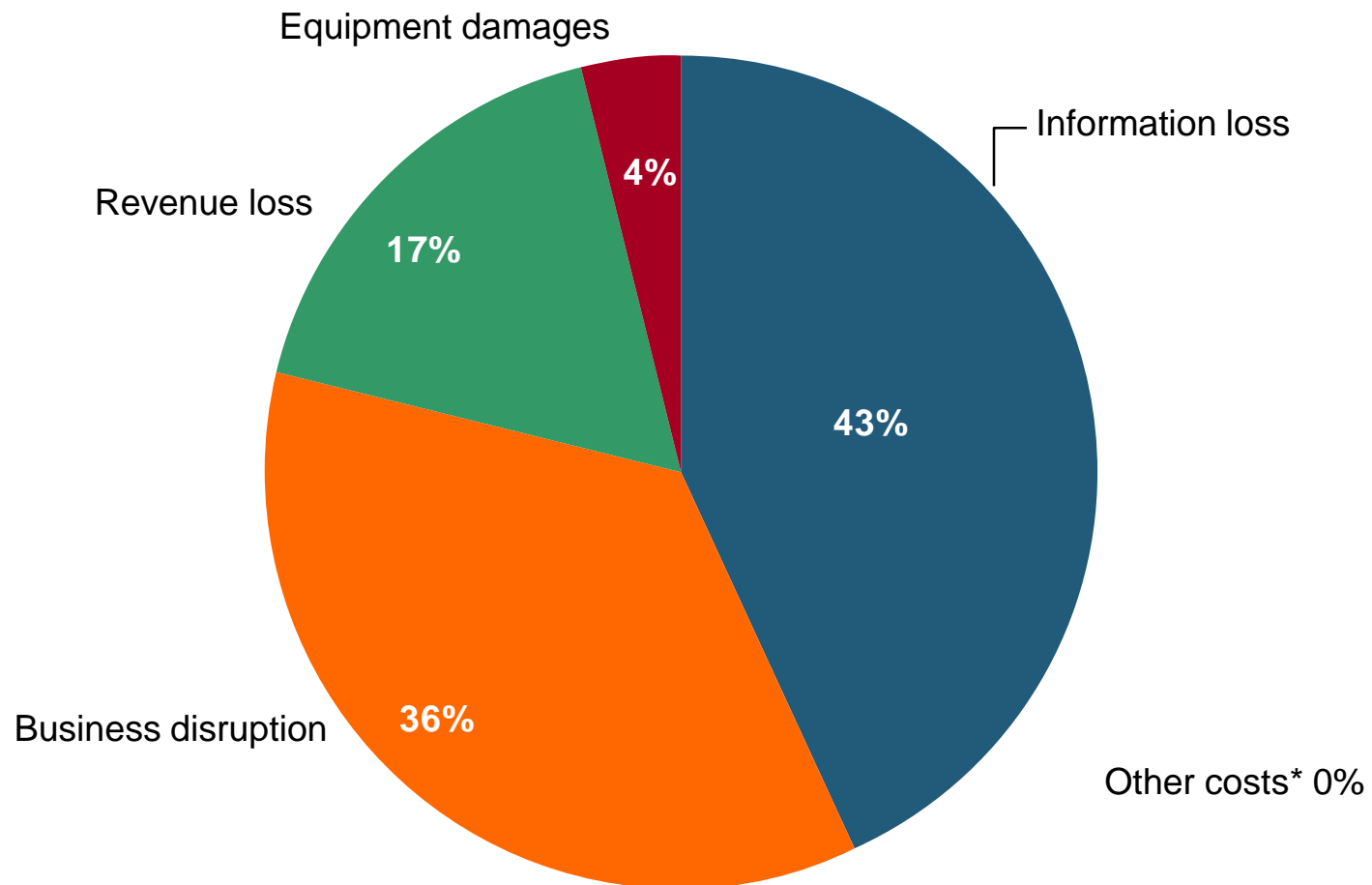
# The Most Costly Cyber Crimes, Fiscal Year 2013

Denial of service, malicious code and web-based attacks account for more than 55 percent of all cyber costs per U.S. organization on an annual basis.



# External Cyber Crime Costs: Fiscal Year 2013

Information loss (43%) and business disruption or lost productivity (36%) account for the majority of external costs due to cyber crime.



\* Other costs include direct and indirect costs that could not be allocated to a main external cost category

Source: 2013 Cost of Cyber Crime: United States, Ponemon Institute.

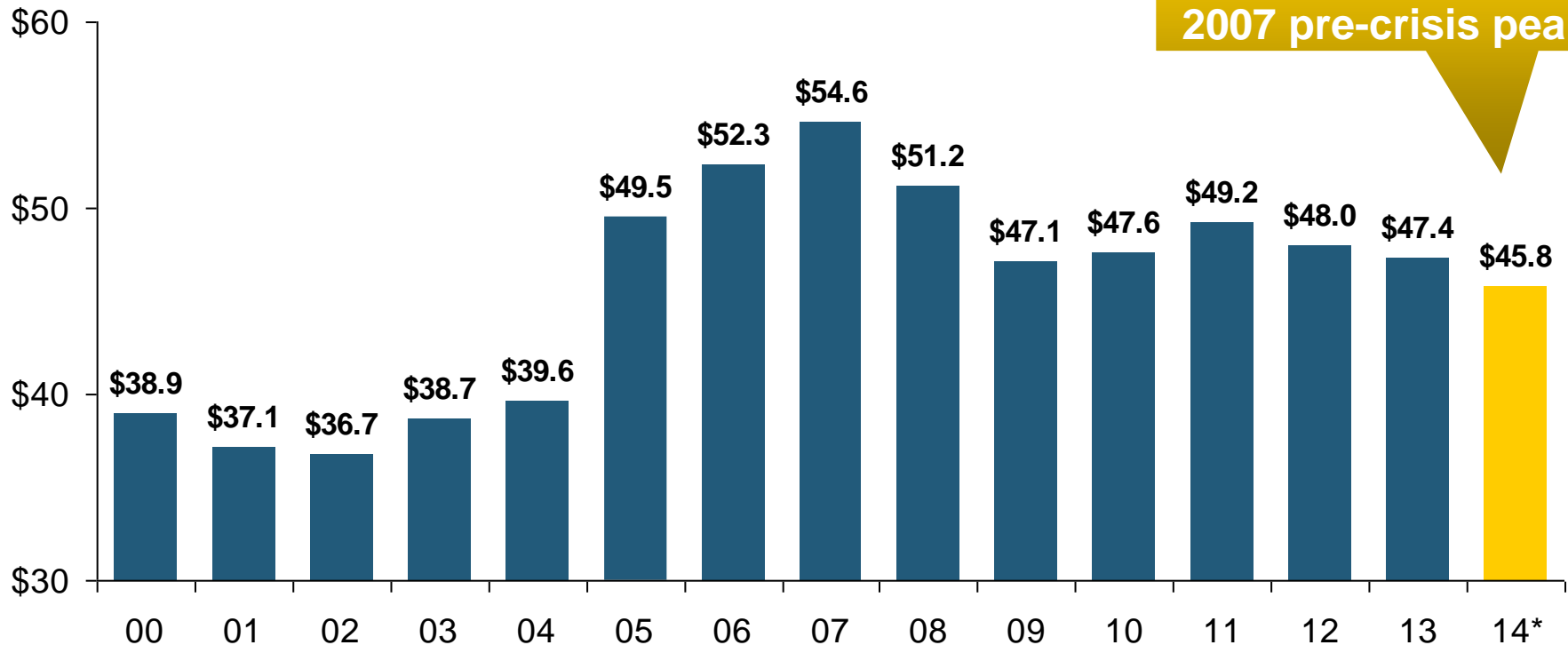
# **INVESTMENTS: THE NEW REALITY**

**Investment Performance is a Key  
Driver of Profitability**

***Depressed Yields Will Necessarily  
Influence Underwriting & Pricing***

# Property/Casualty Insurance Industry Investment Income: 2000–2014<sup>1</sup>

(\$ Billions)



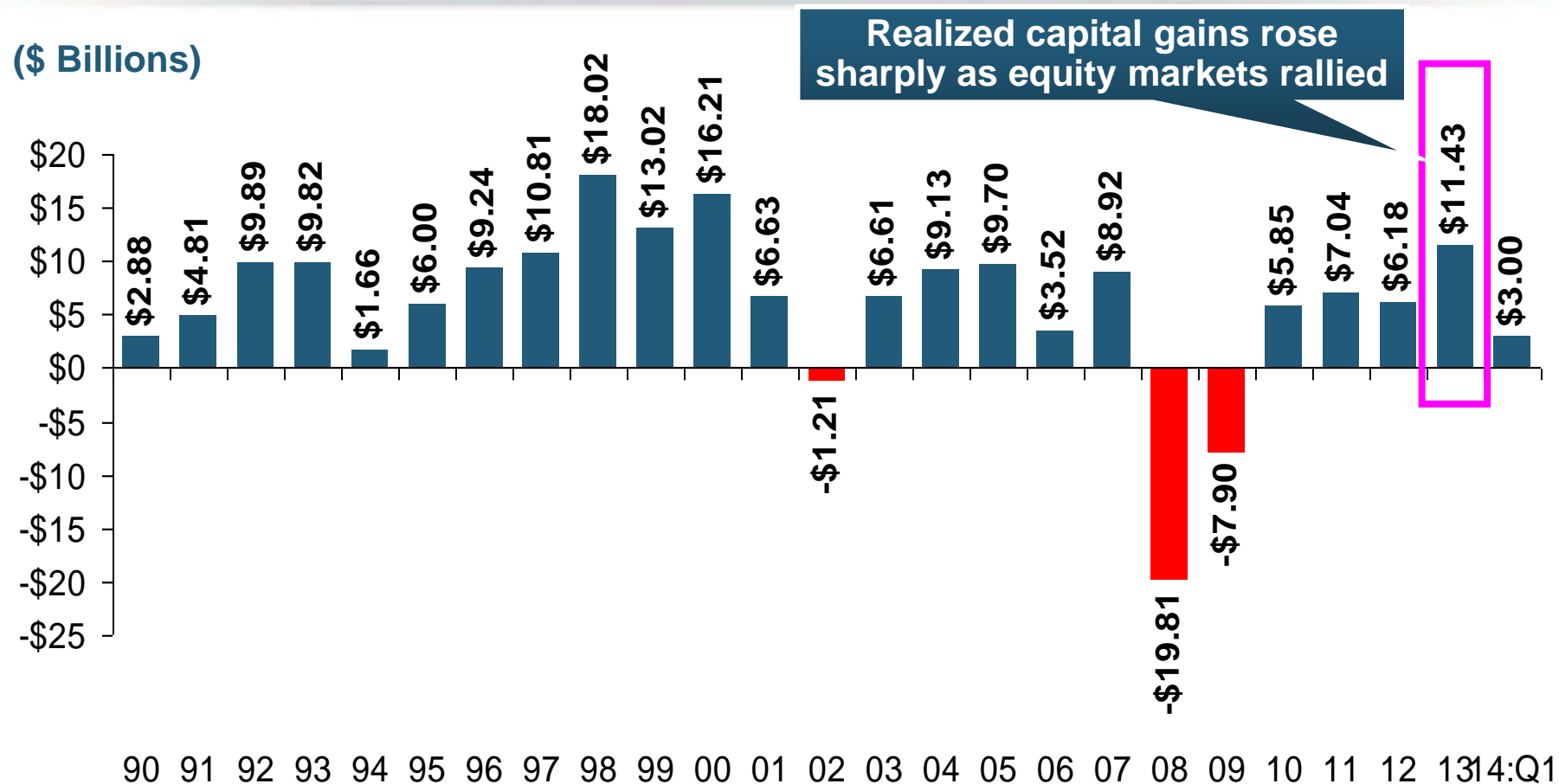
**Due to persistently low interest rates,  
investment income fell in 2012 and in 2013  
and is falling again in 2014.**

<sup>1</sup> Investment gains consist primarily of interest and stock dividends.  
Sources: ISO; Insurance Information Institute.

\*2014 investment income is estimated Q1, annualized.



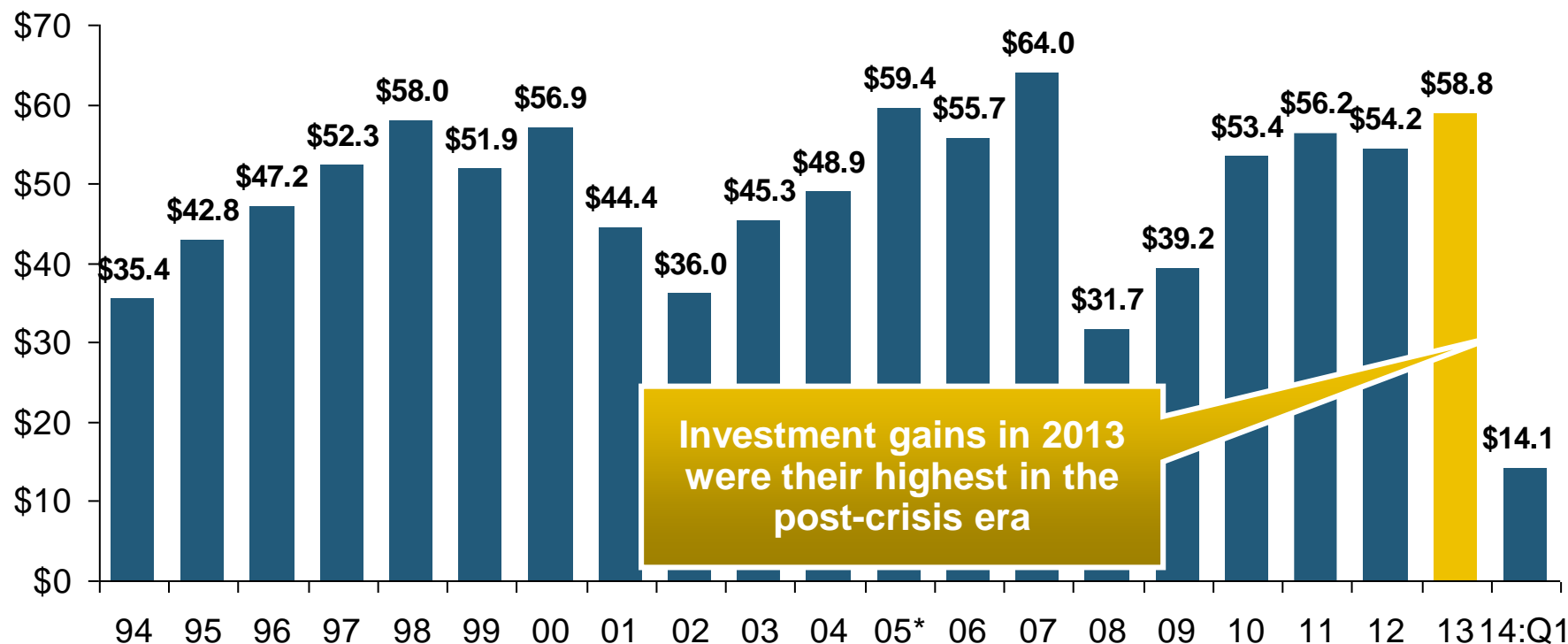
# P/C Insurer Net Realized Capital Gains/Losses, 1990-2014:Q1



**Insurers Posted Net Realized Capital Gains in 2010 - 2013 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009's Large Drop in Profits and ROE**

# Property/Casualty Insurance Industry Investment Gain: 1994–2014:Q1<sup>1</sup>

(\$ Billions)



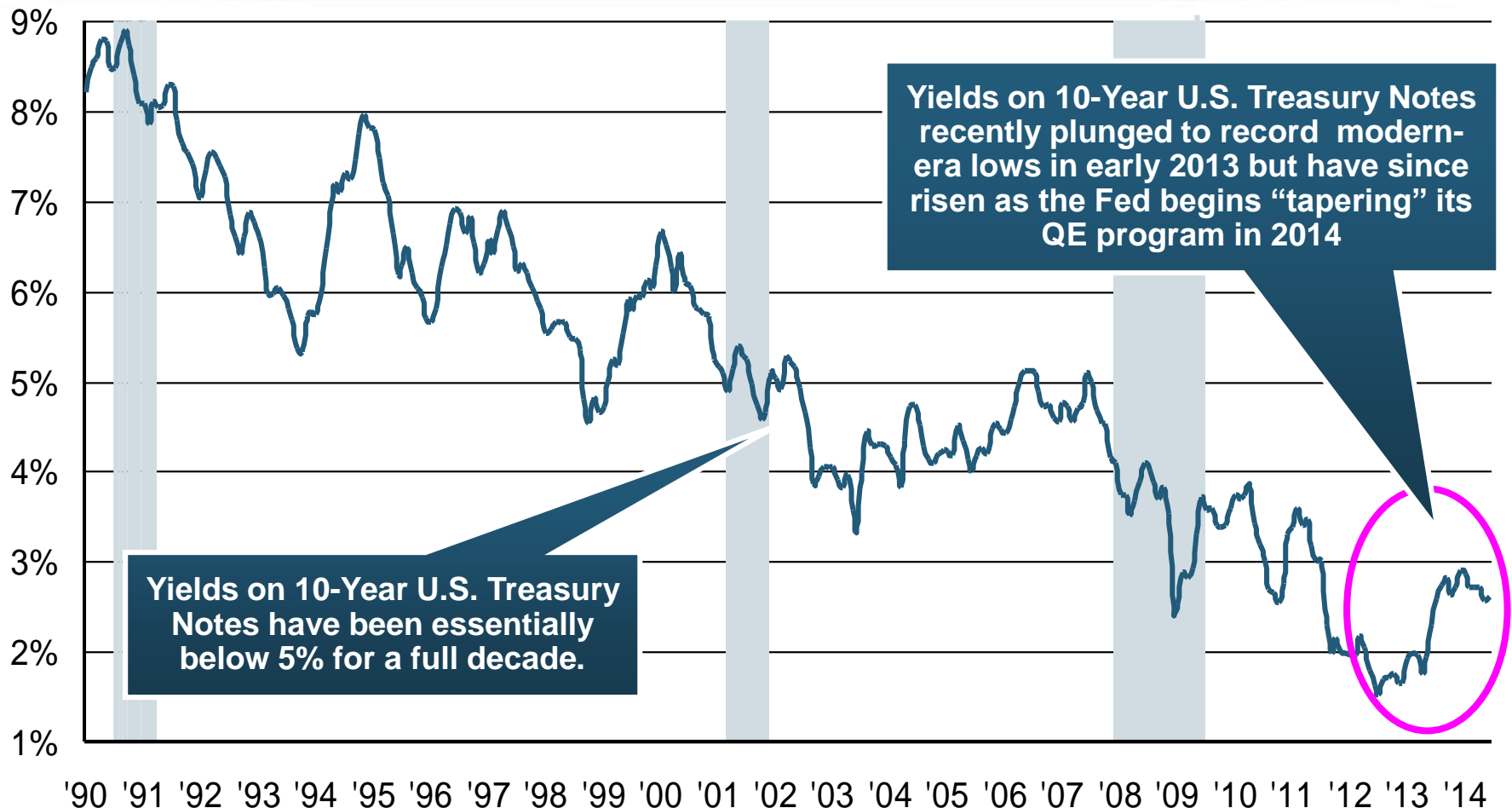
**Investment Income Continued to Fall in 2013 Due to Low Interest Rates but Realized Investment Gains Were Up Sharply; The Financial Crisis Caused Investment Gains to Fall by 50% in 2008**

<sup>1</sup> Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

\* 2005 figure includes special one-time dividend of \$3.2B;

Sources: ISO; Insurance Information Institute.

# U.S. 10-Year Treasury Note Yields: A Long Downward Trend, 1990–2014\*



**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.**

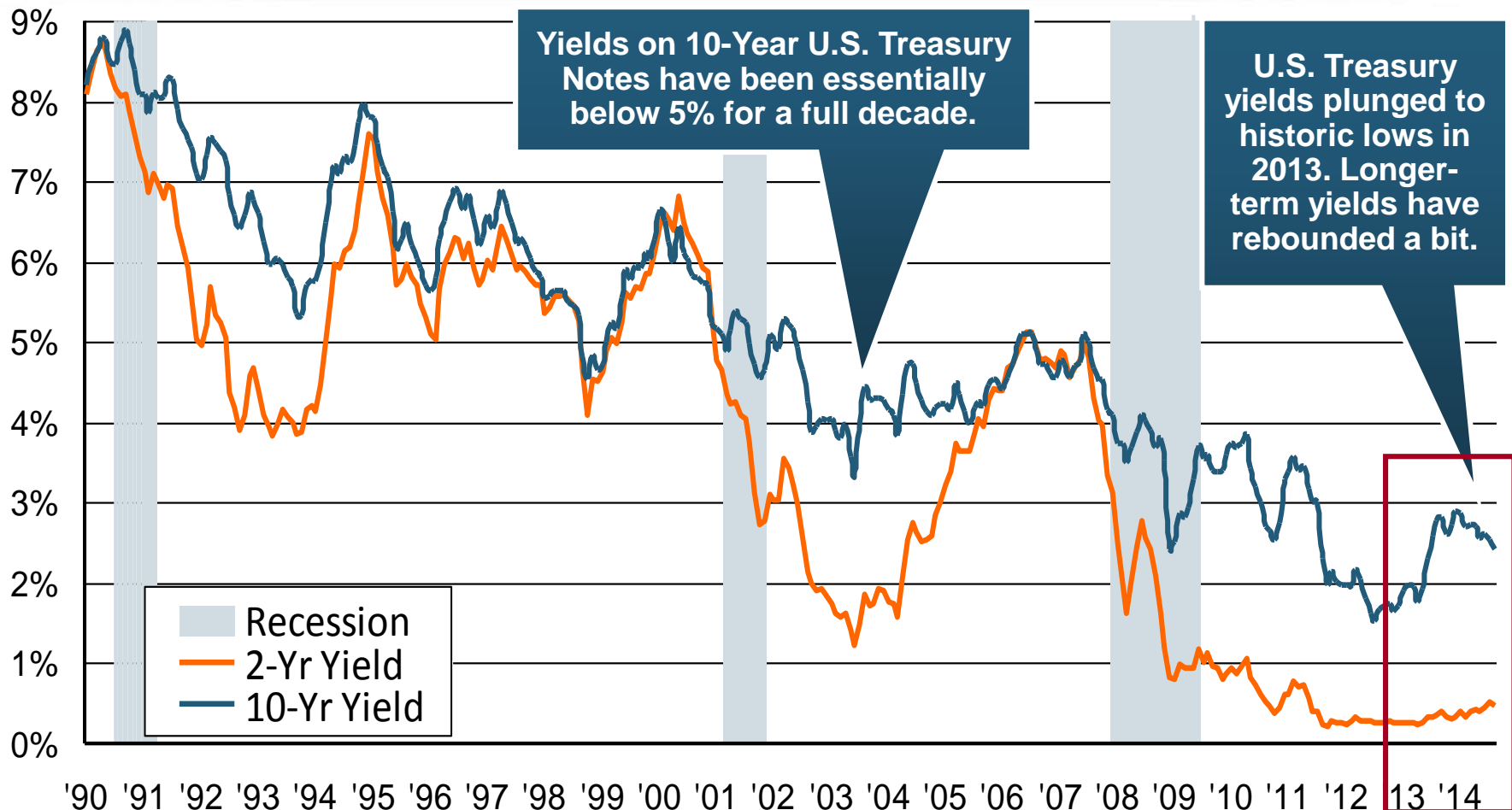
\*Monthly, through June 2014.

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.

# U.S. Treasury Security Yields: A Long Downward Trend, 1990–2014\*

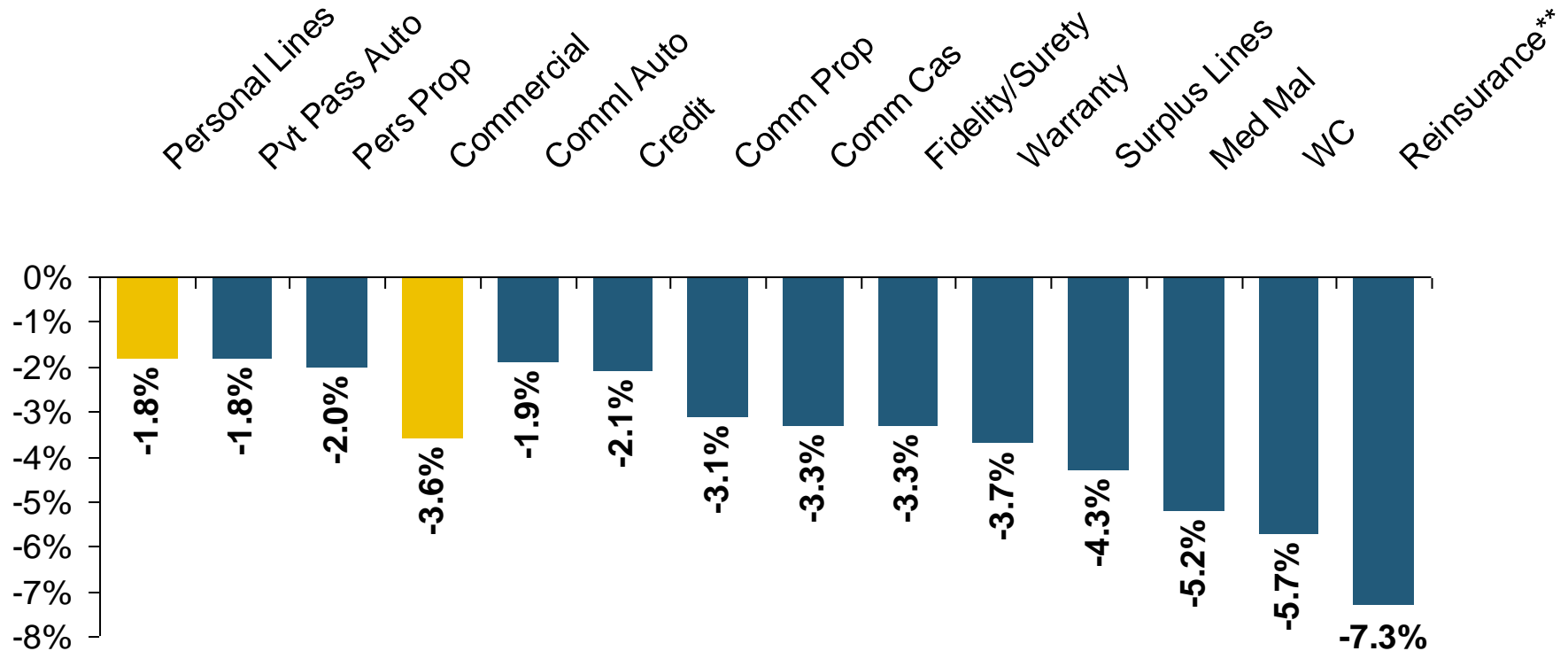


**Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.**

\*Monthly, constant maturity, nominal rates, through Aug. 2014.

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

# Reduction in Combined Ratio Necessary to Offset 1% Decline in Investment Yield to Maintain Constant ROE, by Line\*



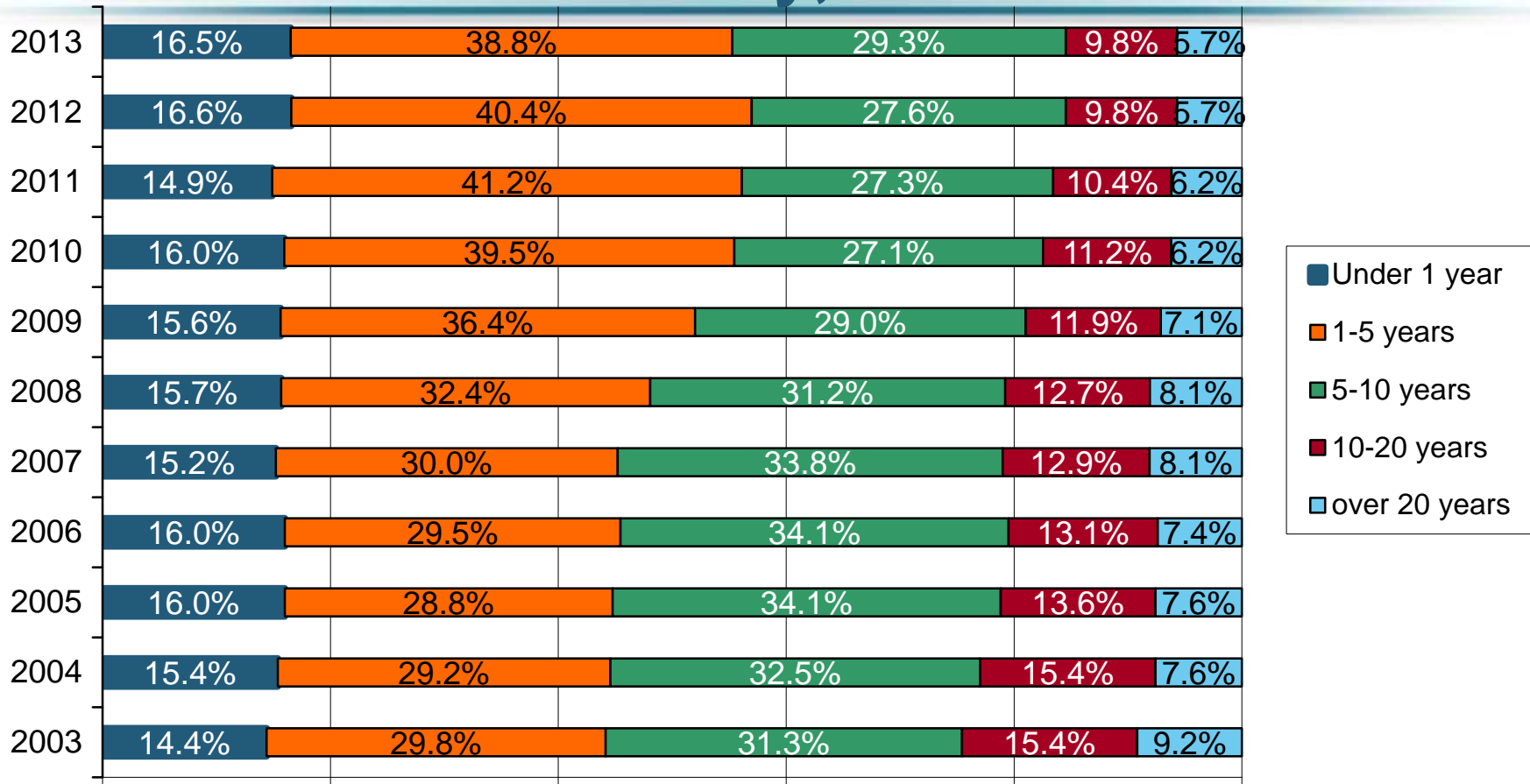
**Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline**

\*Based on 2008 Invested Assets and Earned Premiums

\*\*US domestic reinsurance only

Source: A.M. Best; Insurance Information Institute.

# Distribution of Bond Maturities, P/C Insurance Industry, 2003-2013



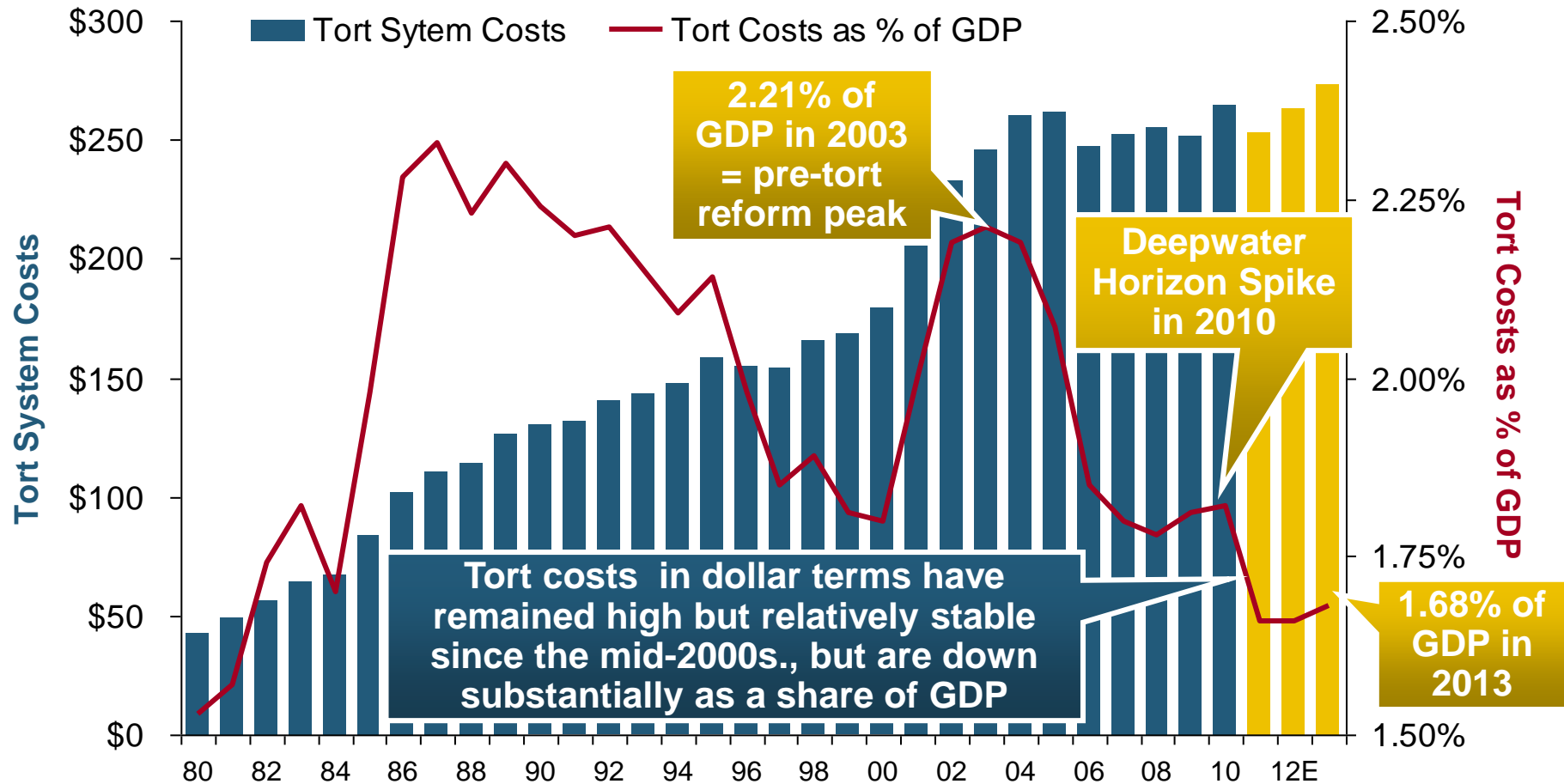
The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 15.5% in 2012) and then trimmed bonds in the 5-10-year category (from 31.3% in 2003 to 27.6% in 2012). Falling average maturity of the P/C industry's bond portfolio is contributing to a drop in investment income along with lower yields.

# **Shifting Legal Liability & Tort Environment**

**Is the Tort Pendulum  
About to Swing Against Corporate  
America and their Insurers?**

# Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

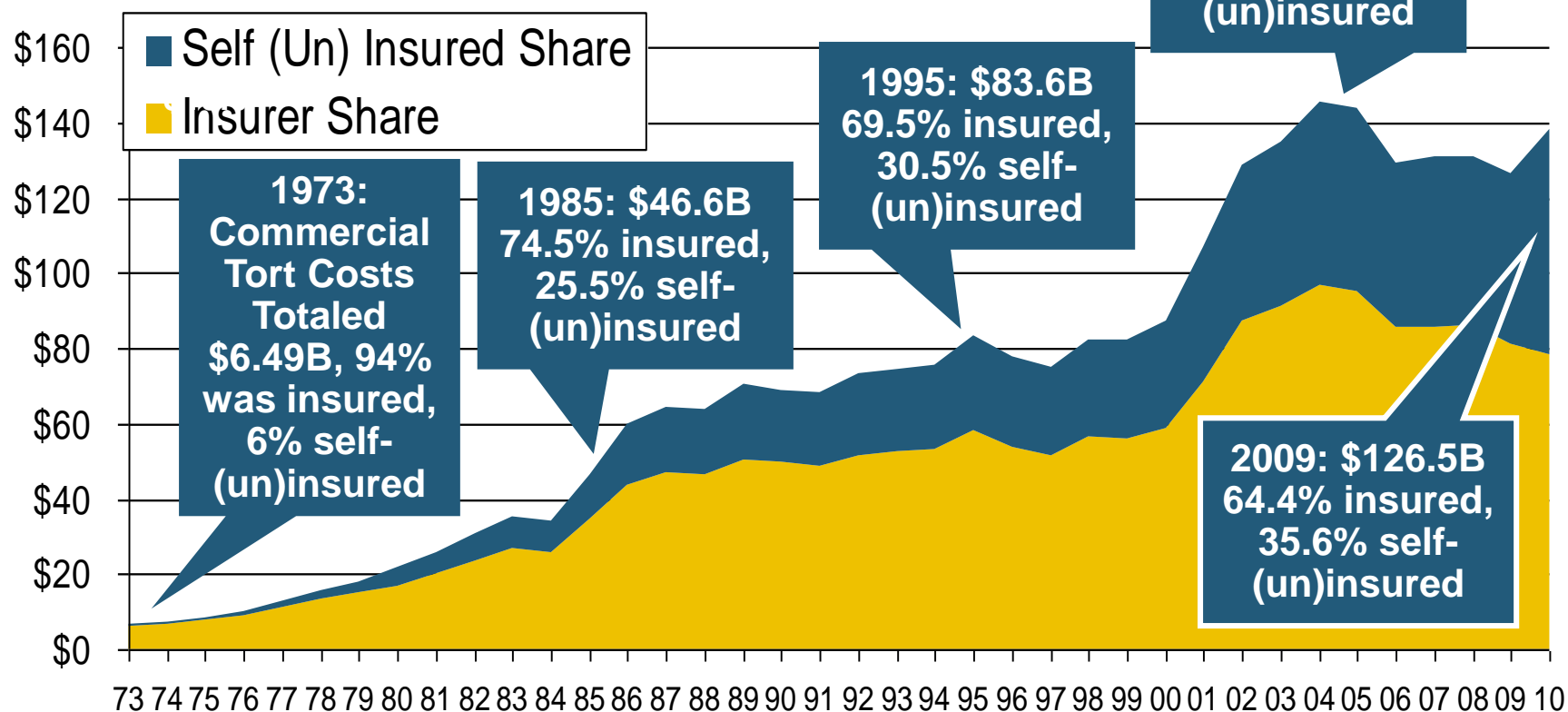
(\$ Billions)





# Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010

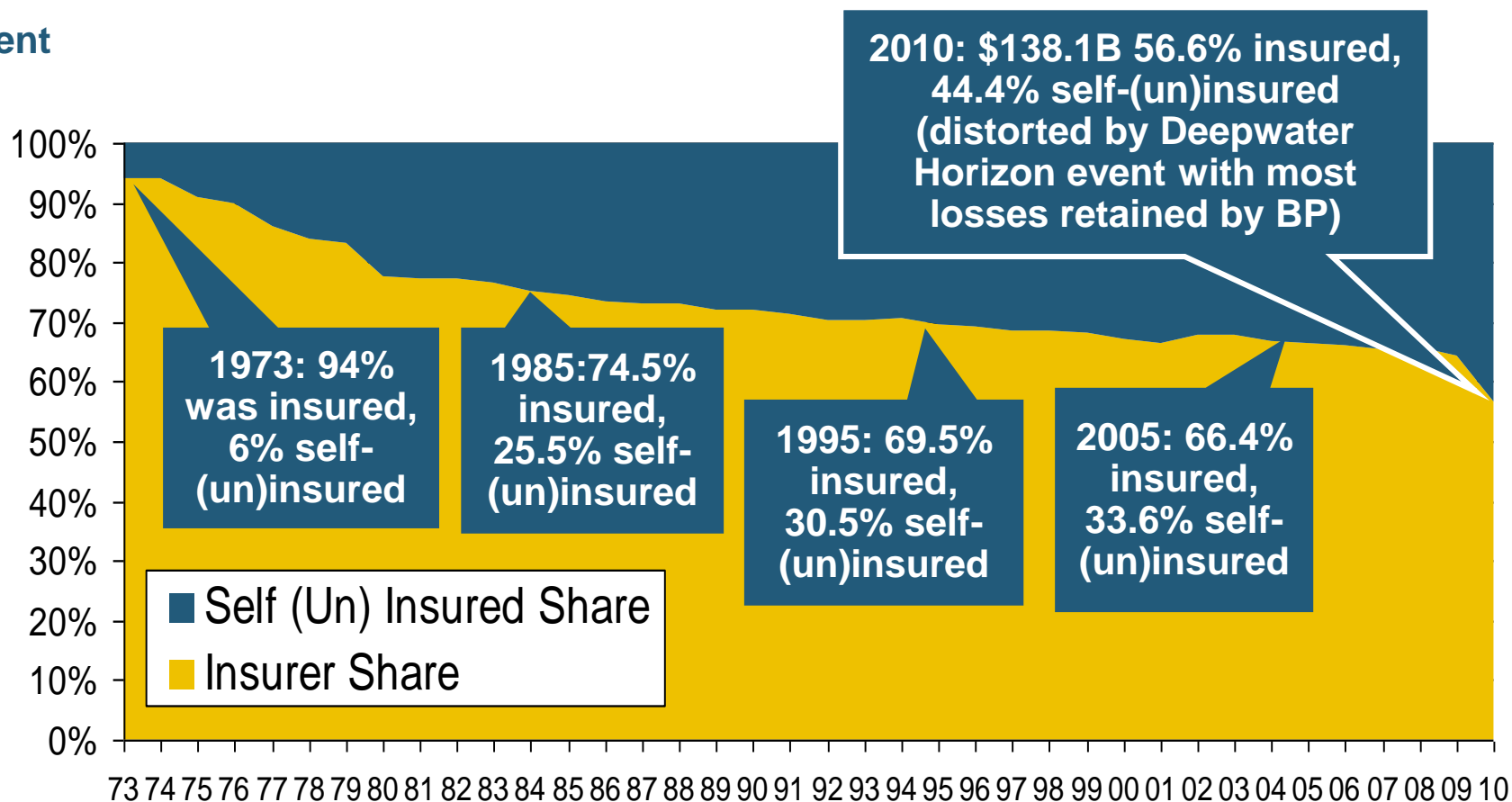
Billions of Dollars



**Tort Costs and the Share Retained by Risks Both Grew Rapidly from the mid-1970s to mid-2000s, When Tort Costs Began to Fall But Self-Insurance Shares Continued to Rise**

# Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010

Percent



**The Share of Tort Costs Retained by Risks Has Been Steadily Increasing for Nearly 40 Years. This Trend Contributes Has Left Insurers With Less Control Over Pricing.**

# Business Leaders Ranking of Liability Systems in 2012

## ■ Best States

1. Delaware
2. Nebraska
3. Wyoming
4. Minnesota
5. Kansas
6. Idaho
7. Virginia
8. North Dakota
9. Utah
10. Iowa

### New in 2012

- Wyoming
- Minnesota
- Kansas
- Idaho

### Drop-offs

- Indiana
- Colorado
- Massachusetts
- South Dakota

## ■ Worst States

41. Florida
42. Oklahoma
43. Alabama
44. New Mexico
45. Montana
46. Illinois
47. California
48. Mississippi
49. Louisiana
50. West Virginia

### Newly Notorious

- Oklahoma

### Rising Above

- Arkansas

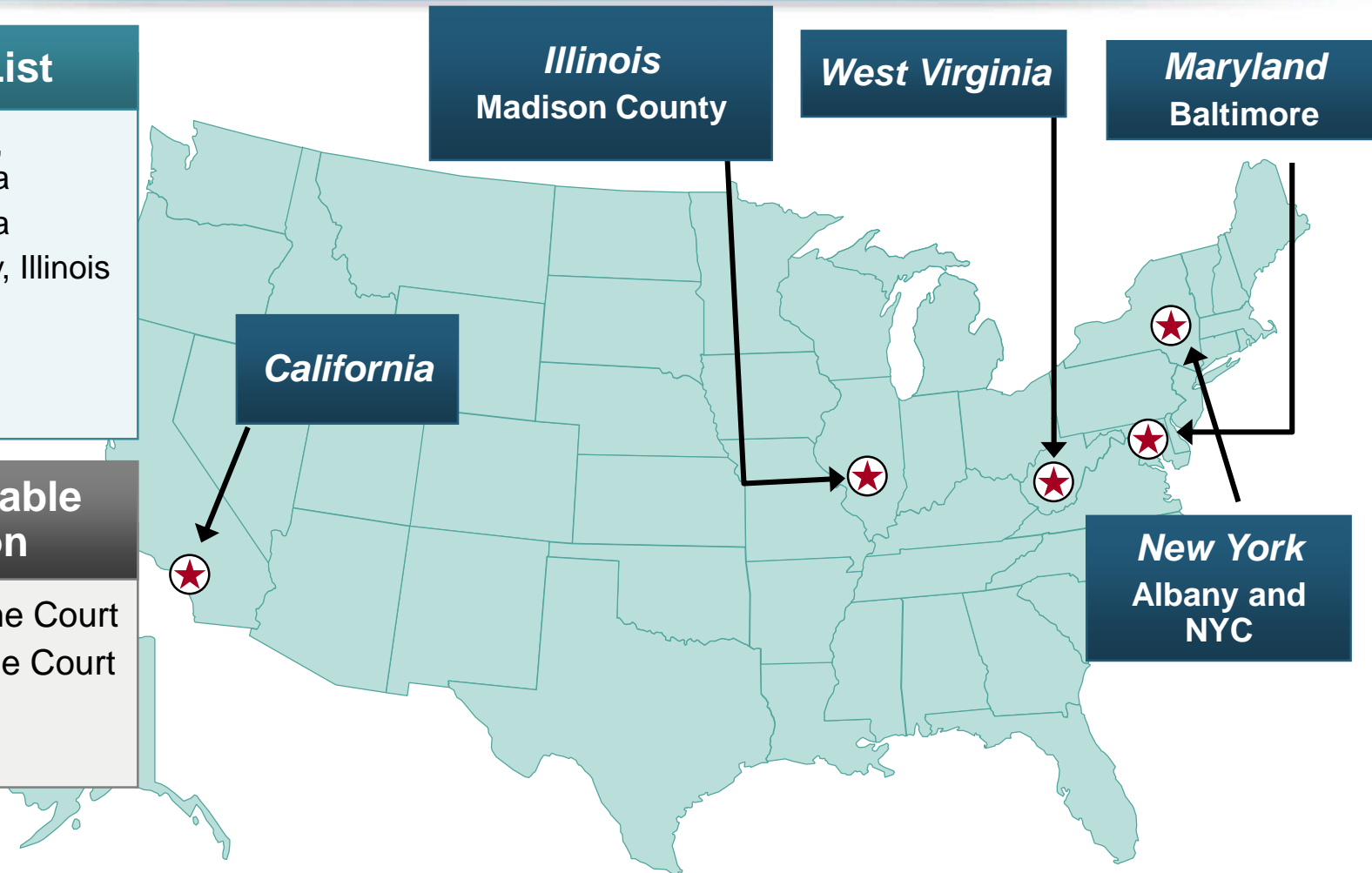
# The Nation's Judicial Hellholes: 2012/2013

## Watch List

- Philadelphia, Pennsylvania
- South Florida
- Cook County, Illinois
- New Jersey
- Nevada
- Louisiana

## Dishonorable Mention

- MO Supreme Court
- WA Supreme Court



Insurance Information Institute Online:

**[www.iii.org](http://www.iii.org)**

***Thank you for your time  
and your attention!***

***Twitter: [twitter.com/bob\\_hartwig](https://twitter.com/bob_hartwig)***