



Mega-Trends Influencing the Workers Compensation Insurance Industry

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Estimated Medical & Indirect Costs of Occupational Injuries & Diseases, 2007

Category	Injury Costs (\$bn)	Percent of row	Disease Costs (\$bn)	Percent of row	Total Costs (\$bn)
MEDICAL	\$46.26	69.0%	\$20.83	31.0%	\$67.09
---fatalities	\$0.31	1.7%	\$17.66	98.3%	\$17.97
---nonfatalities	\$45.95	93.5%	\$3.17	6.5%	\$49.12
INDIRECT	\$145.57	79.7%	\$36.97	20.3%	\$182.54
---Lost earnings	\$91.00	82.7%	\$19.02	17.3%	\$110.02
---Fringe benefits	\$24.30	83.7%	\$4.73	16.3%	\$29.03
---Home production	\$30.27	69.6%	\$13.22	30.4%	\$43.49
TOTAL COSTS	\$191.83	76.8%	\$57.81	23.2%	\$249.64

Source: J. Paul Leigh, "Economic Burden of Occupational Injury and Illness in the United States," *The Millbank Quarterly*, Vol. 89, No. 4, Table 3.

- 1. A Growing Exposure Base, but with a Different Mix of Risks**
- 2. Workplace Safety Improvement Continues, but “Room” for More**
- 3. Inflation, WC-style**
- 4. Low Investment Returns**
- 5. The Aging Workforce**
- 6. The Obesity Epidemic**

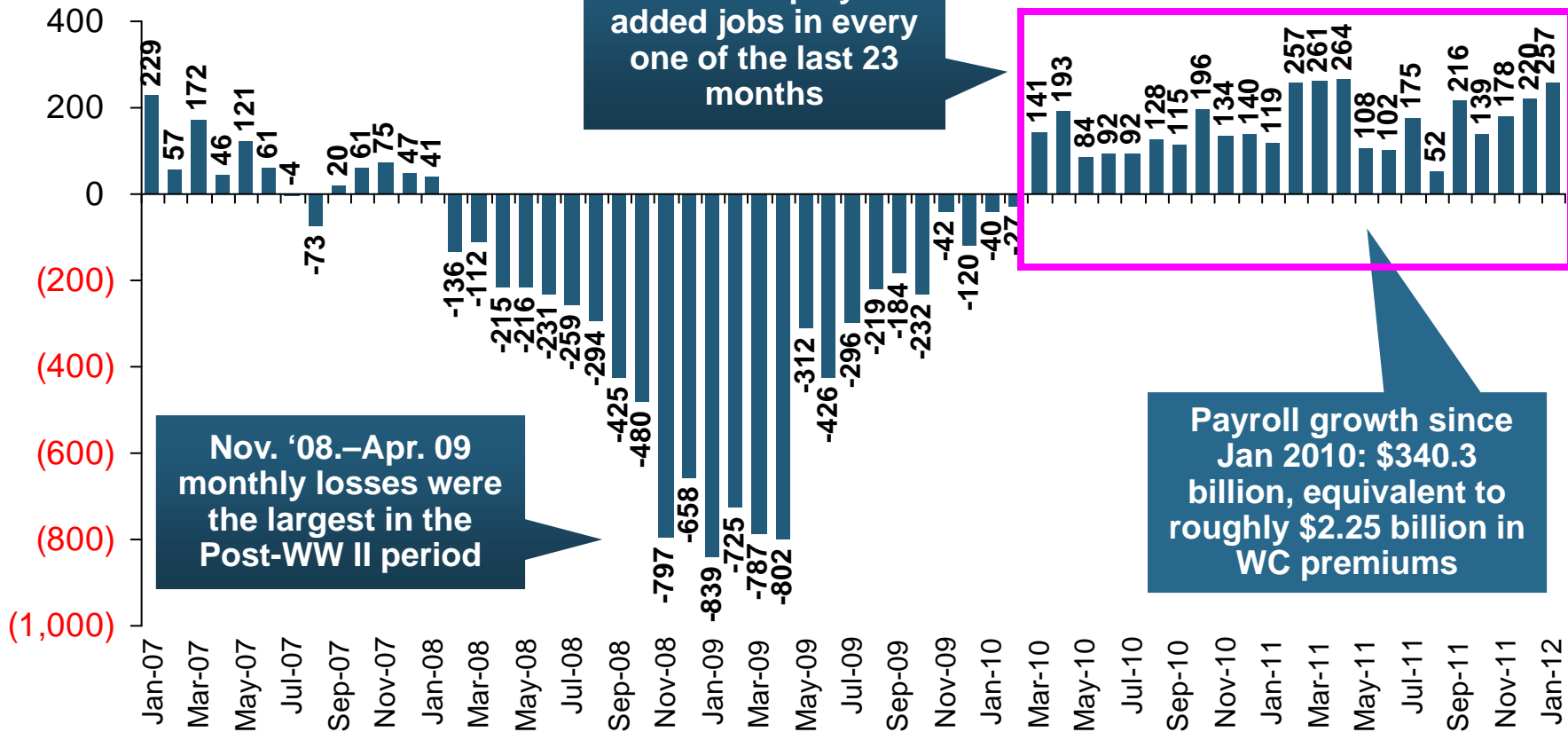


1. A Growing Exposure Base, but with a Different Mix of Risks

**Health Care, Education, Services
Will Lead**

Monthly Change in Private Employment* January 2007 through January 2012

(Thousands)

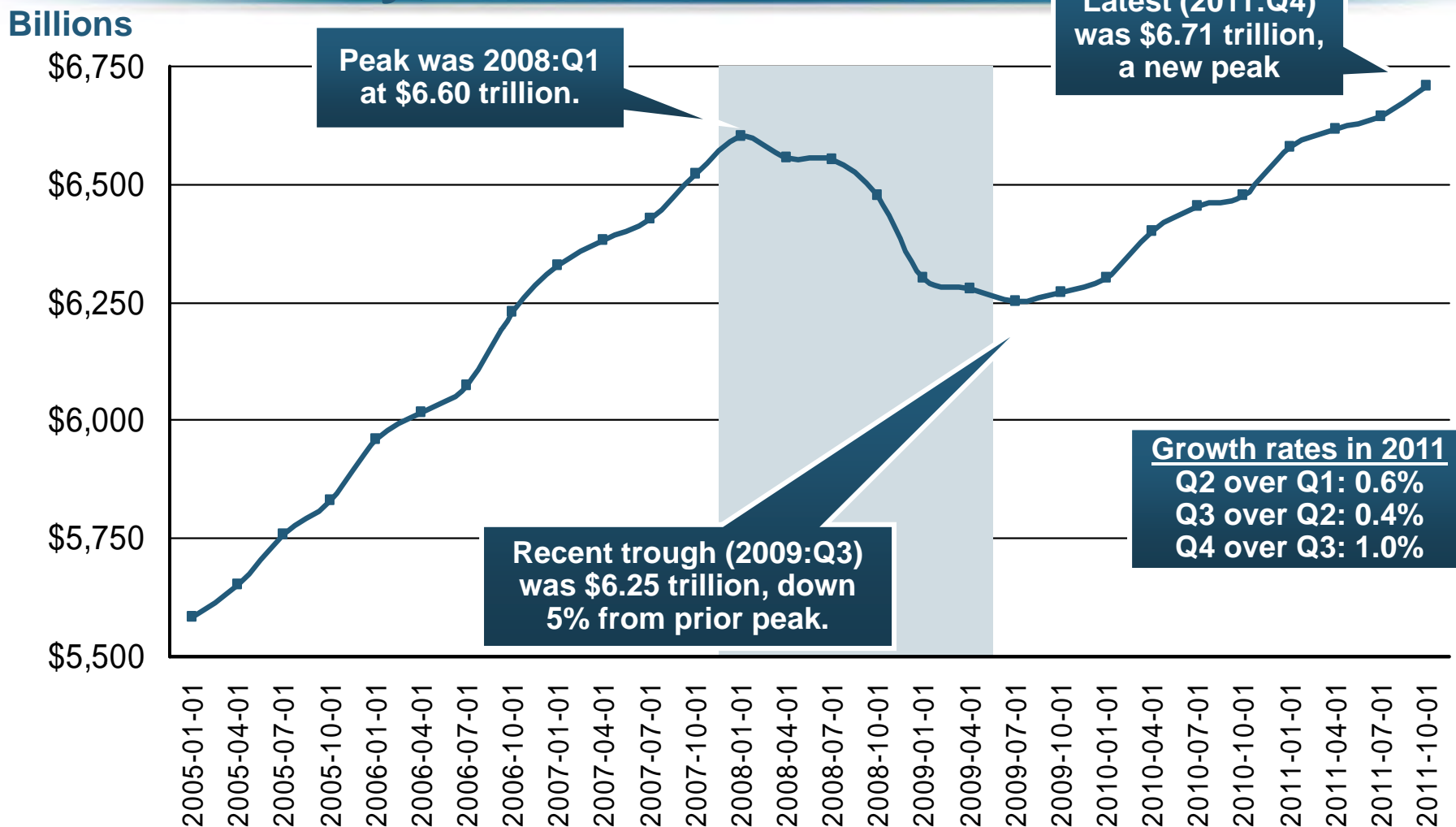


**Private employers added 3.3 million (net) jobs in 2010-2011,
after shedding 8.8 million jobs in 2008-2009
Average monthly private job growth in 2011: 174,000**

*seasonally adjusted

Sources: U.S. Bureau of Labor Statistics: <http://www.bls.gov/ces/home.htm>; Insurance Information Institute.

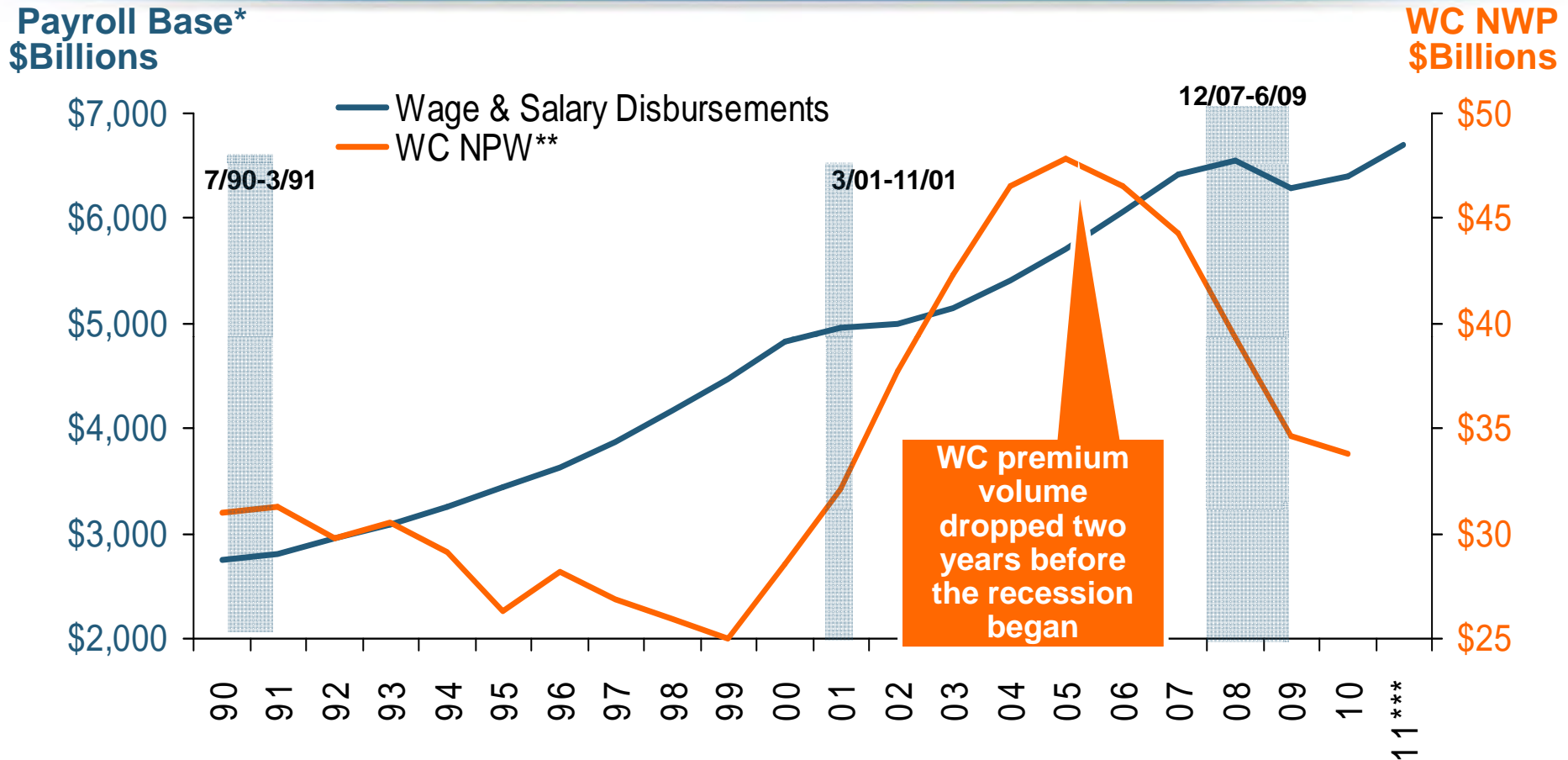
Nonfarm Payroll (Wages & Salaries): Quarterly, 2005–2011:Q4



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 Institutes.

Wage and Salary Disbursements (Payroll Base) vs. Workers Comp Net Written Premiums



Weakening payrolls have eroded \$2B+ in workers comp premiums; nearly 29% of NPW has been eroded away by the soft market and weak economy

*private employment

**includes premiums to state funds

***2011:Q4

Shaded areas indicate recessions.

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



Where Will the Growth in WC Exposure Come From?

Industry and Occupation Growth Analysis

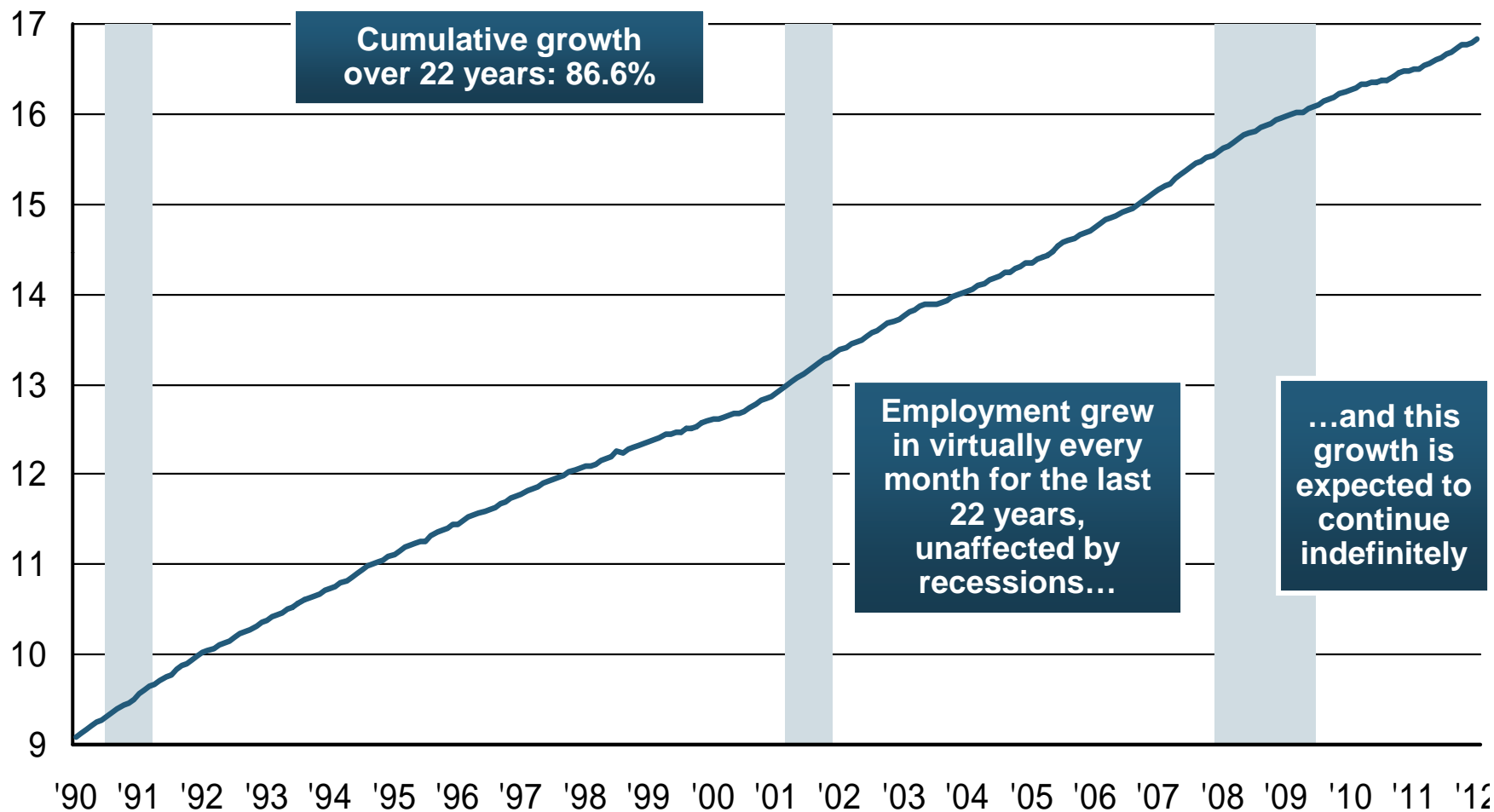
Occupations with Largest Numerical Growth, 2008–2018: *Health, Services Dominate*

Occupations	Number of new jobs	Percent change	Wages (May 2008 median)	Education/training category
Registered nurses	581,500	22	\$62,450	Associate degree
Home health aides	460,900	50	20,460	Short-term on-the-job training
Customer service representatives	399,500	18	29,860	Moderate-term on-the-job training
Combined food preparation and serving workers, including fast food	394,300	15	16,430	Short-term on-the-job training
Personal and home care aides	375,800	46	19,180	Short-term on-the-job training
Retail salespersons	374,700	8	20,510	Short-term on-the-job training
Office clerks, general	358,700	12	25,320	Short-term on-the-job training
Accountants and auditors	279,400	22	59,430	Bachelor's degree
Nursing aides, orderlies, and attendants	276,000	19	23,850	Postsecondary vocational award
Postsecondary teachers	256,900	15	58,830	Doctoral degree
Construction laborers	255,900	20	28,520	Moderate-term on-the-job training
Elementary school teachers, except special education	244,200	16	49,330	Bachelor's degree
Truck drivers, heavy and tractor-trailer	232,900	13	37,270	Short-term on-the-job training
Landscaping and groundskeeping workers	217,100	18	23,150	Short-term on-the-job training

BLS projects we'll need 1.7 million new health care workers by 2018 over 2008. Also 700,000 truck drivers and construction and landscape workers.

U.S. Employment in Health Care & Social Services, Monthly, 1990–2012*

Millions



*As of January 2012 (Jan 2012 and Dec 2011 are preliminary); Seasonally adjusted

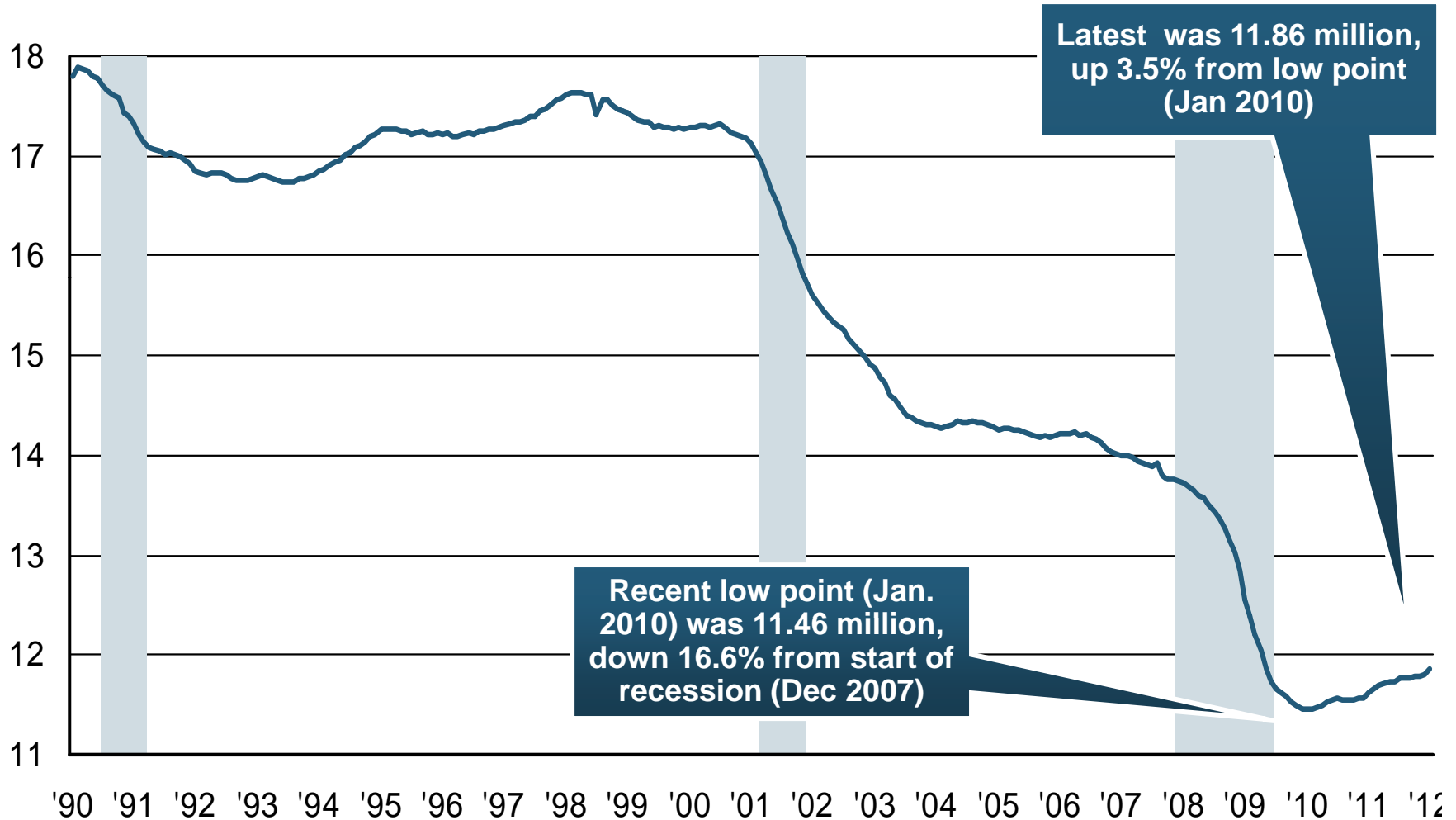
Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

U.S. Employment in Manufacturing

Monthly, 1990–2012*

Millions

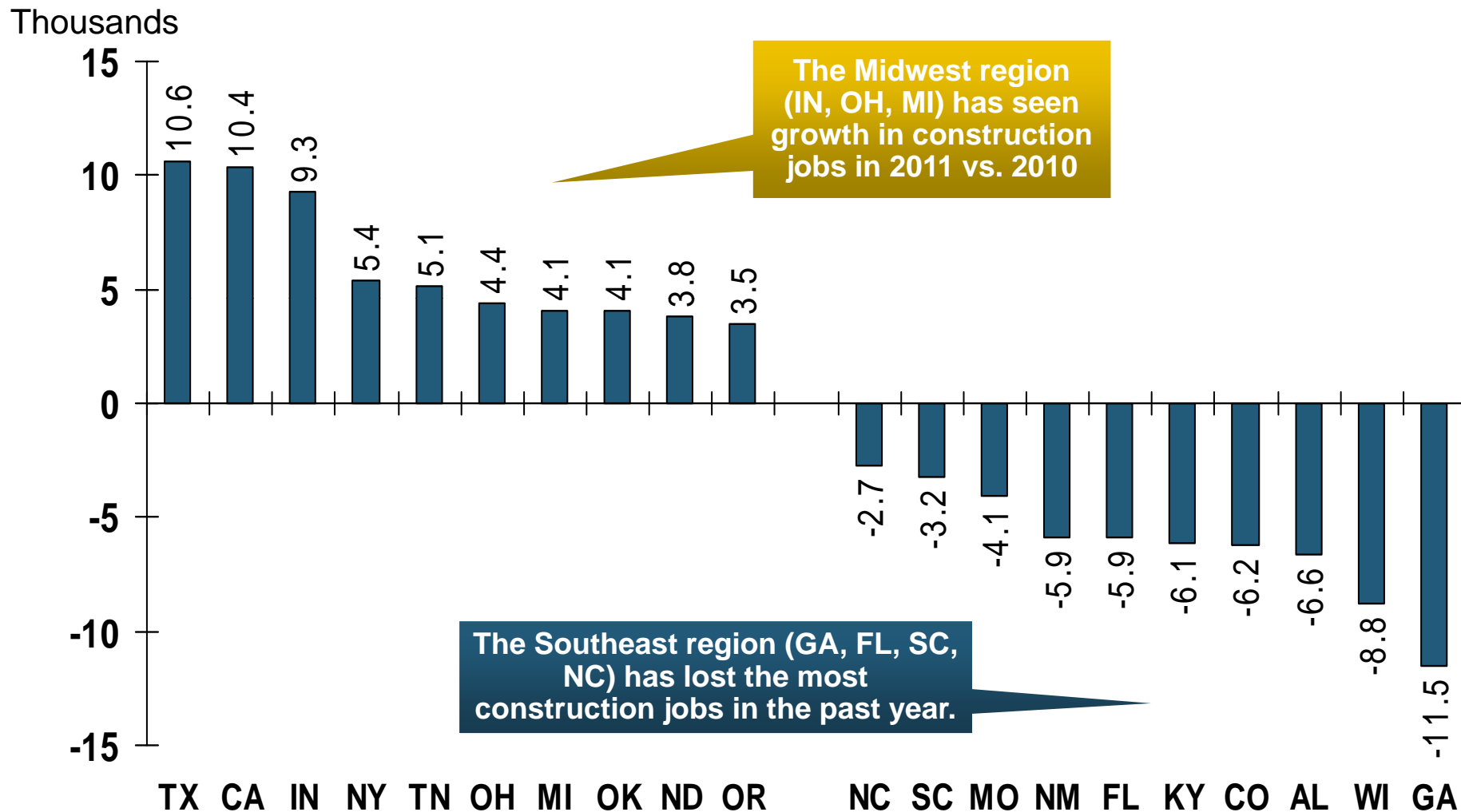


*As of January 2012 (Jan and Dec 2011 are preliminary); Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

Employment Growth in **Construction**, 2011 vs. 2010*: 10 Highest & Lowest States

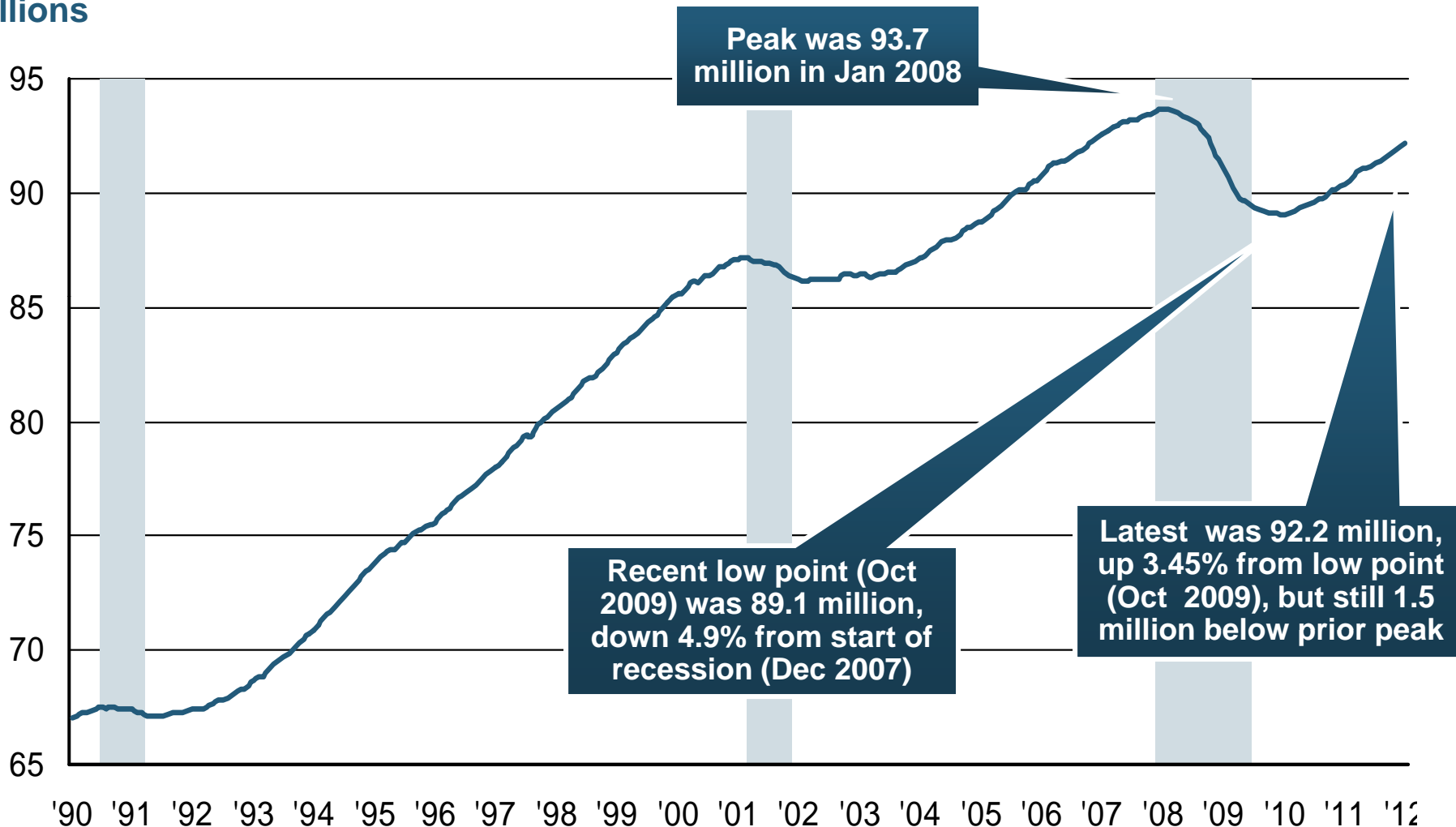


*November 2011 vs November 2010; seasonally adjusted

Source: U.S. Bureau of Labor Statistics, *Regional and State Employment and Unemployment—November 2011*, released December 20, 2011

U.S. Employment in Service Industries, Private Sector, Monthly, 1990–2012*

Millions



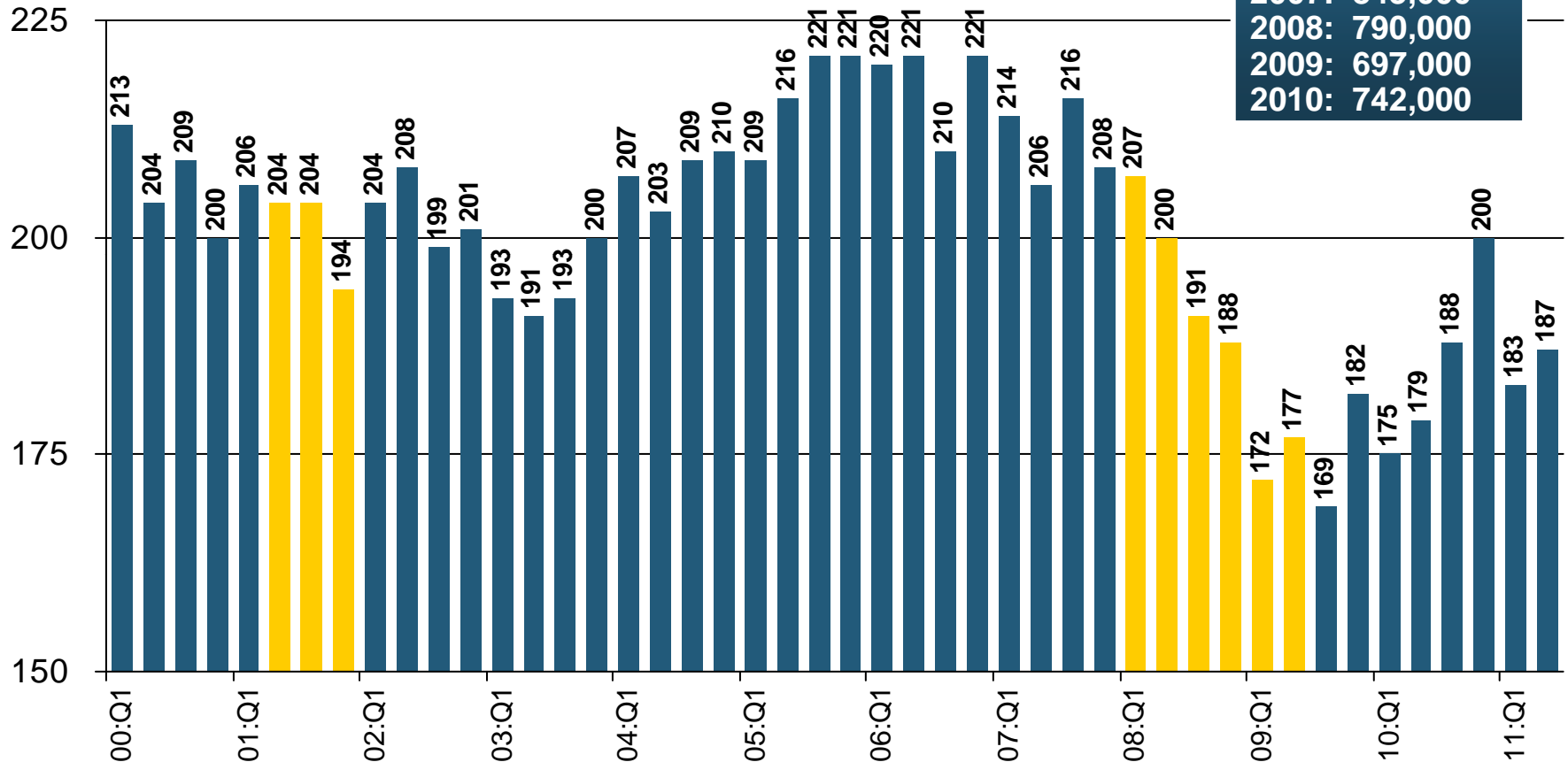
*As of January 2012; Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

Private Sector Business Starts, Quarterly, 2000:Q1 – 2011:Q2*

(Thousands)



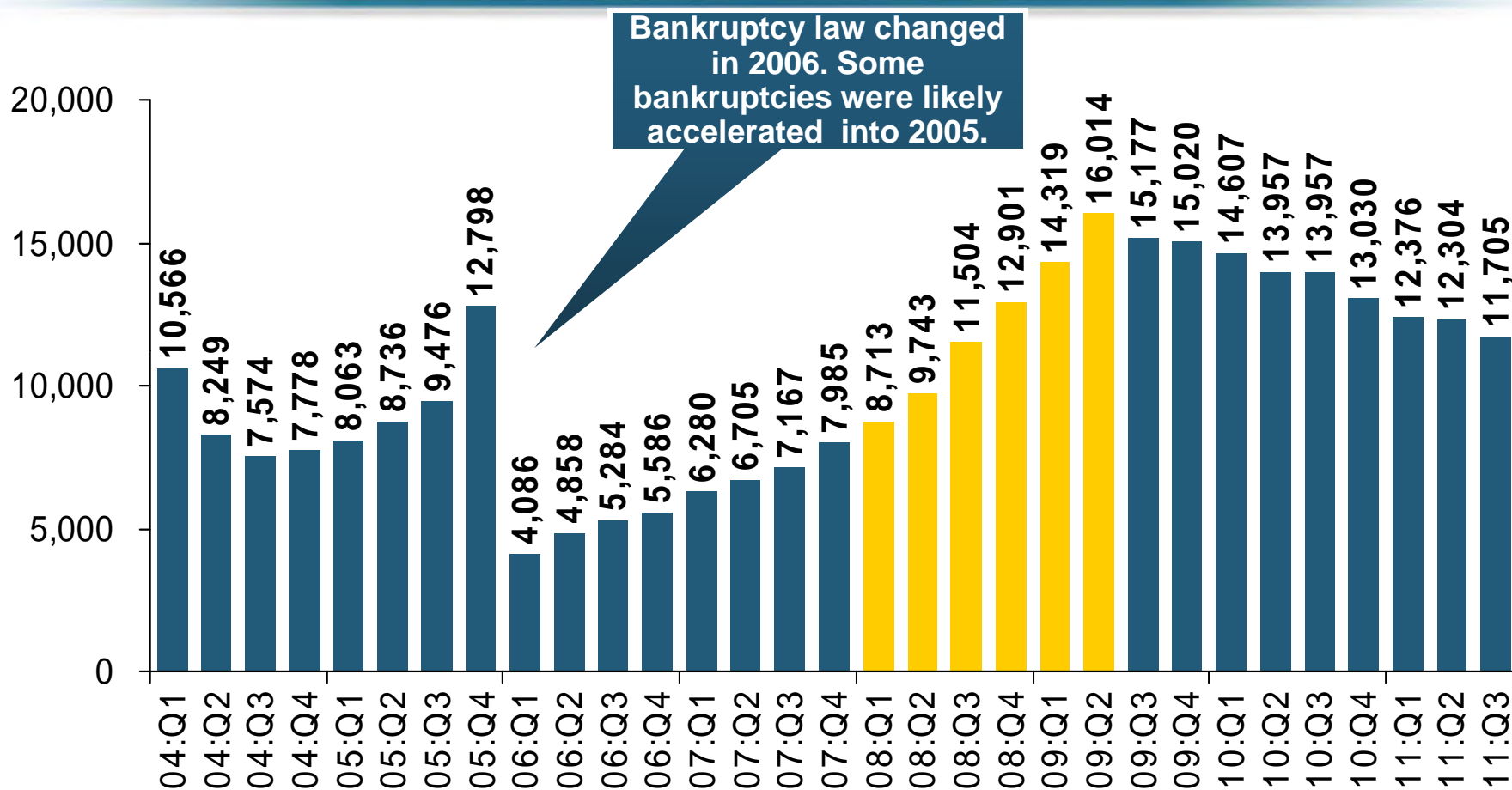
Yearly Starts	
2006:	872,000
2007:	843,000
2008:	790,000
2009:	697,000
2010:	742,000

By the start of 2011, business starts were trending up again, but cautiously. Tight credit, low aggregate demand, hold down starts.

*Latest available, seasonally adjusted; next release scheduled for May 1, 2012. Gold bars are recession quarters

Source: Bureau of Labor Statistics, *Business Employment Dynamics* report, Table 8.

Business Bankruptcy Filings, Quarterly, 2006-2011:Q3



Bankruptcies were rising even before the recession began in December 2007.

Bars in gold are recession quarters

Sources: American Bankruptcy Institute at

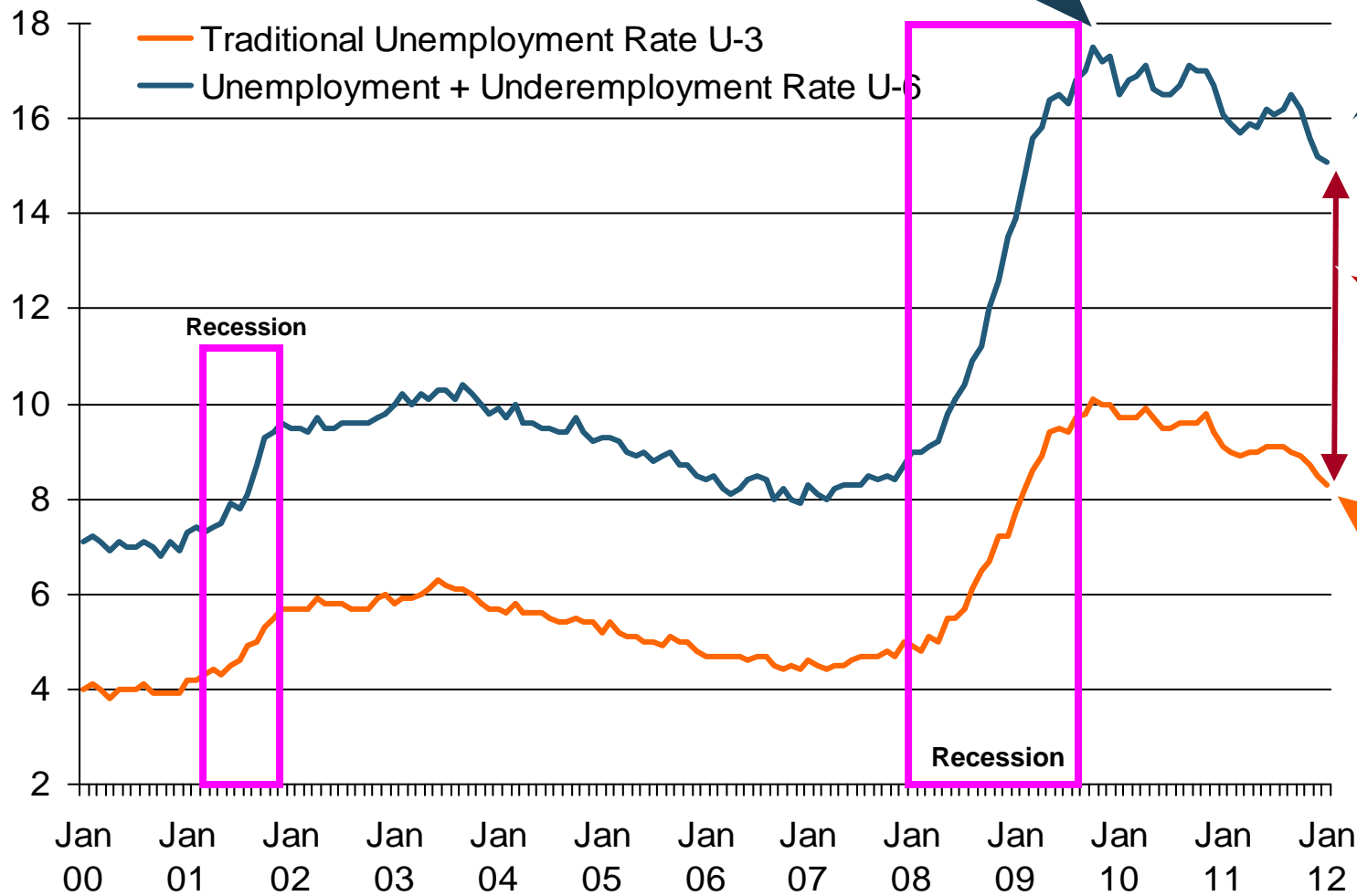
<http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633> ;
Insurance Information Institute



It's a Long Road Back for Some People

Unemployment and Underemployment Rate "Normality": Years to Go

January 2000 through January 2012, Seasonally Adjusted (%)



U-6 hit 17.5% in Oct 2009

U-6 is now 15.1%, down 2.4 percentage points from its peak

Gap between U-3 and U-6 is normally 4 percentage points but is now 6.8 points

January 2012 unemployment rate (U-3) was 8.3%. Peak rate in the last 30 years: 10.8% in Nov - Dec 1982

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



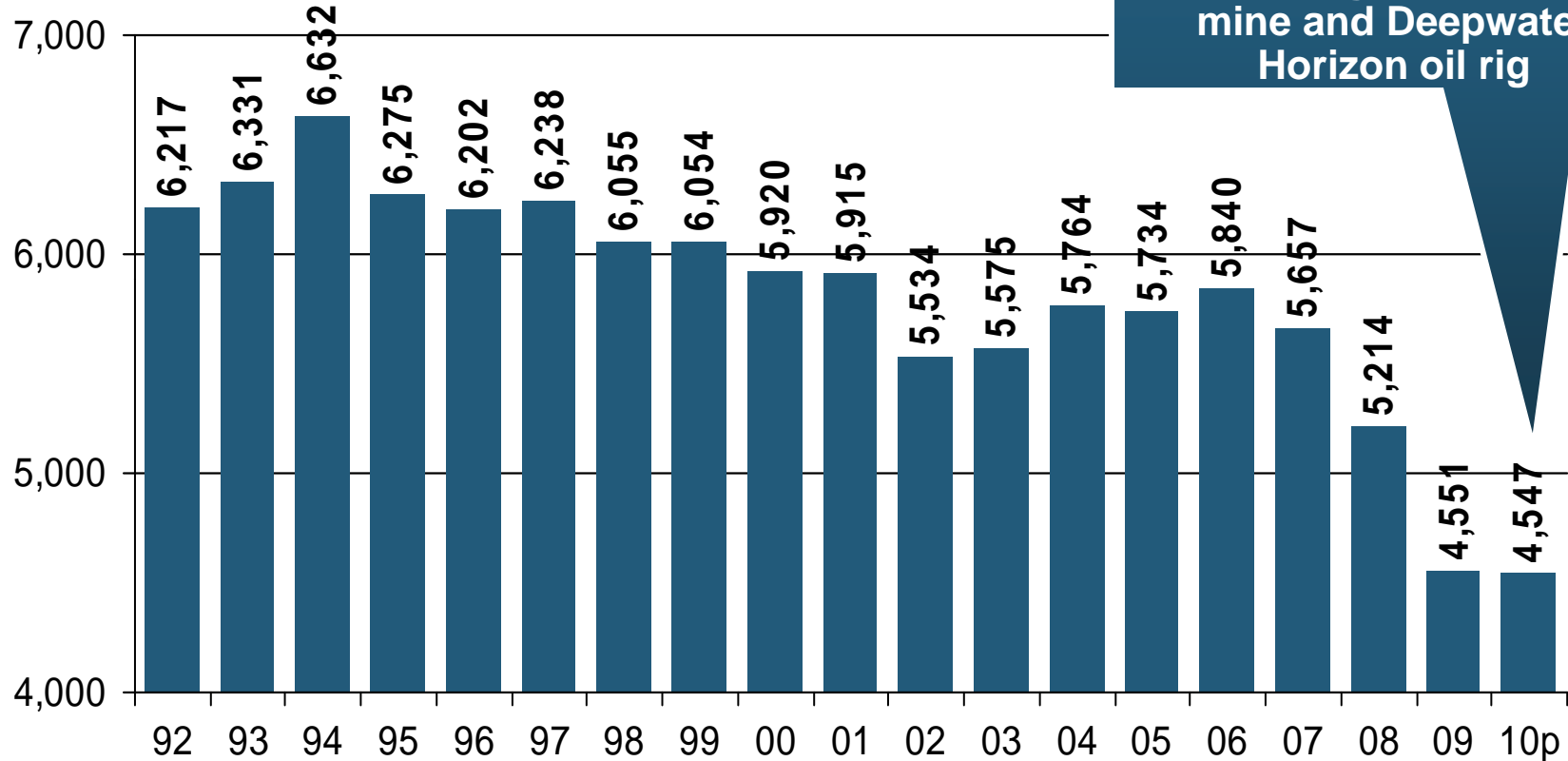
2. Workplace Safety Improvement Continues, but “Room” for More

The WC industry has certainly helped create/support the improvement

Fewer Occupational Deaths

1992–2010p

Number of
Fatal Injuries



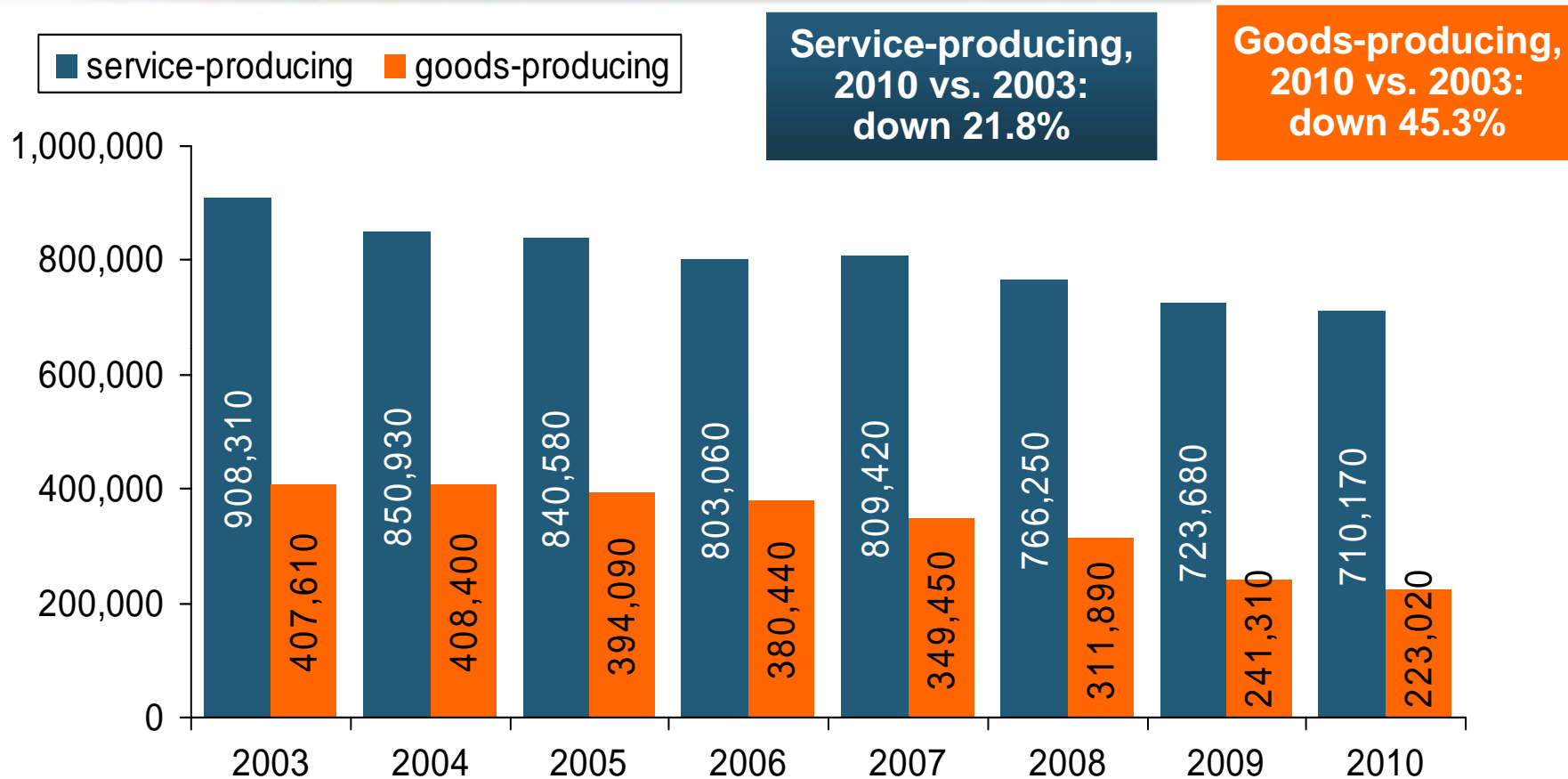
Includes multiple deaths in
Upper Big Branch coal
mine and Deepwater
Horizon oil rig

The death rate per 100,000 full-time-equivalent workers was 3.5 in 2010, the same as the rate for 2009.

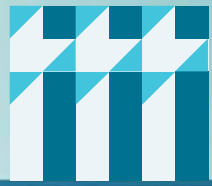
P = preliminary; final data will be released in Spring 2012

Source: U.S. Bureau of Labor Statistics, *National Census of Fatal Occupational Injuries in 2010*, released August 25, 2011.

Private Industry: Fewer Injuries & Illnesses with Days Away from Work



The number of illnesses and injuries dropped from 2003-2007 despite growth in employment and the aging of the workforce.

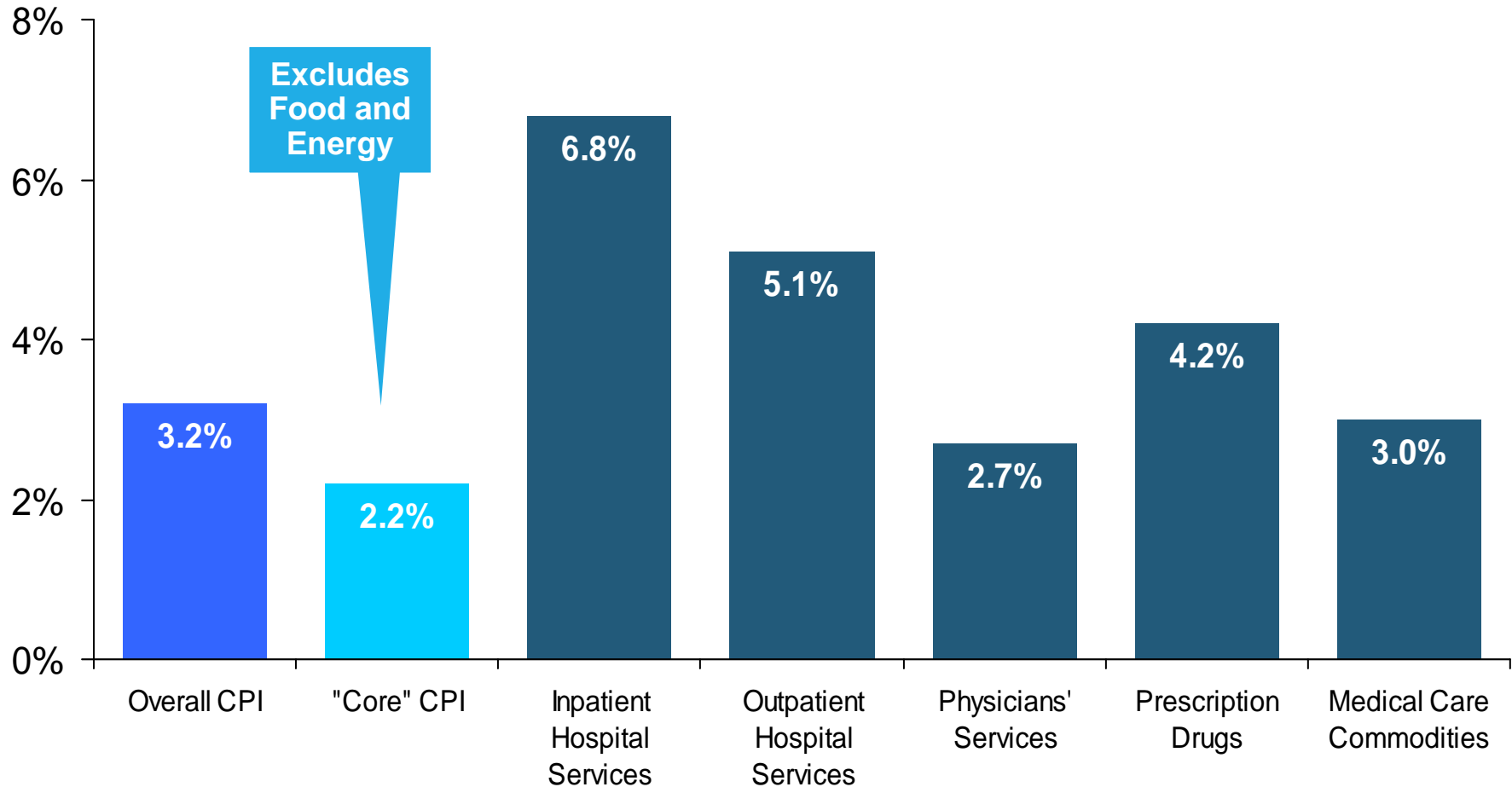


3. Inflation

**The Low CPI Doesn't
Reflect WC Cost Pressures**

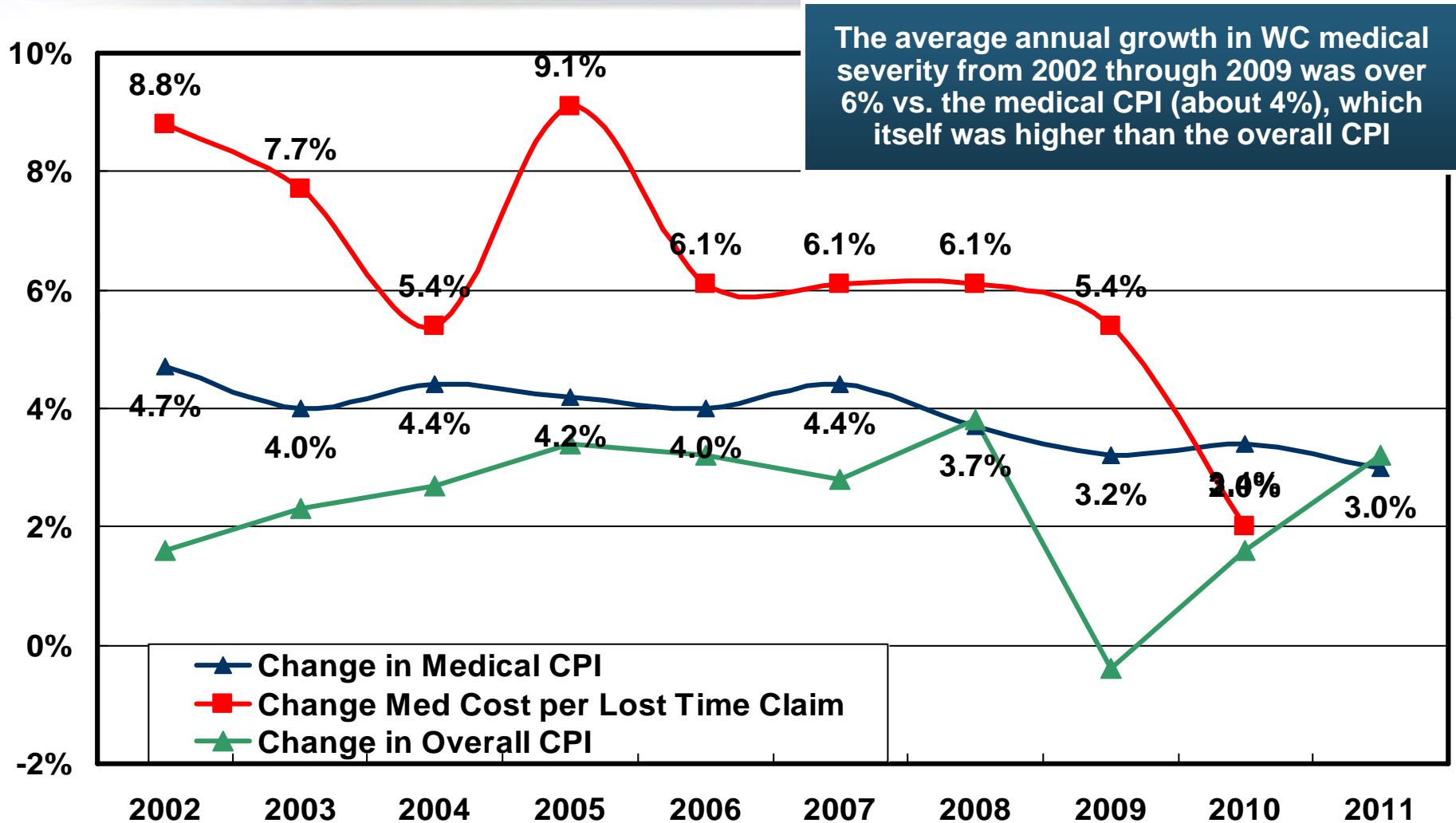
WC Insurers Experience Inflation More Intensely than the Overall CPI Suggests

Price Level Changes,
2011 vs. 2010



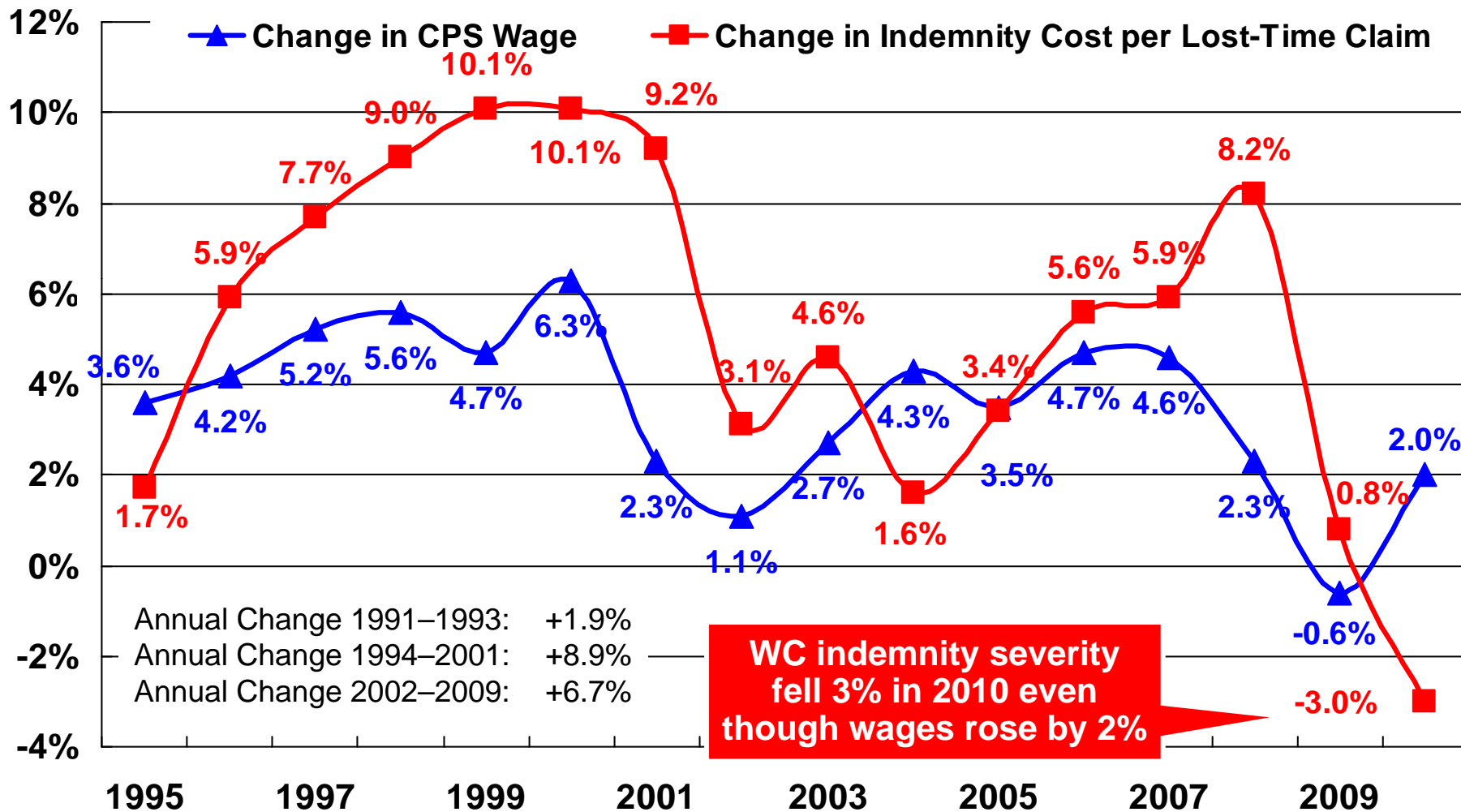
Healthcare Costs Are a Major WC Insurance Cost Driver. They Are Likely to Increase Faster than the CPI for the Next Few Years, at Least

WC Medical Severity Typically Rises Faster Than the Medical CPI Rate



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

WC Indemnity Severity Generally Grows Faster than Wages, 1995-2010p



2010p: Preliminary based on data valued as of 12/31/2010; 1991-2009: Based on data through 12/31/2009, developed to ultimate. Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies. CPS = Current Population Survey.

Source: NCCI

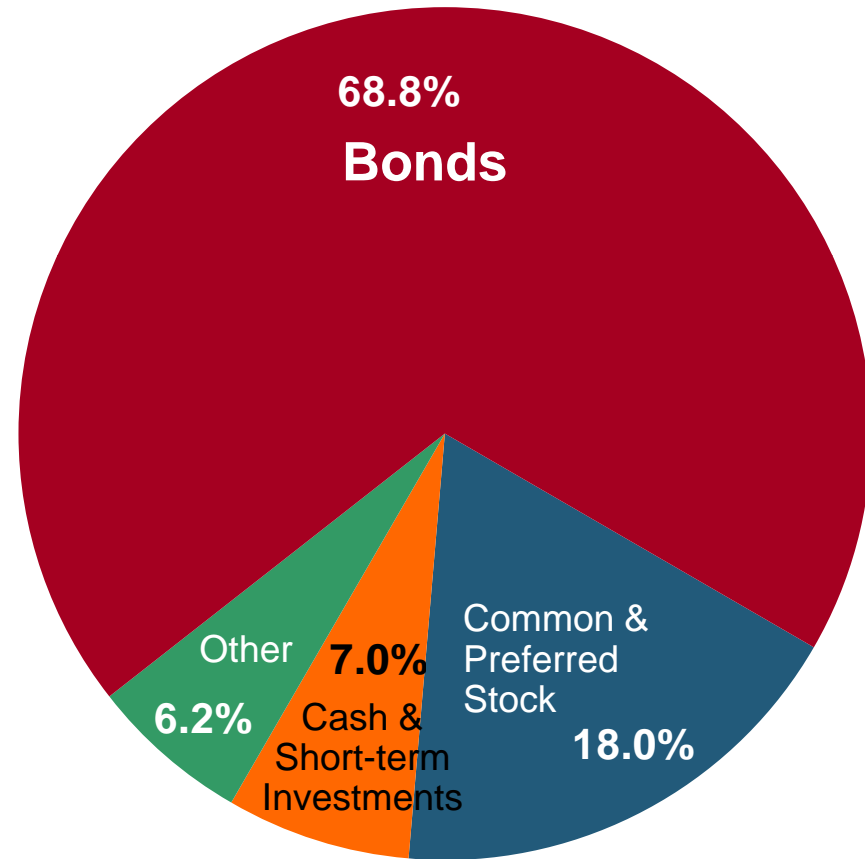
4. Low Investment Returns

Most of the P/C Insurance Industry's Investment Portfolio is in Bonds*

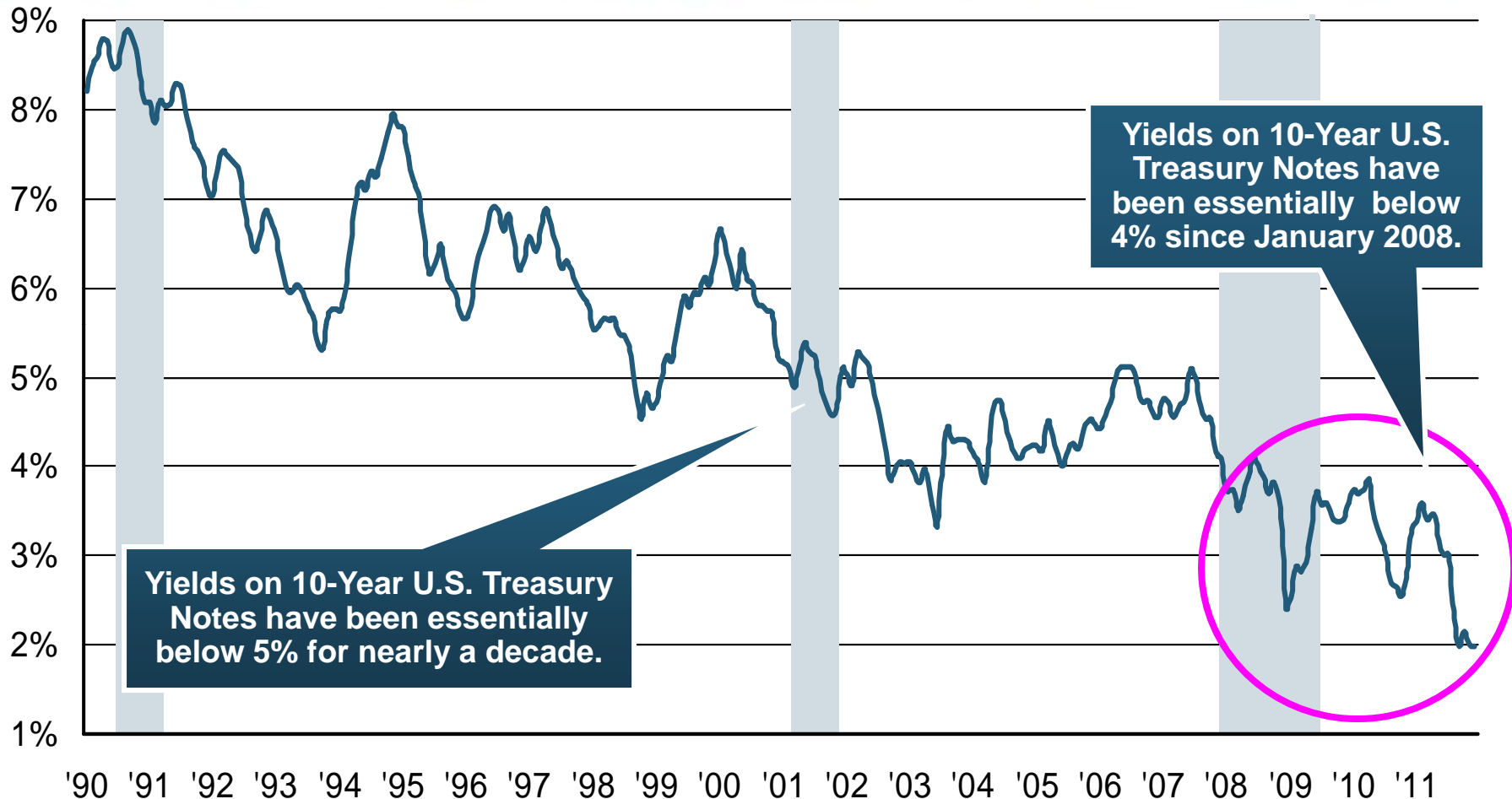
Portfolio Facts as of 12/31/2009

- Invested assets totaled \$1.26 trillion
- Generally, insurers invest conservatively, with over 2/3 of invested assets in bonds
- Only 18% of invested assets were in common or preferred stock

As of December 31, 2009



U.S. 10-Year Treasury Note Yields: A Long Downward Trend, 1990–2011*



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

*Monthly, through December 2011

Note: Recessions indicated by gray shaded columns.

Sources: Federal Reserve Bank at http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TCMNOM_Y10.txt
 National Bureau of Economic Research (recession dates); Insurance Information Institutes.

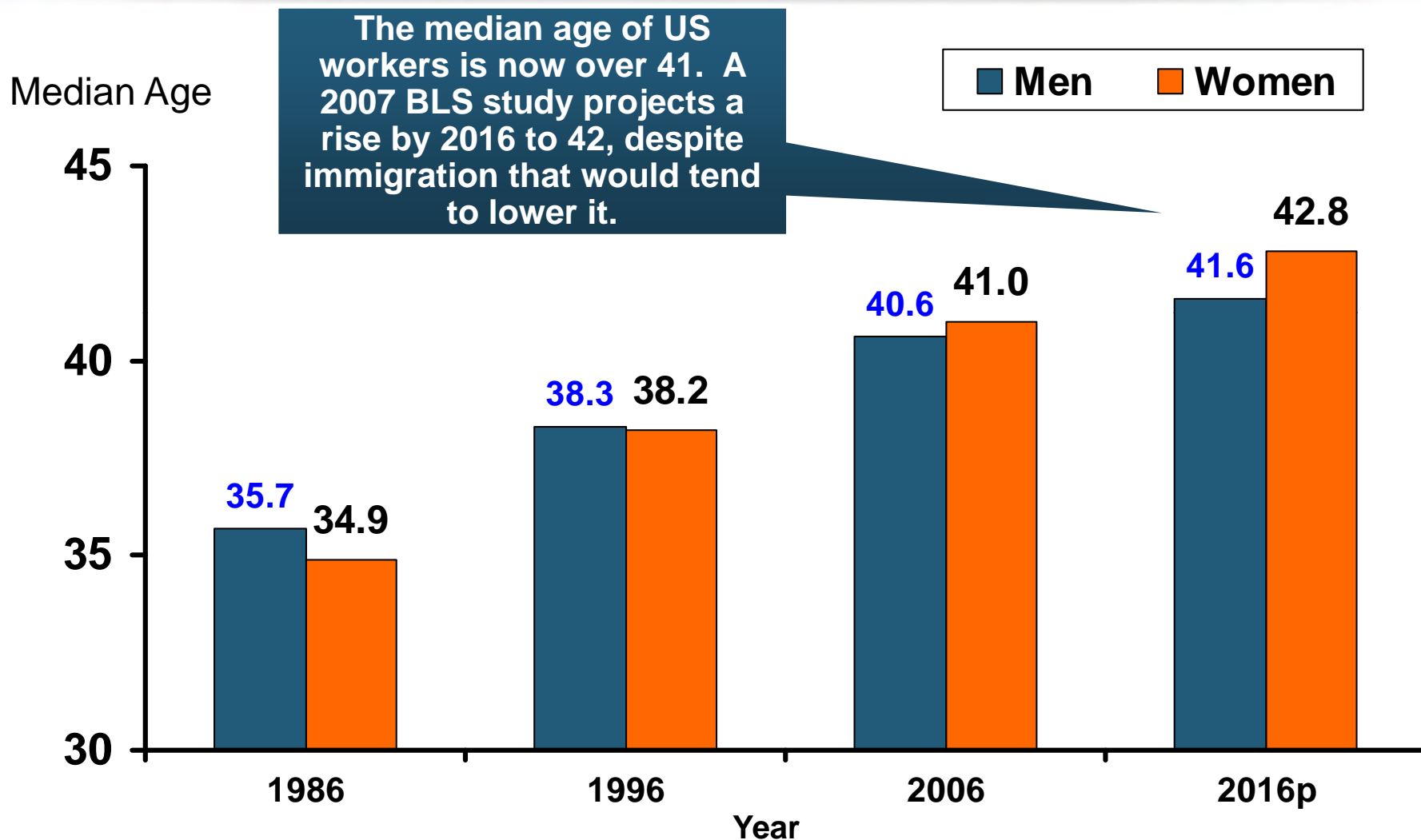
Long-Term Reduction in the Level of Investment Earnings: Outlook

- Fed actions in capital markets will likely keep interest rates low for at least several years
- In a prolonged period of low interest rates, each year maturing higher-rate bonds are replaced with lower rates, building in a low portfolio yield that will last for the duration of the newer bonds
- Industry must be prepared to operate in an environment in which investment returns are a much smaller fraction of profits
 - ◆ Drives rates higher? Regulators will not accept this
 - ◆ Stiffens underwriting discipline? Yet to manifest itself



5. The Aging Workforce

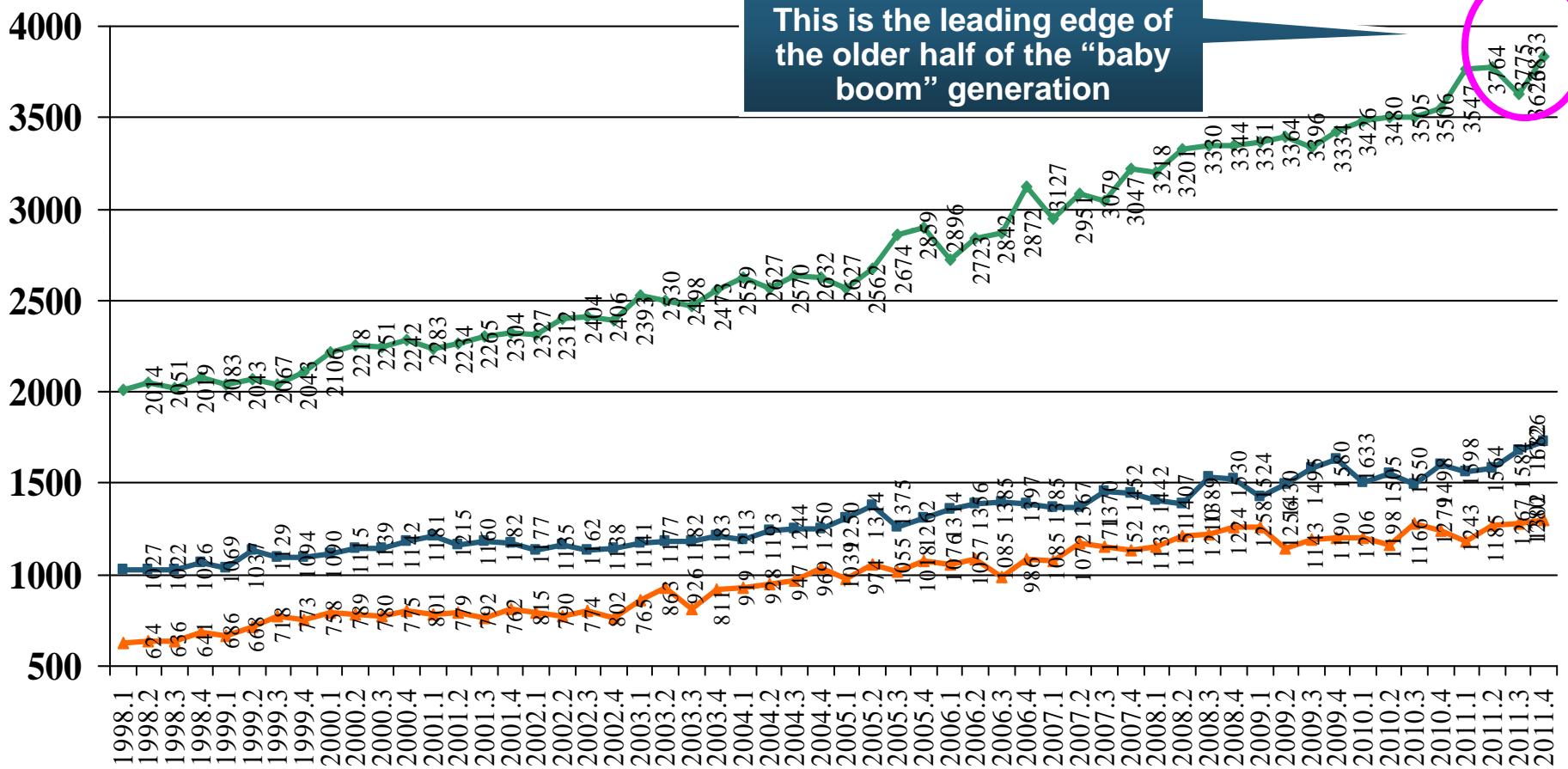
U.S. Workforce is Aging: Significant Implications for WC



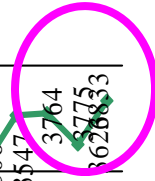
Number of Workers Age 65-69, 70-74, and 75+, Quarterly, 1998-2011:Q4

(Thousands)

◆ Age 65-69
 ■ Age 70-74
 ▲ Age 75 & over



This is the leading edge of the older half of the "baby boom" generation



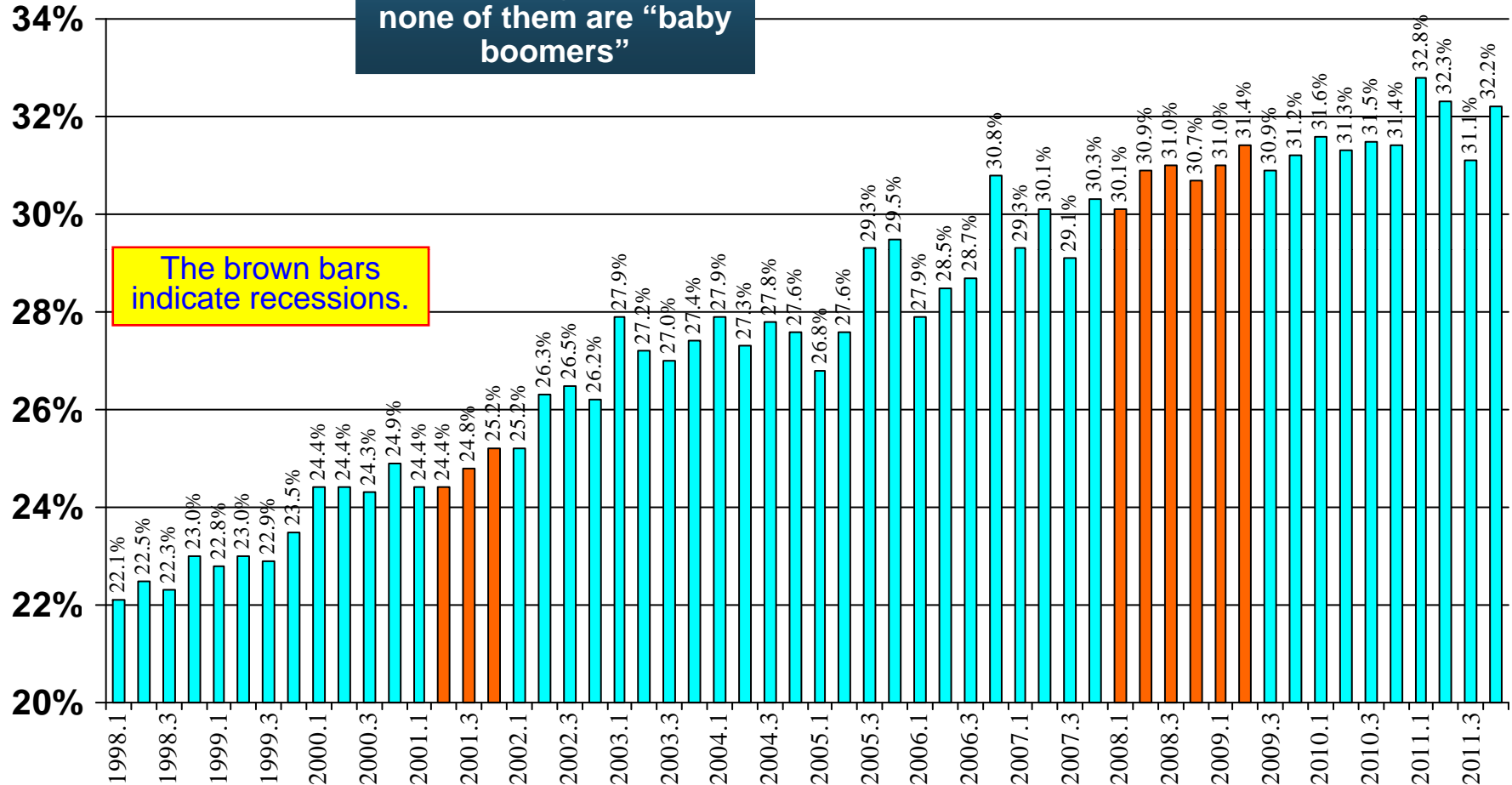
There are now nearly 7 million senior workers. Within the next decade this number will probably double.

Source: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.

Labor Force Participation Rate, Ages 65-69, Quarterly, 1998:Q1-2011:Q4

Labor Force participation rate

1 in 3 in this age group are working. Virtually none of them are “baby boomers”



The brown bars indicate recessions.

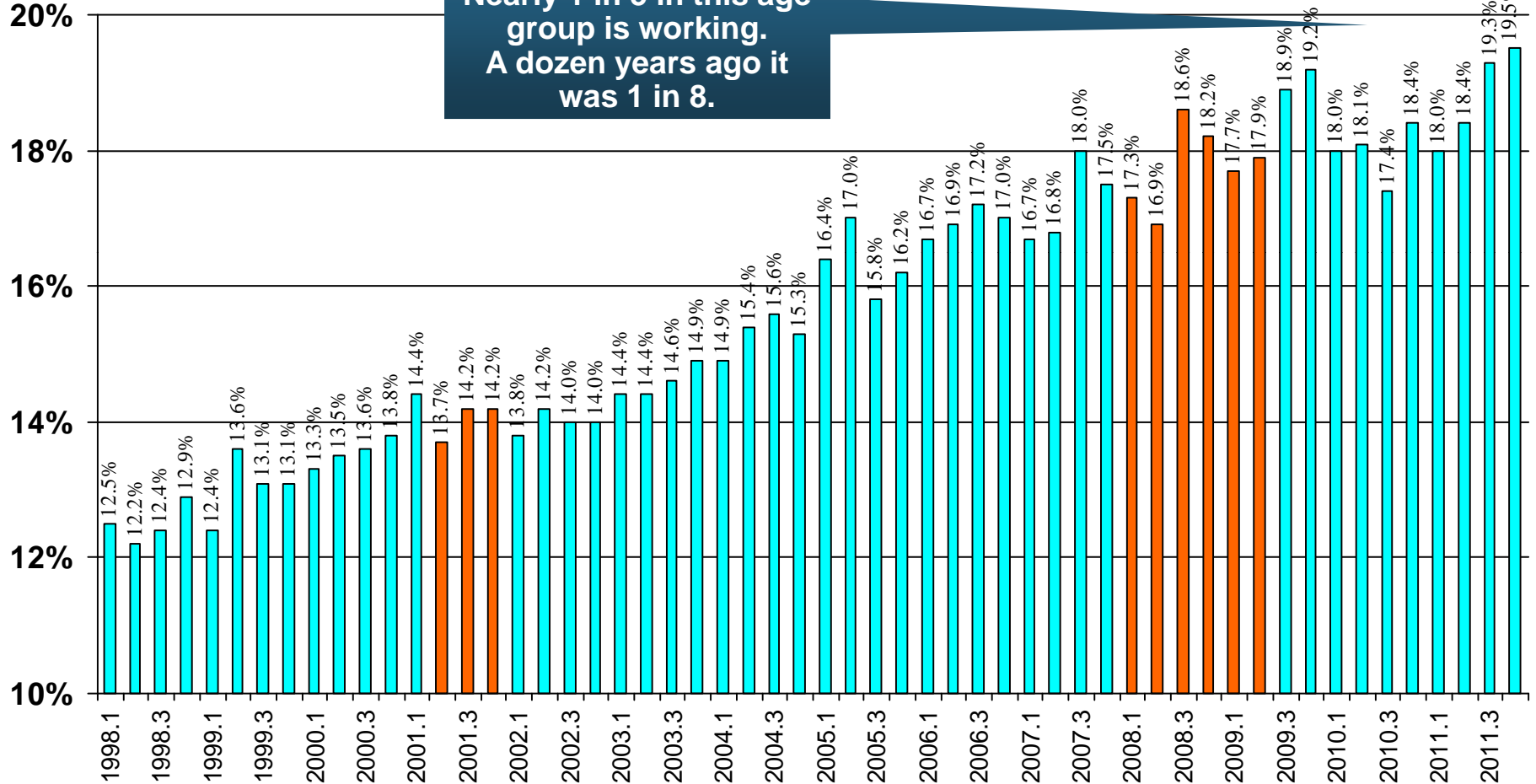
The labor force participation rate for workers 65-69 might grow even faster in the future as seniors find they can't fully retire on their meager retirement savings.

Not seasonally adjusted. Sources: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.

Labor Force Participation Rate, Ages 70-74, Quarterly, 1998:Q1-2011:Q4

Labor Force participation rate

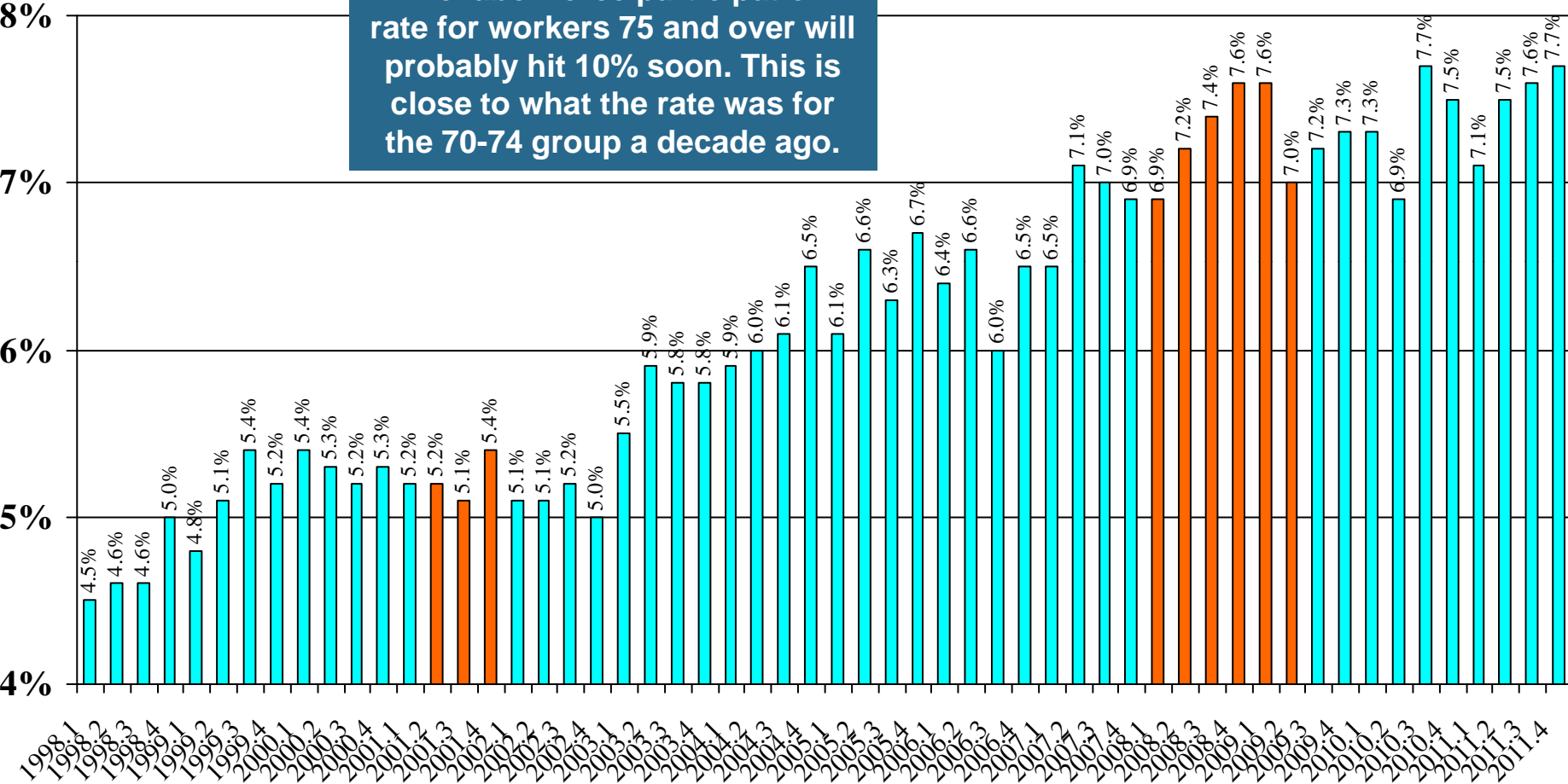
Nearly 1 in 5 in this age group is working. A dozen years ago it was 1 in 8.



The labor force participation rate for workers 70-74 grew by about 50% since 1998, but growth has stalled since the Great Recession began.

Labor Force Participation Rate, Quarterly Ages 75 and over, 1998-2011:Q4

Labor Force
participation rate



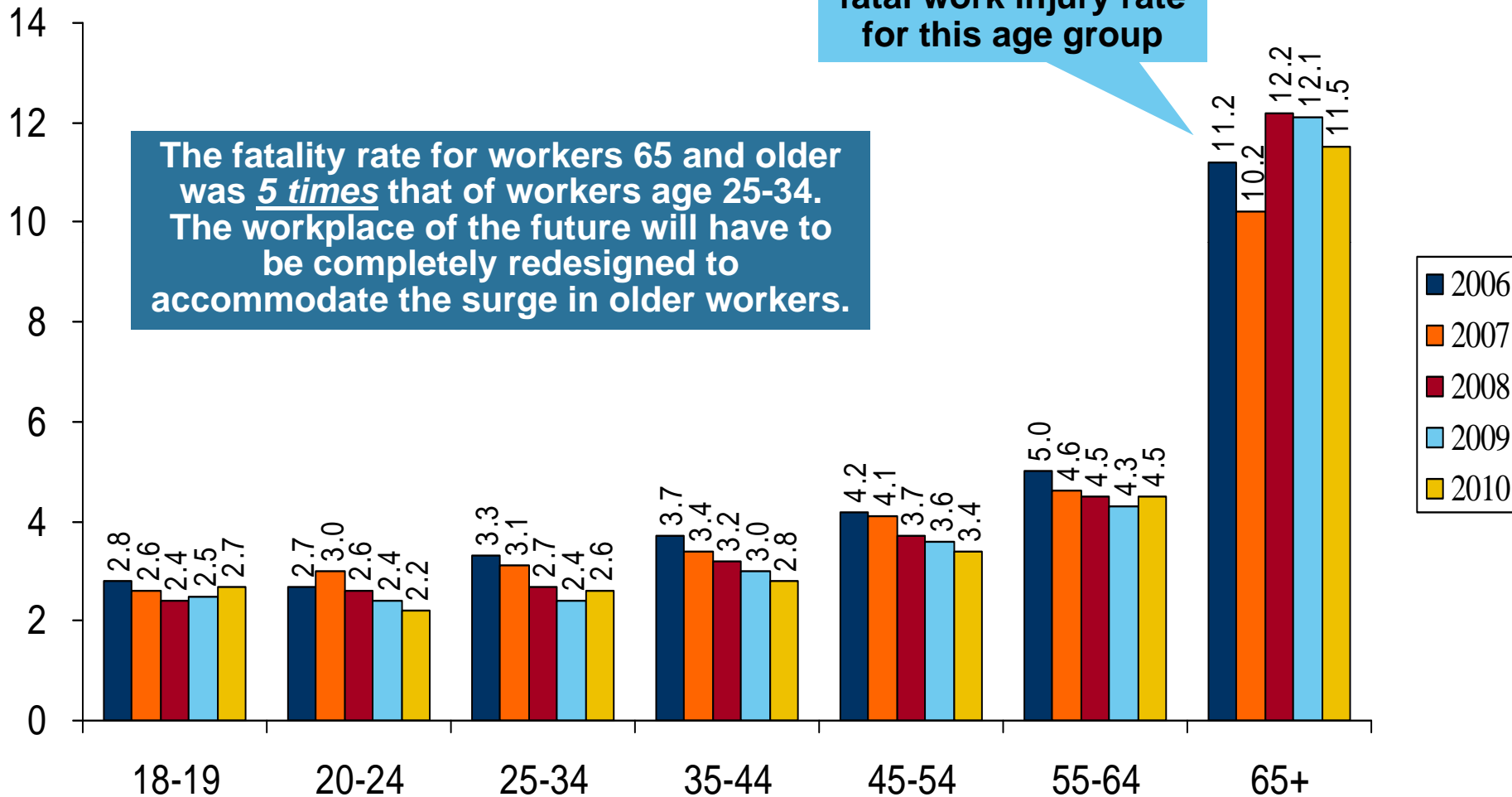
In the last 14 years, the labor force participation rate for workers 75 and over grew from 4.5% to 7.7%. So 92.3% of these people are retired.

The Aging of the Workforce: What's Next?

- There were 16.2 million people age 60-64 in 2010.
- There likely will be 14-15 million people age 65-69 in 2015.
- If historical patterns persist, 5 million of them will be in the labor force in 2015.
 - ◆ This compares to 3.5 million employed 2010.
- There were 12.0 million people age 65-69 in 2010.
- There likely will be 10 million people age 70-74 in 2015.
- If historical patterns persist, 2 million of them will be in the labor force in 2015.
 - ◆ This compares to 1.5 million employed in 2010

Since 2006, Fatal Work Injury Rates Improved But Still Climb Sharply With Age

Fatal Work Injury Rate per 100,000 full-time-equivalent workers



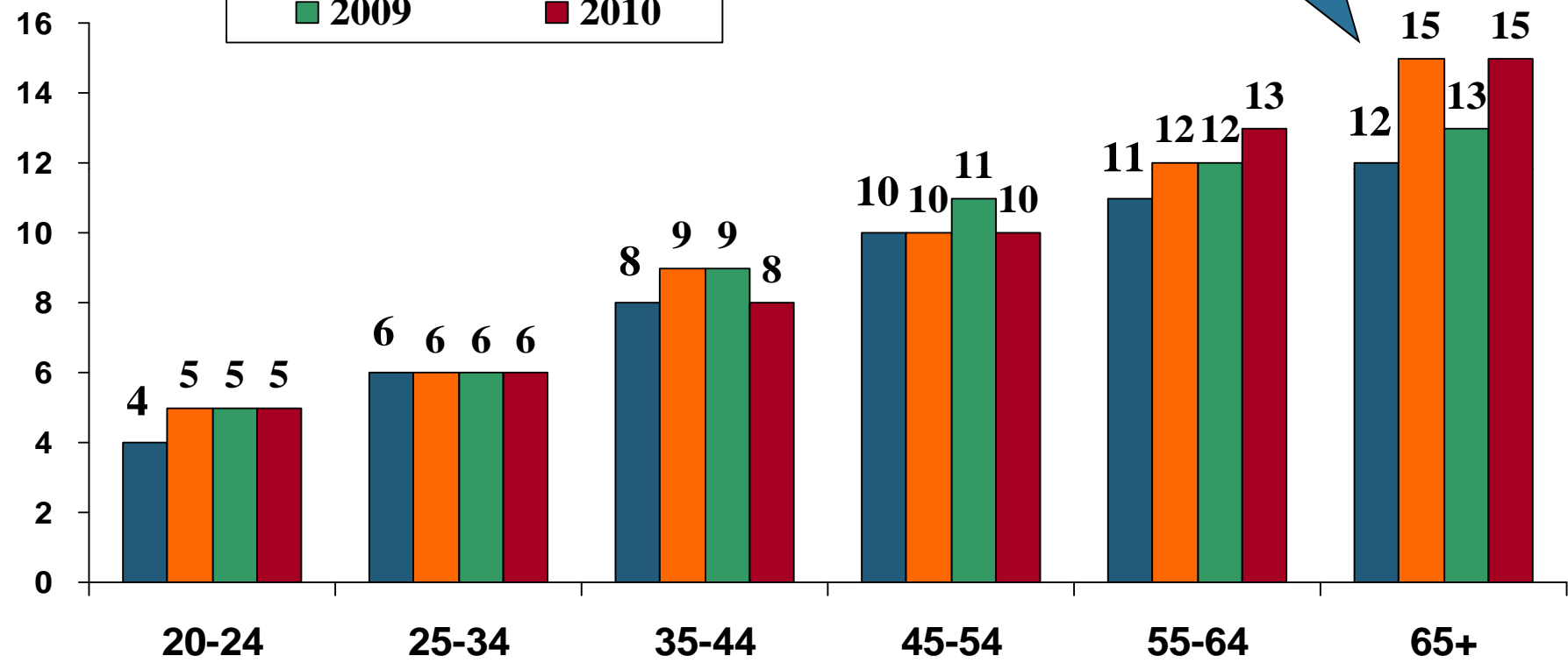
Data for 2010 are preliminary and subject to revision

Source: US Bureau of Labor Statistics, at <http://www.bls.gov/iif/oshwc/foi/cfch0009.pdf>, various years

Older Workers Lose More Days from Work Due to Injury or Illness

Age 65+ workers median lost time is 2-3X that of workers age 25-34

Median Days Away From Work



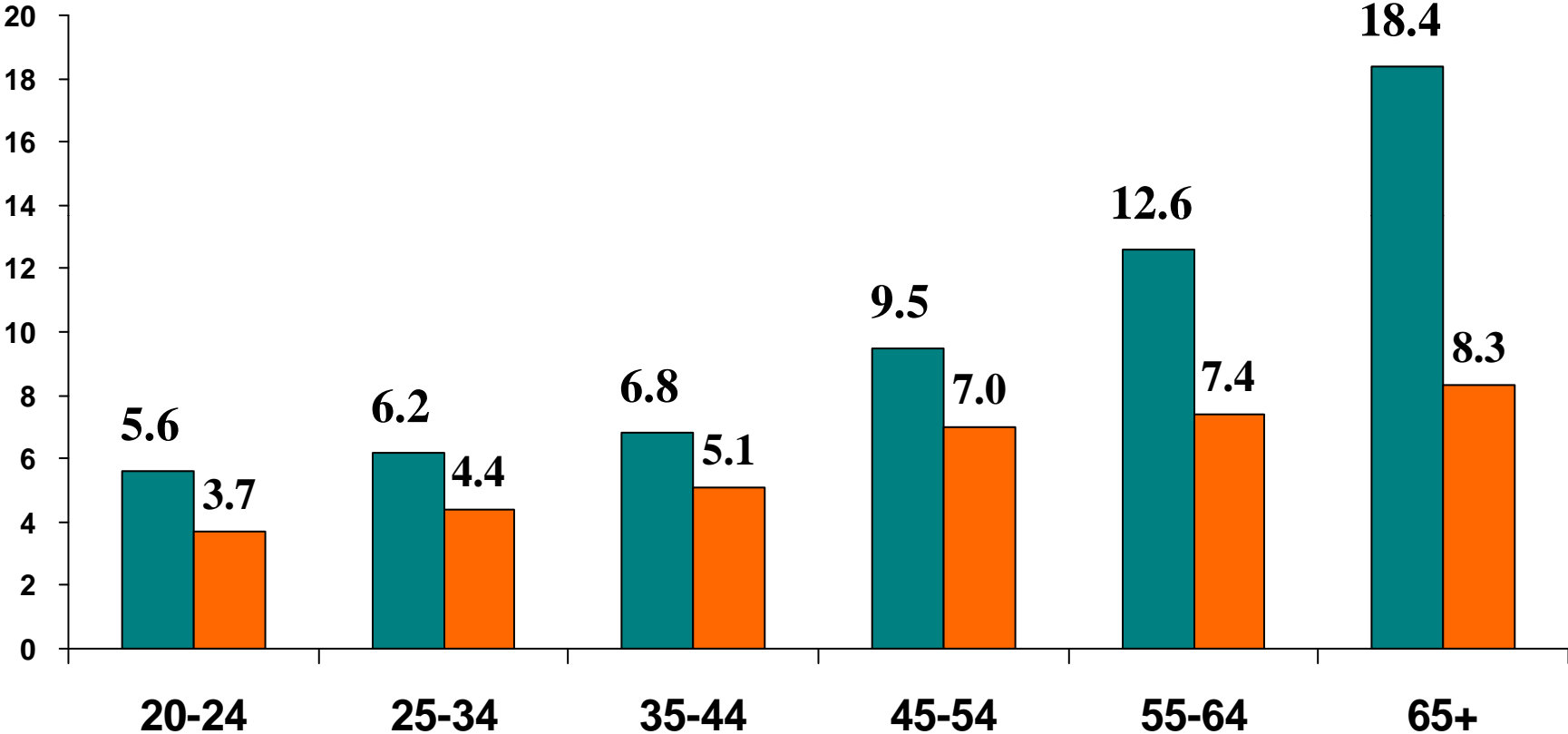
There will be more lost time as the workforce ages in the future

Source: US Bureau of Labor Statistics, *Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, 2010* (Table 10), released November 9, 2011.

Older Workers Are Much More Likely to Break a Bone

Incidence Rate* (2010)

■ Fractures ■ Multiple Traumatic Injuries



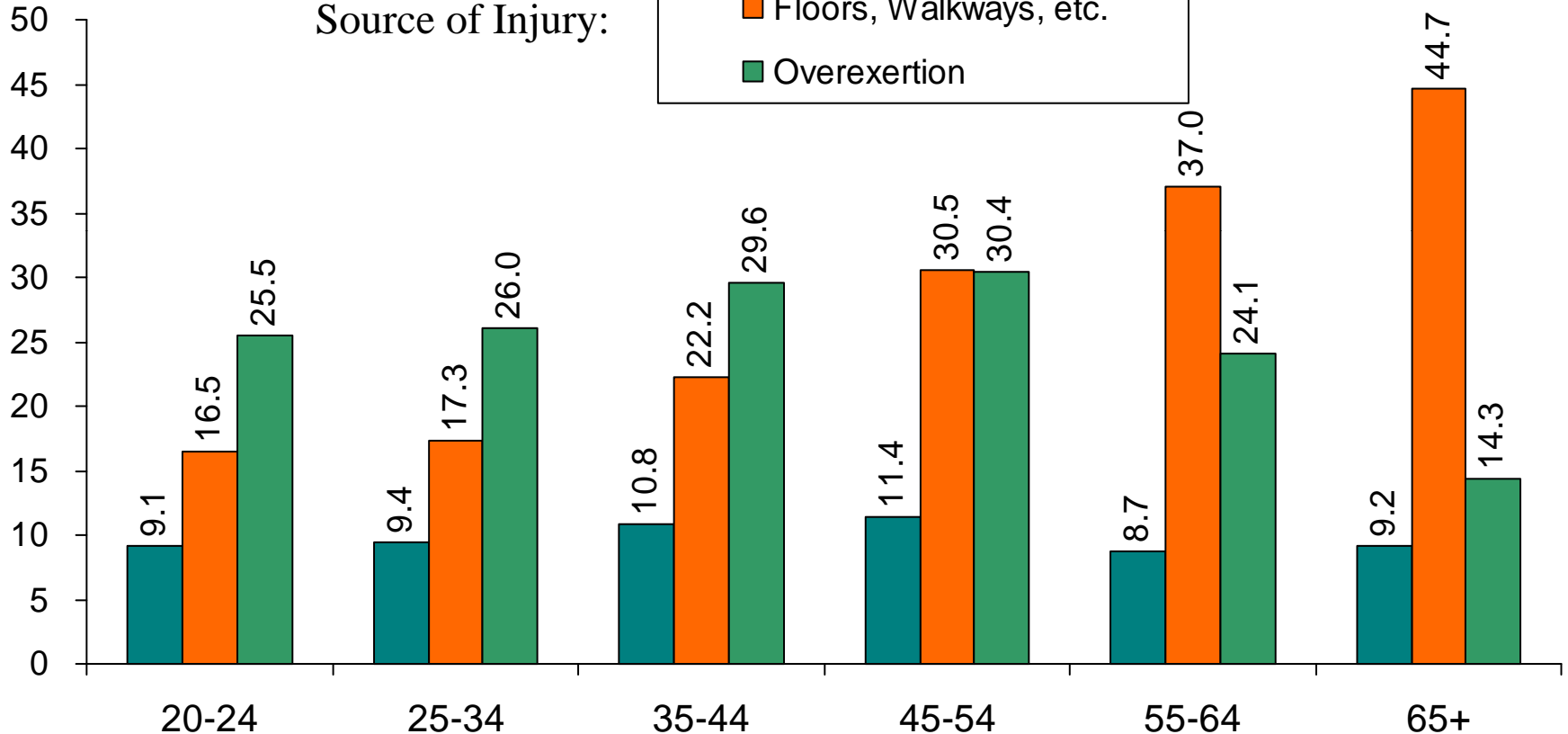
*per 10,000 full-time-equivalent workers

Source: US Bureau of Labor Statistics, US Department of Labor at <http://www.bls.gov/news.release/pdf/osh2.pdf> Table 14

Older Workers Are More Likely to Slip When Walking, but Less Likely to Overexert Themselves

Incidence
Rate (2010)

Source of Injury:



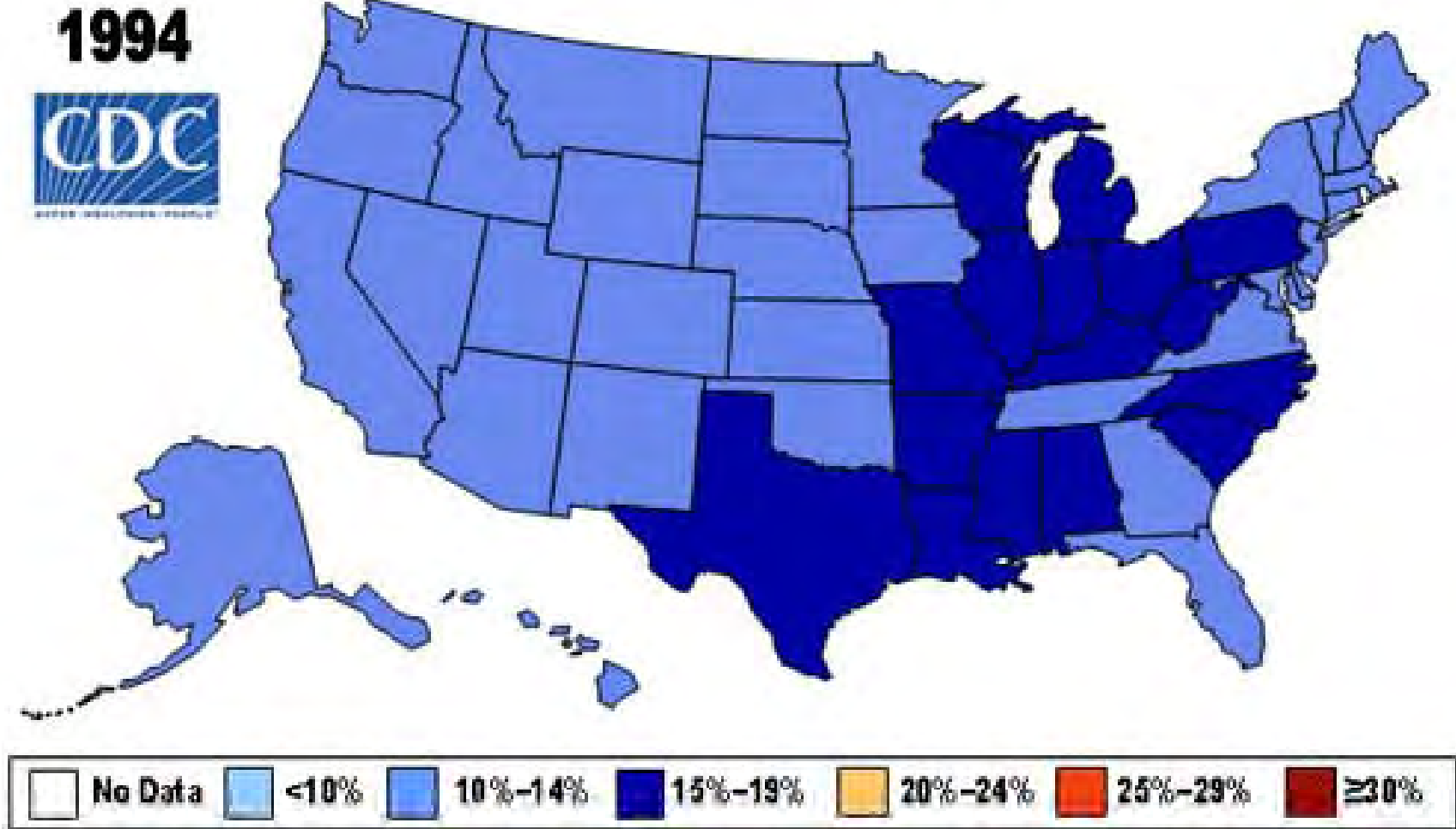
6. The Obesity Epidemic

In 1994, in no state was the percent of adults who were obese as high as 20%.

By 2010, all 50 states had adult obesity rates of 20% or more. In 12 states, 30% of the adults were obese.

Obesity Trends Among U.S. Adults

BRFSS, 1994

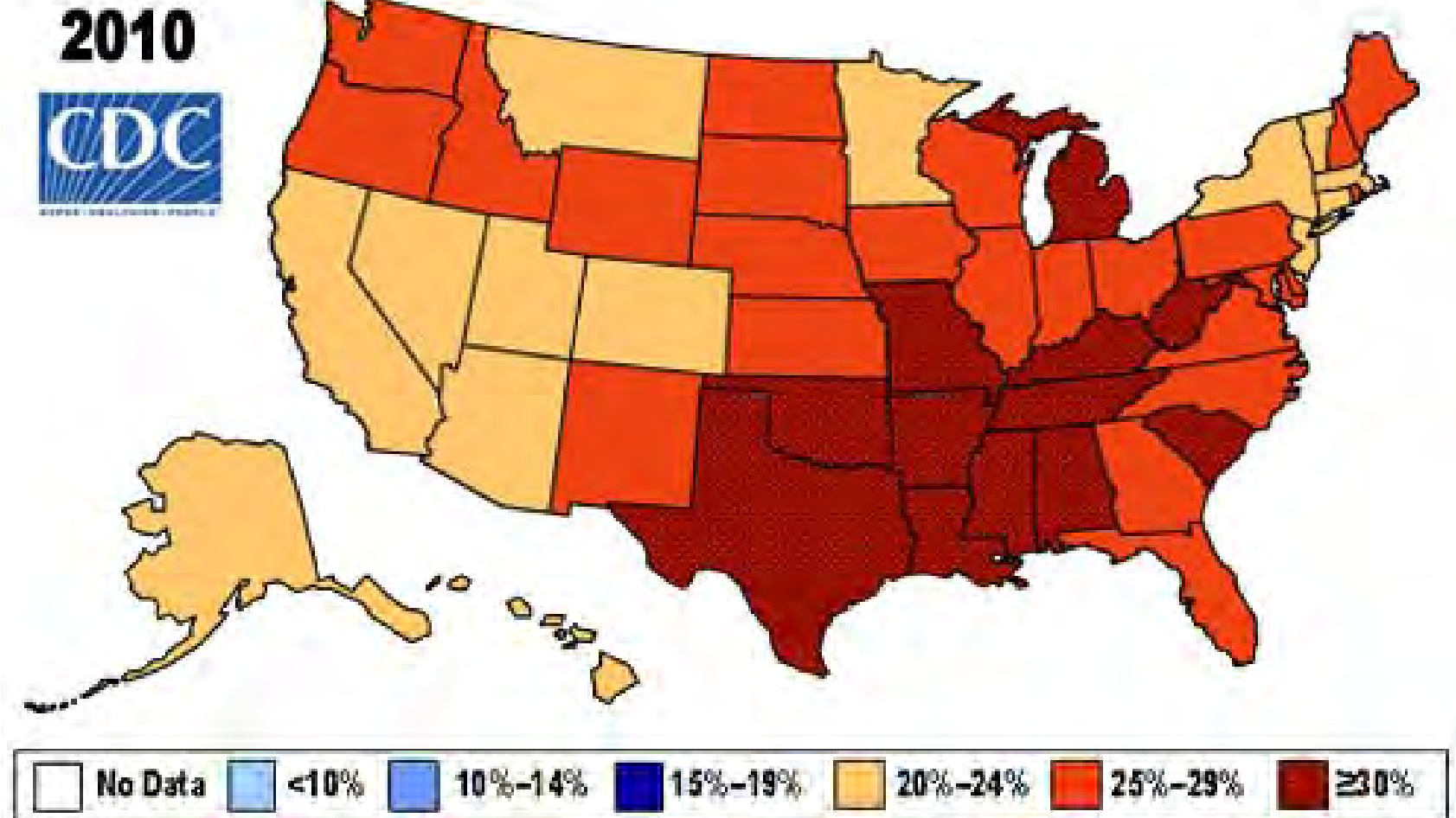


Source: <http://www.cdc.gov/obesity/data/trends.html#State>

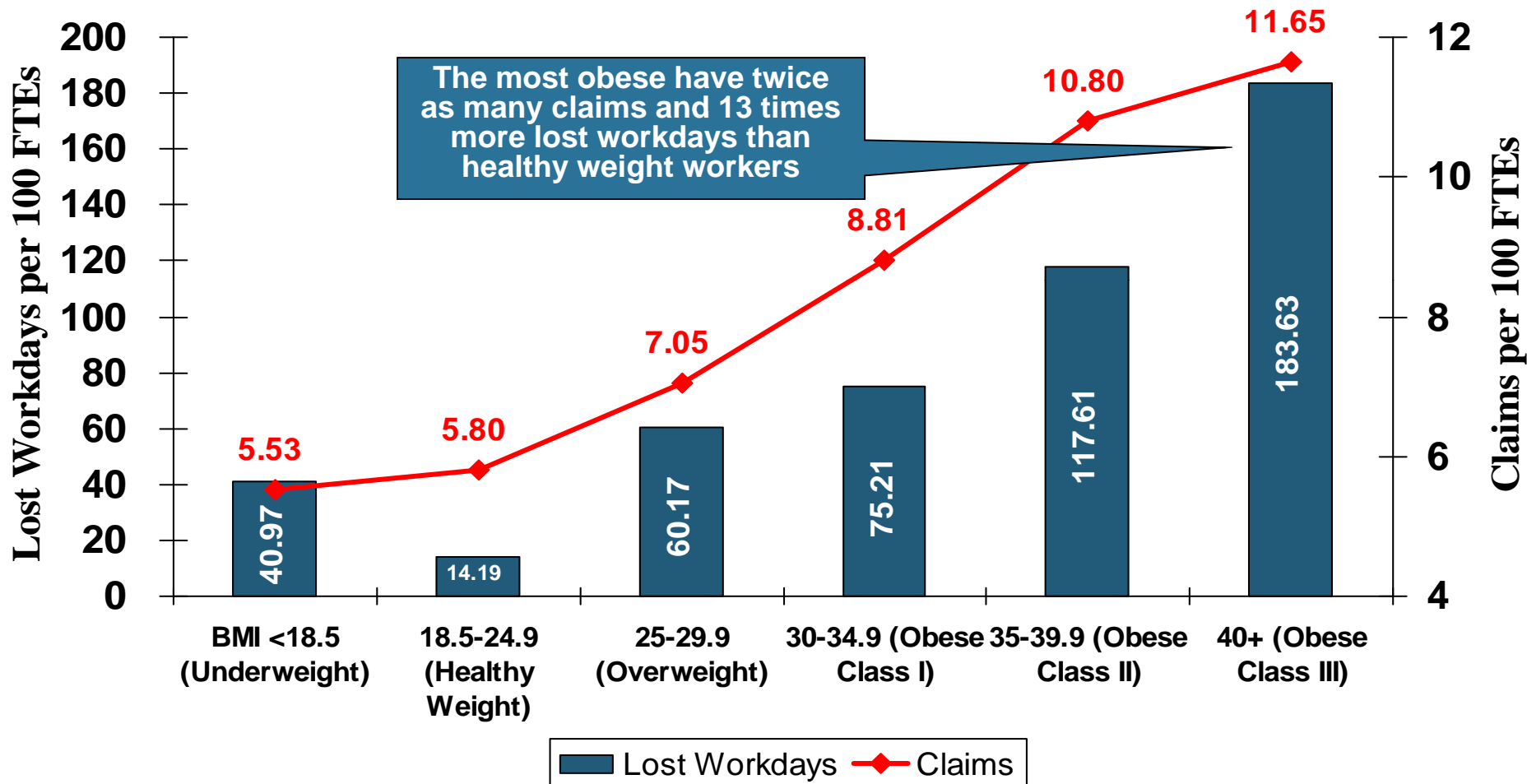
Obesity Trends Among U.S. Adults

BRFSS, 2010

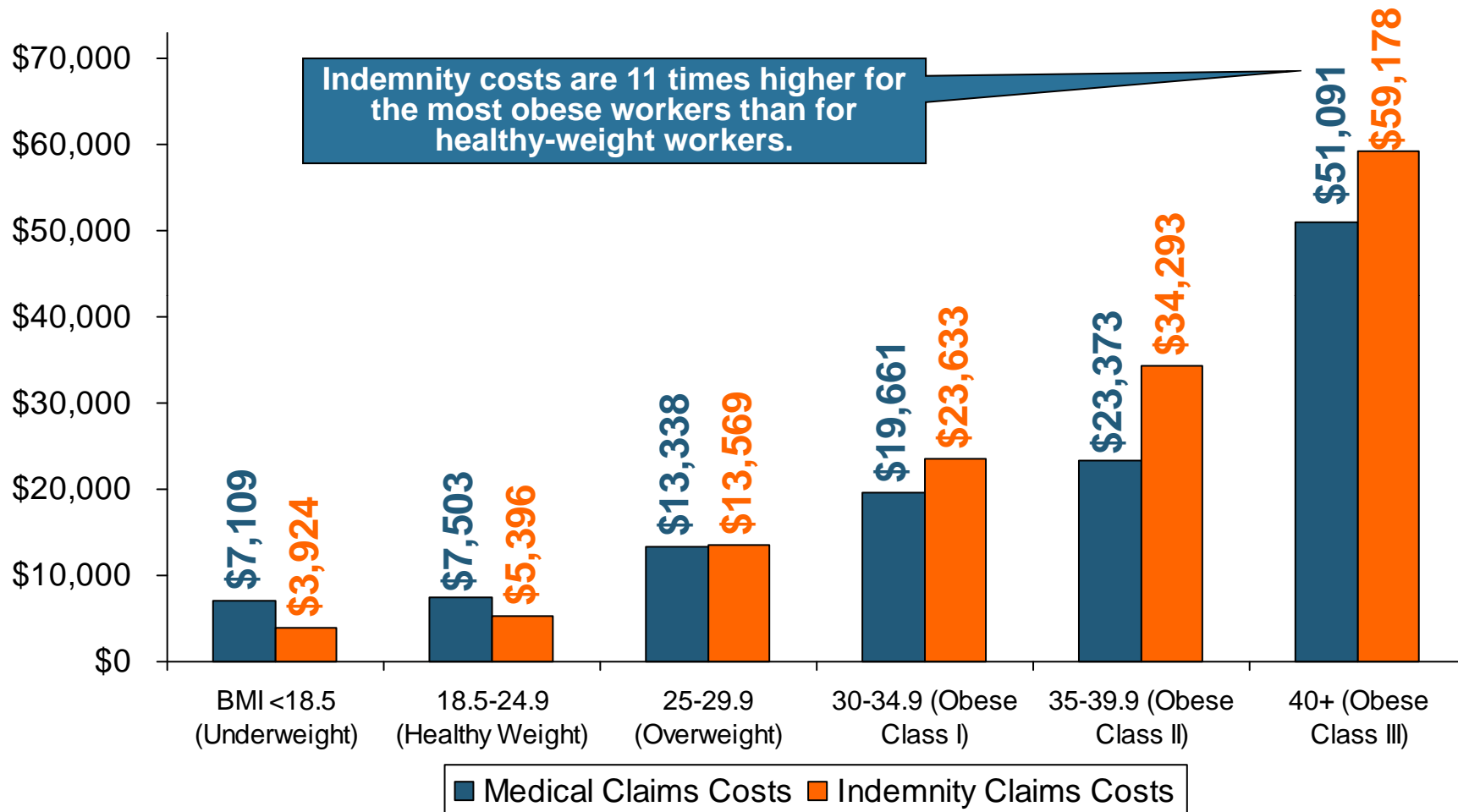
(*BMI ≥ 30 , or ~ 30 lbs. overweight for 5' 4" person)



The Most Obese Workers File Twice as Many WC Claims as Healthy-Weight Workers

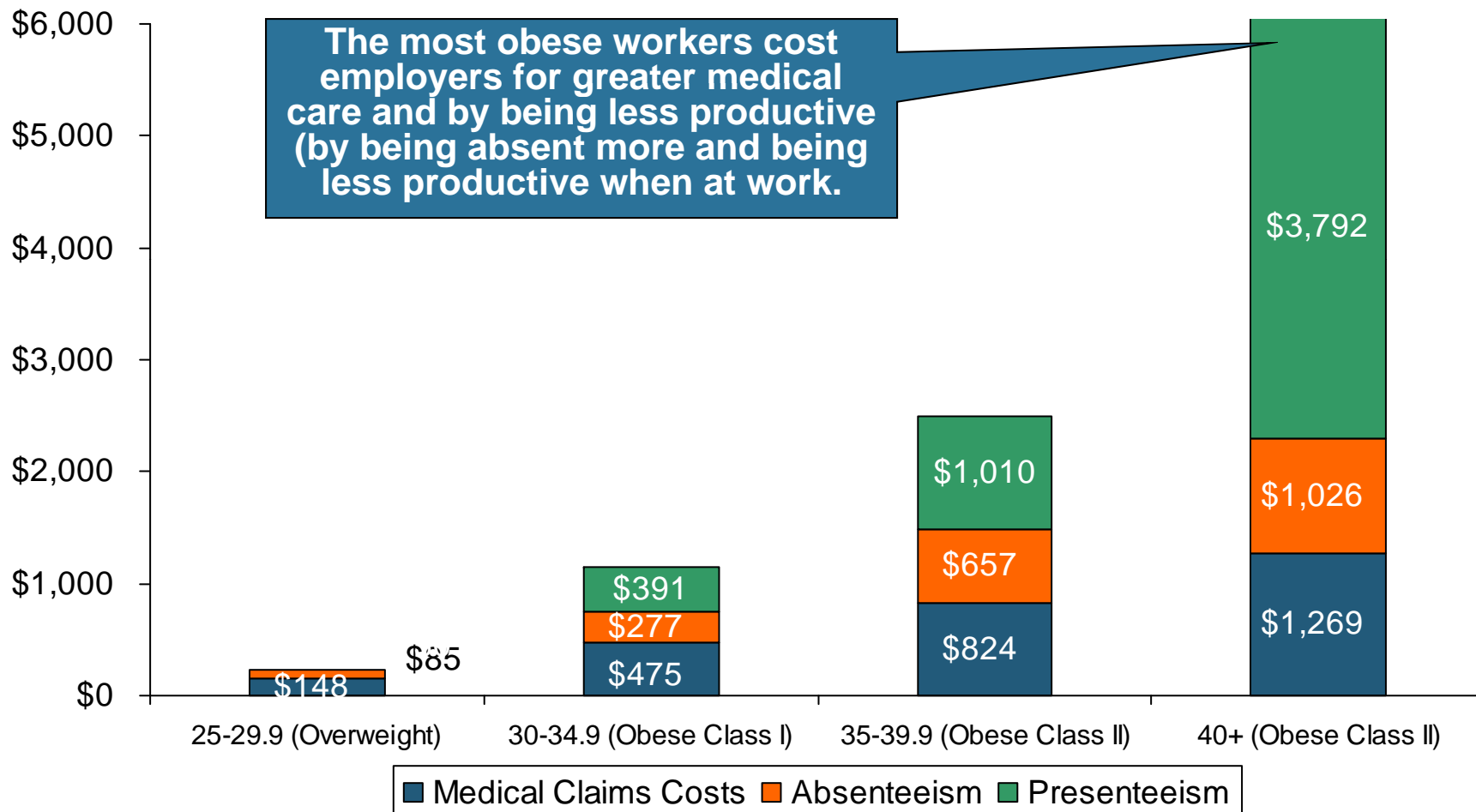


WC Medical Claims and Indemnity Costs are 5-10x Higher for the Most Obese Workers



Additional (to WC) Costs of Obese Workers

Estimated Per
Capita Costs



Insurance Information Institute Online:

www.iii.org

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