Mega Trends in Workers Compensation
Past, Present and Future
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The Post-Crisis Economy & Workers Compensation
  The scars of the “Great Recession” are still visible on the WC line

The New American Labor Force

The Reindustrialization of America

The Future of Healthcare in the United States
  WC’s future is inextricably linked to influences in this key sector

Workers Compensation Operating Result Update

Workers Compensation: The Next 100 Years

Q&A
The Slow and Uneven Nature of the Economic Recovery Is Changing the WC Playing Field

Despite a Still-Sluggish Economy, there Are Potent Growth Drivers for Workers Comp and Commercial Insurers in General
US Real GDP Growth*

**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 3/14; Insurance Information Institute.
Real GDP by State Percent Change, 2012: Highest 25 States

<table>
<thead>
<tr>
<th>State</th>
<th>Percent Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>13.4</td>
</tr>
<tr>
<td>TX</td>
<td>4.8</td>
</tr>
<tr>
<td>OR</td>
<td>3.9</td>
</tr>
<tr>
<td>WA</td>
<td>3.6</td>
</tr>
<tr>
<td>CA</td>
<td>3.5</td>
</tr>
<tr>
<td>MN</td>
<td>3.5</td>
</tr>
<tr>
<td>UT</td>
<td>3.4</td>
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<tr>
<td>IN</td>
<td>3.3</td>
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<td>TN</td>
<td>3.3</td>
</tr>
<tr>
<td>WV</td>
<td>3.3</td>
</tr>
<tr>
<td>NC</td>
<td>2.7</td>
</tr>
<tr>
<td>SC</td>
<td>2.7</td>
</tr>
<tr>
<td>AZ</td>
<td>2.6</td>
</tr>
<tr>
<td>FL</td>
<td>2.4</td>
</tr>
<tr>
<td>IA</td>
<td>2.4</td>
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<tr>
<td>MD</td>
<td>2.4</td>
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<tr>
<td>MS</td>
<td>2.4</td>
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<td>MA</td>
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<td>MI</td>
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<td>OH</td>
<td>2.2</td>
</tr>
<tr>
<td>US</td>
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</tr>
<tr>
<td>CO</td>
<td>2.1</td>
</tr>
<tr>
<td>GA</td>
<td>2.1</td>
</tr>
<tr>
<td>MT</td>
<td>2.1</td>
</tr>
<tr>
<td>OK</td>
<td>2.1</td>
</tr>
<tr>
<td>MO</td>
<td>2.0</td>
</tr>
</tbody>
</table>

North Dakota was the economic growth juggernaut of the US in 2012—by far.

Only 10 states experienced growth in excess of 3%, which is what we would see nationally in a more typical recovery.

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

Growth rates in 8 states (and DC) were still below 1% in 2012

Connecticut was the only state to shrink in 2012

The economic outlook for most of the US is positive for the first time in many years.
Consumer confidence has 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.

Source: University of Michigan; Insurance Information Institute

Impact of 2011 budget impasse

Optimism among consumers dropped in Q3 2013 as the government shutdown created uncertainty, then rebounded though the harsh winter took a toll.
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

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959

Job growth, low inventories of existing homes, low mortgage rates and demographics should continue to stimulate new home construction for several more years

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (3/14 and 3/13); Insurance Information Institute.
Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2013*

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Loan Volume ($Trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>06:Q1</td>
<td>$1.13</td>
</tr>
<tr>
<td>06:Q2</td>
<td>$1.16</td>
</tr>
<tr>
<td>06:Q3</td>
<td>$1.18</td>
</tr>
<tr>
<td>06:Q4</td>
<td>$1.22</td>
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<tr>
<td>07:Q1</td>
<td>$1.25</td>
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<tr>
<td>07:Q2</td>
<td>$1.30</td>
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<tr>
<td>07:Q3</td>
<td>$1.39</td>
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<td>07:Q4</td>
<td>$1.44</td>
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<td>08:Q1</td>
<td>$1.48</td>
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<td>08:Q2</td>
<td>$1.50</td>
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<td>08:Q3</td>
<td>$1.49</td>
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<td>08:Q4</td>
<td>$1.49</td>
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<td>09:Q1</td>
<td>$1.43</td>
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<td>09:Q2</td>
<td>$1.27</td>
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<td>$1.18</td>
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<td>$1.18</td>
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<td>$1.18</td>
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<td>$1.24</td>
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<td>11:Q3</td>
<td>$1.28</td>
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<td>11:Q4</td>
<td>$1.35</td>
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<td>12:Q1</td>
<td>$1.37</td>
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<td>12:Q2</td>
<td>$1.42</td>
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<td>12:Q3</td>
<td>$1.46</td>
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<td>12:Q4</td>
<td>$1.51</td>
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<tr>
<td>13:Q1</td>
<td>$1.53</td>
</tr>
<tr>
<td>13:Q2</td>
<td>$1.56</td>
</tr>
<tr>
<td>13:Q3</td>
<td>$1.57</td>
</tr>
</tbody>
</table>

In nominal dollar terms, this is an all-time high.

Outstanding loan volume has been growing for over two years and (as of year-end 2012) surpassed previous peak levels.

*Latest data as of 2/2/2014.
Source: FDIC at [http://www2.fdic.gov/qbp/](http://www2.fdic.gov/qbp/) (Loan Performance spreadsheet); Insurance Information Institute.
ISM Non-Manufacturing Index
(Values > 50 Indicate Expansion)

January 2010 through February 2014

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

**Business Bankruptcy Filings, 1980-2013**

**% Change Surrounding Recessions**

<table>
<thead>
<tr>
<th>Period</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-82</td>
<td>58.6%</td>
</tr>
<tr>
<td>1980-87</td>
<td>88.7%</td>
</tr>
<tr>
<td>1990-91</td>
<td>10.3%</td>
</tr>
<tr>
<td>2000-01</td>
<td>13.0%</td>
</tr>
<tr>
<td><strong>2006-09</strong></td>
<td><strong>208.9%</strong></td>
</tr>
</tbody>
</table>

2013 bankruptcies totaled 33,212, down 17.1% from 2012—the fourth consecutive year of decline. Business bankruptcies more than tripled during the financial crisis.

**Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline**

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2013: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 Institute.

Latest (2013:Q4) was $7.23 trillion, a new peak--$980B above 2009 trough

Prior Peak was 2008:Q1 at $6.60 trillion

Recent trough (2009:Q3) was $6.25 trillion, down 5.3% from prior peak

Payrolls are 15.7% above their 2009 trough and up 2.0% over the past year
### 12 Industries for the Next 10 Years: Insurance Solutions Needed

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

Many industries are poised for growth, though insurers’ ability to capitalize on these industries varies widely.
The Construction Sector Is Critical to the Economy and the WC Insurers
Private Construction Activity Is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

*2013 figure is a seasonally adjusted annual rate as of December.
Sources: US Department of Commerce; Insurance Information Institute.
Change from Peak in New Construction Expenditures to 2013*

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 Construction Put in Place, January 2014 vs. January 2013*

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](http://www.census.gov/construction/c30/c30index.html); Insurance Information Institute.
Private Construction Activity is Up in Most Segments, Including the Key Residential Construction Sector; Bodes Well for Early 2014

*seasonally adjusted
Source: U.S. Census Bureau, [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html); Insurance Information Institute.
Private Construction Activity is Up in Many Segments, Including the Key Residential Construction Sector, But Down in a Few

*seasonally adjusted
Source: U.S. Census Bureau, [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html) ; Insurance Information Institute.
Florida Total Private Housing Starts, 2000 – 2017F

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

**CRASH, CRATER, RECOVERY**

Homebuilding in FL continues to recover, but employment and WC exposures will take more than a decade to recover.

(Thousands of Units)
Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Continues to Contract As State/Local Governments Grapple with Deficits and Federal Sequestration Takes Hold

*2013 figure is a seasonally adjusted annual rate as of December.
Sources: US Department of Commerce; Insurance Information Institute.

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

Public Construction Activity is Down in Many Segments as State and Local Budgets Remain Under Stress; Improvement Possible in 2014.

*seasonally adjusted
Source: U.S. Census Bureau, [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html) ; Insurance Information Institute.
Public Construction by Segment/Project Type, Jan. 2014 vs. Jan. 2013*

State and local public sector construction spending could begin a slow recovery in 2014; Federal spending will languish.

*seasonally adjusted
Source: U.S. Census Bureau, [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html); Insurance Information Institute.
Construction Employment, Jan. 2010—February 2014*

Construction employment is +506,000 above Jan. 2011 (+9.3%) trough

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

*Seasonally adjusted.
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.
The New American Labor Force

The Recovery’s Winners and Losers Are Reshaping the Sources of WC’s Payroll Exposure Base
Unemployment and Underemployment Rates: Still Too High, But Falling

January 2000 through February 2014, Seasonally Adjusted (%)

- "Headline" Unemployment Rate U-3
- Unemployment + Underemployment Rate U-6

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

"Headline" unemployment was 6.7% in February 2014. 4% to 6% is "normal."

As the unemployment rate approaches 6%, the Fed will begin signaling on short-term rates.

U-6 went from 8.0% in March 2007 to 17.5% in October 2009; Stood at 12.6% in Feb. 2014. 8% to 10% is "normal."

US Unemployment Rate Forecast

2007:Q1 to 2015:Q4F*

Rising unemployment eroded payrolls and WC’s exposure base. Unemployment peaked at 10% in late 2009.

Jobless figures have been revised slightly downwards for 2014/15

Unemployment forecasts have been revised slightly downwards. Optimistic scenarios put the unemployment as low as 6.0% by Q4 of this year.

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (3/14 edition); Insurance Information Institute.
Monthly Change in Private Employment

January 2007 through February 2014 (Thousands, Seasonally Adjusted)

Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Oct-10
Nov-10
Dec-10
Jan-11
Feb-11
Mar-11
Apr-11
May-11
Jun-11
Jul-11
Aug-11
Sep-11
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14

Millions

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

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

<table>
<thead>
<tr>
<th>Month</th>
<th>Cumulative Change in Employment (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-10</td>
<td>4</td>
</tr>
<tr>
<td>Feb-10</td>
<td>-10</td>
</tr>
<tr>
<td>Mar-10</td>
<td>33</td>
</tr>
<tr>
<td>Apr-10</td>
<td>92</td>
</tr>
<tr>
<td>May-10</td>
<td>98</td>
</tr>
<tr>
<td>Jun-10</td>
<td>287</td>
</tr>
<tr>
<td>Jul-10</td>
<td>511</td>
</tr>
<tr>
<td>Aug-10</td>
<td>-68</td>
</tr>
<tr>
<td>Sep-10</td>
<td>-184</td>
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<tr>
<td>Oct-10</td>
<td>-213</td>
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<tr>
<td>Nov-10</td>
<td>-224</td>
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<tr>
<td>Dec-10</td>
<td>-271</td>
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<tr>
<td>Jan-11</td>
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<tr>
<td>Feb-11</td>
<td>-288</td>
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<tr>
<td>Mar-11</td>
<td>-324</td>
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<tr>
<td>Apr-11</td>
<td>-452</td>
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<tr>
<td>May-11</td>
<td>-488</td>
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<tr>
<td>Jun-11</td>
<td>-530</td>
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<tr>
<td>Jul-11</td>
<td>-536</td>
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<tr>
<td>Aug-11</td>
<td>-549</td>
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<tr>
<td>Sep-11</td>
<td>-574</td>
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<td>Oct-11</td>
<td>-585</td>
</tr>
<tr>
<td>Nov-11</td>
<td>-559</td>
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<tr>
<td>Dec-11</td>
<td>-589</td>
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<td>Jan-12</td>
<td>-621</td>
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<tr>
<td>Feb-12</td>
<td>-643</td>
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<tr>
<td>Mar-12</td>
<td>-654</td>
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<tr>
<td>Apr-12</td>
<td>-623</td>
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<tr>
<td>May-12</td>
<td>-616</td>
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<tr>
<td>Jun-12</td>
<td>-610</td>
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<tr>
<td>Jul-12</td>
<td>-621</td>
</tr>
<tr>
<td>Aug-12</td>
<td>-643</td>
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<tr>
<td>Sep-12</td>
<td>-654</td>
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<td>Oct-12</td>
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<td>Dec-12</td>
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<tr>
<td>Jan-13</td>
<td>-618</td>
</tr>
<tr>
<td>Feb-13</td>
<td>-631</td>
</tr>
</tbody>
</table>

*Temporary Census hiring distorted 2010 figures*

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.

**Cumulative job losses through Dec. 2013 totaled 631,000**

**Source:** US Bureau of Labor Statistics [http://www.bls.gov/data/#employment](http://www.bls.gov/data/#employment); Insurance Information Institute

State government employment fell by 1.9% since the end of 2009 but is recovering while Federal employment is down by 3.8% and deteriorating.

Local government employment shrank by 424,000 from Jan. 2010 through Dec. 2013, accounting for 67% of all government job losses, negatively impacting WC exposures for those cities and counties that insure privately.

*Cumulative change from prior month; Base employment date is Dec. 2009.
Unemployment Rates by State, February 2014: Highest 25 States*

In February, 29 states had over-the-month unemployment rate decreases, 10 states had increases, and 11 states and the District of Columbia had no change.

*Provisional figures for February 2014, seasonally adjusted.

In February, 29 states had over-the-month unemployment rate decreases, 10 states had increases, and 11 states and the District of Columbia had no change.

*Provisional figures for February 2014, seasonally adjusted.
US Unemployment Rate Forecasts

Quarterly, 2013:Q1 to 2014:Q4

Unemployment will remain high even under the most optimistic of scenarios, but forecasts are being revised downwards.

Sources: Blue Chip Economic Indicators (May 2013); Insurance Information Institute
Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2013:Q4

Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.
Sources: [http://research.stlouisfed.org/fred2/series/WASCUR](http://research.stlouisfed.org/fred2/series/WASCUR); National Bureau of Economic Research (recession dates); Insurance Information Institute.
Payroll vs. Workers Comp Net Written Premiums, 1990-2013E

Payroll Base*
$Billions

WC NWP
$Billions

Payroll Growth and Rate Increases 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.
Labor Force Participation Rate by Gender, 1948—2013

86.6% or working age men participated in the labor force in 1948 compared to 32.7% or women.

By 2013, the labor force participation rate for men had declined to 69.7% while the participation rate for women had risen to 57.2%.

By 2013, 57.2% of working age women participated in the labor force, up from 32.7% in 1948 but down from its all time high of 60.0% in 1999.

The composition and character of the U.S. labor force is changing rapidly. Winners and losers have clearly emerged. What does this mean for WC?

Unemployment Rates by Age and Race: 2006, 2010 and 2013

Unemployment among younger workers remains a chronic problem

Unemployment among some minority groups remains far above pre-recession levels

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.

The labor force participation rate for workers 70-74 grew by about 50% since 1998. Growth stalled during and after the Great Recession but has since resumed.

The Aging Workforce
Fatality Rates Improved Slightly Since 2006 but Still Climb Sharply With Age

The fatality rate for workers 65 and older was 5 times that of workers age 25-34. The workplace of the future will have to be completely redesigned to accommodate the surge in older workers.

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

Median Days Away From Work

- 2008
- 2009
- 2010
- 2011

Youngest baby boomer is age 48 (in 2013)
Oldest baby boomer is age 67 (in 2013)

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

Older Workers Are Much More Likely to Break a Bone

Incidence Rate* (2011)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Fractures</th>
<th>Multiple Traumatic Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>6.7</td>
<td>3.1</td>
</tr>
<tr>
<td>25-34</td>
<td>7.8</td>
<td>3.7</td>
</tr>
<tr>
<td>35-44</td>
<td>7.4</td>
<td>4.0</td>
</tr>
<tr>
<td>45-54</td>
<td>9.9</td>
<td>4.3</td>
</tr>
<tr>
<td>55-64</td>
<td>13.4</td>
<td>5.9</td>
</tr>
<tr>
<td>65+</td>
<td>15.3</td>
<td>6.4</td>
</tr>
</tbody>
</table>

*per 10,000 full-time-equivalent workers

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

Source/Nature of Injury:
- Vehicles
- Floors, Walkways, etc.
- Overexertion

Incidence Rate (2011)

| Age Group | Incidence Rate
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>9.9 (V) 10.9 (F) 34.7 (O)</td>
</tr>
<tr>
<td>25-34</td>
<td>10.5 (V) 12.7 (F) 37.7 (O)</td>
</tr>
<tr>
<td>35-44</td>
<td>11.4 (V) 17.0 (F) 44.3 (O)</td>
</tr>
<tr>
<td>45-54</td>
<td>12.8 (V) 22.3 (F) 49.6 (O)</td>
</tr>
<tr>
<td>55-64</td>
<td>12.1 (V) 30.6 (F) 39.6 (O)</td>
</tr>
<tr>
<td>65+</td>
<td>10.2 (V) 23.8 (F) 35.1 (O)</td>
</tr>
</tbody>
</table>

The Reindustrialization of America

American Industrial Might Is Making a Comeback

A Golden Opportunity for Workers Comp Insurers?
The value of Manufacturing Shipments in Dec. 2013 was $492.7B—a near record high.


*seasonally adjusted; Dec. 2013 is preliminary; data published February 4, 2014.
The manufacturing sector expanded for 48 of the 50 months from Jan. 2010 through February 2014. Weakness in early 2014 stems largely from harsh winter weather and weakness in China.

Manufacturing Growth for Selected Sectors, 2013 vs. 2012*

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 November 2013 to the same period in 2012. Source: U.S. Census Bureau, Full Report on Manufacturers’ Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/
**Manufacturing Is Expanding:** New orders exceed shipments which suggests the industry is in an expansionary phase

*Seasonally adjusted; Date are advance report YTD data comparing data through December 2013 to the same period in 2012. Source: U.S. Census Bureau, *Full Report on Manufacturers’ Shipment, Inventories, and Orders*, [http://www.census.gov/manufacturing/m3/](http://www.census.gov/manufacturing/m3/).*
Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

March 2001 through December 2013

Percent of Industrial Capacity

- 82%
- 80%
- 78%
- 76%
- 74%
- 72%
- 70%
- 68%
- 66%

“Full Capacity”

The US operated at 79.2% of industrial capacity in Dec. 2013, well above the June 2009 low of 66.9% but is still below pre-recession levels.

The closer the economy is to operating at “full capacity,” the greater the inflationary pressure.

Source: Federal Reserve Board statistical releases at [http://www.federalreserve.gov/releases/g17/Current/default.htm](http://www.federalreserve.gov/releases/g17/Current/default.htm).
Since Jan 2010, manufacturing employment is up (+605,000 or +5.3%) and still growing.

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

*Seasonally adjusted; Jan. and Feb. 2014 are preliminary
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).

The U.S. is now the largest gas producer in the world, though Russia is the largest exporter. The U.S. needs to invest in its pipeline and LNG infrastructure and expedite regulatory approval to realize its full export potential.

Oil and gas extraction employment is up 32.9% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

*Seasonally adjusted
Healthcare employment has continued to grow in good times and bad - including the Great Recession.

Occupations Ranked by Projected Percentage Growth, 2012-2022F (Millions)

Healthcare Support 28.1
   Healthcare Practitioners 21.5
   Construction 21.4
   Personal Care and Service 20.9
   Computer and Math 18
   Social Service 17.2
   Business & Financial 12.5
   Groundskeeping/Janitorial 12.5
   Education 11.1
   All Occupations 10.8
   Legal 10.7
   Life, Phys and Social Science 10.1
   Repair 9.6
   Food Preparation 9.4
   Transportation 8.6
   Fire, Police, Etc. 7.9
   Architects and Engineers 7.3
   Sales 7.3
   Management 7.2
   Arts and Media 7
   Administrative Support 6.8
   Production 0.8
   Farming 3.4

Healthcare professions are expected to grow at 2 to nearly 3 times employment growth overall.

The Future of Healthcare in America

Workers Comp Is Increasingly Along for the Ride in the American Health Care Saga
From 1965 through 2013, US health care expenditures had increased by 69 fold. Population growth over the same period increased by a factor of just 1.6. By 2022, health spending will have increased 119 fold.

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.

Health care expenditures as a share of GDP rose from 5.8% in 1965 to 18.0% in 2013 and are expected to reach 19.9% of GDP by 2022.

Since 2009, health expenditures as a % of GDP have flattened out at about 18%--the question is why and will it last?

Rate of Health Care Expenditure Increase Compared to Population, CPI and GDP

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).

1965: 194.3 Mill
2013: 317.0 Mill
63.1%

1965: $719.1 Bill
2013: $16,797.5 Bill
650.7%

1965: $42.0 Bill
2013: $2,914.7 Bill
2235.9%

6839.8%

Source: Insurance Information Institute research.
Medical Cost Inflation vs. Overall CPI, 1995 - 2013

Though moderating, medical inflation will continue to exceed inflation in the overall economy.

Average Annual Growth Average
Healthcare: 3.8%
Overall CPI: 2.4%

Possible Effects of the Affordable Care Act ("ObamaCare") on Workers Compensation
WC Medical Severity Generally Outpaces the Medical CPI Rate

Average annual increase in WC medical severity from 1995 through 2011 was well above the medical CPI (6.8% vs. 3.8%), but the gap is narrowing.

## A Few Potential Impacts of the ACA on Workers Compensation

<table>
<thead>
<tr>
<th>Issue</th>
<th>Concern</th>
<th>Contravening Argument</th>
</tr>
</thead>
</table>
| Surge in People Covered by Health Insurance | • System is overwhelmed  
• MD shortage  
• Patient care adversely impacted | • Over time, people will have access to preventative care, improving the general health of the population  
• Greater use of PA’s, etc. |
| Electronic Health Records                  | • Cost                                                                  | • Computerization of patient data could help flag issues and improve risk management and improve patient outcomes |
| Claim Shifting                             | • Provider/patient may prefer claim handled via WC system                | • Reduction in uninsured population reduces shifting                                    |

Source: Insurance Information Institute research; WCRI.
WC rates often tied to WC but can change for reasons independent of this link

There could be both positive and negative effects of a cut in Medicare rates on WC performance in states which tie reimbursement to Medicare

- WC reimbursement rates would go down
- Doctors may be unwilling to see WC patients:
  - 64% of Dr.’s surveyed said they would stop accepting new Medicare patients if planned rate cuts go through; some of these same doctors may also refuse WC patients if WC rates also decrease

These effects would likely be short lived

- All states which tie their fee schedules to Medicare already increase the Medicare rates to set WC rates, so any drop in the Medicare rates would likely be soon offset by a higher WC adjustment

**WC Maximum Allowable Reimbursement Rates**

- WC rates tied to Medicare
- WC rates **not** tied to Medicare

PPACA May Have Distinct Impacts on WC Depending on Claim Frequency/Severity

**High Volume, Low Severity**  
*Ex: med only, quick to settle, <25K*

**Complicated**  
*Ex: back pain claims, very litigious*

**Catastrophic Injuries**  
*Ex: spinal cord injury, multiple trauma claims*

**Potential ACA Impact**
- Expanded coverage may shift some small claims to the health insurance system (+)
- Physician access problems could lead to indemnity increases and may bleed into the complicated cases (-)
- Preventative care and early record keeping decreases WC comorbidities (+)
- Soft tissue treatments, a large portion of “slow burn claims,” may decrease in cost (+)
- No significant impacts

**Industry Portfolio by Claim Type**  
*Relative Volume by Claim Frequency & Paid Dollars*

**SOURCE:** Dr. Glenn Pransky, Liberty Mutual Research Institute for Health & Safety extracted from 3/13/13 presentation by Christopher Cunniff, FCAS, of Liberty Mutual: *Impacts of Healthcare Reform on Workers Compensation,*
Possible Effects on Workers Comp

1. Could slow the growth in WC medical care costs
   - IPAB recommendations and PCORI reports, plus Medicare changes, could have beneficial effects on cost and treatment effectiveness

2. Could ACA be first step in federal regulation of insurance products and markets?
   - Will regulation like that requiring products to be priced to meet Medical Loss Ratios be applied to WC?
   - Will cost-control mechanisms such as the Independent Payment Advisory Board be developed for WC?
   - Will WC insurers lose their limited exemption from anti-trust laws that they have had under McCarran-Ferguson since 1945?
Some states are running new health-insurance exchanges on their own. Other are leaving some or all of the task to the federal government.

Number of People Signed Up for Health Care Under the ACA, Oct. 1 – March 1

As of March 1, 4.2 million people have signed up for coverage under the ACA since enrollment opened on Oct. 1, 2013.

UPDATE
HHS announced that enrollment as of 3/16 now exceeds 5 million.

Source: Centers for Medicare and Medicaid as of March 7, 2014:
Projected Number of People with No Health Insurance, 2013—2022*

The projected decline in the uninsured population is very sensitive to the enrollment rate under the Affordable Care Act.

By 2018 the number of people under age 65 without insurance is expected to drop by 25 million (~45%).

*Under age 65.

Will Skill Shortages in the Medical Field Adversely Impact WC?

Concern that the ACA Will Overwhelm the Healthcare Delivery System, Harming Outcomes
A potential large and growing physician gap looms over the next decade, with potential for users of health care

<table>
<thead>
<tr>
<th>Year</th>
<th>Physician Supply (All Specialties)</th>
<th>Physician Demand (All Specialties)</th>
<th>Physician Shortage (All Specialties*)</th>
<th>Physician Shortage (Non-Primary Care Specialties)</th>
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</thead>
<tbody>
<tr>
<td>2008</td>
<td>699,100</td>
<td>706,500</td>
<td>7,400</td>
<td>None</td>
</tr>
<tr>
<td>2010</td>
<td>709,700</td>
<td>723,400</td>
<td>13,700</td>
<td>4,700</td>
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<td>2015</td>
<td>735,600</td>
<td>798,500</td>
<td>62,900</td>
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<td>2020</td>
<td>759,800</td>
<td>851,300</td>
<td>91,500</td>
<td>46,100</td>
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<td>2025</td>
<td>785,400</td>
<td>916,000</td>
<td>130,600</td>
<td>64,800</td>
</tr>
</tbody>
</table>

Source: American Association of Medical Colleges [https://www.aamc.org/advocacy/campaigns_and_coalitions/fixdocshortage/]; Insurance Information Institute.
A potential large and growing shortage of physicians looms. Estimates suggest a shortage of 91,500 physicians by 2020—a gap 12% gap. *Will this be a negative for MPL?*

Source: American Association of Medical Colleges [https://www.aamc.org/advocacy/campaigns_and_coalitions/fixdocshortage/]; Insurance Information Institute.
Physician Supply and Demand, 2008–2020

Demand for physicians is expected to outstrip supply through 2020 by a wide margin.

Source: American Association of Medical Colleges [https://www.aamc.org/advocacy/campaigns_and_coalitions/fixdocshortage/]; Insurance Information Institute.
Growth in Healthcare Profession by Skill Level, 2012 – 2022F

(Thousands of Jobs)

- Practitioners, including RNs: 5,005 to 6,020 (+1.015 Mill, +20.3%)
- Technicians, including LPNs: 2,893 to 3,590 (+697,000, +24.1%)
- Aides: 2,492 to 3,242 (+750,000, +30.1%)
- Other: 1,771 to 2,196 (+425,000, +24.0%)

The Weak Economy and Soft Market Have Made the Workers Comp Operating Environment Increasingly Challenging
Workers Compensation Combined Ratio: 1994–2014F

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.

Sources: A.M. Best (1994-2009); NCCI (2010-2012P) and are for private carriers only; Insurance Information Institute (2013-14).
Return on Net Worth, 2003-2012, Workers Comp vs. All P/C Lines

WC Has Been Marginally Less Profitable than the P/C Insurance Industry Overall

Average: 2003-2012
WC: 7.1%
All P/C Lines: 7.9%

### Workers Comp Return on Net Worth, 2012

<table>
<thead>
<tr>
<th>State</th>
<th>Percent</th>
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<tbody>
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</tr>
<tr>
<td>MT*</td>
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</tr>
<tr>
<td>NV*</td>
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<tr>
<td>MI</td>
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<tr>
<td>WV</td>
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<tr>
<td>SD</td>
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<td>TN</td>
<td>8.3</td>
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<tr>
<td>NH</td>
<td>8.1</td>
</tr>
</tbody>
</table>

- **Top 25 States**
- 9 states posted double-digit profits in WC in 2012

Sources: NAIC; Insurance Information Institute

* Denotes results exclude state funds. Other state funds are included in results
In 2012, in 7 states the Return on Net Worth was under 4%
Change in Price Paid for Medical Professional Services in WC, 2002-2012*

Increases in WC med costs varied enormously over the past decade from a high of 56% in Wisconsin to a low of 2% in North Carolina.

States in GOLD had no fee schedule in 2012. These generally saw larger increases in WC medical costs over the past decade.

*Data are preliminary as of 6/30/12.
Workers Compensation Medical Severity Moderate Increase in 2012

Average Medical Cost per Lost-Time Claim

Cumulative Change = 252% (1991-2012p)

Accident Year

2012p: Preliminary based on data valued as of 12/31/2012.
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.
Average Indemnity Cost per Lost-Time Claim

Average indemnity costs per claim were up 1% in 2012 to $22,400

Annual Change 1991–1993: -1.7%
Annual Change 1994–2001: +7.3%
Annual Change 2002–2011: +3.2%

2012p: Preliminary based on data valued as of 12/31/2012.
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.
Workers Compensation Lost-Time Claim Frequency Declined in 2012

Lost-Time Claims

Cumulative Change of \(-55.4\%\) (1991–2011 adj.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Indicated</th>
<th>Adjusted</th>
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<tr>
<td>2012p</td>
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</table>

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

*Adjustments primarily due to significant audit activity.

2012p: Preliminary based on data valued as of 12/31/2012
1991–2011: Based on data through 12/31/2011, developed to ultimate
Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies
WC Indemnity Severity vs. Wage Inflation, 1995 -2012p

WC indemnity severity turned positive again in 2011

Indemnity severities usually outpace wage gains

Change in CPS Wage
Change in Indemnity Cost per Lost-Time Claim

Annual Change 1991–1993: -1.7%
Annual Change 1994–2001: +7.3%
Annual Change 2002–2011: +3.2%

Source: NCCI
According to the NICB, the number of “Questionable Claims” in WC and EL increased by 38.4% from 2010 through 2012.
Workers Compensation Premium: Second Consecutive Year of Increase

Net Written Premium

$ Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>State Funds ($ B)</th>
<th>Private Carriers ($ B)</th>
</tr>
</thead>
<tbody>
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<td>2012</td>
<td>32.3</td>
<td>35.2</td>
</tr>
<tr>
<td>2012p</td>
<td>35.2</td>
<td>39.6</td>
</tr>
</tbody>
</table>

Pvt. Carrier NWP growth was +9.0% in 2012, the best since 2005

Source: 1990–2010p Private Carriers, Annual Statement Data, NCCI.
1996–2012p State Funds: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT Annual Statements
State Funds available for 1996 and subsequent
Direct Premiums Written: Workers’ Comp Percent Change by State, 2007-2012*

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.
Bottom 25 States

States with the poorest performing economies also produced the most negative net change in premiums of the past 5 years

*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.
While growth rates varied widely, all states experienced growth in excess of 5% in 2012.
Workers Comp. Quarterly Rate Changes, by Line: 2000:Q1 to 2013:Q2

1999:Q4 = 100

Most accounts are now renewing upwards

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; Barclay’s Capital; Insurance Information Institute.
Change in Commercial Rate Renewals, by Line: 2013:Q3

Major Commercial Lines Renewed Uniformly Upward in Q3:2013 for the 9th Consecutive Quarter; Property Lines & Workers Comp Leading the Way; Cat Losses and Low Interest Rates Provide Momentum Going Forward

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; Insurance Information Institute.
Workers Comp Rate Changes, 2008:Q4 – 2013:Q3

WC rate changes have been positive for 10 consecutive quarters, longer than any other commercial line

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

P/C growth is expected to remain fairly stable through 2015

Source: Conning.
Average Approved Bureau Rates/Loss Costs

History of Average WC Bureau Rate/Loss Cost Level Changes

Cumulative 1990–1993
+36.3%

Cumulative 1994–1999
-27.8%

Cumulative 2000–2003
+17.1%

Cumulative 2004–2011
-25.6%

Note: Countrywide approved changes in advisory rates, loss costs and assigned risk rates as filed by applicable rating organization.
Source: NCCI.
Current NCCI Voluntary Market
Filed Rate/Loss Cost Changes

(Excludes Law-Only Filings)

Effective Dates 1/1/2012 and Prior  Effective Dates Subsequent to 1/1/2012  Filed and Pending

• IN and NC filed in cooperation with state rating bureau
Source: NCCI
Impact of Discounting on Workers Compensation Premium

NCCI States—Private Carriers

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.
INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing
Investment Income Fell in 2012 and is Falling in 2013 Due to Persistently Low Interest Rates, Putting Additional Pressure on (Re) Insurance Pricing

1 Investment gains consist primarily of interest and stock dividends.

*Estimate based on annualized actual 9M:2013 investment income of $34.338B.

Sources: ISO; Insurance Information Institute.
Insurers Posted Net Realized Capital Gains in 2010, 2011 and 2012 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were the Primary Cause of 2008/2009’s Large Drop in Profits and ROE

Sources: A.M. Best, ISO, Insurance Information Institute.
Investment gains through 2013:Q3 were approximately double those through 2012:Q3

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

1 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.
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.
Yields on 10-Year U.S. Treasury Notes have been essentially below 5% for a full decade.

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.

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*Monthly, constant maturity, nominal rates, through February 2014.

Treasury yield curve remains near its most depressed level in at least 45 years. Investment income is falling as a result. Even as the Fed “tapers” rates are unlikely to return to pre-crisis levels anytime soon.

The Fed is actively signaling that it is determined to keep rates low until unemployment drops below 6.5% or until inflation expectations exceed 2.5%; low rates add to pricing pressure for insurers.

Source: Federal Reserve Board of Governors; Insurance Information Institute.
Treasury Yield Curves: Pre-Crisis (July 2007) vs. Feb. 2014

Longer term yields are expected to rise in 2014 and 2015 while short-term yields will not begin to normalize until 2015.

Higher longer-term yields will help insurers but short-term yields are expected to lag behind.

Outlook for U.S. Treasury Bond Yields Through 2015

Long-term yields should begin to normalize in 2014 but short-term yields will remain very low until 2015.

Longer-tail lines like MPL and workers comp will benefit the most from the normalization of yields.

History Suggests that WC, Like Other Long-Tailed Lines Is Much More Difficult to Underwrite
The Number of Impairments Varies Significantly Over the P/C Insurance Cycle, With Peaks Occurring Well into Hard Markets

Source: A.M. Best Special Report “Pace of P/C Impairments Slowed in 2012; Auto Writers, RRGs Continued to Struggle,” June 2013; Insurance Information Institute.
Impairment Rates Are Highly Correlated With Underwriting Performance and Reached Record Lows in 2007; Recent Increase Was Associated Primarily With Mortgage and Financial Guaranty Insurers and Not Representative of the Industry Overall

Source: A.M. Best; Insurance Information Institute
Number of Recessions Endured by P/C Insurers, by Number of Years in Operation

Number of Recessions Since 1860

Insurers are true survivors—not just of natural catastrophes but also economic ones

Many US Insurers Are Close to a Century Old or Older

Sources: Insurance Information Institute research from National Bureau of Economic Research data.
Historically, Deficient Loss Reserves and Inadequate Pricing Are By Far the Leading Cause of P-C Insurer Impairments. Investment and Catastrophe Losses Play a Much Smaller Role.

Medical Professional Liability Accounts for Only About 2% of Industry DPW but 6.7% of Insurer Impairments

- Workers Comp: 22.2%
- Homeowners: 19.7%
- Pvt. Passenger Auto: 8.6%
- Commercial Multi peril: 8.6%
- Commercial Auto Liability: 8.8%
- Other Liability: 7.3%
- Other: 6.7%
- Med Mal: 4.8%
- Surety: 4.0%
- Title: 8.6%

Source: A.M. Best Special Report “Pace of P/C Impairments Slowed in 2012; Auto Writers, RRGs Continued to Struggle,” June 2013; Insurance Information Institute.
Workers Compensation

The NEXT 100 Years
Threats and Challenges

- Will Advances in Workplace Safety Make WC Irrelevant?
- Loss of Pricing Discipline
- Persistently Low Interest Rates
- Affordable Care Act ("ObamaCare")
  - Probably a small net benefit for WC insurers
  - Less cost shifting possible
  - Potential downward pressure on drivers of med cost inflation; Wellness?
- Obesity
- Aging Workforce
- Opioids
- Regulatory Risk
- Anti-Immigration Sentiment in Washington
  - Likely holding back growth in high and low skill jobs
- Adoption of Employer Liability Laws? (e.g., TX, OK)
- “Big Data” and Workers Comp
  - Proliferation of advanced analytics
Workers Compensation Timeline

- **Industrialization of US in the Late 19th/Early 20th Century Led to Increasing & Unacceptably High Number of Deaths and Injuries Among Workers**
  - In 1912, an estimated 18,000 to 23,000 workers were killed on the job (compared to 5,071 in 2008) and approximately 4.7 million (12% or workforce) suffered a nonfatal illness or injury (compared to 3.7 million 2008)
  - The 1912 death/injury rates would imply 75,600 deaths and 17 million injuries today
  - More awareness of broader impacts on families of injured/killed workers

- **Workers Could Seek Redress Under Tort Law, But Seldom Prevailed**
  - Employers usually won suits filed by injured workers by arguing:
    - **Contributory Negligence**: Employee was at least partially to blame for the accident
    - **Assumed Risk**: By taking the job, the employee understood the hazards involved
    - **Fellow Servant Rule**: A fellow worker caused the accident, so the employer was not at fault

- **European Countries Began to Implement Workers Compensation Programs**
  - Germany (1884); England (1897)

- **Insurers Began to Sell Commercial Liability Coverage in the Late 1800s**
  - Coverage for inadvertent errors became more commonplace
  - In the workforce, such policies became the first employer liability policies

Source: Insurance Information Institute.
Key Workers Compensation Developments in the 1910s

**Nationwide**

- 1910: NY passes WC law (ruled unconstitutional)
- 1911: WI passes WC law (constitutionality upheld)
- 1912: Gov. commission studies WC reform laws
- 1913: 1st Ohio WC law passes (voluntary)
- 1914: 1912 law made compulsory
- 1915: Feb: State Supreme Ct rules WC laws constitutional
- 1916: Sept: Constitutional amendment OKs state fund
- 1917: DOI allows private WC insurers
- 1918: State Supreme Ct OKs private WC insurers
- 1918: US Supreme Ct rules WC laws are constitutional

**Ohio**

- 1910: NY passes WC law
- 1911: NY passes WC law
- 1912: NY passes WC law
- 1913: NY passes WC law
- 1914: NY passes WC law
- 1915: NY passes WC law
- 1916: NY passes WC law
- 1917: NY passes WC law
- 1918: NY passes WC law

Source: Insurance Information Institute.
New York was the first state to pass a WC law in 1910, and Ohio was one of the first ten when its law passed in 1911. By 1920, 43 of the 48 states at that time had passed WC laws.

Workers Compensation: 4 Predictions for the Next 100 Years

1. The Workplace Will Become Safer
   - Continuation of a nearly century long trend
   - Deaths and injuries will continue to fall and perhaps plummet due to improvements in risk management, technology and medicine
   - Technologies such as autonomous (driverless vehicles) will likely be a reality within 20-25 years causing motor-vehicle related fatalities and injuries (including MSDs) to fall

2. The Footprint of Federal Regulation on Insurance Will Increase
   - TRIA: Workers comp is arguably the most TRIA-dependent line
   - Post-Dodd-Frank: One (and in the future perhaps more) Systemically Important Financial Institution (SIFI) is a big WC insurer; The Fed is the ultimate regulator of SIFIs
   - Other WC insurers and reinsurers could be designated as Internationally Active Insurance Group (IAIG); Impact of this in the US is still unclear; More capital?
   - Federal Insurance Office (FIO): Pushing for greater consistency in state regulation
   - Affordable Care Act and subsequent healthcare legislation
   - Will the federal government take direct interest in WC?
     - It already has (e.g., TRIA) but will not seek to completely usurp states
     - As WC medical loss share rises, WC will get pulled into a tighter federal orbit
   - Insurers could once again resurrect the Optional Federal Charter debate
   - **Bottom Line:** The federal regulatory camel’s nose is under the tent; The hump is next.

Source: Insurance Information Institute.
Workplace deaths and injury rates have been falling for decades—trends that will likely continue for many years to come.

Source: Bureau of Labor Statistics; National Safety Council; Insurance Information Institute
U.S. Workforce Injury & Illness Rates, 1973-2012

(Injuries and Illnesses per 100 Full-Time Workers)

Workplace injury rates have declined in all industries from 11.0 in 1973 to 3.4 in 2012; in the same period injury rates in manufacturing declined from 15.3 to 4.3 and in construction from 19.8 to 3.7.

Sources: Bureau of Labor Statistics; Insurance Information Institute
Frequency: 1926–2009
A Long-Term Drift Downward

Manufacturing – Total Recordable Cases
Rate of Injury and Illness Cases per 100 Full-Time Workers

Workplace Injury Incidence Rates Declined in Last Four Economic Downturns

Note: Recessions indicated by gray bars.
Sources: NCCI, US Bureau of Labor Statistics;
3. **Businesses Will Retain More Risk**
   - Large deductible programs, self-insurance and use of captives will grow
   - Driven by more sophisticated risk management throughout corporate America and build-up of cash on corporate balance sheets *(phenomenon of increased risk retention is occurring for most types of property and liability risks)*
   - Some catastrophic WC exposures could be securitized

4. **Medical Costs Will Continue to Rise**
   - Technology, advancements in medicine will drive costs higher
   - Co-morbidities persist but may plateau; May improve over the span of decades
   - Supply/Demand imbalances for med services unlikely to persist beyond next 20 years
   - Consolidation in the healthcare space is likely; Net impact is upward price pressure
   - Digitization of patient med records per ACA is costly but ultimately should save money
   - **BUT:** “Big Data” drive should improve patient outcomes and lower costs
   - **IF:** Population projections are correct, aging will be less of an issue after 2030 or so
   - **AND:** People will live significantly longer but will not work that much longer

Source: Insurance Information Institute.
Thank you for your time and your attention!

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