



# 2015 State of the Line

## *Analysis of Workers Compensation Results*

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### **2015 State of the Line—Analysis of Workers Compensation Results**

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In some ways, workers compensation insurance is unique as a line of business because it endeavors to balance the interests of numerous system stakeholders—including injured employees and their families, employers, insurance companies, medical providers, regulators, and states—in their efforts to protect and retain jobs. Understanding the detailed interactions and dependencies among the various system participants allows an in-depth appreciation of the shared social and economic implications innate to this line of insurance.

Throughout its history, these interdependencies have contributed to several significant transformations in our industry. Workers compensation claim frequency has dropped more than 50% over the last 20 years, underscored by dramatic improvements in workplace safety. Insurers have formed medical networks that are designed to leverage the skills of doctors who specialize in occupational injuries—emphasizing the fact that a significant majority of workers who suffer physical injuries are seen within a few days of their injury, many on the same day.

Today's environment demands a different emphasis than in the past. Construction and manufacturing employment totals are still well below their prerecession levels. Weak demand for new single-family housing has hampered recovery in the construction sector, while the manufacturing industry continues to suffer from reduced overseas demand as a result of a weak global economy and a strong US dollar. This is significant for the workers compensation industry because these two sectors accounted for approximately 40% of the industry's prerecession premium volume.

In addition, the extended period of record-low new money yields is forcing workers compensation insurers to take a fresh look at how they conduct business. Adapting to today's economy by putting more emphasis on underwriting, loss prevention, medical cost containment, and return-to-work programs has become a vital component of success.

These actuarial- and economic-related realities highlight the importance of a collective effort among system stakeholders to both accurately and judiciously address these topics.

The following sections highlight the most recent industry results and include key related observations.

## Property/Casualty (P/C) Industry Results

The P/C industry had a strong year in 2014—posting an overall combined ratio of 97%. This is the second year in a row with an underwriting gain for an industry that experienced underwriting losses from 2008 through 2012 (Exhibit 1). Interestingly, the average combined ratios by underwriting cycle emphasize the fact that the most recent cycle has been quite different from the preceding one. The average combined ratio for Calendar Years 1993 through 2001 was 108%, compared with the notably lower average of 101% from 2002 to 2013.

The combined ratio results differ by line of business, with only workers compensation and commercial auto showing improvement between Calendar Years 2013 and 2014 (Exhibit 2). While the homeowners, commercial multiple peril, and fire and allied lines posted combined ratios of less than 100% in 2014, they all experienced increases versus 2013, in part due to the occurrence of relatively more catastrophic losses.

In 2014, the industry's net written premium volume grew 4.1%, with the largest percentage increases in the commercial auto and homeowners lines of business (Exhibit 3). Although 2014 marks the fifth consecutive year in which industry premiums have risen, this year's change falls short of the rates of growth observed in 2012 (4.3%) and 2013 (4.5%).

A similar observation can be made for the workers compensation line of business. While workers compensation private carrier premium grew by 4.6% in 2014, this increase was comparatively less than the corresponding growth rates observed in 2012 (8.8%) and 2013 (5.1%).

Exhibit 1

### P/C Industry Net Combined Ratios Private Carriers

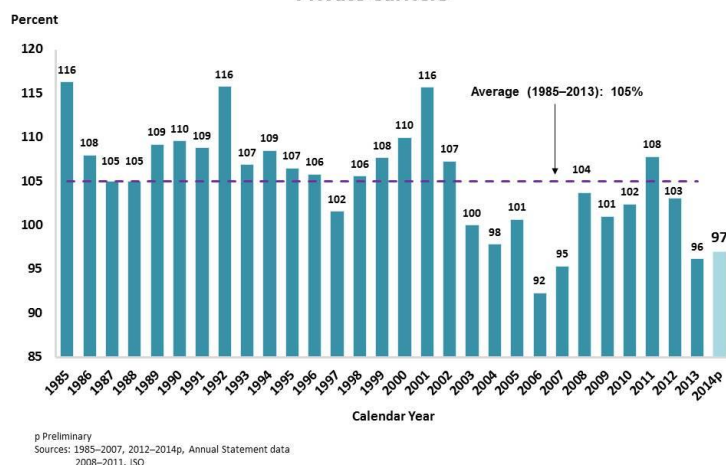


Exhibit 2

### P/C Industry Net Combined Ratio Overall Underwriting Gain Private Carriers

Line of Business	Calendar Year		
	2012	2013	2014p
Personal Auto	102%	102%	102%
Homeowners	104%	90%	92%
Other Liability (Incl Prod Liab)	104%	100%	102%
<b>Workers Compensation</b>	<b>109%</b>	<b>102%</b>	<b>98%</b>
Commercial Multiple Peril	107%	98%	99%
Fire & Allied Lines (Incl EQ)	103%	84%	87%
Commercial Auto	107%	107%	103%
All Other Lines	98%	83%	84%
<b>Total P/C Industry</b>	<b>103%</b>	<b>96%</b>	<b>97%</b>

p Preliminary  
Source: Annual Statement data for individual carriers prior to consolidation of affiliated carriers  
Includes carrier data available as of 4/16/2015

Exhibit 3

### P/C Industry Net Written Premium All Major Lines Increased Private Carriers

Line of Business	Calendar Year (\$ Billions)			Change (%) 2013- 2014p
	2012	2013	2014p	
Personal Auto	\$ 168.0	\$ 174.9	\$ 183.2	4.7%
Homeowners	\$ 66.9	\$ 71.9	\$ 76.9	6.9%
Other Liability (Incl Prod Liab)	\$ 41.7	\$ 45.6	\$ 47.6	4.3%
<b>Workers Compensation</b>	<b>\$ 35.1</b>	<b>\$ 36.9</b>	<b>\$ 38.5</b>	<b>4.6%</b>
Commercial Multiple Peril	\$ 31.4	\$ 33.2	\$ 34.3	3.4%
Fire & Allied Lines (Incl EQ)	\$ 25.9	\$ 27.0	\$ 27.1	0.5%
Commercial Auto	\$ 22.1	\$ 23.9	\$ 25.6	7.1%
All Other Lines	\$ 65.8	\$ 63.9	\$ 63.6	-0.5%
<b>Total P/C Industry</b>	<b>\$ 456.8</b>	<b>\$ 477.3</b>	<b>\$ 496.9</b>	<b>4.1%</b>

p Preliminary  
Source: Annual Statement data for individual carriers prior to consolidation of affiliated carriers  
Includes carrier data available as of 4/16/2015

The industry earned an 8.4% after-tax return on surplus in 2014 (Exhibit 4). After earning returns between 0.6% and 6.6% between 2008 and 2012, 2014 marks the second consecutive year in which the industry's return has exceeded the 8.3% long-term average.

The investment gain ratio decreased from 12.5% in 2013 to 11.5% in 2014, primarily driven by the continued decline in the net investment income component. The long-term average net investment income of 14.1% for 1986 through 2001 dropped to 11.0% for 2002 through 2014—with consistent declines of approximately 0.6% observed in each of the three most recent years. While net investment income has declined, net realized capital gains have remained strong—averaging 2.0% since 2012.

Total industry surplus grew to \$675 billion in 2014 and the industry's premium-to-surplus ratio (0.74:1) remained stable, the latter as a result of the observed calendar year increases in both surplus and premium. The industry remains extremely well capitalized.

## Workers Compensation Results

### Calendar Year Combined Ratio

Based on NCCI's preliminary analysis, a 98% workers compensation combined ratio is estimated for 2014. Underwriting gains are relatively infrequent for the workers compensation line of business—only occurring twice between 1990 and 2013 (Exhibit 5). The 2014 combined ratio represents a 4-point improvement over that for 2013 and a 17-point drop from the peak of the last underwriting cycle in 2011.

The combined ratio decline in 2014 is primarily driven by an improvement in the underlying loss ratio. The changes by component are as follows:

- The loss ratio fell by three points, from approximately 61% to 58%
- The loss adjustment expense ratio to premium remained slightly higher than 14%
- The underwriting expense ratio dropped about one point, from 25% to 24%
- The dividend ratio stayed just above 1%

Exhibit 4

### P/C Industry After-Tax Return on Surplus Private Carriers

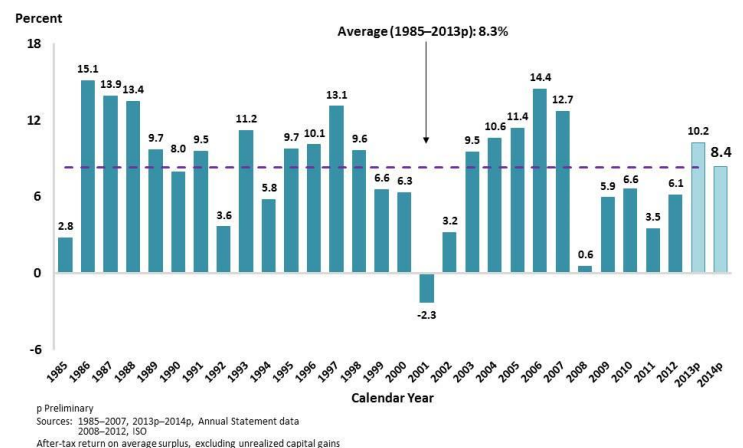
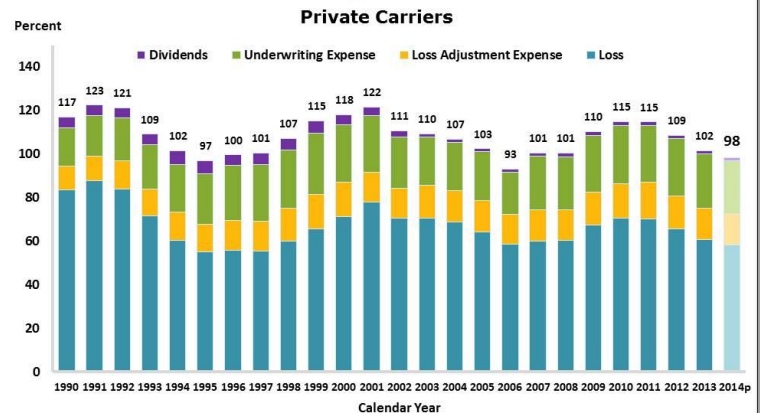


Exhibit 5

### WC Combined Ratio Underwriting Gain Achieved



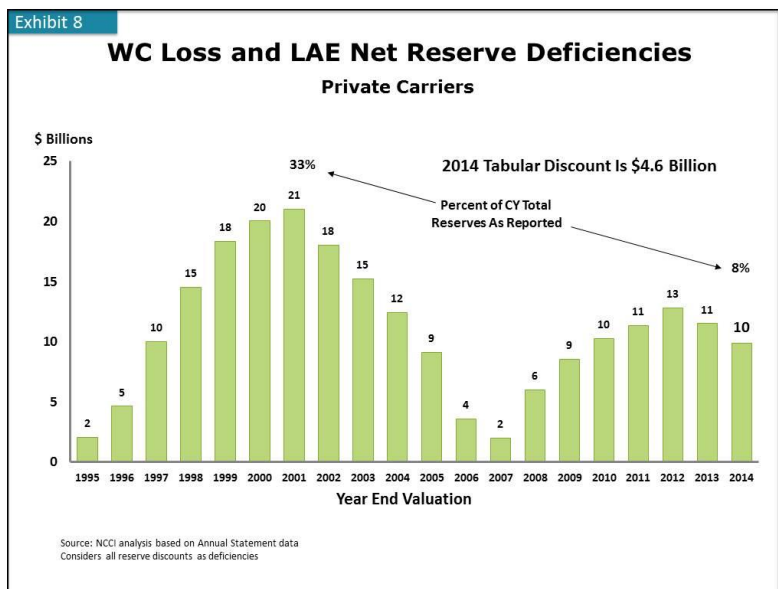
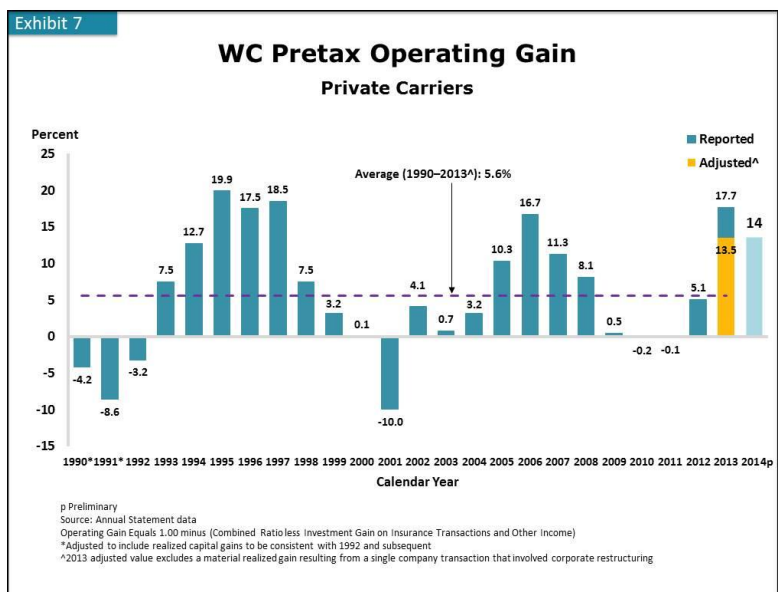
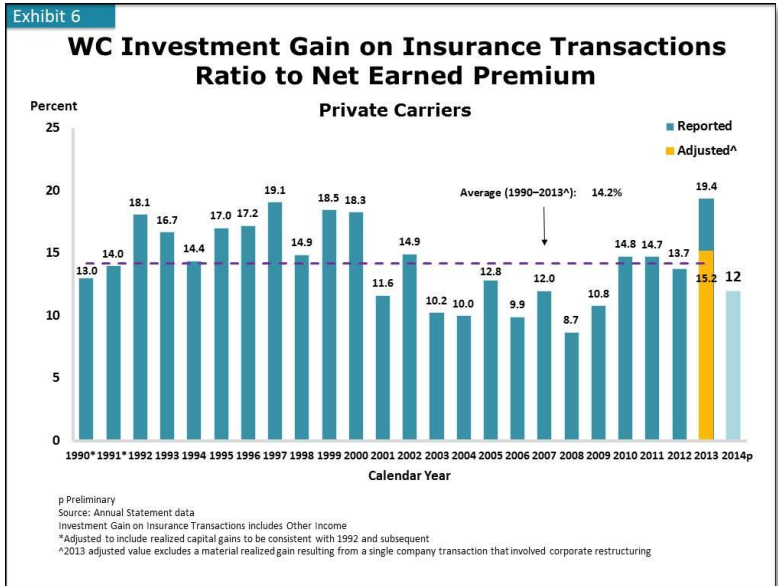
The 2014 preliminary estimate for the investment gain on workers compensation insurance transactions is 12%. This is the lowest this figure has been in the last five years and is below the long-term average of 14.2% (Exhibit 6). Mirroring the P/C industry's declining net investment income figures, a general downward trend in the workers compensation investment gain percentages has been observed since 2010. This trend is not surprising; it is likely associated with the observed decline in the industry's bond portfolio embedded yields in the years following the Great Recession.

A 14% pretax operating gain for 2014 results after combining the year's underwriting and investment gains (Exhibit 7). While the results for 2013 and 2014 are a welcome change versus those from the prior four-year period, the year-to-year volatility in these figures underscores the unwavering importance of insurance industry underwriting.

### Reserve Position

NCCI's estimate of the reserve position for the private carriers as of Year-End 2014 is a deficiency of \$10 billion (Exhibit 8). This is \$1 billion lower than NCCI's estimate as of Year-End 2013 and the second consecutive year that the estimated countrywide reserve deficiency has fallen.

After allowing for the permissible discounting of indemnity reserves for lifetime pension cases, the currently estimated remaining inadequacy still exceeds \$5 billion—which represents about 4.3% of the \$121 billion in carried reserves. It is estimated that approximately 40% of the total deficiency is associated with accident years prior to 2005, with further notable contributions associated with several accident years in the 2007 through 2011 time period. NCCI estimates some redundancy in the Accident Year 2014 reserves at first report.





## Accident Year Results

It is also helpful to analyze workers compensation experience on an accident year basis—because it may provide additional insight into the underlying performance of this “long-tailed” line of insurance without the distortions of prior-year reserve adjustments.

Consistent with the recent calendar year results, workers compensation accident year combined ratios have also improved. Over the last five years, the accident year combined ratio dropped from 118% in 2010 to a preliminary estimate of 95% in 2014 (Exhibit 9). Time will tell if the industry has reached its peak of combined ratio improvement or if 2015 will bring more favorable news to system stakeholders.

## Workers Compensation Net Written Premium

Calendar Year 2014 marks the fourth consecutive year of workers compensation net written premium growth—with year-over-year increases observed for both private carriers and state funds (Exhibit 10). It is estimated that the 2014 total workers compensation net written volume exceeds \$44 billion. This is more than a 5.5% increase versus that for Calendar Year 2013.

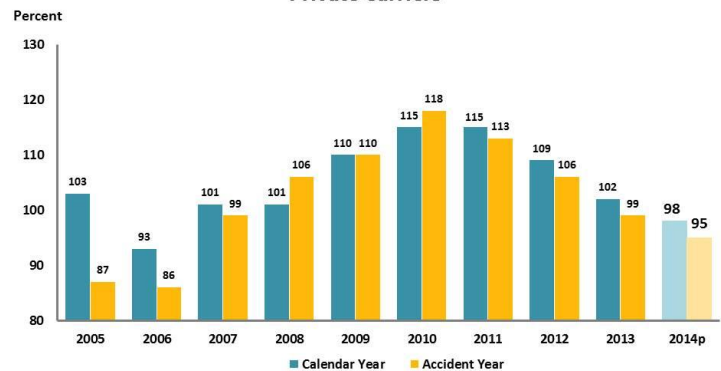
Payroll growth was once again the primary factor underlying the most recent year’s increase in premium volume (Exhibit 11). Payroll growth of 4.7%, along with changes in carrier discounting and other factors, more than offset 2014’s decline in the average bureau loss cost level.

## Bureau Premium Level Changes

Countrywide average approved premium level changes were quite modest in 2014—whether viewed on an “all-states” basis (+0.5%) or restricted to only those jurisdictions for which NCCI provides ratemaking services (–1.4%). The changes approved thus far with effective dates in

Exhibit 9

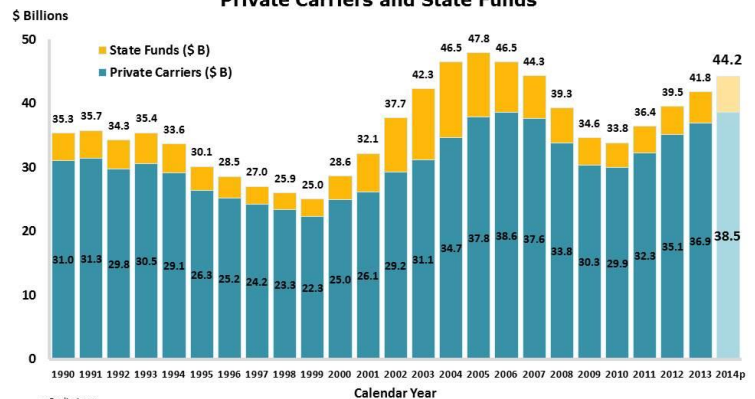
### WC Net Combined Ratios Calendar Year vs. Ultimate Accident Year Private Carriers



p Preliminary  
Source: NCCI analysis based on Annual Statement data  
Accident year data is evaluated as of 12/31/2014 and developed to ultimate  
Includes dividends to policyholders

Exhibit 10

### WC Net Written Premium Growth Continued Private Carriers and State Funds



p Preliminary  
Source: Annual Statement data  
Includes state insurance fund data for the following states: AZ, CA, CO, HI, IL, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, and UT  
Each calendar year total for state funds includes all funds operating as a state fund in that year

Exhibit 11

### WC Components of Written Premium Change Private Carriers

#### Written Premium Change From 2013 to 2014

<b>Net Written Premium—Countrywide</b>	<b>+4.6%</b>
<b>Direct Written Premium (DWP)—Countrywide</b>	<b>+4.6%</b>
<b>Direct Written Premium (DWP)—NCCI States</b>	<b>+4.5%</b>
<b>Components of DWP Change for NCCI States:</b>	
Change in Carrier Estimated Payroll	+4.7%
Change in Bureau Loss Costs and Mix	–1.4%
Change in Carrier Discounting	+0.4%
Change in Other Factors	+0.8%
<b>Combined Effect:</b>	<b>+4.5%</b>

Sources: Countrywide: Annual Statement data  
NCCI States: Annual Statement Statutory Page 14 for all states where NCCI provides ratemaking services  
Components: NCCI Policy data

2015 support further average declines relative to the respective 2014 values (Exhibit 12).

The magnitude of historical premium level changes have varied over time and were likely influenced by factors including the impact of system reforms, the economic environment, and changes in claim frequency and severity. Since 2004, the magnitude of the cumulative approved premium level change across all states has been consistent with that observed in the NCCI jurisdictions—with the average changes in the NCCI states exhibiting smaller year-to-year fluctuations.

Carrier discounting from bureau rates/loss costs has declined in NCCI states for the fourth consecutive year. The declines in both 2013 and 2014 were primarily driven by the change in rate/loss cost departures (Exhibit 13). The long-term patterns observed pre- and post-2002 generally seem to mirror each other, with the more recent period exhibiting a relatively smaller range of annual impacts.

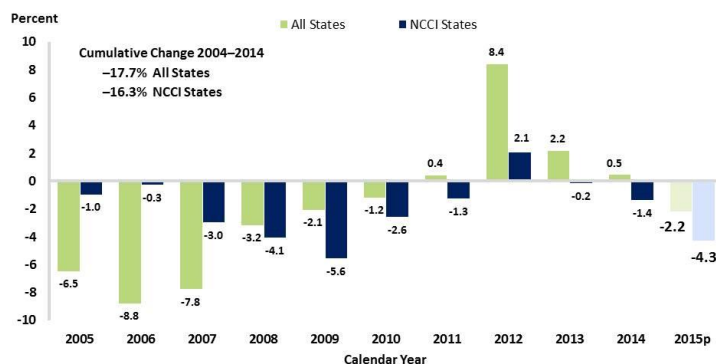
### Claim Frequency

NCCI estimates that workers compensation lost-time claim frequency per \$1 million of pure premium declined 2% in 2014—marking the 18th annual claim frequency decline in the last 20 years (Exhibit 14). The familiar pattern of claim frequency changes observed prior to the Great Recession (i.e., a relatively large decrease in frequency followed by several years of smaller decreases) seems to have continued in 2012.

A review of the underlying mix of lost-time claims by size also suggests a return to pre-recessionary patterns. As the recession deepened in 2008 and 2009, the frequency of small claims dropped more rapidly than that for larger claims. This trend reversed itself coincidentally with the economic recovery. NCCI

Exhibit 12

### WC Approved Changes in Bureau Premium Level By Effective Date for Total Market



p Preliminary  
Bureau premium level changes are countrywide approved changes in advisory rates, loss costs, assigned risk rates, and rating values, as of 4/24/2015, as filed by the applicable rating organization, relative to those previously approved

Exhibit 13

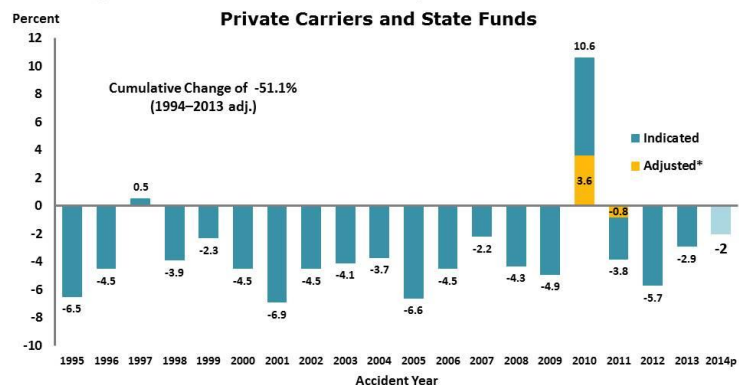
### WC Impact of Discounting on Premium NCCI States



p Preliminary  
Sources: Annual Statement Statutory Page 14 and NCCI Financial Call data  
Dividend ratios are based on calendar year statistics  
NCCI benchmark level does not include an underwriting contingency provision  
Based on data through 12/31/2014 for all states where NCCI provides ratemaking services, excluding TX

Exhibit 14

### WC Lost-Time Claim Frequency Change in Lost-Time Claims per \$1M Pure Premium



\*Adjustments primarily due to significant changes in audit activity  
p Preliminary based on data valued as of 12/31/2014  
Source: NCCI Financial Call data, developed to ultimate and adjusted to current wage and voluntary loss cost level; excludes high deductible policies; 1994-2013: Based on data through 12/31/2013  
For all states where NCCI provides ratemaking services, excluding WV

research has shown that, over the last few years, annual changes in frequency for small-versus-large lost-time claims have been consistent with each other (Exhibit 15).

### *Indemnity and Medical Average Claim Costs*

The countrywide average cost of the indemnity portion of a workers compensation lost-time claim in 2014 is estimated to be \$23,600 (Exhibit 16). This represents a 4% increase over the corresponding value for 2013—slightly outpacing the 3% increase in wages over this same time period.

Similarly, the countrywide average cost of the medical portion of a lost-time claim is estimated to have also increased by 4% to \$29,400 (Exhibit 17). Based on data submitted to NCCI, countrywide average medical benefits per lost-time claim have increased in each of the last 20 years—more than tripling the medical average cost per claim since 1995.

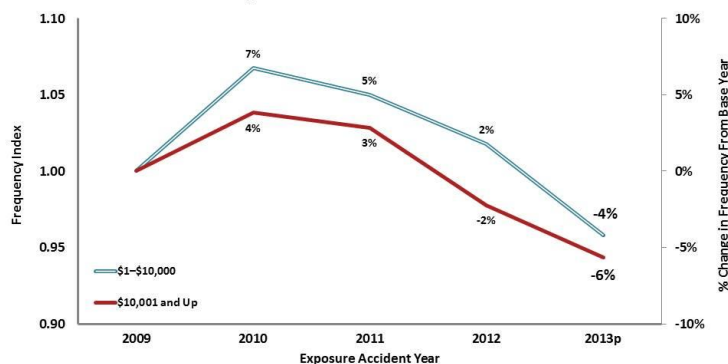
As with all countrywide averages, values by individual jurisdiction may vary.

While continued declines in claim frequency serve to partially offset increases in claim severity, continued diligence is needed by all workers compensation stakeholders to ensure that the system remains strong and competitive.

Exhibit 15

### WC Lost-Time Claim Frequency Changes by Total Size of Loss

Index: Exposure Accident Year 2009 = 1.00

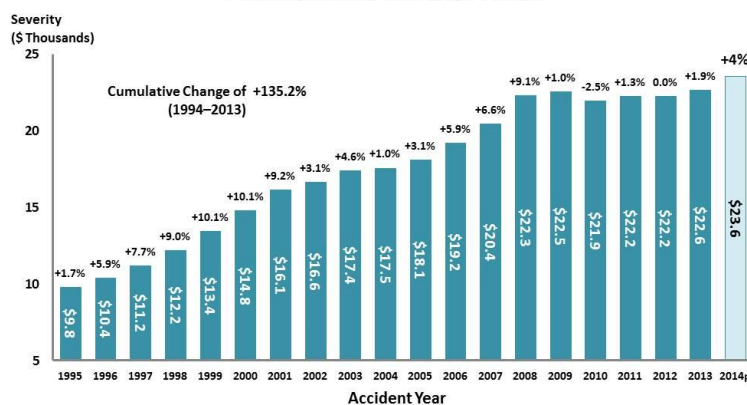


p Preliminary  
Source: NCCI Unit Statistical Plan data  
Frequency is the number of lost-time claims at 1st report per \$1M premium at current wage and average carrier rate level  
Prior to assigning individual claims to size of loss groupings, reported loss amounts are adjusted for inflation through 2013  
For all states where NCCI provides ratemaking services

Exhibit 16

### WC Average Indemnity Cost per Lost-Time Claim

Private Carriers and State Funds

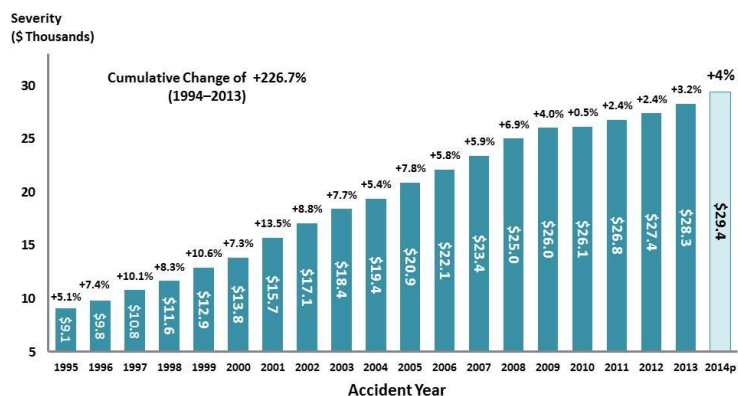


p Preliminary based on data valued as of 12/31/2014  
Source: NCCI Financial Call data, developed to ultimate; excludes high deductible policies  
1994–2013: Based on data through 12/31/2013  
For all states where NCCI provides ratemaking services, excluding WV

Exhibit 17

### WC Average Medical Cost per Lost-Time Claim

Private Carriers and State Funds



p Preliminary based on data valued as of 12/31/2014  
Source: NCCI Financial Call data, developed to ultimate; excludes high deductible policies  
1994–2013: Based on data through 12/31/2013  
For all states where NCCI provides ratemaking services, excluding WV

## Residual Market Update

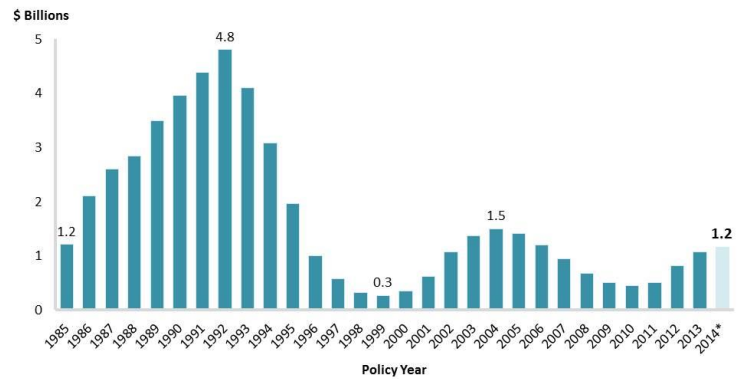
It is estimated that residual market premium increased in 2014 by approximately \$75 million to \$1.2 billion in total (Exhibit 18). This increase is notably less than the \$250+ million increases observed in both 2012 and 2013. The residual market share for states in which Pools are serviced by NCCI held steady at a manageable 8% between 2013 and 2014.

The 2014 residual market combined ratio has also remained stable at 106%. Primarily driven by the increase in premium, this represents an 8% combined ratio improvement since 2011 (Exhibit 19). The current policy year underwriting loss is estimated to have risen to about \$74 million from the \$64 million estimate for 2013 (Exhibit 20).

In the first quarter of 2015, residual market premium volume declined versus that from a year prior in three policy-size categories greater than \$10,000. This may indicate that residual market growth has begun to subside. NCCI will remain vigilant in maintaining programs to help manage the residual market growth and, to whatever extent possible, prevent significant erosion of the residual market operating results.

Exhibit 18

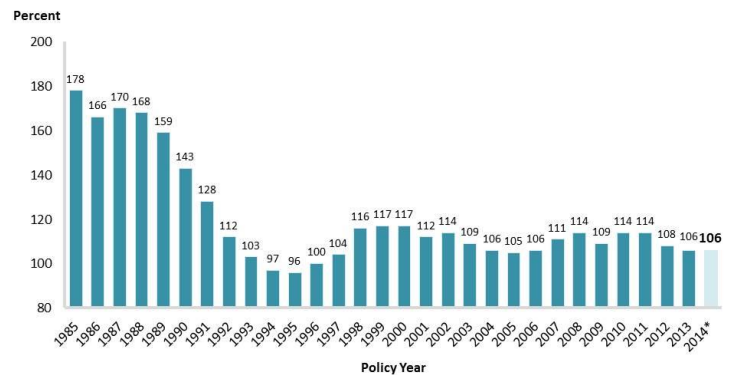
### WC Residual Market Premium NCCI-Serviced WC Residual Market Pools



\*Incomplete policy year projected to ultimate  
Includes pool data as of 12/31/2014 for all NCCI-serviced WC residual market pool states  
Source: NCCI, *Residual Market Quarterly Results*

Exhibit 19

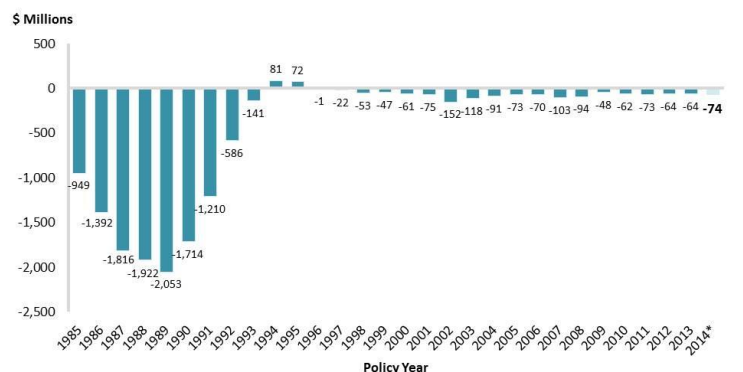
### WC Residual Market Combined Ratio NCCI-Serviced WC Residual Market Pools



\*Incomplete policy year projected to ultimate  
Includes pool data as of 12/31/2014 for all NCCI-serviced WC residual market pool states  
Source: NCCI, *Residual Market Quarterly Results*

Exhibit 20

### WC Residual Market Underwriting Results NCCI-Serviced WC Residual Market Pools



\*Incomplete policy year projected to ultimate  
Includes pool data as of 12/31/2014 for all NCCI-serviced WC residual market pool states  
Source: NCCI, *Residual Market Quarterly Results*



## In Conclusion

Overall, 2014 was a good year for both the P/C industry and the workers compensation line of business. More specifically:

- The workers compensation line posted its first underwriting gain since 2006
- Workers compensation lost-time claim frequency continued its long-term decline, partially offsetting the observed modest increases in claim severities
- The P/C industry remains well capitalized and likely comforted by the recent renewal of the Terrorism Risk Insurance Act

Challenges to the line also remain, including:

- A continuing low-interest-rate environment threatens investment results over the long term
- While workers compensation premium volumes continue to increase, construction and manufacturing employment totals remain well below prerecession levels—restraining even higher premium growth rates

NCCI will continue to work with all workers compensation system stakeholders to help maintain adequate rate/loss cost levels, provide unbiased impact analyses of proposed legislative reforms, and strive for self-funded residual markets. By providing timely in-person and online educational opportunities, along with the production of relevant, forward-looking research, NCCI will continue to assist all interested parties in understanding both current and emerging trends impacting workers compensation.



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