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Concurrent Session R-5:

# Workers Compensation— State of the Market

March 26, 2019

Jay Rosen, FCAS, MAAA  
Practice Leader and Senior Actuary, NCCI

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CAS RPM Seminar – Boston, MA



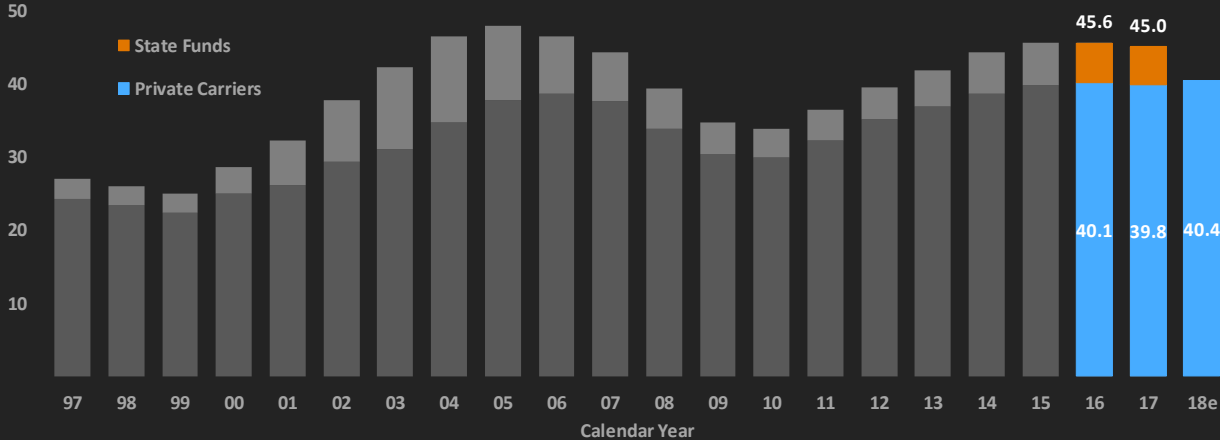
# Workers Compensation (WC) Premium

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# WC Net Written Premium

Private Carriers and State Funds

\$ Billions



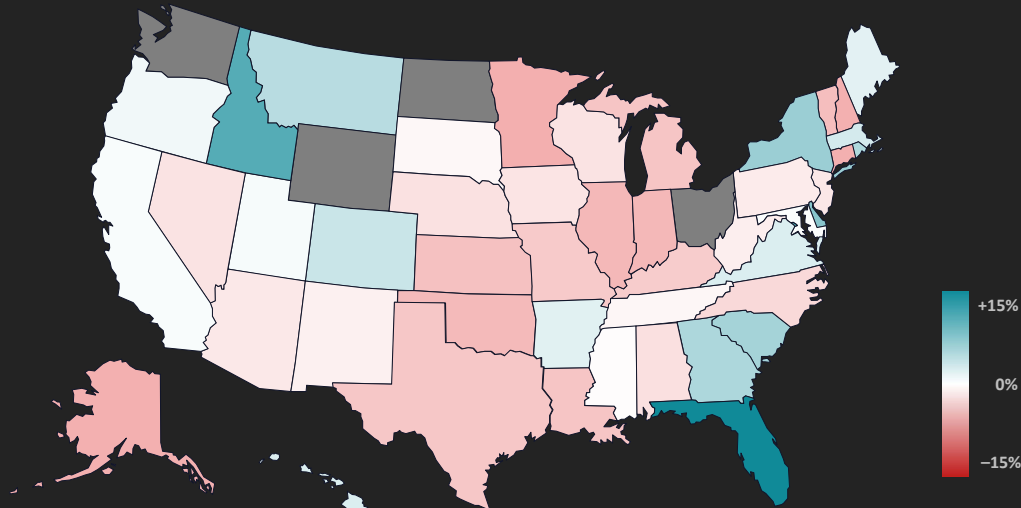
e Estimated  
 Source: NAIC's Annual Statement data; includes state insurance fund data for the following states: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, and UT  
 Each calendar year total for state funds includes all funds operating as a state fund in that year

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# WC Direct Written Premium Change—2017

Private Carriers



Source: 2016 and 2017 NAIC's Annual Statement Statutory Page 14

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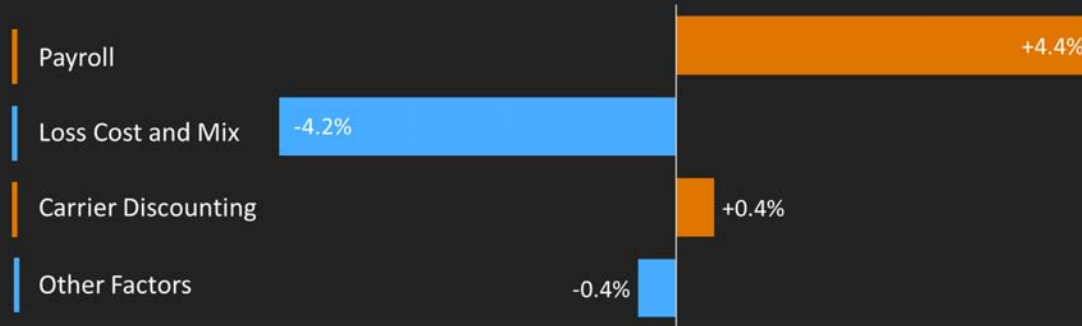
4

## WC Direct Written Premium Change by Component

Private Carriers—NCCI States

Change in Direct Written Premium: 0.0%

2017 vs. 2016



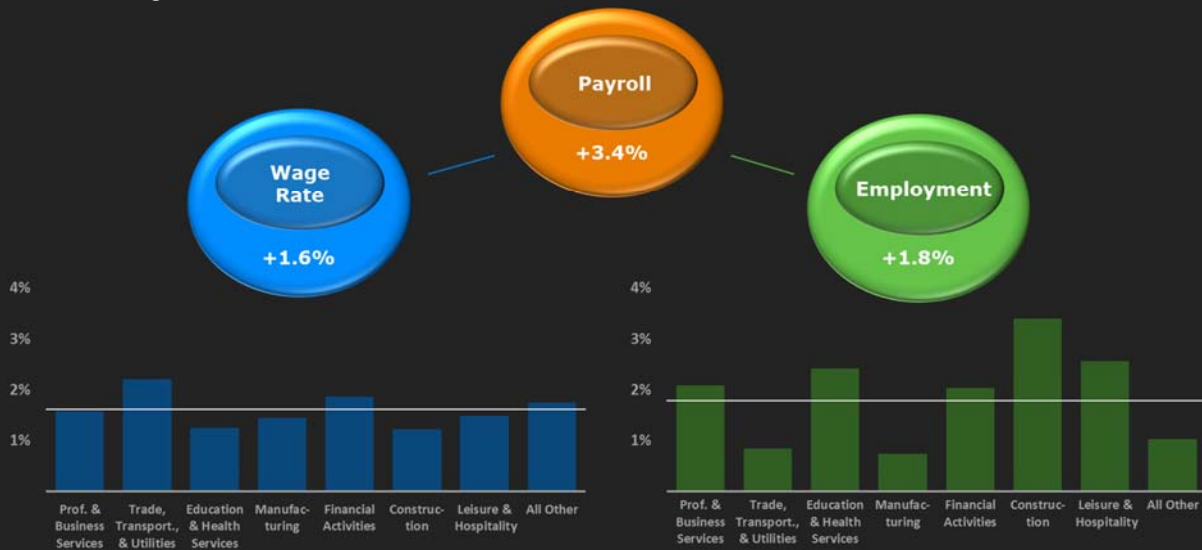
Sources: Direct Written Premium Change: NAIC's Annual Statement Statutory Page 14 for all states where NCCI provides ratemaking services  
Components: NCCI's Policy data

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## Increases in Payroll Continue to Drive Changes in Premium

Forecast Change 2016–2017



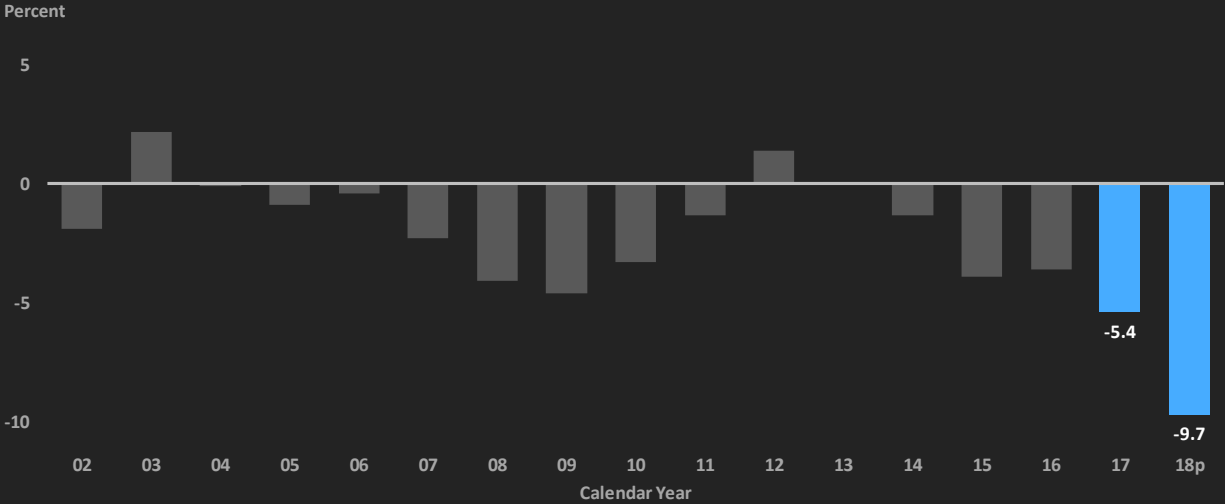
Sources: Moody's Analytics and NCCI

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# WC Approved Changes in Bureau Premium Level

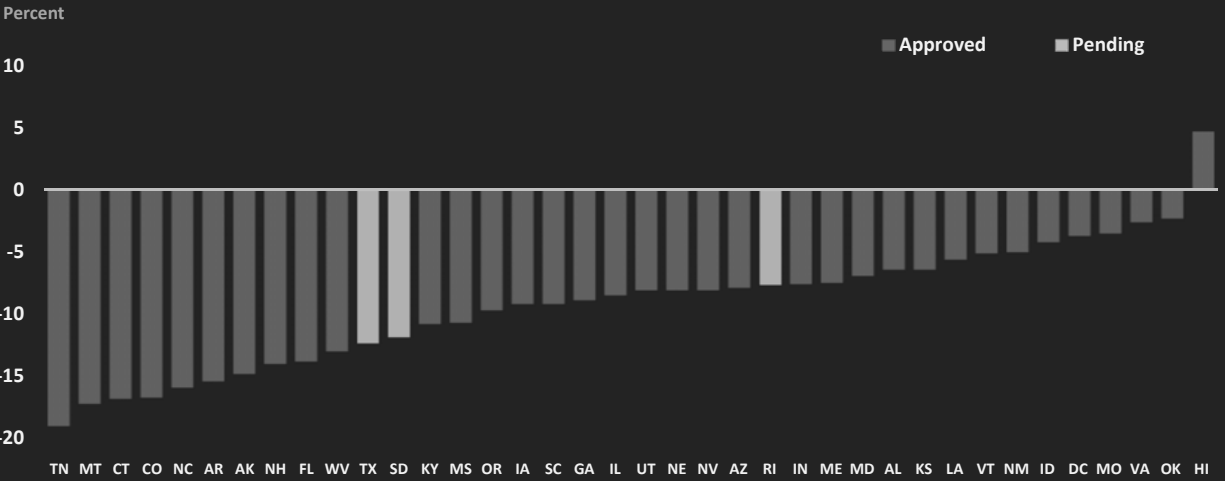
Weighted by Effective Date—NCCI States



p Preliminary  
 Source: NAIC's Annual Statement Statutory Page 14  
 Values reflect changes in average premium levels between years, based on approved changes in advisory rates, loss costs, assigned risk rates, and rating values, as of 12/21/2018  
 IN and NC are filed in cooperation with state rating bureaus  
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# Current NCCI Loss Cost/Rate Level Changes

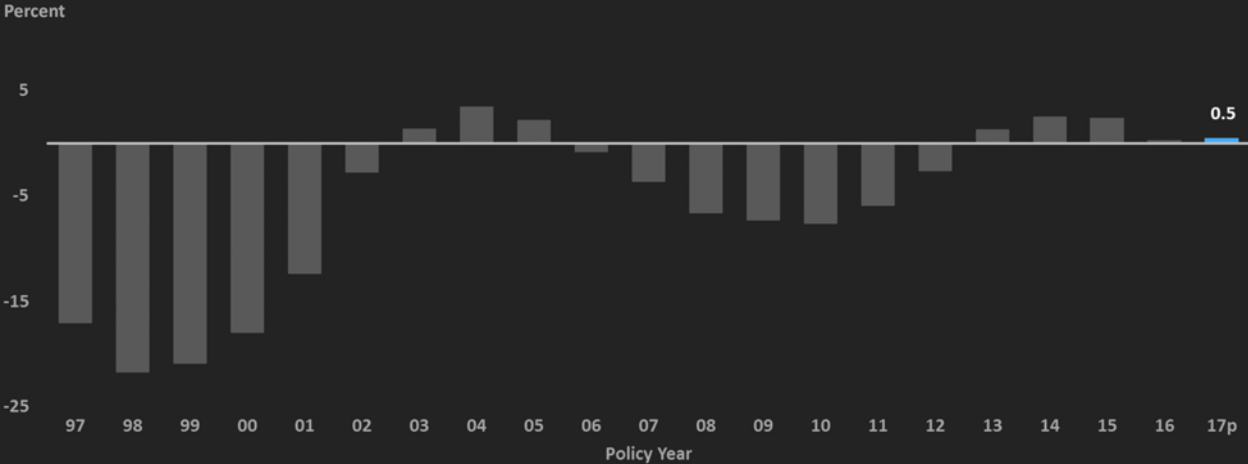
Voluntary Market, Excludes Law-Only Filings



Reflects the most recent experience filing in each jurisdiction  
 Due to the timing of the individual loss cost/rate filings, the figures shown may include changes from prior filing seasons  
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# WC Impact of Discounting on Premium

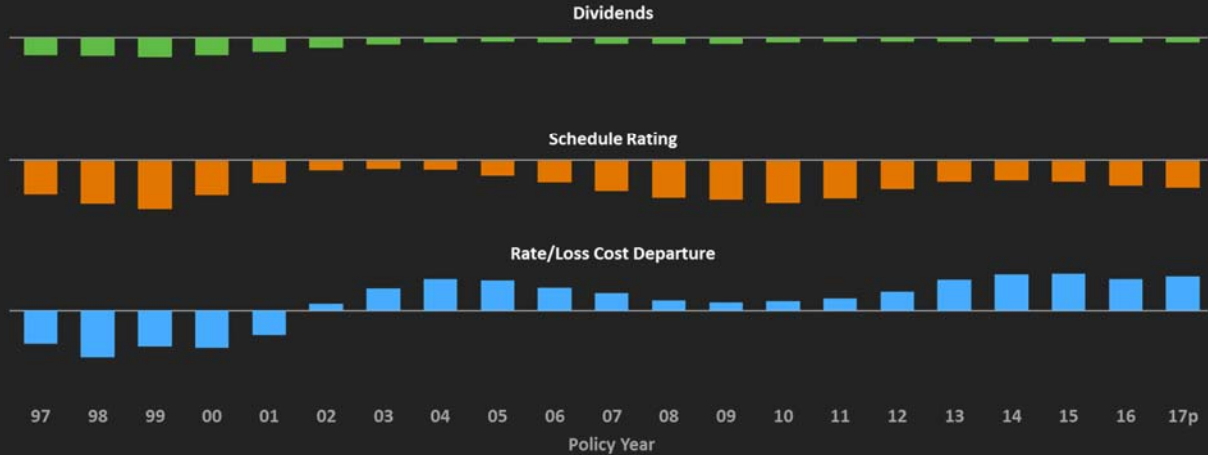
Private Carriers—NCCI States



p Preliminary  
 Sources: NAIC's Annual Statement Statutory Page 14 and NCCI's Financial Call data  
 Rate/loss cost departure reflects carrier departure from NCCI rate level, which excludes a profit and contingency provision and expense constant  
 Based on data for all states where NCCI provides ratemaking services, excluding TX  
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# WC Impact of Discounting on Premium by Component

Private Carriers—NCCI States



p Preliminary  
 Sources: NAIC's Annual Statement Statutory Page 14 and NCCI's Financial Call data  
 Dividend ratios are based on calendar year statistics  
 Rate/loss cost departure reflects carrier departure from NCCI rate level, which excludes a profit and contingency provision and expense constant  
 Based on data for all states where NCCI provides ratemaking services, excluding TX  
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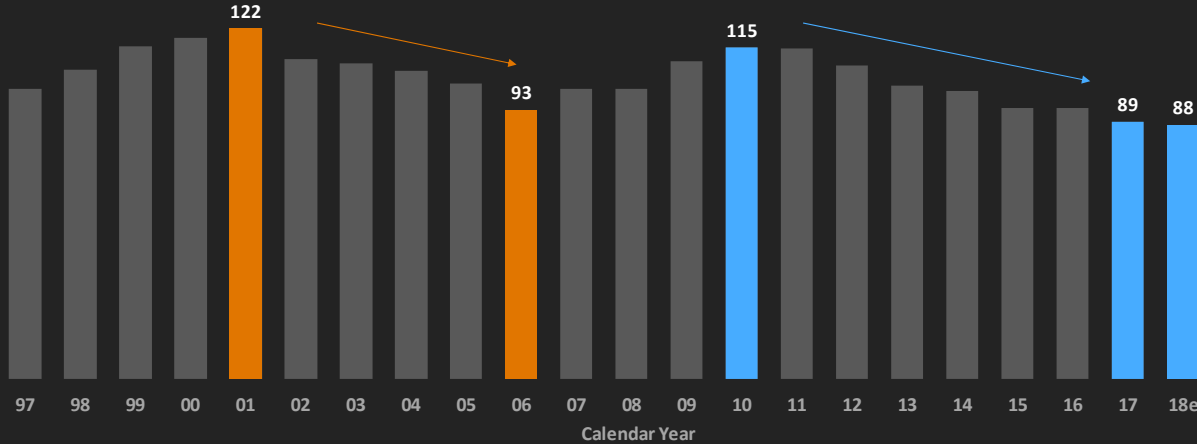
# Workers Compensation Results

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## WC Combined Ratio—Underwriting Gain Achieved

Private Carriers

Percent

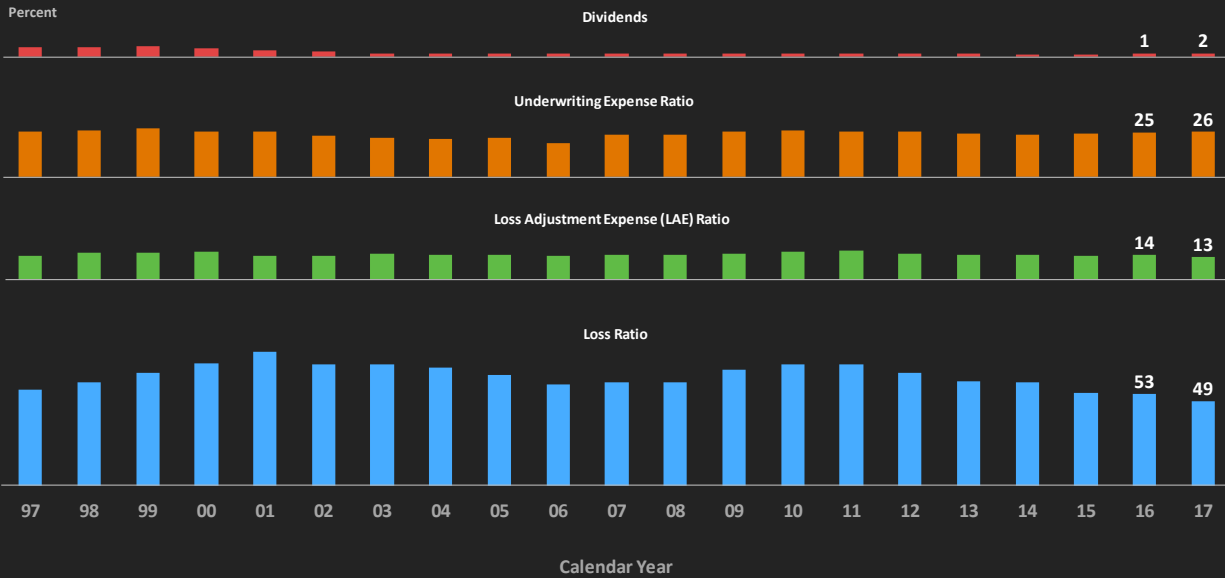


e Estimated  
Source: NAIC's Annual Statement data

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## WC Combined Ratio by Component

Private Carriers



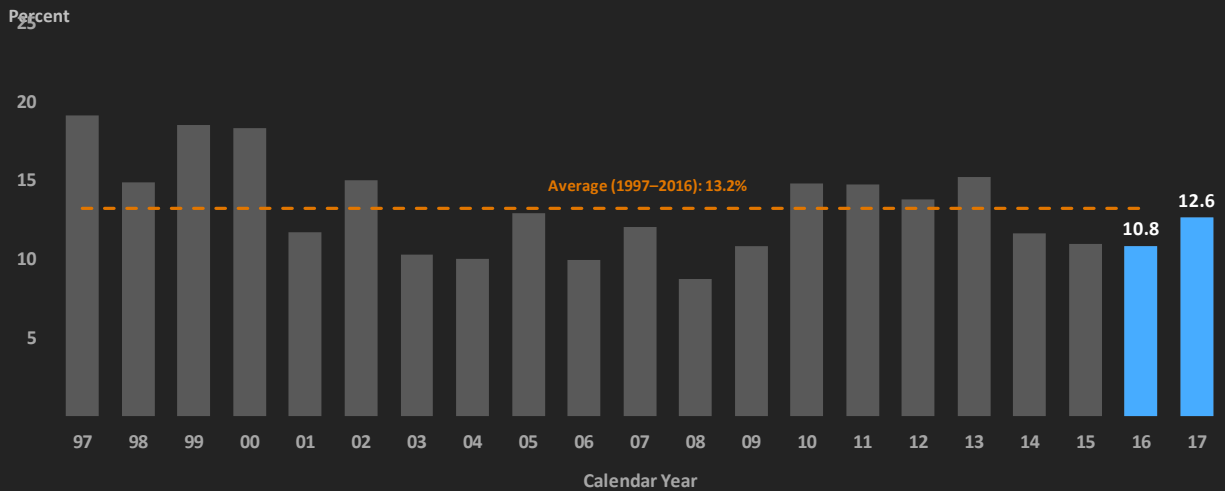
Source: NAIC's Annual Statement data

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## WC Investment Gain on Insurance Transactions

Ratio to Net Earned Premium, Private Carriers



Source: NAIC's Annual Statement data

Investment Gain on Insurance Transactions includes Other Income

2013 is adjusted to exclude a material realized gain resulting from a single company transaction that involved corporate restructuring; unadjusted value is 19.4

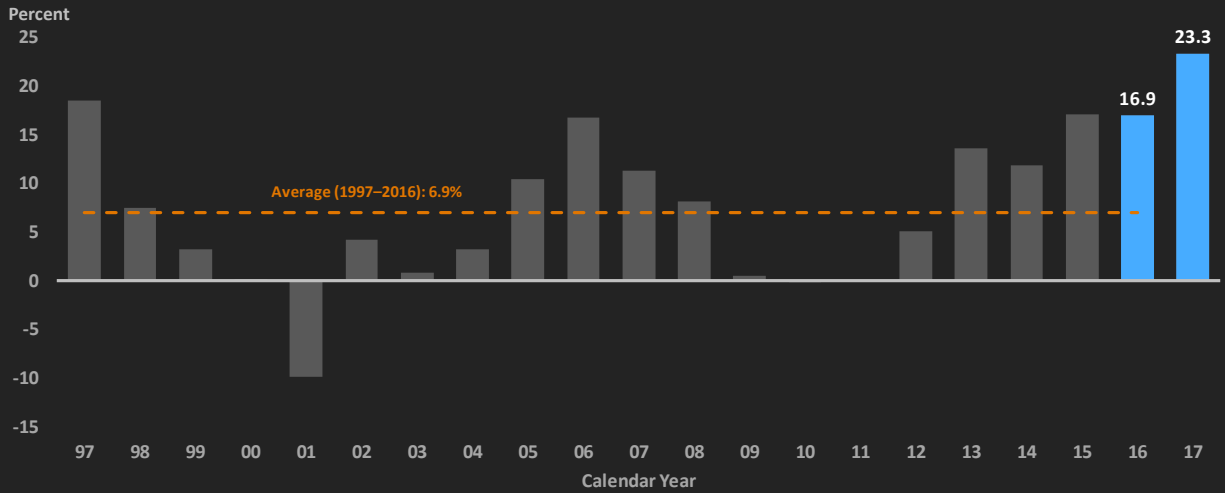
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## WC Pretax Operating Gain

Private Carriers



Source: NAIC's Annual Statement data  
 Operating Gain equals 1.00 minus (Combined Ratio less Investment Gain on Insurance Transactions and Other Income)  
 2013 is adjusted to exclude a material realized gain resulting from a single company transaction that involved corporate restructuring; unadjusted value is 17.7  
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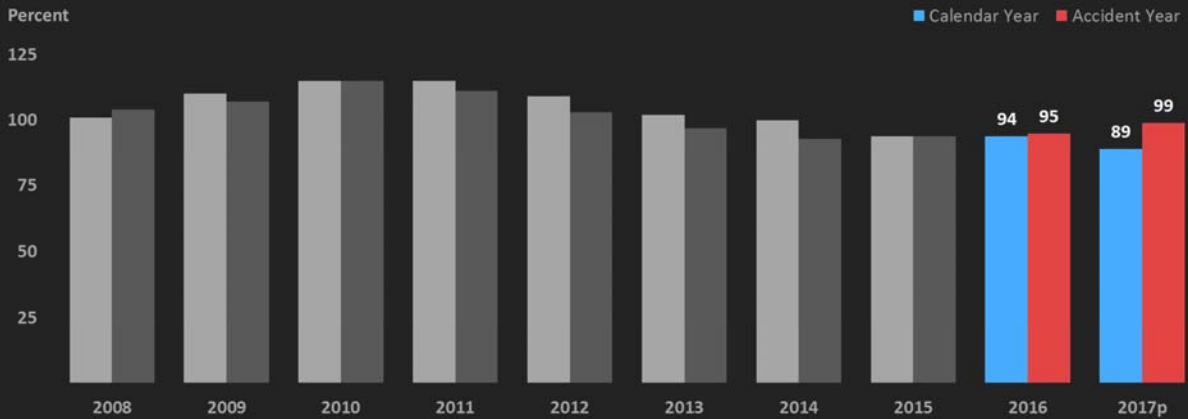


# Workers Compensation Accident Year Results and Reserve Estimates

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## WC Net Combined Ratios— Calendar Year vs. Accident Year As Reported

Private Carriers



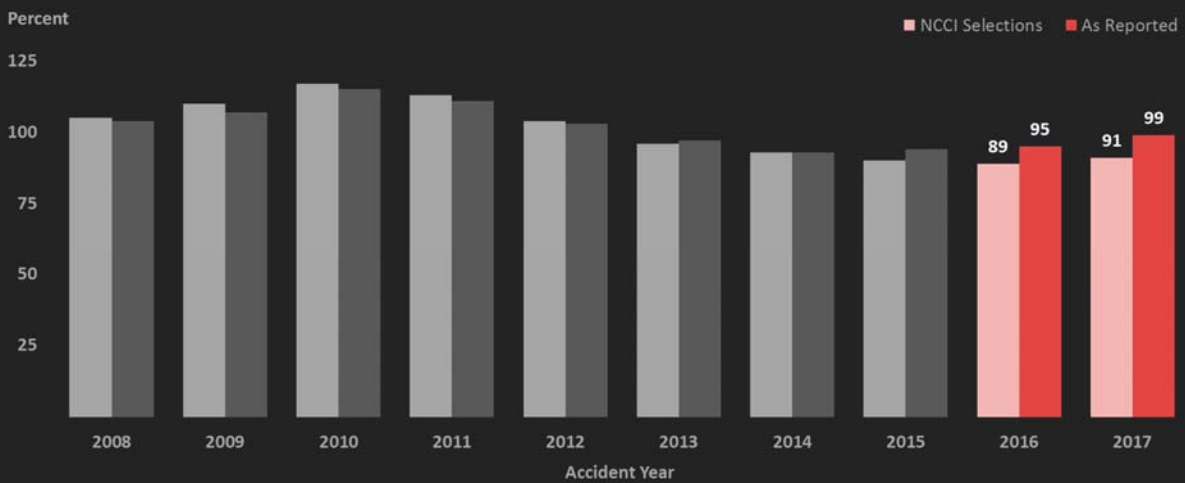
p Preliminary  
Source: NAIC's Annual Statement data  
Accident Year information is reported as of 12/31/2017  
Includes dividends to policyholders

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## WC Net Combined Ratios— NCCI's Accident Year Selections vs. As Reported

Private Carriers



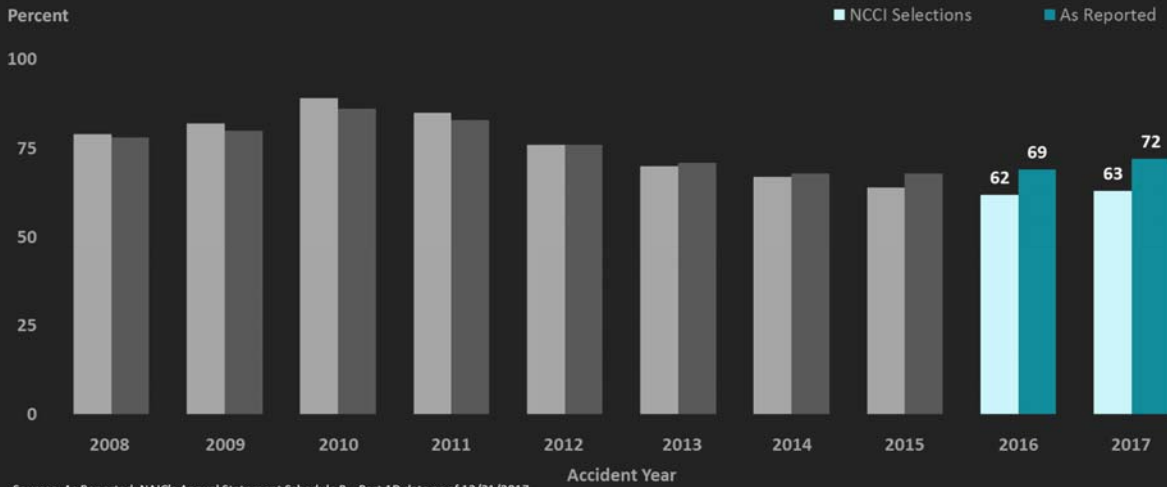
Sources: As Reported: NAIC's Annual Statement Schedule P—Part 1D data as of 12/31/2017  
NCCI Selections: NCCI's analysis based on NAIC's Annual Statement data

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## WC Net Loss and LAE Ratios— NCCI's Accident Year Selections vs. As Reported

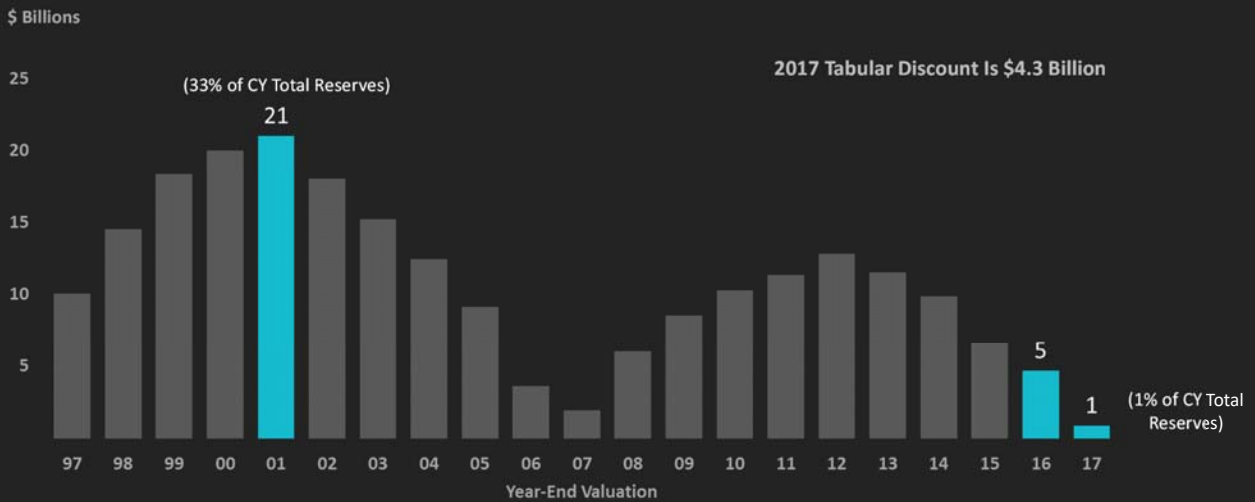
Private Carriers



Sources: As Reported: NAIC's Annual Statement Schedule P—Part 1D data as of 12/31/2017  
 NCCI Selections: NCCI's analysis based on NAIC's Annual Statement data  
 As Reported Loss and LAE ratios are net of tabular reserve discounts and gross of nontabular reserve discounts  
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## WC Net Loss and LAE Reserve Deficiencies

Private Carriers



Source: NCCI's analysis based on NAIC's Annual Statement Schedule P—Part 1D data at year-end valuations  
 Considers all reserve discounts as deficiencies  
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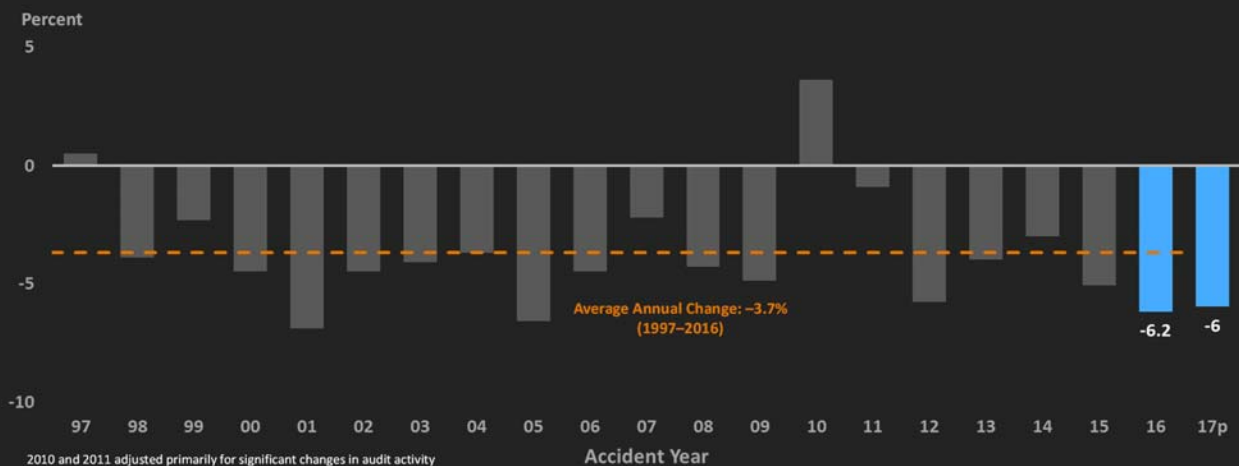


# Workers Compensation Loss Drivers

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## WC Lost-Time Claim Frequency

Claims per \$1M Pure Premium, Private Carriers and State Funds—NCCI States



2010 and 2011 adjusted primarily for significant changes in audit activity

p Preliminary, based on data valued as of 12/31/2017

Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies; based on data through 12/31/2016

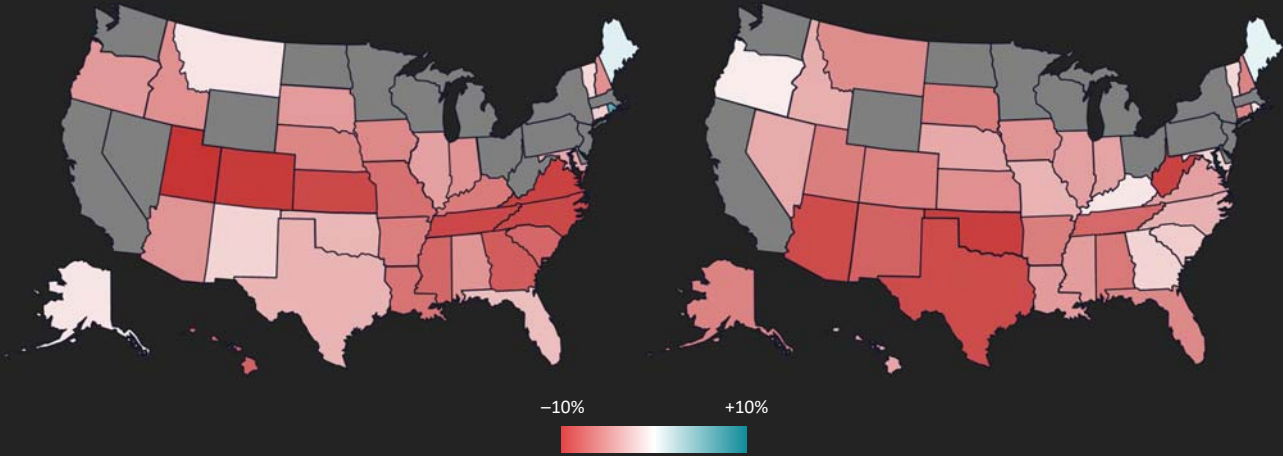
Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
Includes all states where NCCI provides ratemaking services; WV is excluded through 2011

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# WC Lost-Time Claim Frequency

Average Annual Change 1992–1996

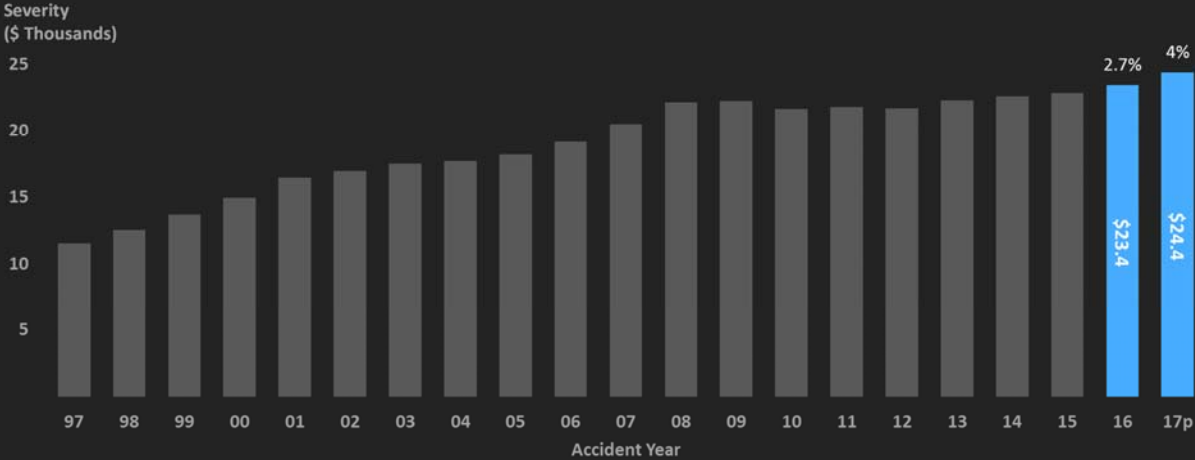
Average Annual Change 2012–2016



Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies; based on data through 12/31/2016  
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
 Includes all states where NCCI provides ratemaking services  
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# WC Average Indemnity Claim Severity

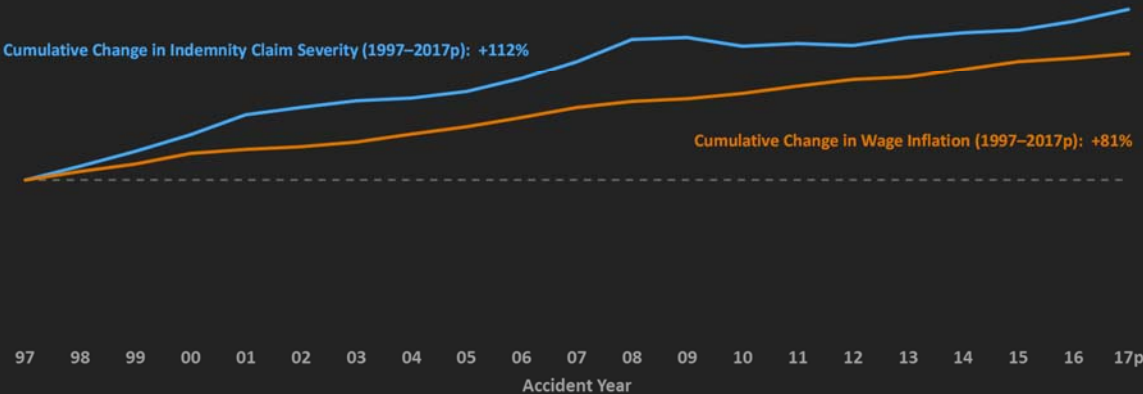
Private Carriers and State Funds—NCCI States



p Preliminary, based on data valued as of 12/31/2017  
 Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
 Includes all states where NCCI provides ratemaking services; WV is excluded through 2007  
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# WC Average Indemnity Claim Severity

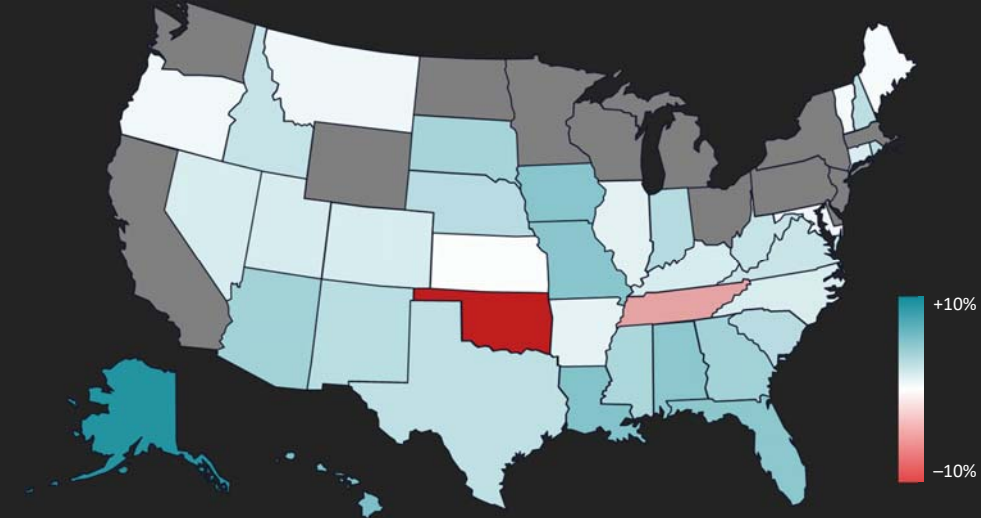
Private Carriers and State Funds—NCCI States



p Preliminary, based on data valued as of 12/31/2017  
Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007  
US Average Weekly Wage: 1997–2007 and 2012–2016 Quarterly Census of Employment and Wages; 2008–2011 NCCI and BLS; 2017p NCCI and Moody's Analytics  
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# WC Average Indemnity Claim Severity

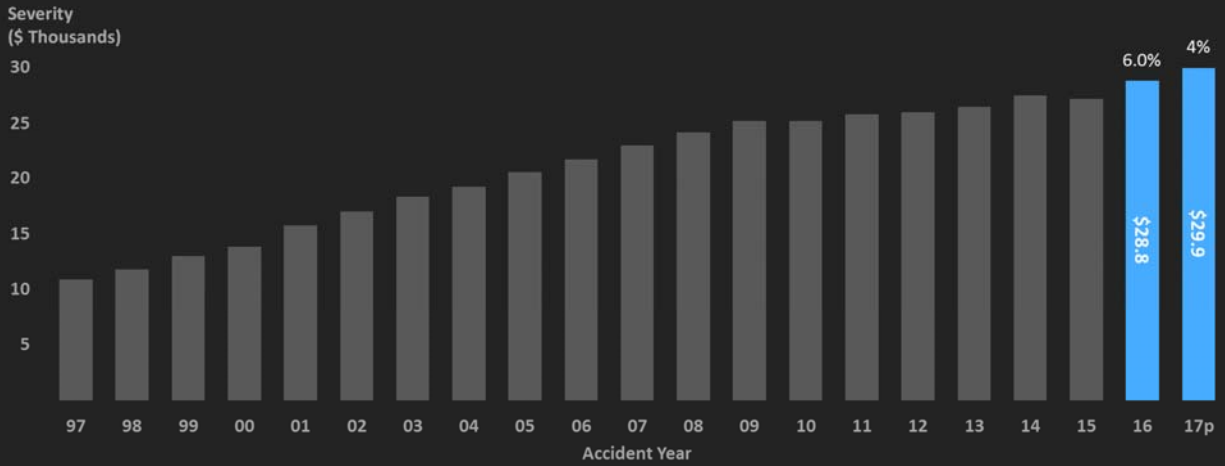
Average Annual Change 2012–2016, Private Carriers and State Funds—NCCI States



Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
Includes all states where NCCI provides ratemaking services  
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## WC Average Medical Lost-Time Claim Severity

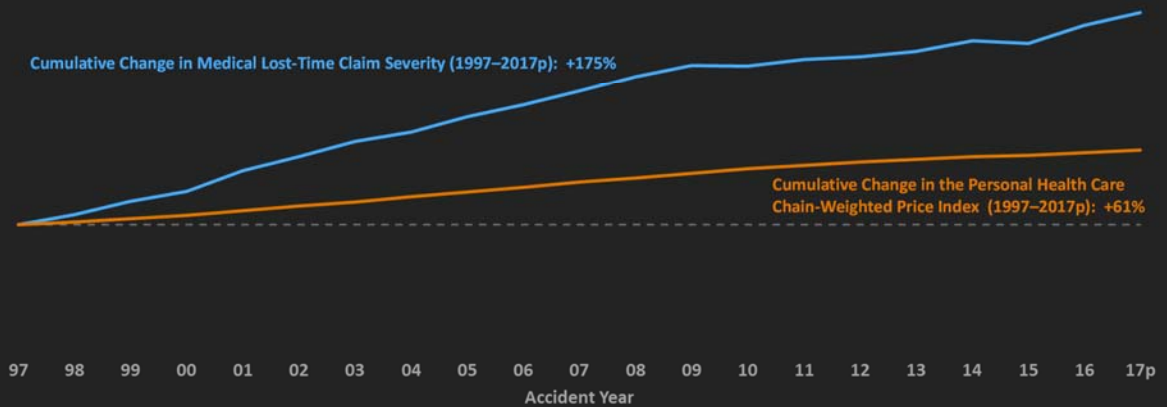
Private Carriers and State Funds—NCCI States



p Preliminary, based on data valued as of 12/31/2017  
 Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
 Includes all states where NCCI provides ratemaking services; WV is excluded through 2007  
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## WC Average Medical Lost-Time Claim Severity

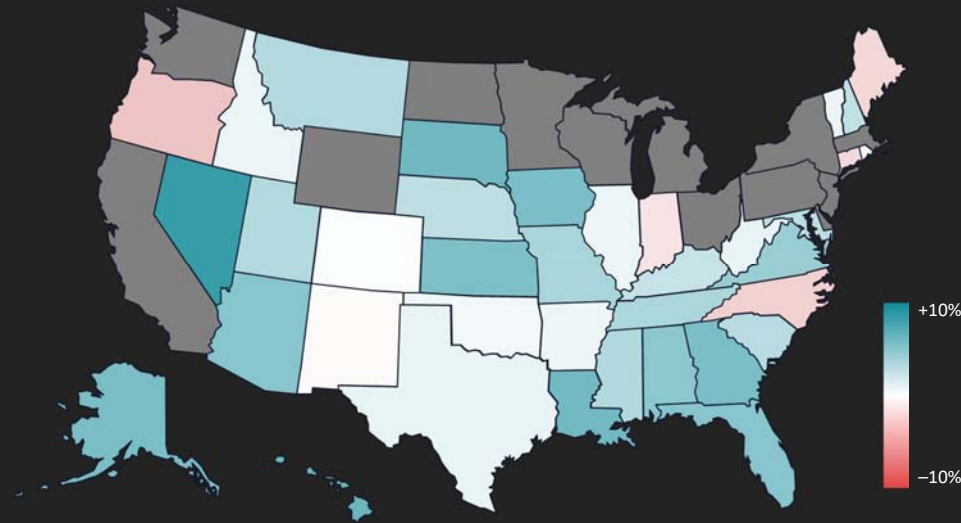
Private Carriers and State Funds—NCCI States



p Preliminary, based on data valued as of 12/31/2017  
 Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
 Includes all states where NCCI provides ratemaking services; WV is excluded through 2007  
 Personal Health Care (PHC) Chain-Weighted Price Index: Centers for Medicare & Medicaid Services  
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## WC Average Medical Lost-Time Claim Severity

Average Annual Change 2012–2016, Private Carriers and State Funds—NCCI States



Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016  
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing  
 Includes all states where NCCI provides ratemaking services

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## Workers Compensation Summary

### On One Hand

- Investment income remained **below** the long-term average
- Loss costs continued to **decrease**
- Net written premium for private carriers **declined** slightly
- Lost-time claim frequency **fell** again

### On the Other Hand

- Combined ratio **improved** to the lowest level in over half a century
- Payroll continued to **increase**
- Reserve position continued to **strengthen**
- Severity **increases** remained moderate

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