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Concurrent Session R-11:

Workers Compensation— State of the Market

March 21, 2018

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

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CAS RPM Seminar – Chicago, IL

State of the Workers Compensation Market

- Combined ratios: Underwriting gains achieved on both calendar year and accident year bases
- Net written premium volume remained relatively steady in 2016
- The overall reserve position for private carriers improved in 2016
- Lost-time claim frequency decreased
- Lost-time claim severity increased for both indemnity and medical

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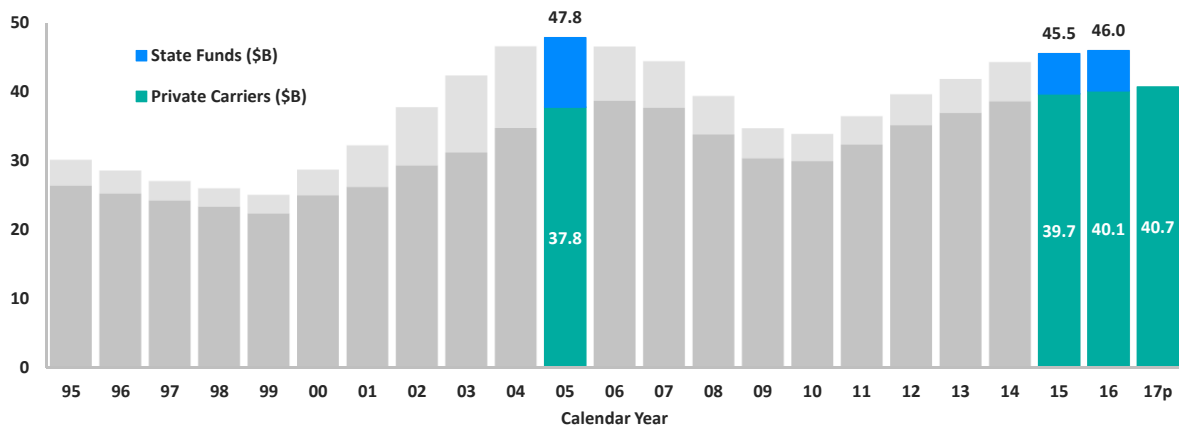
Workers Compensation (WC) Premium

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WC Net Written Premium

Private Carriers and State Funds

\$ Billions



p Preliminary, based on statutory data reported through 2nd Quarter 2017
 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

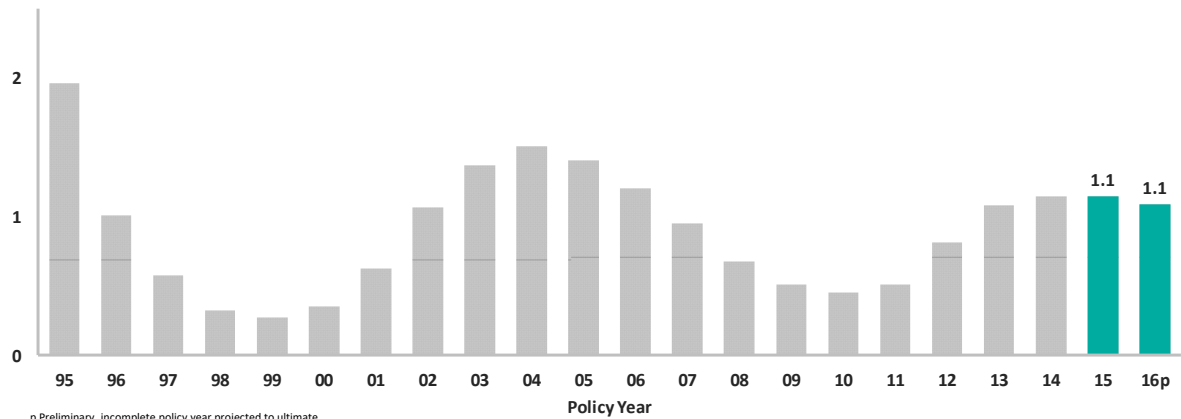
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WC Residual Market Premium

NCCI-Serviced WC Residual Market Pools

\$ Billions



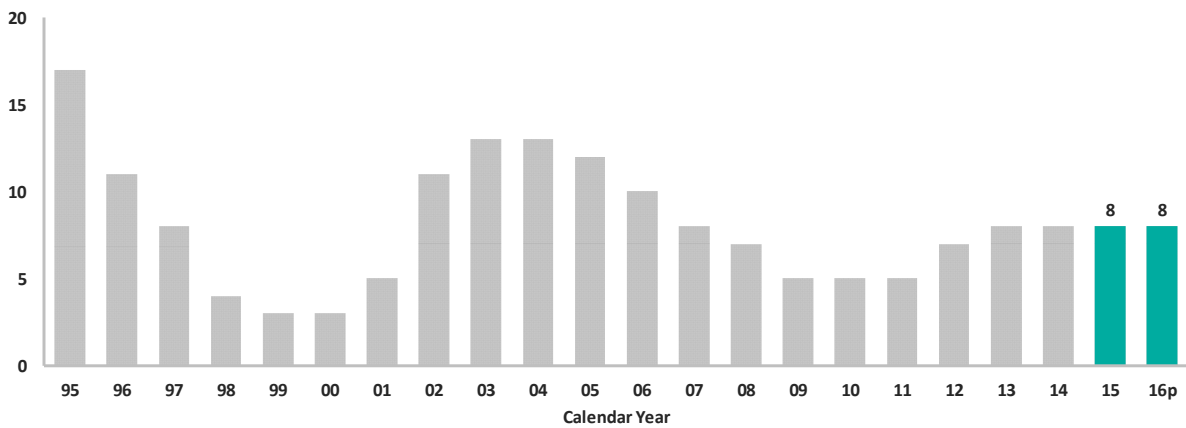
p Preliminary, incomplete policy year projected to ultimate
 Includes Pool data for all NCCI-serviced WC Residual Market Pool states, valued as of 12/31/2016
 Tennessee Reinsurance Mechanism premium is not included
 Source: NCCI's *Residual Market Quarterly Results*



WC Residual Market Share

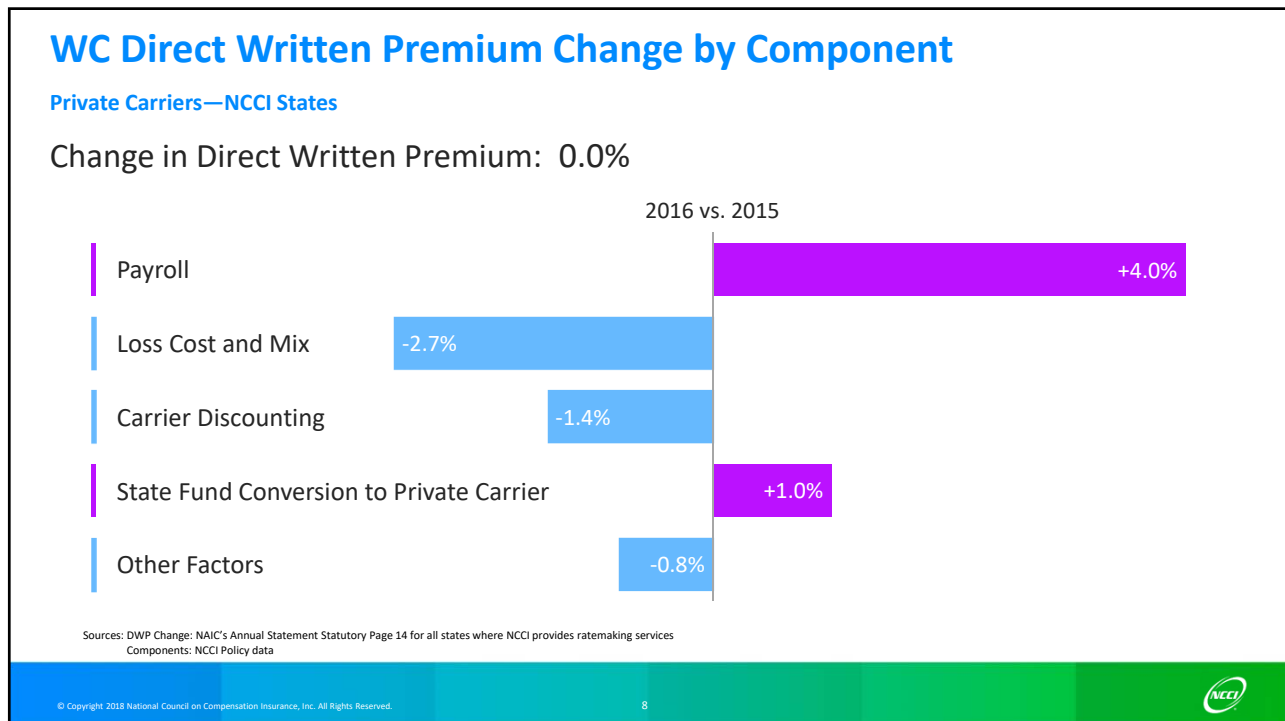
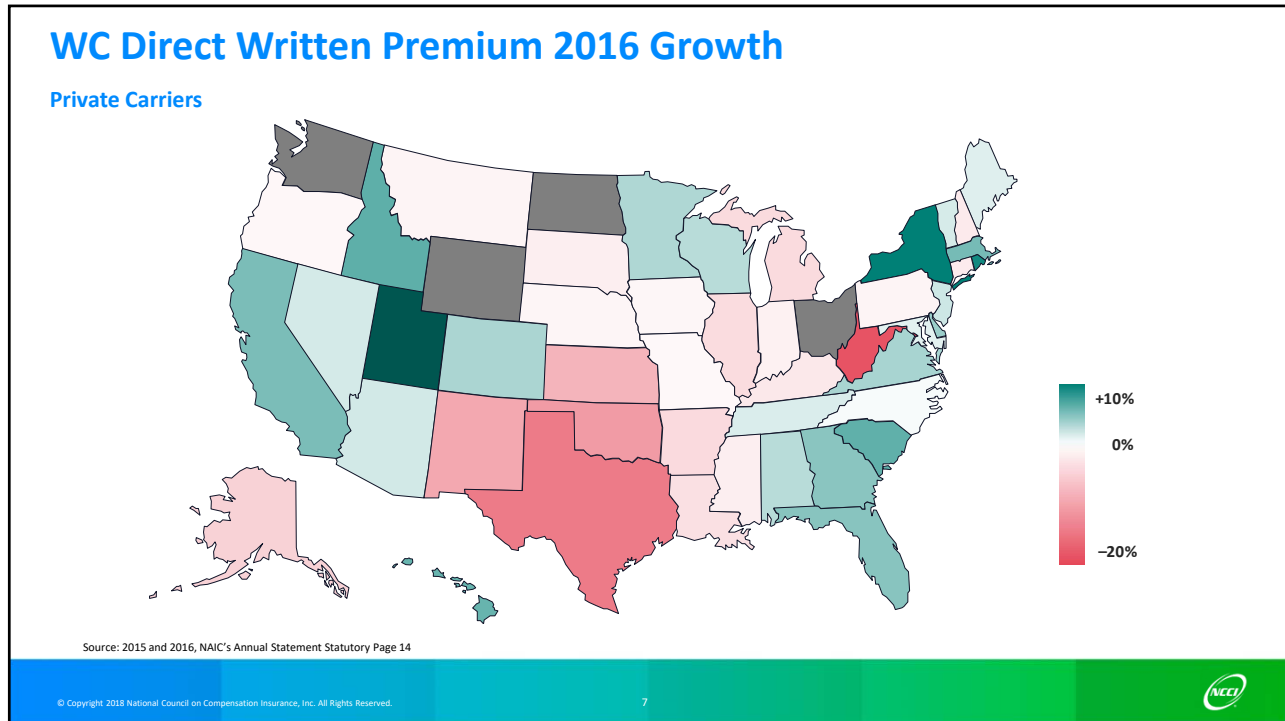
NCCI-Serviced WC Residual Market Pools

Percent



p Preliminary
 Includes Pool and direct assignment data for all NCCI-serviced WC Residual Market Pool states
 Source: NCCI's *Residual Market Management Summary*





Increases in Payroll Continue to Drive Premium Growth

Forecast Change 2015–2016

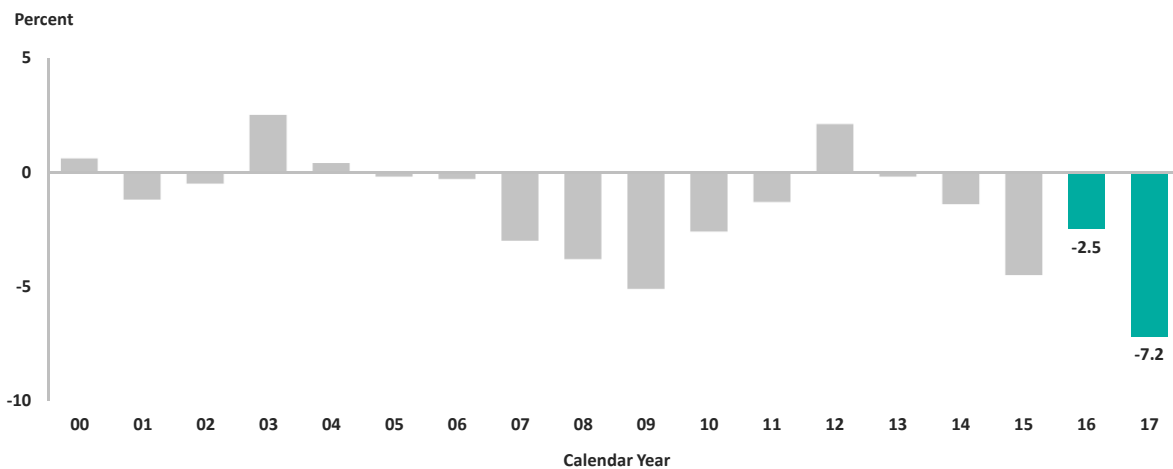


Sources: Moody's Analytics and NCCI



WC Approved Changes in Bureau Premium Level

By Effective Year for NCCI States



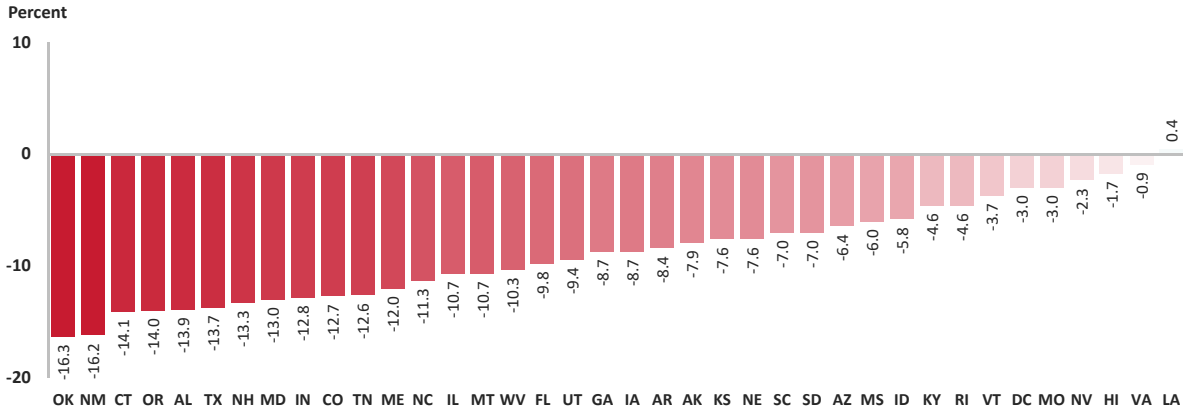
Source: NAIC's Annual Statement Statutory Page 14

Bureau premium level changes reflect approved changes in advisory rates, loss costs, assigned risk rates, and rating values relative to those previously approved in NCCI states only. IN and NC are filed in cooperation with state rating bureaus.



Latest Changes in Bureau Premium Level

Voluntary Market, Excludes Law-Only Filings

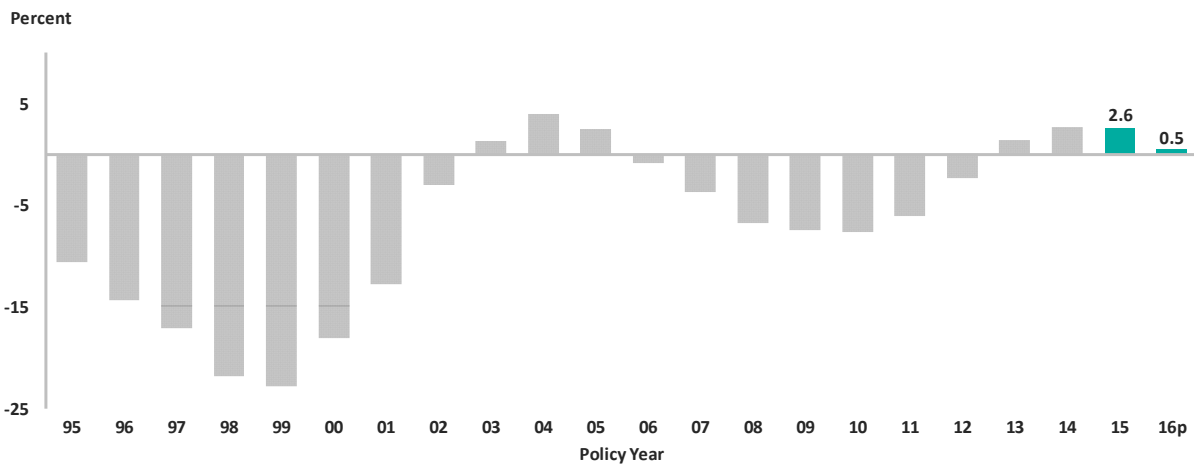


Premium level changes are approved or filed and pending changes in advisory rates, loss costs, and rating values, as filed by the applicable rating organization relative to those previously approved
 RI, SD, and TX are filed and pending
 IN and NC are filed in cooperation with state rating bureaus



WC Impact of Discounting on Premium

Private Carriers—NCCI States

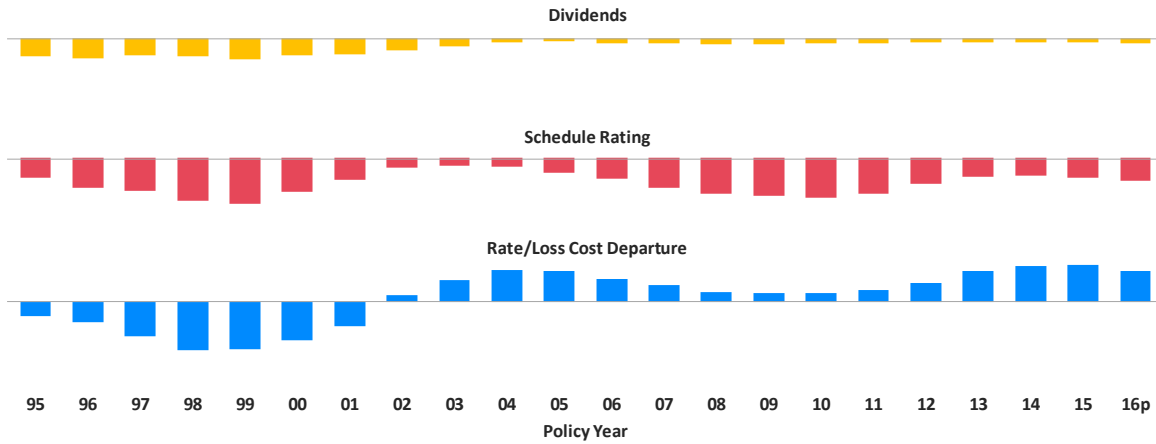


p Preliminary
 Sources: NAIC's Annual Statement Statutory Page 14 and NCCI's Financial Call data
 NCCI benchmark level does not include a profit and contingency provision or expense constant
 Based on data for all states where NCCI provides ratemaking services, excluding TX



WC Impact of Discounting on Premium

Private Carriers—NCCI States



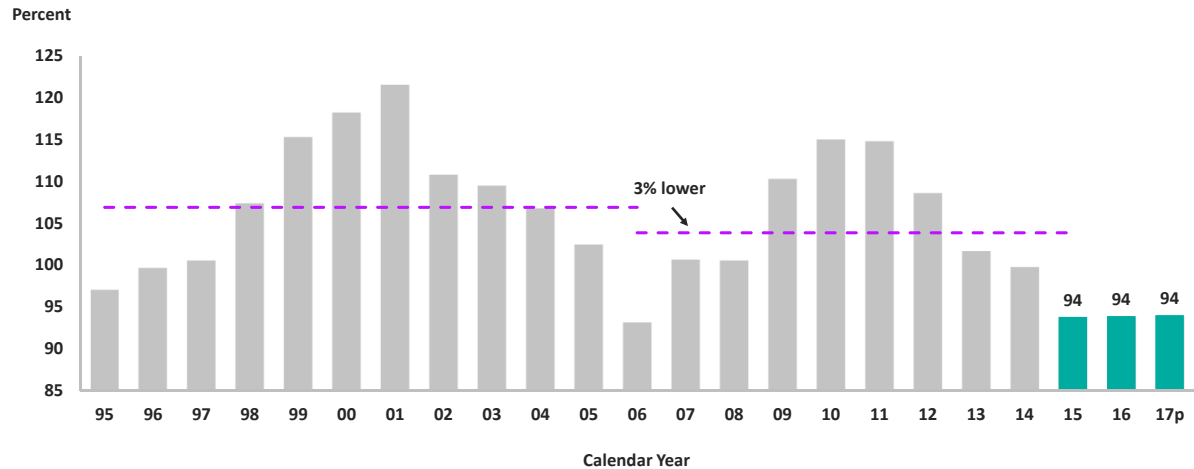
p Preliminary
 Sources: NAIC's Annual Statement Statutory Page 14 and NCCI's Financial Call data
 Dividend ratios are based on calendar year statistics
 NCCI benchmark level does not include a profit and contingency provision or expense constant
 Based on data for all states where NCCI provides ratemaking services, excluding TX



Workers Compensation Results

WC Combined Ratio—Underwriting Gain Achieved

Private Carriers

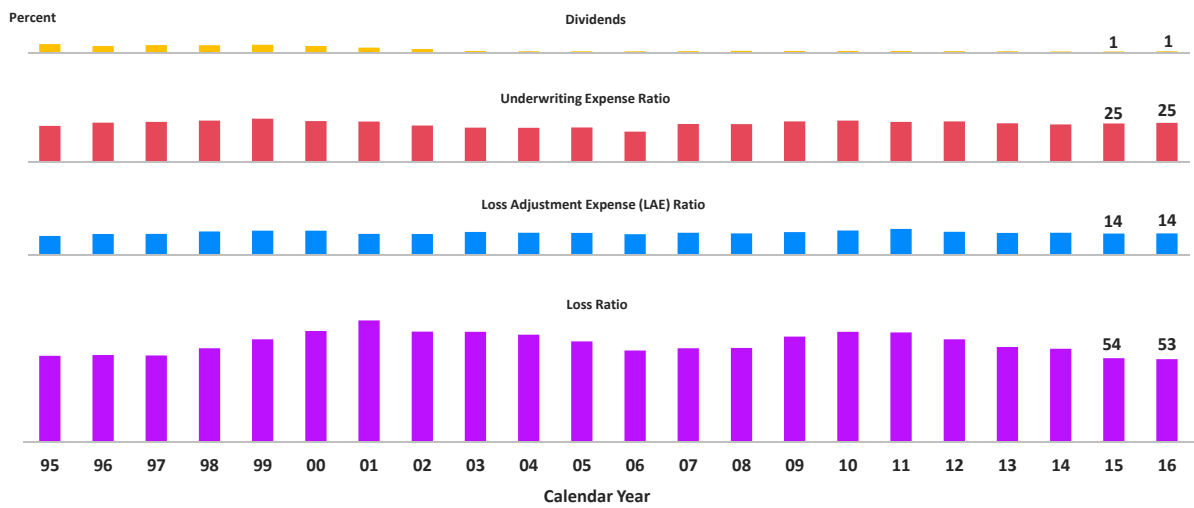


p Preliminary, based on statutory data reported through 2nd Quarter 2017
Source: NAIC's Annual Statement data



WC Combined Ratio Components

Private Carriers

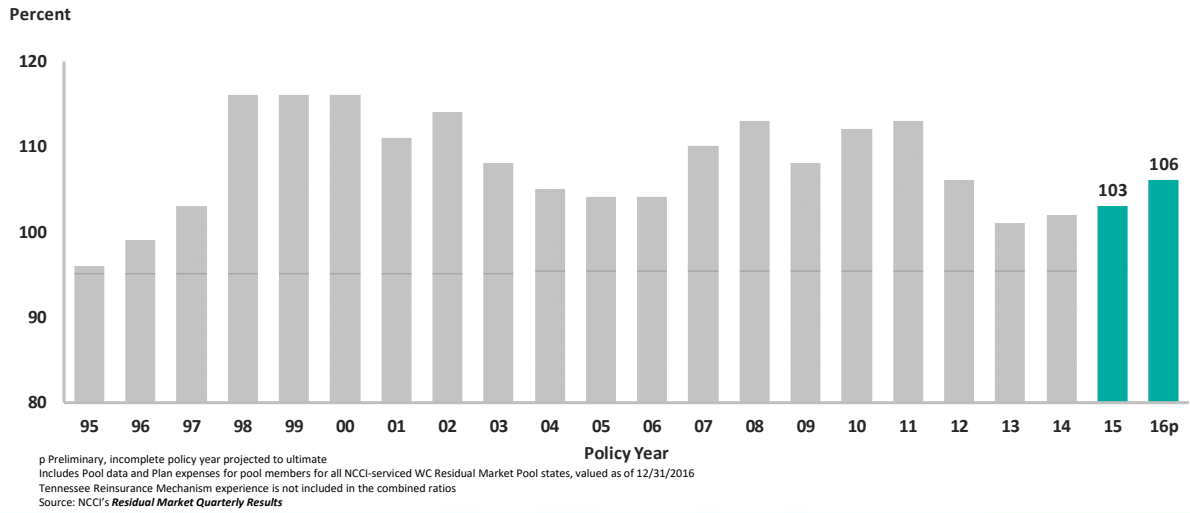


Source: NAIC's Annual Statement data



WC Residual Market Combined Ratio

NCCI-Serviced WC Residual Market Pools



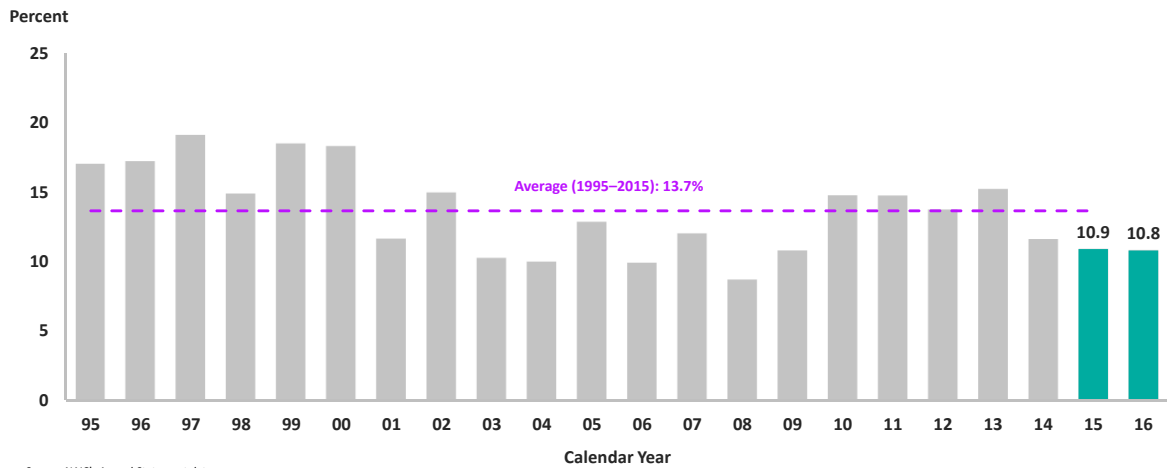
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WC Investment Gain on Insurance Transactions Ratio to Net Earned Premium

Private Carriers



Source: NAIC's Annual Statement data
Investment Gain on Insurance Transactions includes Other Income

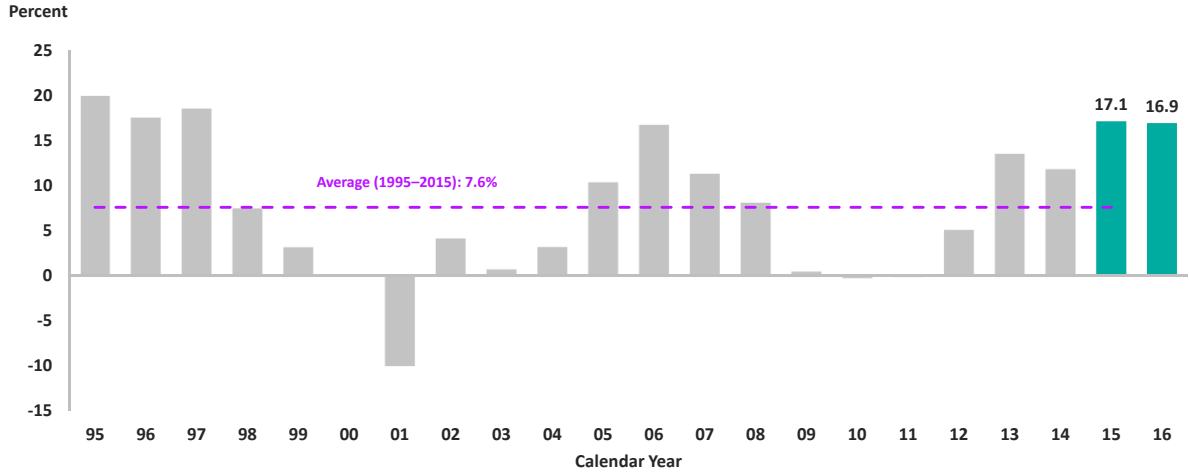
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WC Pretax Operating Gain

Private Carriers



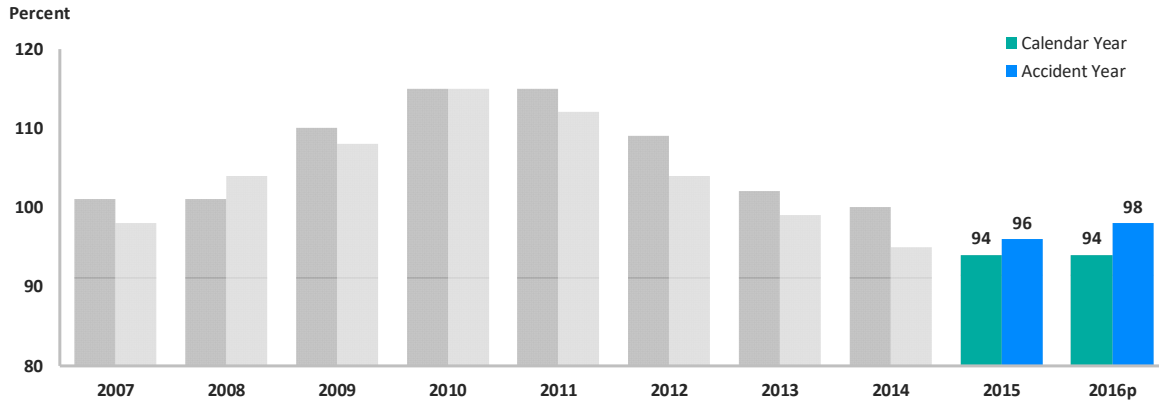
Source: NAIC's Annual Statement data
 Operating Gain equals 1.00 minus (Combined Ratio less Investment Gain on Insurance Transactions and Other Income)



Workers Compensation Accident Year Results and Reserve Estimates

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

Private Carriers

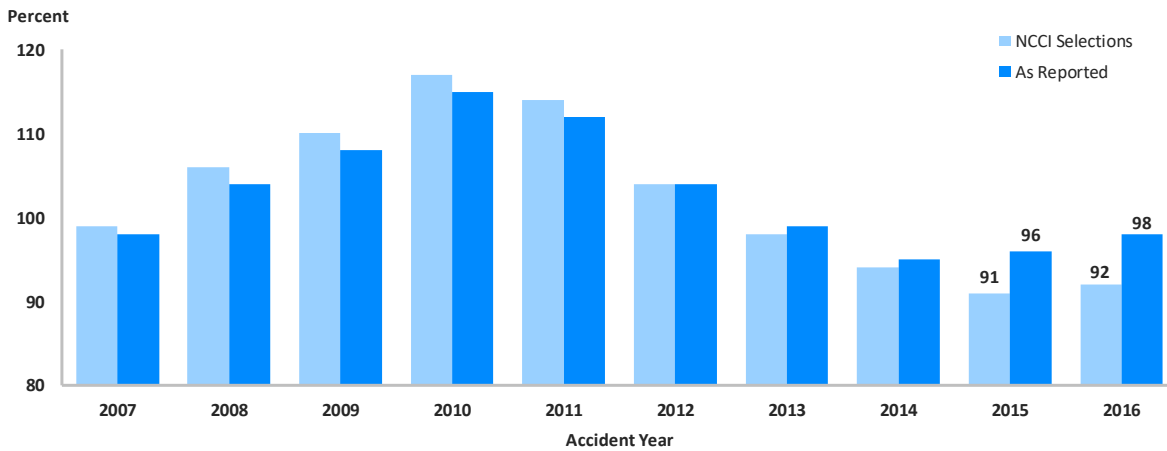


p Preliminary
Source: NAIC's Annual Statement data
Accident Year information is reported as of 12/31/2016
Includes dividends to policyholders



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

Private Carriers

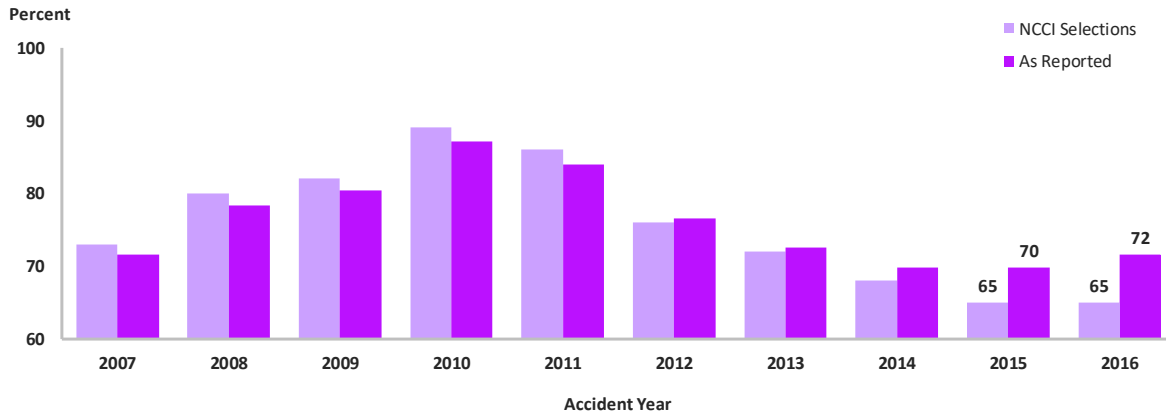


Sources: As Reported: NAIC's Annual Statement Schedule P—Part 1D data as of 12/31/2016
NCCI Selections: NCCI analysis based on NAIC's Annual Statement data
As Reported Loss and LAE ratios are net of tabular reserve discounts and gross of nontabular reserve discounts



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

Private Carriers

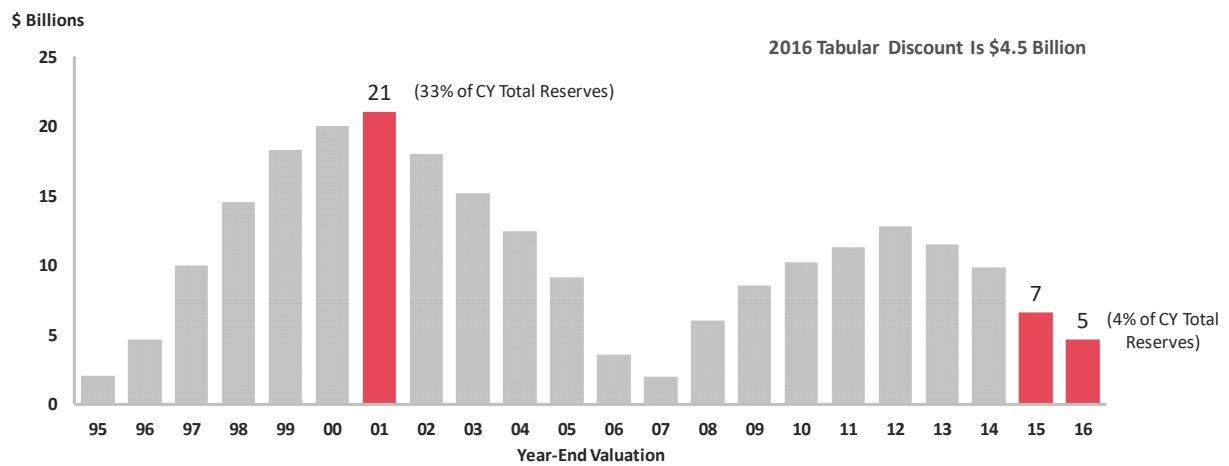


Sources: As Reported: NAIC's Annual Statement Schedule P—Part 10 data as of 12/31/2016
 NCCI Selections: NCCI analysis based on NAIC's Annual Statement data
 As Reported Loss and LAE ratios are net of tabular reserve discounts and gross of nontabular reserve discounts



WC Net Loss and LAE Reserve Deficiencies

Private Carriers



Source: NCCI analysis based on NAIC's Annual Statement data
 Considers all reserve discounts as deficiencies

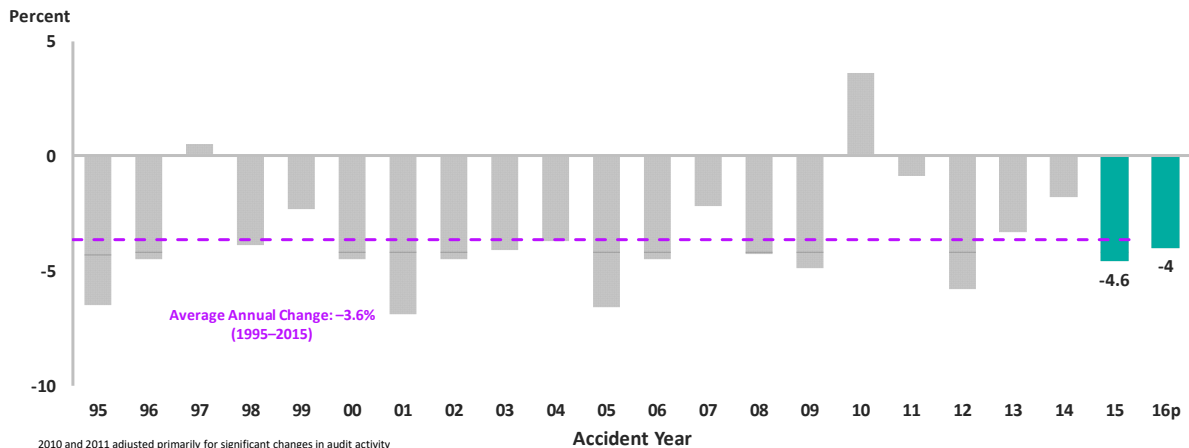


Workers Compensation Loss Drivers

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WC Lost-Time Claim Frequency— Change in Lost-Time 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 12/31/2016

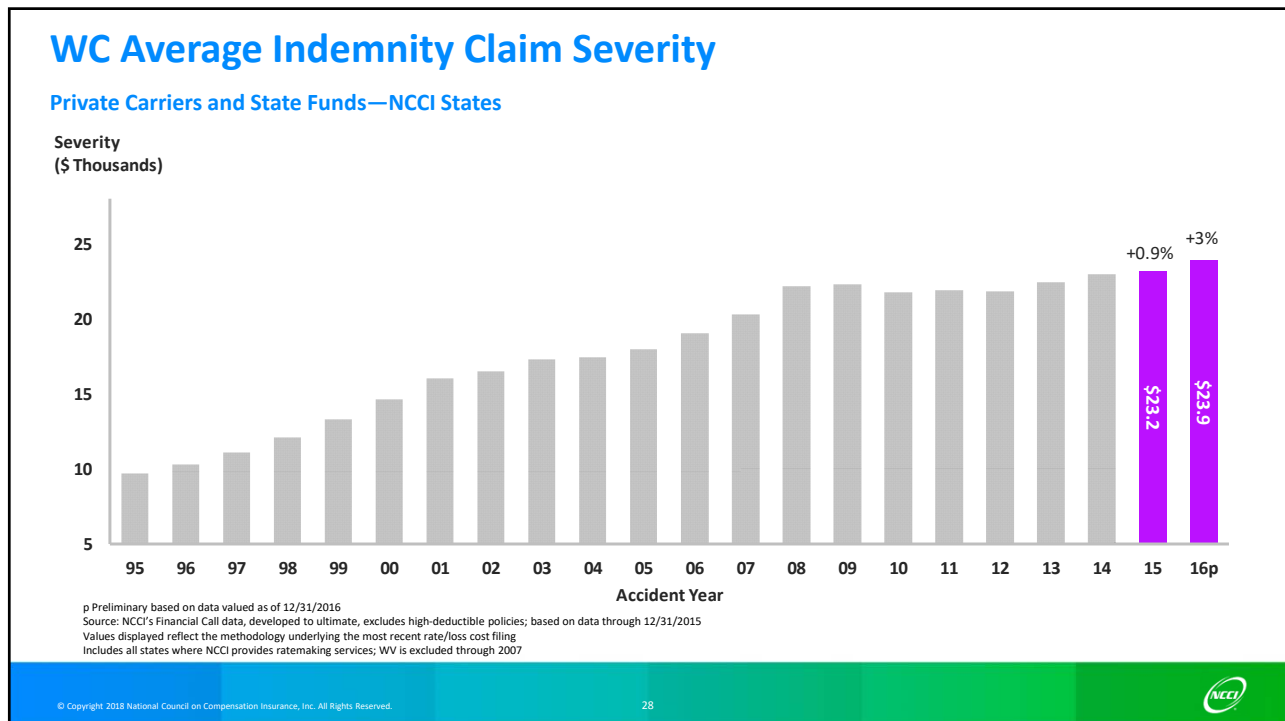
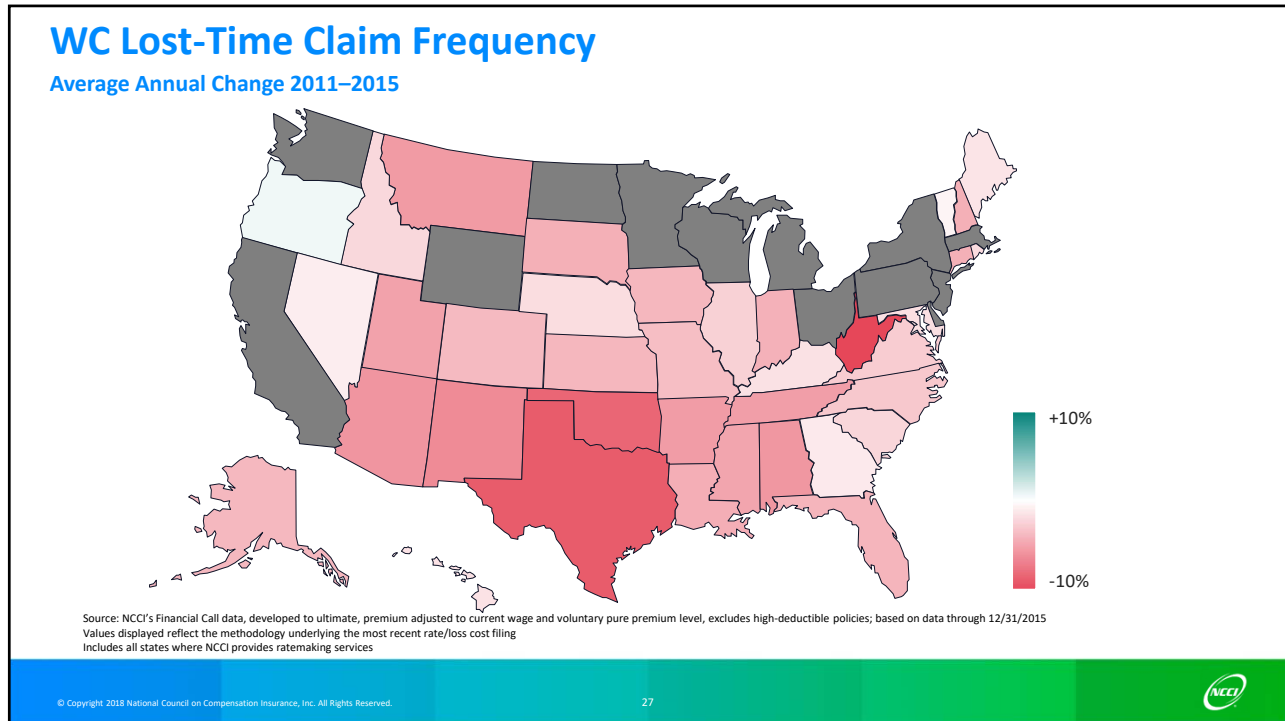
Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies; based on data through 12/31/2015

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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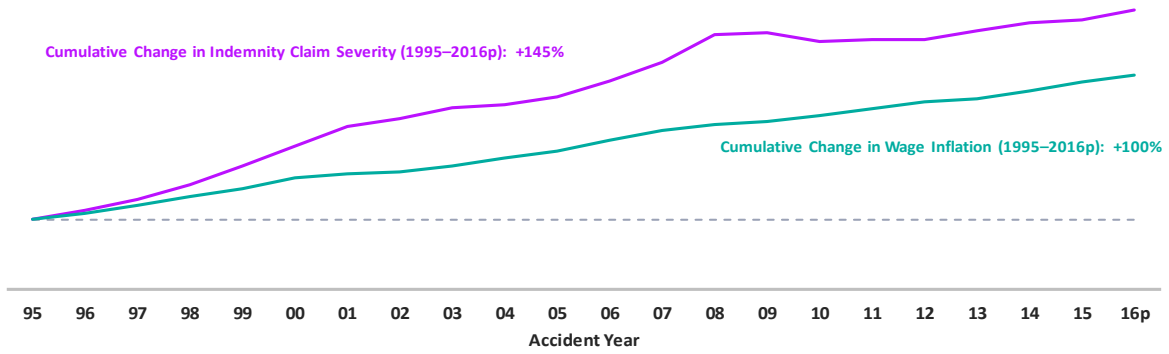
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WC Average Indemnity Claim Severity

Private Carriers and State Funds—NCCI States

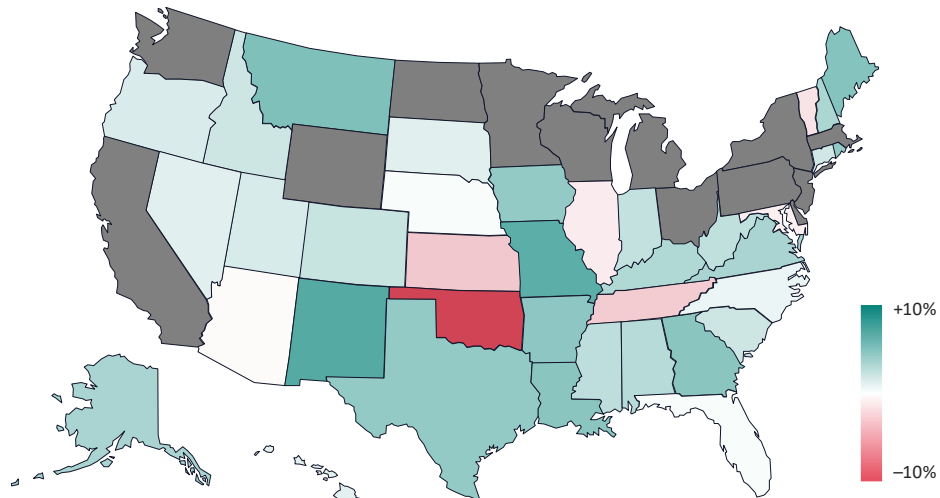


p Preliminary based on data valued as of 12/31/2016
 Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2015
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing
 Includes all states where NCCI provides ratemaking services; WV is excluded through 2007
 US Average Weekly Wage: 1995–2007 and 2012–2015, Quarterly Census of Employment and Wages; 2008–2011, NCCI; 2016p, NCCI and Moody's Analytics



WC Average Indemnity Claim Severity

Average Annual Change 2011–2015, Private Carriers and State Funds—NCCI States



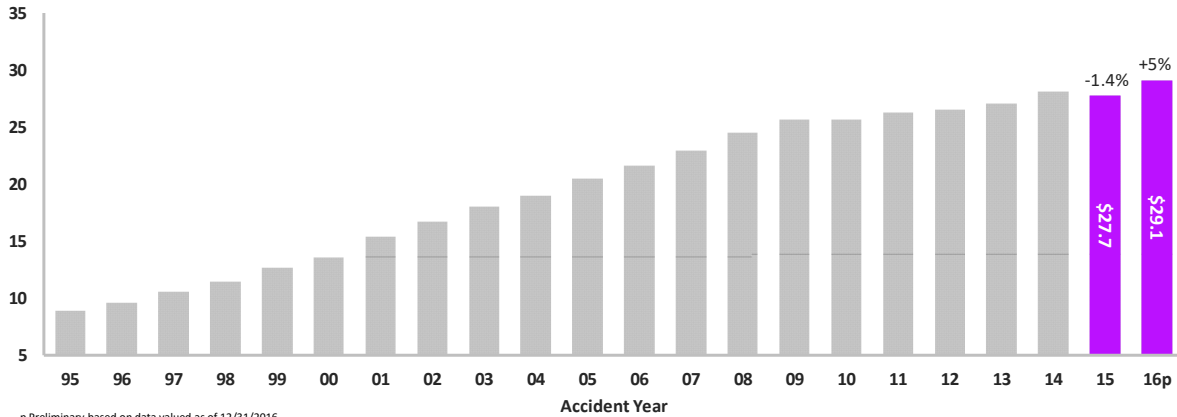
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2015
 Values displayed reflect the methodology underlying the most recent rate/loss cost filing
 Includes all states where NCCI provides ratemaking services



WC Average Medical Lost-Time Claim Severity

Private Carriers and State Funds—NCCI States

Severity
(\$ Thousands)

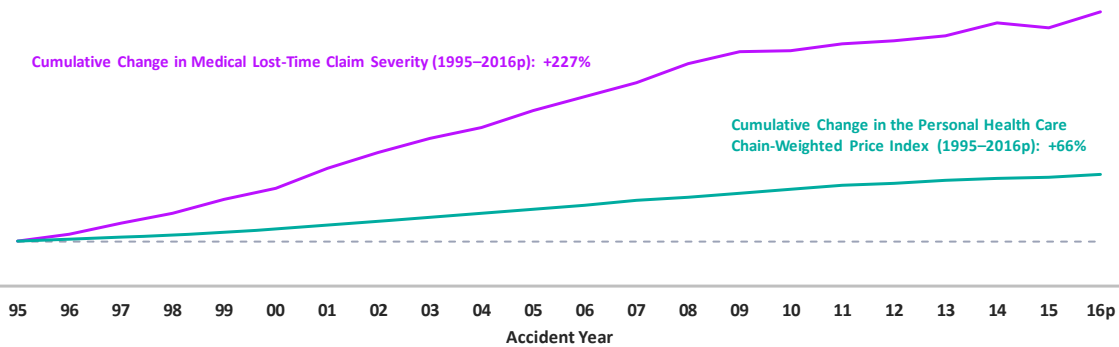


p Preliminary based on data valued as of 12/31/2016
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2015
Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007



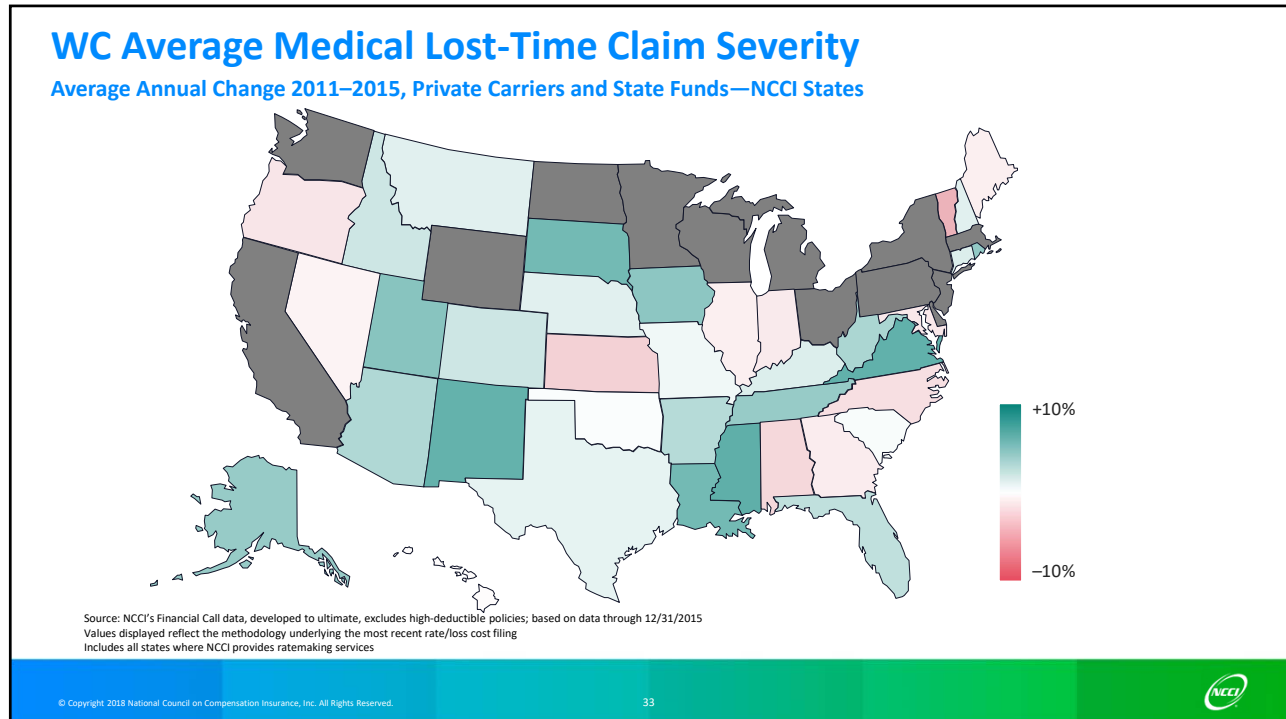
WC Average Medical Lost-Time Claim Severity

Private Carriers and State Funds—NCCI States



p Preliminary based on data valued as of 12/31/2016
Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2015
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





In Summary

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- Net written premium volume remained relatively steady in 2016
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