



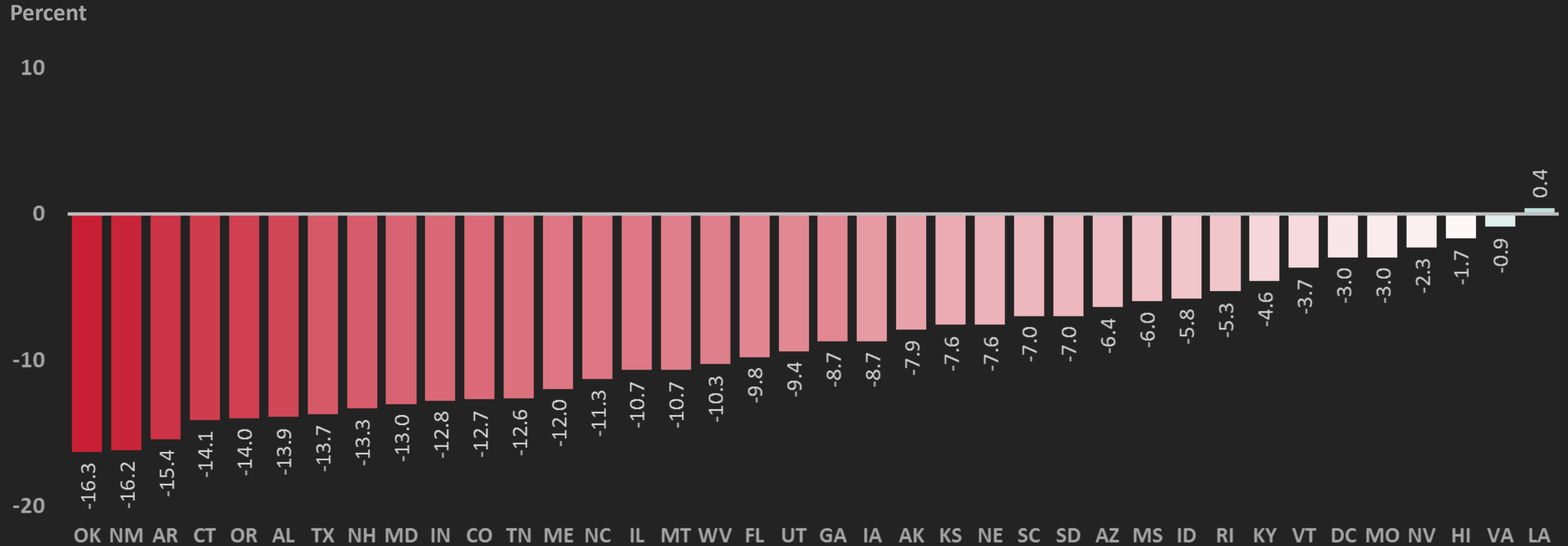
Workers Compensation State of the Line

Jeff Eddinger, FCAS, MAAA

July 13, 2018

Most Recent Changes in Bureau Premium Level

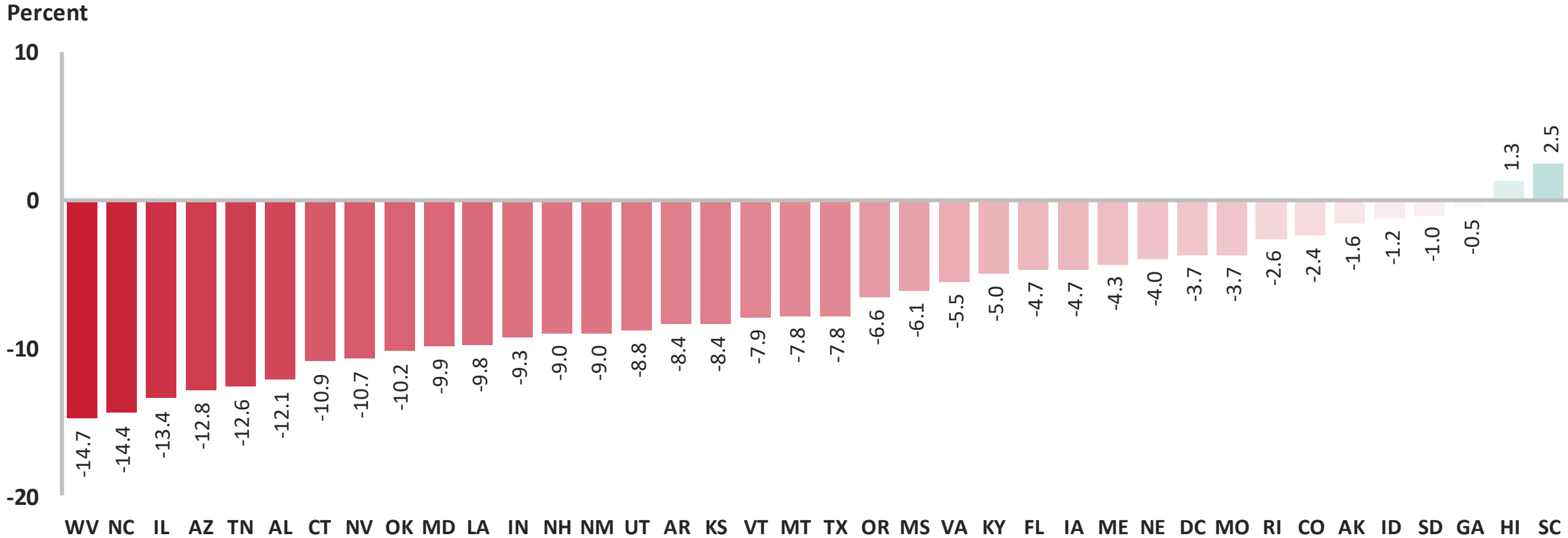
Voluntary Market, Excludes Law-Only Filings



Premium level changes in advisory rates, loss costs, and rating values, as of 5/10/2018, as filed by the applicable rating organization, relative to those previously approved
IN and NC are filed in cooperation with state rating bureaus

Prior Year 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 of 5/12/2017, as filed by the applicable rating organization, relative to those previously approved

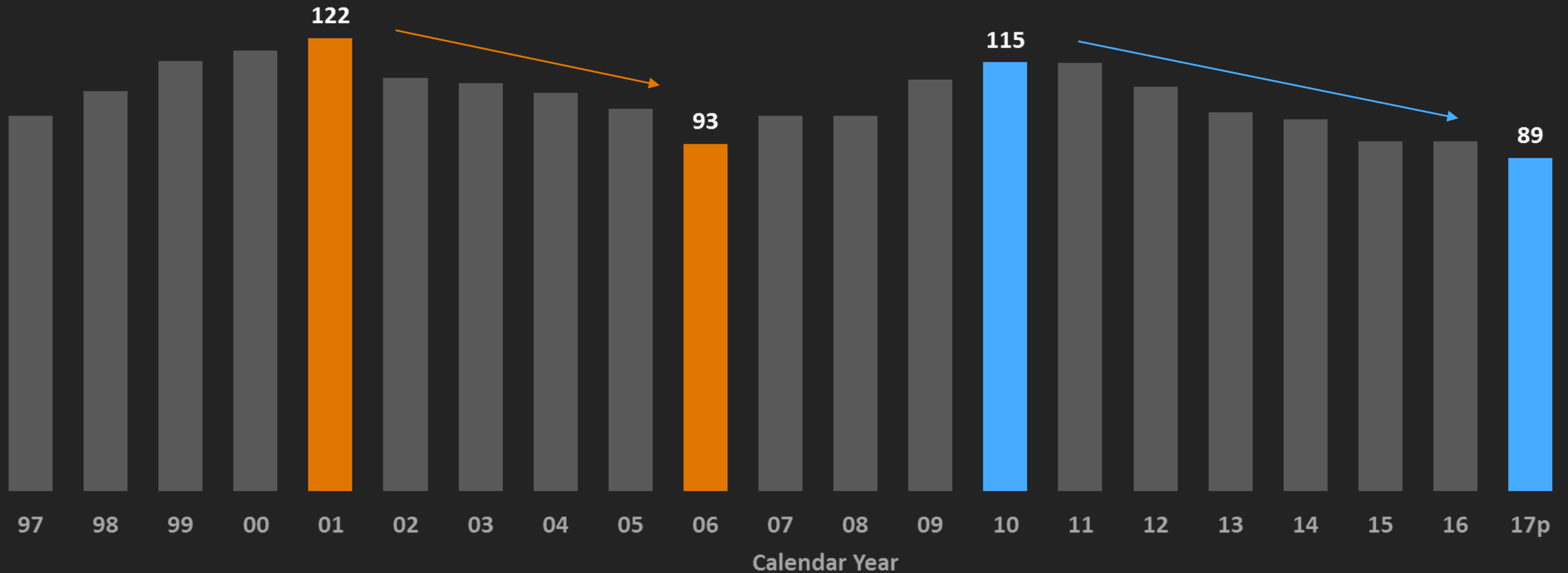
IN and NC are filed in cooperation with state rating bureaus

WORKERS COMPENSATION RESULTS

WC Combined Ratio—Underwriting Gain Achieved

Private Carriers

Percent



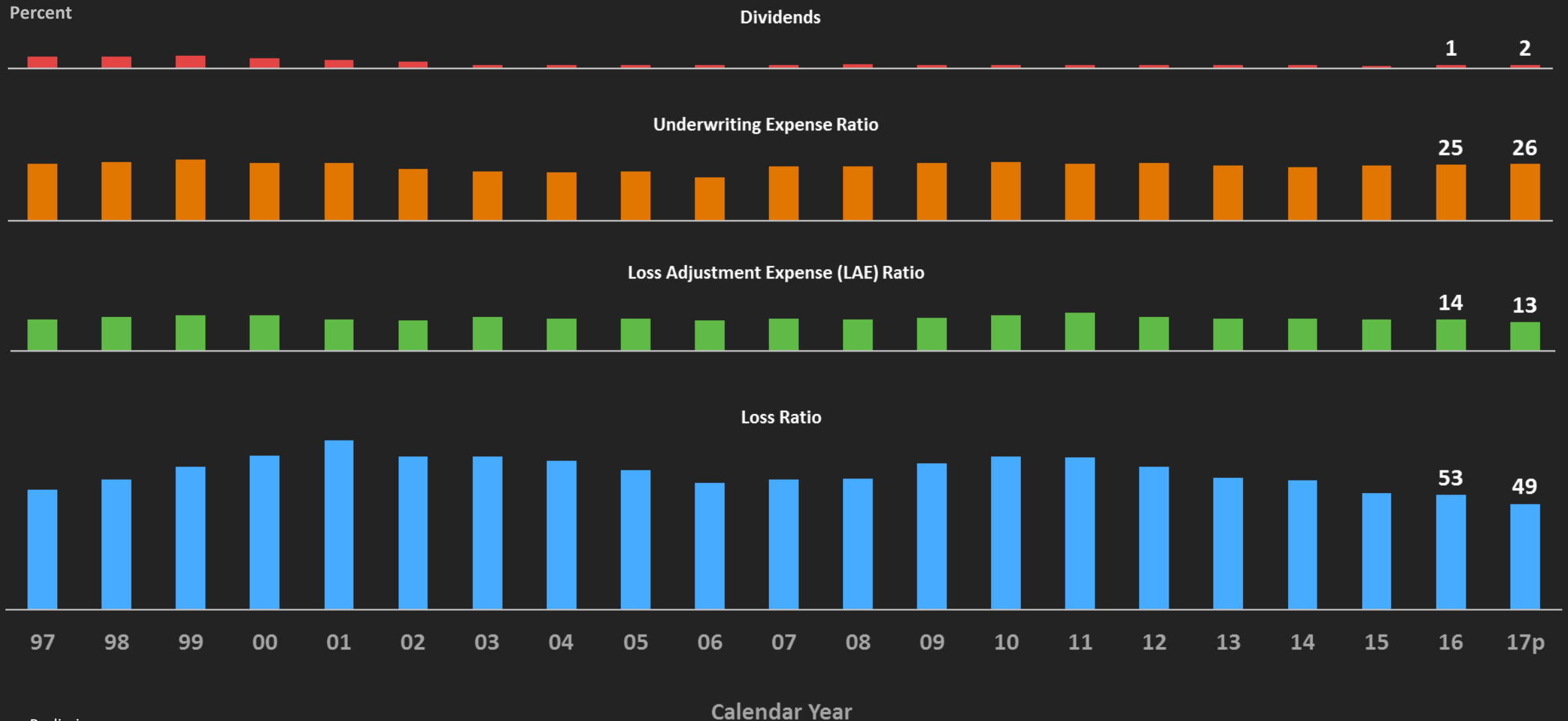
p Preliminary

Source: NAIC's Annual Statement data

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WC Combined Ratio by Component

Private Carriers



p Preliminary

Source: NAIC's Annual Statement data

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WC LAE-to-Loss Ratio—Net Incurred LAE to Incurred Losses

Private Carriers

Percent

40

30

20

10

97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17p

Calendar Year

26.6 27

p Preliminary

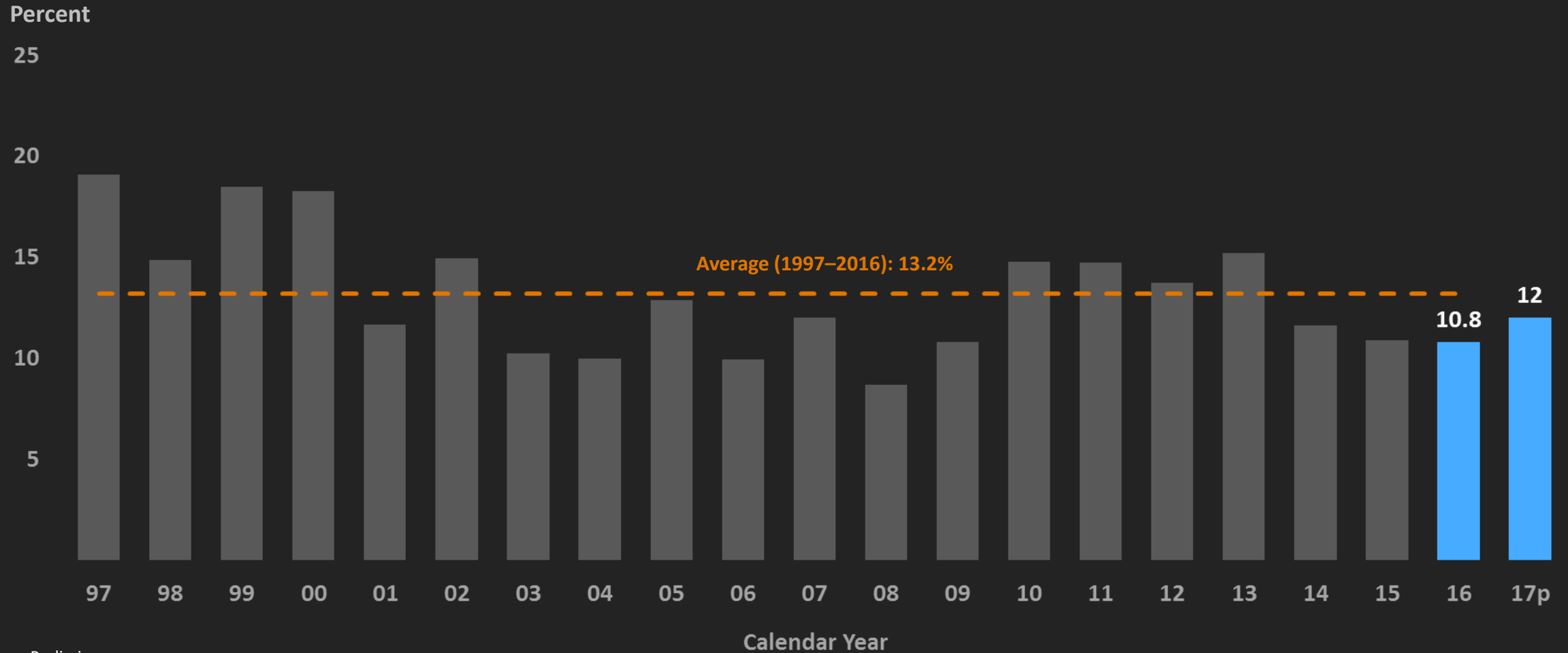
Source: NAIC's Annual Statement data

LAE includes Defense and Cost Containment Expense plus Adjusting and Other Expense

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WC Investment Gain on Insurance Transactions

Ratio to Net Earned Premium, Private Carriers



p Preliminary

Source: NAIC's Annual Statement data

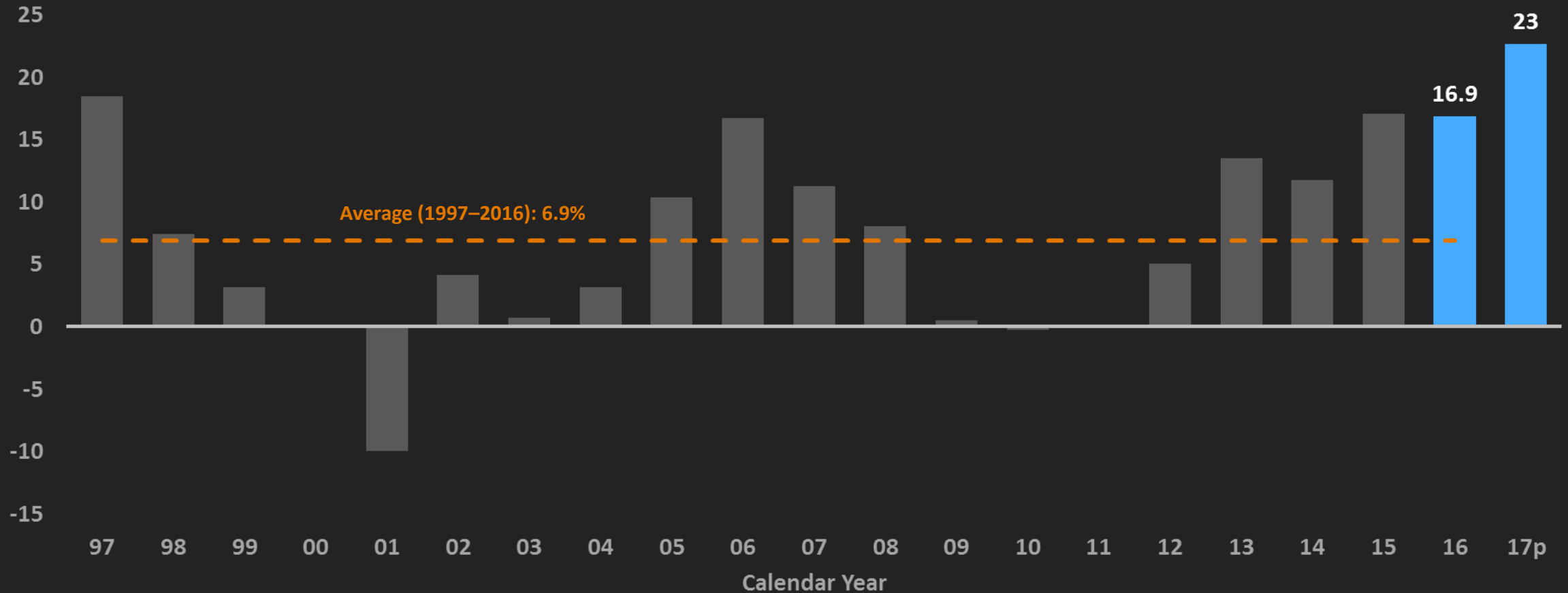
Investment Gain on Insurance Transactions includes Other Income

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

WC Pretax Operating Gain

Private Carriers

Percent



p Preliminary

Source: NAIC's Annual Statement data

Operating Gain equals 1.00 minus (Combined Ratio less Investment Gain on Insurance Transactions and Other Income)

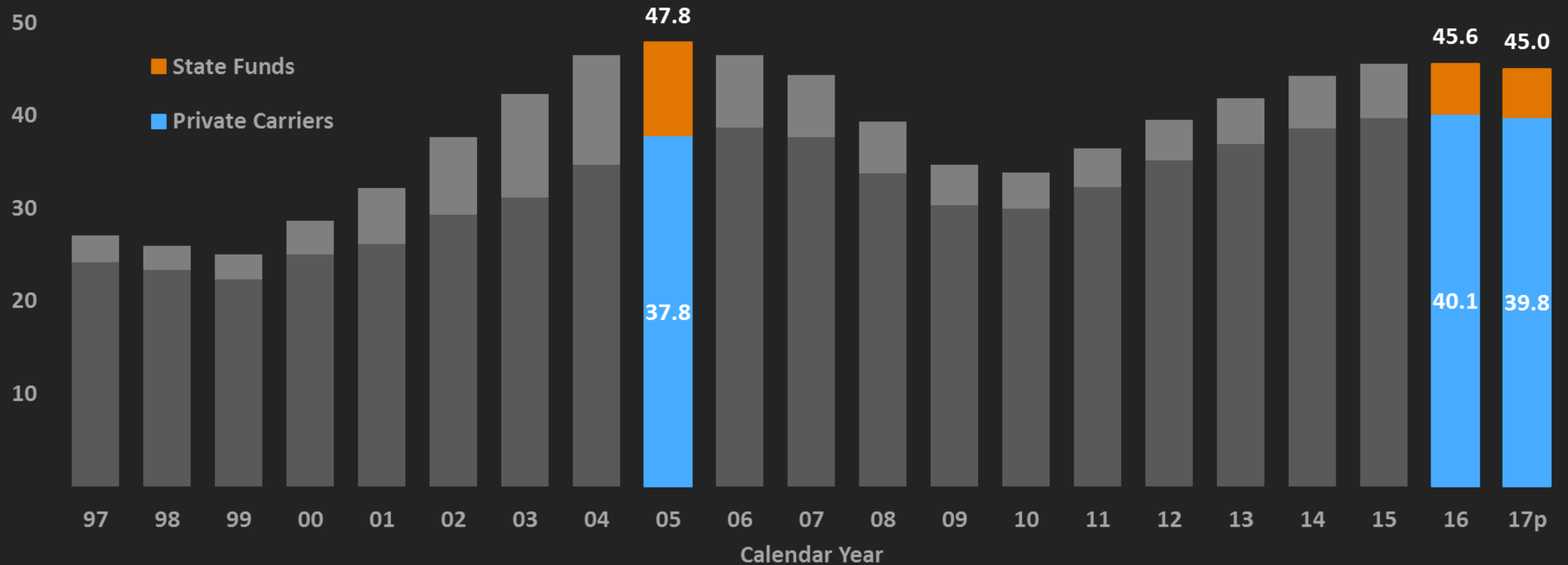
2013 is adjusted to exclude a material realized gain resulting from a single company transaction that involved corporate restructuring; unadjusted value is 17.7

WORKERS COMPENSATION PREMIUM DRIVERS

WC Net Written Premium

Private Carriers and State Funds

\$ Billions

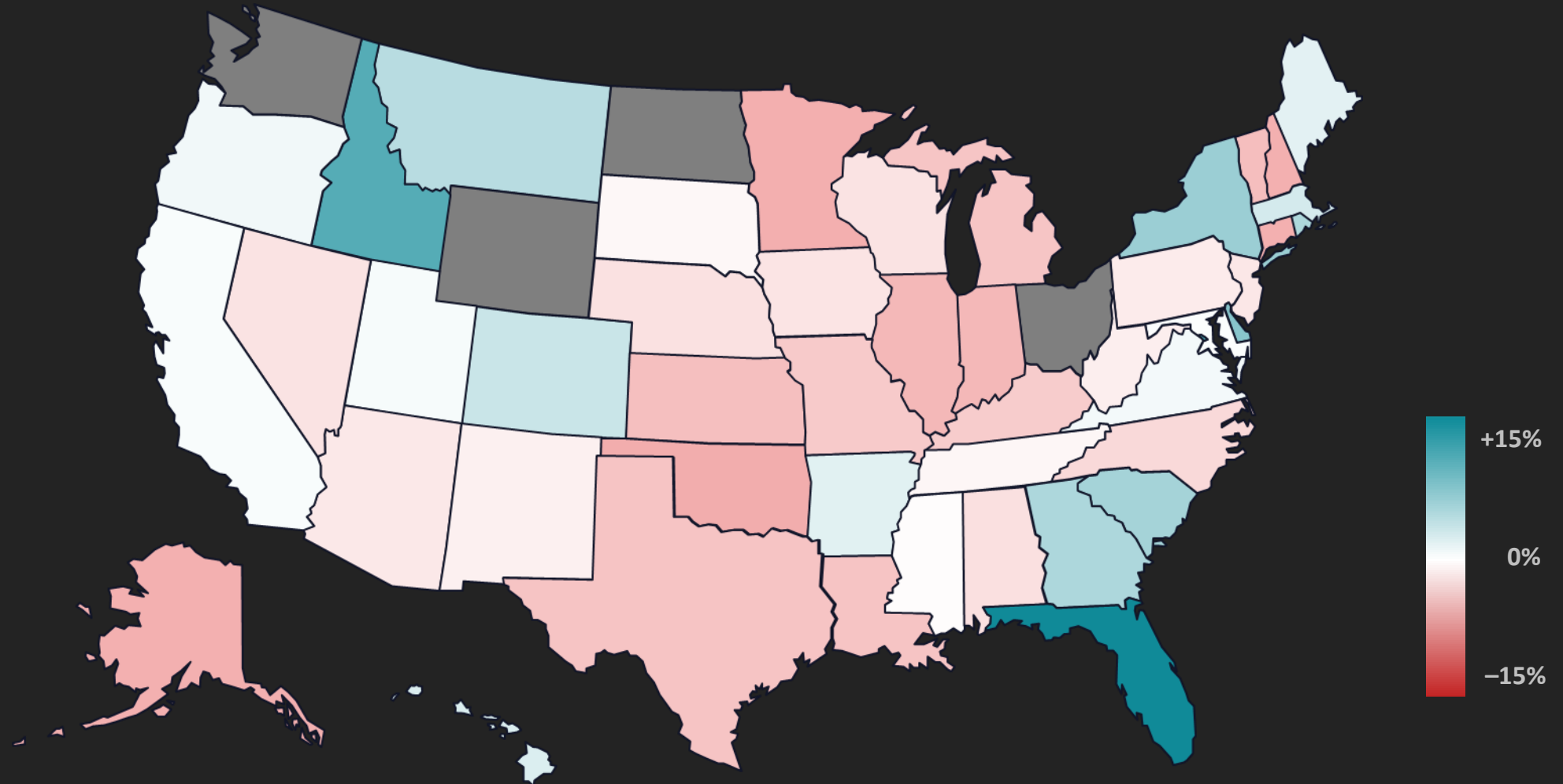


p Preliminary

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

WC Direct Written Premium Change—2017

Private Carriers



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

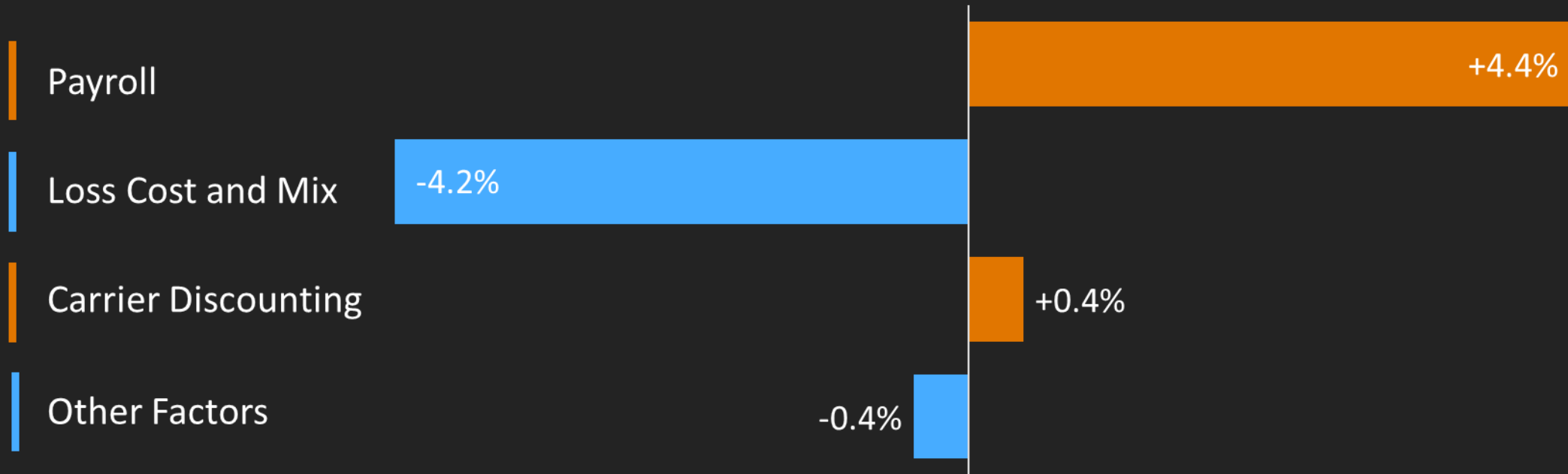
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WC Direct Written Premium Change by Component

Private Carriers—NCCI States

Change in Direct Written Premium: 0.0%

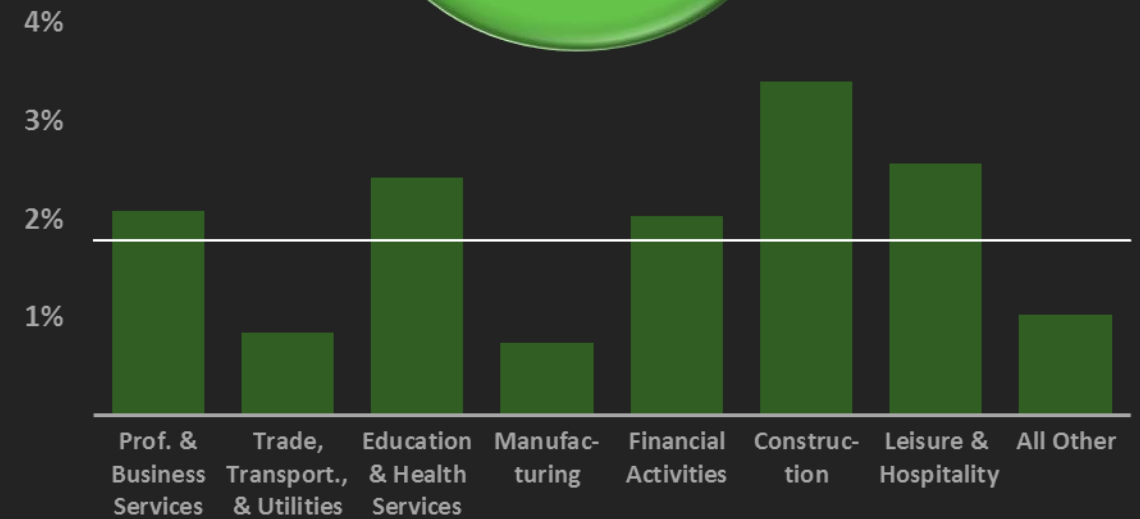
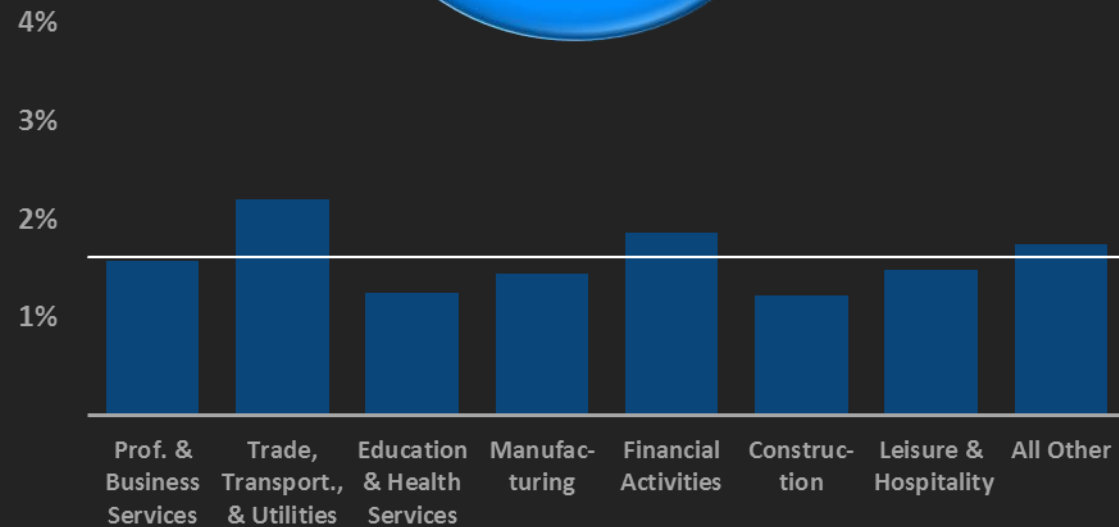
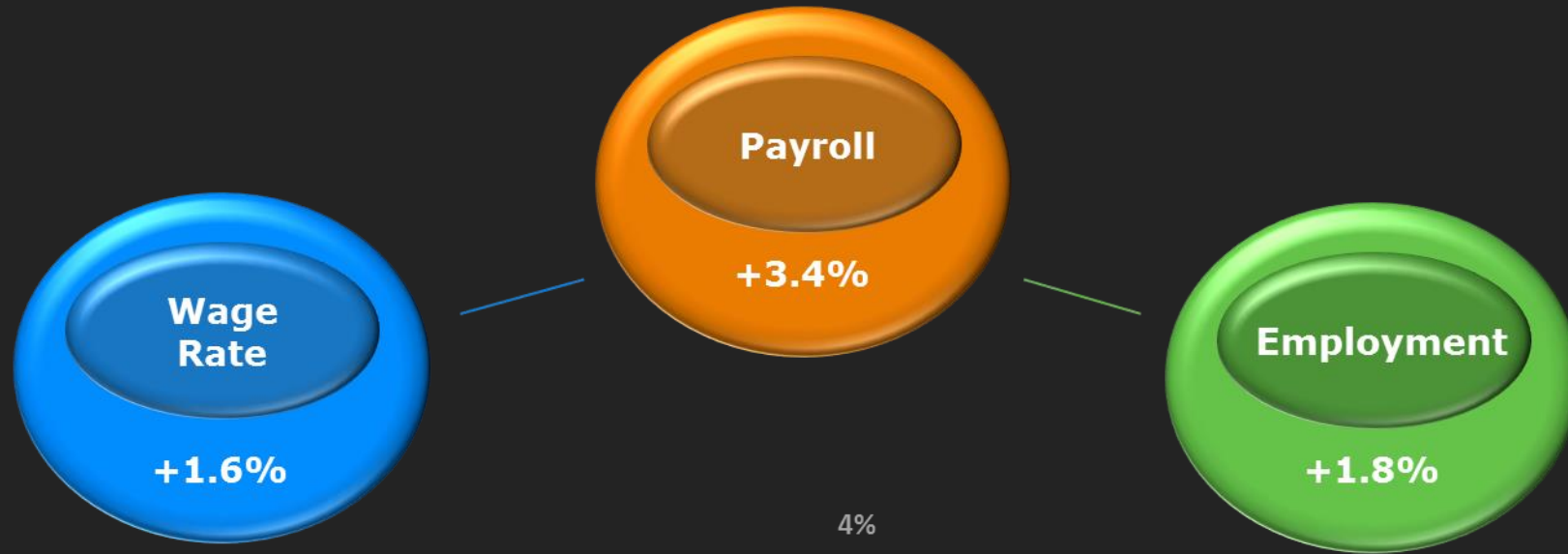
2017 vs. 2016



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

Increases in Payroll Continue to Drive Changes in Premium

Forecast Change 2016–2017

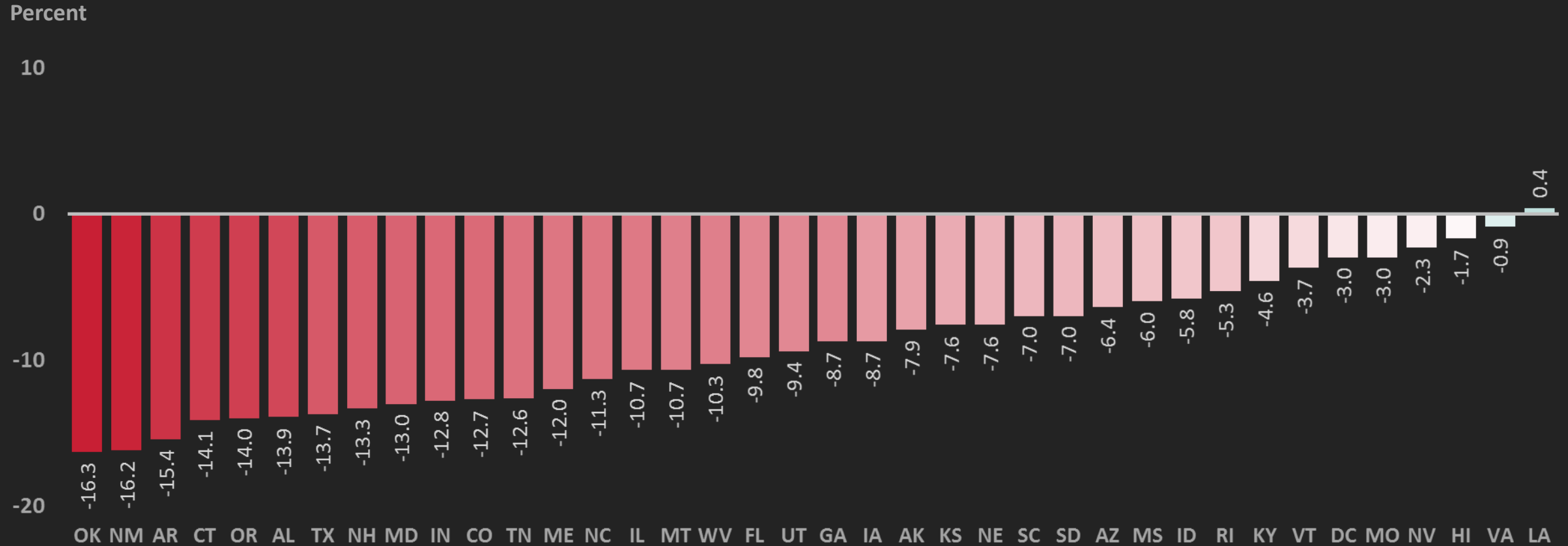


Sources: Moody's Analytics and NCCI

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Most Recent Changes in Bureau Premium Level

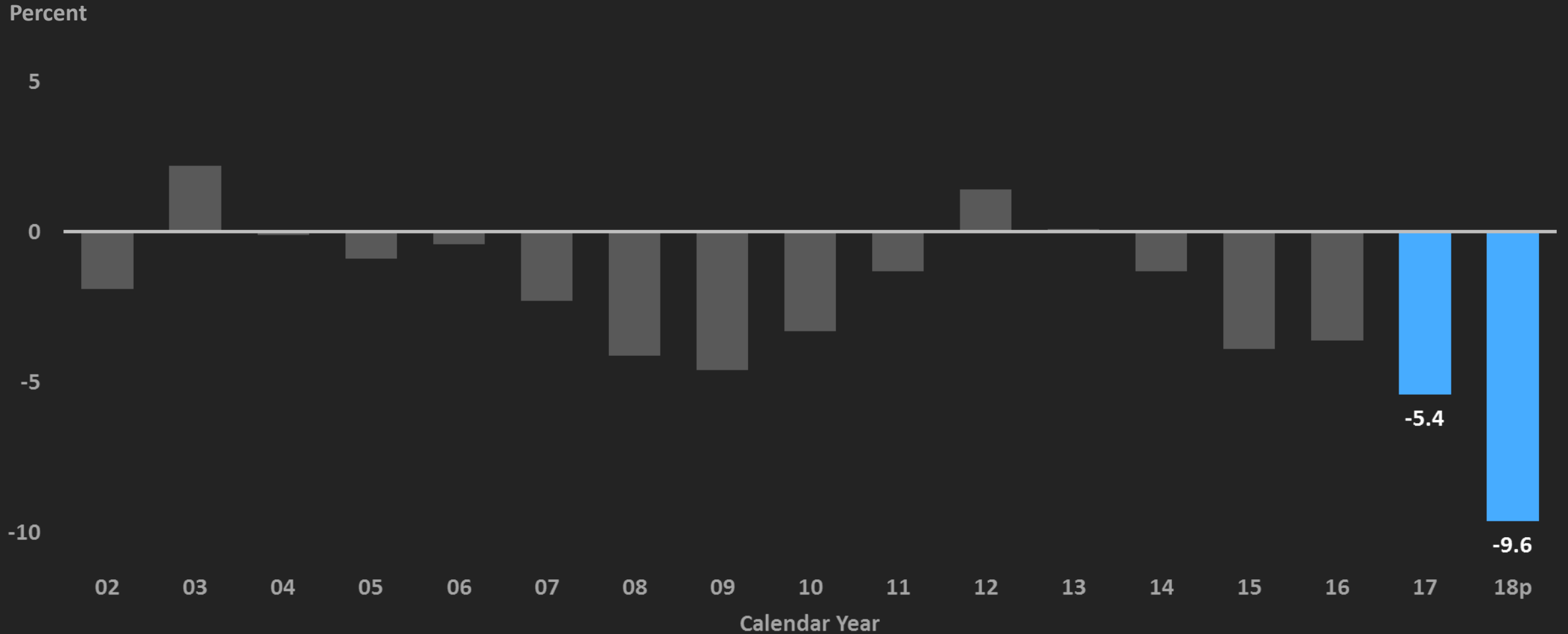
Voluntary Market, Excludes Law-Only Filings



Premium level changes in advisory rates, loss costs, and rating values, as of 5/10/2018, as filed by the applicable rating organization, relative to those previously approved
IN and NC are filed in cooperation with state rating bureaus

WC Approved Changes in Bureau Premium Level

Weighted by Effective Date—NCCI States



p Preliminary

Source: NAIC's Annual Statement Statutory Page 14

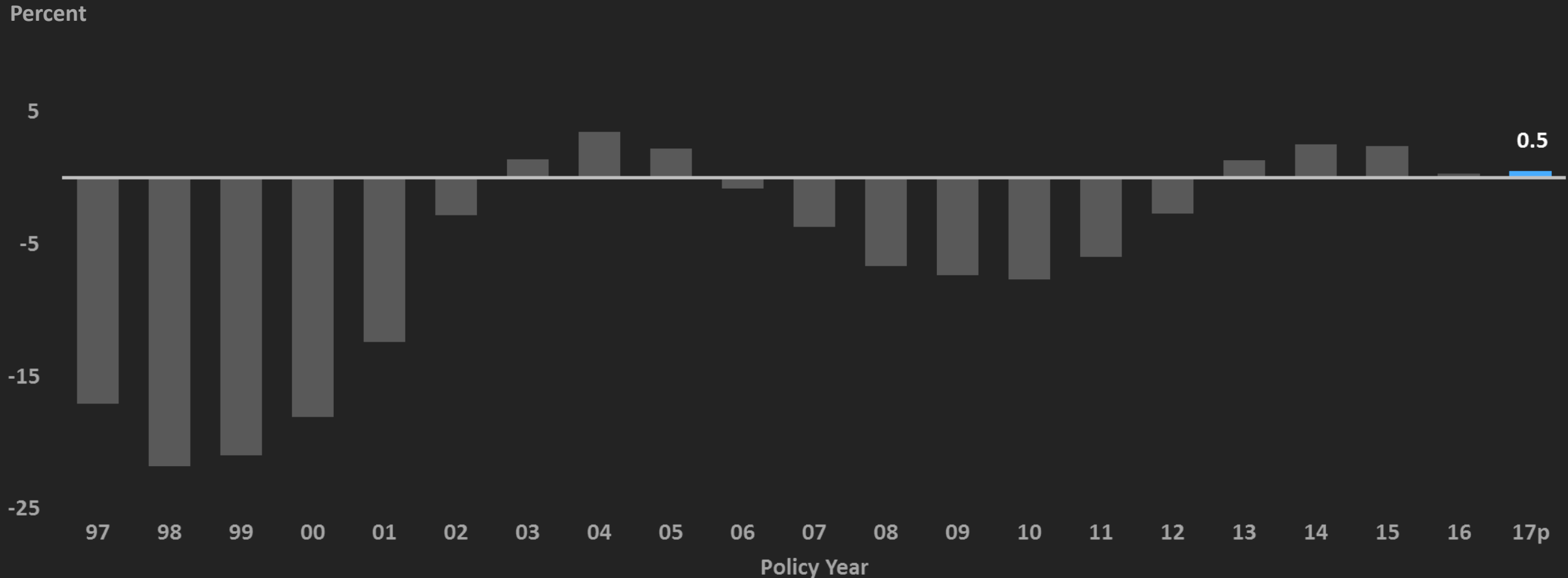
Values reflect changes in average premium levels between years, based on approved changes in advisory rates, loss costs, assigned risk rates, and rating values, as of 5/10/2018

IN and NC are filed in cooperation with state rating bureaus

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WC Impact of Discounting on Premium

Private Carriers—NCCI States



p Preliminary

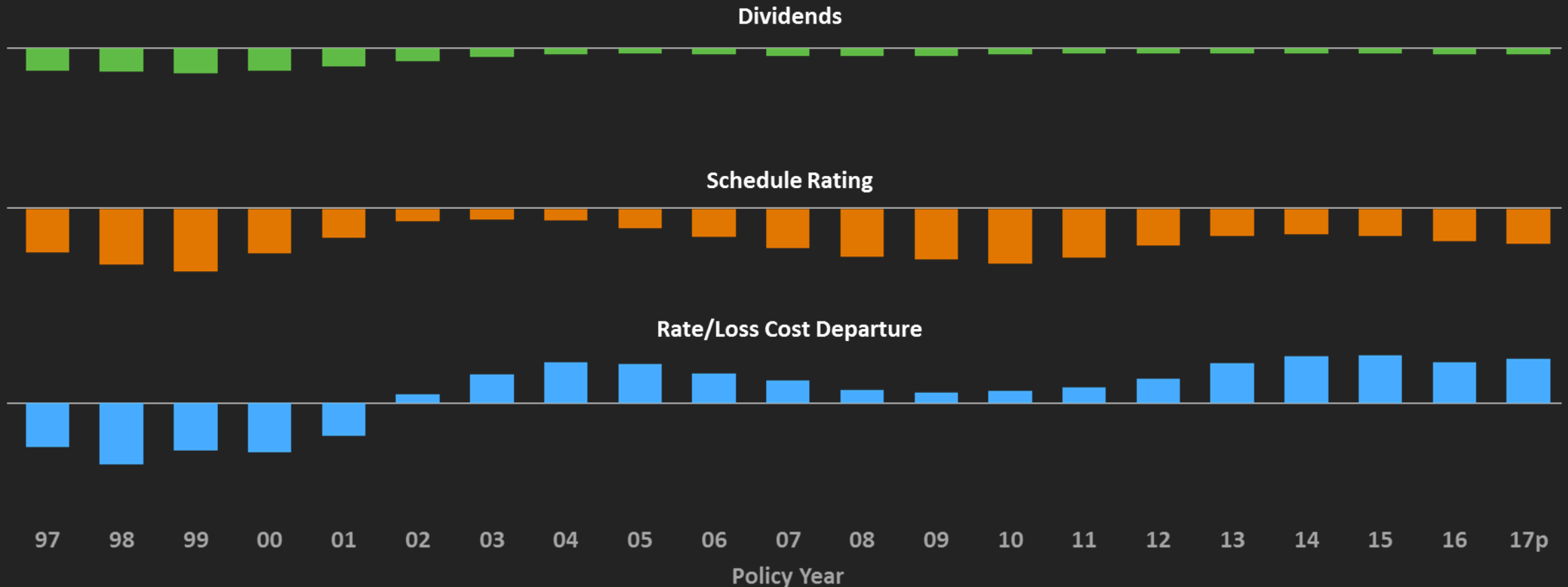
Sources: NAIC's Annual Statement Statutory Page 14 and NCCI's Financial Call data

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

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

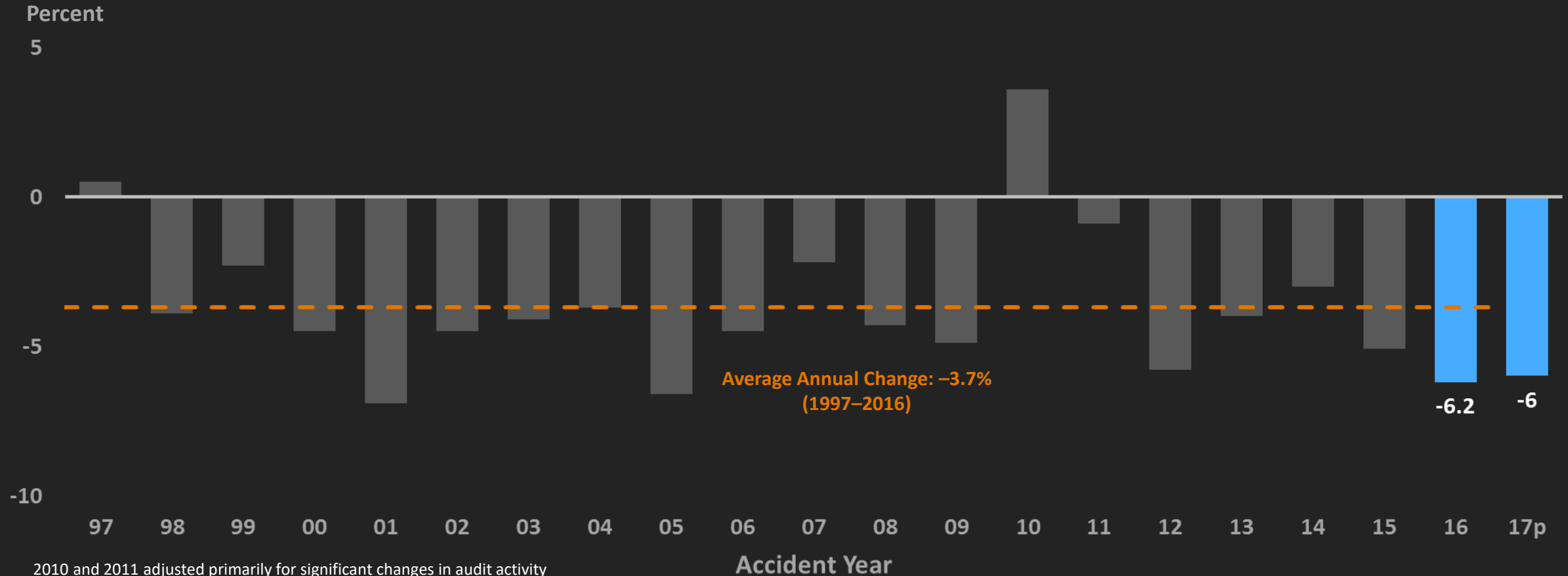
Based on data for all states where NCCI provides ratemaking services, excluding TX

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WORKERS COMPENSATION LOSS DRIVERS

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

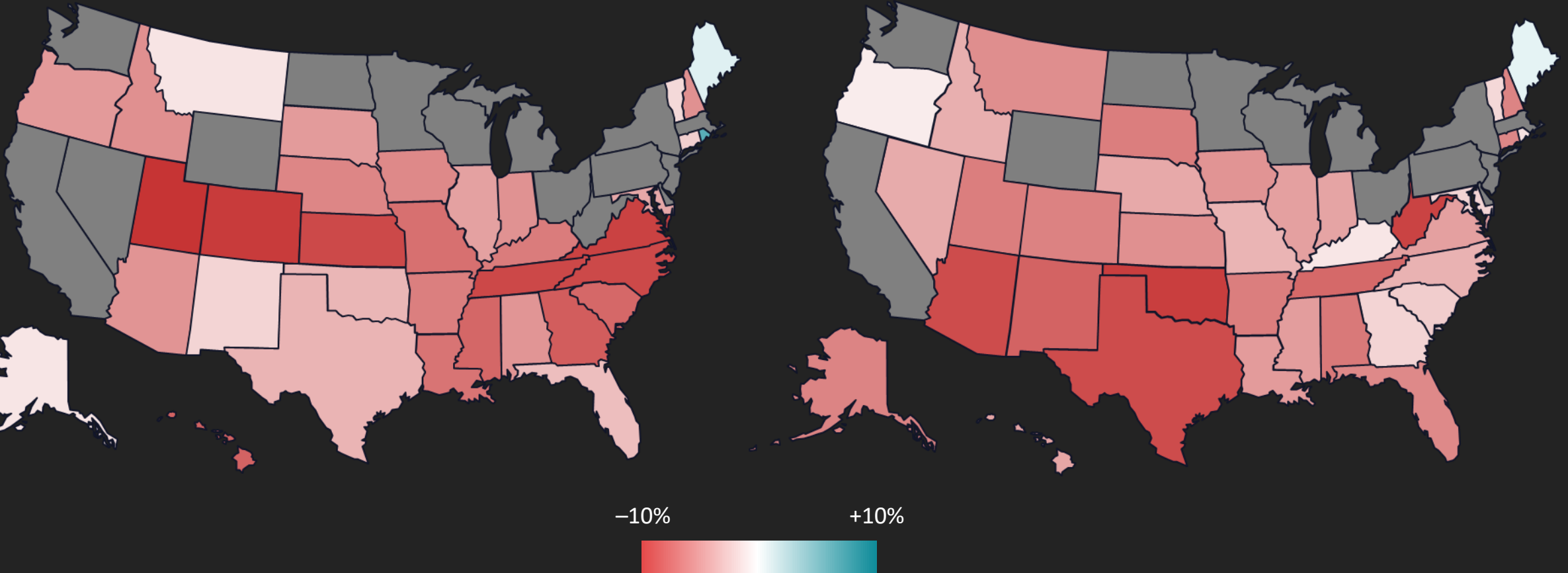
Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies;
based on data through 12/31/2016

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

WC Lost-Time Claim Frequency

Average Annual Change 1992–1996

Average Annual Change 2012–2016

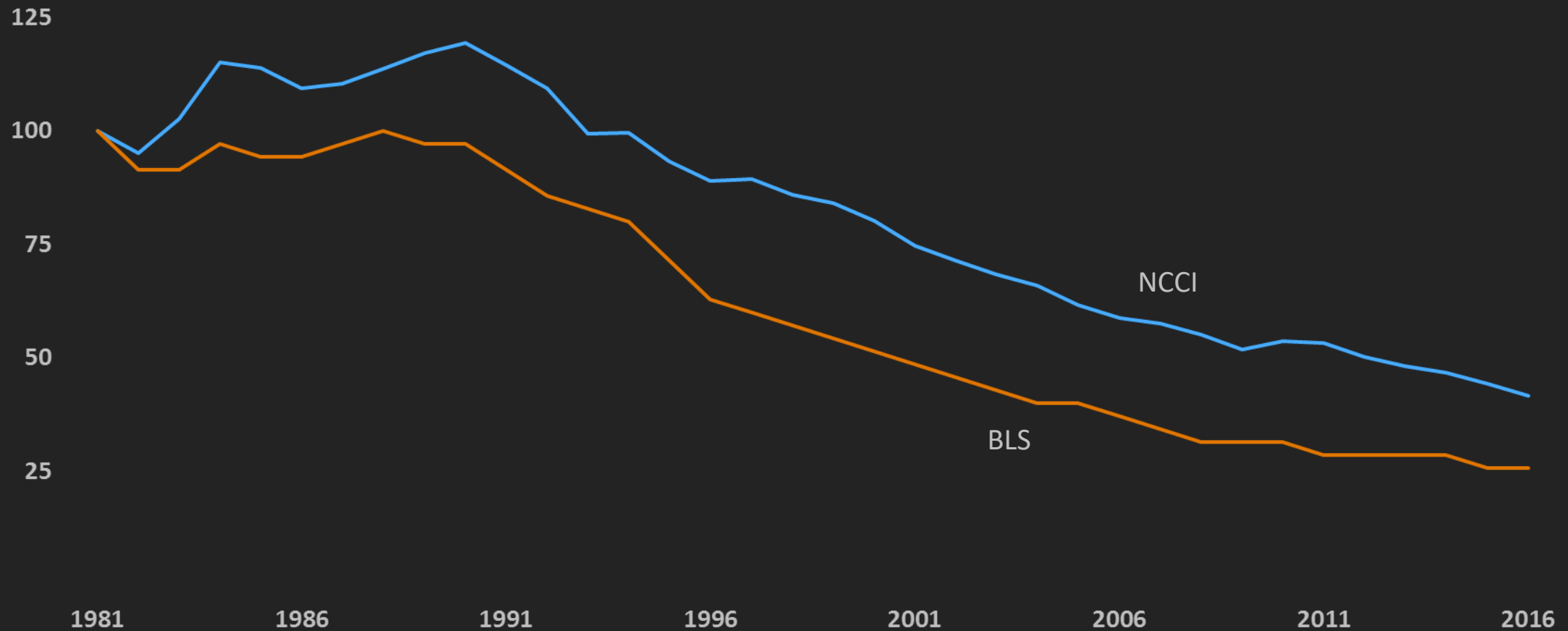


Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies; based on data through 12/31/2016

Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides ratemaking services

NCCI and BLS Measures of Lost-Time Claim Frequency

Index 1981 = 100

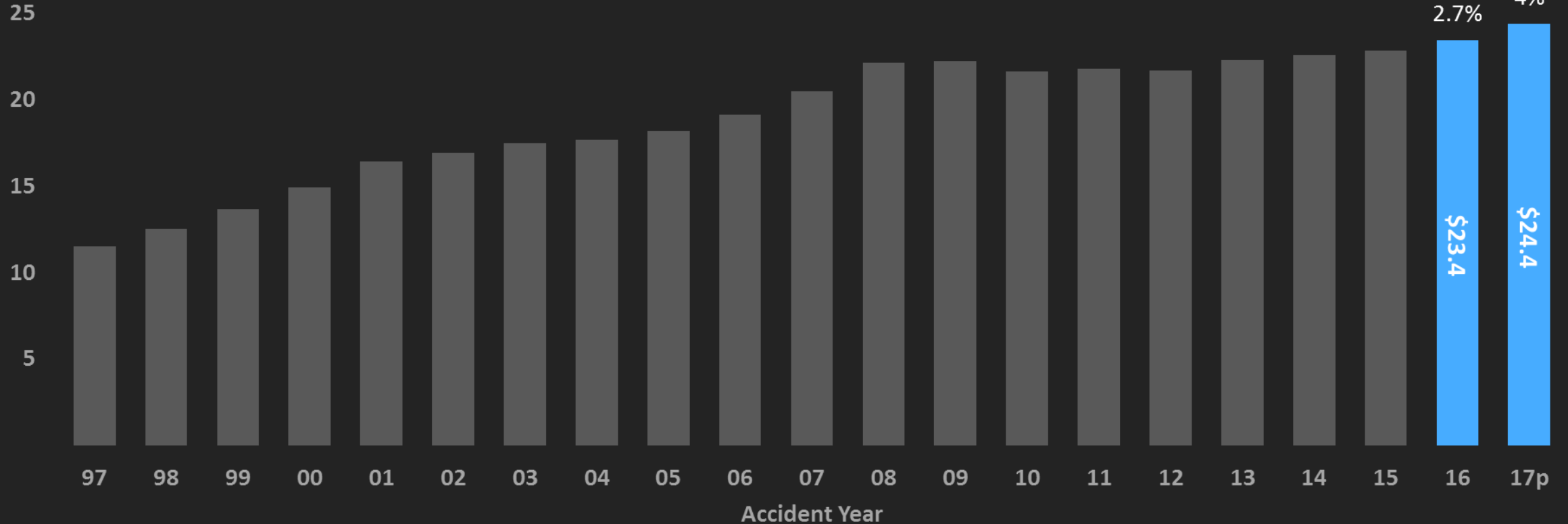


Sources: US Bureau of Labor Statistics (BLS); incidence rate for total private industry; injury and illness cases involving days away from work
NCCI's Frequency and Severity Analyses; lost-time claims based on the states where NCCI provides ratemaking services, including state funds; excludes high-deductible policies

WC Average Indemnity Claim Severity

Private Carriers and State Funds—NCCI States

Severity
(\$ Thousands)



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

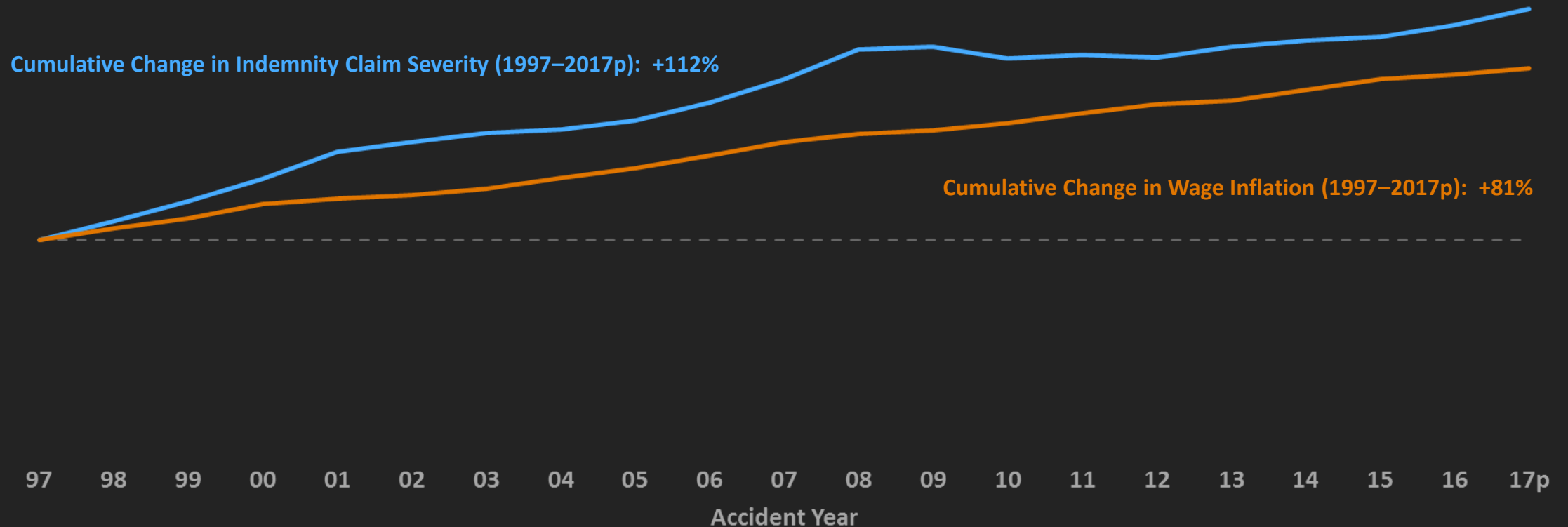
Sources: Severity: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016

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

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

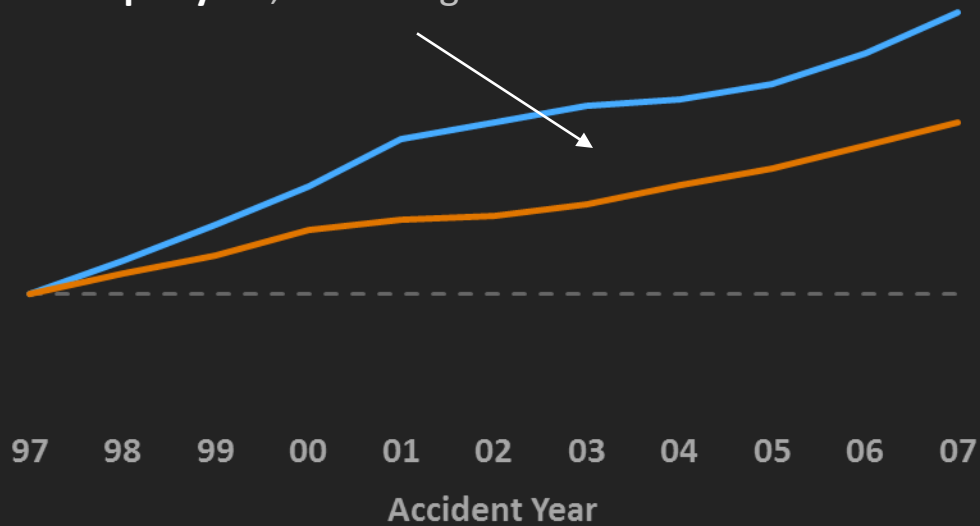
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007

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

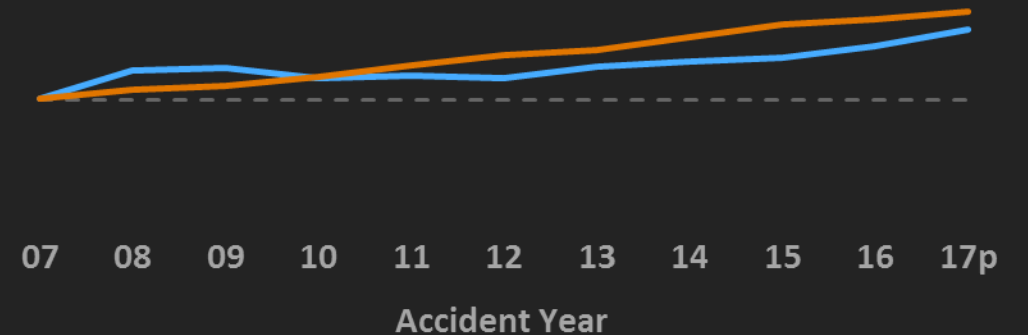
Relative Growth Rates—Indemnity Severity vs. Wage Inflation

Private Carriers and State Funds—NCCI States

Changes in indemnity claim severity **outpaced** changes in wage inflation by **1.9% per year, on average**



Indemnity claim severity and wages grew at a **similar rate**



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

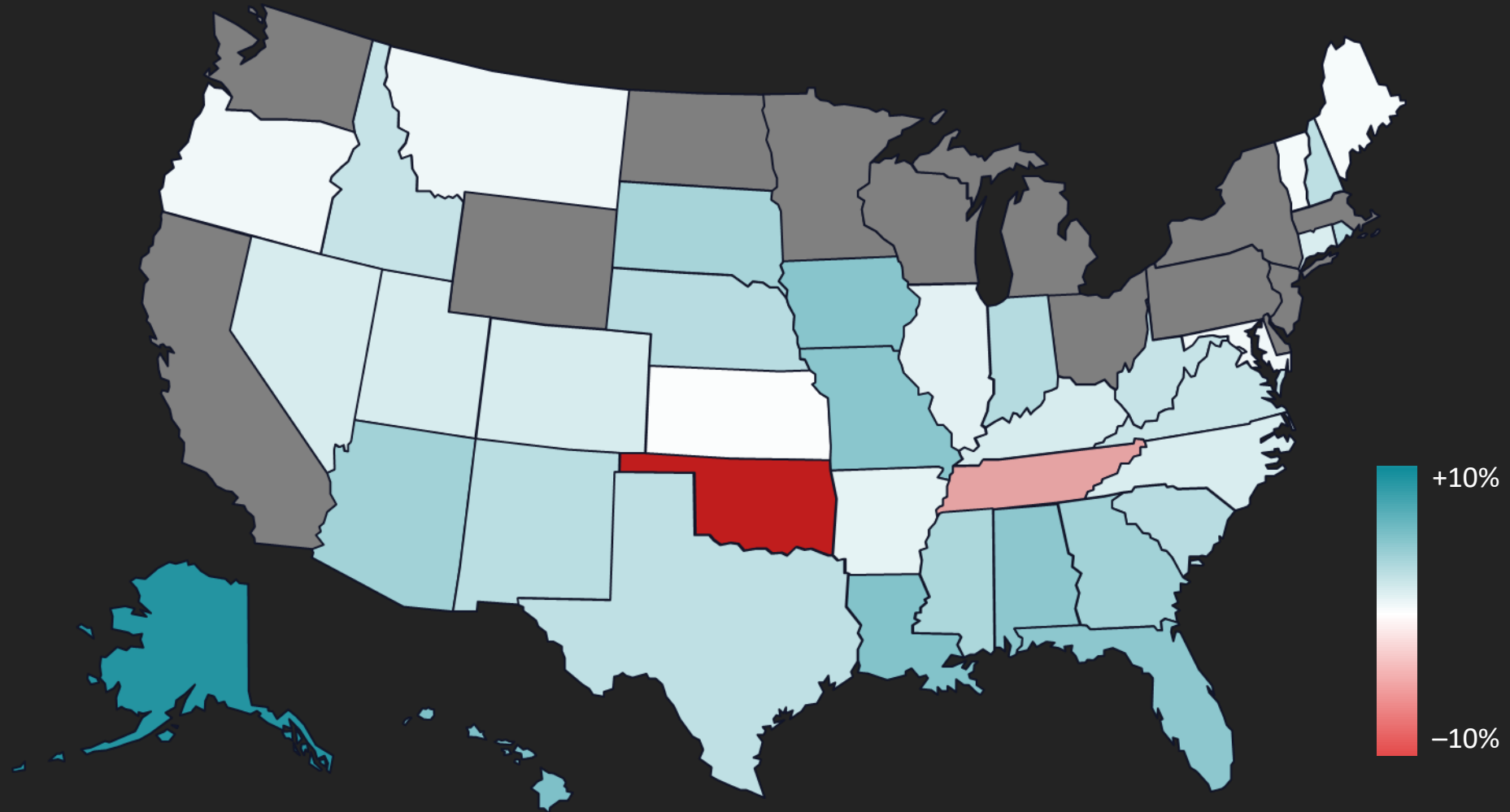
Values displayed reflect the methodology underlying the most recent rate/loss cost filing

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

WC Average Indemnity Claim Severity

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

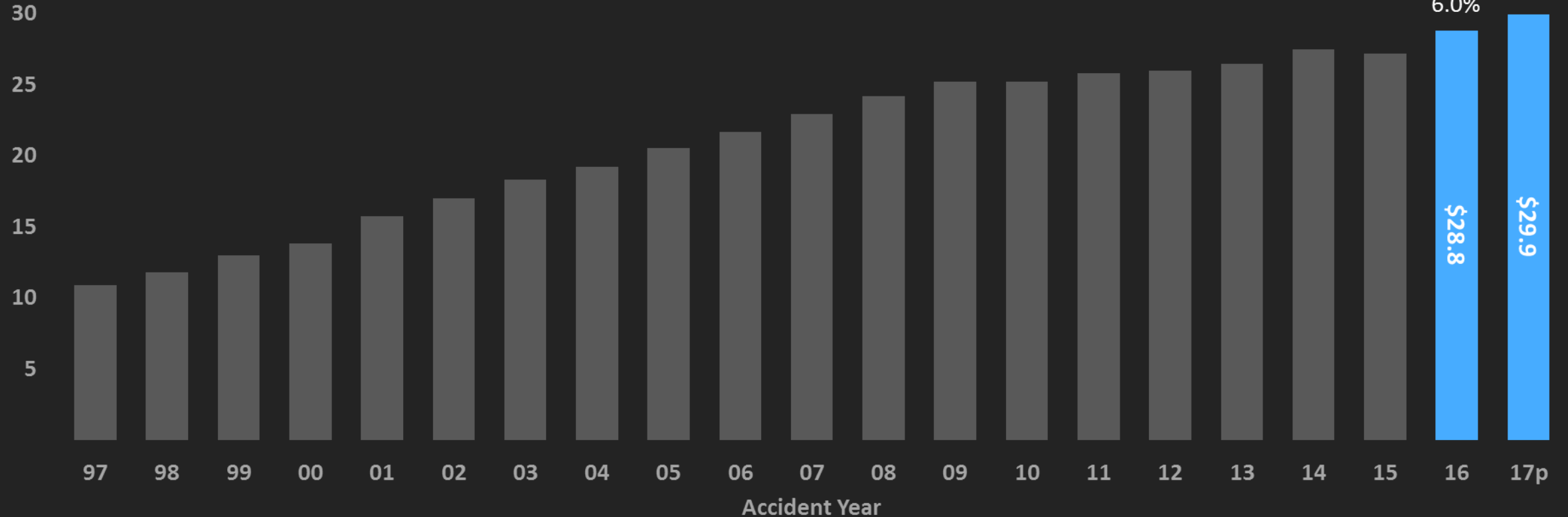


Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016
Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides ratemaking services

WC Average Medical Lost-Time Claim Severity

Private Carriers and State Funds—NCCI States

Severity
(\$ Thousands)



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

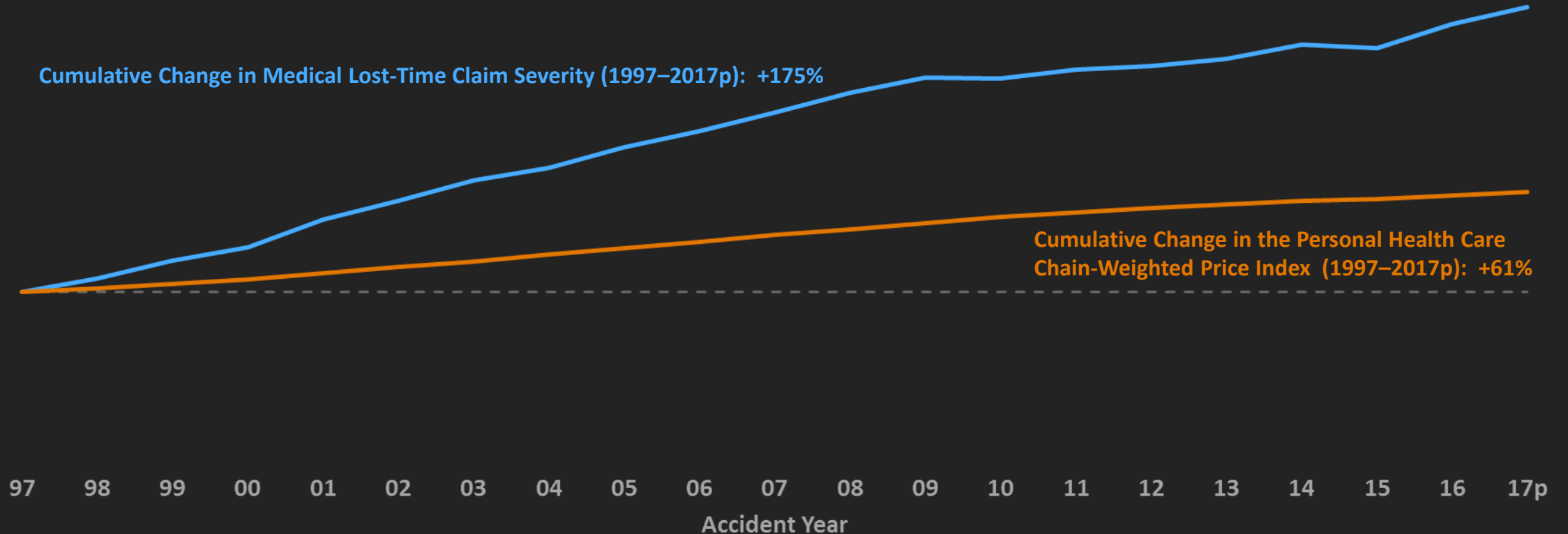
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016

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

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

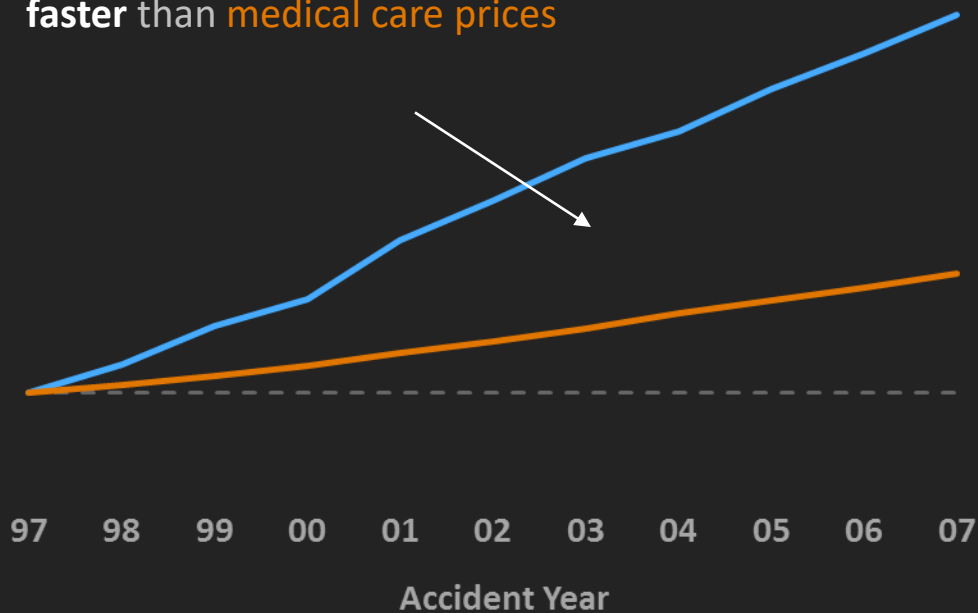
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007

Personal Health Care (PHC) Chain-Weighted Price Index: Centers for Medicare & Medicaid Services

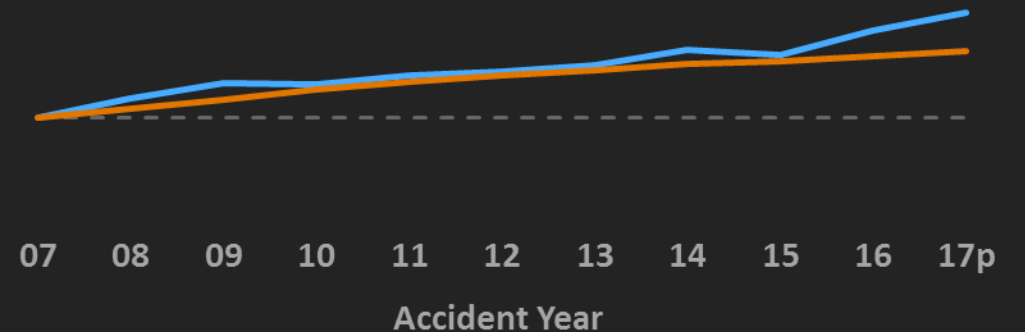
Relative Growth Rates—Medical Severity vs. Price Inflation

Private Carriers and State Funds—NCCI States

Medical lost-time claim severity grew approximately **4.5%** per year **faster** than **medical care prices**



Change in **Medical lost-time claim severity** and **medical care prices** tracked one another



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

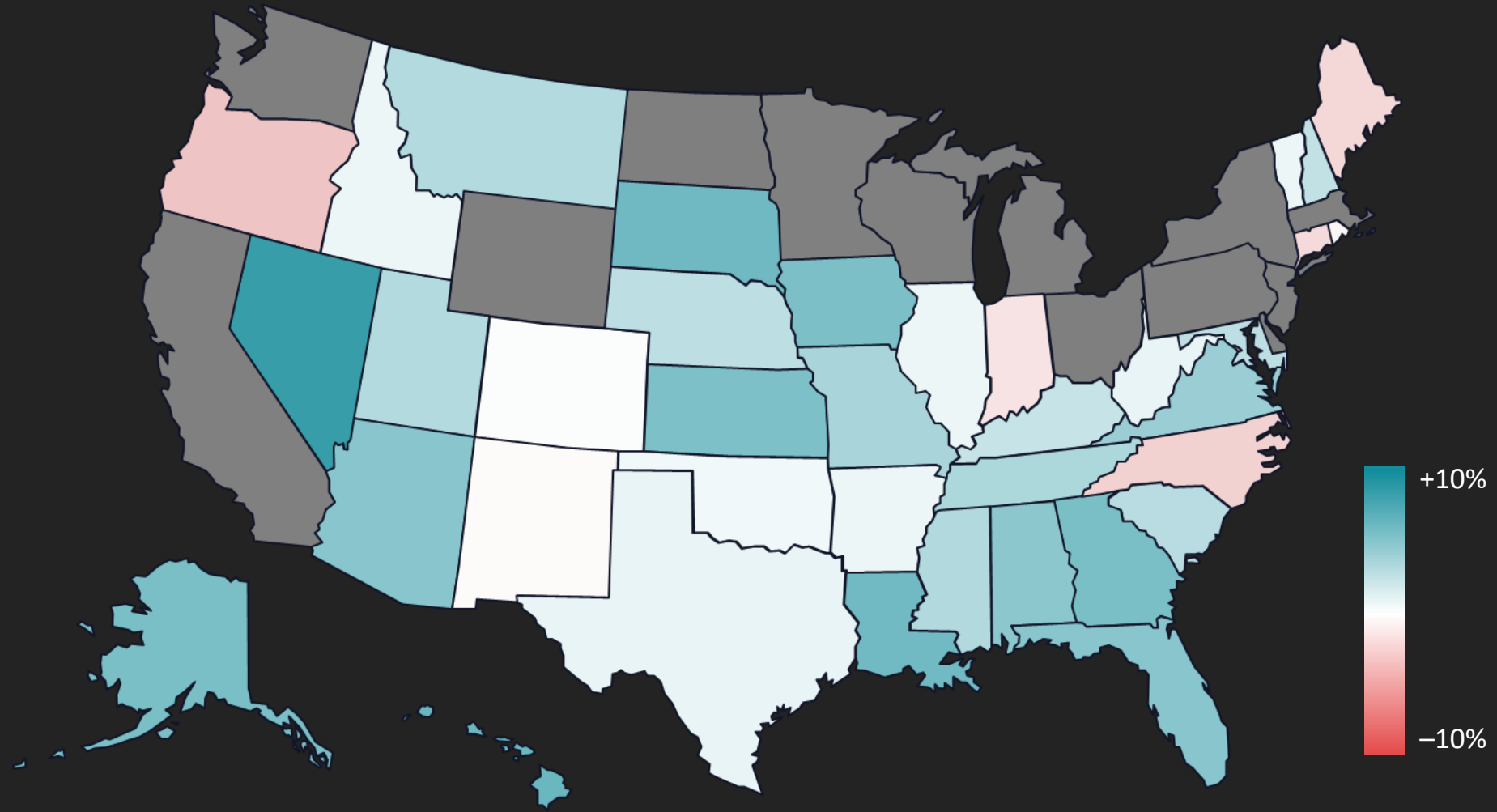
Values displayed reflect the methodology underlying the most recent rate/loss cost filing

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

WC Average Medical Lost-Time Claim Severity

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



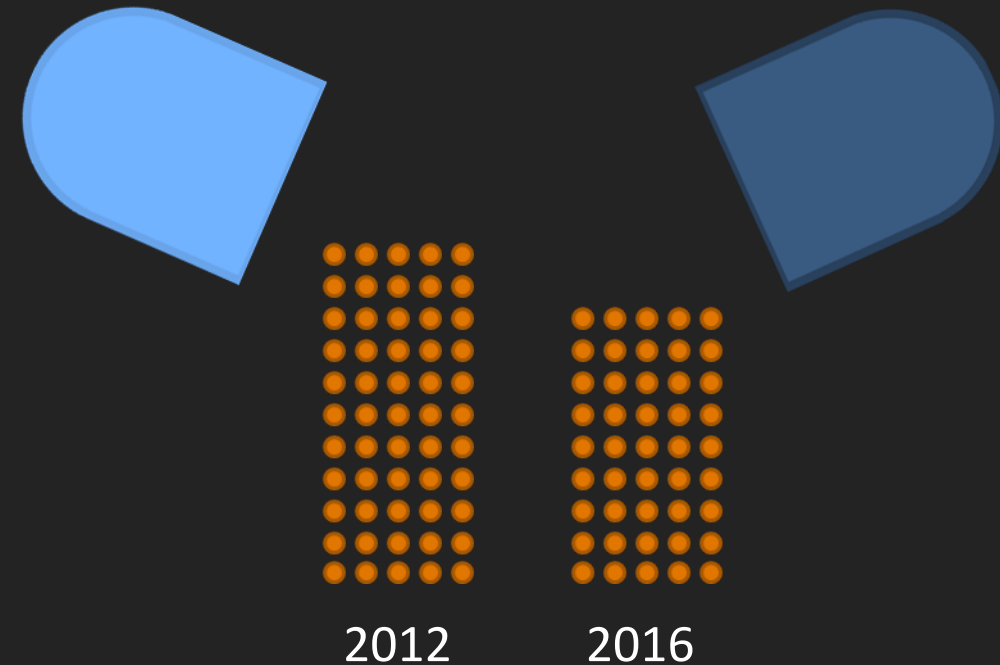
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016
Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides ratemaking services

Utilization of Opioids

The Decline in Prescribed Opioids in Workers Compensation

In **2012**, approximately **55%** of WC claimants with a prescription were prescribed an **opioid**

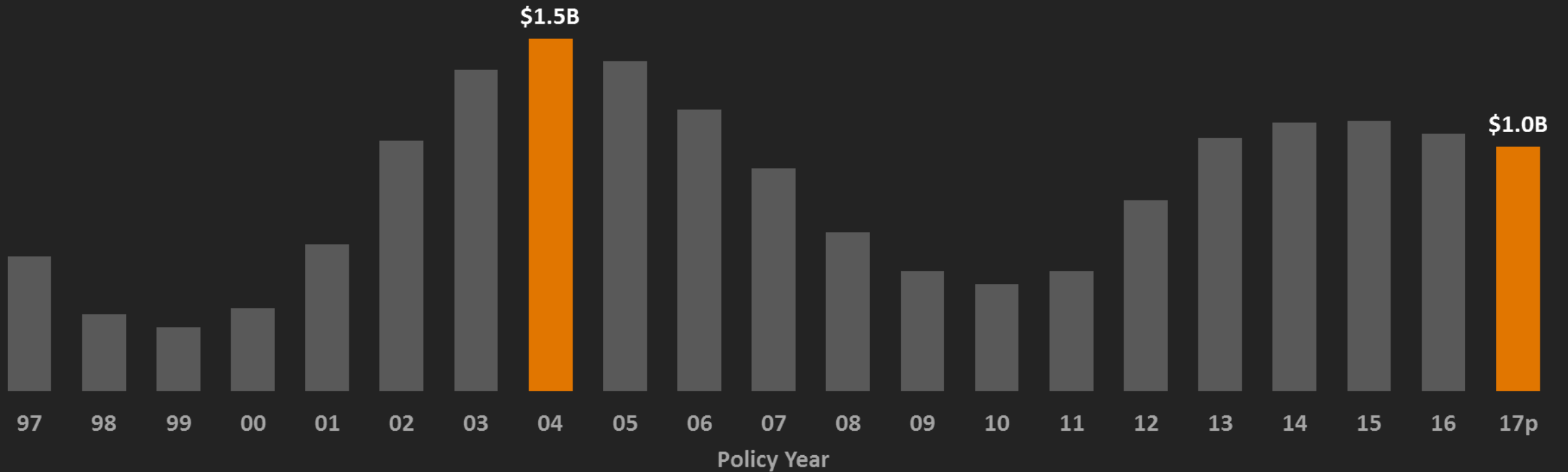
By **2016**, that share **decreased** to about **45%**



RESIDUAL MARKET

WC Residual Market Premium

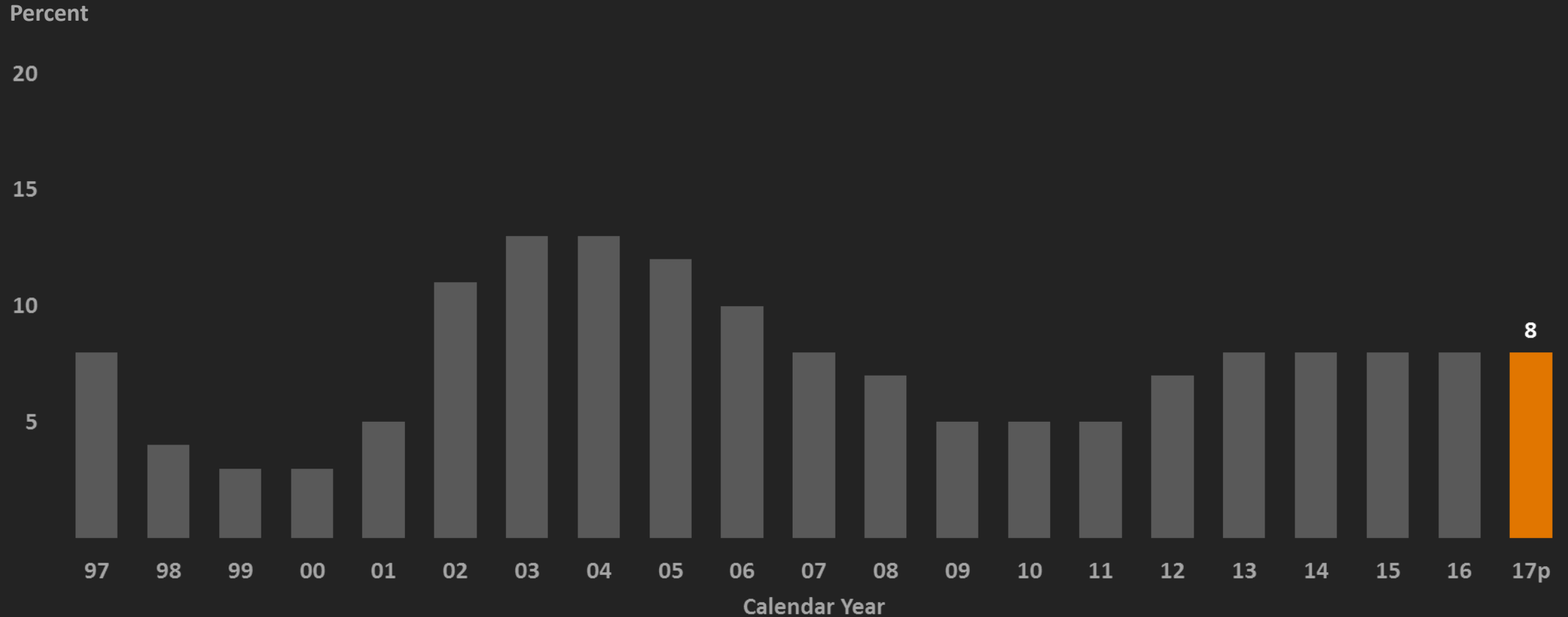
NCCI-Serviced WC Residual Market Pools



p Preliminary, incomplete policy year projected to ultimate
Includes Pool data for all NCCI-serviced WC Residual Market Pool states, valued as of 12/31/2017
Tennessee Reinsurance Mechanism premium is not included
Source: NCCI's *Residual Market Quarterly Results*

WC Residual Market Share

NCCI-Serviced WC Residual Market Pools



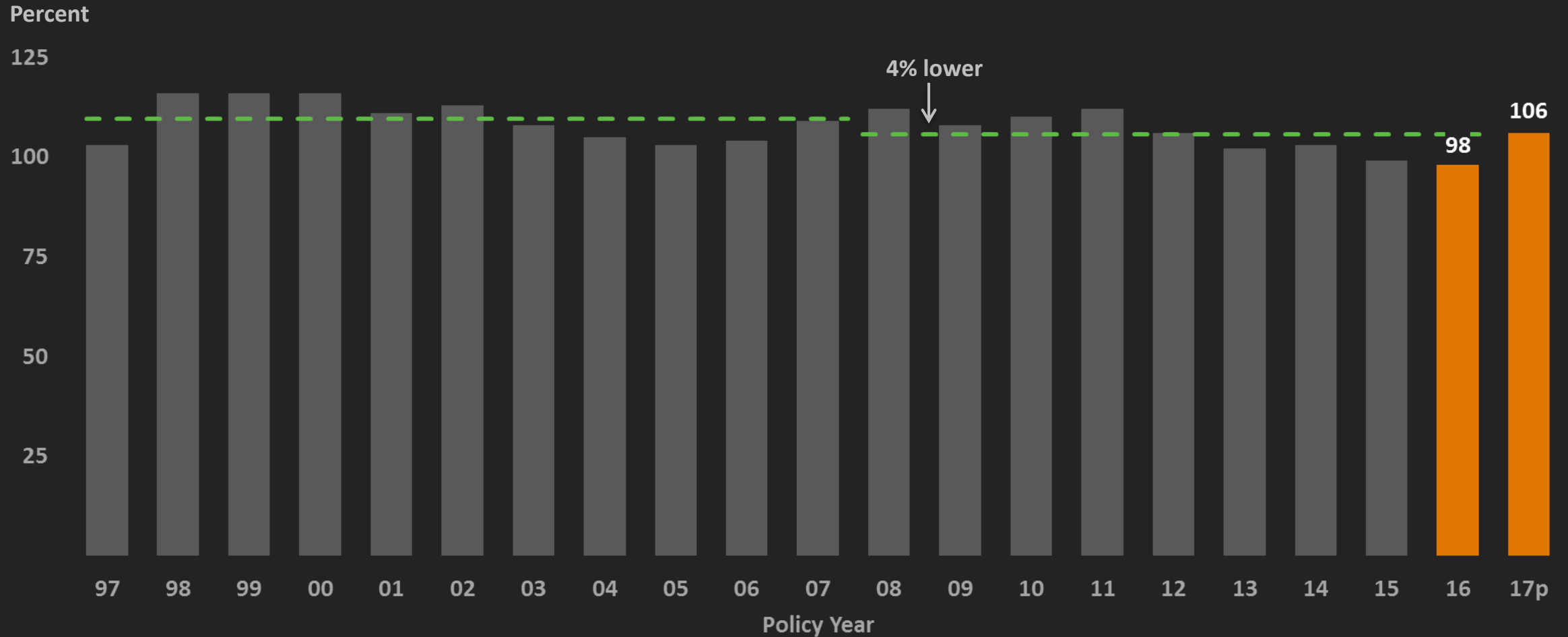
p Preliminary

Includes Pool and direct assignment data for all NCCI-serviced WC Residual Market Pool states

Source: NCCI's *Residual Market Management Summary*

WC Residual Market Combined Ratio

NCCI-Serviced WC Residual Market Pools



p Preliminary, incomplete policy year projected to ultimate

Includes Pool data and Plan expenses for pool members for all NCCI-serviced WC Residual Market Pool states, valued as of 12/31/2017

Tennessee Reinsurance Mechanism experience is not included in the combined ratios

Source: NCCI's *Residual Market Quarterly Results*

WORKERS COMPENSATION SUMMARY

Workers Compensation Summary

On One Hand

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

On the Other Hand

- Combined ratio **improved** to the lowest level in over half a century
- Payroll continued to **increase**
- Severity **increases** remained moderate
- Residual Market remained stable and manageable

THANK YOU