



State of the Line

AIS
2018
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PROPERTY/CASUALTY (P/C) RESULTS

P/C Industry Net Written Premium Growth

Private Carriers

Line of Business	2016 (\$B)	2017p (\$B)	% Change From 2016
Personal Auto	207.4	221.9	7.0
Homeowners	80.6	82.2	2.0
Other Liability (Incl. Product Liability)	47.9	50.1	4.6
Workers Compensation	40.1	39.8	-0.7
Commercial Multiple Peril	33.8	34.1	0.9
Fire & Allied Lines (Incl. EQ)	26.3	26.4	0.4
Commercial Auto	28.3	30.6	8.1
All Other Lines	63.7	67.0	5.2
Total P/C Industry	528.0	552.1	4.6

p Preliminary

Source: NAIC's Annual Statement data for individual carriers prior to consolidation of affiliated carriers

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P/C Industry Net Combined Ratio

Private Carriers

Line of Business	2016 (%)	2017p (%)	Difference From 2016
Personal Auto	106	103	-3
Homeowners	93	107	14
Other Liability (Incl. Product Liability)	111	101	-10
Workers Compensation	94	89	-5
Commercial Multiple Peril	102	108	6
Fire & Allied Lines (Incl. EQ)	90	124	34
Commercial Auto	111	111	0
All Other Lines	87	98	11
Total P/C Industry	101	104	3

p Preliminary

Source: NAIC's Annual Statement data for individual carriers prior to consolidation of affiliated carriers

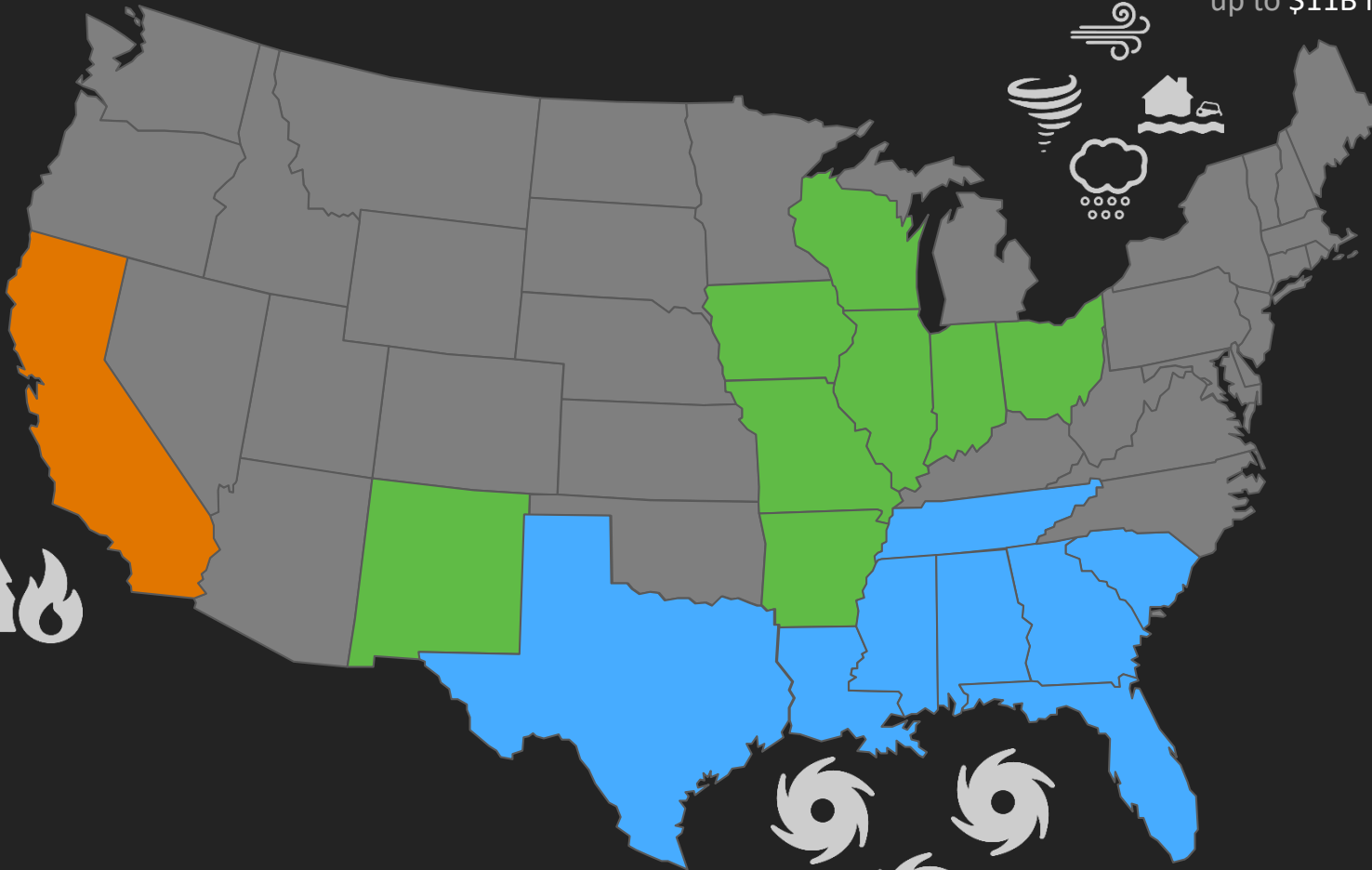
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Impact of Catastrophes on P/C Losses

Several tornado, hail, wind, and flood events produced up to \$11B in insured losses



Wildfires destroyed structures, homes, and buildings, resulting in over \$11B in losses



Major hurricanes had a combined impact on insured losses of \$56B

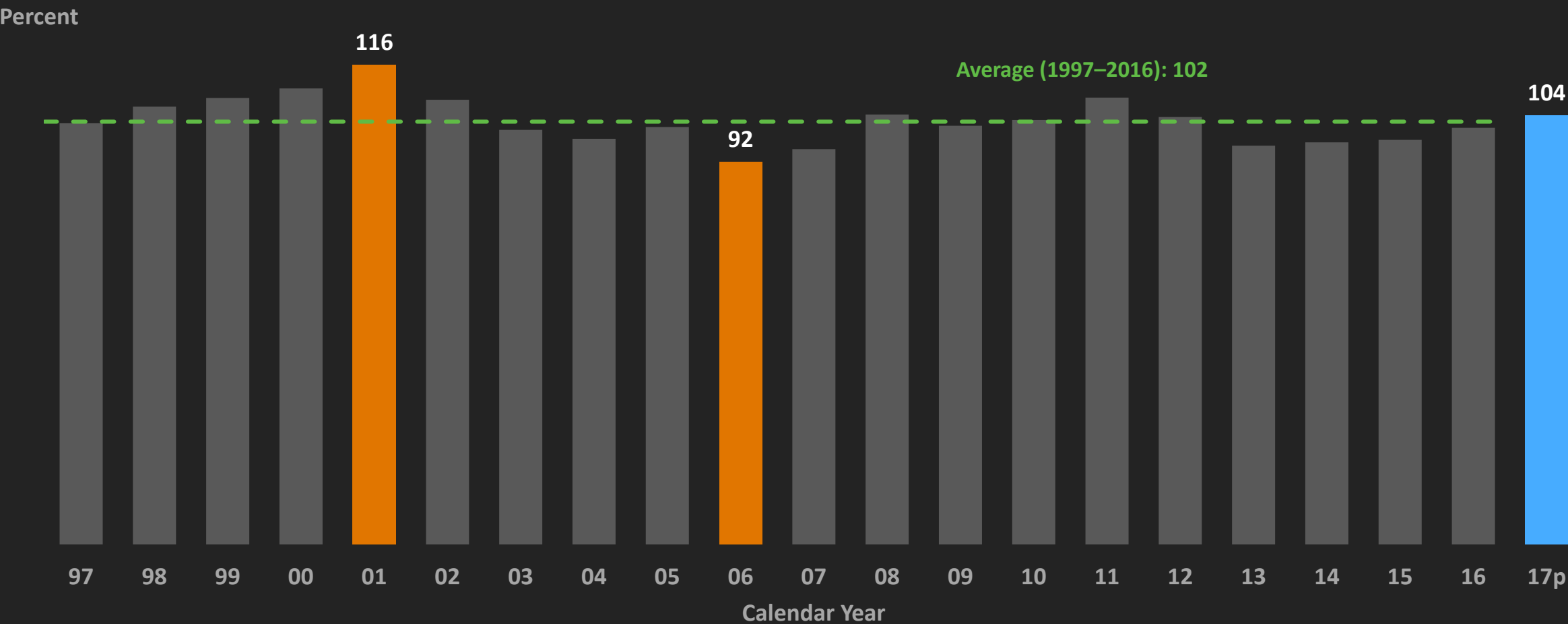
Source: Willis Re Summary of Natural Cat Events 2017

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P/C Industry Net Combined Ratio

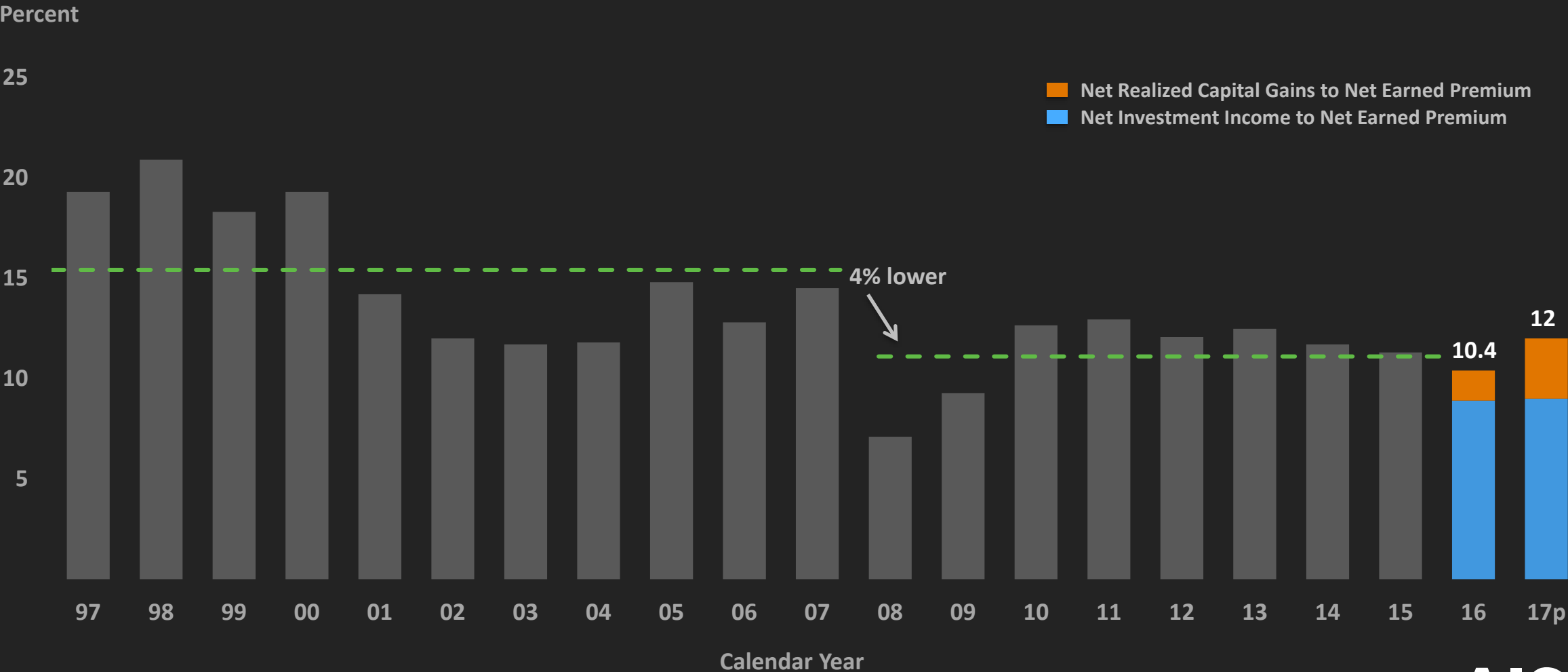
Private Carriers



p Preliminary
Sources: 1997–2007 and 2012–2017p NAIC’s Annual Statement data; 2008–2011 ISO

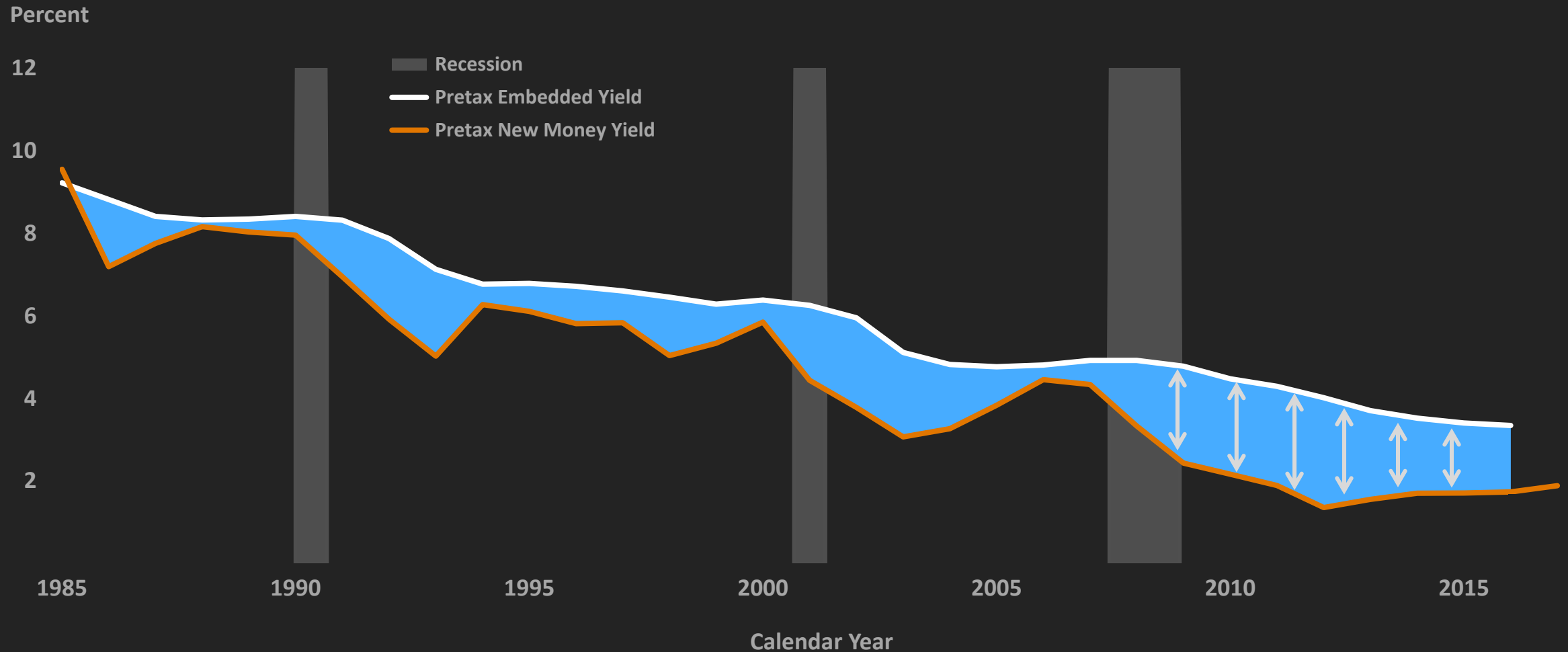
P/C Industry Investment Gain Ratio

Private Carriers



p Preliminary
Sources: 1997–2007 and 2013–2017p NAIC’s Annual Statement data; 2008–2012 ISO

P/C Industry Bond Embedded Yield and New Money Yield



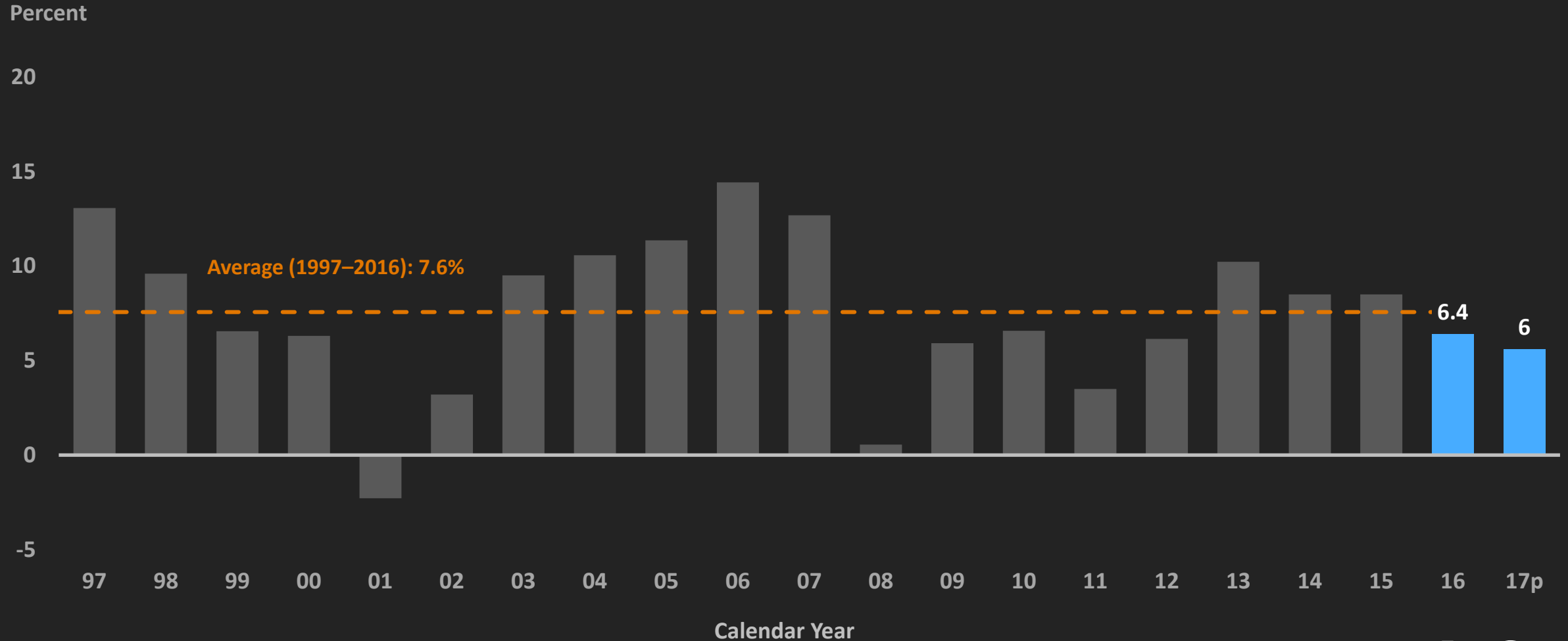
Sources: NCCI, *A.M. Best's Aggregates & Averages*, Federal Reserve Bank, Value Line, TreasuryDirect.gov, Barron's, and Bloomberg
Embedded Yield is the reported investment income for bond instruments divided by the asset value of those instruments
New Money Yield is the pretax yield on bonds

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P/C Industry After-Tax Return on Surplus

Private Carriers



p Preliminary

Sources: 1997–2007 and 2013–2017p NAIC's Annual Statement data; 2008–2012 ISO

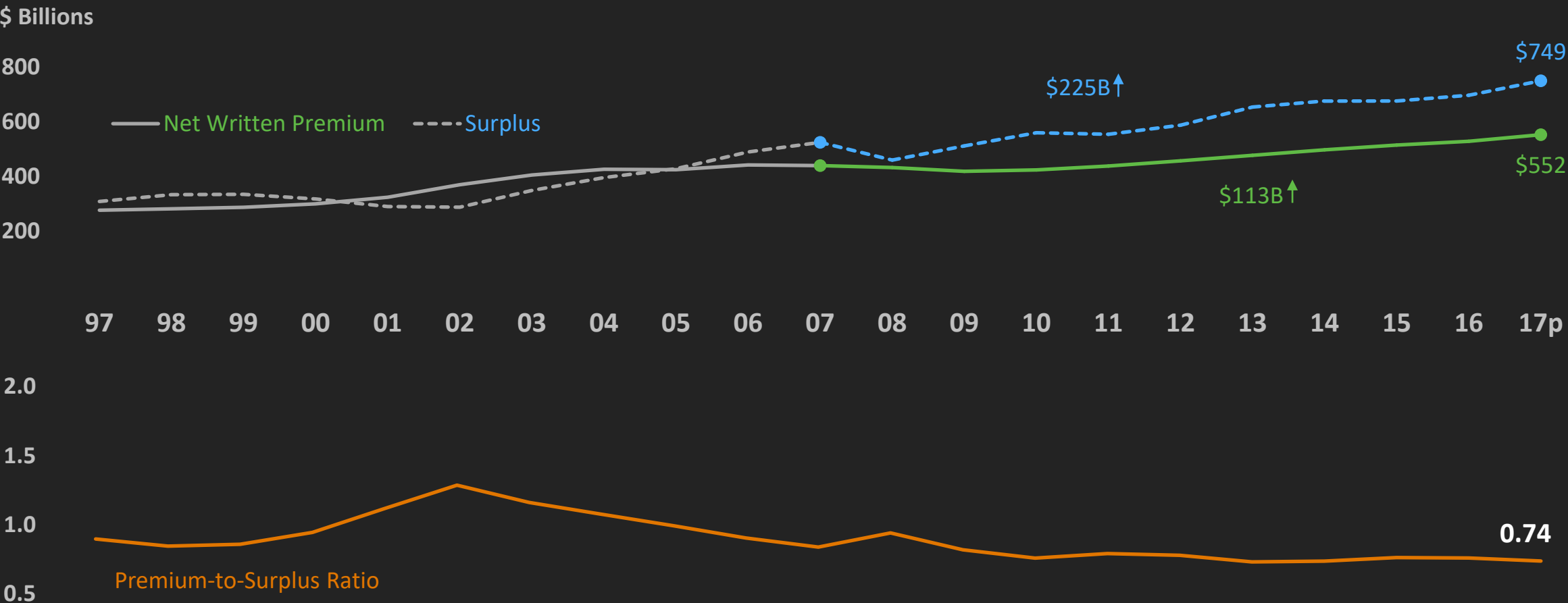
After-tax return on average surplus, excluding unrealized capital gains

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P/C Industry Premium-to-Surplus Ratio

Private Carriers



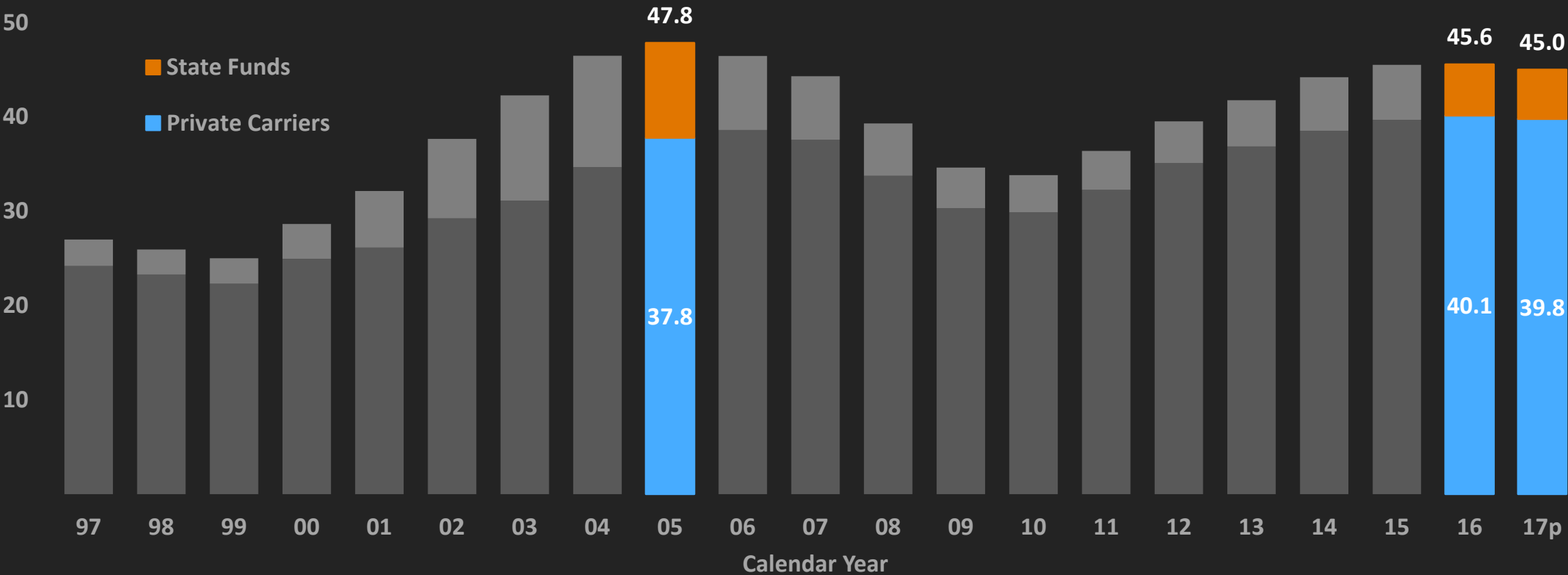
p Preliminary
Sources: 1997–2007 and 2013–2017p NAIC’s Annual Statement data; 2008–2012 ISO

WORKERS COMPENSATION (WC) PREMIUM

WC Net Written Premium

Private Carriers and State Funds

\$ Billions

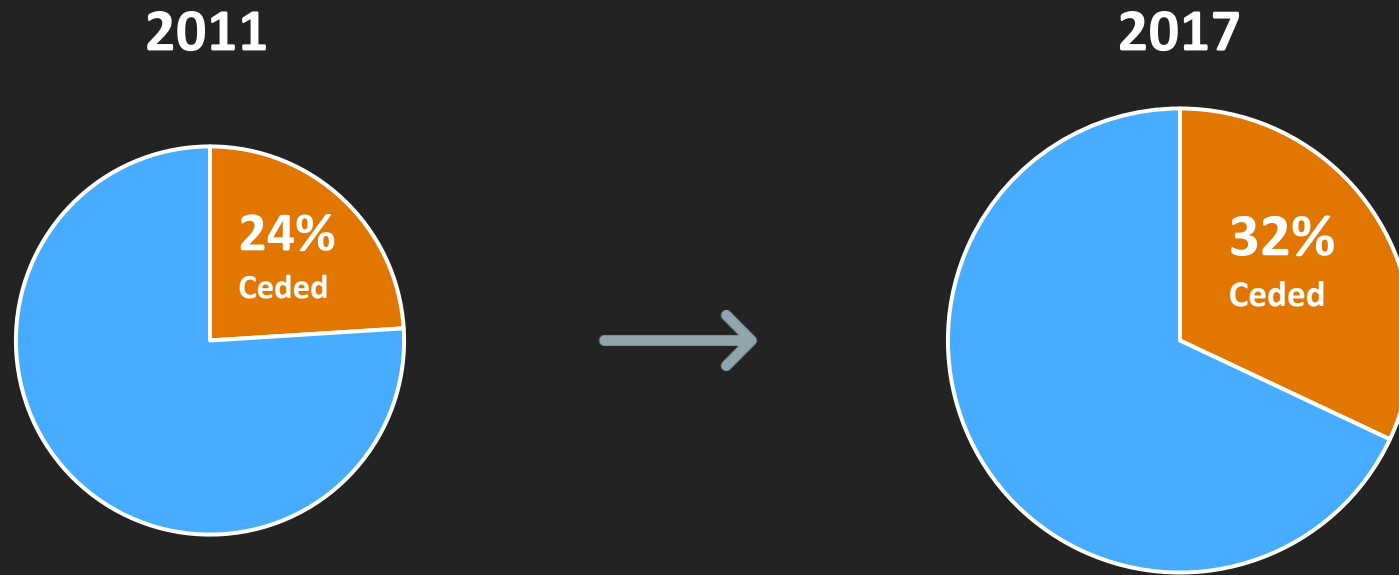


p Preliminary

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

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Proportion of Total WC Premium Ceded



Ceded (+11% per year)

Direct and Assumed (+6% per year)

Average Annual Growth

2011 2012 2013 2014 2015 2016 2017

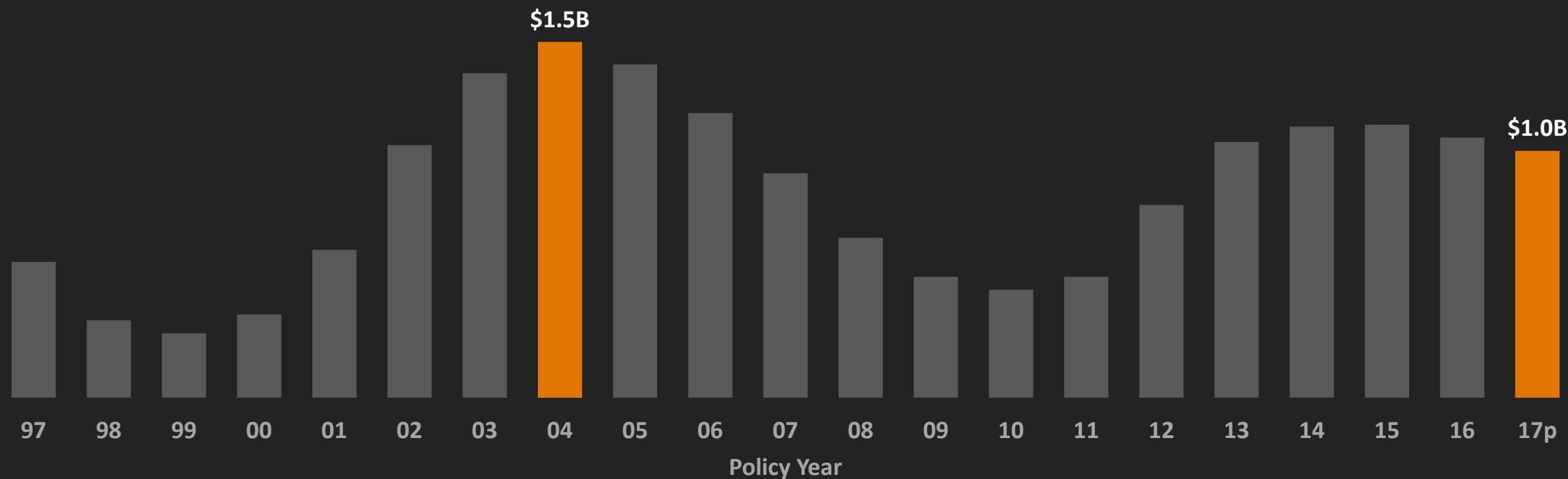
Source: NAIC's Annual Statement data

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WC Residual Market Premium

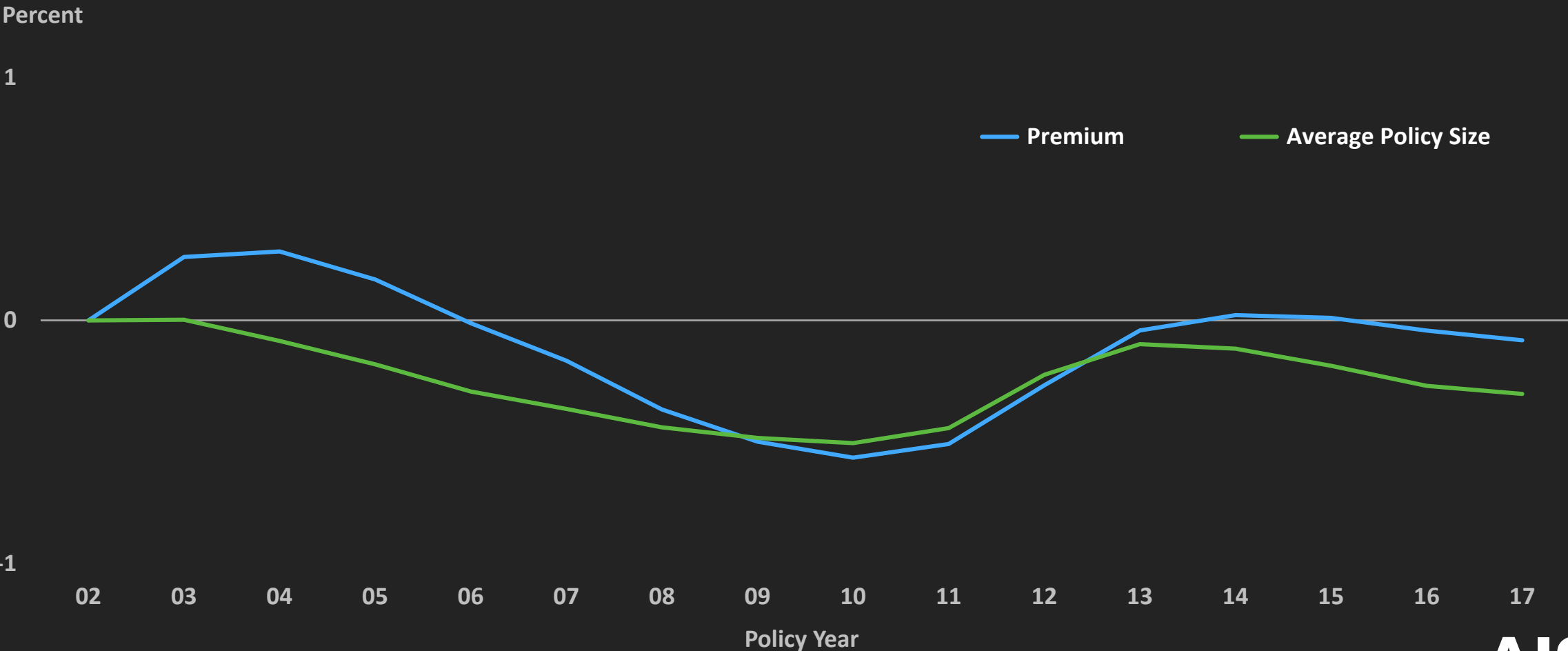
NCCI-Serviced WC Residual Market Pools



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—Changes in Premium vs. Average Policy Size

NCCI-Administered WC Residual Market Plan States



Total estimated annual premium
Includes Pool and direct assignment data for all NCCI-administered WC Residual Market Plan states

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WC Residual Market Premium by Size of Risk

NCCI-Administered WC Residual Market Plan States

				Premium (\$ Millions)			
Size of Risk				Q1 2017	Q1 2018	% Change From 2017	
\$	0	–	2,499	36.1	39.3		9
\$	2,500	–	4,999	20.0	19.4	-3	
\$	5,000	–	9,999	26.5	25.3	-5	
\$	10,000	–	49,999	68.5	61.4	-10	
\$	50,000	–	99,999	21.2	19.5	-8	
\$	100,000	and	Over	26.6	20.2	-24	
Total				198.9	185.1	-7	

Total estimated annual premium
Includes Pool and direct assignment data for all NCCI-administered WC Residual Market Plan states

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WC Residual Market Share

NCCI-Serviced WC Residual Market Pools

Percent

20

15

10

5

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

Calendar Year

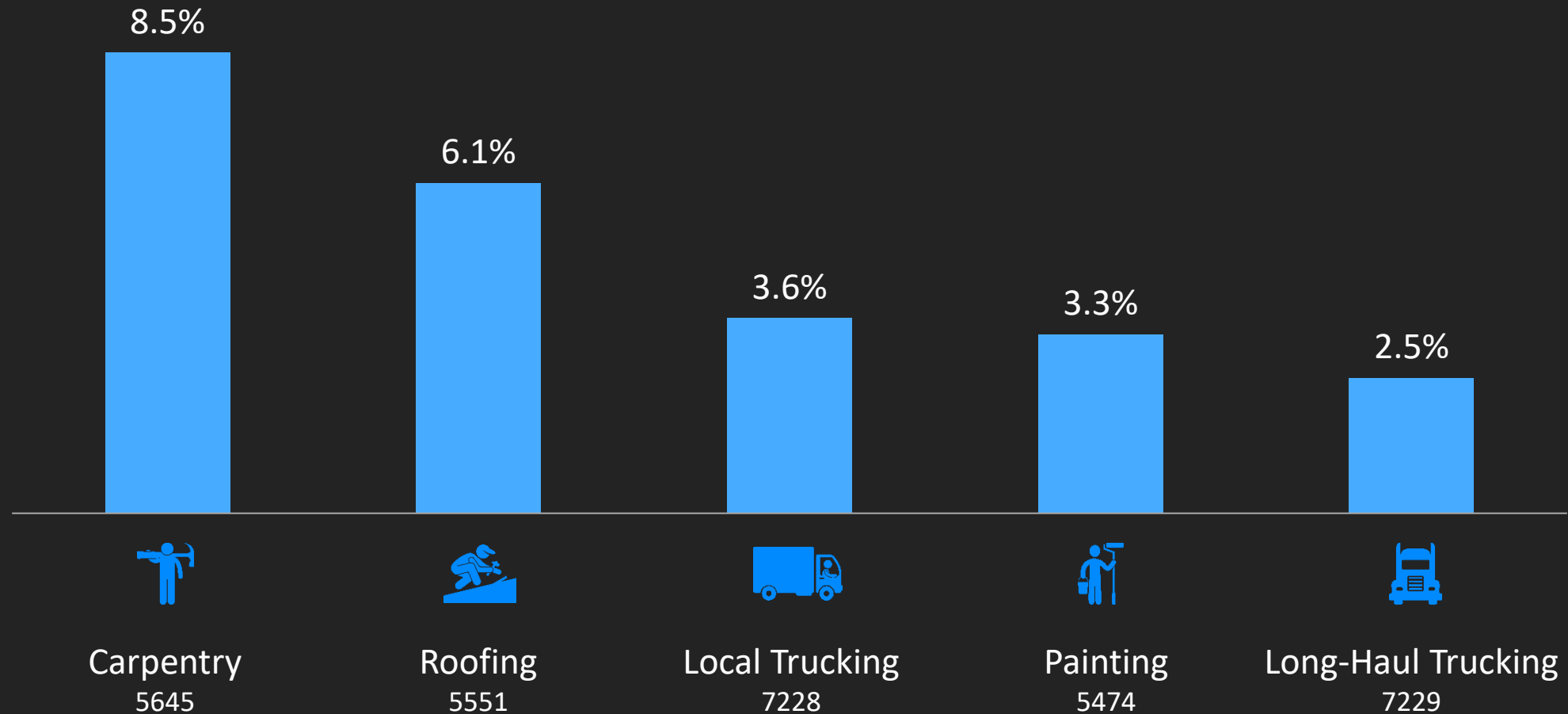
8

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

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Top Five Residual Market Class Codes

Based on Residual Market Plan Total Written Premium for 2017



Top classification codes excluding the Standard Exception classifications

Results are based on manual premium volume for both intrastate policies and the state-specific portion of interstate policies

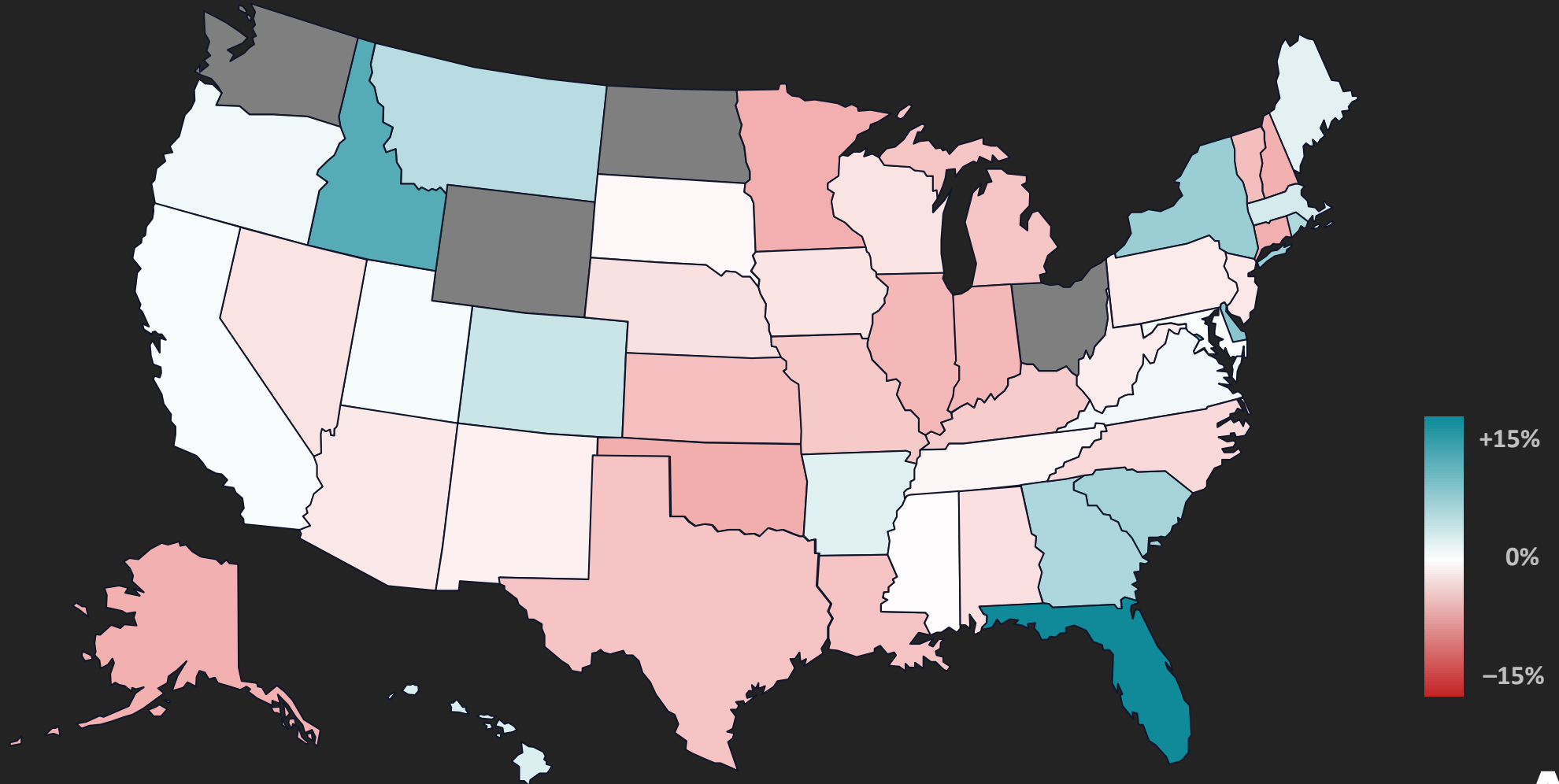
Source: NCCI's Policy data

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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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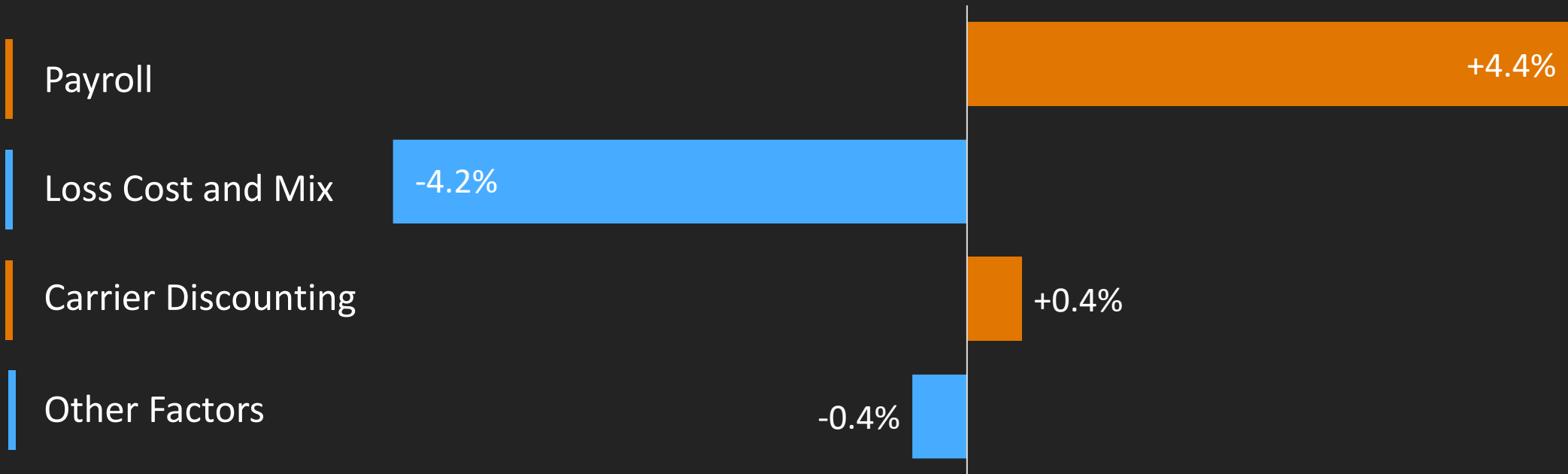
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WC Direct Written Premium Change by Component

Private Carriers—NCCI States

Change in Direct Written Premium: 0.0%

2017 vs. 2016

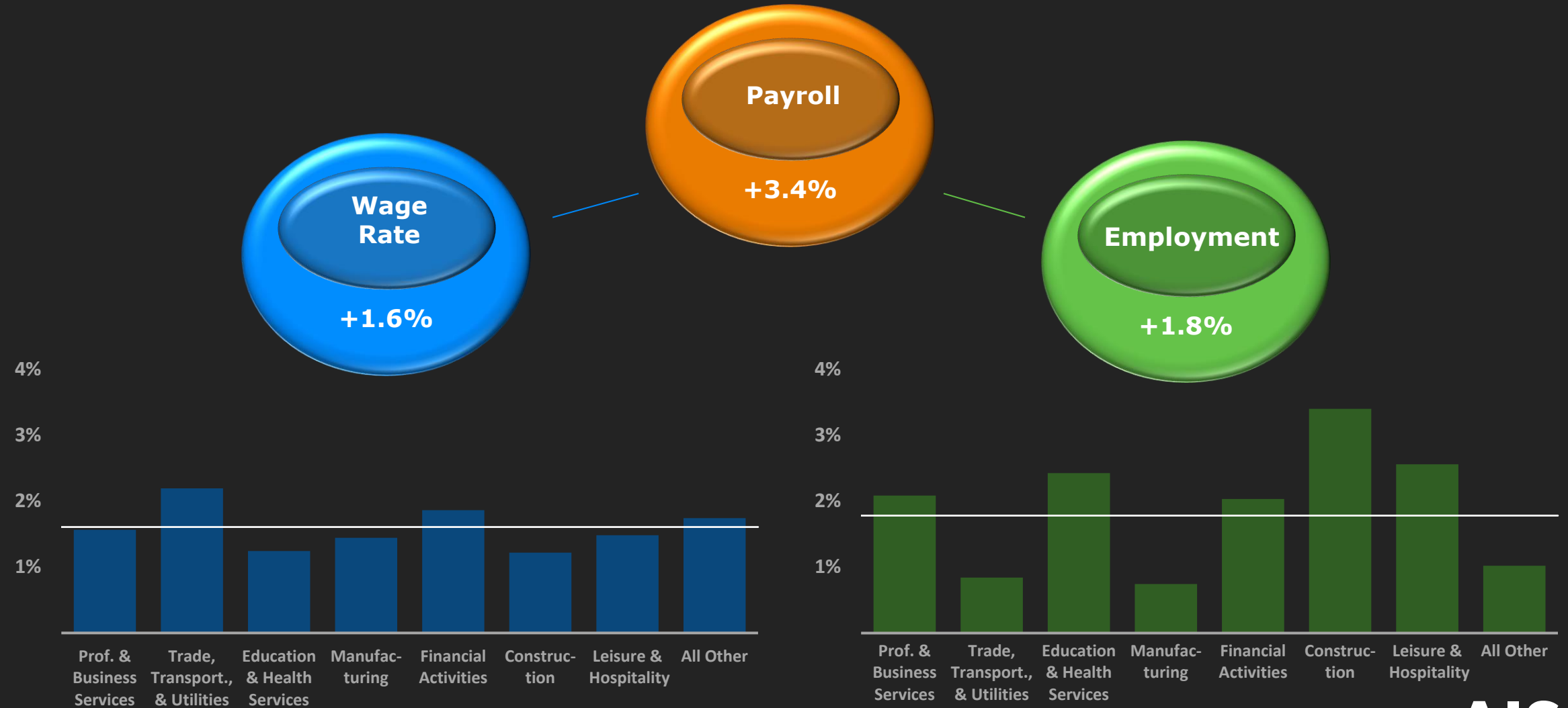


Sources: Direct Written Premium Change: NAIC's Annual Statement Statutory Page 14 for all states where NCCI provides ratemaking services
Components: NCCI's Policy data

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Increases in Payroll Continue to Drive Changes in Premium

Forecast Change 2016–2017

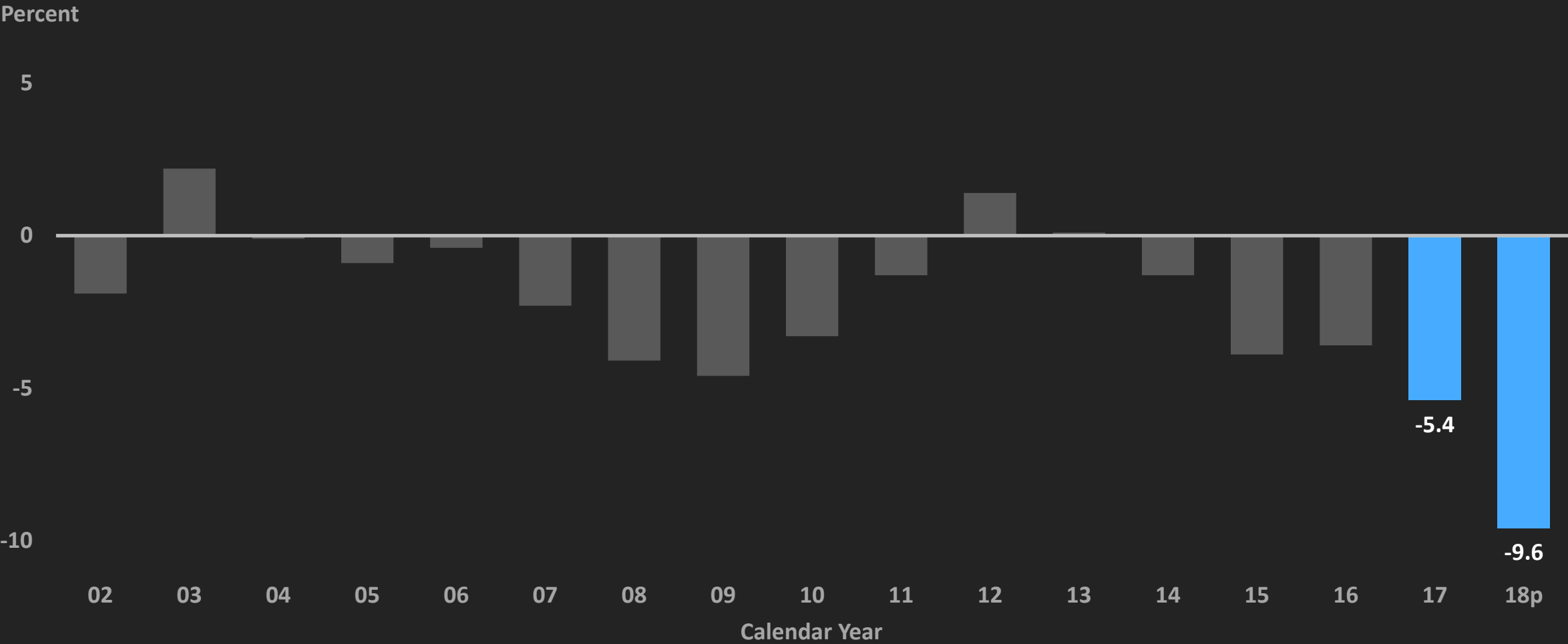


Sources: Moody's Analytics and NCCI

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WC Approved Changes in Bureau Premium Level

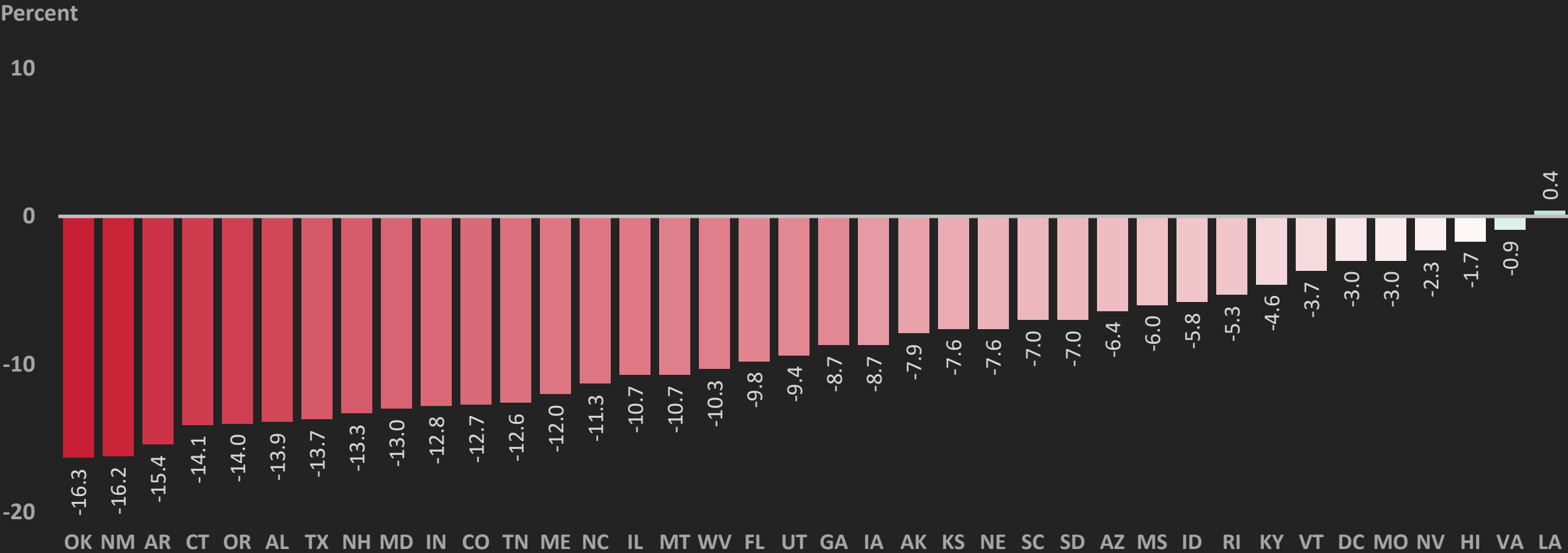
Weighted by Effective Date—NCCI States



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 5/10/2018
IN and NC are filed in cooperation with state rating bureaus

Most Recent Changes in Bureau Premium Level

Voluntary Market, Excludes Law-Only Filings

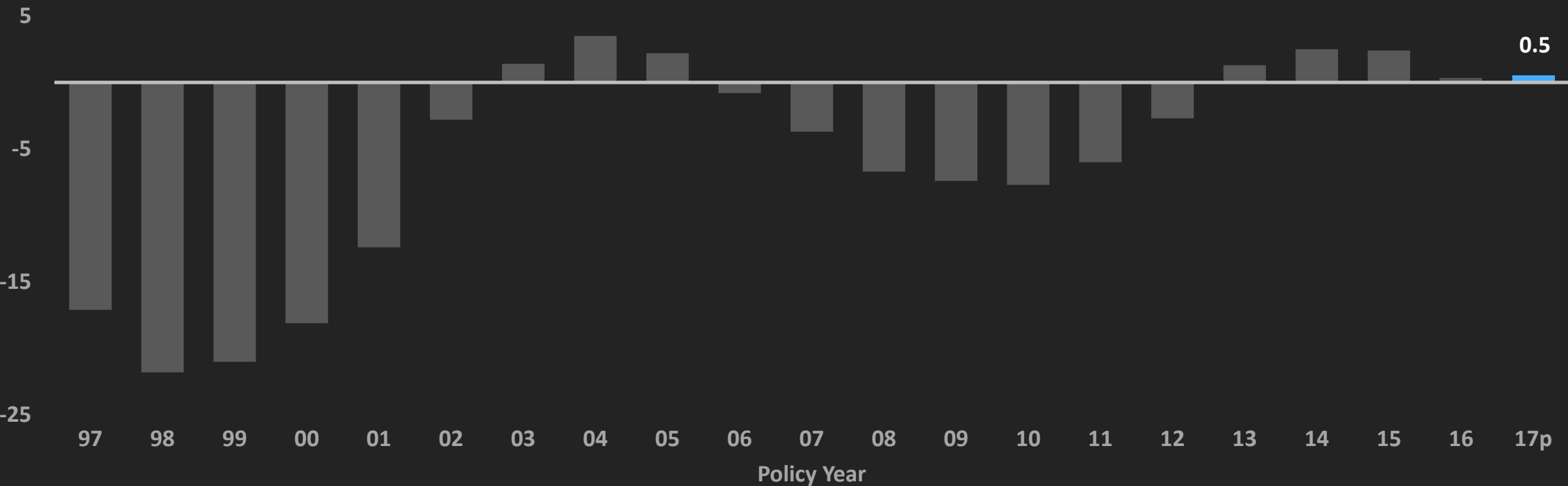


Premium level changes in advisory rates, loss costs, and rating values, as of 5/10/2018, as filed by the applicable rating organization, relative to those previously approved
IN and NC are filed in cooperation with state rating bureaus

WC Impact of Discounting on Premium

Private Carriers—NCCI States

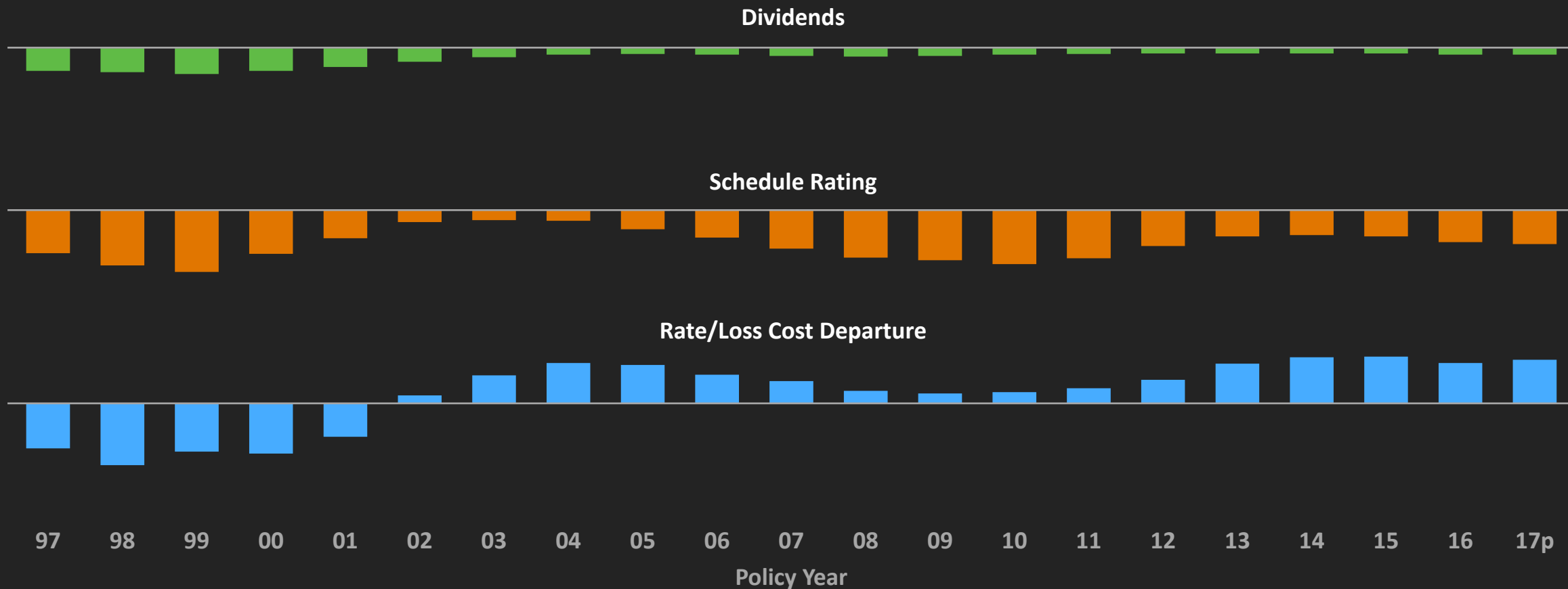
Percent



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

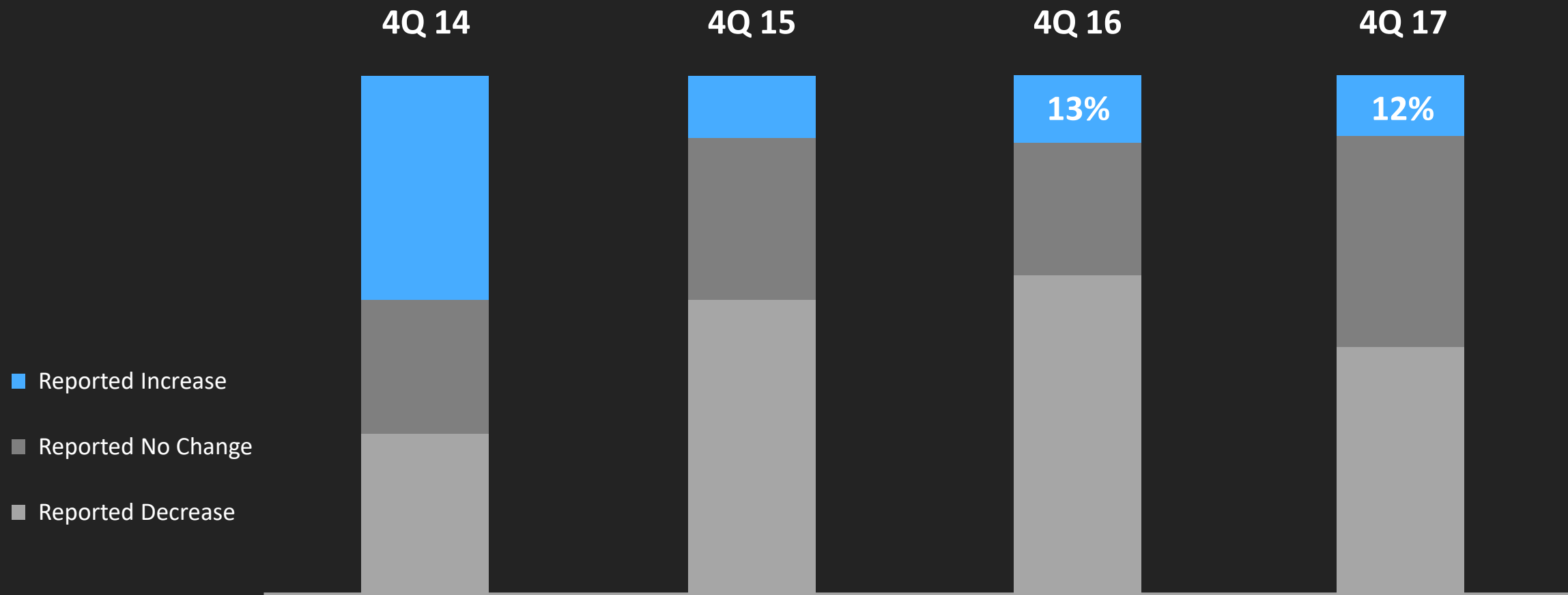
Rate/loss cost departure reflects carrier departure from NCCI rate level, which excludes a profit and contingency provision and expense constant

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

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WC Pricing—Market Index Survey

Percentage of Respondents

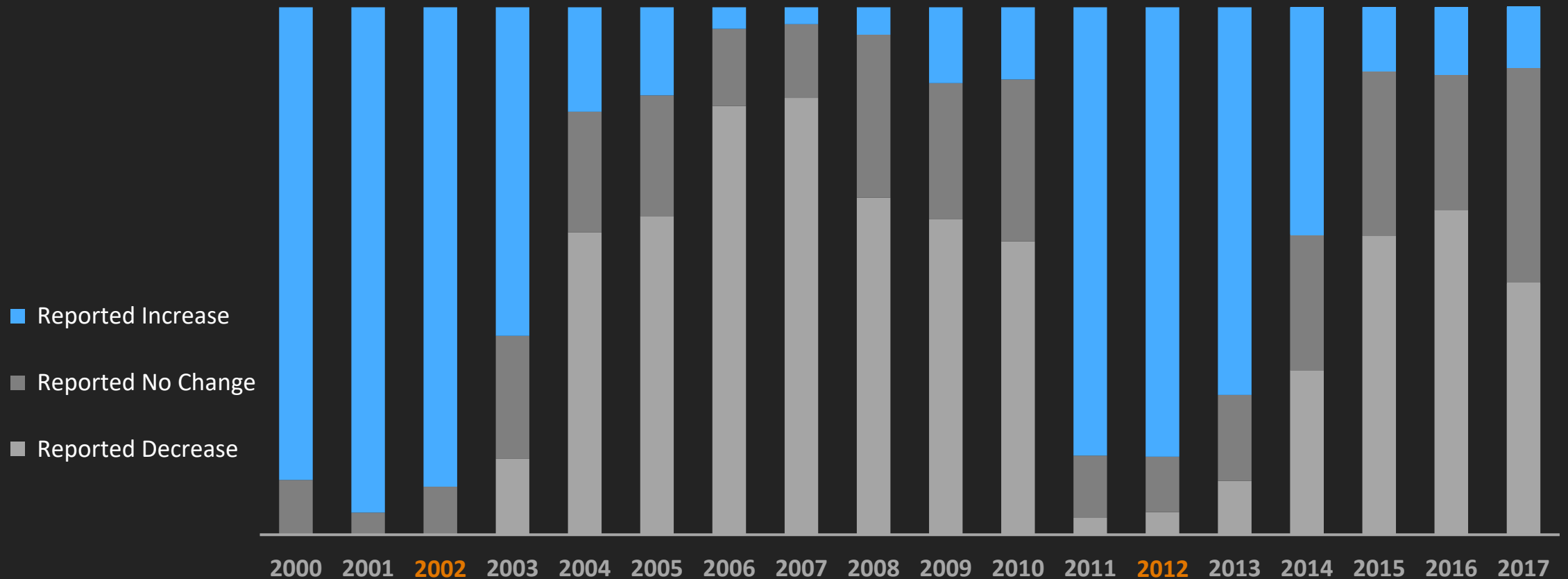


Sources: The Council of Insurance Agents & Brokers: Q4 P/C Market Index Surveys (2014–2017); results for “All Regions”

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WC Pricing—Market Index Survey

Percentage of Respondents, Based on 4Q Results



Sources: The Council of Insurance Agents & Brokers: Q4 P/C Market Index Surveys (2000–2017); results for “All Regions”

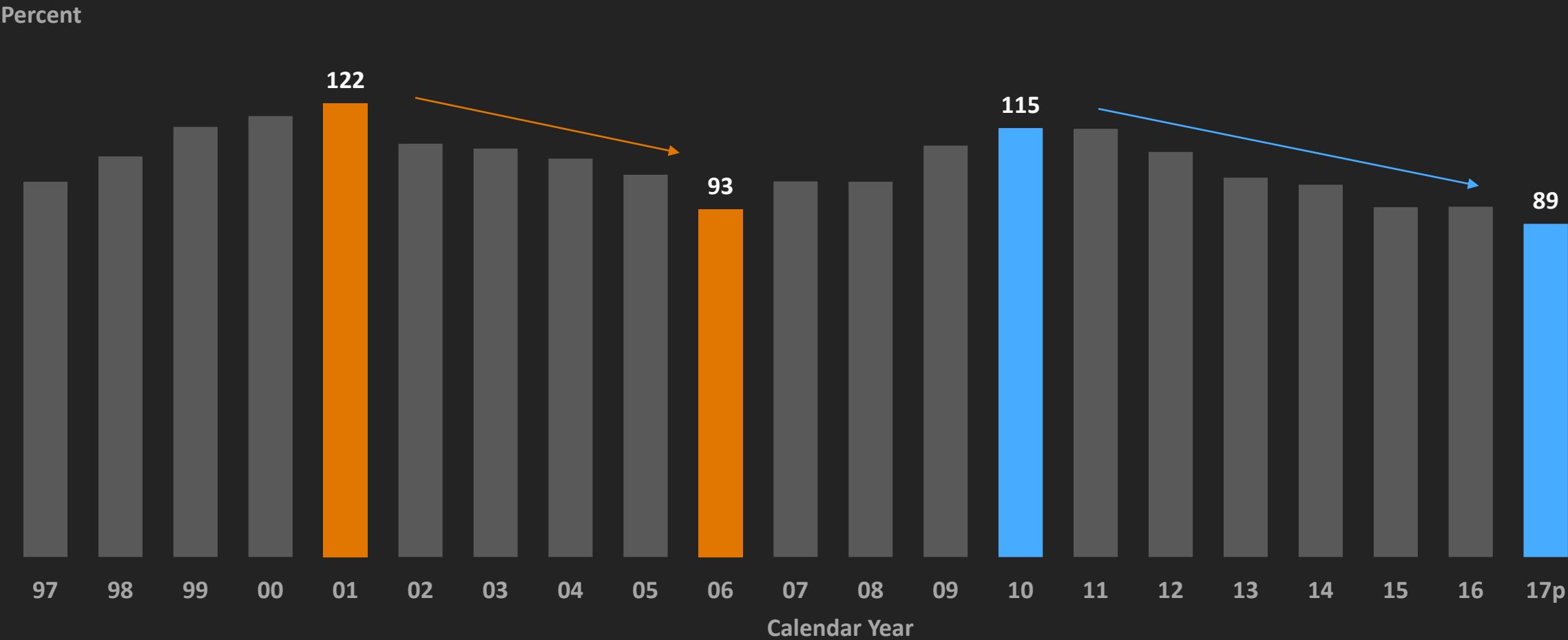
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WORKERS COMPENSATION RESULTS

WC Combined Ratio—Underwriting Gain Achieved

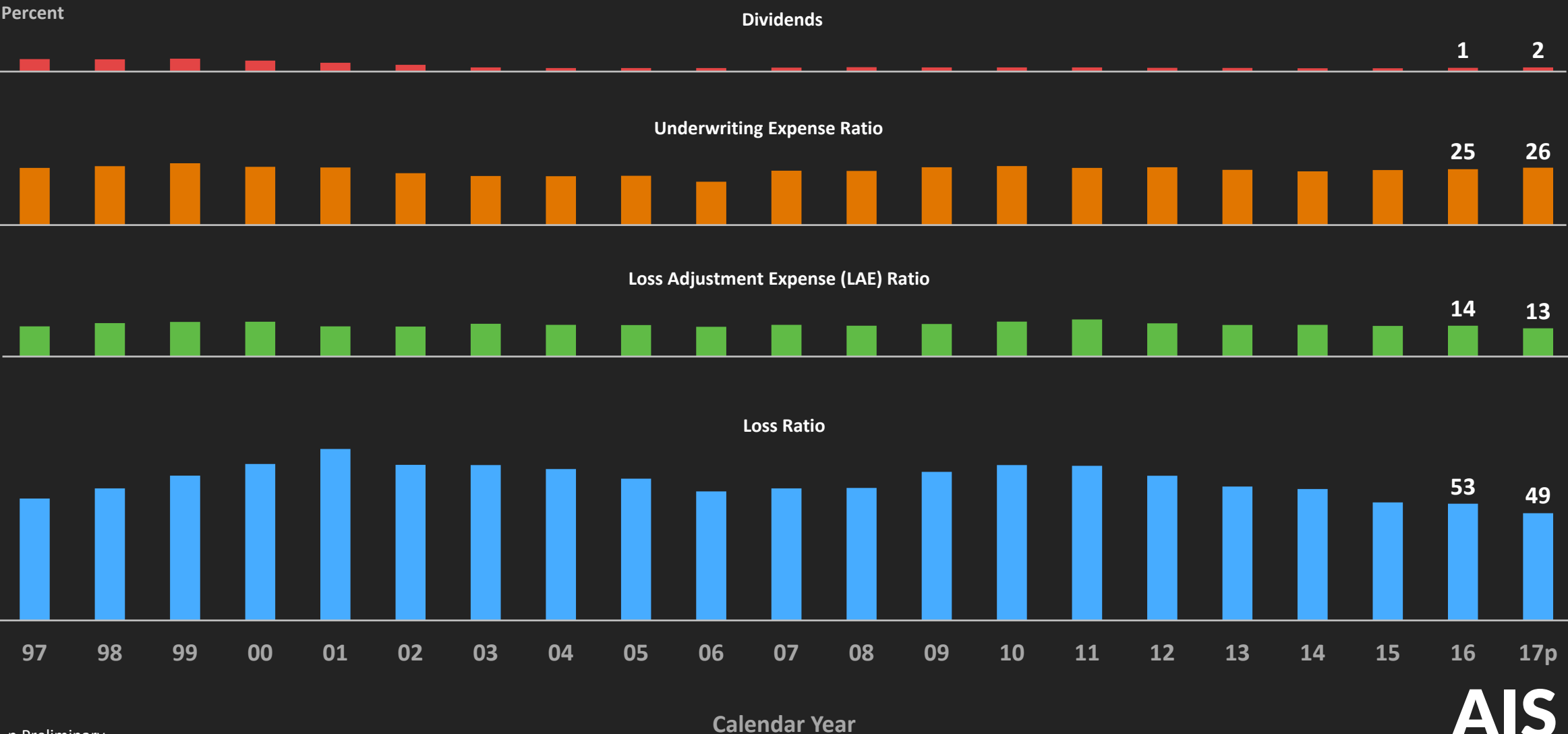
Private Carriers



p Preliminary
Source: NAIC's Annual Statement data
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WC Combined Ratio by Component

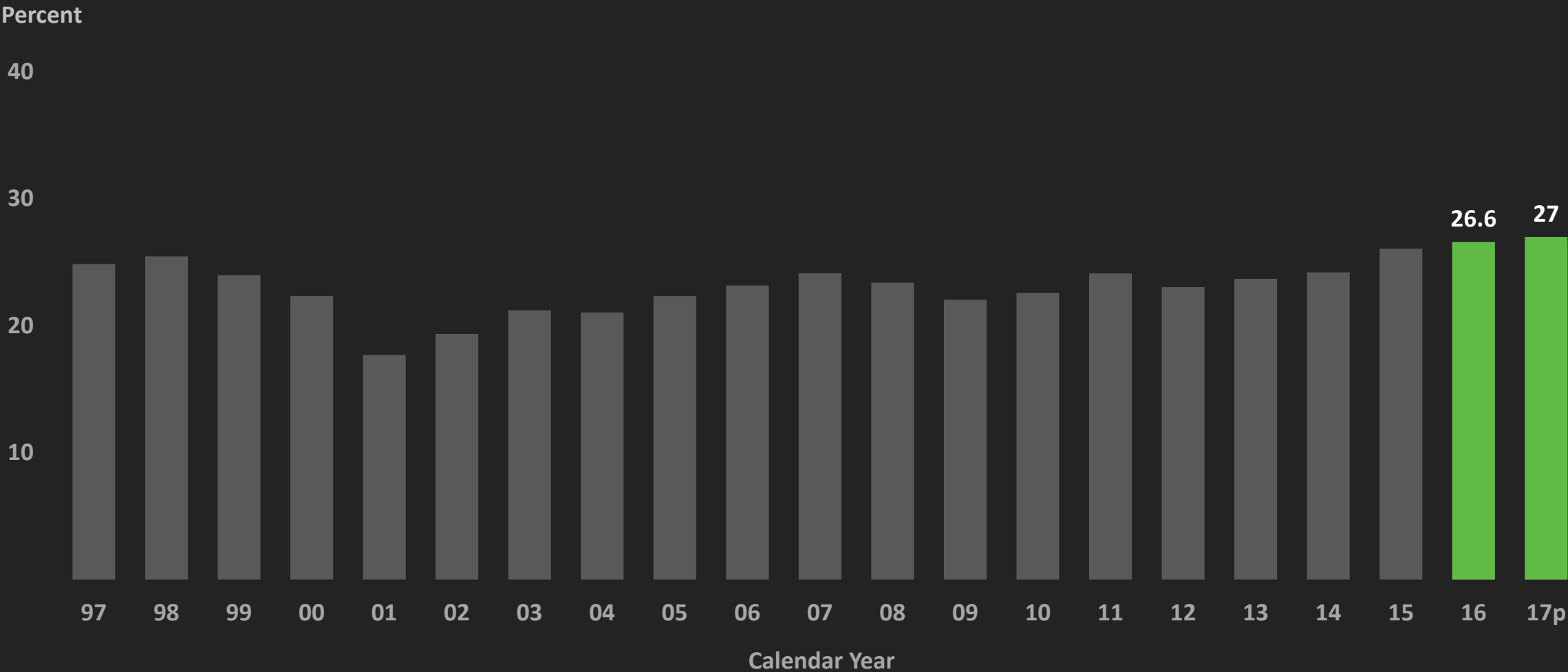
Private Carriers



p Preliminary
Source: NAIC's Annual Statement data
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WC LAE-to-Loss Ratio—Net Incurred LAE to Incurred Losses

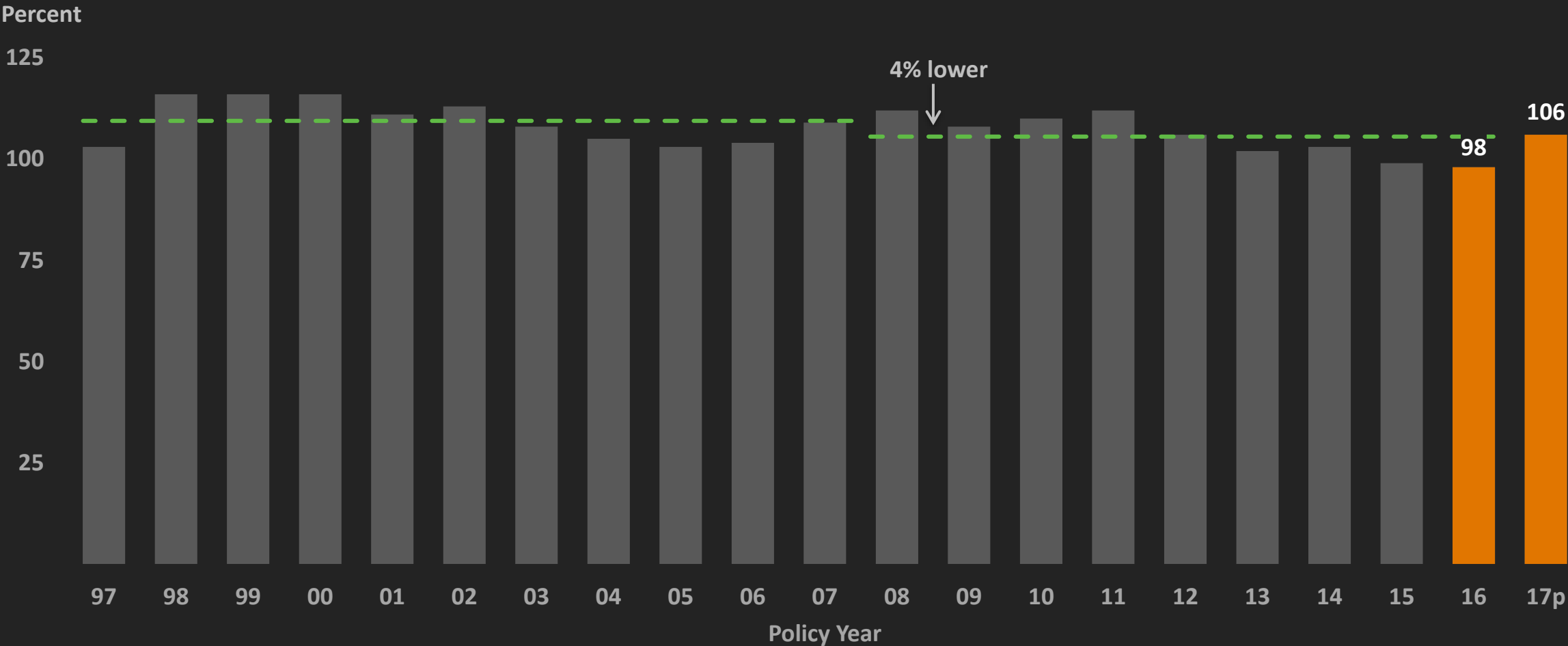
Private Carriers



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 Residual Market Combined Ratio

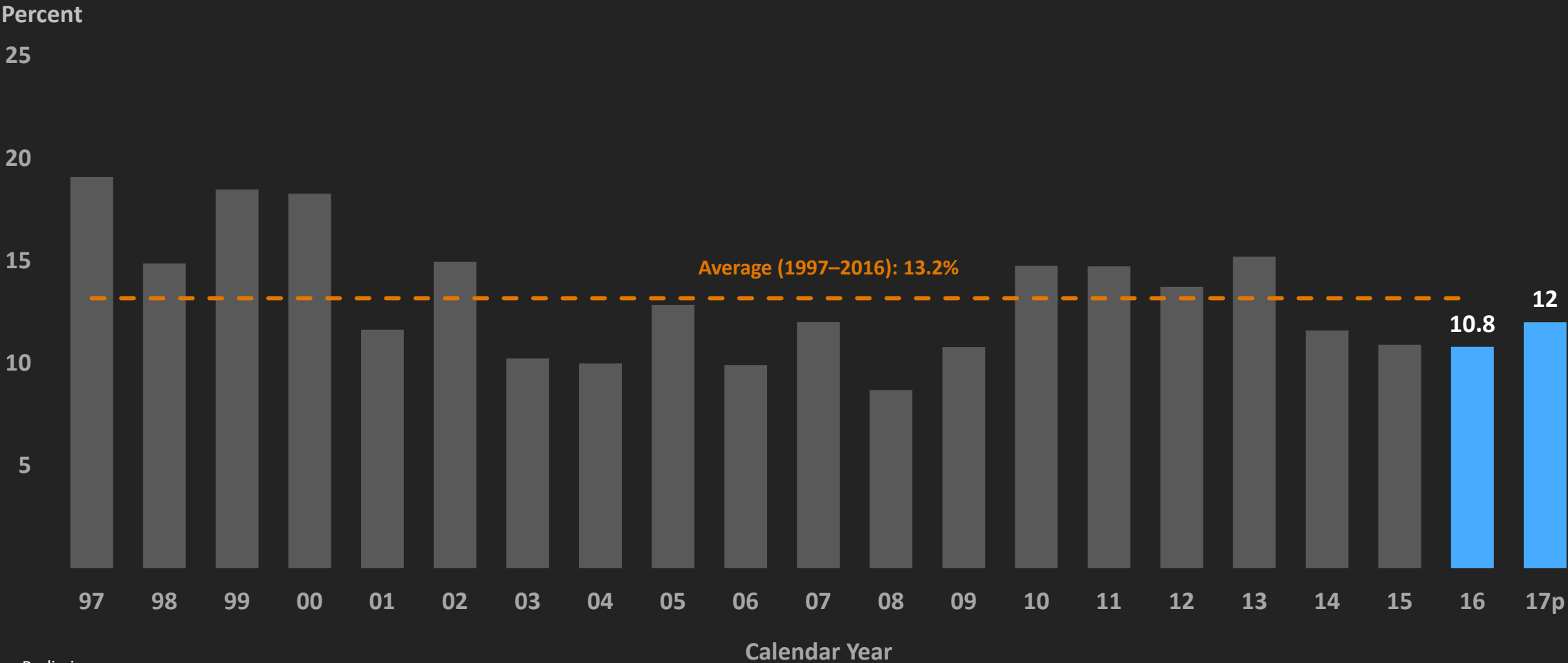
NCCI-Serviced WC Residual Market Pools



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*

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

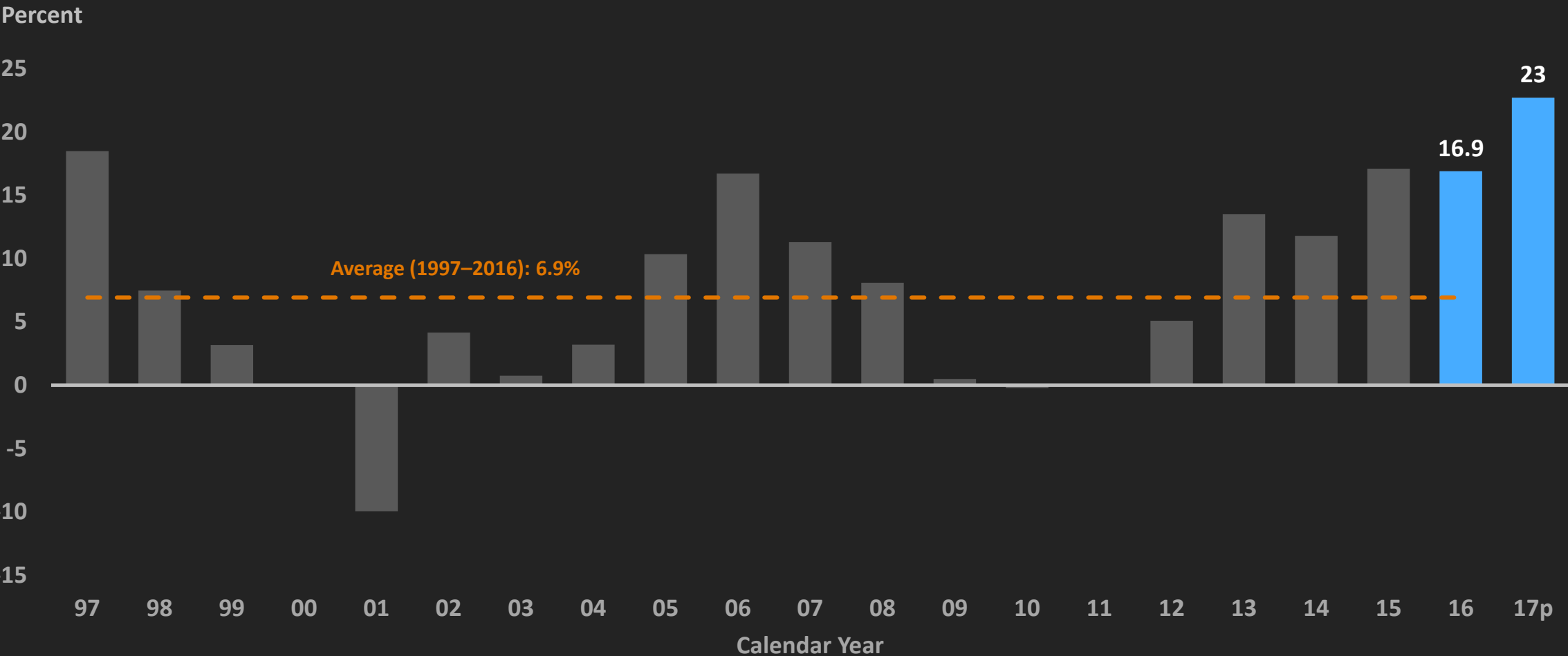
2013 is adjusted to exclude a material realized gain resulting from a single company transaction that involved corporate restructuring; unadjusted value is 19.4

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WC Pretax Operating Gain

Private Carriers



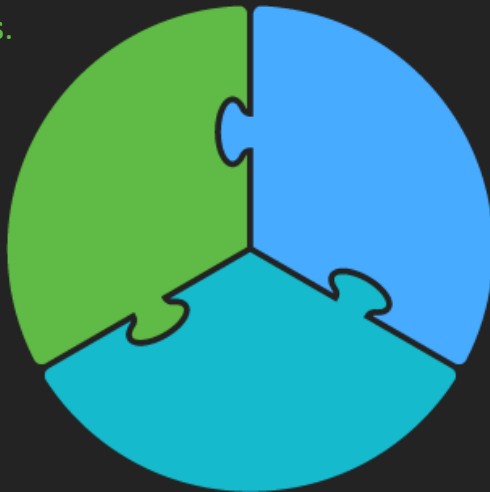
p Preliminary
Source: NAIC's Annual Statement data
Operating Gain equals 1.00 minus (Combined Ratio less Investment Gain on Insurance Transactions and Other Income)
2013 is adjusted to exclude a material realized gain resulting from a single company transaction that involved corporate restructuring;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

Social Security Disability Insurance and Workers Compensation

The idea of a “race to the bottom” is not borne out by the facts

Interaction of Coverages

Most states did **not reduce WC** benefits in the last **15 years**.

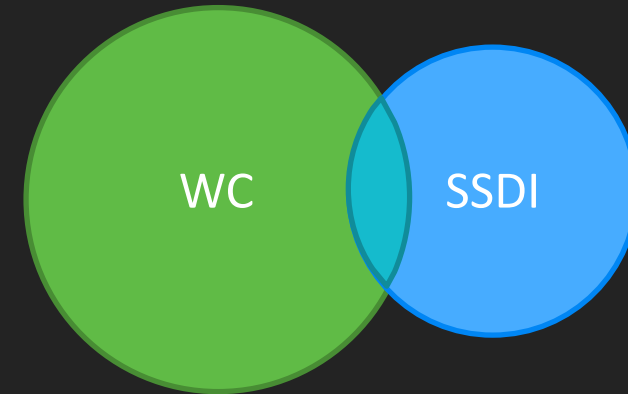


Observed **increases in SSDI** applications were impacted much more by the **Great Recession** than by WC benefit levels.

In states that did **lower WC** benefits, **SSDI applications** typically **decreased** following these reforms.

Dual Recipients

SSDI and WC work together to provide benefits to dual recipients. While workers receive dual benefits, **WC** generally shoulders the **majority** of the cost.

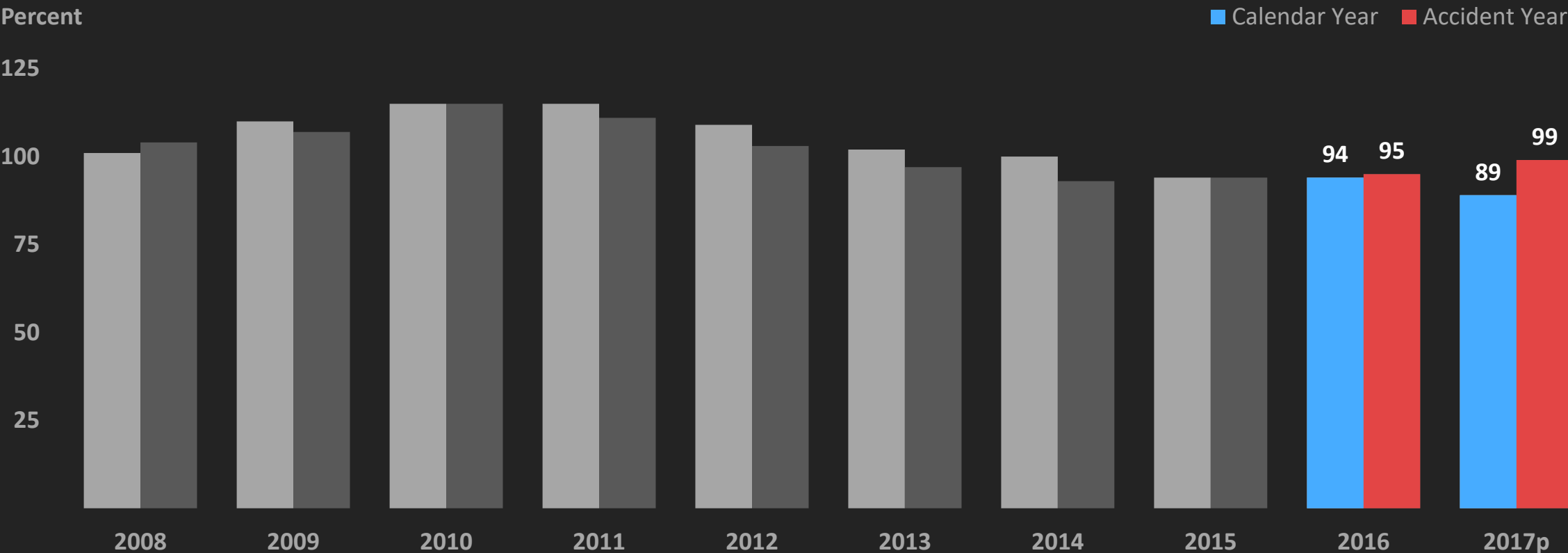


Cost shifting may serve to realign practices and/or to bring costs back in line with the original intent of a program, whether that program is WC, SSDI, or Medicare.

WORKERS COMPENSATION ACCIDENT YEAR RESULTS AND RESERVE ESTIMATES

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

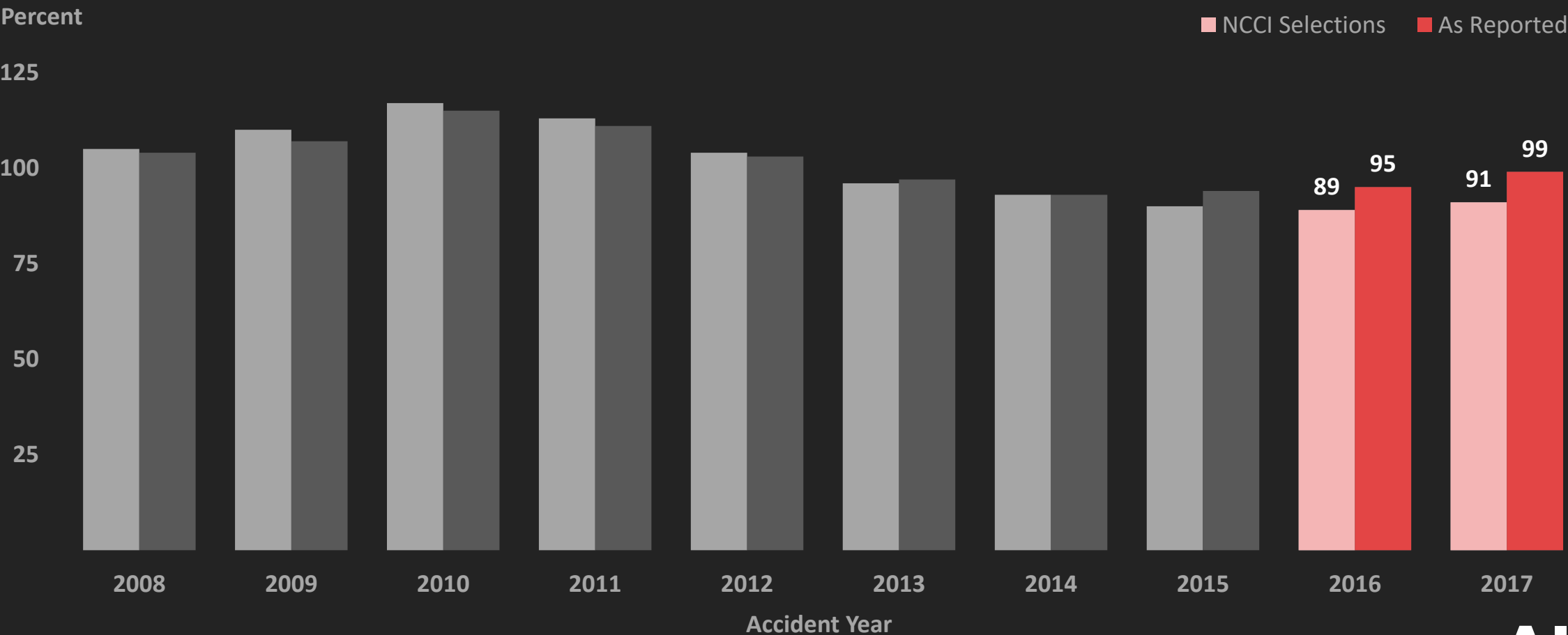
Private Carriers



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

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

Private Carriers

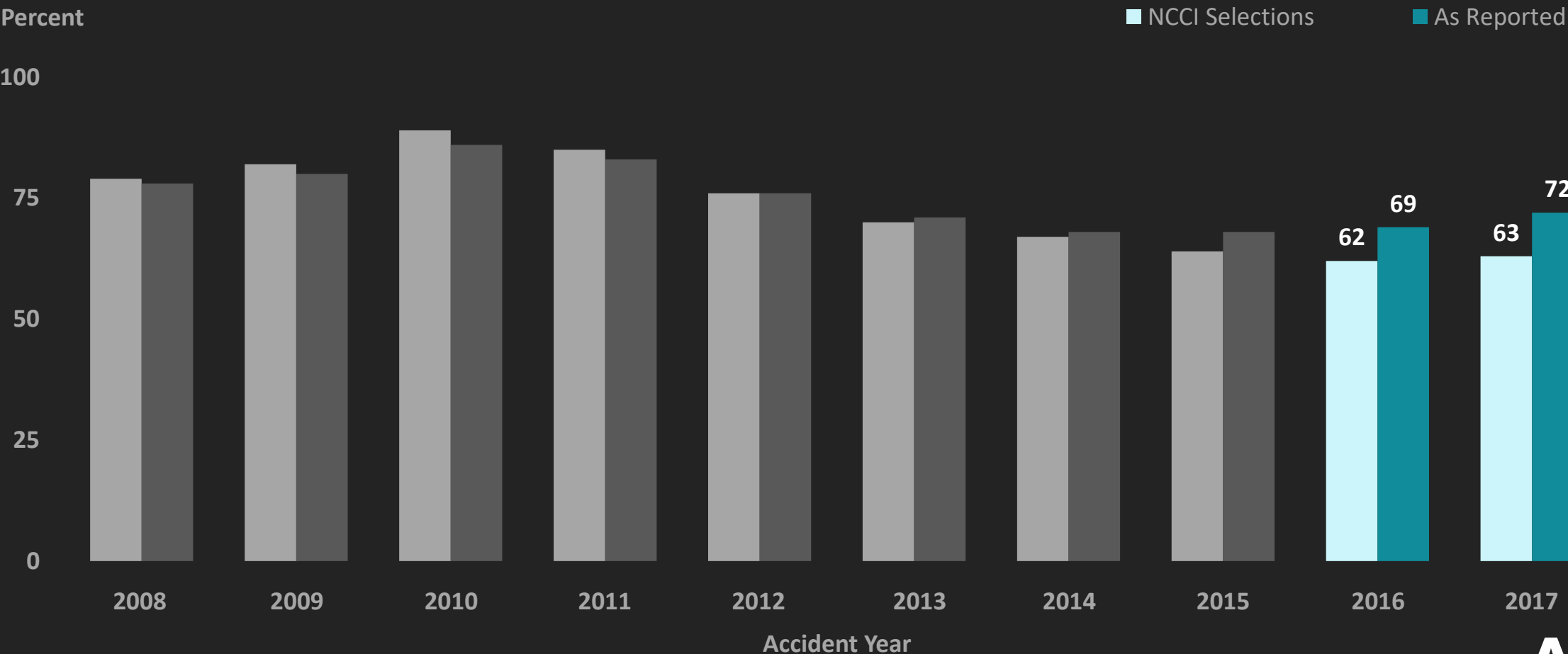


Sources: As Reported: NAIC's Annual Statement Schedule P—Part 1D data as of 12/31/2017
NCCI Selections: NCCI's analysis based on NAIC's Annual Statement data

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

Private Carriers

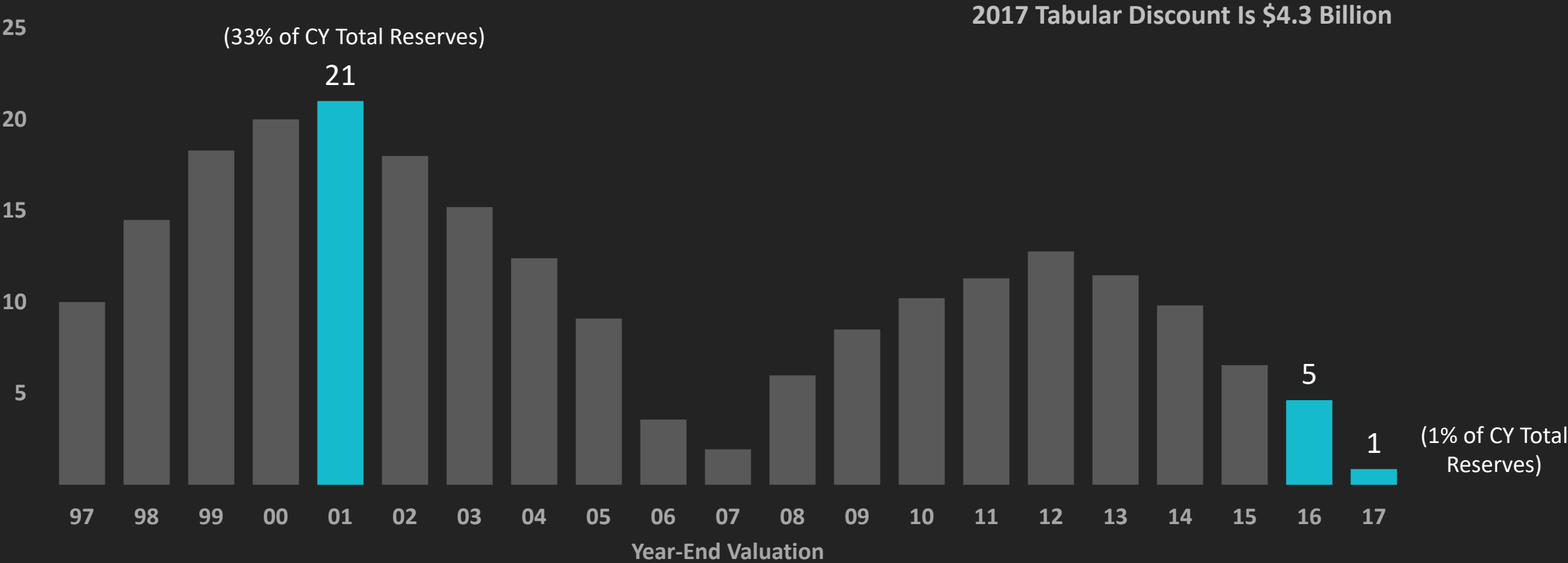


Sources: As Reported: NAIC's Annual Statement Schedule P—Part 1D data as of 12/31/2017
NCCI Selections: NCCI's analysis based on NAIC's Annual Statement data
As Reported Loss and LAE ratios are net of tabular reserve discounts and gross of nontabular reserve discounts

WC Net Loss and LAE Reserve Deficiencies

Private Carriers

\$ Billions

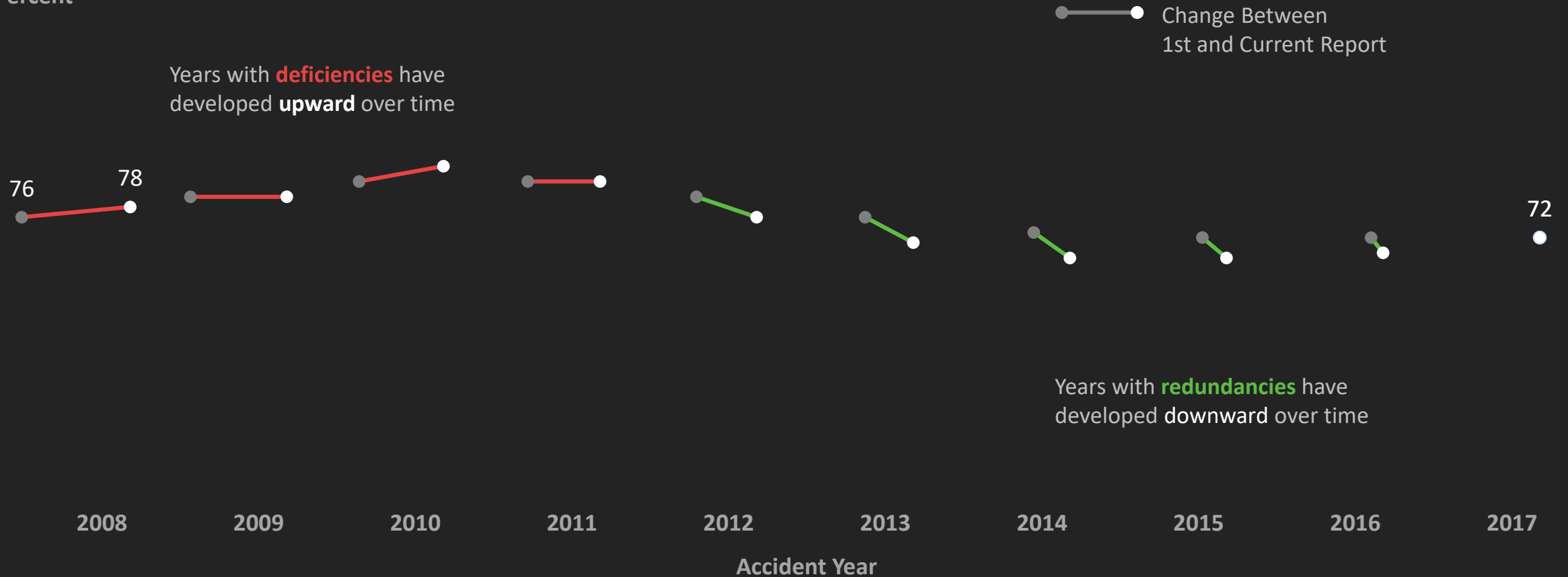


Source: NCCI's analysis based on NAIC's Annual Statement Schedule P—Part 1D data at year-end valuations
Considers all reserve discounts as deficiencies

Emergence of Reported WC Net Loss and LAE Ratios

Private Carriers

Percent



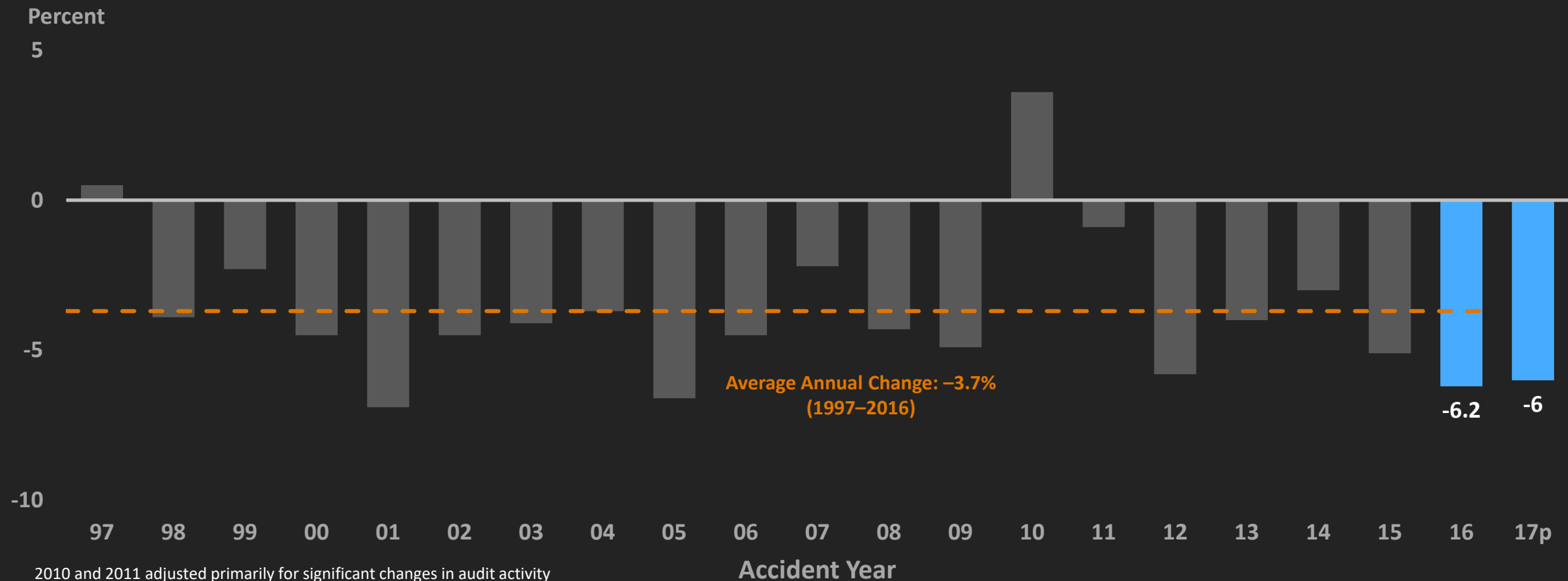
Source: NAIC's Annual Statement Schedule P—Part 1D data at year-end valuations
As Reported Loss and LAE ratios are net of tabular reserve discounts and gross of nontabular reserve discounts

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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

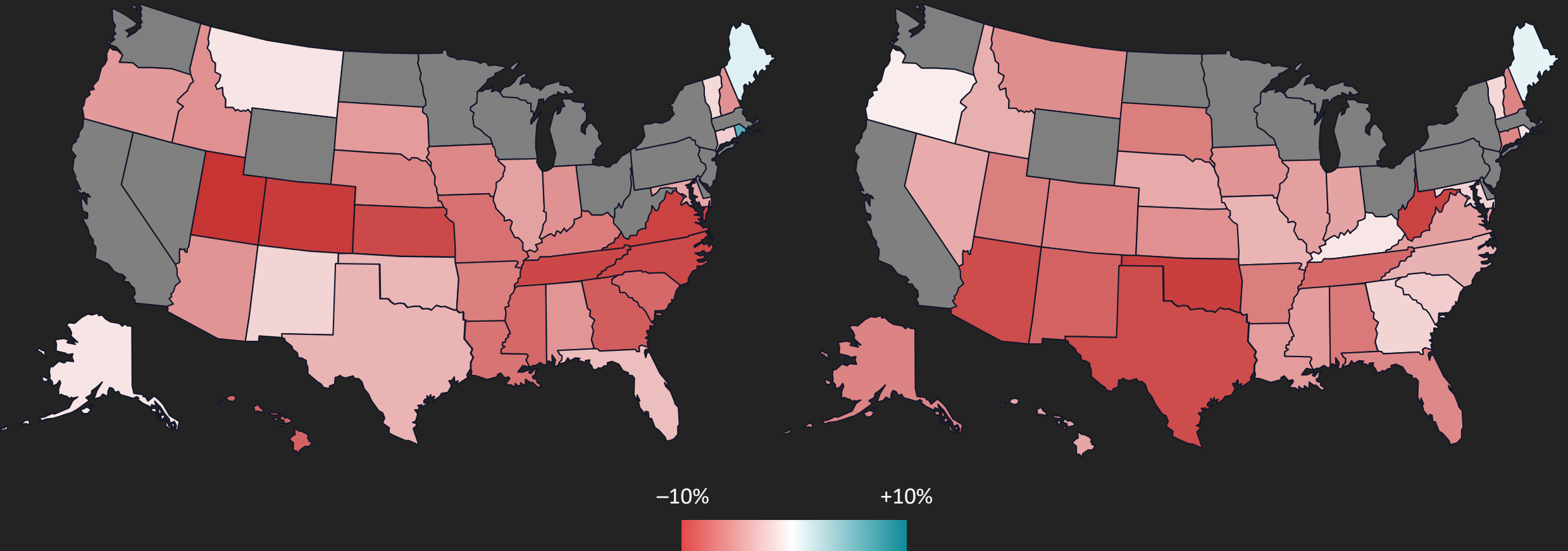


2010 and 2011 adjusted primarily for significant changes in audit activity
p Preliminary, based on data valued as of 12/31/2017
Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies;
based on data 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



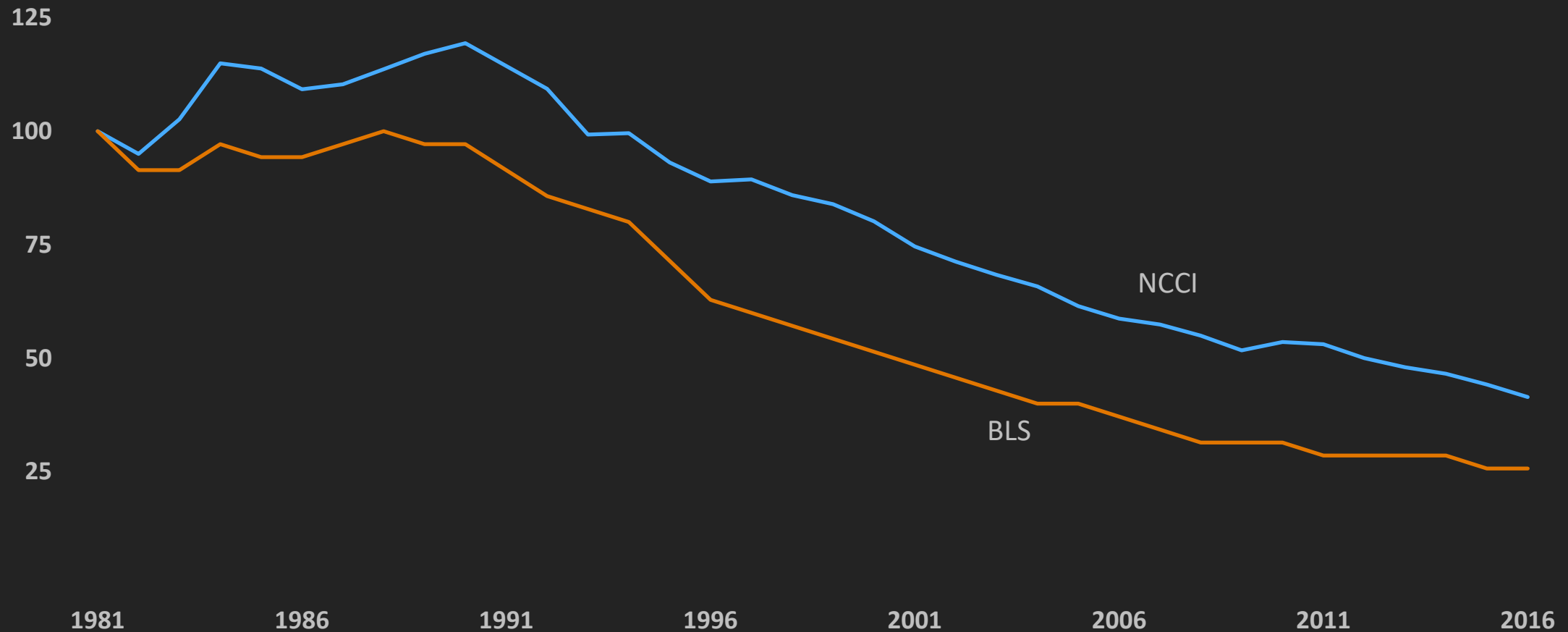
Source: NCCI's Financial Call data, developed to ultimate, premium adjusted to current wage and voluntary pure premium level, excludes high-deductible policies;
based on data through 12/31/2016
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Includes all states where NCCI provides ratemaking services

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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

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Distribution of Lost-Time Claims by Size

Number of
Lost-Time Claims

1,000,000

750,000

500,000

250,000

Under 10K 10K–20K 20K–30K 30K–40K 40K–50K 50K–60K 60K–70K 70K–80K 80K–90K 90K–100K 100K–110K 110K–120K 120K–130K 130K–140K 140K–150K 150K–160K 160K–170K 170K–180K 180K–190K 190K–200K 200K–210K 210K–220K 220K–230K 230K–240K 240K–250K

Claim Size Range (\$)

Claims less than the
average size account
for **75% of counts**,
but contribute
25% to losses.

Claims **over \$1M**
account for less than
0.5% of counts,
but contribute
7% to losses.

2,500

2,000

1,500

1,000

500

1M–3M

3M–5M

5M–7M

7M–9M

9M–11M

Over 11M

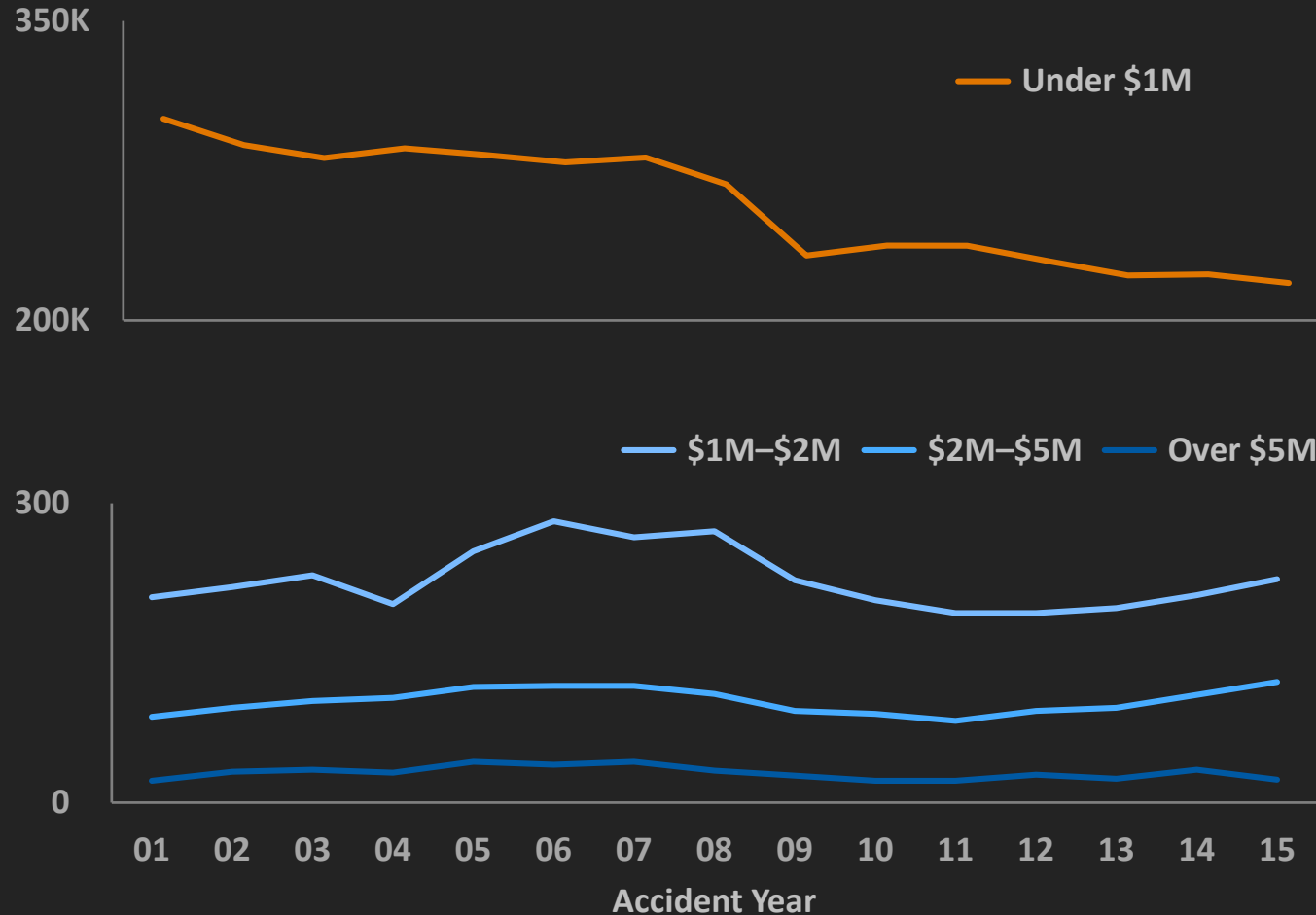
Source: NCCI's Unit Statistical Plan data; includes data for policies expiring between 2010 and 2015
Includes all states where NCCI provides ratemaking services

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Changes in Lost-Time Claims by Size

Number of Lost-Time Claims



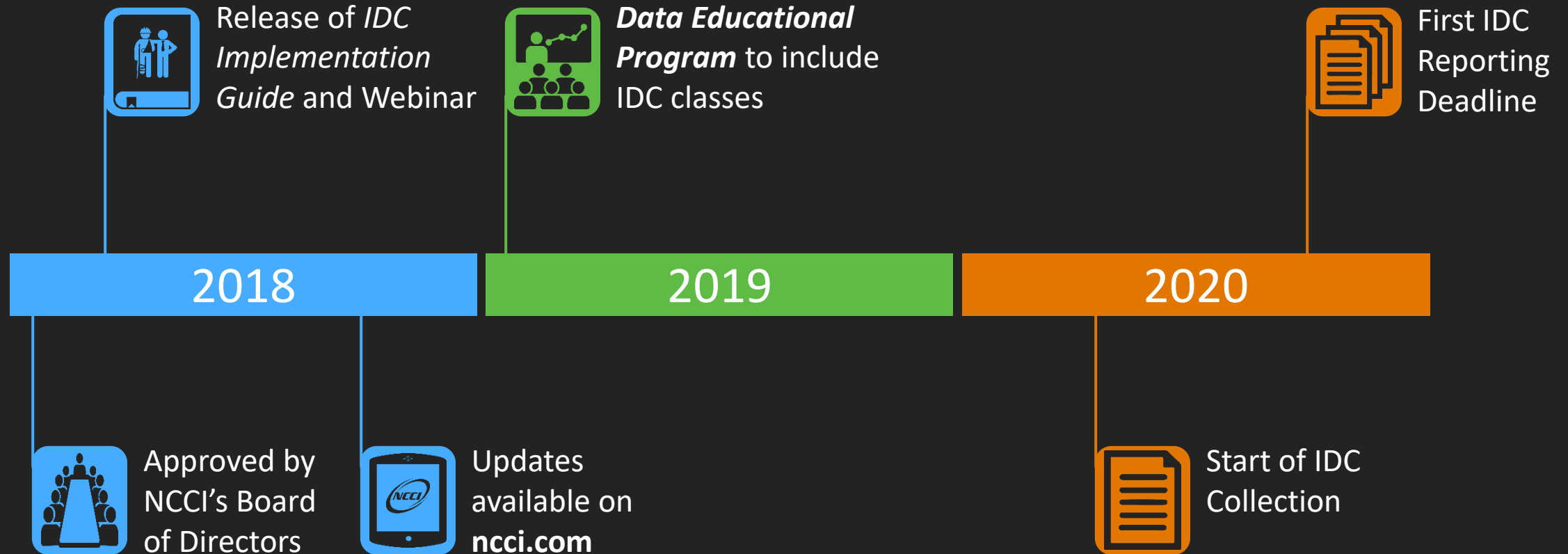
Over the last 15 years, the number of claims **under \$1M** has continued to **decline**, while the observed changes in **larger claim sizes** have been relatively **more volatile**

Source: NCCI's Financial Call data at 2nd report by Accident Year
Includes all states where NCCI provides ratemaking services, excluding TX and WV

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Indemnity Data Call (IDC)

Implementation Timeline



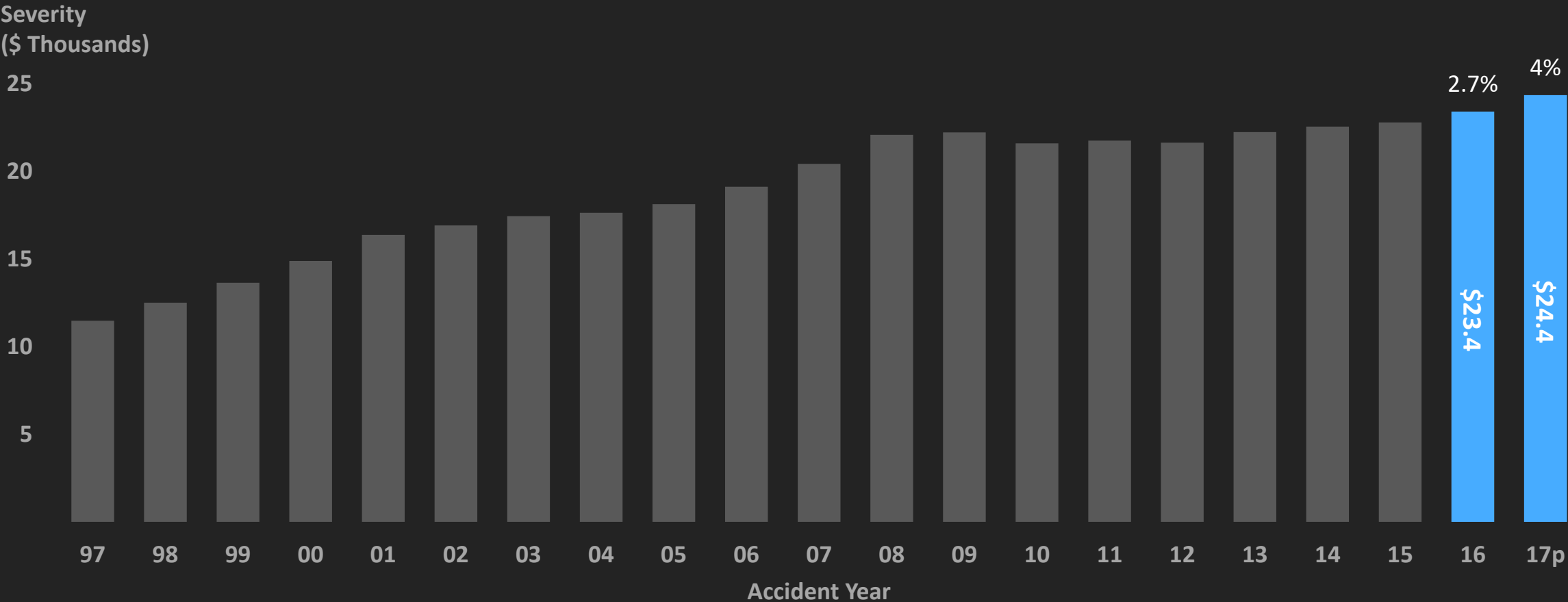
Source: NCCI Circular IND-2018-02 "Indemnity Data Call—New Indemnity Data Call Resources—Available on [ncci.com](https://www.ncci.com)"

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WC Average Indemnity Claim Severity

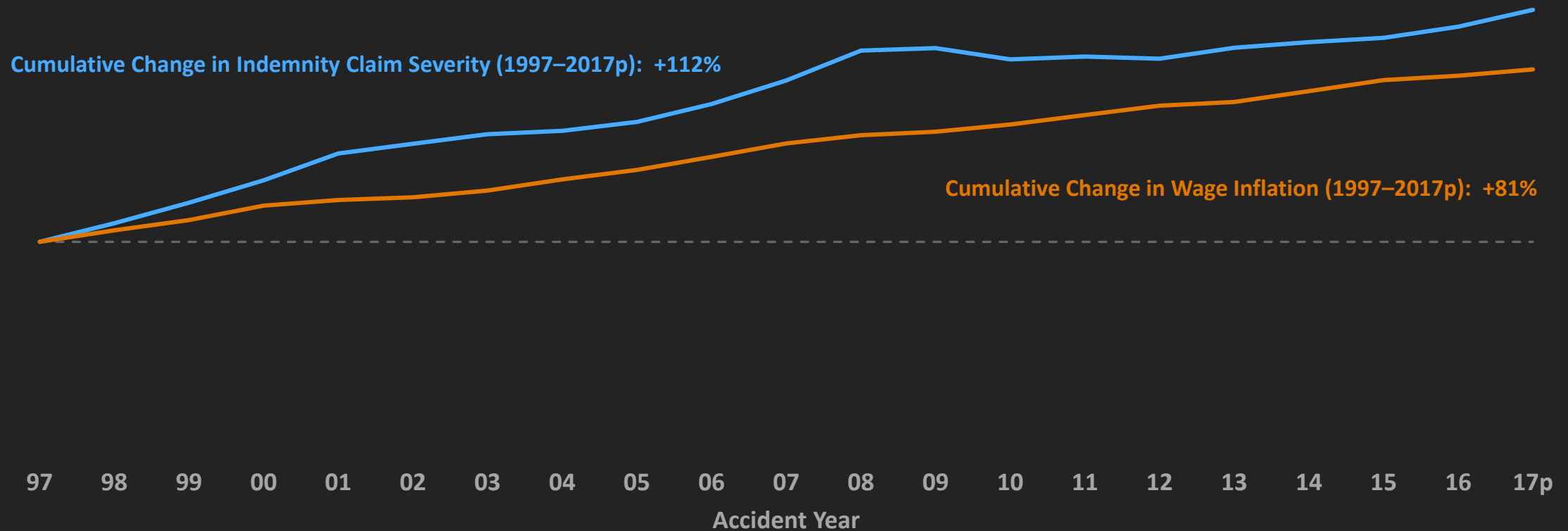
Private Carriers and State Funds—NCCI States



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

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

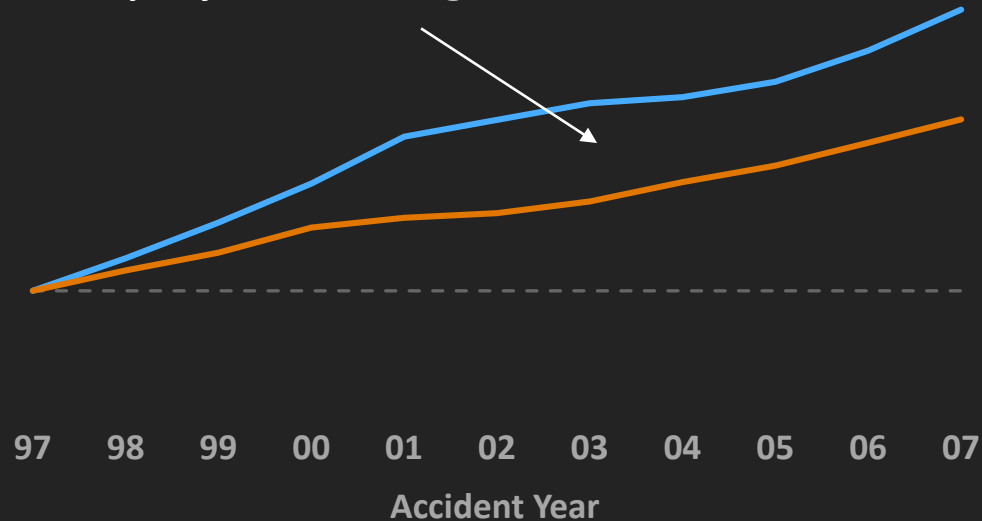
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007

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

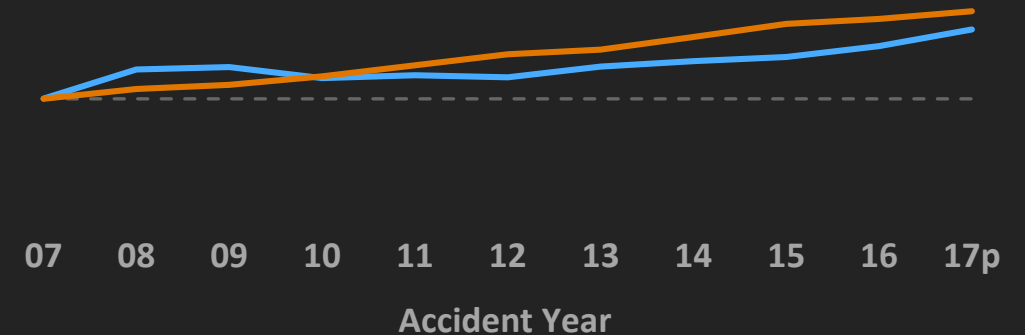
Relative Growth Rates—Indemnity Severity vs. Wage Inflation

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

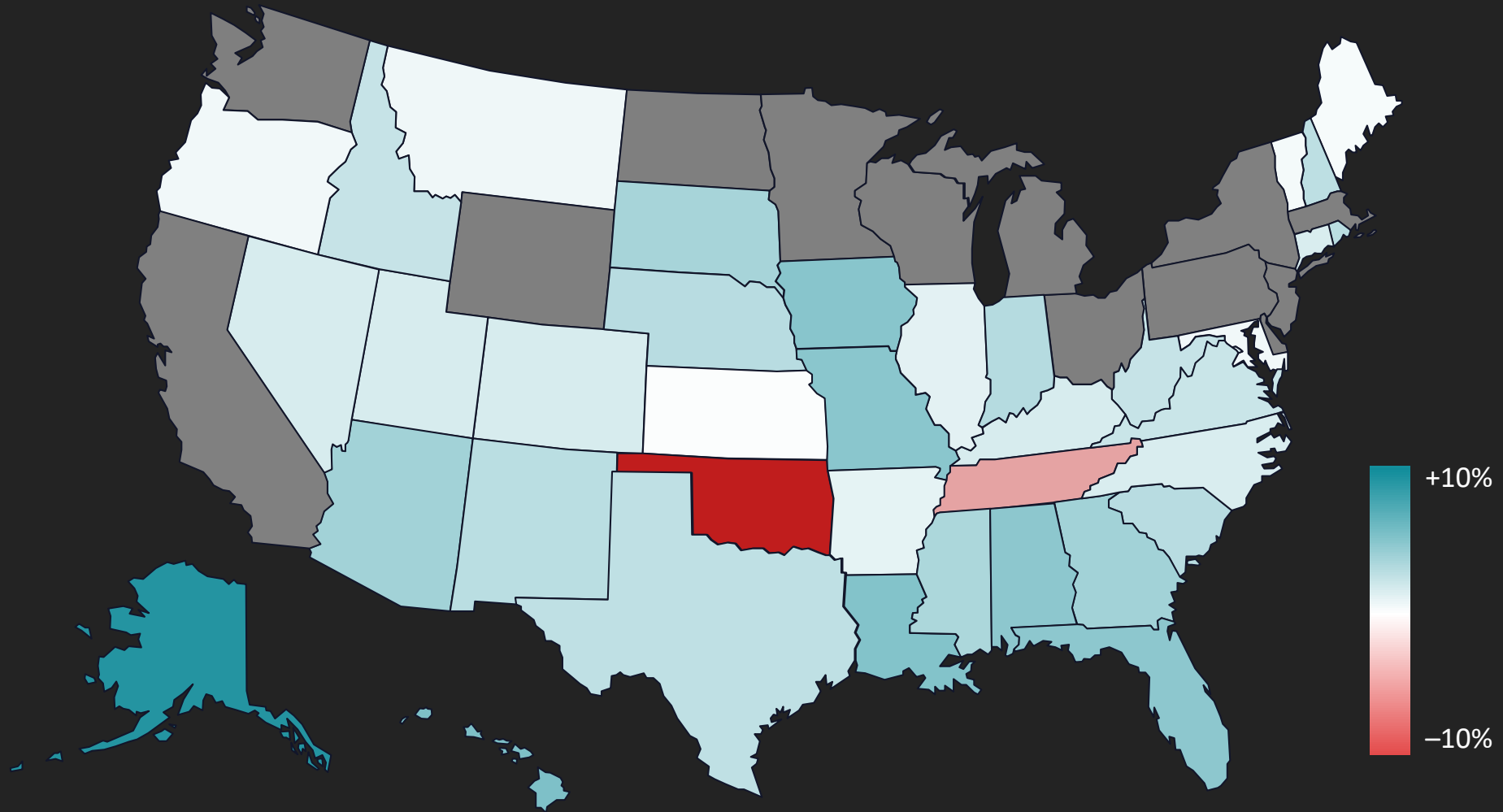
Values displayed reflect the methodology underlying the most recent rate/loss cost filing

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



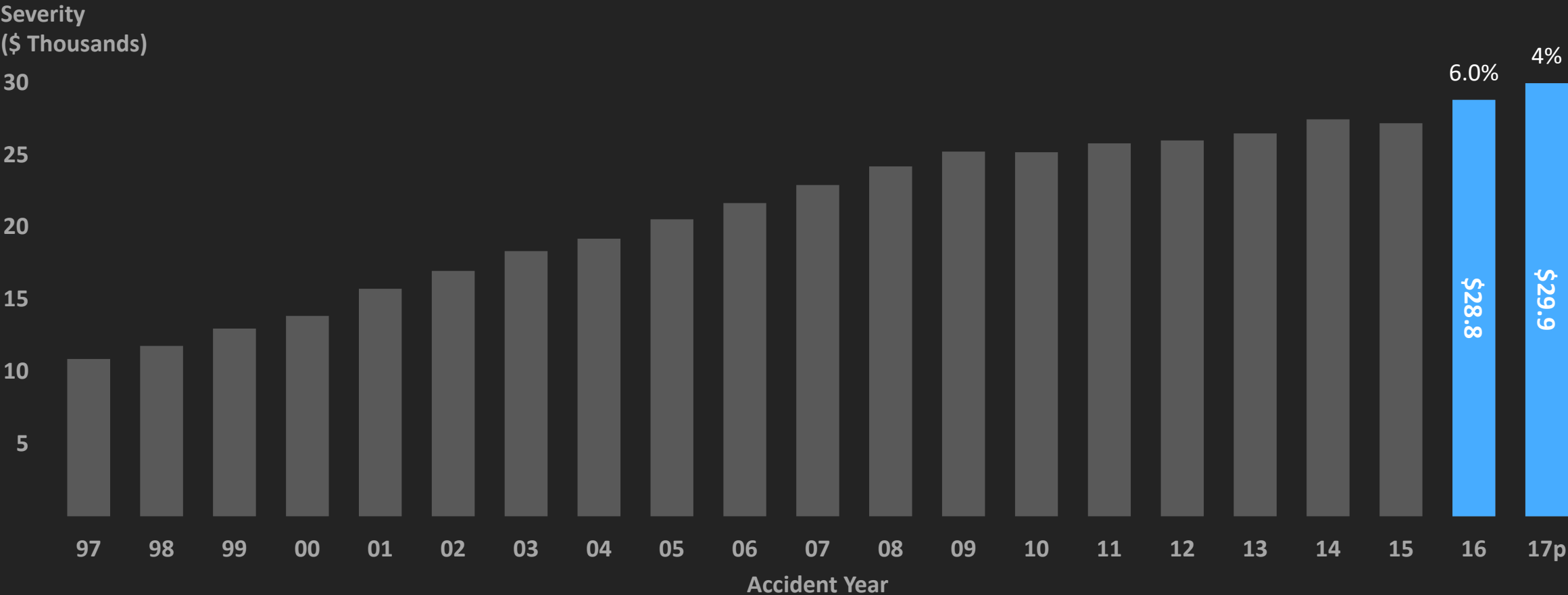
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016
Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides ratemaking services

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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

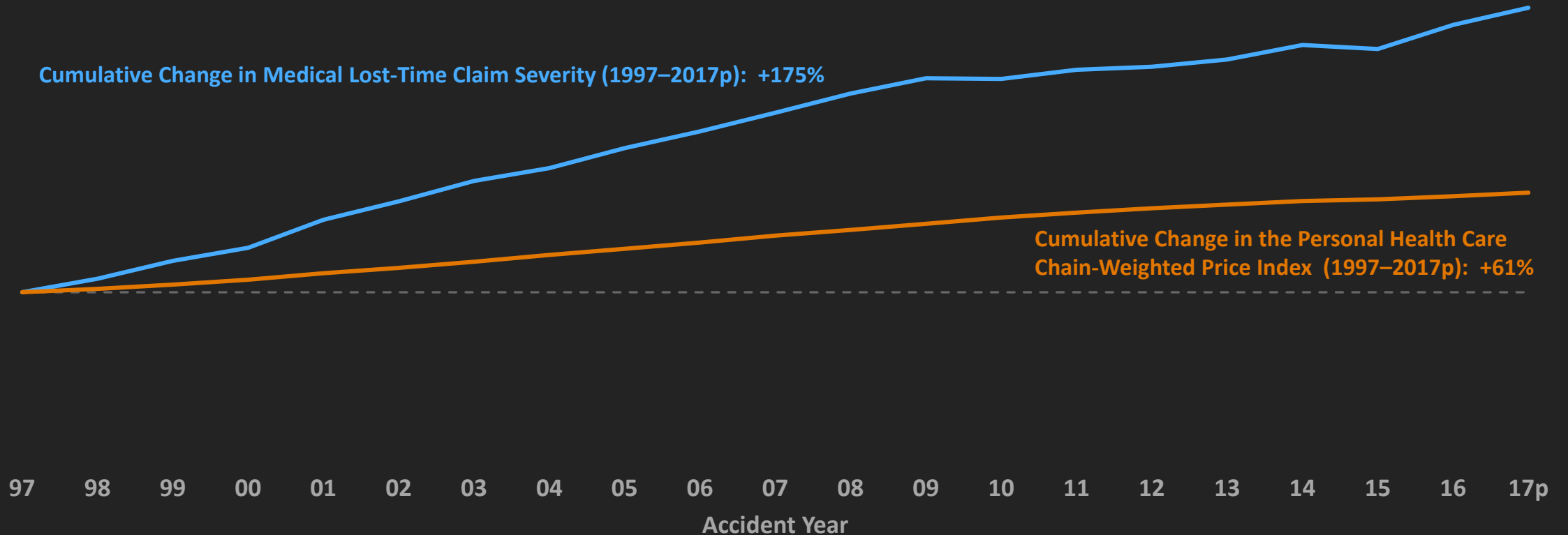
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WC Average Medical Lost-Time Claim Severity

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

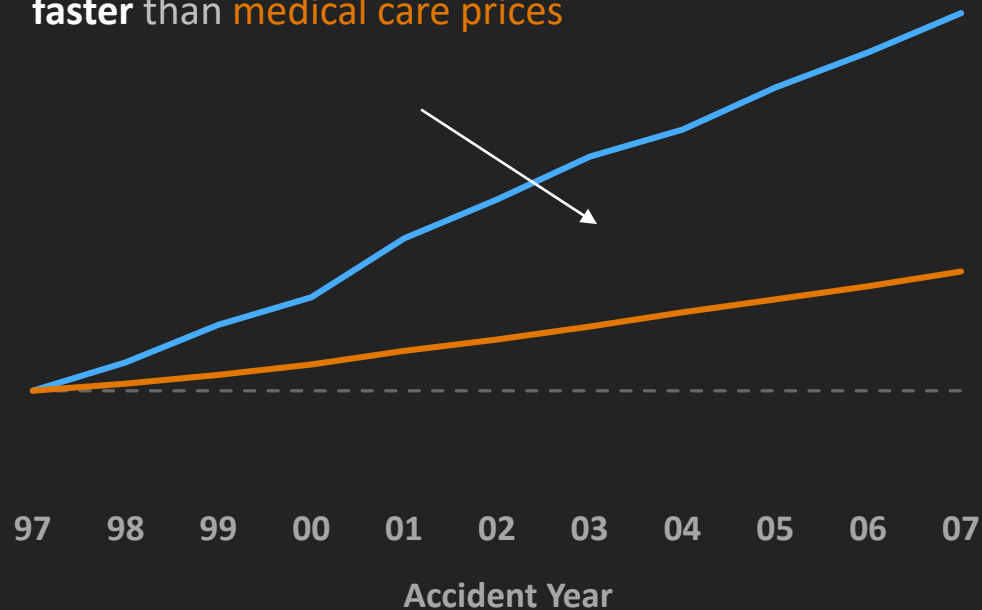
Includes all states where NCCI provides ratemaking services; WV is excluded through 2007

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

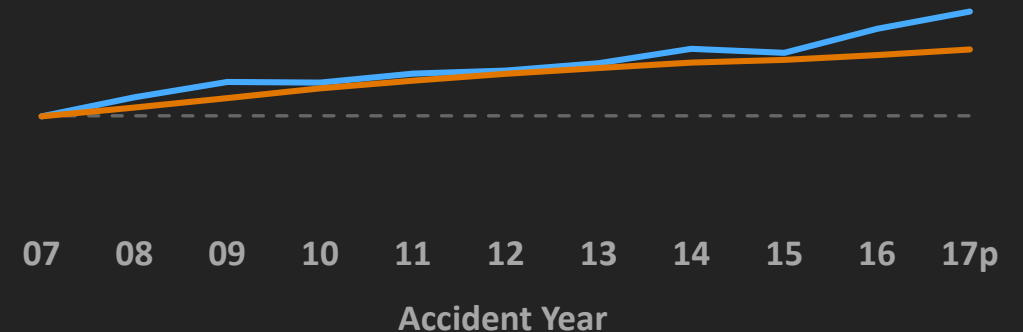
Relative Growth Rates—Medical Severity vs. Price Inflation

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

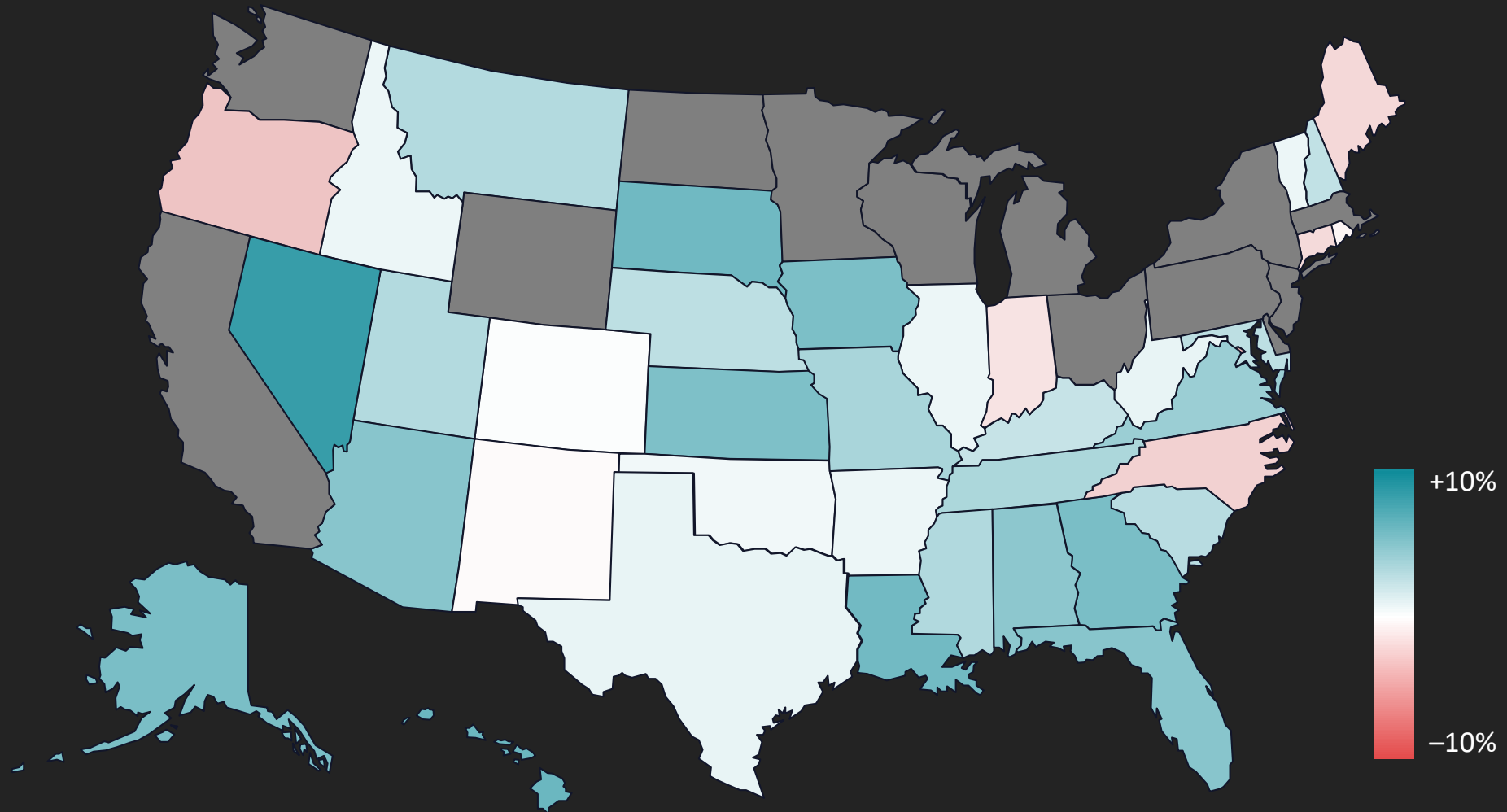
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Personal Health Care (PHC) Chain-Weighted Price Index: Centers for Medicare & Medicaid Services

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
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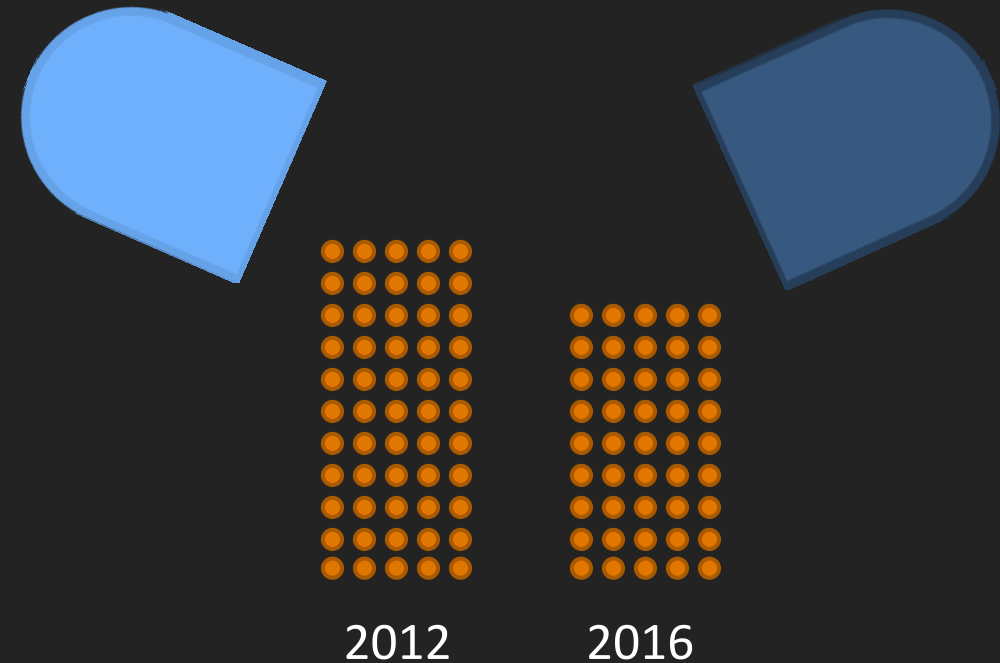
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Utilization of Opioids

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%**



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

WHAT'S NEXT?

RESEARCH

Opioids—Killer Pain Relief

Marijuana—The Move to Schedule II

Impact of Provider Networks on
Workers Compensation Medical Costs

ncci.com

Indemnity Data Call Implementation

Aggregate Loss Factors (ALF) on Demand

WC Motor Vehicle Accident Research

QUESTIONS AND MORE INFORMATION

MEET THE EXPERTS

Immediately following this session

RESOURCES FOR THE STATE OF THE LINE PRESENTATION

Full presentation on **ncci.com**

State of the Line Guide on **ncci.com**

stateoftheline@ncci.com