

STATE ADVISORY **FORUMS**

Colorado

September 27, 2018

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Colorado State Advisory Forum

- The Future@Work® Video
- Countrywide Workers Compensation System
- Colorado Workers Compensation System
- Guest Speaker—Paul Tauriello, Director, Colorado Division of Workers' Compensation
- Countrywide and Colorado Labor Markets
- The Data Connection Video
- Legislative Issues
- Opioids and Workers Compensation
- Closing Remarks





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The Future@Work® Video



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Countrywide Workers Compensation System

Countrywide Workers Compensation (WC)— An Overview

Premium decreased slightly in the most recent year

The combined ratio continues to show favorable results

Frequency declined again at the latest point

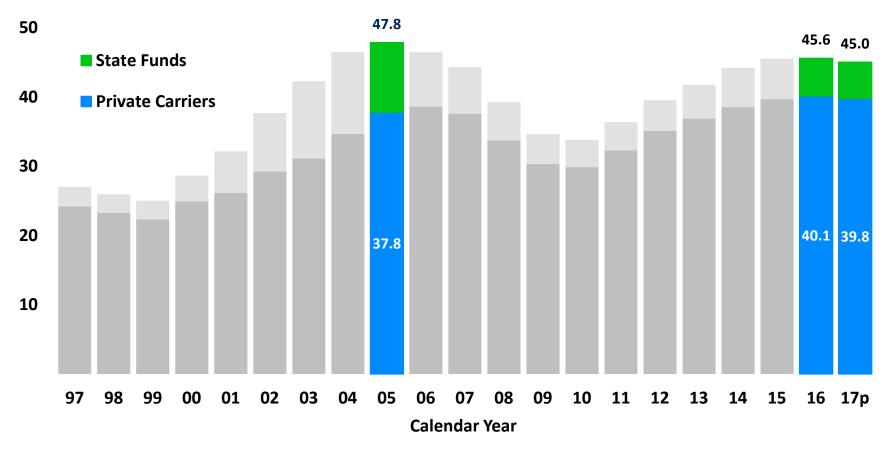
Medical and indemnity severity increased modestly



WC Net Written Premium

Private Carriers and State Funds

\$ Billions



p Preliminary

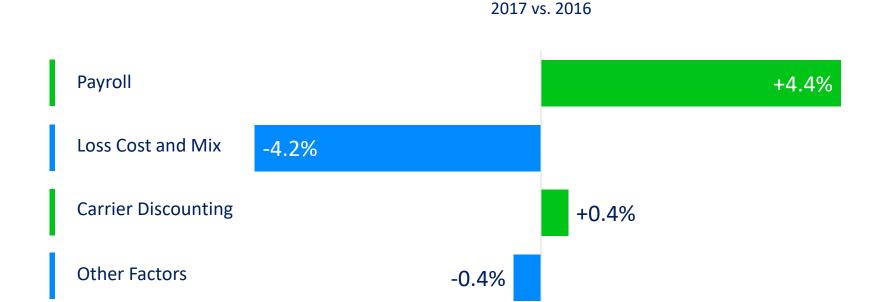
Source: NAIC's Annual Statement data; includes state insurance fund data for the following states: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, and UT Each calendar year total for state funds includes all funds operating as a state fund in that year



WC Direct Written Premium (DWP) Change by Component

Private Carriers—NCCI States

Change in Direct Written Premium: 0.0%

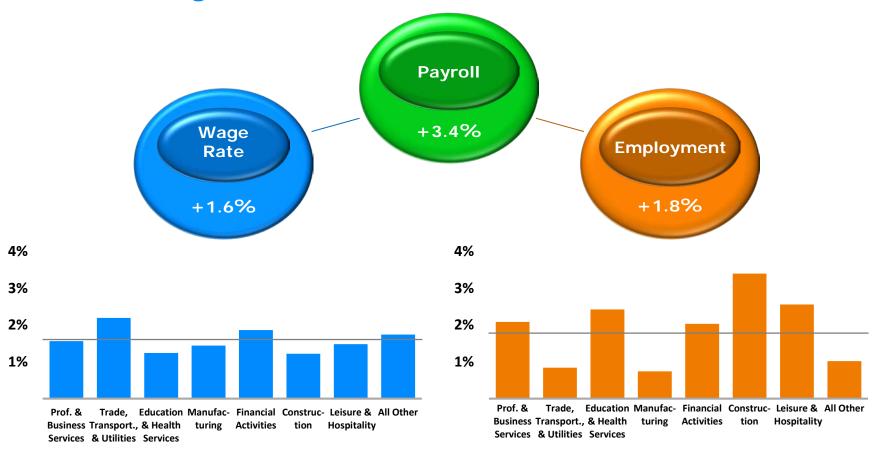


Sources: DWP Change: NAIC's Annual Statement Statutory Page 14 for all states where NCCI provides ratemaking services Components: NCCI's Policy data



Increases in Payroll Continue to Drive Changes in Premium

Forecast Change 2016–2017

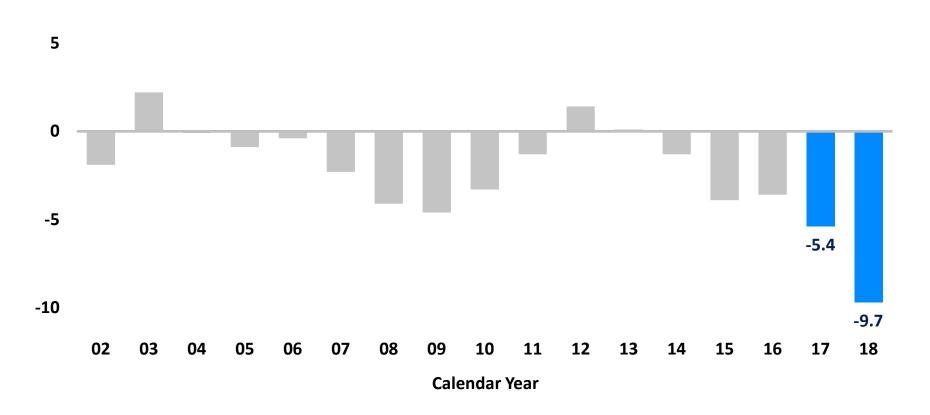


Sources: Moody's Analytics and NCCI



WC Approved Changes in Bureau Premium Level Weighted by Effective Date—NCCI States

Percent



Source: NAIC's Annual Statement Statutory Page 14

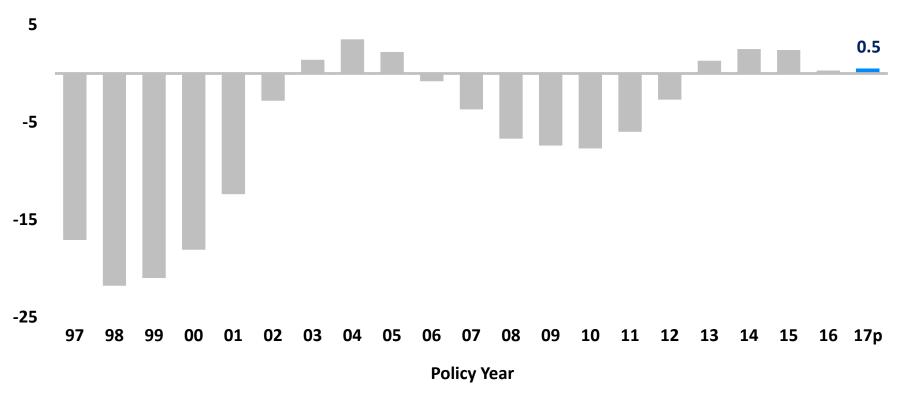
Values reflect changes in average premium levels between years, based on approved changes in advisory rates, loss costs, assigned risk rates, and rating values, as of 9/14/2018 IN and NC are filed in cooperation with state rating bureaus



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's rate level, which excludes a profit and contingency provision and expense constant

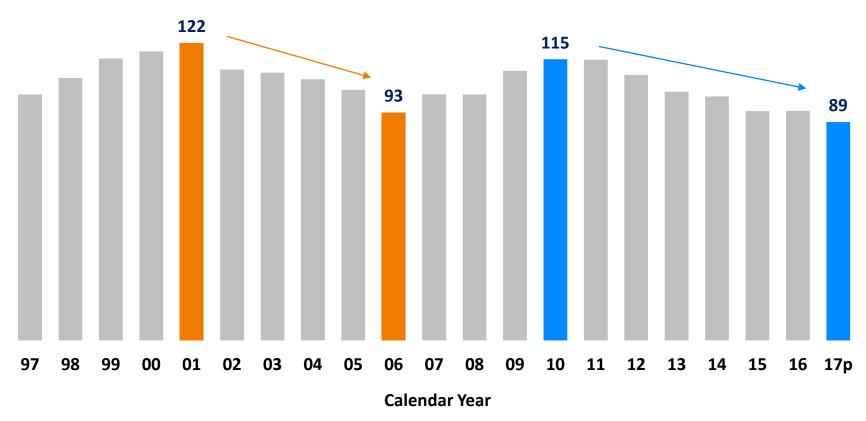
Based on data for all states where NCCI provides ratemaking services, excluding TX



WC Combined Ratio— Underwriting Gain Achieved

Private Carriers

Percent



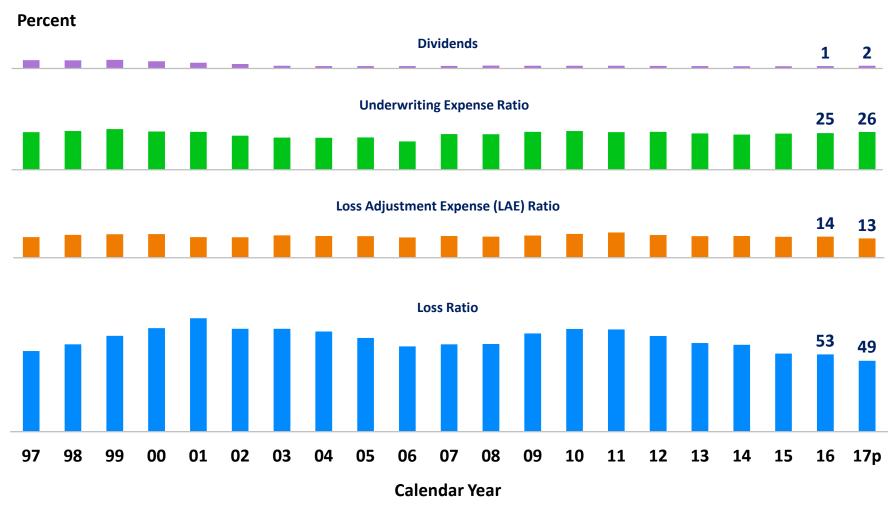
p Preliminary

Source: NAIC's Annual Statement data



WC Combined Ratio by Component

Private Carriers



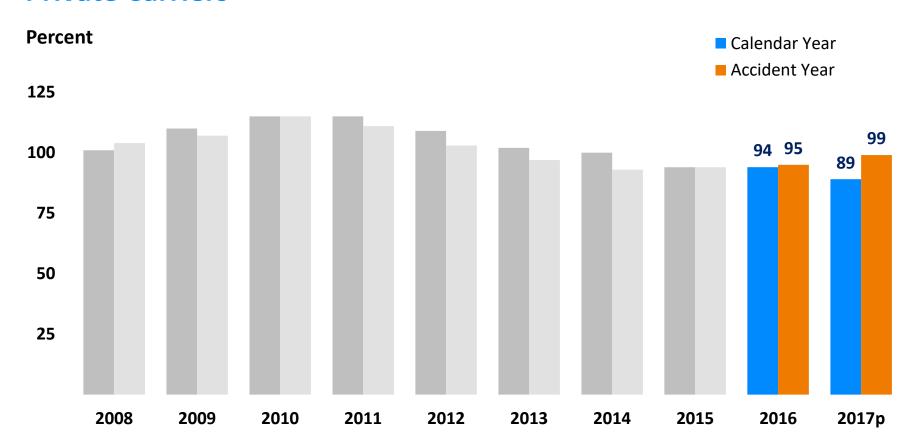
p Preliminary

Source: NAIC's Annual Statement data



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

Private Carriers



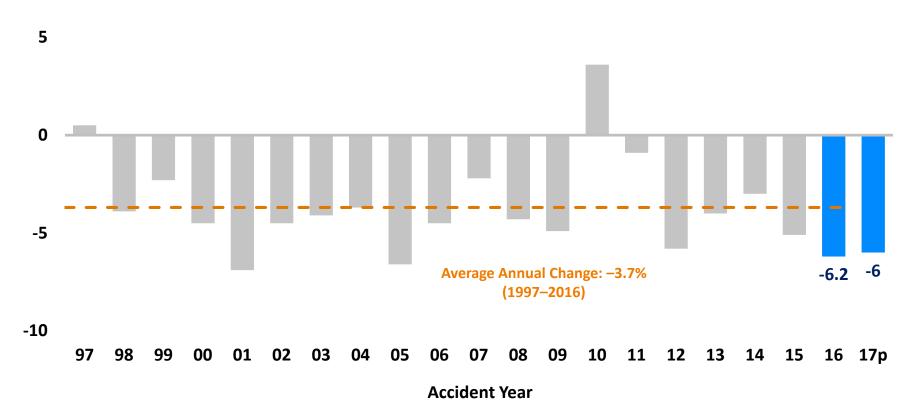
p Preliminary Source: NAIC's Annual Statement data Accident Year information is reported as of 12/31/2017 Includes dividends to policyholders



WC Lost-Time Claim Frequency

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

Percent



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

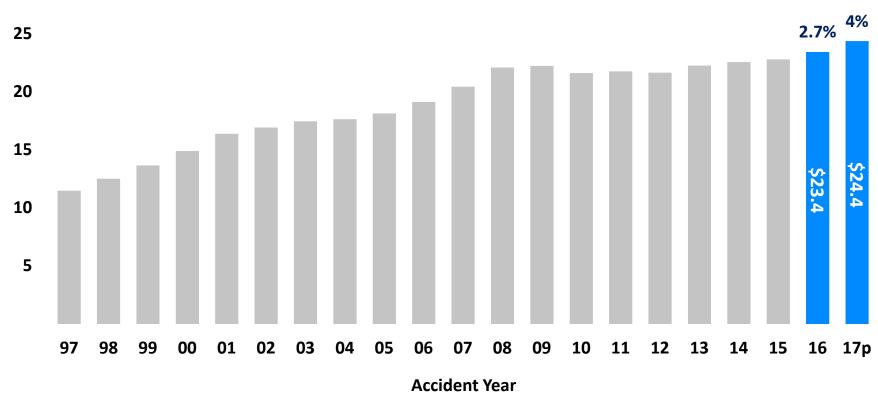
Values displayed reflect the methodology underlying the most recent rate/loss cost filing Includes all states where NCCI provides ratemaking services; WV is excluded through 2011



WC Average Indemnity 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

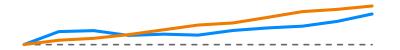


Relative Growth Rates— Indemnity Severity vs. Wage Inflation

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



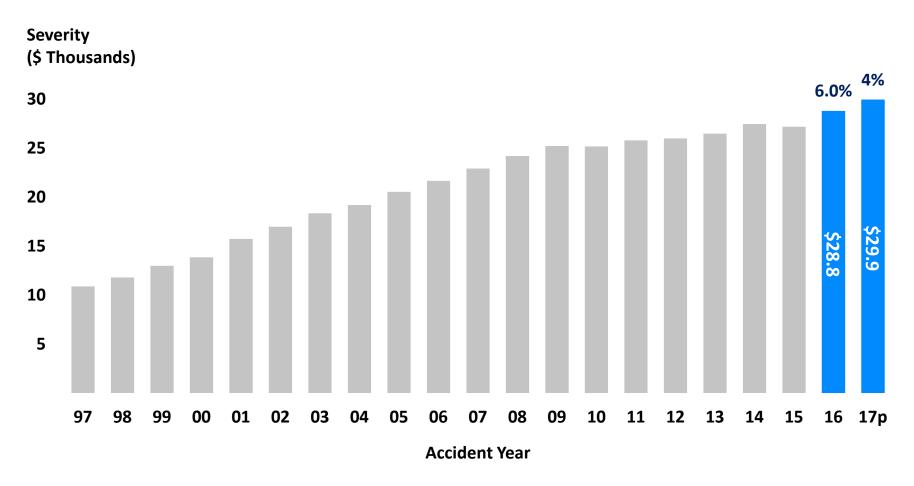
97 98 99 00 01 02 03 04 05 06 07 Accident Year 07 08 09 10 11 12 13 14 15 16 17p Accident Year

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: 1995–2007 and 2012–2016, Quarterly Census of Employment and Wages; 2008–2011, NCCI; 2017p, NCCI and Moody's Analytics



WC Average Medical Lost-Time Claim Severity

Private Carriers and State Funds—NCCI States

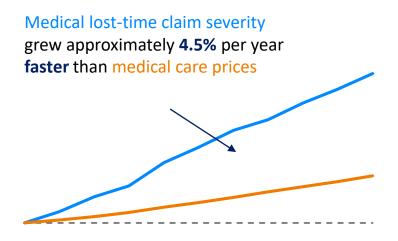


p Preliminary based on data valued as of 12/31/2017
Source: NCCI's Financial Call data, developed to ultimate, excludes high-deductible policies; based on data through 12/31/2016
Values displayed reflect the methodology underlying the most recent rate/loss cost filing
Includes all states where NCCI provides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

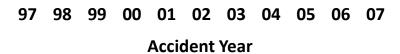


Relative Growth Rates— Medical Severity vs. Price Inflation

Private Carriers and State Funds—NCCI States



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



7 08 09 10 11 12 13 14 15 16 17p

Accident Year

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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Colorado Workers Compensation System

Colorado Workers Compensation System— An Overview

Written
premium
volume remains
stable

Latest combined ratios show favorable results

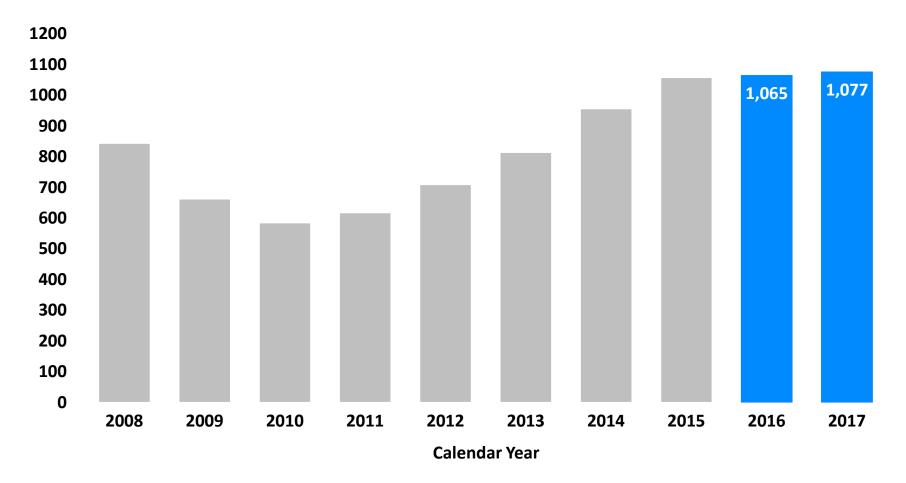
Lost-time claim frequency decreased again

Lower average claim severity observed in most recent years



Colorado Workers Compensation Premium Volume

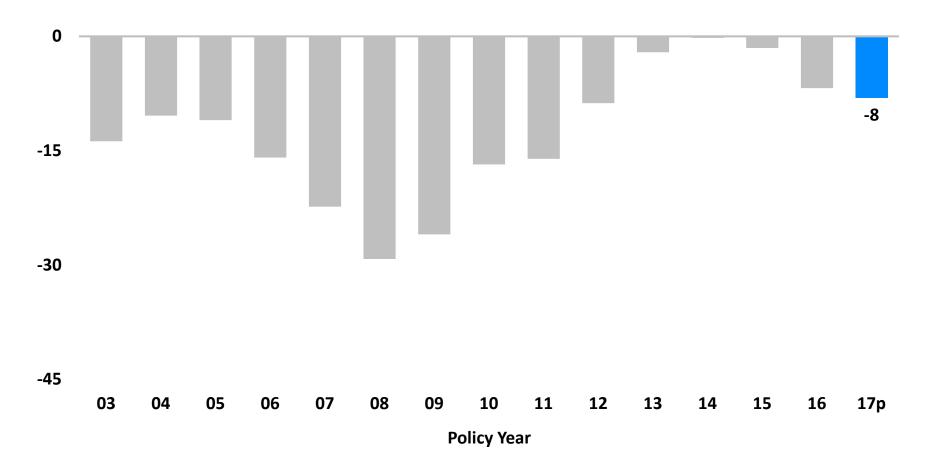
Direct Written Premium in \$ Millions



Source: NAIC's Annual Statement data



Impact of Discounting on Workers Compensation Premium in Colorado

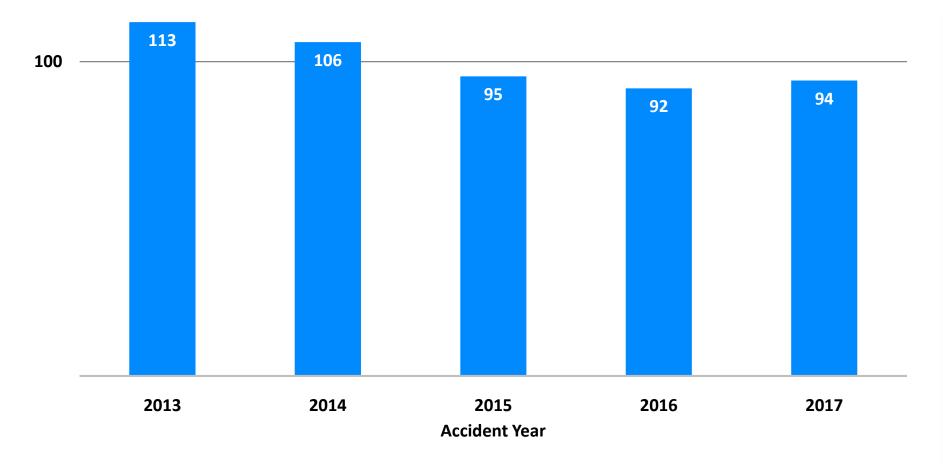


p Preliminary Based on data through 12/31/2017



Colorado Combined Ratios

Accident Year

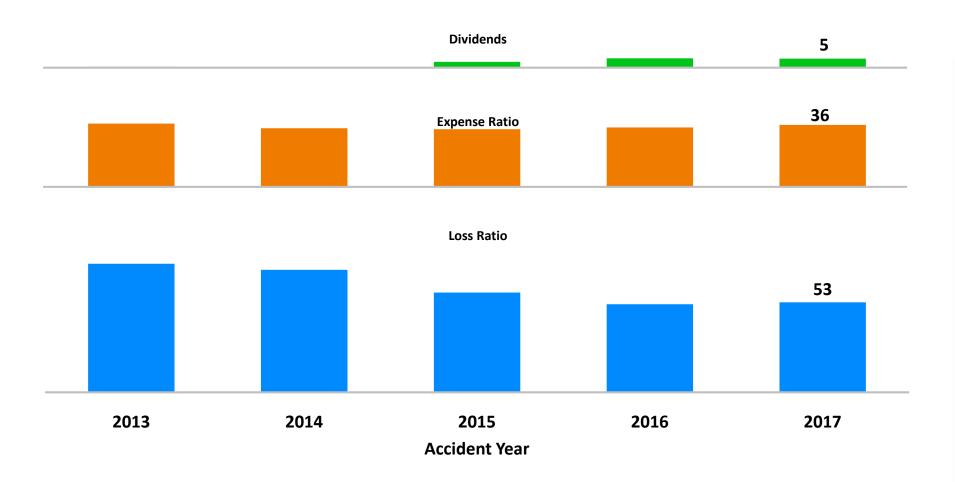


Sources: NCCI's financial data through 12/31/2017 and NAIC's Annual Statement data



Colorado Combined Ratios by Component

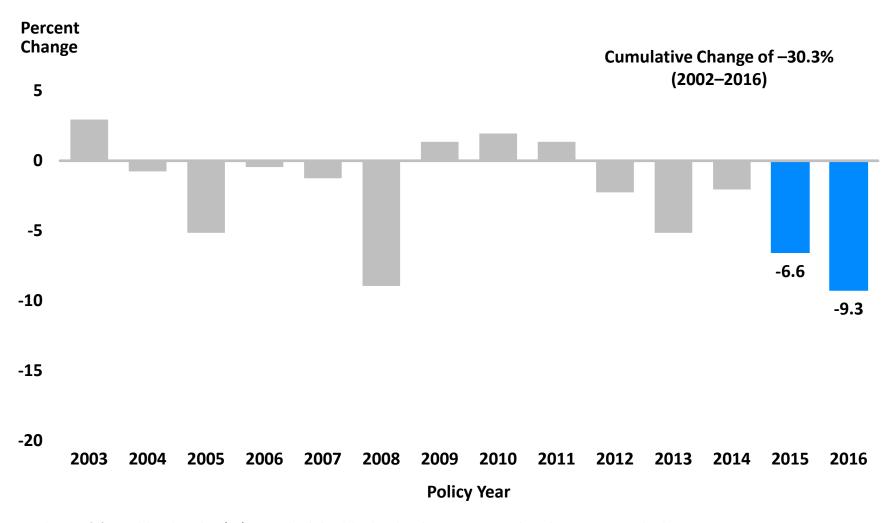
Accident Year



Sources: NCCI's financial data through 12/31/2017 and NAIC's Annual Statement data



Colorado Workers Compensation Percent Change in Lost-Time Claim Frequency

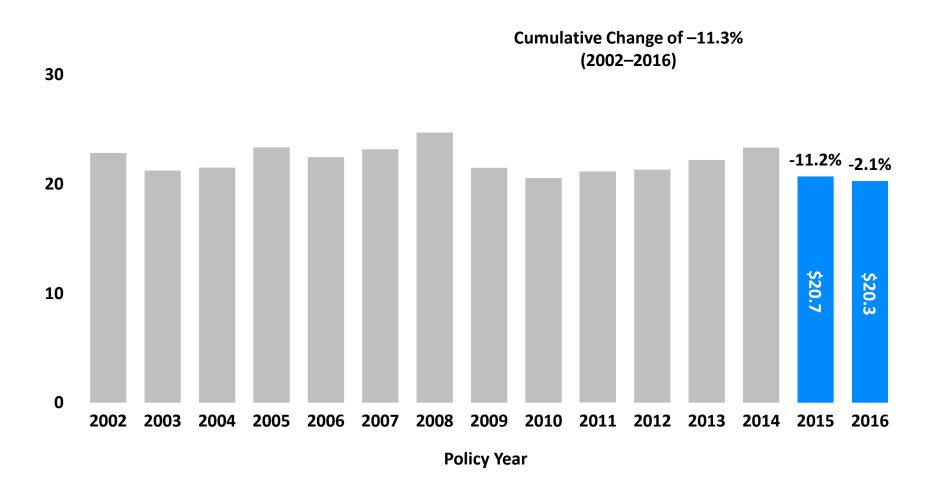


Based on NCCI's financial data through 12/31/2017, on-leveled and developed to ultimate, premium adjusted to common wage level



Colorado Average Indemnity Claim Severity

Lost-Time Claim Severity in \$ Thousands

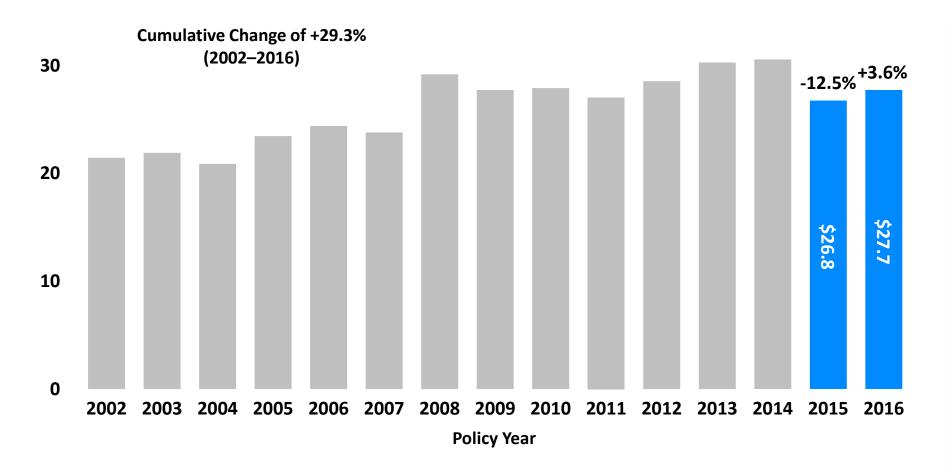


Based on NCCI's financial data through 12/31/2017, on-leveled and developed to ultimate



Colorado Average Medical Claim Severity

Lost-Time Claim Severity in \$ Thousands

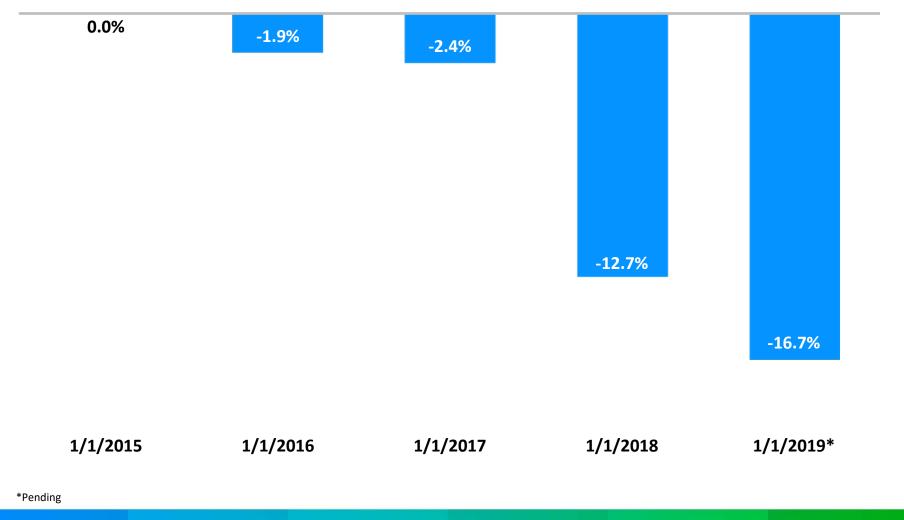


Based on NCCI's financial data through 12/31/2017, on-leveled and developed to ultimate



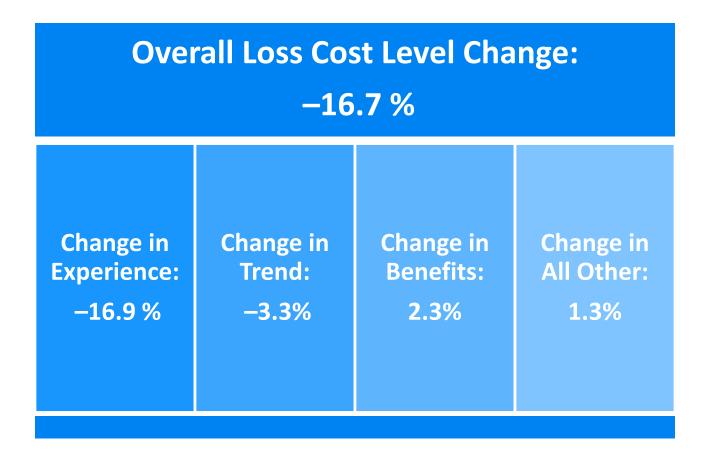
Colorado Filing Activity

Voluntary Loss Cost Changes





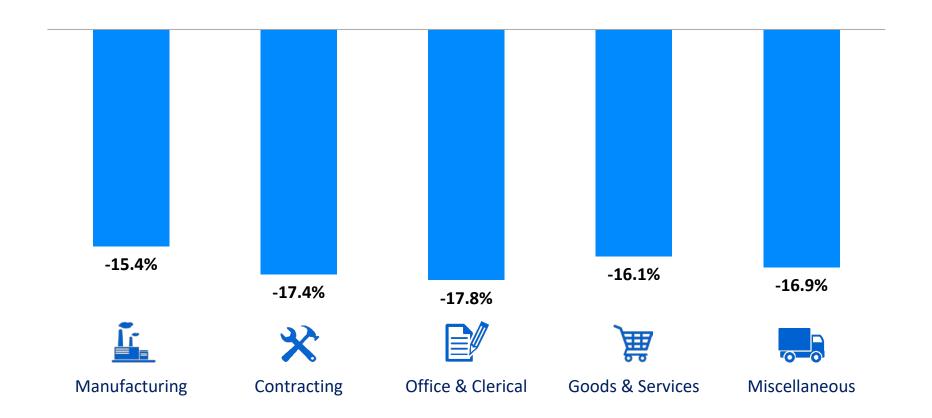
Colorado January 1, 2019 Loss Cost Filing





Colorado January 1, 2019 Filing— Average Changes by Industry Group

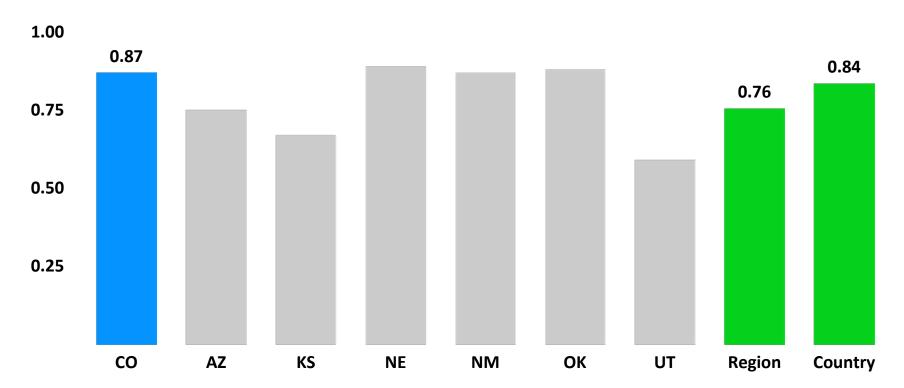
Overall Loss Cost Level Change: -16.7%



Average Voluntary Pure Loss Costs Using Colorado Payroll Distribution

Pure Loss Cost—All Classes

1.25

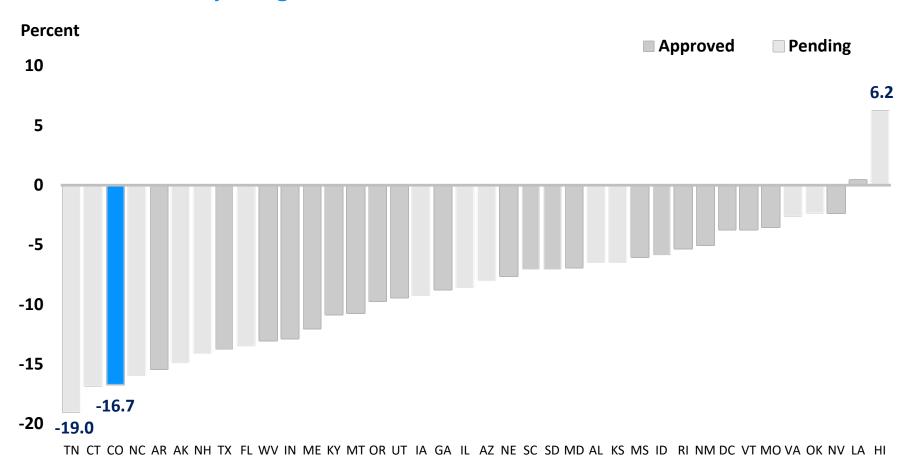


Based on approved rates and loss costs from filings using data valued as of 12/31/2016



Current NCCI Voluntary Market Loss Cost/Rate Level Changes

Excludes Law-Only Filings

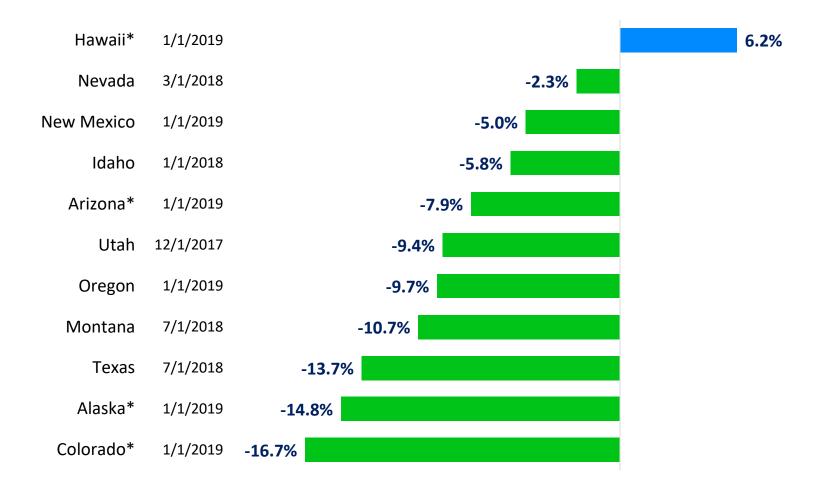


Reflects the most recent experience filing in each jurisdiction

Due to the timing of the individual loss cost/rate filings, the figures shown may include changes from prior filing seasons



Current Voluntary Market Rates/Loss Costs Western States



^{*}Pending





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Paul Tauriello
Director,
Colorado Division
of Workers'
Compensation



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Countrywide and Colorado Labor Markets

National Economic Highlights and Their Impact on Workers Compensation

National Economic Indicator	Potential Impact on the Workers Compensation Market
Private employment growth continues to be near 2%	Continuing payroll and premium growth
Wage growth is increasing and expected to accelerate	Upward pressure on payroll and premium growth as well as indemnity severity
Medical inflation is forecast to rise	Increases in medical costs per claim
Short-term and long-term interest rates have increased	Investment yields will increase across the spectrum of bond maturities



Change in Private Employment

Private Employment Growth Is Above Average

Percent





-3 2016 Q1 2017 Q1 2018 Q1

Year-over-year percentage change; employment is for Total Private Industry Frequency of observation: quarterly; 2015 Q1–2018 Q1 Sources: US Bureau of Labor Statistics, Moody's Analytics, and NCCI



Change in Average Weekly Wages

Wage Growth Is Above the National Average

Percent





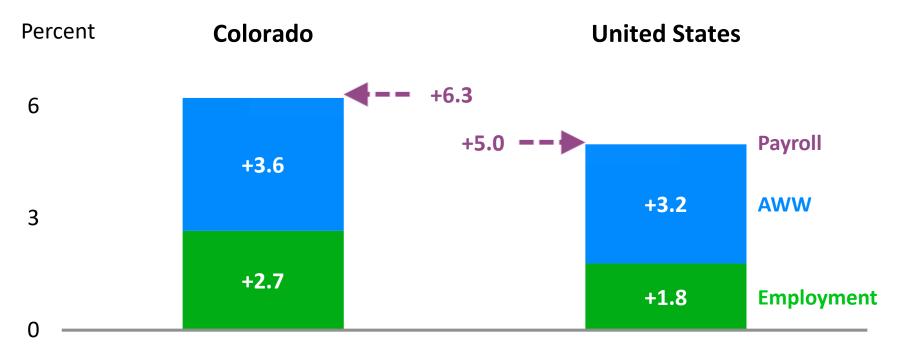
-3 2016 Q1 2017 Q1 2018 Q1

Year-over-year percentage change; wages are for Total Private Industry
Frequency of observation: quarterly; 2015 Q1–2018 Q1
Sources: US Bureau of Labor Statistics, Bureau of Economic Analysis, Moody's Analytics, and NCCI



Private Industry Payroll Growth Decomposition

Payroll Growth Is Higher Than the National Average



-3

AWW = Average Weekly Wage 2018 Q1 year-over-year percentage change Sources: US Bureau of Labor Statistics, Bureau of Economic Analysis, Moody's Analytics, and NCCI



Change in Employment by Sector

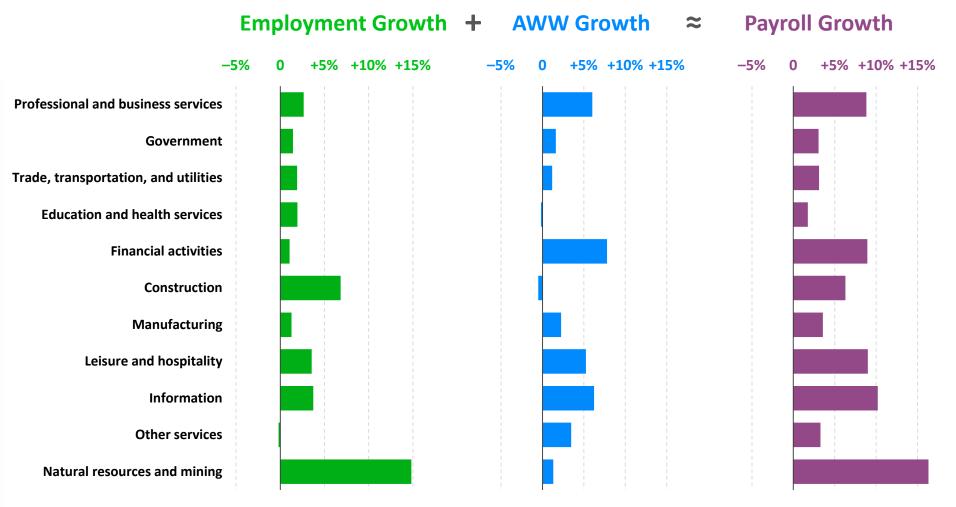
Employment Growth Has Been Strong Across Sectors in the Past Year

	Ye	ear-Over-Year Percent Change, 2018 Q1	Sector Size	% Share	1-Year Change
CO US	+3.6 +2.0		340,900	13	+11,700
CO US	+6.8 +3.5		171,900	6	+11,000
CO US	+2.6 +2.5		419,900	15	+10,800
CO US	+1.9 +0.9		467,800	17	+8,700
CO US	+1.9 +2.0		337,600	12	+6,500
CO US	+1.4 +0.0		439,900	16	+6,200
CO US	+14.8 +6.6		31,500	1	+4,100
CO US	+3.7 -1.7		74,200	3	+2,700
CO US	+1.3 +1.8		145,400	5	+1,900
CO US	+1.1 +1.6		168,200	6	+1,700
CO US	-0.2 +1.6		112,500	4	-200
	CO US CO CO US CO	CO +3.6 US +2.0 CO +6.8 US +3.5 CO +2.6 US +2.5 CO +1.9 US +0.9 CO +1.9 US +2.0 CO +1.4 US +0.0 CO +1.4 US +6.6 CO +3.7 US -1.7 CO +1.3 US +1.8 CO +1.1 US +1.6 CO -0.2	US +2.0 CO +6.8 US +3.5 CO +2.6 US +2.5 CO +1.9 US +0.9 CO +1.9 US +2.0 CO +1.4 US +0.0 CO +14.8 US +6.6 CO +3.7 US -1.7 CO +1.3 US +1.8 CO +1.1 US +1.6 CO -0.2	Year-Over-Year Percent Change, 2018 Q1 CO +3.6 US +2.0 340,900 CO +6.8 US +3.5 171,900 CO +2.6 US +2.5 419,900 CO +1.9 US +0.9 337,600 CO +1.9 US +0.0 337,600 CO +1.4 US +0.0 439,900 CO +1.4 US +6.6 74,200 CO +1.3 US +1.8 145,400 CO +1.1 US +1.6 168,200 CO -0.2 112,500	CO +3.6 US +2.0 340,900 Price (see the content of the co

Employment numbers are rounded to the nearest hundred Year-over-year percentage change; frequency of observation: quarterly; 2018 Q1 Sources: US Bureau of Labor Statistics, Moody's Analytics, and NCCI



Colorado's Payroll Growth Decomposition by Sector



AWW = Average Weekly Wage 2018 Q1 year-over-year percentage change; sectors are in descending order by the volume of state payroll amounts Sources: US Bureau of Labor Statistics, Bureau of Economic Analysis, Moody's Analytics, and NCCI



Headline Unemployment Rate

Unemployment Rate Is Below the National Rate

Percent

6





Headline Unemployment Rate, seasonally adjusted Frequency of observation: monthly; latest available data point: June 2018 Source: US Bureau of Labor Statistics (BLS), www.bls.gov



Colorado's Labor Market

- Colorado's unemployment rate is below the US rate
- Payroll growth exceeds the national average, driven by strong increases in both wages and employment
 - The high growth rate in the Professional and Business Services sector is particularly remarkable considering the sector has the largest payroll in the state
 - Payroll expanded for all economic sectors, with several increasing by well over 5%
- Employment growth is above the US rate
 - Many economic sectors grew faster than the national average
 - Employment in the Natural Resources and Mining sector increased by more than twice the national average





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The Data Connection Video



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Legislative Issues

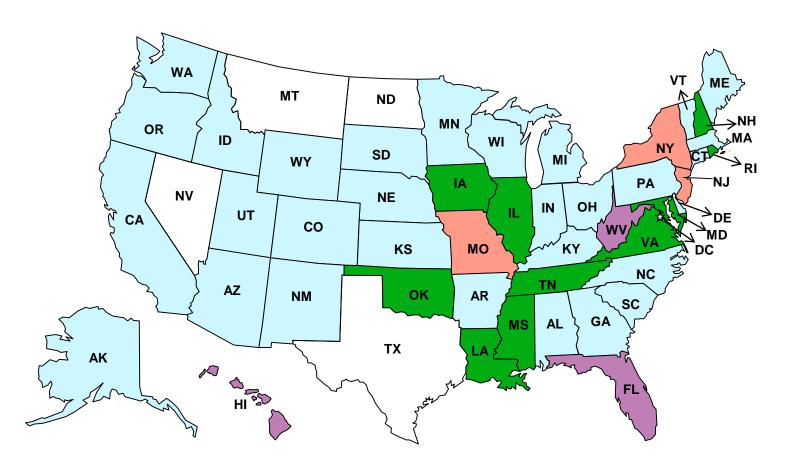
Legislative Overview for 2018

As of June 30, 2018:

- NCCI has tracked approximately 814 state and federal workers compensation-related bills
- 462 of the bills are in NCCI states
- 76 bills have been enacted (includes all jurisdictions and federal)



2018 Workers Compensation Legislative Activity



States Not in Session

0-10 Bills Introduced 11–20 Bills Introduced

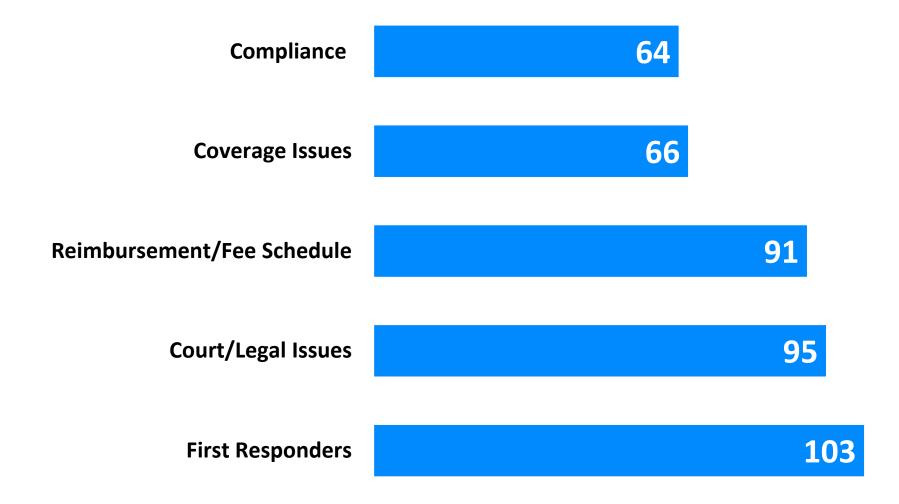
21-30 Bills Introduced

More Than 30 Bills Introduced



Top Five WC Legislative Trends in 2018

Number of Bills by Category





NCCI's Engagement at the Federal Level

NCCI works with Congress and federal agencies to educate and inform federal public policymakers on the impact of legislative and regulatory issues on the state-based workers compensation system.





NCCI's Engagement at the Federal Level (cont'd)

NCCI provides information and insights to several federal agencies, including:

- US Department of Labor (USDOL)
- National Institute for Occupational Safety and Health (NIOSH)
- Government Accountability
 Office (GAO)
- US Department of the Treasury





Federal Insurance Office— Report on TRIP Effectiveness

Key findings:

- The Terrorism Risk Insurance
 Program (TRIP) is effective in
 making terrorism risk insurance
 available and affordable
- TRIP has not had the effect of discouraging or impeding property/casualty insurance
- TRIP serves as an important backstop for workers compensation insurance





State Legislative Activity

- HB 18-1308—Workers' Compensation Out-of-State Workers Temporarily in Colorado (effective April 30, 2018)
- HB 18-1429—Workers' Compensation Cash Fund Maximum Reserve Exemption (effective June 6, 2018)
- SB 18-178—Similar Coverage Independent Commercial Vehicles (effective August 8, 2018)





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Opioids and Workers Compensation

What Is a Prescription Opioid?

- Prescription opioids are a class of drugs used to treat moderate to severe pain, particularly chronic, intractable pain
- Prescription opioids include oxycodone (OxyContin®), hydrocodone (Vicodin®), and morphine
- Opioids bind to and activate opioid receptors on cells in the brain and body
 - Pain signals are blocked, and large amounts of dopamine are released
 - Misuse of opioids can slow down breathing, which can lead to death



Background

- According to the US Department of Health and Human Services (HHS), in 2016:
 - 11.5 million Americans misused prescription opioids
 - 2.1 million reported an opioid disorder
 - 116 died every day from an opioid-related overdose
- According to the Centers for Disease Control and Prevention (CDC), in 2016:
 - 40% of opioid overdose deaths involved a prescription opioid
 - The number of overdose deaths involving prescription opioids was five times higher than in 1999
 - The US prescribing rate for opioids was 61 prescriptions per 100 persons





Impact on Workers Compensation

- According to NCCI's data, injured workers who were prescribed at least one prescription in 2016 received three times as many opioid prescriptions as the overall US opioid prescribing rate
- Workers compensation is directly impacted because injured workers are often prescribed opioids for pain





Opioids Are a Significant Share of WC Prescription Drug (Rx) Costs

Two in five Rx claims received an opioid in Service Year (SY) 2016

Claims

Costs

The average cost of an opioid Rx claim is four times that of a nonopioid Rx claim One in four dollars spent for prescriptions in workers compensation is for opioids

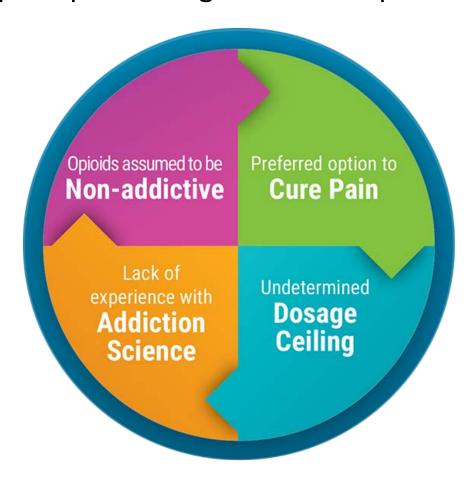
Spend

Source: NCCI's Medical Data Call, Service Year 2016; states included are AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VA, VT, and WI



How Did We Get Here?

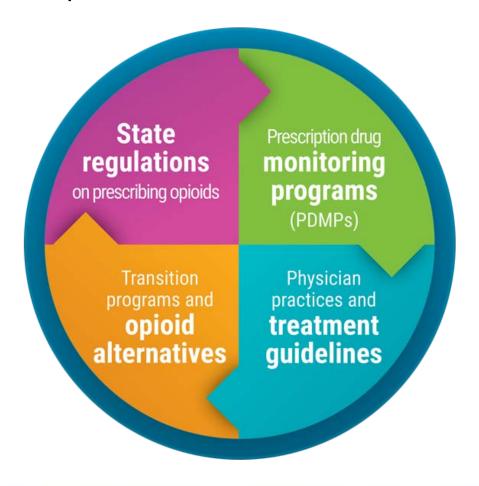
Physicians interviewed by NCCI pointed to four key factors that led to the rise in opioid prescribing and consumption:





State Regulators' Perspective

State regulators interviewed by NCCI shared that tools in the fight against the opioid epidemic include:





Legislative and Regulatory Activity

- In 2018, a large majority of states considered prescription drug legislation or regulatory changes, including:
 - Drug formularies
 - Limitation on physician dispensing and repackaged drugs
 - PDMPs
 - Prescription drug fee schedules

Federal:

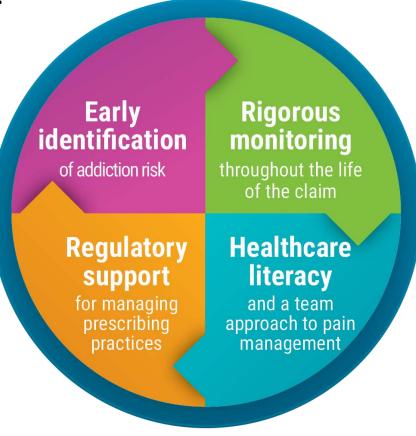
- New Initiative to Stop Opioid Abuse and Reduce Drug Supply and Demand
- CDC Guidelines provide recommendations for prescribing opioid pain medication
- Proposed legislation—Prescription Drug Monitoring Act of 2017



Claims Professionals' Perspective

Claims professionals interviewed by NCCI said that there are four key elements that are critical for successfully managing claims

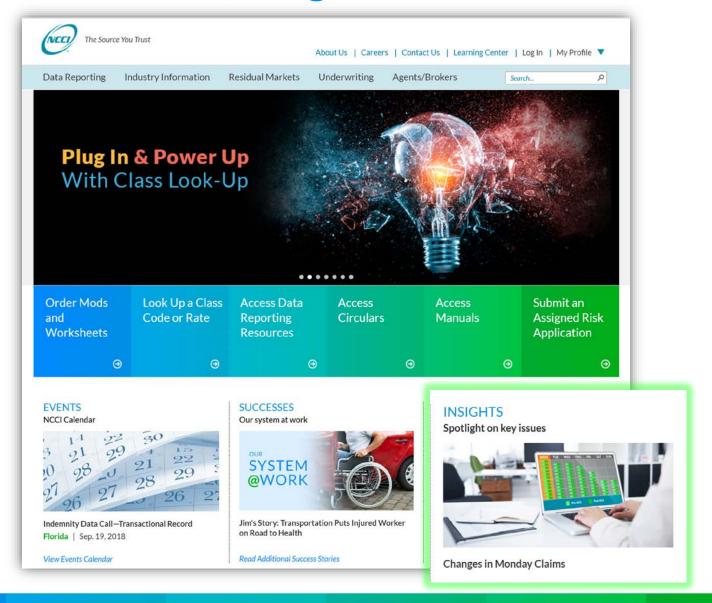
involving opioids:







Find It on ncci.com/Insights







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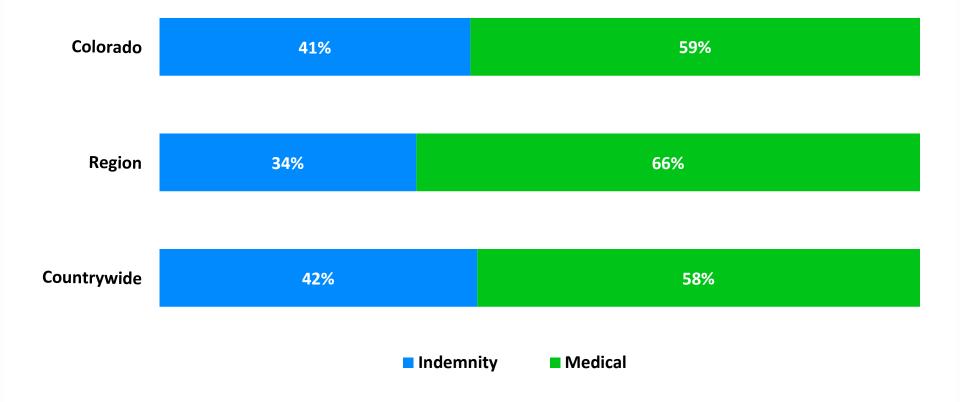
Closing Remarks



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Supplemental Information

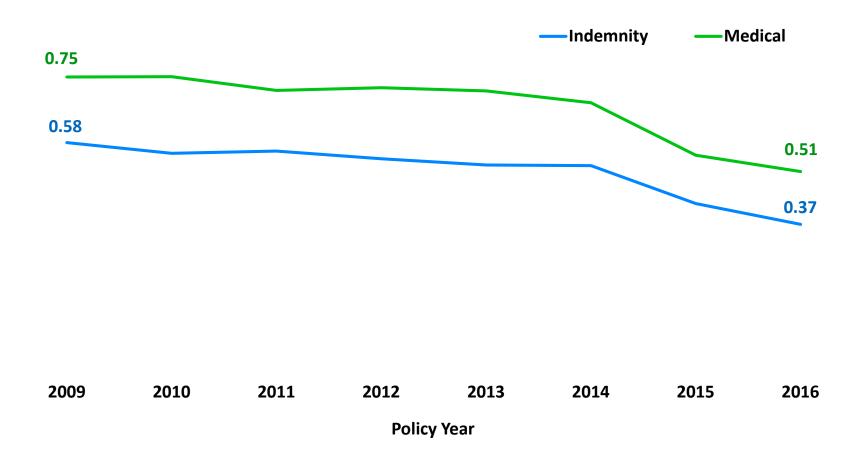
Total Benefit Costs in Colorado



Regional states are AZ, KS, NE, NM, OK, and UT Based on NCCI's financial data through 12/31/2017



Colorado Indemnity and Medical Loss Ratios



Based on NCCI's financial data through 12/31/2017 at current benefit level and developed to ultimate



Colorado Claim Frequency

Per Million of On-Leveled Premium



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

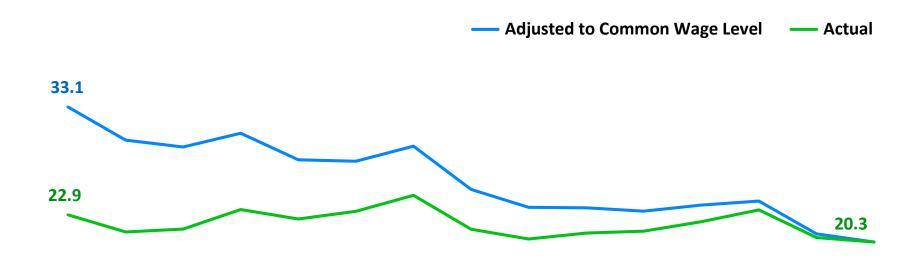
Policy Year

Based on NCCI's financial data through 12/31/2017, adjusted to a common wage level



Colorado Average Indemnity Claim Severity

Average Indemnity Claim Severity in \$ Thousands



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

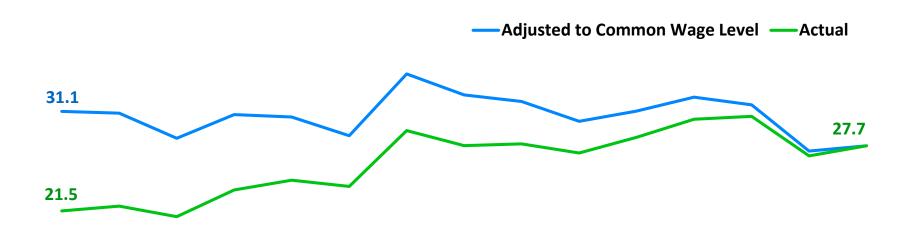
Policy Year

Based on NCCI's financial data through 12/31/2017 for lost-time claims at current benefit level and developed to ultimate



Colorado Average Medical Claim Severity

Average Medical Claim Severity in \$ Thousands



Policy Year

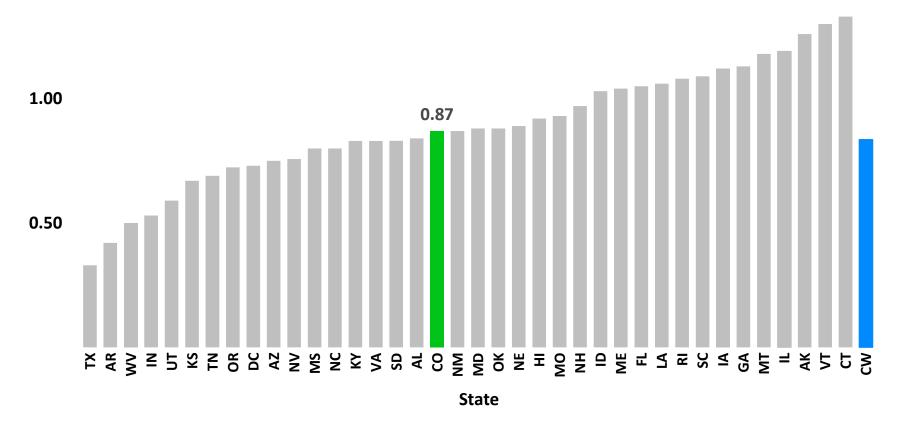
Based on NCCI's financial data through 12/31/2017 for lost-time claims at current benefit level and developed to ultimate



Average Voluntary Pure Loss Costs Using Colorado Payroll Distribution

Pure Loss Costs—All Classes

1.50

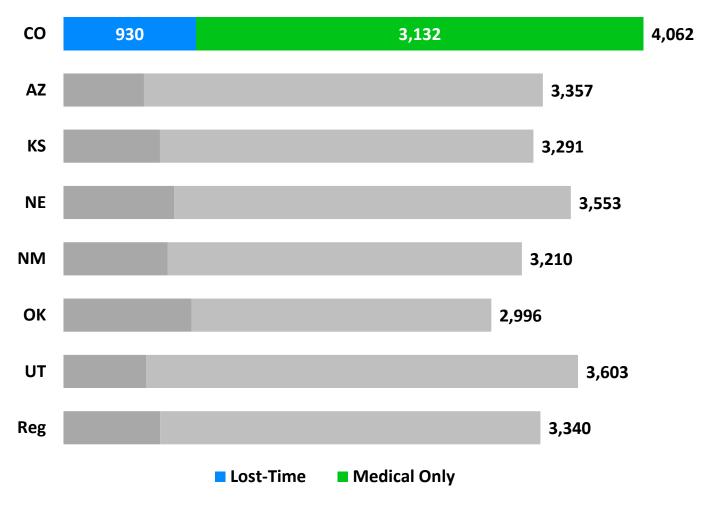


Based on approved rates and loss costs from filings using data valued as of 12/31/2016



Colorado Average Claim Frequency

Frequency per 100,000 Workers—All Claims

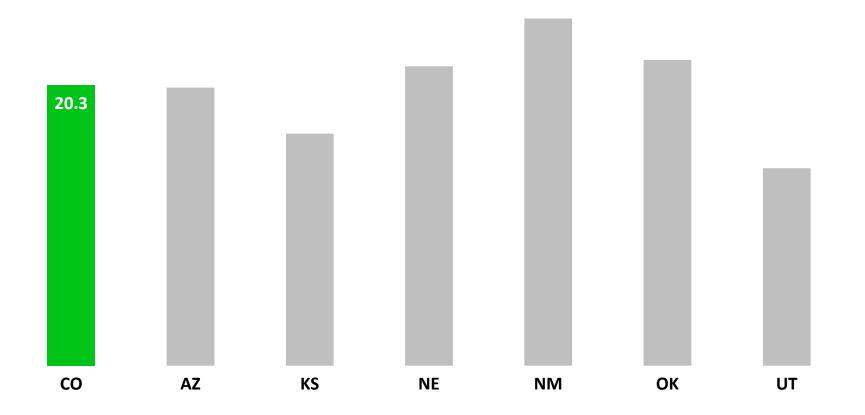


Based on NCCI's Statistical Plan data



Average Indemnity Claim Severity in the Region

Lost-Time Claim Severity in \$ Thousands

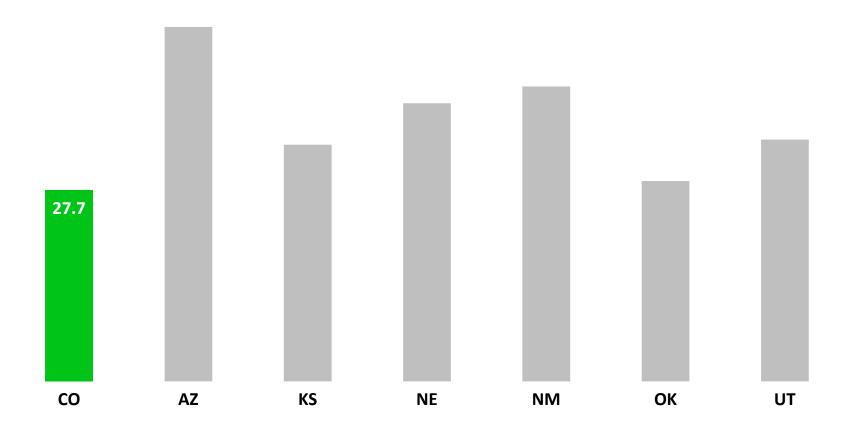


All states except CO are based on limited data Based on NCCl's financial data



Average Medical Claim Severity in the Region

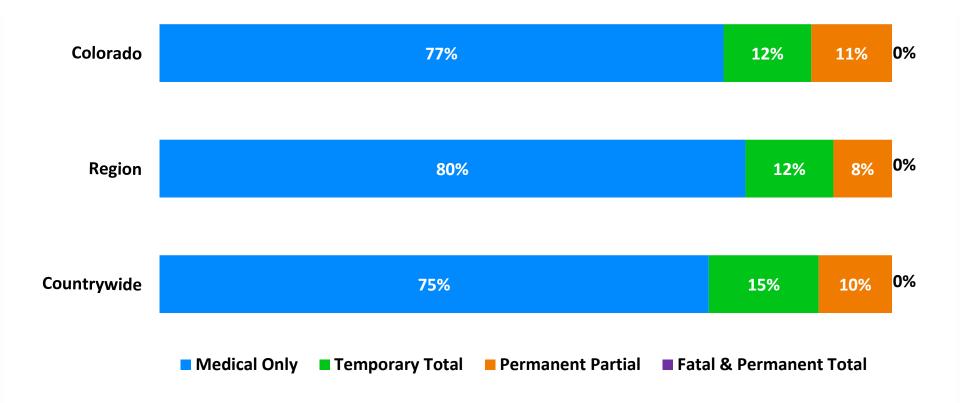
Lost-Time Claim Severity in \$ Thousands



All states except CO are based on limited data Based on NCCl's financial data



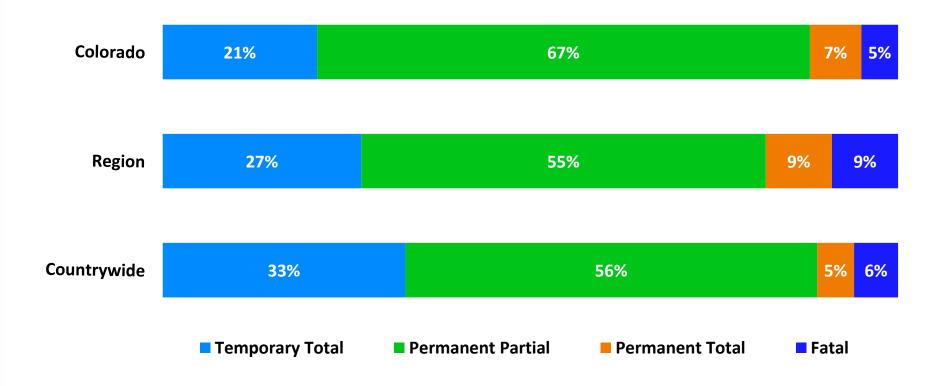
Colorado Distribution of Claims by Injury Type



Regional states are AZ, KS, NE, NM, OK, and UT Based on NCCI's **Statistical Plan** data for jurisdiction/claim type combinations for which three or more cases exist



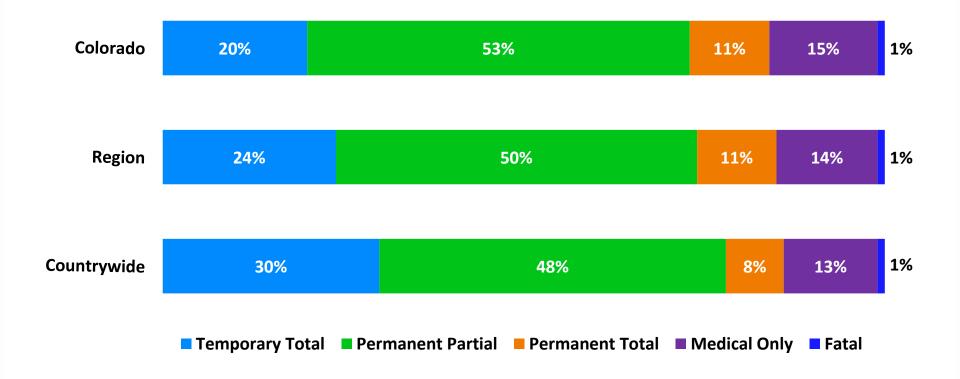
Colorado Indemnity Loss Distribution by Injury Type



Regional states are AZ, KS, NE, NM, OK, and UT Based on NCCI's **Statistical Plan** data for jurisdiction/claim type combinations for which three or more cases exist



Colorado Medical Loss Distribution by Injury Type



Regional states are AZ, KS, NE, NM, OK, and UT Based on NCCI's **Statistical Plan** data for jurisdiction/claim type combinations for which three or more cases exist





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- Assigned Risk Adjustment Program (ARAP)—An assigned risk market program that surcharges residual market risks based on the magnitude of their experience rating modification.
- Calendar Year (CY)—Experience of earned premium and loss transactions occurring within the calendar year beginning January 1, irrespective of the contractual dates of the policies to which the transactions relate and the dates of the accidents.
- Calendar-Accident Year (AY)—The accumulation of loss data on all accidents with the date of occurrence falling within a given calendar year. The premium figure is the same as that used in calendar year experience.
- Claim Frequency—The number of claims per unit of exposure; for example, the number of claims per million dollars of premium or per 100 workers.



- Claim Severity—The average cost of a claim. Severity is calculated by dividing total losses by the total number of claims.
- Combined Ratio—The sum of the (1) loss ratio, (2) expense ratio, and (3) dividend ratio for a given time period.
- **Detailed Claim Information (DCI)**—An NCCI Call that collects detailed information on an individual workers compensation lost-time claim basis, such as type of injury, whether or not an attorney was involved, and the timing of the claim's report to the carrier.
- Direct Written Premium (DWP)—The gross premium income adjusted for additional or return premiums, but excluding any reinsurance premiums.



- Indemnity Benefits—Payments by an insurance company to cover an injured worker's time lost from work. These benefits are also referred to as "wage replacement" benefits.
- Loss Ratio—The ratio of losses to premium for a given time period.
- **Lost-Time (LT) Claims**—Claims resulting in indemnity benefits (and usually medical benefits) being paid to or on behalf of the injured worker for time lost from work.
- Medical-Only Claims—Claims resulting in only medical benefits being paid on behalf of an injured worker.
- Net Written Premium (NWP)—The gross premium income adjusted for additional or return premiums and including any additions for reinsurance assumed and any deductions for reinsurance ceded.



- Permanent Partial (PP)—A disability that is permanent but does not involve a total inability to work. The specific definition and associated workers compensation benefits are defined by statute and vary by jurisdiction.
- Policy Year (PY)—The year of the effective date of the policy. Policy year financial results summarize experience for all policies with effective dates in a given calendar year period.
- Schedule Rating—A debit and credit plan that recognizes variations in the hazard-causing features of an individual risk.
- **Take-Out Credit Program**—An assigned risk program that encourages carriers to write current residual market risks in the competitive voluntary marketplace.
- Temporary Total (TT)—A disability that totally disables a worker for a temporary period of time.





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Appendix

NCCI's Workers Compensation Resources

- Financial Aggregate Calls
 - Used for aggregate ratemaking
- Statistical Plan for Workers Compensation and Employers Liability Insurance (Statistical Plan)
 - Used for class ratemaking
- Detailed Claim Information
 - In-depth sample of lost-time claims
- Policy Data
 - Policy declaration page information

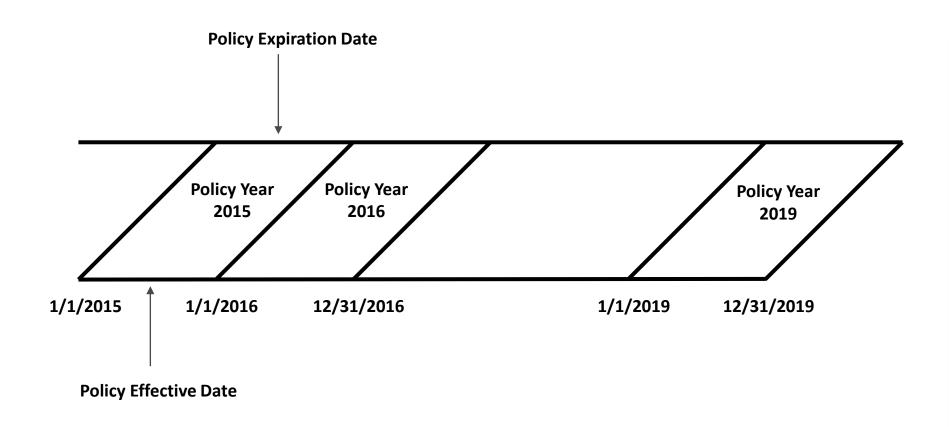


Financial Aggregate Calls

- Collected Annually
 - Policy and calendar-accident year basis
 - Statewide and assigned risk data
- Premiums, Losses, and Claim Counts
 - Evaluated as of December 31
- Purpose
 - Basis for overall aggregate rate indication
 - Research

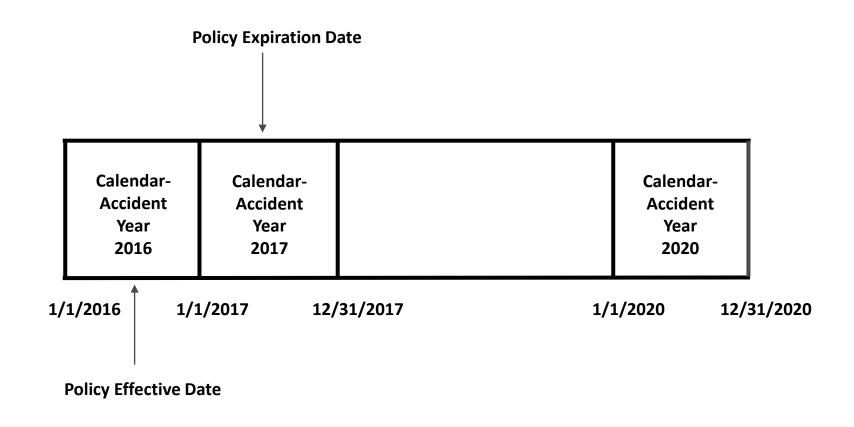


Policy Year Financial Aggregate Data





Calendar-Accident Year Financial Aggregate Data





Statistical Plan for Workers Compensation and Employers Liability Insurance (Statistical Plan) Data

- Experience by Policy Detail
 - Exposure, premium, and experience rating modifications
 - Individual claims by injury type
- Purposes
 - Classification relativities
 - Experience Rating Plan
 - Research



Valuation of Statistical Plan Data

