

Actuarial Committee

Meeting Agenda

Date	Time	Location	Staff Contact
March 16, 2020	9:30 AM	Teleconference	David M. Bellusci
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Released: March 9, 2020

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I. Approval of Minutes

Meeting held on December 5, 2019

II. Working Group Meeting Summaries

Actuarial Research Working Group Meeting held March 3, 2020

III. Unfinished Business

A. AC19-08-05: Review of Loss Development Tail Methodology

IV. New Business

A. AC20-03-01: First Quarter 2020 Review of Diagnostics

B. AC20-03-02: 12/31/2019 Experience – Review of Methodologies

V. Matters Arising at Time of Meeting

VI. Next Meeting Date: April 2, 2020

VII. Adjournment

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Actuarial Research Working Group

Meeting Summary

To: Participants of the Actuarial Research Working Group
From: Laura Carstensen
Date: March 9, 2020

RE: Summary of March 3, 2020 Meeting

Insurer Meeting Participants Were Reminded of the Antitrust Notice

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Discussion Topics

At the meeting, the following topics were discussed.

A. Experience Rating D-Ratio Credibility Constants

The Working Group was informed that the WCIRB has updated the methodology used to determine credibility values for use in computing classification D-ratios. The methods used to compute D-ratios and the current credibility values were reviewed. Staff presented a hindsight review of indications using the current methodology and noted that the results were undesirably volatile.

Staff summarized the Bühlmann credibility formula approach that was developed as an alternative to the current credibility approach along with its calculation. Staff noted that claim observations needed to be weighted in order for weighted mean classification D-ratios to equal their standard definition. Staff presented a final step in the calculation used to translate the indicated credibility constant from a total claim count to an indemnity claim count basis. A Working Group member asked if the constants could be determined using only indemnity claim data. Staff responded that it was possible, but that the calculation would not be consistent with the way that D-ratios are calculated in practice. Another Working Group member noticed an apparent inconsistency in the translation of the constant from a total claim count to an indemnity claim count basis. Staff subsequently investigated the concern and agreed that the translation should be changed. The impact of this change is very small.

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Staff presented the resulting indicated credibility constants. These constants followed a very consistent pattern over time. Additionally, year-to-year changes can be easily explained by examining the variance structure of the underlying data. Staff noted that the updated process typically gives more credibility to classification data in the D-ratio calculation. Staff showed that changes in final D-ratios were unbiased and noted that the largest changes were possible for classifications that were both medium-sized and with empirical D-ratios that were significantly different from their hazard group.

Staff presented the plan to update the credibility constants annually and to use unsmoothed values of the indicated constants, allowing the process to be completely data driven. The Working Group was advised that the impact of the changes in the D-ratio methodology on employer modifications will be determined for presentation to the Actuarial Committee and the Classification and Rating Committee. It was noted that the expected impacts on modifications were small.

B. Experience Rating Primary Threshold Update Process

The Working Group was informed that the WCIRB has developed a method to regularly update the expected loss ranges that determine the primary threshold used to calculate experience modifications.

Updated indications were presented. These were consistent with previous analysis, showing increasing primary thresholds by size of risk and indications of 100% primary credibility and 0% excess credibility. The previous data and smoothing methodology used to select the current primary thresholds was shown. Updated primary threshold selections were presented for all available time periods. Staff noted that the functional form used to smooth the final primary thresholds was being changed from a cubic function to a logistic function. The choice of function made little difference over the range of smoothed values, but the logistic smoothing will not allow unrealistic values when extrapolating outside of this range.

Staff noted that in the original development of the variable split plan, some excess credibility was indicated for the very largest risks, but not implemented as part of the plan. Staff presented updating findings showing that these indications were the result of constraining excess credibility to be non-negative. When unconstrained, excess credibility values were equally likely to be positive or negative. Given these findings, staff noted that no excess credibility was indicated for risks of any size.

Staff presented findings showing that the indicated primary threshold for a risk with a given amount of expected losses had generally drifted up over time. This drift was partially but not fully explained by changes in claim severity. This drift indicates a need to update the expected loss ranges on a regular basis. Staff indicated that it plans to examine the impact of this update to expected loss ranges for presentation to the Actuarial Committee and the Classification and Rating Committee.

Finally, the Working Group was reminded that scheduled research for 2020 will investigate the current eligibility standard, as well as potential alternative rating structures for small employers. Working Group members also suggested exploring potential updates to other plan parameters

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including the current \$175,000 loss limit, alternative approaches to reduce year-to-year volatility in experience modification and the current \$250 per claim "first aid" reduction. Staff advised the Working Group that these issues will be addressed with future research as time permits.

C. Loss Development for Classification Ratemaking

The Working Group was informed that staff has begun a comprehensive review of the WCIRB's classification ratemaking methodology. This is expected to be a multi-year process with staff beginning by reviewing alternatives to the current loss development methodology. In future years, staff plans to review other components of classification ratemaking.

Staff presented initial explorations into potential groupings based on claims characteristics and the correlations with development from first to second report level. Staff plans to re-optimize the current loss development group methodology as a base option and to build out 1-2 additional options for comparison. Staff requested feedback on potential alternative groupings. The Working Group indicated that limited loss development options should be explored prior to assessing alternative grouping approaches. The Working Group also indicated that exploring potential loss development groupings based on claims characteristics is promising and could help adjust class relativities to reflect systemwide changes in claims patterns. The Working Group also generally supported optimizing groupings based on open claims and handling development on closed claims separately.

Staff plans to explore potential groupings further based on feedback from the Working Group and will present 2-3 options for feedback at the next meeting.

Item AC19-08-05 Review of Loss Development Tail Methodology

For a number of years, the WCIRB's approach to projecting the loss development tail for indemnity and medical losses has been based on (a) using six-year average historical incurred age-to-age development from approximately 264 months to 420 months and (b) fitting an inverse power curve to age-to-age incurred loss development factors to compute the tail factor after 420 months. At the March 18, 2019 meeting, the Committee noted that incurred medical development after 120 months has shown an anomalous pattern for the last several calendar years, likely influenced by changes in pharmaceutical costs and other transitional effects of recent reforms.

At the August 1, 2019 meeting, the Committee reviewed an initial study of the loss development tail methodology which suggested that an approach based on an inverse power curve applied to paid loss development fit the data well, minimized the variance in the loss development tail factor, and did not show the recent anomalous pattern as compared to incurred loss development. However, it was unclear whether the factors that led to the selection of incurred loss development in lieu of paid development from accident years 1998 and prior, which was based on a comprehensive study conducted in 2014,¹ continued to apply.

At recent Actuarial Committee meetings, the Committee has also noted that the sharp acceleration in claim settlement rates over the last several years likely impacts the loss development tail projection. In the decision on the January 1, 2020 Pure Premium Rate Filing, the California Department of Insurance also noted that the recent increases in claim settlement rates likely impacts future period development. Given that the current Berquist-Sherman adjustment for changes in claim settlement rates does not contemplate future period development, the Committee recommended this issue be reviewed in 2020.

Analysis of Paid and Incurred Development

The approach to rely primarily on incurred loss development after 264 months was recommended by the Committee based on a 2014 study which identified a significant shift in the incurred-to-paid ratio observed in the mid-1990s. This shift was largely driven by the 1996 Minniear² decision as well as other factors significantly slowing the rate of medical payments during these years. Due to this dramatic shift in paid development patterns, the Committee recommended no longer using paid development factors to project ultimate loss ratios arising from accident years prior to 1998.

Exhibits 1.1 and 1.2 show the incurred-to-paid loss ratios for indemnity and medical, respectively, from 132 months through 360 months. Although the more recent ratios for medical (shaded in blue on Exhibit 1.2) have declined significantly over the last several years, they have not returned to the levels observed in the pre-Minniear period prior to 1998 (shaded in black on Exhibit 1.2). However, these recent incurred-to-paid loss ratios are no longer as stable as the immediate post-Minniear ratios observed in the 2014 analysis (shaded in red on Exhibit 1.2). This suggests that the distortion which led to basing the longer-term loss development projections on incurred development may not be as significant as observed in the 2014 study.

One of the factors that could be driving the recent decline in medical incurred-to-paid ratios is the recent decreases in pharmaceutical costs, which impacts older period development disproportionately. The decline in pharmaceutical payments over the last several years has been significant but gradual. However, a shift in case reserve levels to react to factors impacting pharmaceutical costs such as reforms and the opioid epidemic could be reflected quicker than the change in payment patterns. Exhibit 2 shows the incurred-to-paid medical ratios with the payments adjusted to the 2018 pharmaceutical cost level based on the same adjustment used in the WCIRB's current loss development projection. While the ratios

¹ See Item AC14-03-03 of the March 19, 2014 Actuarial Committee Agenda.

² Minniear v. Mount San Antonio Community College District (1996) 61 Cal. Comp. Cases 1055 (Appeals Board en banc opinion).

shown in Exhibit 2 still decline in recent years, the decline is not as sharp as shown in Exhibit 1.2, which was prior to reflecting the adjustment for declining pharmaceutical costs.

Staff conducted retrospective tests of incurred and paid development approaches for development in these later periods. These tests focused on the medical component since indemnity development is much smaller and more consistent over time at these later periods. Each accident year paid or incurred loss ratio was developed from a historical period (beginning with the December 31, 2012 evaluation) up through the December 31, 2018 evaluation for that accident year.³ The incurred method was based on a six-year average of age-to-age factors while the paid method was based on a three-year average of (unadjusted) age-to-age factors, which has been the WCIRB's standard approach for selecting development for these periods for many years. The developed loss ratios were compared to the reported incurred loss ratios for the accident year and target evaluation, with developed paid loss ratios adjusted to an incurred basis using the reported ratio of incurred losses to paid losses for that accident year at the target evaluation. The results of the retrospective tests for medical are shown in Exhibits 3.1 through 3.6.

Exhibits 4.1 and 4.2 summarize the results of the retrospective tests. Exhibit 4.1 shows the square root of the mean squared error by accident year and starting evaluation. Exhibit 4.2 shows the count of observations in which each method was more accurate than the other method. In general for this retrospective test, the paid development method consistently has lower average errors and was more accurate for a significantly greater number of observations. This suggests that paid development has been a more accurate predictor of the actual development for this period.⁴ However, this test was based on accident years 2005 and earlier (for which the actual development at older periods is available). Significant shifts in the claims environment have occurred since that time, such as Senate Bill No. 863 (SB 863), which has helped drive a significant acceleration in claim settlement rates. As a result, the unadjusted paid or incurred age-to-age development from these older accident years may not be the most appropriate predictor of development on more recent accident years.

Impact of Claim Settlement Rate Changes on Later Period Development

Indemnity claim settlement rates have increased steadily over the last several years. In 2017, the WCIRB studied the claim settlement rate increase and found that the Berquist-Sherman approach to adjust paid loss development generally increased the accuracy of the projection during a period of significant claim settlement rate change. However, it was noted that this approach only accounts for changes in development patterns during the period of claim settlement rate change and does not account for changes in future period development arising from the claim settlement shift. Staff reviewed potential adjustments for later development periods when claim settlement rates change and found that, particularly for medical, an adjustment for this issue was not appropriate at that time due to reforms and other factors that have significantly shifted payment patterns over time.⁵

Exhibits 5 through 7.2 show an updated analysis of indemnity claim settlement rate changes compared to later period development. Exhibit 5 shows changes in reported indemnity claim settlement rates by accident year and maturity, with changes above 1.5% highlighted for emphasis. Exhibits 6.1 and 6.2 show how the comparison of the projected calendar year paid development at the period of claim settlement rate change and the actual paid development emerging for the accident year is computed. For example, on Exhibit 6.2 the paid medical development for calendar year 2010 from 12 to 84 months of 5.622 is the latest year projection of accident year 2010 from 12 months. This will compare to the actual accident year 2010 development that emerged from 12 to 84 months of 6.198. Exhibits 7.1 and 7.2 show the difference between projected paid development and actual paid development. The lower section of Exhibits 7.1 and 7.2 show how these differences are correlated with changes in indemnity claim settlement rates (shown in Exhibit 5).

³ For example, accident year 1999 was developed from 156, 168, etc. months up through 240 months.

⁴ Staff also tested a 3-year average incurred method (which is consistent with the selection for paid) which did not significantly increase the accuracy of the incurred method.

⁵ See Item AC17-03-03 of the June 16, 2017 Actuarial Committee Agenda.

As shown in Exhibits 7.1 and 7.2, at earlier evaluations, there does not appear to be significant correlation with claim settlement rate changes and changes in longer-term loss development patterns. However, at around 48 months there are indications of significant negative correlation. As noted in the 2017 study, the accident years with available data at later maturities have been significantly impacted by several reforms and changes in the workers' compensation system, such as the Minnear decision, the 2002 through 2004 reforms, and SB 863, which makes these comparisons to later periods challenging. For the most recent years included in this study (2011 through 2013) which include some of the recent claim settlement increase period, there is some corresponding decreases in the development for the immediate following evaluations.

In 2019, the WCIRB studied the impact of claim settlement rate changes on paid ALAE development which did find significant negative correlation between early period claim settlement rate changes and changes in later period paid ALAE development.⁶ Paid ALAE development has been much less impacted by reforms and other changes to the system compared to benefit payments. As a result of the study, the Committee recommended an approach to adjust future paid ALAE development during periods of significant claim settlement rate changes based on a regression model. Although the correlation between early claim settlement rate changes and later period paid medical development was not as significant as found in the ALAE development study, staff attempted to fit the model to medical losses. However, as expected, the fits of this model were not significant.

To further analyze the impact of claim settlement rate changes on future medical development, staff reviewed medical transaction data to determine if the recent acceleration in claim settlement rates has resulted in fewer claims receiving payments at later maturities. If many recently settled claims had remained open mostly for lien or ALAE payments, they may not be receiving significant volumes of medical services and may either (a) not be reported in the medical transaction data or (b) be reported with small amounts of medical services, thus dampening the incremental paid medical severity. Their closing would result in a change in the number of open claims and may result in a settlement payment but may not significantly impact the future medical payment patterns as would be observed in medical transaction data.

Exhibit 8.1 shows reported indemnity claim settlement rates based on aggregate financial data. Exhibit 8.2 shows the ratio of the number of claims receiving paid transactions in medical transaction data compared to the overall number of open indemnity claims reported in aggregate financial data. In general, as claim settlement rates change, there appears to be a corresponding change in the percentage of open claims receiving payments. However, the relationship is not always consistent across calendar years and development periods.

Exhibit 9.1 shows incremental paid medical per open indemnity claim based on aggregate financial data. Exhibit 9.2 shows incremental paid medical per claims with medical transactions from transaction data as well as the relativity to the comparable severity based on aggregate financial data shown in Exhibit 9.1. Although the proportion of open claims receiving payment has increased during the recent period of claim settlement rate acceleration (see Exhibits 8.1 and 8.2), the average paid per claim with transactions has declined significantly. As shown in the relativities in Exhibit 9.2, the decrease in medical transaction severity is at a higher rate than the corresponding changes from aggregate financial data. This may be related to increases in claim settlement payments, which are only included in aggregate financial data, or a disproportionate impact of the recent pharmaceutical cost declines in medical transaction data. Staff is continuing to review these potential causes. However, this data at least suggests that the decrease in the number of claims remaining open at later periods is not resulting in higher incremental paid severities as would be the case if a significant number of these closed claims were receiving no or very low incremental payments.

At the meeting, staff will discuss potential next steps for the study and solicit Committee feedback.

⁶ See Item AC19-08-04 of the August 1, 2019 Actuarial Committee Agenda.

Indemnity Incurred Loss to Paid Loss Ratio

Accident Year	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360
1993	1.041	1.037	1.034	1.031	1.031	1.025	1.021	1.018	1.017	1.014	1.014	1.012	1.011	1.010	1.009	1.008	1.007	1.006	1.004	1.004
1994	1.059	1.050	1.043	1.041	1.031	1.028	1.026	1.023	1.021	1.020	1.018	1.016	1.015	1.013	1.012	1.010	1.009	1.007	1.005	1.004
1995	1.066	1.057	1.054	1.046	1.042	1.039	1.035	1.034	1.029	1.024	1.023	1.020	1.018	1.016	1.013	1.012	1.010	1.007	1.006	1.005
1996	1.070	1.063	1.053	1.046	1.040	1.037	1.034	1.032	1.028	1.024	1.021	1.020	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
1997	1.068	1.057	1.051	1.047	1.042	1.037	1.033	1.029	1.026	1.022	1.020	1.019	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
1998	1.068	1.057	1.051	1.046	1.041	1.036	1.030	1.027	1.024	1.022	1.020	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
1999	1.058	1.049	1.043	1.039	1.034	1.030	1.026	1.022	1.019	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2000	1.054	1.049	1.043	1.036	1.033	1.030	1.026	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2001	1.059	1.053	1.047	1.041	1.036	1.030	1.026	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2002	1.053	1.044	1.038	1.033	1.029	1.026	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2003	1.068	1.060	1.052	1.046	1.040	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2004	1.074	1.065	1.057	1.049	1.043	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2005	1.074	1.063	1.056	1.048	1.043	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2006	1.072	1.059	1.052	1.048	1.043	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2007	1.064	1.054	1.052	1.048	1.043	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005
2008	1.060	1.054	1.052	1.048	1.043	1.035	1.022	1.024	1.020	1.018	1.018	1.018	1.017	1.016	1.013	1.012	1.010	1.007	1.006	1.005

Source: WCIRB aggregate financial data.

Medical Incurred Loss to Paid Loss Ratio

Accident Year	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360
Age (in months)	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360
1993	1.109	1.111	1.109	1.106	1.105	1.108	1.105	1.102	1.101	1.106	1.097	1.083	1.075	1.065	1.058	1.051				
1994	1.140	1.133	1.133	1.122	1.112	1.120	1.119	1.118	1.110	1.105	1.100	1.091	1.078	1.065	1.062					
1995	1.176	1.161	1.162	1.168	1.166	1.150	1.143	1.144	1.121	1.114	1.100	1.097	1.074	1.066						
1996	1.163	1.156	1.152	1.145	1.139	1.137	1.126	1.117	1.108	1.097	1.086	1.078	1.065							
1997	1.176	1.176	1.165	1.159	1.155	1.141	1.131	1.117	1.108	1.098	1.088	1.078	1.069							
1998	1.189	1.178	1.173	1.166	1.149	1.138	1.132	1.118	1.108	1.093	1.085									
1999	1.166	1.158	1.145	1.138	1.132	1.118	1.100	1.086	1.071	1.063										
2000	1.154	1.148	1.146	1.132	1.119	1.104	1.088	1.075	1.065											
2001	1.173	1.165	1.151	1.137	1.119	1.103	1.085	1.076												
2002	1.154	1.137	1.125	1.105	1.089	1.077	1.066													
2003	1.158	1.139	1.121	1.101	1.086	1.075														
2004	1.156	1.136	1.117	1.097	1.082															
2005	1.143	1.126	1.104	1.088																
2006	1.127	1.105	1.095																	
2007	1.120	1.100																		
2008	1.102																			

Source: WCIRB aggregate financial data.

Medical Incurred Loss to Paid Loss Ratio Adjusted for Changes in Pharmaceutical Cost Levels

Accident Year	Age (in months)																							
	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360				
1985	1.059	1.052	1.044	1.039	1.038	1.039	1.037	1.039	1.037	1.040	1.044	1.042	1.037	1.034	1.034	1.034	1.031	1.032	1.038	1.036	1.035			
1986	1.061	1.054	1.046	1.043	1.042	1.043	1.043	1.050	1.050	1.049	1.045	1.043	1.042	1.045	1.045	1.045	1.046	1.052	1.046	1.043				
1987	1.073	1.059	1.053	1.053	1.053	1.053	1.067	1.064	1.064	1.055	1.046	1.044	1.051	1.045	1.047	1.047	1.048	1.049	1.046	1.040				
1988	1.053	1.047	1.051	1.048	1.048	1.048	1.052	1.051	1.049	1.043	1.044	1.045	1.045	1.041	1.046	1.044	1.042	1.041	1.036	1.031				
1989	1.057	1.057	1.058	1.058	1.072	1.066	1.062	1.055	1.056	1.055	1.056	1.056	1.056	1.064	1.055	1.052	1.047	1.043	1.038	1.032				
1990	1.051	1.050	1.054	1.057	1.056	1.051	1.050	1.047	1.048	1.051	1.051	1.048	1.050	1.049	1.041	1.040	1.037	1.033	1.028					
1991	1.054	1.055	1.056	1.057	1.056	1.059	1.055	1.055	1.055	1.055	1.051	1.055	1.051	1.047	1.044	1.040	1.035	1.029						
1992	1.072	1.082	1.083	1.081	1.073	1.077	1.071	1.066	1.063	1.063	1.070	1.064	1.062	1.056	1.050	1.044	1.038							
1993	1.109	1.111	1.109	1.106	1.105	1.108	1.105	1.102	1.101	1.120	1.109	1.094	1.085	1.073	1.065	1.058								
1994	1.140	1.133	1.133	1.122	1.112	1.120	1.119	1.118	1.121	1.117	1.112	1.102	1.087	1.072	1.069									
1995	1.176	1.161	1.162	1.168	1.166	1.150	1.143	1.161	1.136	1.128	1.112	1.109	1.083	1.074										
1996	1.163	1.156	1.152	1.145	1.139	1.137	1.140	1.132	1.122	1.109	1.097	1.088	1.073											
1997	1.176	1.176	1.175	1.159	1.155	1.156	1.148	1.132	1.126	1.110	1.100	1.088	1.077											
1998	1.189	1.178	1.173	1.156	1.168	1.159	1.153	1.137	1.126	1.108	1.099													
1999	1.166	1.158	1.145	1.155	1.151	1.135	1.116	1.100	1.083	1.074														
2000	1.154	1.148	1.160	1.150	1.137	1.120	1.101	1.086	1.075															
2001	1.173	1.175	1.166	1.155	1.134	1.116	1.096	1.085																
2002	1.160	1.149	1.139	1.117	1.099	1.086	1.073																	
2003	1.172	1.154	1.135	1.112	1.096	1.083																		
2004	1.172	1.149	1.129	1.106	1.090																			
2005	1.158	1.140	1.115	1.098																				
2006	1.140	1.116	1.104																					
2007	1.132	1.110																						
2008	1.111																							

Source: WCIRB aggregate financial data.
Ratios are adjusted for shifts in pharmaceutical costs for 2012 to 2018 evaluations.

Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2012 Evaluation

Incurred Development Method (6-Year Average)														
Accident Year	108	120	132	144	156	168	180	192	204	216	228	240	252	264
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
1998														
1999														
2000														
2001														
2002														
2003														
2004														
2005														

Root Mean Squared Error: 0.011

Paid Development Method (3-Year Average)														
Accident Year	108	120	132	144	156	168	180	192	204	216	228	240	252	264
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
1998														
1999														
2000														
2001														
2002														
2003														
2004														
2005														

Root Mean Squared Error: 0.004

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

**Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2013 Evaluation**

Incurred Development Method (6-Year Average)										
Accident Year	120	132	144	156	168	180	192	204	216	Difference from Actual Incurred Loss Ratio at Age
1986										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										

Root Mean Squared Error: 0.012

Paid Development Method (3-Year Average)										
Accident Year	120	132	144	156	168	180	192	204	216	Difference from Actual Incurred Loss Ratio at Age
1986										
1987										
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										

Root Mean Squared Error: 0.003

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

**Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2014 Evaluation**

Incurred Development Method (6-Year Average)																						
Accident	Difference from Actual Incurred Loss Ratio at Age																					
Year	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1986																						
1987																						
1988																						
1989																						
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1997																						
1998																						
1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						

Root Mean Squared Error: 0.010

Paid Development Method (3-Year Average)																						
Accident	Difference from Actual Incurred Loss Ratio at Age																					
Year	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384
1986																						
1987																						
1988																						
1989																						
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1997																						
1998																						
1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						

Root Mean Squared Error: 0.003

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

**Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2015 Evaluation**

Incurred Development Method (6-Year Average)																						
Accident Year	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396
1986																						
1987																						
1988																						
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2001																						
2002																						
2003																						
2004																						
2005																						

Root Mean Squared Error: 0.006

Paid Development Method (3-Year Average)																						
Accident Year	144	156	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396
1986																						
1987																						
1988																						
1989																						
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1998																						
1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						

Root Mean Squared Error: 0.003

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

**Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2016 Evaluation**

Incurred Development Method (6-Year Average)														
Accident Year	156	168	180	192	204	216	228	240	252	264	276	288	300	312
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
1998														
1999														
2000														
2001														
2002														
2003														
2004														
2005														

Root Mean Squared Error: 0.004

Paid Development Method (3-Year Average)														
Accident Year	156	168	180	192	204	216	228	240	252	264	276	288	300	312
1986														
1987														
1988														
1989														
1990														
1991														
1992														
1993														
1994														
1995														
1996														
1997														
1998														
1999														
2000														
2001														
2002														
2003														
2004														
2005														

Root Mean Squared Error: 0.002

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

**Retrospective Testing of Later Period Medical Development
Projected from the December 31, 2017 Evaluation**

Incurred Development Method (6-Year Average)																						
Accident Year	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396	408	420
1986																						
1987																						
1988																						
1989																						
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1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						
Root Mean Squared Error: 0.001																						
Paid Development Method (3-Year Average)																						
Accident Year	168	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	360	372	384	396	408	420
1986																						
1987																						
1988																						
1989																						
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1998																						
1999																						
2000																						
2001																						
2002																						
2003																						
2004																						
2005																						
Root Mean Squared Error: 0.000																						

Source: WCIRB aggregate financial data
Paid loss ratios are converted to an incurred basis using the reported ratio of incurred losses to paid losses at the target age.

Root Mean Squared Error of Retrospective Tests of Medical Development

Incurred Development Method (6-Year Average)

Accident	Starting Evaluation						All
Year	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Evaluations
1986	0.001	0.001	0.002	0.001	0.002	0.002	0.002
1987	0.001	0.002	0.003	0.002	0.000	0.000	0.002
1988	0.003	0.003	0.003	0.002	0.001	0.000	0.003
1989	0.004	0.003	0.004	0.003	0.002	0.001	0.003
1990	0.006	0.006	0.003	0.003	0.002	0.001	0.004
1991	0.005	0.005	0.004	0.004	0.003	0.002	0.004
1992	0.004	0.003	0.003	0.002	0.001	0.001	0.003
1993	0.004	0.005	0.004	0.002	0.001	0.001	0.004
1994	0.004	0.004	0.005	0.004	0.002	0.001	0.004
1995	0.008	0.006	0.006	0.004	0.005	0.001	0.006
1996	0.007	0.007	0.007	0.005	0.003	0.001	0.006
1997	0.015	0.016	0.013	0.008	0.004	0.002	0.013
1998	0.013	0.012	0.013	0.007	0.006	0.000	0.011
1999	0.020	0.022	0.019	0.011	0.006	0.001	0.018
2000	0.024	0.025	0.021	0.015	0.007	0.000	0.021
2001	0.018	0.019	0.018	0.011	0.006	0.001	0.016
2002	0.018	0.018	0.015	0.009	0.003	0.001	0.015
2003	0.012	0.012	0.009	0.006	0.003	0.000	0.010
2004	0.009	0.009	0.007	0.005	0.003	0.001	0.007
2005	0.008	0.008	0.006	0.004	0.003	0.001	0.007
All AY	0.011	0.012	0.010	0.006	0.004	0.001	0.010

Paid Development Method (3-Year Average)

Accident	Starting Evaluation						All
Year	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Evaluations
1986	0.002	0.003	0.002	0.002	0.001	0.001	0.002
1987	0.001	0.001	0.001	0.000	0.000	0.000	0.001
1988	0.000	0.001	0.001	0.000	0.000	0.000	0.000
1989	0.001	0.001	0.001	0.001	0.000	0.000	0.001
1990	0.002	0.002	0.002	0.001	0.001	0.000	0.002
1991	0.002	0.002	0.002	0.001	0.000	0.000	0.002
1992	0.000	0.001	0.000	0.000	0.001	0.000	0.001
1993	0.004	0.002	0.001	0.001	0.001	0.000	0.002
1994	0.004	0.002	0.001	0.001	0.001	0.000	0.003
1995	0.011	0.006	0.003	0.003	0.003	0.000	0.007
1996	0.007	0.003	0.001	0.002	0.001	0.000	0.004
1997	0.003	0.001	0.004	0.005	0.003	0.001	0.003
1998	0.003	0.002	0.004	0.005	0.002	0.001	0.003
1999	0.003	0.002	0.003	0.004	0.002	0.001	0.003
2000	0.003	0.006	0.008	0.008	0.004	0.001	0.006
2001	0.003	0.002	0.004	0.004	0.002	0.000	0.003
2002	0.003	0.005	0.005	0.005	0.003	0.001	0.004
2003	0.003	0.002	0.002	0.002	0.001	0.000	0.002
2004	0.003	0.001	0.001	0.001	0.001	0.000	0.002
2005	0.005	0.001	0.001	0.001	0.000	0.000	0.003
All AY	0.004	0.003	0.003	0.003	0.002	0.000	0.003

Source: WCIRB aggregate financial data

Note: The number of observations decreases as the evaluation increases, resulting in overall lower error terms over time.

Observation Count of More Accurate Medical Development Method

Incurred Development Method (6-Year Average)

Accident	Starting Evaluation						All
Year	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Evaluations
1986	2	3	1	1	1	0	8
1987	3	1	0	0	1	1	6
1988	0	0	1	0	0	1	2
1989	1	1	0	0	0	0	2
1990	1	0	1	0	0	0	2
1991	0	0	0	0	0	0	0
1992	1	0	0	0	1	0	2
1993	3	0	0	0	1	0	4
1994	4	2	0	0	0	0	6
1995	6	4	0	0	0	0	10
1996	5	1	0	0	0	0	6
1997	1	0	0	0	0	0	1
1998	1	0	0	1	0	1	3
1999	1	0	0	0	0	1	2
2000	1	0	0	0	0	1	2
2001	2	1	0	0	0	0	3
2002	1	0	0	0	0	0	1
2003	2	0	0	0	0	0	2
2004	2	0	0	0	0	0	2
2005	3	0	0	1	0	0	4
All AY	40	13	3	3	4	5	68

Paid Development Method (3-Year Average)

Accident	Starting Evaluation						All
Year	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	Evaluations
1986	1	0	2	2	1	1	7
1987	1	3	4	3	1	0	12
1988	5	5	3	3	2	0	18
1989	5	4	4	3	2	1	19
1990	5	5	3	3	2	1	19
1991	6	5	4	3	2	1	21
1992	5	5	4	3	1	1	19
1993	3	5	4	3	1	1	17
1994	2	3	4	3	2	1	15
1995	0	1	4	3	2	1	11
1996	1	4	4	3	2	1	15
1997	5	5	4	3	2	1	20
1998	5	5	4	2	2	0	18
1999	5	5	4	3	2	0	19
2000	5	5	4	3	2	0	19
2001	4	4	4	3	2	1	18
2002	5	5	4	3	2	1	20
2003	4	5	4	3	2	1	19
2004	4	5	4	3	2	1	19
2005	3	5	4	3	2	1	18
All AY	74	84	76	58	36	15	343

Source: WCIRB aggregate financial data

Note: The number of observations decreases as the evaluation increases.

Change in Reported Indemnity Claim Settlement Ratio¹

<u>AY</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	
1989							
1990	-3.4%	-3.7%	-2.7%	-1.7%	-0.5%	-0.3%	
1991	-8.4%	-4.7%	-2.7%	-1.2%	-1.2%	-0.2%	
1992	2.1%	4.2%	3.9%	2.2%	1.9%	0.7%	
1993	4.1%	6.8%	4.1%	2.7%	0.5%	0.0%	
1994	2.7%	0.3%	1.3%	-0.6%	-0.3%	-0.5%	
1995	-0.7%	0.5%	-2.4%	-0.7%	-0.8%	-0.9%	
1996	2.5%	-4.8%	-0.8%	-0.7%	-0.9%	-0.8%	
1997	-9.3%	-0.6%	-0.7%	-1.4%	-1.1%	-1.2%	
1998	0.0%	-2.0%	-3.3%	-2.4%	-2.1%	-1.6%	
1999	-1.7%	-2.9%	-1.6%	-2.0%	-1.7%	-1.2%	
2000	-1.2%	-0.7%	-2.7%	-3.1%	-2.4%	-1.6%	
2001	-2.9%	-5.9%	-6.8%	-5.4%	-3.9%	-1.0%	
2002	-0.8%	-1.4%	-1.5%	-0.7%	2.4%	0.4%	
2003	-1.4%	-3.3%	-1.9%	2.4%	0.3%	0.3%	
2004	-0.1%	1.3%	4.2%	2.2%	1.5%	0.5%	
2005	0.1%	3.4%	2.5%	1.9%	0.6%	0.2%	
2006	0.8%	0.5%	0.9%	-0.4%	-0.3%	-0.3%	
2007	0.9%	0.1%	-0.7%	-0.8%	-0.8%	-0.6%	
2008	0.4%	-1.7%	-1.8%	-1.5%	-1.1%	0.4%	
2009	-0.9%	-1.9%	-1.8%	-1.4%	-0.1%	-0.5%	
2010	0.2%	0.5%	0.7%	1.8%	1.5%	1.4%	
2011	0.7%	0.4%	1.5%	1.2%	1.1%	1.1%	
2012	-0.1%	0.8%	1.1%	1.4%	1.3%	1.3%	
2013	-0.6%	0.3%	1.2%	1.6%	1.8%	1.4%	
<u>Number of observations of claim settlement rate change:</u>							<u>All</u>
Downward	13	12	14	15	14	13	81
Upward	11	12	10	9	10	11	63

¹ For example, the value for 2010 at 12 months is equal to the arithmetic difference between the reported indemnity claim settlement rate for 2010 at 12 months and the reported indemnity claim settlement rate for 2009 at 12 months.

Red -	Arithmetic change in claim settlement rates by less than -1.0% (lighter color) or less than -1.5% (darker color).
Blue -	Arithmetic change in claim settlement rates by more than 1.0% (lighter color) or more than 1.5% (darker color).

Source: WCIRB aggregate financial data for December 31 evaluations.

Paid Indemnity Loss Development Factors

AY	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228
1989	2.938	1.856	1.322	1.140	1.076	1.043	1.028	1.015	1.010	1.006	1.005	1.004	1.003	1.002	1.003	1.005	1.002	1.002
1990	3.048	1.731	1.282	1.134	1.068	1.040	1.024	1.015	1.010	1.006	1.006	1.004	1.003	1.002	1.003	1.002	1.002	1.002
1991	2.999	1.701	1.297	1.130	1.070	1.038	1.024	1.014	1.011	1.008	1.005	1.004	1.004	1.003	1.004	1.003	1.002	1.002
1992	2.902	1.733	1.281	1.128	1.071	1.039	1.023	1.016	1.012	1.010	1.006	1.007	1.005	1.004	1.003	1.003	1.002	1.002
1993	2.958	1.708	1.278	1.124	1.067	1.040	1.025	1.021	1.013	1.010	1.007	1.004	1.004	1.004	1.004	1.003	1.002	1.003
1994	3.086	1.713	1.260	1.120	1.067	1.042	1.032	1.020	1.015	1.014	1.009	1.008	1.007	1.006	1.003	1.003	1.004	1.003
1995	3.327	1.694	1.246	1.116	1.069	1.049	1.030	1.023	1.016	1.010	1.012	1.008	1.007	1.005	1.005	1.003	1.005	1.005
1996	3.313	1.691	1.246	1.129	1.075	1.047	1.035	1.027	1.018	1.014	1.012	1.009	1.006	1.006	1.004	1.004	1.005	1.004
1997	3.472	1.661	1.251	1.130	1.080	1.052	1.034	1.025	1.018	1.016	1.012	1.008	1.007	1.006	1.006	1.005	1.004	1.003
1998	3.422	1.692	1.268	1.133	1.084	1.054	1.037	1.027	1.021	1.015	1.012	1.009	1.009	1.007	1.006	1.006	1.006	1.004
1999	3.506	1.724	1.282	1.146	1.089	1.055	1.036	1.025	1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.004	1.004	1.003
2000	3.511	1.744	1.304	1.151	1.088	1.052	1.035	1.025	1.016	1.013	1.010	1.009	1.008	1.007	1.006	1.004	1.004	1.004
2001	3.545	1.796	1.322	1.145	1.077	1.051	1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.006	1.005	1.005	1.005
2002	3.590	1.782	1.290	1.127	1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.007	1.006	1.005	1.005	1.005
2003	3.370	1.696	1.249	1.128	1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.006	1.005	1.005	1.007
2004	2.914	1.522	1.236	1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009	1.008	1.009	1.007	1.007	1.009
2005	2.734	1.512	1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013	1.010	1.010	1.008	1.008	1.008	1.010
2006	2.866	1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016	1.012	1.011	1.009	1.007	1.007	1.007	1.011
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020	1.016	1.013	1.009	1.007	1.006	1.004	1.004	1.013
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023	1.018	1.015	1.012	1.008	1.007	1.006	1.005	1.005	1.015
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031	1.023	1.021	1.015	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038	1.027	1.022	1.022	1.015	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2011	3.208	1.613	1.266	1.144	1.087	1.056	1.041	1.027	1.022	1.022	1.015	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2012	3.137	1.597	1.262	1.137	1.087	1.051	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2013	3.169	1.606	1.260	1.129	1.072	1.044	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2014	3.229	1.635	1.257	1.129	1.071	1.044	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2015	3.278	1.618	1.244	1.119	1.071	1.044	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2016	3.235	1.586	1.230	1.119	1.071	1.044	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2017	3.185	1.569	1.230	1.119	1.071	1.044	1.035	1.027	1.027	1.020	1.016	1.012	1.009	1.008	1.006	1.005	1.005	1.015
2018	3.109																	

Source: WCIRB aggregate financial data for December 31 evaluations.

Paid Medical Loss Development Factors

AY	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-168	168-180	180-192	192-204	204-216	216-228
1989	2.272	1.274	1.114	1.057	1.034	1.026	1.019	1.014	1.013	1.008	1.008	1.008	1.007	1.008	1.009	1.007	1.005	1.006
1990	2.479	1.256	1.106	1.054	1.037	1.027	1.020	1.013	1.010	1.010	1.009	1.010	1.010	1.006	1.005	1.005	1.006	1.005
1991	2.297	1.231	1.104	1.063	1.042	1.028	1.021	1.014	1.012	1.012	1.011	1.009	1.008	1.007	1.009	1.007	1.007	1.006
1992	2.060	1.216	1.110	1.064	1.043	1.028	1.020	1.017	1.015	1.016	1.013	1.011	1.013	1.010	1.010	1.017	1.008	1.007
1993	1.962	1.207	1.100	1.061	1.042	1.034	1.025	1.025	1.021	1.020	1.020	1.014	1.012	1.014	1.013	1.011	1.011	1.011
1994	2.040	1.236	1.107	1.067	1.048	1.038	1.035	1.028	1.029	1.025	1.017	1.018	1.014	1.017	1.013	1.012	1.013	1.009
1995	2.131	1.254	1.124	1.081	1.058	1.051	1.040	1.037	1.031	1.020	1.024	1.021	1.019	1.018	1.018	1.015	1.011	1.016
1996	2.183	1.265	1.142	1.097	1.071	1.055	1.049	1.038	1.029	1.025	1.027	1.023	1.020	1.018	1.016	1.013	1.014	1.013
1997	2.271	1.286	1.159	1.105	1.080	1.065	1.052	1.036	1.033	1.028	1.026	1.022	1.019	1.016	1.014	1.014	1.014	1.011
1998	2.342	1.328	1.181	1.118	1.093	1.066	1.047	1.039	1.033	1.032	1.030	1.021	1.019	1.019	1.015	1.017	1.013	1.010
1999	2.476	1.378	1.207	1.133	1.089	1.059	1.044	1.035	1.032	1.032	1.025	1.025	1.016	1.016	1.018	1.015	1.012	1.009
2000	2.666	1.430	1.222	1.127	1.079	1.056	1.042	1.038	1.031	1.027	1.023	1.020	1.020	1.017	1.013	1.010	1.009	1.008
2001	2.842	1.472	1.212	1.109	1.076	1.057	1.045	1.038	1.034	1.030	1.022	1.022	1.022	1.017	1.012	1.011	1.010	1.010
2002	2.887	1.416	1.168	1.112	1.072	1.054	1.046	1.034	1.032	1.024	1.023	1.018	1.016	1.012	1.011	1.010	1.009	1.009
2003	2.592	1.318	1.170	1.112	1.074	1.057	1.048	1.041	1.030	1.030	1.026	1.019	1.016	1.012	1.011	1.010	1.009	1.009
2004	2.298	1.345	1.189	1.123	1.092	1.070	1.055	1.040	1.036	1.034	1.024	1.018	1.016	1.012	1.012	1.010	1.009	1.009
2005	2.251	1.345	1.209	1.138	1.095	1.073	1.054	1.049	1.038	1.031	1.021	1.019	1.015	1.012	1.011	1.010	1.009	1.009
2006	2.340	1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025	1.020	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2007	2.416	1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031	1.022	1.020	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2008	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027	1.018	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2009	2.408	1.447	1.251	1.160	1.104	1.067	1.046	1.032	1.024	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2010	2.479	1.468	1.265	1.152	1.096	1.066	1.043	1.030	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2011	2.580	1.470	1.248	1.145	1.095	1.058	1.041	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2012	2.561	1.468	1.247	1.143	1.087	1.056	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2013	2.492	1.464	1.238	1.130	1.077	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2014	2.518	1.462	1.226	1.121	1.076	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2015	2.533	1.439	1.218	1.111	1.076	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2016	2.480	1.410	1.197	1.111	1.076	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2017	2.373	1.391	1.197	1.111	1.076	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009
2018	2.378	1.391	1.197	1.111	1.076	1.048	1.040	1.029	1.025	1.020	1.017	1.015	1.015	1.012	1.011	1.010	1.009	1.009

Source: WCIRB aggregate financial data for December 31 evaluations.

**Difference in Projected Calendar Year Indemnity Paid Development
Compared to Actual¹**

<u>AY</u>	<u>12-84</u>	<u>24-84</u>	<u>36-84</u>	<u>48-84</u>	<u>60-84</u>	<u>72-84</u>	<u>84-108</u>	<u>84-228</u>
1990	-0.7%	-4.3%	-2.4%	-0.4%	-0.2%	-0.1%	-0.8%	-2.8%
1991	-13.2%	-11.7%	-3.7%	-1.8%	-0.8%	-0.4%	-0.6%	-2.0%
1992	-7.8%	-4.8%	-4.9%	-1.9%	-0.6%	-0.4%	0.0%	-1.7%
1993	0.0%	-1.8%	-2.2%	-1.9%	-0.6%	-0.1%	0.7%	1.1%
1994	-2.2%	-6.3%	-5.2%	-2.4%	-1.1%	-0.2%	1.1%	3.7%
1995	3.3%	-4.2%	-3.4%	-0.7%	0.6%	0.5%	1.1%	3.2%
1996	-2.9%	-2.5%	-1.3%	1.3%	1.2%	0.7%	1.4%	4.9%
1997	4.8%	0.0%	2.0%	2.8%	2.2%	1.3%	2.0%	5.5%
1998	4.8%	6.3%	6.2%	4.4%	3.2%	1.5%	2.5%	8.0%
1999	16.3%	13.5%	9.4%	6.4%	3.5%	1.5%	2.4%	7.3%
2000	12.8%	12.7%	9.3%	4.8%	2.7%	1.0%	1.8%	6.2%
2001	11.4%	10.3%	5.9%	1.6%	0.3%	0.2%	0.5%	5.4%
2002	3.0%	1.7%	-0.4%	-1.1%	-0.5%	-0.1%	0.2%	
2003	-18.2%	-12.8%	-7.6%	-3.6%	-2.0%	-0.8%	-0.2%	
2004	-34.4%	-24.1%	-11.1%	-4.9%	-1.9%	-0.5%	1.4%	
2005	-21.9%	-16.7%	-6.6%	-2.4%	-0.4%	0.4%	2.6%	
2006	7.9%	3.0%	1.8%	3.5%	2.7%	1.5%	2.1%	
2007	8.9%	7.5%	5.0%	4.2%	3.0%	1.5%	1.9%	
2008	13.0%	12.2%	9.5%	6.4%	3.2%	1.3%	0.9%	
2009	21.7%	16.1%	11.1%	6.7%	3.5%	1.7%	1.9%	
2010	12.7%	9.6%	6.2%	3.2%	2.2%	1.0%	1.5%	
2011	0.7%	-0.9%	-0.7%	-0.3%	-0.6%	-0.3%	0.2%	
2012	-8.4%	-6.3%	-4.5%	-3.2%	-2.0%	-1.6%		
2013	-7.0%	-7.9%	-7.6%	-6.1%	-3.8%	-2.0%		
<u>Number of observations of difference in development factor:</u>							<u>All</u>	
Downward	10	13	14	13	12	11	73	
Upward	14	11	10	11	12	13	71	

Correlation between claim settlement ratio change at age X to development difference at X-to-84:

-0.0048 -0.2635 -0.5395 -0.6130 -0.5523 -0.6331

Correlation between claim settlement ratio change at age X to development difference at 84-to-108:

0.1859 0.2164 0.1347 -0.0992 -0.2002 -0.3811

Correlation between claim settlement ratio change at age X to development difference at 84-to-228:

0.0999 -0.1650 -0.3069 -0.5105 -0.6602 -0.8671

¹ For example, the value of 12.7% for 2010 at 12-to-84 months is equal to the difference in the projected loss development factor at 12-to-84 months as of 12/31/2010 to the actual loss development factor at 12-to-84 months that emerged for accident year 2010.

Yellow Difference in development factors by less than -0.5%.

Green Difference in development factors by more than 0.5%.

Source: WCIRB aggregate financial data for December 31 evaluations.

**Difference in Projected Calendar Year Medical Paid Development
Compared to Actual¹**

AY	12-84	24-84	36-84	48-84	60-84	72-84	84-108	84-228
1989								
1990	9.7%	0.6%	-0.6%	-0.1%	0.3%	0.3%	0.0%	-6.0%
1991	-11.2%	-4.1%	-0.8%	0.3%	0.5%	0.3%	-0.6%	-3.2%
1992	-12.9%	-2.9%	0.3%	0.7%	0.5%	0.0%	0.3%	-0.6%
1993	-5.4%	-0.7%	1.3%	1.8%	1.5%	1.0%	1.8%	5.9%
1994	10.0%	5.8%	4.1%	3.8%	2.5%	1.2%	3.0%	10.9%
1995	16.8%	11.8%	7.6%	6.3%	4.5%	2.4%	4.4%	16.0%
1996	18.5%	15.7%	13.0%	8.9%	5.6%	2.7%	5.2%	17.4%
1997	24.8%	20.0%	17.0%	11.7%	7.3%	3.6%	5.4%	17.3%
1998	29.6%	25.7%	19.8%	14.0%	8.8%	3.7%	5.2%	19.3%
1999	33.6%	26.3%	17.9%	11.5%	6.4%	2.4%	4.5%	18.1%
2000	30.3%	21.0%	12.4%	6.6%	3.8%	1.7%	3.8%	14.9%
2001	18.5%	11.2%	4.1%	1.4%	1.0%	0.6%	2.2%	13.8%
2002	-4.0%	-5.5%	-4.6%	-1.4%	-0.8%	-0.1%	1.2%	
2003	-26.3%	-17.9%	-8.4%	-4.3%	-2.5%	-0.8%	0.3%	
2004	-17.1%	-6.5%	-1.6%	0.3%	0.7%	0.4%	0.5%	
2005	9.2%	11.5%	9.2%	5.5%	2.8%	1.3%	1.9%	
2006	19.4%	14.9%	10.4%	5.9%	3.3%	1.1%	1.4%	
2007	19.9%	16.2%	10.6%	6.9%	4.1%	1.7%	2.1%	
2008	7.1%	11.3%	9.6%	6.8%	4.5%	1.7%	0.3%	
2009	13.2%	9.3%	6.7%	4.0%	2.1%	1.0%	-0.6%	
2010	10.3%	7.1%	3.7%	0.8%	-0.2%	-0.3%	-0.9%	
2011	4.7%	0.6%	-0.9%	-1.5%	-1.8%	-1.4%	-2.4%	
2012	-3.5%	-2.7%	-2.7%	-2.5%	-2.0%	-1.1%		
2013	-12.0%	-9.5%	-9.2%	-7.2%	-4.8%	-2.5%		
<u>Number of observations of difference in development factor:</u>							<u>All</u>	
Downward	8	8	8	6	6	6	42	
Upward	16	16	16	18	18	17	101	

Correlation between claim settlement ratio change at age X to development difference at X-to-84:

-0.0843 -0.1616 -0.2719 -0.4966 -0.6327 -0.8413

Correlation between claim settlement ratio change at age X to development difference at 84-to-108:

-0.0170 -0.0911 -0.1997 -0.3839 -0.5061 -0.7898

Correlation between claim settlement ratio change at age X to development difference at 84-to-228:

0.1339 -0.1025 -0.2435 -0.3916 -0.5556 -0.8012

¹ For example, the value of 10.3% for 2010 at 12-to-84 months is equal to the difference in the projected loss development factor at 12-to-84 months as of 12/31/2010 to the actual loss development factor at 12-to-84 months that emerged for accident year 2010.

Yellow Difference in development factors by less than -0.5%.

Green Difference in development factors by more than 0.5%.

Source: WCIRB aggregate financial data for December 31 evaluations.

Reported Indemnity Claim Settlement Ratio

Development Years	Closed at End of Calendar Year					Development Years	Year-to-Year Change				
	2014	2015	2016	2017	2018		14-15	15-16	16-17	17-18	14-18
29 - 29					99.8%	29 - 29					
28 - 28				99.7%	99.7%	28 - 28				0.0%	
27 - 27			99.7%	99.7%	99.7%	27 - 27			0.0%	0.0%	
26 - 26		99.7%	99.6%	99.7%	99.6%	26 - 26		-0.1%	0.0%	-0.1%	
25 - 25	99.7%	99.6%	99.6%	99.5%	99.5%	25 - 25	0.0%	0.0%	-0.1%	0.0%	-0.2%
24 - 24	99.6%	99.6%	99.5%	99.4%	99.3%	24 - 24	0.0%	-0.1%	-0.1%	-0.1%	-0.3%
23 - 23	99.5%	99.4%	99.3%	99.2%	99.2%	23 - 23	-0.1%	-0.1%	-0.1%	0.0%	-0.3%
22 - 22	99.4%	99.3%	99.1%	99.1%	99.0%	22 - 22	-0.1%	-0.1%	0.0%	-0.1%	-0.3%
21 - 21	99.2%	99.1%	99.0%	98.9%	98.8%	21 - 21	-0.1%	0.0%	-0.1%	-0.1%	-0.4%
20 - 20	99.0%	98.9%	98.8%	98.6%	98.7%	20 - 20	-0.1%	-0.1%	-0.2%	0.0%	-0.3%
19 - 19	98.8%	98.7%	98.5%	98.5%	98.5%	19 - 19	-0.2%	-0.1%	0.0%	0.0%	-0.4%
18 - 18	98.5%	98.4%	98.3%	98.2%	98.0%	18 - 18	-0.2%	-0.1%	-0.1%	-0.3%	-0.6%
17 - 17	98.2%	98.1%	98.0%	97.6%	98.0%	17 - 17	-0.1%	-0.1%	-0.4%	0.4%	-0.2%
16 - 16	97.9%	97.7%	97.3%	97.7%	97.9%	16 - 16	-0.2%	-0.4%	0.4%	0.2%	0.0%
15 - 15	97.5%	96.9%	97.3%	97.5%	97.8%	15 - 15	-0.6%	0.4%	0.2%	0.3%	0.3%
14 - 14	96.5%	96.8%	97.0%	97.3%	97.6%	14 - 14	0.3%	0.2%	0.3%	0.3%	1.1%
13 - 13	96.4%	96.4%	96.8%	97.0%	97.1%	13 - 13	0.0%	0.4%	0.3%	0.1%	0.7%
12 - 12	95.9%	96.0%	96.4%	96.4%	96.8%	12 - 12	0.2%	0.3%	0.0%	0.4%	0.9%
11 - 11	95.3%	95.5%	95.5%	96.0%	96.2%	11 - 11	0.1%	0.1%	0.4%	0.3%	0.9%
10 - 10	94.4%	94.3%	94.9%	95.1%	95.4%	10 - 10	-0.1%	0.6%	0.3%	0.2%	0.9%
9 - 9	93.0%	93.2%	93.7%	93.9%	94.8%	9 - 9	0.3%	0.5%	0.2%	0.9%	1.8%
8 - 8	91.4%	91.6%	91.9%	92.9%	93.7%	8 - 8	0.2%	0.3%	1.1%	0.8%	2.3%
7 - 7	88.8%	88.7%	90.2%	91.1%	92.1%	7 - 7	-0.2%	1.5%	0.8%	1.0%	3.3%
6 - 6	84.6%	86.0%	87.2%	88.4%	89.9%	6 - 6	1.4%	1.2%	1.2%	1.5%	5.3%
5 - 5	80.6%	81.8%	83.1%	84.8%	86.3%	5 - 5	1.1%	1.3%	1.7%	1.5%	5.7%
4 - 4	73.8%	75.1%	76.7%	78.2%	80.7%	4 - 4	1.4%	1.6%	1.5%	2.6%	7.0%

Source: WCIRB aggregate financial data. Insurer mix reflects the insurers also reporting medical transaction data.

Percent of Open Indemnity Claims with Medical Service Payments¹

Development Years	Transaction Year					Development Years	Year-to-Year Change				
	2014	2015	2016	2017	2018		14-15	15-16	16-17	17-18	14-18
29 - 29					53.7%	29 - 29					
28 - 28				52.2%	54.0%	28 - 28				1.8%	
27 - 27			58.3%	56.7%	54.0%	27 - 27			-1.7%	-2.6%	
26 - 26		61.2%	57.7%	59.2%	53.2%	26 - 26		-3.5%	1.5%	-6.0%	
25 - 25	62.0%	61.9%	59.8%	55.5%	53.4%	25 - 25	0.0%	-2.1%	-4.3%	-2.1%	-8.6%
24 - 24	61.5%	59.3%	55.5%	52.3%	52.9%	24 - 24	-2.2%	-3.8%	-3.2%	0.6%	-8.7%
23 - 23	63.6%	58.4%	57.2%	53.8%	55.1%	23 - 23	-5.2%	-1.1%	-3.4%	1.3%	-8.5%
22 - 22	60.4%	60.4%	57.4%	55.1%	55.2%	22 - 22	0.1%	-3.0%	-2.4%	0.2%	-5.2%
21 - 21	59.9%	59.3%	57.3%	56.8%	54.0%	21 - 21	-0.6%	-1.9%	-0.5%	-2.8%	-5.9%
20 - 20	61.8%	59.4%	59.9%	57.2%	57.2%	20 - 20	-2.3%	0.5%	-2.7%	0.0%	-4.5%
19 - 19	59.2%	60.4%	59.5%	57.3%	56.3%	19 - 19	1.2%	-0.9%	-2.3%	-1.0%	-2.9%
18 - 18	61.8%	61.6%	60.6%	58.3%	56.7%	18 - 18	-0.3%	-1.0%	-2.3%	-1.5%	-5.1%
17 - 17	65.0%	65.6%	59.8%	57.8%	61.5%	17 - 17	0.7%	-5.8%	-2.0%	3.8%	-3.4%
16 - 16	65.7%	63.9%	61.0%	60.1%	62.0%	16 - 16	-1.8%	-2.9%	-0.9%	1.9%	-3.6%
15 - 15	64.1%	62.8%	59.8%	63.2%	62.2%	15 - 15	-1.3%	-2.9%	3.4%	-1.0%	-1.9%
14 - 14	63.0%	62.0%	62.1%	64.0%	65.0%	14 - 14	-1.0%	0.1%	1.9%	1.0%	2.0%
13 - 13	63.4%	65.0%	63.0%	65.9%	63.2%	13 - 13	1.6%	-2.0%	3.0%	-2.8%	-0.2%
12 - 12	66.3%	64.7%	64.8%	64.4%	69.1%	12 - 12	-1.6%	0.1%	-0.5%	4.8%	2.8%
11 - 11	65.0%	65.1%	63.1%	68.3%	69.8%	11 - 11	0.1%	-1.9%	5.1%	1.5%	4.8%
10 - 10	63.2%	65.5%	66.7%	69.3%	68.8%	10 - 10	2.3%	1.1%	2.7%	-0.5%	5.6%
9 - 9	64.0%	68.1%	67.5%	69.5%	75.3%	9 - 9	4.1%	-0.7%	2.0%	5.8%	11.3%
8 - 8	65.9%	68.2%	67.2%	74.6%	78.3%	8 - 8	2.3%	-1.0%	7.5%	3.6%	12.4%
7 - 7	65.6%	68.2%	74.0%	78.2%	81.7%	7 - 7	2.7%	5.8%	4.2%	3.5%	16.1%
6 - 6	66.5%	75.7%	78.4%	83.0%	83.2%	6 - 6	9.2%	2.7%	4.6%	0.2%	16.7%
5 - 5	71.4%	79.1%	84.8%	84.6%	82.2%	5 - 5	7.7%	5.6%	-0.2%	-2.4%	10.8%
4 - 4	75.5%	89.7%	88.8%	85.6%	84.1%	4 - 4	14.2%	-0.8%	-3.3%	-1.4%	8.6%
Correlation with Change in Settlement Rate (All DYs):							0.836	0.725	0.430	0.174	0.808
Correlation with Change in Settlement Rate (11 to 25 DYs):							0.062	0.222	0.761	0.673	0.868

Source: WCIRB aggregate financial and medical transaction data. Insurer mix reflects the insurers also reporting medical transaction data.

¹Equal to [the number of claims with paid medical transactions in the given year] / [the number of indemnity claims open during the calendar year from aggregate financial data]

Incremental Paid Medical Per Open Indemnity Claim - Aggregate Financial Data

Development Years	Calendar Year					Development Years	Year-to-Year Change				
	2014	2015	2016	2017	2018		14-15	15-16	16-17	17-18	14-18
27 - 29				6,968	8,143	27 - 29				17%	
24 - 26		11,148	8,025	9,322	12,200	24 - 26		-28%	16%	31%	
22 - 23	10,368	13,007	11,329	11,538	13,915	22 - 23	25%	-13%	2%	21%	34%
20 - 21	14,306	13,143	13,915	9,022	9,734	20 - 21	-8%	6%	-35%	8%	-32%
19 - 19	16,051	13,017	11,809	10,420	11,547	19 - 19	-19%	-9%	-12%	11%	-28%
18 - 18	13,621	12,675	12,824	13,552	10,395	18 - 18	-7%	1%	6%	-23%	-24%
17 - 17	12,949	13,333	15,351	9,669	11,560	17 - 17	3%	15%	-37%	20%	-11%
16 - 16	14,278	16,104	11,302	10,765	11,294	16 - 16	13%	-30%	-5%	5%	-21%
15 - 15	13,901	14,163	13,377	10,090	11,594	15 - 15	2%	-6%	-25%	15%	-17%
14 - 14	16,279	14,768	12,193	11,859	11,497	14 - 14	-9%	-17%	-3%	-3%	-29%
13 - 13	14,868	11,163	11,718	10,683	12,881	13 - 13	-25%	5%	-9%	21%	-13%
12 - 12	14,042	13,621	11,911	11,418	12,284	12 - 12	-3%	-13%	-4%	8%	-13%
11 - 11	15,055	13,620	13,343	11,410	12,346	11 - 11	-10%	-2%	-14%	8%	-18%
10 - 10	12,827	12,796	12,268	12,793	13,053	10 - 10	0%	-4%	4%	2%	2%
9 - 9	14,014	11,636	12,685	12,104	12,146	9 - 9	-17%	9%	-5%	0%	-13%
8 - 8	12,505	13,026	12,674	11,861	12,322	8 - 8	4%	-3%	-6%	4%	-1%
7 - 7	12,772	12,544	11,956	12,903	11,747	7 - 7	-2%	-5%	8%	-9%	-8%
6 - 6	12,242	12,415	12,266	12,407	11,135	6 - 6	1%	-1%	1%	-10%	-9%
5 - 5	12,243	12,012	11,308	10,899	10,032	5 - 5	-2%	-6%	-4%	-8%	-18%
4 - 4	11,801	10,921	10,373	9,782	9,622	4 - 4	-7%	-5%	-6%	-2%	-18%

Source: WCIRB aggregate financial data. Insurer mix reflects the insurers also reporting medical transaction data.

Paid Medical per Claim with Medical Transactions

Development						Development					
Transaction Year						Year-to-Year Change					
Years	2014	2015	2016	2017	2018	Years	14-15	15-16	16-17	17-18	14-18
27 - 29				8,202	6,976	27 - 29				-15%	
24 - 26		7,719	6,397	8,284	8,215	24 - 26		-17%	29%	-1%	
22 - 23	6,497	7,897	9,263	9,676	9,841	22 - 23	22%	17%	4%	2%	51%
20 - 21	9,752	10,999	10,593	7,129	7,086	20 - 21	13%	-4%	-33%	-1%	-27%
19 - 19	11,919	9,725	7,237	7,426	7,585	19 - 19	-18%	-26%	3%	2%	-36%
18 - 18	10,503	8,546	8,559	7,725	5,494	18 - 18	-19%	0%	-10%	-29%	-48%
17 - 17	8,707	8,863	7,900	5,269	6,707	17 - 17	2%	-11%	-33%	27%	-23%
16 - 16	9,294	8,614	6,091	5,998	6,583	16 - 16	-7%	-29%	-2%	10%	-29%
15 - 15	8,659	6,714	6,733	6,806	6,202	15 - 15	-22%	0%	1%	-9%	-28%
14 - 14	7,376	7,649	6,823	6,301	5,591	14 - 14	4%	-11%	-8%	-11%	-24%
13 - 13	8,074	7,719	6,604	5,767	5,705	13 - 13	-4%	-14%	-13%	-1%	-29%
12 - 12	8,086	7,008	6,081	6,183	5,775	12 - 12	-13%	-13%	2%	-7%	-29%
11 - 11	7,502	6,510	6,427	5,801	5,982	11 - 11	-13%	-1%	-10%	3%	-20%
10 - 10	6,785	6,591	5,965	5,983	5,517	10 - 10	-3%	-9%	0%	-8%	-19%
9 - 9	7,184	6,407	6,082	5,784	5,405	9 - 9	-11%	-5%	-5%	-7%	-25%
8 - 8	6,612	6,360	5,939	5,402	5,327	8 - 8	-4%	-7%	-9%	-1%	-19%
7 - 7	6,579	6,412	5,839	5,230	5,070	7 - 7	-3%	-9%	-10%	-3%	-23%
6 - 6	6,411	6,256	5,707	5,234	4,857	6 - 6	-2%	-9%	-8%	-7%	-24%
5 - 5	6,387	5,970	5,655	5,194	4,373	5 - 5	-7%	-5%	-8%	-16%	-32%
4 - 4	6,291	6,004	5,111	4,514	4,272	4 - 4	-5%	-15%	-12%	-5%	-32%

Relativity to Incremental Paid Medical per Open Indemnity Claim From Aggregate Financial Data

Development						Development					
Calendar/Transaction Year						Year-to-Year Change					
Years	2014	2015	2016	2017	2018	Years	14-15	15-16	16-17	17-18	14-18
27 - 29				1.18	0.86	27 - 29				-27%	
24 - 26		0.69	0.80	0.89	0.67	24 - 26		15%	11%	-24%	
22 - 23	0.63	0.61	0.82	0.84	0.71	22 - 23	-3%	35%	3%	-16%	13%
20 - 21	0.68	0.84	0.76	0.79	0.73	20 - 21	23%	-9%	4%	-8%	7%
19 - 19	0.74	0.75	0.61	0.71	0.66	19 - 19	1%	-18%	16%	-8%	-12%
18 - 18	0.77	0.67	0.67	0.57	0.53	18 - 18	-13%	-1%	-15%	-7%	-31%
17 - 17	0.67	0.66	0.51	0.54	0.58	17 - 17	-1%	-23%	6%	6%	-14%
16 - 16	0.65	0.53	0.54	0.56	0.58	16 - 16	-18%	1%	3%	5%	-10%
15 - 15	0.62	0.47	0.50	0.67	0.53	15 - 15	-24%	6%	34%	-21%	-14%
14 - 14	0.45	0.52	0.56	0.53	0.49	14 - 14	14%	8%	-5%	-8%	7%
13 - 13	0.54	0.69	0.56	0.54	0.44	13 - 13	27%	-19%	-4%	-18%	-18%
12 - 12	0.58	0.51	0.51	0.54	0.47	12 - 12	-11%	-1%	6%	-13%	-18%
11 - 11	0.50	0.48	0.48	0.51	0.48	11 - 11	-4%	1%	6%	-5%	-3%
10 - 10	0.53	0.52	0.49	0.47	0.42	10 - 10	-3%	-6%	-4%	-10%	-20%
9 - 9	0.51	0.55	0.48	0.48	0.45	9 - 9	7%	-13%	0%	-7%	-13%
8 - 8	0.53	0.49	0.47	0.46	0.43	8 - 8	-8%	-4%	-3%	-5%	-18%
7 - 7	0.52	0.51	0.49	0.41	0.43	7 - 7	-1%	-4%	-17%	6%	-16%
6 - 6	0.52	0.50	0.47	0.42	0.44	6 - 6	-4%	-8%	-9%	3%	-17%
5 - 5	0.52	0.50	0.50	0.48	0.44	5 - 5	-5%	1%	-5%	-9%	-16%
4 - 4	0.53	0.55	0.49	0.46	0.44	4 - 4	3%	-10%	-6%	-4%	-17%

Source: WCIRB medical transaction data

Item AC20-03-01 First Quarter 2020 Review of Diagnostics

Twice a year, WCIRB staff compiles a comprehensive list of measures to be reviewed by the Claims Working Group and Actuarial Committee in order to identify and quantify changes in claim patterns and trends and help determine the most appropriate methodologies to be used in the development of pure premium rates. The diagnostics are segregated into the following areas:

1. Market and claim characteristic information (exhibit numbers start with M)
2. Claim count information (exhibit numbers start with C)
3. Loss development information (exhibit numbers start with D)
4. Claim severity information (exhibit numbers start with S)
5. Loss adjustment expense information (exhibit numbers start with E)

Please note the following:

1. Permanent disability claims continue to close at a faster rate throughout the state. The percent of statewide permanent disability claims closed increased from 34% for policy year 2011 to 50% for policy year 2016 at second report level (30 months from policy inception). Los Angeles and San Diego's permanent disability closed claim percentages are now higher than the rest of the state. (Exhibit M5).
2. The proportion of claims settled by compromise and release tends to be highest in the Los Angeles Basin. However, the average compromise and release settlement in the Los Angeles Basin is lower than in other regions (Exhibit M6.1 through M6.5).
3. Since Senate Bill No. 1160 (SB 1160) became effective January 1, 2017, the number of filed liens has continued to decrease. The number of liens filed in 2019 is 29% less than 2018 and almost 75% below 2016. Lien filings primarily related to medical treatment and in all regions have declined (Exhibit M9.2).
4. After reaching a historical high in 2018, the number of independent medical review (IMR) applications eligible for review declined 11% in 2019 to the level comparable to 2015 (Exhibit M14).
5. On a preliminary basis, the cumulative injury share of total indemnity counts for 2017 at second report level is only slightly above 2016 and for 2018 at preliminary first report level is lower than 2017 (Exhibit C15).
6. On a preliminary basis, at first report level, San Diego's ratio of permanent disability claims to indemnity claims for AY 2018 is the highest in the State and 13% higher than statewide average. However, the percentage of claims involving cumulative injury dropped in San Diego as well as in the Los Angeles Basin (Exhibit C17).
7. Although claims caused by motor vehicle accidents continue to represent a relatively small proportion of all indemnity claims, the frequency of indemnity claims caused by motor vehicle accidents show increases for the more recent two years (Exhibit C25).
8. Retrospective evaluations of the performance of alternative loss development methodologies indicate that the latest year reform and claim settlement rate adjusted methodology for projecting ultimate loss ratios is consistently closer to actual loss ratio than the other methodologies reviewed (Exhibits D6.1 to D6.5).

9. Average indemnity case outstanding per open indemnity claim and average paid indemnity per reported indemnity claim show increases over the most recent calendar year for the most recent accident years (Exhibits S3.1 and S4.1).
10. After a period of increases in 2018 and early 2019, the incremental paid medical severities generally show decreases in the more recent two quarters (Exhibit S7).
11. The percentage permanent disability claims that are represented across regions and loss types at first and second survey levels show indications of decline (Exhibit E7).
12. Despite changes in SB 1160 and the new drug formulary intended to limit prospective utilization review, the increase in the average cost of medical cost containment programs (MCCP) per indemnity claim for accident year 2018 is significant, while accident year 2019 average cost of MCCP at 9 months is relatively consistent with that for accident year 2018 (Exhibit E15).

Exhibit Numbering Guide March 2020

Exhibit #	Exhibit Name
Market/Claim Characteristics	
M4	Distribution of Estimated Ultimate Number of Claims by Injury Type
M5	Percentage of Claims Closed by Injury Type and Region - First through Third Report Level
M6	Percentage of Claim Count and Average Severity by Type of Settlement
M8	Quarterly Expedited Hearings by Region
M9	Number of Division of Workers' Compensation (DWC) Lien Decisions
M14	IMR Filed Counts
Claim Count	
C1	Reported Indemnity Claim Count Development - Statewide
C2	Indemnity Claim Settlement Rates by Injury Type
C3	Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims
C6	California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year
C7	Accident Year Indemnity Claim Frequency Model & Indemnity Claim Frequency History and Projections
C11	Changes in Incremental Indemnity Claim Counts and Medical Only Claim Counts
C12	Economic Variables
C15	Accident Year Cumulative Injury Indemnity Claim Counts by Policy Year and Report Level
C17	Claim Count Ratios by Region Based on Unit Statistical Data at 1st Report Level
C21	Indemnity Claim Frequency by Geographic Region
C25	Frequency of Indemnity Claims Caused by Motor Vehicle Accidents
Loss Development	
D4	Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year
D6	Comparison of Projected Loss Ratios
Claim Severity	
S2	Average Incurred Indemnity Loss per Reported Indemnity Claim & Incurred Medical Loss per Reported Claim
S3	Average Indemnity & Medical Case Outstanding Per Open Indemnity Claim
S4	Average Paid Losses per Indemnity Claim & Average Paid Medical Loss Per Claim
S5	Average Paid Losses per Closed Indemnity Claim
S7	Ratio of Quarterly Paid Medical to Indemnity Claims Inventory
S8	Estimated Ultimate Severities by Injury Type
S11	Average Permanent Disability Ratings by Type of Loss
Loss Adjustment Expense	
E5	Average Paid ALAE Per Reported Indemnity Claim - Private Insurers
E7	Percentage of Represented Permanent Disability Claims by Region and Loss Type
E13	Changes in the Number and Cost of Medical-Legal Reports by Service Year
E15	Average Paid MCCP per Reported Indemnity Claim - Statewide

Distribution of Estimated Ultimate Number of Claims by Injury Type

I. Distribution of Ultimate Number of Indemnity Claims

Accident <u>Year</u>	Permanent <u>Indemnity</u>	Temporary <u>Indemnity</u>	<u>Total</u>
2002	54.3%	45.7%	100%
2003	53.8%	46.2%	100%
2004	49.7%	50.3%	100%
2005	46.2%	53.8%	100%
2006	47.2%	52.8%	100%
2007	48.3%	51.7%	100%
2008	50.4%	49.6%	100%
2009	51.8%	48.2%	100%
2010	51.3%	48.7%	100%
2011	51.3%	48.7%	100%
2012	50.6%	49.4%	100%
2013	50.5%	49.5%	100%
2014	51.0%	49.0%	100%
2015	51.6%	48.4%	100%
2016	51.1%	48.9%	100%
2017	50.9%	49.1%	100%
2018*	50.3%	49.7%	100%

II. Distribution of Ultimate Number of All Claims

Accident <u>Year</u>	Permanent <u>Indemnity**</u>	Temporary <u>Indemnity</u>	Medical <u>Only</u>	<u>Total</u>
2002	18.9%	15.9%	65.2%	100%
2003	18.7%	16.0%	65.3%	100%
2004	15.6%	15.8%	68.6%	100%
2005	13.4%	15.6%	71.0%	100%
2006	13.6%	15.2%	71.2%	100%
2007	14.3%	15.3%	70.4%	100%
2008	15.4%	15.2%	69.4%	100%
2009	17.2%	15.9%	66.9%	100%
2010	17.7%	16.8%	65.5%	100%
2011	18.2%	17.3%	64.5%	100%
2012	18.4%	17.9%	63.7%	100%
2013	18.9%	18.5%	62.6%	100%
2014	19.1%	18.3%	62.6%	100%
2015	19.2%	18.0%	62.8%	100%
2016	19.1%	18.3%	62.6%	100%
2017	18.2%	17.6%	64.2%	100%
2018*	18.0%	17.7%	64.3%	100%

* Accident year 2018 experience is partial in that it only reflects experience from policy year 2017.

** Permanent indemnity consists of the death, permanent total, and permanent partial injury types.

Source: WCIRB unit statistical data

Percentage of Claims Closed by Injury Type and Region

Permanent Partial & Temporary

Permanent Partial		Policy Year							Latest Year Reported Claim Distribution
Report Level	Region*	2011	2012	2013	2014	2015	2016	2017	
1	Bay Area	12%	14%	15%	16%	18%	19%	21%	15%
1	Los Angeles	12%	15%	16%	17%	21%	24%	25%	52%
1	San Diego	13%	17%	20%	20%	23%	26%	27%	7%
1	Remainder of CA	13%	15%	17%	17%	20%	22%	25%	27%
	ALL REGIONS COMBINED	12%	15%	16%	17%	20%	23%	25%	100%
2	Bay Area	35%	38%	38%	41%	45%	47%		14%
2	Los Angeles	32%	37%	37%	40%	45%	51%		56%
2	San Diego	38%	43%	44%	46%	50%	53%		7%
2	Remainder of CA	36%	38%	39%	42%	47%	48%		24%
	ALL REGIONS COMBINED	34%	38%	38%	41%	46%	50%		100%
3	Bay Area	55%	58%	59%	62%	65%			15%
3	Los Angeles	51%	55%	55%	59%	65%			54%
3	San Diego	59%	62%	65%	67%	70%			7%
3	Remainder of CA	56%	58%	59%	62%	67%			25%
	ALL REGIONS COMBINED	53%	56%	58%	61%	66%			100%

Temporary		Policy Year							Latest Year Reported Claim Distribution
Report Level	Region*	2011	2012	2013	2014	2015	2016	2017	
1	Bay Area	56%	54%	56%	59%	60%	61%	62%	18%
1	Los Angeles	51%	49%	47%	50%	51%	52%	53%	44%
1	San Diego	58%	56%	55%	56%	57%	60%	62%	6%
1	Remainder of CA	59%	57%	55%	59%	60%	61%	60%	32%
	ALL REGIONS COMBINED	55%	53%	52%	55%	55%	57%	58%	100%
2	Bay Area	74%	73%	77%	77%	79%	79%		17%
2	Los Angeles	68%	67%	68%	70%	72%	73%		46%
2	San Diego	73%	75%	75%	76%	77%	80%		7%
2	Remainder of CA	75%	73%	74%	76%	77%	78%		30%
	ALL REGIONS COMBINED	71%	71%	72%	73%	75%	76%		100%
3	Bay Area	85%	85%	87%	89%	89%			17%
3	Los Angeles	79%	80%	81%	82%	84%			45%
3	San Diego	85%	86%	87%	88%	89%			6%
3	Remainder of CA	84%	85%	86%	86%	88%			31%
	ALL REGIONS COMBINED	82%	83%	84%	85%	86%			100%

*Los Angeles Includes Los Angeles County and remainder of Los Angeles Basin

Source: WCIRB unit statistical data

**Percentage of Claim Count and Average Severity of Compromise & Release
and Stipulated Award Settlements**
Geographic Region: All Regions Combined

Policy Year 2012									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	12,934	84%	23,200	26,737	49,937	---	---	---	---
Stipulated Award	<u>2,452</u>	16%	<u>17,044</u>	<u>15,359</u>	<u>32,403</u>	---	---	---	---
Total/Average	15,386		22,219	24,923	47,143	---	---	---	---
Policy Year 2013									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	17,026	84%	24,087	25,999	50,086	31.6%	3.8%	-2.8%	0.3%
Stipulated Award	<u>3,132</u>	16%	<u>17,914</u>	<u>14,353</u>	<u>32,267</u>	<u>27.7%</u>	<u>5.1%</u>	<u>-6.6%</u>	<u>-0.4%</u>
Total/Average	20,158		23,128	24,189	47,317	31.0%	4.1%	-2.9%	0.4%
Policy Year 2014									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	20,871	84%	25,960	25,939	51,899	22.6%	7.8%	-0.2%	3.6%
Stipulated Award	<u>3,838</u>	16%	<u>18,377</u>	<u>13,461</u>	<u>31,838</u>	<u>22.5%</u>	<u>2.6%</u>	<u>-6.2%</u>	<u>-1.3%</u>
Total/Average	24,709		24,782	24,001	48,783	22.6%	7.2%	-0.8%	3.1%
Policy Year 2015*									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	23,051	85%	25,960	24,987	50,947	10.4%	0.0%	-3.7%	-1.8%
Stipulated Award	<u>4,088</u>	15%	<u>19,137</u>	<u>13,830</u>	<u>32,967</u>	<u>6.5%</u>	<u>4.1%</u>	<u>2.7%</u>	<u>3.5%</u>
Total/Average	27,139		24,933	23,306	48,239	9.8%	0.6%	-2.9%	-1.1%

*Policy Year 2015 is preliminary

Source: closed permanent disability claims from third report level unit statistical data

**Percentage of Claim Count and Average Severity of Compromise & Release
and Stipulated Award Settlements**
Geographic Region: Bay Area

Policy Year 2012									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	1,726	79%	27,688	29,431	57,120	---	---	---	---
Stipulated Award	<u>461</u>	21%	<u>18,353</u>	<u>14,901</u>	<u>33,254</u>	---	---	---	---
Total/Average	2,187		25,720	26,368	52,089	---	---	---	---
Policy Year 2013									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	2,217	80%	29,892	29,785	59,677	28.4%	8.0%	1.2%	4.5%
Stipulated Award	<u>546</u>	<u>20%</u>	<u>20,521</u>	<u>14,727</u>	<u>35,248</u>	<u>18.4%</u>	<u>11.8%</u>	<u>-1.2%</u>	<u>6.0%</u>
Total/Average	2,763		28,040	26,809	54,850	26.3%	9.0%	1.7%	5.3%
Policy Year 2014									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	2,839	79%	32,956	31,536	64,492	28.1%	10.2%	5.9%	8.1%
Stipulated Award	<u>765</u>	21%	<u>18,829</u>	<u>13,238</u>	<u>32,068</u>	<u>40.1%</u>	<u>-8.2%</u>	<u>-10.1%</u>	<u>-9.0%</u>
Total/Average	3,604		29,957	27,652	57,610	30.4%	6.8%	3.1%	5.0%
Policy Year 2015*									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	3,109	79%	32,752	30,068	62,820	9.5%	-0.6%	-4.7%	-2.6%
Stipulated Award	<u>815</u>	21%	<u>20,935</u>	<u>14,191</u>	<u>35,125</u>	<u>6.5%</u>	<u>11.2%</u>	<u>7.2%</u>	<u>9.5%</u>
Total/Average	3,924		30,297	26,771	57,068	8.9%	1.1%	-3.2%	-0.9%

*Policy Year 2015 is preliminary

Source: closed permanent disability claims from third report level unit statistical data

**Percentage of Claim Count and Average Severity of Compromise & Release
and Stipulated Award Settlements**
Geographic Region: Los Angeles**

Policy Year 2012									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	7,031	86%	21,390	24,199	45,589	---	---	---	---
Stipulated Award	<u>1,169</u>	14%	<u>16,832</u>	<u>15,488</u>	<u>32,320</u>	---	---	---	---
Total/Average	8,200		20,740	22,957	43,697	---	---	---	---
Policy Year 2013									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	9,225	86%	22,163	23,595	45,758	31.2%	3.6%	-2.5%	0.4%
Stipulated Award	<u>1,446</u>	14%	<u>17,871</u>	<u>14,939</u>	<u>32,810</u>	<u>23.7%</u>	<u>6.2%</u>	<u>-3.5%</u>	<u>1.5%</u>
Total/Average	10,671		21,582	22,422	44,003	30.1%	4.1%	-2.3%	0.7%
Policy Year 2014									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	11,389	87%	23,797	22,984	46,781	23.5%	7.4%	-2.6%	2.2%
Stipulated Award	<u>1,740</u>	13%	<u>18,171</u>	<u>13,643</u>	<u>31,813</u>	<u>20.3%</u>	<u>1.7%</u>	<u>-8.7%</u>	<u>-3.0%</u>
Total/Average	13,129		23,051	21,746	44,797	23.0%	6.8%	-3.0%	1.8%
Policy Year 2015*									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	12,552	87%	24,192	22,532	46,724	10.2%	1.7%	-2.0%	-0.1%
Stipulated Award	<u>1,822</u>	13%	<u>19,242</u>	<u>13,864</u>	<u>33,106</u>	<u>4.7%</u>	<u>5.9%</u>	<u>1.6%</u>	<u>4.1%</u>
Total/Average	14,374		23,565	21,433	44,998	9.5%	2.2%	-1.4%	0.4%

*Policy Year 2015 is preliminary

**Includes Los Angeles County and remainder of Los Angeles Basin

Source: closed permanent disability claims from third report level unit statistical data

Percentage of Claim Count and Average Severity of Compromise & Release
and Stipulated Award Settlements
Geographic Region: San Diego**

Policy Year 2012									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	875	81%	21,745	27,195	48,940	---	---	---	---
Stipulated Award	<u>205</u>	<u>19%</u>	<u>14,857</u>	<u>14,390</u>	<u>29,247</u>	---	---	---	---
Total/Average	1,080		20,437	24,764	45,202	---	---	---	---
Policy Year 2013									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	1,265	82%	22,368	26,504	48,872	44.6%	2.9%	-2.5%	-0.1%
Stipulated Award	<u>285</u>	18%	<u>16,311</u>	<u>11,793</u>	<u>28,105</u>	<u>39.0%</u>	<u>9.8%</u>	<u>-18.0%</u>	<u>-3.9%</u>
Total/Average	1,550		21,255	23,799	45,054	43.5%	4.0%	-3.9%	-0.3%
Policy Year 2014									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	1,520	83%	23,329	27,189	50,518	20.2%	4.3%	2.6%	3.4%
Stipulated Award	<u>307</u>	17%	<u>17,813</u>	<u>12,259</u>	<u>30,072</u>	<u>7.7%</u>	<u>9.2%</u>	<u>3.9%</u>	<u>7.0%</u>
Total/Average	1,827		22,402	24,680	47,083	17.9%	5.4%	3.7%	4.5%
Policy Year 2015*									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	1,642	85%	24,181	26,149	50,330	8.0%	3.7%	-3.8%	-0.4%
Stipulated Award	<u>281</u>	15%	<u>17,071</u>	<u>13,006</u>	<u>30,077</u>	<u>-8.5%</u>	<u>-4.2%</u>	<u>6.1%</u>	<u>0.0%</u>
Total/Average	1,923		23,142	24,228	47,371	5.3%	3.3%	-1.8%	0.6%

*Policy Year 2015 is preliminary
Source: closed permanent disability claims from third report level unit statistical data

**Percentage of Claim Count and Average Severity of Compromise & Release
and Stipulated Award Settlements**
Geographic Region: Other

Policy Year 2012									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	3,302	84%	25,095	30,610	55,705	---	---	---	---
Stipulated Award	<u>617</u>	<u>16%</u>	<u>17,196</u>	<u>15,779</u>	<u>32,975</u>	---	---	---	---
Total/Average	3,919		23,851	28,275	52,126	---	---	---	---
Policy Year 2013									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	4,319	83%	25,720	29,043	54,763	30.8%	2.5%	-5.1%	-1.7%
Stipulated Award	<u>855</u>	<u>17%</u>	<u>16,855</u>	<u>13,977</u>	<u>30,831</u>	<u>38.6%</u>	<u>-2.0%</u>	<u>-11.4%</u>	<u>-6.5%</u>
Total/Average	5,174		24,255	26,554	50,808	32.0%	1.7%	-6.1%	-2.5%
Policy Year 2014									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	5,123	83%	27,672	29,034	56,706	18.6%	7.6%	0.0%	3.5%
Stipulated Award	<u>1,026</u>	<u>17%</u>	<u>18,560</u>	<u>13,678</u>	<u>32,238</u>	<u>20.0%</u>	<u>10.1%</u>	<u>-2.1%</u>	<u>4.6%</u>
Total/Average	6,149		26,152	26,472	52,623	18.8%	7.8%	-0.3%	3.6%
Policy Year 2015*									
	<u>Claims</u>	<u>Claim Distribution</u>	<u>Average Indemnity</u>	<u>Average Medical</u>	<u>Average Incurred</u>	<u>% Change in Claims</u>	<u>% Change in Avg. Indemnity</u>	<u>% Change in Avg. Medical</u>	<u>% Change in Avg. Incurred</u>
Compromise & Release	5,748	83%	26,656	27,268	53,924	12.2%	-3.7%	-6.1%	-4.9%
Stipulated Award	<u>1,170</u>	<u>17%</u>	<u>18,218</u>	<u>13,725</u>	<u>31,943</u>	<u>14.0%</u>	<u>-1.8%</u>	<u>0.3%</u>	<u>-0.9%</u>
Total/Average	6,918		25,229	24,978	50,207	12.5%	-3.5%	-5.6%	-4.6%

*Policy Year 2015 is preliminary

Source: closed permanent disability claims from third report level unit statistical data

Quarterly Expedited Hearings by Region

<u>Time Period</u>	<u>Northern California</u>	<u>Central California</u>	<u>Southern California</u>	<u>Expedited Hearing</u>	<u>Change from Same Quarter in Prior Year</u>
1st Qtr 2011	---	---	---	2,503	---
2nd Qtr 2011	---	---	---	2,098	---
3rd Qtr 2011	---	---	---	2,462	---
4th Qtr 2011	---	---	---	2,439	---
1st Qtr 2012	---	---	---	2,480	-0.9%
2nd Qtr 2012	---	---	---	2,525	20.4%
3rd Qtr 2012	---	---	---	3,786	53.8%
4th Qtr 2012	---	---	---	2,673	9.6%
1st Qtr 2013	---	---	---	3,480	40.3%
2nd Qtr 2013	---	---	---	3,615	43.2%
3rd Qtr 2013	---	---	---	4,109	8.5%
4th Qtr 2013	---	---	---	4,013	50.1%
1st Qtr 2014	---	---	---	3,813	9.6%
2nd Qtr 2014	14.4%	24.6%	60.9%	4,463	23.5%
3rd Qtr 2014	16.6%	23.5%	59.8%	4,404	7.2%
4th Qtr 2014	16.9%	16.8%	66.3%	3,926	-2.2%
1st Qtr 2015	15.9%	18.2%	65.9%	4,062	6.5%
2nd Qtr 2015	18.0%	18.0%	63.9%	3,993	-10.5%
3rd Qtr 2015	17.6%	20.1%	62.3%	4,222	-4.1%
4th Qtr 2015	19.1%	20.3%	60.6%	4,252	8.3%
1st Qtr 2016	18.4%	20.7%	60.8%	4,507	11.0%
2nd Qtr 2016	16.7%	20.5%	62.8%	4,631	16.0%
3rd Qtr 2016	17.5%	20.3%	62.2%	4,764	12.8%
4th Qtr 2016	18.3%	20.1%	61.6%	4,569	7.5%
1st Qtr 2017	19.1%	20.3%	60.6%	4,983	10.6%
2nd Qtr 2017	16.8%	17.8%	65.4%	4,990	7.8%
3rd Qtr 2017	16.8%	15.3%	67.9%	5,041	5.8%
4th Qtr 2017	16.5%	15.3%	68.2%	5,155	12.8%
1st Qtr 2018	20.0%	16.4%	63.6%	5,633	13.0%
2nd Qtr 2018	19.7%	14.8%	65.5%	5,768	15.6%
3rd Qtr 2018	20.7%	13.8%	65.5%	5,594	11.0%
4th Qtr 2018	20.3%	12.5%	67.2%	5,537	7.4%
1st Qtr 2019	20.1%	14.6%	65.3%	5,705	1.3%
2nd Qtr 2019	17.8%	12.0%	70.2%	5,831	1.1%
3rd Qtr 2019	17.7%	14.8%	67.5%	6,380	14.1%
4th Qtr 2019	15.8%	12.7%	71.5%	5,793	4.6%

Source: DWC

Quarterly Expedited Hearings - DOR Reasons by Region

Northern California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	77.4%	18.1%	4.5%
2015	76.4%	19.9%	3.7%
2016	77.6%	19.2%	3.2%
2017	77.5%	20.5%	2.0%
2018	80.8%	17.3%	1.9%
2019	81.1%	17.1%	1.8%

Central California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	86.8%	12.2%	1.0%
2015	84.6%	14.2%	1.2%
2016	87.3%	12.0%	0.7%
2017	84.8%	14.3%	0.9%
2018	84.7%	14.9%	0.4%
2019	82.7%	17.0%	0.3%

Southern California

<u>Time Period</u>	<u>Medical Treatment</u>	<u>TD</u>	<u>Other</u>
2Q14-4Q14	70.0%	19.4%	10.7%
2015	65.4%	20.5%	14.1%
2016	69.1%	18.9%	12.0%
2017	71.5%	18.6%	9.9%
2018	74.2%	17.0%	8.8%
2019	77.7%	16.0%	6.3%

Source: DWC

Number of Division of Workers' Compensation (DWC) Lien Decisions

<u>Calendar Year</u>	<u>Number of Lien Decisions (in 000s)</u>	<u>Year-to-Year Change</u>
1993	18.4	---
1994	26.3	42.9%
1995	33.6	27.8%
1996	33.9	0.9%
1997	27.1	-20.1%
1998	19.3	-28.8%
1999	17.6	-8.8%
2000	15.1	-14.2%
2001	14.8	-2.0%
2002	16.6	12.2%
2003	16.5	-0.6%
2004	21.2	28.5%
2005	24.3	14.6%
2006	28.3	16.5%
2007	35.2	24.4%
2008*	34.5	-2.0%
2009	28.5	-17.4%
2010	37.1	30.2%
2011	41.4	11.6%
2012	64.3	55.3%
2013	65.8	2.3%
2014	58.3	-11.4%
2015	64.4	10.5%
2016	56.1	-12.9%
2017	52.1	-7.1%
2018	49.7	-4.6%

*Prior to 8/9/2008, DWC's workload adjudication data was available from the legacy system. DWC transitioned to a new computer-based system, the Electronic Adjudication Management System (EAMS), at the end of August 2008. Therefore, data for 2008 are comprised of data both from the legacy and from the EAMS system and may not be directly comparable to previous years due to transition issues.

Source: DWC via Commission on Health and Safety & Workers' Compensation 2019 Annual Report (draft)

Counts by Region**								
<u>Time Period</u>	<u>Bay Area</u>	<u>Central Coast/ Valley</u>	<u>Los Angeles County</u>	<u>Remainder of LA Basin</u>	<u>Remaining CA Zip Codes</u>	<u>Sacramento</u>	<u>San Diego County</u>	<u>Total</u>
2011	18,723	24,414	283,774	114,554	2,535	3,934	15,922	463,856
1st Qtr 2012	5,490	7,245	97,245	38,034	895	1,248	4,936	155,093
2nd Qtr 2012	5,467	8,970	122,040	44,065	1,102	1,322	4,991	187,957
3rd Qtr 2012	6,434	15,289	207,639	85,152	698	1,407	6,611	323,230
4th Qtr 2012	10,397	25,730	342,549	123,129	1,119	1,557	8,523	513,004
1st Qtr 2013	1,232	2,193	46,830	17,032	230	268	1,312	69,097
2nd Qtr 2013	1,450	1,562	18,947	6,917	211	339	684	30,110
3rd Qtr 2013	1,607	1,795	25,999	9,855	247	410	991	40,904
4th Qtr 2013	1,928	2,025	29,537	10,893	276	358	1,136	46,153
1st Qtr 2014	1,841	2,029	25,668	10,117	239	384	1,165	41,443
2nd Qtr 2014	1,697	2,306	29,417	11,942	265	354	1,263	47,244
3rd Qtr 2014	1,941	1,996	29,665	12,198	355	424	1,378	47,957
4th Qtr 2014	1,690	2,371	34,772	12,469	374	384	1,488	53,548
1st Qtr 2015	2,071	3,058	45,827	18,016	431	488	2,133	72,024
2nd Qtr 2015	2,370	4,218	54,147	22,198	501	500	2,787	86,721
3rd Qtr 2015	2,428	4,977	61,619	24,827	691	526	3,047	98,115
4th Qtr 2015	2,338	4,991	68,843	26,571	686	495	3,085	107,009
1st Qtr 2016	2,884	5,410	67,259	27,326	672	538	3,931	108,020
2nd Qtr 2016	2,543	5,112	66,511	26,852	536	506	3,912	105,972
3rd Qtr 2016	2,243	4,167	45,707	20,136	420	462	3,404	76,539
4th Qtr 2016	1,872	4,433	66,169	25,942	506	397	4,400	103,719
1st Qtr 2017	1,228	1,872	24,947	9,594	334	312	1,380	39,667
2nd Qtr 2017	1,537	2,211	33,194	11,969	349	369	1,764	51,393
3rd Qtr 2017	1,700	2,047	29,215	10,487	298	419	1,149	45,315
4th Qtr 2017	1,535	1,804	26,566	9,914	313	366	1,176	41,674
1st Qtr 2018	1,501	1,575	28,754	10,848	312	406	1,314	44,710
2nd Qtr 2018	1,264	1,538	23,697	9,034	312	338	986	37,169
3rd Qtr 2018	1,156	1,178	18,596	6,340	241	309	702	28,522
4th Qtr 2018	1,276	1,217	19,034	6,108	230	308	690	28,863
1st Qtr 2019	1,206	1,044	17,863	5,664	268	336	577	26,958
2nd Qtr 2019	1,447	1,049	15,862	5,073	244	334	445	24,454
3rd Qtr 2019	1,246	1,195	16,354	4,731	319	381	549	24,775
4th Qtr 2019	1,206	948	15,597	4,496	286	334	434	23,301

Counts by Type						
<u>Time Period</u>	<u>Interpreter</u>	<u>Medical</u>	<u>Medical-Legal</u>	<u>Copy Service</u>	<u>Other***</u>	<u>Total</u>
2011	28,721	292,982	39,569	539	102,045	463,856
1st Qtr 2012	12,937	85,152	22,931	139	33,934	155,093
2nd Qtr 2012	17,162	106,336	37,440	65	26,954	187,957
3rd Qtr 2012	46,095	182,474	64,912	91	29,658	323,230
4th Qtr 2012	47,427	317,241	80,916	62	67,358	513,004
1st Qtr 2013	2,397	45,631	11,411	11	9,647	69,097
2nd Qtr 2013	831	22,480	587	20	6,192	30,110
3rd Qtr 2013	484	32,356	653	23	7,388	40,904
4th Qtr 2013	378	37,515	537	8	7,715	46,153
1st Qtr 2014	421	33,105	397	16	7,504	41,443
2nd Qtr 2014	275	38,534	320	10	8,105	47,244
3rd Qtr 2014	140	39,810	179	7	7,821	47,957
4th Qtr 2014	156	45,440	160	4	7,788	53,548
1st Qtr 2015	143	60,155	216	18	11,492	72,024
2nd Qtr 2015	152	74,037	268	7	12,257	86,721
3rd Qtr 2015	134	84,290	191	7	13,493	98,115
4th Qtr 2015	101	91,820	236	15	14,837	107,009
1st Qtr 2016	60	93,393	233	5	14,329	108,020
2nd Qtr 2016	90	89,781	467	6	15,628	105,972
3rd Qtr 2016	64	64,924	262	11	11,278	76,539
4th Qtr 2016	94	91,867	68	4	11,686	103,719
1st Qtr 2017	29	33,952	19	3	5,664	39,667
2nd Qtr 2017	33	43,470	34	5	7,851	51,393
3rd Qtr 2017	77	37,815	31	0	7,392	45,315
4th Qtr 2017	65	33,876	18	1	7,714	41,674
1st Qtr 2018	64	36,674	29	2	7,941	44,710
2nd Qtr 2018	103	29,276	22	0	7,768	37,169
3rd Qtr 2018	79	21,334	14	4	7,091	28,522
4th Qtr 2018	60	21,595	22	1	7,185	28,863
1st Qtr 2019	75	19,887	12	1	6,983	26,958
2nd Qtr 2019	54	18,497	17	1	5,885	24,454
3rd Qtr 2019	43	17,721	9	1	6,674	24,775
4th Qtr 2019	48	15,977	14	0	7,262	23,301

* Lien Counts exclude SDI/EDD Liens

** Regions reflect the following WCAB Office mapping: Bay Area - Oakland, San Jose, San Francisco; Central Coast/Valley - Bakersfield, Fresno, Goleta, Grover Beach, Salinas, Stockton; Los Angeles County - Long Beach, Los Angeles, Marina Del Rey, Pomona, Van Nuys; Remainder of LA Basin - Anaheim, Oxnard, Riverside, San Bernardino, Santa Ana; Remaining CA Zip Codes - Eureka, Redding, San Luis Obispo, Santa Barbara, Santa Rosa; Sacramento - Sacramento; San Diego County - San Diego

***Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens

Source: EAMS Liens Data

Liens Filed Counts*

Counts by Region**								
Month	Bay Area	Central Coast/ Valley	Los Angeles County	Remainder of LA Basin	Remaining CA Zip Codes	Sacramento	San Diego County	Total
Jan-17	210	347	5,362	2,380	69	64	316	8,748
Feb-17	421	598	8,251	3,112	122	118	453	13,075
Mar-17	597	927	11,334	4,102	143	130	611	17,844
Apr-17	474	764	11,573	4,118	110	106	640	17,785
May-17	519	835	11,395	4,175	121	132	573	17,750
Jun-17	544	612	10,226	3,676	118	131	551	15,858
Jul-17	530	548	10,092	3,636	101	130	426	15,463
Aug-17	594	703	10,712	3,690	109	146	412	16,366
Sep-17	576	796	8,411	3,161	88	143	311	13,486
Oct-17	514	773	9,856	3,585	100	128	413	15,369
Nov-17	451	496	8,506	3,214	110	119	371	13,267
Dec-17	570	535	8,204	3,115	103	119	392	13,038
Jan-18	473	565	9,986	3,636	98	123	457	15,338
Feb-18	490	479	8,982	3,451	101	140	481	14,124
Mar-18	538	531	9,786	3,761	113	143	376	15,248
Apr-18	387	546	8,851	3,375	97	90	361	13,707
May-18	477	513	8,380	3,433	112	126	308	13,349
Jun-18	400	479	6,466	2,226	103	122	317	10,113
Jul-18	386	414	6,101	2,109	79	124	229	9,442
Aug-18	406	422	7,039	2,338	76	91	275	10,647
Sep-18	364	342	5,456	1,893	86	94	198	8,433
Oct-18	476	454	6,645	2,270	74	106	271	10,296
Nov-18	454	431	6,436	2,097	81	117	237	9,853
Dec-18	346	332	5,953	1,741	75	85	182	8,714
Jan-19	434	371	6,394	1,918	78	113	191	9,499
Feb-19	407	385	5,581	1,802	120	116	205	8,616
Mar-19	365	288	5,888	1,944	70	107	181	8,843
Apr-19	449	374	5,683	1,903	99	121	188	8,817
May-19	535	366	5,352	1,734	82	113	152	8,334
Jun-19	463	309	4,827	1,436	63	100	105	7,303
Jul-19	444	389	5,595	1,685	96	139	167	8,515
Aug-19	457	483	5,717	1,580	115	122	202	8,676
Sep-19	345	323	5,042	1,466	108	120	180	7,584
Oct-19	453	379	5,941	1,778	112	135	161	8,959
Nov-19	394	294	5,056	1,461	86	107	150	7,548
Dec-19	359	275	4,600	1,257	88	92	123	6,794

Counts by Type						
Month	Interpreter	Medical	Medical-Legal	Copy Service	Other***	Total
Jan-17	9	7,460	5	2	1,272	8,748
Feb-17	8	11,103	10	1	1,953	13,075
Mar-17	12	15,389	4	0	2,439	17,844
Apr-17	13	15,188	12	3	2,569	17,785
May-17	7	14,838	14	1	2,890	17,750
Jun-17	13	13,444	8	1	2,392	15,858
Jul-17	37	13,022	9	0	2,395	15,463
Aug-17	24	13,599	11	0	2,732	16,366
Sep-17	16	11,194	11	0	2,265	13,486
Oct-17	13	12,692	5	1	2,658	15,369
Nov-17	19	10,666	5	0	2,577	13,267
Dec-17	33	10,518	8	0	2,479	13,038
Jan-18	41	12,695	12	1	2,589	15,338
Feb-18	17	11,551	9	1	2,546	14,124
Mar-18	6	12,428	8	0	2,806	15,248
Apr-18	18	10,714	11	0	2,964	13,707
May-18	25	10,744	8	0	2,572	13,349
Jun-18	60	7,818	3	0	2,232	10,113
Jul-18	44	7,056	0	3	2,339	9,442
Aug-18	23	7,914	8	1	2,701	10,647
Sep-18	12	6,364	6	0	2,051	8,433
Oct-18	23	7,720	9	0	2,544	10,296
Nov-18	24	7,309	7	1	2,512	9,853
Dec-18	13	6,566	6	0	2,129	8,714
Jan-19	26	6,759	7	1	2,706	9,499
Feb-19	38	6,011	3	0	2,564	8,616
Mar-19	11	7,117	2	0	1,713	8,843
Apr-19	27	6,707	4	1	2,078	8,817
May-19	22	6,357	10	0	1,945	8,334
Jun-19	5	5,433	3	0	1,862	7,303
Jul-19	22	6,307	2	1	2,183	8,515
Aug-19	8	6,265	4	0	2,399	8,676
Sep-19	13	5,149	3	0	2,419	7,584
Oct-19	38	5,957	4	0	2,960	8,959
Nov-19	2	5,280	8	0	2,258	7,548
Dec-19	8	4,740	2	0	2,044	6,794

* Lien Counts exclude SDI/EDD Liens

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***Other includes Attorney Fees, Family Support, Living Expense, PFL, Transport, Wage Replace Liens

Source: EAMS Liens Data

IMR Filed Counts

Quarterly IMRs Filed

<u>Year & Quarter</u>	<u>IMRs Filed</u>	<u>Change from Same Quarter in Prior Year</u>	<u>Eligible IMRs</u>	<u>Change from Same Quarter in Prior Year</u>
2013 1Q & 2Q	878	---	---	---
2013 3Q	31,950	---	---	---
2013 4Q	51,092	---	---	---
2014 1Q	49,929	---	17,421	---
2014 2Q	60,023	---	24,417	---
2014 3Q	59,678	86.8%	54,959	---
2014 4Q	58,577	14.7%	46,512	---
2015 1Q	61,142	22.5%	36,314	108.4%
2015 2Q	65,418	9.0%	48,628	99.2%
2015 3Q	65,889	10.4%	40,603	-26.1%
2015 4Q	61,330	4.7%	39,950	-14.1%
2016 1Q	60,772	-0.6%	41,023	13.0%
2016 2Q	64,852	-0.9%	44,287	-8.9%
2016 3Q	62,411	-5.3%	43,892	8.1%
2016 4Q	61,318	0.0%	43,618	9.2%
2017 1Q	61,253	0.8%	43,194	5.3%
2017 2Q	62,773	-3.2%	42,866	-3.2%
2017 3Q	63,380	1.6%	42,836	-2.4%
2017 4Q	60,125	-1.9%	43,298	-0.7%
2018 1Q	64,533	5.4%	47,336	9.6%
2018 2Q	66,647	6.2%	48,175	12.4%
2018 3Q	61,658	-2.7%	45,775	6.9%
2018 4Q	59,539	-1.0%	44,941	3.8%
2019 1Q	56,083	-13.1%	42,334	-10.6%
2019 2Q	57,633	-13.5%	43,189	-10.3%
2019 3Q	55,758	-9.6%	41,023	-10.4%
2019 4Q	52,654	-11.6%	40,008	-11.0%

Yearly IMRs Filed

	<u>Original IMR Applications</u>	<u>Duplicates</u>	<u>Ineligible</u>	<u>Total Rejected</u>	<u>Eligible IMRs</u>	<u>Eligible IMR Yearly Change</u>
2013 IMR Counts	83,920	15,560	15,516	31,076	52,844	---
2014 IMR Counts	228,084	56,503	28,272	84,775	143,309	171.2%
2015 IMR Counts	253,776	58,106	30,175	88,281	165,495	15.5%
2016 IMR Counts	249,353	53,314	23,219	76,533	172,820	4.4%
2017 IMR Counts	247,531	54,993	20,344	75,337	172,194	-0.4%
2018 IMR Counts	252,377	52,294	13,856	66,150	186,227	8.1%
2019 IMR Counts	222,128	44,714	10,860	55,574	166,554	-10.6%

Source: DWC Collected from IMR Vendor
DWC Via Commission on Health and Safety & Workers' Compensation 2018 Annual Report

Reported Indemnity Claim Count Development – Statewide

Accident Year	<u>9-21</u>	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>	<u>81-93</u>	<u>93-105</u>	<u>105-117</u>	
2001										1.000
2002								1.000		1.000
2003							0.999	0.999		0.999
2004						1.000	0.999	0.999		0.999
2005					1.002	1.001	1.000	1.000		1.000
2006				1.002	1.001	1.000	1.001	1.000		1.001
2007			1.008	1.004	1.002	1.001	1.000	1.001		1.001
2008		1.029	1.012	1.006	1.003	1.002	1.002	1.001		1.001
2009	1.627	1.035	1.014	1.007	1.004	1.003	1.001	1.001		1.000
2010	1.687	1.040	1.015	1.007	1.005	1.002	1.002	1.000		1.000
2011	1.713	1.046	1.015	1.010	1.003	1.001	1.001	1.000		
2012	1.735	1.050	1.019	1.006	1.003	1.002	1.000			
2013	1.752	1.050	1.010	1.006	1.002	1.001				
2014	1.750	1.040	1.011	1.005	1.002					
2015	1.728	1.039	1.007	1.004						
2016	1.731	1.042	1.009							
2017	1.707	1.033								
2018	1.703									
Latest Year										
I. <u>Age-to-Age</u>	1.703	1.033	1.009	1.004	1.002	1.001	1.000	1.000	1.000	
II. <u>Age-to-Ultimate</u>	1.793	1.053	1.020	1.010	1.007	1.005	1.003	1.003	1.003	1.002
III. <u>Estimated Percent of Ultimate Indemnity Claims Reported</u>	55.8%	95.0%	98.1%	99.0%	99.3%	99.5%	99.7%	99.7%	99.7%	99.8%

Reported Total Claim Count Development – Statewide

Accident Year	<u>9-21</u>	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>	<u>81-93</u>	<u>93-105</u>	<u>105-117</u>	
2001										1.001
2002								1.001		1.001
2003							1.001	1.001		1.000
2004						1.001	1.001	1.000		1.000
2005					1.001	1.002	1.001	1.001		1.000
2006				1.002	1.002	1.001	1.001	1.001		1.001
2007			1.006	1.004	1.002	1.001	1.001	1.001		1.001
2008		1.017	1.009	1.004	1.002	1.002	1.001	1.001		1.000
2009	1.593	1.020	1.008	1.004	1.002	1.002	1.001	1.001		1.001
2010	1.599	1.022	1.008	1.004	1.003	1.002	1.002	1.001		1.000
2011	1.604	1.023	1.008	1.006	1.002	1.001	1.001	1.001		
2012	1.628	1.024	1.010	1.004	1.002	1.001	1.001			
2013	1.639	1.026	1.007	1.004	1.002	1.001				
2014	1.650	1.022	1.007	1.004	1.002					
2015	1.638	1.021	1.006	1.003						
2016	1.632	1.022	1.006							
2017	1.635	1.016								
2018	1.615									
Latest Year										
I. <u>Age-to-Age</u>	1.615	1.016	1.006	1.003	1.002	1.001	1.001	1.001	1.000	
II. <u>Age-to-Ultimate</u>	1.669	1.034	1.017	1.011	1.008	1.006	1.005	1.004	1.003	1.003
III. <u>Estimated Percent of Ultimate Total Claims Reported</u>	59.9%	96.7%	98.3%	98.9%	99.2%	99.4%	99.5%	99.6%	99.7%	99.7%

Source: WCIRB quarterly calls for experience

Indemnity Claim Settlement Ratios by Injury Type

Permanent Partial						Temporary					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
1997	8.3%	33.0%	55.4%	69.4%	77.2%	1997	36.1%	67.5%	79.2%	92.4%	93.8%
1998	8.8%	30.6%	52.9%	67.1%	74.0%	1998	52.5%	75.9%	88.3%	90.9%	93.8%
1999	8.5%	28.7%	49.7%	61.8%	68.6%	1999	56.8%	79.6%	86.3%	90.3%	93.3%
2000	7.9%	26.4%	44.6%	56.7%	65.7%	2000	57.3%	75.6%	83.6%	88.7%	91.2%
2001	6.9%	21.8%	40.6%	57.0%	68.8%	2001	51.6%	70.5%	81.7%	86.2%	88.9%
2002	5.1%	19.0%	41.1%	59.6%	71.0%	2002	54.0%	74.7%	83.1%	88.0%	91.2%
2003	4.0%	20.6%	43.9%	61.0%	72.1%	2003	60.6%	77.4%	85.7%	90.8%	93.6%
2004	5.2%	22.4%	43.8%	59.9%	71.1%	2004	63.0%	80.1%	88.1%	93.0%	94.8%
2005	5.9%	22.5%	43.1%	59.3%	69.6%	2005	62.9%	78.8%	86.5%	89.6%	95.0%
2006	6.4%	23.5%	44.3%	59.4%	68.9%	2006	64.7%	81.7%	88.1%	93.2%	95.1%
2007	6.0%	23.9%	43.6%	58.0%	68.1%	2007	66.2%	81.9%	90.1%	93.3%	94.7%
2008	6.1%	24.0%	43.2%	57.9%	69.8%	2008	66.9%	82.7%	88.8%	91.8%	94.1%
2009	6.1%	23.5%	42.4%	58.4%	70.6%	2009	66.9%	80.7%	86.8%	90.9%	93.1%
2010	7.2%	25.2%	45.7%	62.3%	73.6%	2010	64.9%	78.2%	85.5%	89.8%	92.5%
2011	7.9%	27.4%	48.6%	64.4%	75.6%	2011	63.2%	77.4%	84.9%	89.5%	91.8%
2012	9.2%	30.5%	51.4%	66.3%	77.6%	2012	63.1%	78.0%	86.1%	90.7%	93.0%
2013	10.2%	31.9%	53.2%	69.5%	80.1%	2013	62.9%	79.5%	87.0%	91.0%	93.5%
2014	10.8%	33.5%	55.5%	71.8%	82.6%	2014	65.5%	80.6%	87.6%	91.8%	94.1%
2015	12.6%	37.9%	59.9%	74.9%		2015	65.2%	80.8%	88.7%	93.3%	
2016	14.0%	40.8%	63.6%			2016	67.2%	83.0%	91.6%		
2017	15.4%	44.4%				2017	71.3%	86.0%			
2018	14.7%					2018	70.7%				

Cumulative Injury*						Non-Cumulative Injury					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
1997	8.8%	31.7%	52.1%	66.7%	74.7%	1997	18.5%	46.0%	64.8%	78.4%	83.8%
1998	11.4%	30.8%	50.4%	63.3%	71.5%	1998	26.9%	49.7%	68.3%	77.7%	82.8%
1999	12.2%	29.5%	46.7%	59.4%	67.8%	1999	30.5%	52.3%	67.1%	75.4%	80.2%
2000	11.2%	27.6%	43.8%	56.0%	65.8%	2000	31.9%	50.6%	64.0%	72.6%	78.3%
2001	10.7%	24.6%	42.1%	56.6%	67.4%	2001	27.9%	44.8%	60.2%	71.2%	78.7%
2002	11.4%	26.6%	44.6%	60.2%	70.7%	2002	27.9%	44.8%	61.1%	73.4%	81.0%
2003	14.7%	30.2%	48.8%	62.8%	72.1%	2003	31.1%	48.0%	64.6%	76.1%	83.2%
2004	17.4%	33.4%	50.4%	63.9%	72.7%	2004	34.8%	52.2%	67.0%	77.4%	83.8%
2005	17.8%	33.7%	49.3%	61.2%	71.0%	2005	38.2%	54.5%	68.1%	77.1%	84.5%
2006	15.8%	32.6%	47.7%	59.9%	68.2%	2006	39.1%	56.2%	69.3%	79.0%	84.2%
2007	16.1%	31.8%	46.9%	58.2%	67.3%	2007	39.4%	56.3%	69.9%	78.2%	83.5%
2008	14.0%	29.3%	44.0%	56.4%	66.9%	2008	39.0%	56.0%	68.5%	77.0%	83.7%
2009	12.2%	25.9%	41.0%	55.3%	67.5%	2009	39.1%	55.0%	67.3%	76.9%	83.6%
2010	13.2%	27.2%	44.3%	60.3%	71.5%	2010	38.9%	54.8%	68.3%	78.1%	84.5%
2011	11.6%	28.3%	46.9%	61.3%	72.0%	2011	38.9%	55.8%	69.5%	79.1%	85.3%
2012	12.1%	31.1%	48.2%	62.3%	74.3%	2012	40.0%	57.9%	72.0%	81.0%	87.0%
2013	14.9%	34.0%	52.3%	67.1%	77.5%	2013	40.5%	59.6%	73.3%	82.6%	88.4%
2014	15.9%	36.6%	54.0%	69.0%	80.7%	2014	42.3%	60.9%	74.8%	84.3%	89.8%
2015	18.0%	40.6%	59.3%	71.6%		2015	42.7%	62.7%	77.0%	86.3%	
2016	20.9%	47.7%	63.5%			2016	44.6%	64.7%	80.2%		
2017	18.5%	51.3%				2017	48.6%	67.8%			
2018	18.2%					2018	47.6%				

All Indemnity					
AY/RL	1	2	3	4	5
1997	17.1%	43.9%	63.0%	76.7%	82.5%
1998	24.9%	47.2%	65.9%	75.8%	81.3%
1999	28.3%	49.6%	64.7%	73.4%	78.7%
2000	29.4%	47.8%	61.6%	70.6%	76.8%
2001	25.4%	41.9%	57.6%	69.1%	77.1%
2002	25.1%	41.7%	58.2%	71.2%	79.3%
2003	28.2%	44.9%	61.8%	73.7%	81.3%
2004	32.1%	49.3%	64.5%	75.3%	82.1%
2005	35.6%	51.9%	65.7%	75.1%	82.8%
2006	36.6%	53.7%	67.0%	76.9%	82.5%
2007	37.0%	53.7%	67.5%	76.2%	81.8%
2008	36.4%	53.2%	65.9%	74.8%	81.9%
2009	35.9%	51.6%	64.2%	74.4%	81.7%
2010	35.8%	51.5%	65.4%	75.9%	82.9%
2011	35.6%	52.4%	66.8%	77.0%	83.7%
2012	36.4%	54.4%	68.9%	78.6%	85.4%
2013	36.8%	55.9%	70.3%	80.3%	86.9%
2014	38.3%	57.1%	71.6%	81.9%	88.4%
2015	38.9%	59.3%	74.3%	84.1%	
2016	41.0%	62.2%	77.8%		
2017	43.2%	65.0%			
2018	43.1%				

Notes:
*Cumulative Injury includes both cumulative injury and occupational disease.
Latest diagonal (italics) is based on a partial accident year.
Settlement rates are based on claim counts developed to 5th report.
Source: WCIRB Unit Statistical data

Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

Accident Year	Development								
	<u>9-21</u>	<u>21-33</u>	<u>33-45</u>	<u>45-57</u>	<u>57-69</u>	<u>69-81</u>	<u>81-93</u>	<u>93-105</u>	<u>105-117</u>
2001									16.6%
2002								18.8%	16.4%
2003							19.8%	18.3%	17.6%
2004						20.5%	20.5%	18.7%	22.3%
2005					22.7%	22.0%	19.6%	23.0%	20.7%
2006				26.1%	23.1%	20.7%	23.6%	21.8%	19.3%
2007			28.2%	26.3%	22.4%	25.4%	24.4%	21.7%	23.4%
2008		25.4%	27.4%	25.8%	26.6%	26.6%	24.5%	25.0%	23.6%
2009	31.5%	24.9%	27.0%	27.7%	27.2%	26.7%	27.3%	25.0%	24.5%
2010	31.9%	26.0%	29.0%	29.8%	28.4%	28.9%	28.8%	26.0%	25.0%
2011	32.0%	27.3%	30.7%	31.2%	29.8%	29.9%	30.3%	27.0%	
2012	32.3%	29.3%	31.9%	32.0%	32.4%	31.7%	29.4%		
2013	33.2%	30.8%	34.0%	34.9%	33.8%	32.4%			
2014	34.2%	32.2%	35.5%	37.1%	33.4%				
2015	35.5%	35.3%	38.1%	37.4%					
2016	37.7%	37.1%	39.7%						
2017	40.2%	38.4%							
2018	40.4%								

Source: WCIRB quarterly calls for experience

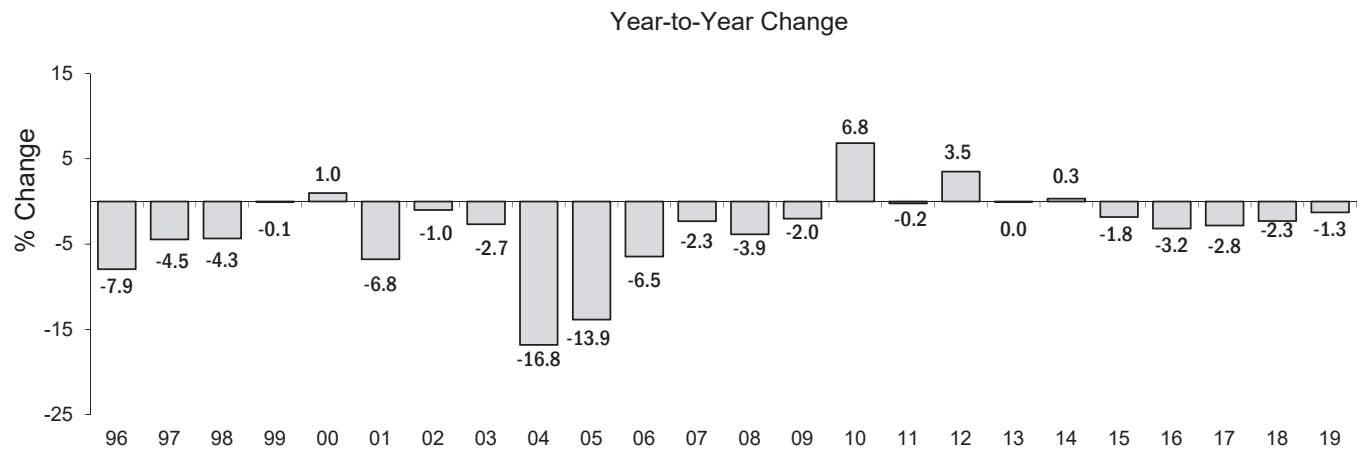
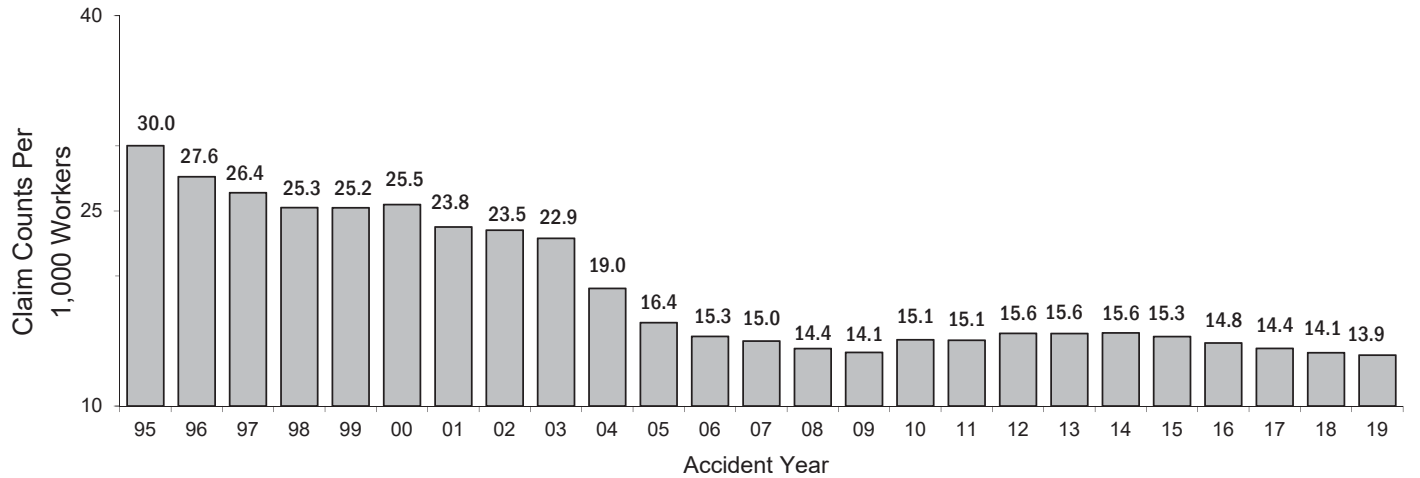
Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims

Accident Year	Development														
	3-6	6-9	9-12	12-15	15-18	18-21	21-24	24-27	27-30	30-33	33-36	36-39	39-42	42-45	45-48
2008	4.7%	8.3%	11.2%	11.2%	9.2%	7.0%	6.6%	6.7%	7.3%	7.4%	8.1%	7.3%	7.4%	7.7%	7.5%
2009	4.0%	7.9%	10.3%	10.6%	8.5%	6.8%	6.6%	6.5%	6.9%	7.6%	7.8%	7.2%	7.9%	7.1%	7.7%
2010	4.1%	7.5%	10.4%	11.1%	8.5%	6.8%	7.1%	6.8%	7.6%	7.3%	7.9%	7.8%	9.1%	8.8%	9.3%
2011	4.3%	7.2%	10.6%	10.7%	8.7%	7.0%	7.3%	7.0%	8.4%	8.3%	9.2%	8.4%	8.5%	9.2%	9.1%
2012	4.3%	7.4%	10.4%	10.5%	9.1%	7.5%	8.2%	7.6%	8.6%	9.2%	9.3%	8.9%	9.3%	9.5%	9.6%
2013	4.2%	7.1%	10.4%	10.6%	9.4%	8.4%	8.6%	8.5%	9.2%	9.3%	9.7%	9.8%	10.2%	9.9%	10.4%
2014	4.0%	7.3%	10.2%	11.0%	9.7%	9.1%	8.8%	9.1%	9.4%	9.8%	10.3%	9.6%	11.2%	10.3%	11.2%
2015	4.0%	7.7%	10.2%	11.7%	10.6%	9.2%	9.5%	10.0%	11.1%	10.6%	11.1%	11.1%	11.7%	11.6%	11.7%
2016	4.3%	7.6%	11.0%	12.5%	11.4%	9.9%	10.7%	10.3%	11.8%	11.2%	12.5%	12.0%	12.2%	11.1%	
2017	4.8%	8.3%	12.4%	13.2%	12.0%	10.7%	11.4%	10.9%	11.9%	11.6%					
2018	4.9%	8.5%	12.5%	13.4%	12.0%	10.8%									
2019	4.9%	8.5%													

Note: All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 82% to 100% of the total California workers' compensation insured market measured using 2018 earned premium levels).

Source: WCIRB quarterly calls for experience

**California Workers' Compensation
Estimated Indemnity Claim Frequency by Accident Year
As of September 30, 2019**



Note:

The 2019 estimate is based on comparison of claim counts based on WCIRB accident year experience as of September 30, 2019 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.

2019 Accident Year Indemnity Claim Frequency Model
As of PY 2017 Preliminary 1st Set & December 2019 UCLA

AY	Annual % Changes Intra- Class Ind Freq	Annual Log Differences						
		Intra-Class Indemnity Frequency per \$M Exposure at PY 2018 Level			AY+1		Economic Variables (1st Prin. Comp.)	Cal/OSHA Dummy Variable
		Total	Cumulative	Non-cum.	Indemnity Benefit Level	Cumulative Injury Index		
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.080	0.000
1981	-3.5%	-0.036	-0.028	-0.036	0.000	0.008	-0.079	0.000
1982	-1.6%	-0.016	0.153	-0.022	0.352	0.175	-0.294	0.000
1983	6.2%	0.060	0.214	0.054	0.081	0.160	0.029	0.000
1984	9.5%	0.091	0.235	0.084	0.000	0.151	0.222	0.000
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.081	0.000
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.078	0.000
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.151	0.000
1988	0.7%	0.007	0.104	0.000	0.000	0.104	0.088	0.000
1989	2.5%	0.024	0.212	0.009	0.046	0.203	0.045	0.000
1990	9.0%	0.087	0.337	0.061	0.071	0.276	-0.121	0.000
1991	0.3%	0.003	0.166	-0.018	0.023	0.184	-0.293	0.000
1992	-11.1%	-0.118	-0.272	-0.098	0.013	-0.174	-0.186	0.068
1993	-14.9%	-0.162	-0.240	-0.153	-0.057	-0.088	-0.022	0.464
1994	-12.8%	-0.136	-0.462	-0.107	0.061	-0.355	0.106	0.173
1995	-4.6%	-0.048	-0.016	-0.050	0.053	0.034	0.092	0.295
1996	-6.8%	-0.070	-0.136	-0.065	0.096	-0.071	0.075	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.138	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.079	0.000
1999	1.5%	0.014	0.100	0.008	0.040	0.092	0.128	0.000
2000	4.0%	0.039	0.071	0.037	-0.003	0.034	0.066	0.000
2001	-6.9%	-0.072	-0.018	-0.076	-0.007	0.059	-0.101	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.202	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.023	0.000
2004	-16.6%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.019	0.049	0.040	-0.084	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.308	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.2%	0.012	0.032	0.010	0.003	0.022	0.043	0.000
2012	4.8%	0.046	0.127	0.037	0.025	0.091	0.123	0.000
2013	0.3%	0.003	0.126	-0.013	0.071	0.139	0.151	0.000
2014	0.1%	0.001	0.050	-0.006	0.003	0.056	0.178	0.000
2015	-1.2%	-0.012	0.026	-0.018	0.002	0.043	0.194	0.000
2016	-2.4%	-0.025	0.062	-0.039	0.004	0.101	0.124	0.000
2017	-2.3%	-0.023	-0.043	-0.020	0.004	-0.023	0.137	0.000
2018*	-2.0%	-0.021	-0.092	-0.007	0.003	-0.085	0.132	0.000
2019	-1.8%	-0.019	-0.019	-0.019	0.004	0.000	0.006	0.000
2020	-2.1%	-0.021	-0.021	-0.021	0.004	0.000	-0.019	0.000
2021	-2.7%	-0.027	-0.027	-0.027	0.004	0.000	-0.074	0.000
2022	-2.0%	-0.020	-0.020	-0.020	0.004	0.000	-0.011	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant -0.020

Std Err of Y Est 0.039

R Squared 0.574

No. of Observations 40

Degrees of Freedom 35

X Coefficient(s) 0.177 0.277 0.103 -0.142

Std Err of Coef. 0.071 0.060 0.043 0.075

Notes: Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency. The Indemnity Benefit Level change for Ogilvie & Almaraz / Guzman in 2009-2010 is not leading. The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits. The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03. For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda. Economic variables are historical through 2018; December 2019 UCLA Anderson Forecasts for 2019 on. Regression is over AY 1979 through AY 2018. AY 2019 through AY 2022 are projections. The constant term, -0.020, consists of measured offsets that recognize annual changes in real benefit levels relative to nominal benefit levels and long-term economic growth. Without these offsets, the indemnity benefit level and economic variables would project frequency to increase without bound.

*AY 2018 is preliminary and change is based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.

Indemnity Claim Frequency History and Projections

AY	Intra-Class Indemnity Claim Frequency(a)	Inter-Class Indemnity Claim Frequency Index(b)	Overall Indemnity Claim Frequency	Annual Percent Changes		
				Intra-Class	Inter-Class	Overall
1979	0.515	0.921	0.620	---	---	---
1980	0.481	0.914	0.576	-6.54%	-0.75%	-7.24%
1981	0.464	0.900	0.547	-3.54%	-1.56%	-5.04%
1982	0.457	0.882	0.527	-1.59%	-2.00%	-3.56%
1983	0.485	0.873	0.554	6.20%	-0.98%	5.17%
1984	0.531	0.871	0.606	9.53%	-0.18%	9.32%
1985	0.542	0.867	0.615	2.05%	-0.51%	1.52%
1986	0.529	0.859	0.595	-2.39%	-0.92%	-3.28%
1987	0.538	0.854	0.601	1.53%	-0.56%	0.97%
1988	0.541	0.854	0.605	0.69%	-0.06%	0.64%
1989	0.555	0.853	0.619	2.47%	-0.08%	2.39%
1990	0.605	0.845	0.669	9.04%	-0.89%	8.07%
1991	0.607	0.832	0.660	0.28%	-1.58%	-1.30%
1992	0.539	0.820	0.579	-11.09%	-1.45%	-12.37%
1993	0.459	0.810	0.486	-14.91%	-1.25%	-15.98%
1994	0.400	0.809	0.424	-12.76%	-0.06%	-12.81%
1995	0.382	0.811	0.405	-4.64%	0.16%	-4.49%
1996	0.356	0.800	0.373	-6.78%	-1.25%	-7.94%
1997	0.344	0.791	0.356	-3.27%	-1.23%	-4.46%
1998	0.331	0.786	0.341	-3.76%	-0.60%	-4.34%
1999	0.336	0.774	0.340	1.45%	-1.48%	-0.05%
2000	0.350	0.752	0.344	4.02%	-2.91%	0.99%
2001	0.325	0.753	0.320	-6.91%	0.13%	-6.79%
2002	0.318	0.763	0.317	-2.31%	1.34%	-1.00%
2003	0.309	0.764	0.309	-2.86%	0.20%	-2.67%
2004	0.257	0.763	0.257	-16.65%	-0.21%	-16.82%
2005	0.222	0.760	0.221	-13.59%	-0.31%	-13.85%
2006	0.210	0.754	0.207	-5.69%	-0.81%	-6.46%
2007	0.206	0.749	0.202	-1.64%	-0.68%	-2.31%
2008	0.201	0.740	0.194	-2.71%	-1.18%	-3.86%
2009	0.200	0.727	0.190	-0.20%	-1.82%	-2.02%
2010	0.218	0.713	0.203	8.87%	-1.87%	6.83%
2011	0.221	0.703	0.203	1.20%	-1.42%	-0.24%
2012	0.231	0.694	0.210	4.76%	-1.20%	3.50%
2013	0.232	0.692	0.210	0.32%	-0.36%	-0.04%
2014	0.232	0.693	0.211	0.12%	0.20%	0.33%
2015	0.229	0.689	0.207	-1.18%	-0.66%	-1.84%
2016	0.224	0.683	0.200	-2.43%	-0.78%	-3.19%
2017(c)	0.219	0.680	0.195	-2.32%	-0.51%	-2.81%
2017(d)	0.217	0.680	0.193	---	---	---
2018(e)	0.213	0.678	0.189	-2.05%	-0.26%	-2.30%
2019	0.205	0.679	0.182	-3.46%	0.12%	-3.35%
2020	0.198	0.675	0.175	-3.71%	-0.54%	-4.23%
2021	0.189	0.670	0.166	-4.25%	-0.85%	-5.06%
2022	0.182	0.668	0.159	-3.63%	-0.18%	-3.81%
PY						
2008	0.201	0.734	0.193			
2009	0.208	0.720	0.196	3.89%	-1.84%	1.93%
2010	0.219	0.708	0.203	5.25%	-1.67%	3.53%
2011	0.225	0.699	0.206	2.82%	-1.32%	1.45%
2012	0.232	0.693	0.210	2.70%	-0.82%	1.87%
2013	0.232	0.693	0.210	0.23%	-0.11%	0.12%
2014	0.231	0.691	0.209	-0.47%	-0.19%	-0.65%
2015	0.227	0.686	0.204	-1.74%	-0.71%	-2.44%
2016	0.221	0.682	0.197	-2.72%	-0.66%	-3.36%
2017	0.215	0.679	0.191	-2.62%	-0.40%	-3.01%
2018	0.209	0.679	0.186	-2.68%	-0.09%	-2.77%
2019	0.202	0.677	0.179	-3.57%	-0.18%	-3.74%
2020	0.194	0.673	0.171	-3.95%	-0.68%	-4.59%
2021	0.186	0.669	0.163	-3.98%	-0.55%	-4.51%

Notes: (a) All frequencies are per \$M exposure at PY 2018 Level.
(b) Index is to AY 1961.
(c) 2017 accidents on 2017 and 2016 policies.
(d) 2017 accidents on 2016 policies only.
(e) AY 2018 percent changes are based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.
(f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

Changes in Incremental Indemnity Claim Counts and Medical-Only Claim Counts

Calendar Quarter <u>Evaluation</u>	Change in Statewide Incremental Number of Indemnity Claims		Change in Statewide Incremental Number of Medical-Only Claims	
	Change in	Change in	Change in	Change in
	Quarterly Increment	4-Quarter Increment	Quarterly Increment	4-Quarter Increment
	from Same Quarter at Prior <u>Calendar Year</u>	from Same Quarter at Prior <u>Calendar Year</u>	from Same Quarter at Prior <u>Calendar Year</u>	from Same Quarter at Prior <u>Calendar Year</u>
3/31/2007	-2.4%	---	---	---
6/30/2007	-10.2%	---	-13.5%	---
9/30/2007	0.3%	---	1.2%	---
12/31/2007	-13.4%	-6.3%	-19.4%	---
3/31/2008	-5.8%	-7.2%	-14.8%	-11.6%
6/30/2008	-3.9%	-5.7%	-2.8%	-9.0%
9/30/2008	-19.2%	-10.7%	-17.6%	-13.9%
12/31/2008	-16.7%	-11.4%	-3.8%	-10.3%
3/31/2009	-27.1%	-16.8%	-27.5%	-13.2%
6/30/2009	-14.2%	-19.4%	-27.0%	-19.4%
9/30/2009	-8.2%	-16.8%	-16.7%	-19.2%
12/31/2009	2.5%	-12.8%	-15.8%	-22.0%
3/31/2010	7.4%	-4.1%	-5.2%	-17.1%
6/30/2010	3.9%	1.0%	-1.9%	-10.6%
9/30/2010	6.7%	5.1%	-6.3%	-7.6%
12/31/2010	7.2%	6.3%	3.3%	-2.6%
3/31/2011	2.7%	5.1%	-4.1%	-2.3%
6/30/2011	-1.2%	3.8%	-8.9%	-4.1%
9/30/2011	3.4%	2.9%	-1.3%	-2.7%
12/31/2011	4.5%	2.3%	-7.8%	-5.5%
3/31/2012	-0.4%	1.5%	-1.8%	-4.6%
6/30/2012	8.1%	3.9%	0.1%	-2.6%
9/30/2012	5.5%	4.5%	3.2%	-1.5%
12/31/2012	6.7%	5.1%	5.5%	1.8%
3/31/2013	5.2%	6.4%	-4.2%	1.3%
6/30/2013	10.9%	7.1%	9.0%	3.4%
9/30/2013	6.2%	7.3%	-1.9%	2.0%
12/31/2013	5.4%	7.0%	0.5%	0.8%
3/31/2014	8.6%	7.7%	0.6%	1.9%
6/30/2014	-0.2%	4.8%	-5.8%	-1.8%
9/30/2014	1.1%	3.5%	1.3%	-0.9%
12/31/2014	-0.4%	2.0%	1.7%	-0.6%
3/31/2015	-2.3%	-0.4%	4.2%	0.2%
6/30/2015	2.4%	0.2%	2.7%	2.4%
9/30/2015	18.4%	4.8%	8.2%	4.3%
12/31/2015	2.7%	5.5%	0.7%	4.0%
3/31/2016	5.0%	7.3%	6.3%	4.5%
6/30/2016	2.7%	7.3%	4.6%	5.0%
9/30/2016	-13.7%	-1.6%	-3.6%	1.7%
12/31/2016	0.3%	-2.2%	-1.3%	1.2%
3/31/2017	3.8%	-2.4%	1.3%	0.1%
6/30/2017	3.8%	-2.1%	6.3%	0.6%
9/30/2017	0.9%	2.2%	5.2%	3.0%
12/31/2017	2.1%	2.6%	13.2%	6.5%
3/31/2018	-3.1%	0.9%	3.2%	7.0%
6/30/2018	-1.9%	-0.5%	-1.4%	5.0%
9/30/2018	7.4%	1.1%	10.1%	6.3%
12/31/2018	3.6%	1.5%	5.0%	4.3%
3/31/2019	4.4%	3.3%	3.6%	4.4%
6/30/2019	2.7%	4.5%	7.4%	6.6%
9/30/2019	0.5%	2.7%	-4.6%	2.5%

Source: WCIRB quarterly calls for experience

Economic Variables					
CY	Aggregate Employment	Unemployment Rate	Annual Log Differences		Economic Variables 1st Prin. Comp.
			Aggregate Employment	Unemployment Rate	
1961	3,961,320	6.90			
1962	4,144,738	5.80	0.045	-0.174	
1963	4,291,884	6.00	0.035	0.034	-0.029
1964	4,424,222	6.00	0.030	0.000	0.004
1965	4,544,514	5.90	0.027	-0.017	0.020
1966	4,791,639	4.90	0.053	-0.186	0.191
1967	4,926,767	5.70	0.028	0.151	-0.146
1968	5,132,112	5.40	0.041	-0.054	0.059
1969	5,366,667	5.20	0.045	-0.038	0.044
1970	5,333,957	7.30	-0.006	0.339	-0.337
1971	5,282,499	8.79	-0.010	0.186	-0.186
1972	6,019,714	7.61	0.131	-0.145	0.161
1973	6,497,553	7.02	0.076	-0.081	0.090
1974	6,706,246	7.30	0.032	0.040	-0.035
1975	6,681,988	9.88	-0.004	0.302	-0.300
1976	7,257,687	9.17	0.083	-0.075	0.085
1977	7,678,245	8.25	0.056	-0.105	0.112
1978	9,198,636	7.11	0.181	-0.149	0.173
1979	9,617,149	6.24	0.044	-0.130	0.134
1980	10,264,350	6.83	0.065	0.090	-0.080
1981	10,403,201	7.41	0.013	0.081	-0.079
1982	10,230,107	9.95	-0.017	0.294	-0.294
1983	10,329,774	9.68	0.010	-0.028	0.029
1984	10,820,756	7.79	0.046	-0.218	0.222
1985	11,172,918	7.21	0.032	-0.077	0.081
1986	11,483,715	6.69	0.027	-0.075	0.078
1987	11,887,947	5.77	0.035	-0.148	0.151
1988	12,355,087	5.31	0.039	-0.084	0.088
1989	12,686,653	5.09	0.026	-0.042	0.045
1990	12,940,612	5.77	0.020	0.125	-0.121
1991	12,776,147	7.74	-0.013	0.294	-0.293
1992	12,576,176	9.32	-0.016	0.186	-0.186
1993	12,477,176	9.52	-0.008	0.021	-0.022
1994	12,609,712	8.56	0.011	-0.106	0.106
1995	12,867,178	7.82	0.020	-0.090	0.092
1996	13,225,216	7.28	0.027	-0.072	0.075
1997	13,619,442	6.37	0.029	-0.135	0.138
1998	14,082,750	5.91	0.033	-0.075	0.079
1999	14,479,548	5.21	0.028	-0.125	0.128
2000	14,992,041	4.90	0.035	-0.062	0.066
2001	15,097,829	5.43	0.007	0.103	-0.101
2002	14,972,323	6.65	-0.008	0.203	-0.202
2003	14,950,484	6.81	-0.001	0.023	-0.023
2004	15,130,247	6.20	0.012	-0.093	0.093
2005	15,421,994	5.40	0.019	-0.139	0.141
2006	15,697,731	4.92	0.018	-0.093	0.095
2007	15,843,800	5.36	0.009	0.087	-0.084
2008	15,689,195	7.31	-0.010	0.310	-0.308
2009	14,807,736	11.15	-0.058	0.423	-0.427
2010	14,664,300	12.22	-0.010	0.091	-0.092
2011	14,826,075	11.72	0.011	-0.042	0.043
2012	15,161,100	10.38	0.022	-0.121	0.123
2013	15,563,525	8.94	0.026	-0.149	0.151
2014	15,992,325	7.50	0.027	-0.176	0.178
2015	16,472,850	6.19	0.030	-0.192	0.194
2016	16,905,425	5.48	0.026	-0.122	0.124
2017	17,258,550	4.79	0.021	-0.135	0.137
2018	17,605,075	4.20	0.020	-0.131	0.132
2019	17,922,381	4.18	0.018	-0.003	0.006
2020	18,240,251	4.27	0.018	0.021	-0.019
2021	18,394,014	4.61	0.008	0.076	-0.074
2022	18,513,083	4.67	0.006	0.012	-0.011

Notes: The first principal component is of the annual log difference data from 1962-2019.
The first principal component of the annual log difference of the economic variables is:
1st PC of Econ Variables = -0.1376216 x Aggregate Employment + 0.9904849 x Unemployment Rate

Sources: Government historical labor statistics through 2019
UCLA Anderson forecasts through 2022 are as of December 2019

Accident Year Cumulative Injury Indemnity Claim Counts

Cumulative Injury Indemnity Claim Counts

AY/RL	1	2	3	4	5	6	7	8	9	10
2004	12,018	12,876	13,224	13,474	13,751	14,240	14,394	14,391	14,444	14,527
2005	7,921	8,802	9,390	9,817	10,320	10,563	10,652	10,767	10,854	10,874
2006	7,368	8,491	9,048	9,520	9,771	9,889	9,980	10,149	10,236	10,252
2007	7,560	8,657	9,341	9,754	9,965	10,130	10,333	10,372	10,426	10,446
2008	7,278	8,577	9,429	9,855	10,157	10,416	10,586	10,675	10,696	10,677
2009	7,749	9,332	10,201	10,699	11,145	11,306	11,435	11,498	11,500	<i>11,501</i>
2010	8,622	9,950	10,690	11,486	11,640	11,839	11,974	11,968	<i>12,001</i>	
2011	8,393	10,363	11,630	11,930	12,187	12,345	12,400	<i>12,420</i>		
2012	9,470	12,099	12,814	13,284	13,578	13,744	<i>13,860</i>			
2013	12,040	14,207	15,143	15,566	15,860	<i>16,041</i>				
2014	12,834	15,180	15,811	16,324	<i>16,715</i>					
2015	12,858	15,335	16,102	<i>16,544</i>						
2016	13,064	16,634	<i>17,718</i>							
2017	12,813	<i>16,561</i>								
2018	<i>11,821</i>									

Cumulative Injury Share of Total Indemnity Count

AY/RL	1	2	3	4	5	6	7	8	9	10
2004	8.8%	9.2%	9.4%	9.6%	9.8%	10.1%	10.3%	10.3%	10.3%	10.4%
2005	6.7%	7.3%	7.8%	8.1%	8.5%	8.7%	8.8%	8.8%	8.9%	8.9%
2006	6.6%	7.5%	7.9%	8.3%	8.5%	8.6%	8.6%	8.8%	8.9%	8.9%
2007	7.1%	7.9%	8.5%	8.8%	8.9%	9.1%	9.2%	9.3%	9.3%	9.3%
2008	7.4%	8.4%	9.1%	9.4%	9.7%	9.9%	10.0%	10.1%	10.1%	10.1%
2009	8.6%	9.9%	10.6%	11.1%	11.5%	11.6%	11.7%	11.8%	11.8%	<i>11.8%</i>
2010	9.4%	10.3%	10.9%	11.6%	11.7%	11.9%	12.0%	12.0%	<i>12.0%</i>	
2011	9.0%	10.6%	11.6%	11.8%	12.0%	12.2%	12.2%	<i>12.2%</i>		
2012	9.7%	11.7%	12.1%	12.5%	12.7%	12.8%	<i>12.9%</i>			
2013	11.5%	12.9%	13.5%	13.8%	14.0%	<i>14.1%</i>				
2014	11.9%	13.3%	13.7%	14.0%	<i>14.3%</i>					
2015	11.9%	13.4%	13.9%	<i>14.1%</i>						
2016	12.0%	14.4%	<i>15.0%</i>							
2017	11.8%	<i>14.0%</i>								
2018	<i>10.8%</i>									

Source: WCIRB unit statistical data

Note: Figures in italics are based on a partial accident year.

Note: The claim count in each Accident Year X is based on claims with accident dates in year X contributed by Policy Year (X - 1) and Policy Year X. Figures in italics are based on a partial contribution from Policy Year (X - 1) only.

Claim Count Ratios by Region Based on Unit Statistical Data at 1st Report Level

Region	Ratio of Permanent Disability Claims to Indemnity Claims for Accident Year														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	0.359	0.309	0.303	0.283	0.296	0.305	0.313	0.323	0.309	0.293	0.302	0.310	0.299	0.285	<i>0.287</i>
Los Angeles/LA Basin	0.456	0.398	0.382	0.388	0.405	0.405	0.397	0.403	0.398	0.369	0.374	0.392	0.381	0.376	<i>0.358</i>
San Diego	0.411	0.341	0.330	0.329	0.336	0.362	0.356	0.357	0.361	0.327	0.348	0.360	0.345	0.356	<i>0.367</i>
All Other	0.370	0.324	0.315	0.299	0.320	0.315	0.325	0.320	0.314	0.290	0.302	0.315	0.301	0.301	<i>0.287</i>
All Regions	0.410	0.356	0.344	0.339	0.357	0.360	0.360	0.363	0.358	0.332	0.341	0.355	0.343	0.337	<i>0.324</i>

Region	Annual Change														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	---	-14.0%	-1.8%	-6.6%	4.4%	3.1%	2.5%	3.3%	-4.4%	-5.2%	3.0%	2.7%	-3.5%	-4.6%	<i>0.5%</i>
Los Angeles/LA Basin	---	-12.8%	-4.0%	1.7%	4.3%	-0.1%	-2.1%	1.6%	-1.3%	-7.2%	1.4%	4.8%	-2.8%	-1.4%	<i>-4.7%</i>
San Diego	---	-16.9%	-3.4%	-0.1%	2.2%	7.6%	-1.5%	0.2%	1.1%	-9.3%	6.2%	3.4%	-4.1%	3.1%	<i>3.2%</i>
All Other	---	-12.5%	-2.7%	-5.2%	7.1%	-1.6%	3.3%	-1.7%	-1.8%	-7.8%	4.2%	4.4%	-4.4%	-0.1%	<i>-4.8%</i>
All Regions	---	-13.3%	-3.2%	-1.5%	5.3%	0.9%	0.0%	0.8%	-1.5%	-7.3%	2.7%	4.2%	-3.5%	-1.5%	<i>-4.0%</i>

Region	Ratio of Indemnity Claims to Total Claims for Accident Year														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	0.307	0.284	0.285	0.289	0.295	0.307	0.315	0.323	0.322	0.331	0.328	0.333	0.334	0.333	<i>0.342</i>
Los Angeles/LA Basin	0.333	0.304	0.297	0.305	0.316	0.341	0.352	0.359	0.372	0.389	0.393	0.391	0.391	0.371	<i>0.368</i>
San Diego	0.281	0.263	0.259	0.260	0.272	0.285	0.303	0.313	0.327	0.329	0.329	0.327	0.327	0.317	<i>0.310</i>
All Other	0.321	0.299	0.289	0.294	0.300	0.313	0.321	0.329	0.330	0.343	0.339	0.331	0.332	0.319	<i>0.320</i>
All Regions	0.320	0.295	0.290	0.295	0.304	0.323	0.333	0.340	0.348	0.361	0.361	0.358	0.358	0.344	<i>0.343</i>

Region	Annual Change														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	---	-7.4%	0.6%	1.1%	2.3%	3.9%	2.7%	2.4%	-0.2%	2.8%	-0.8%	1.4%	0.3%	-0.3%	<i>2.6%</i>
Los Angeles/LA Basin	---	-8.7%	-2.4%	2.5%	3.8%	7.9%	3.3%	1.7%	3.7%	4.7%	0.9%	-0.4%	-0.2%	-5.0%	<i>-0.9%</i>
San Diego	---	-6.4%	-1.4%	0.2%	4.7%	4.6%	6.4%	3.5%	4.3%	0.5%	0.0%	-0.6%	0.1%	-3.2%	<i>-2.0%</i>
All Other	---	-6.9%	-3.2%	1.6%	2.2%	4.2%	2.7%	2.3%	0.4%	3.9%	-1.3%	-2.3%	0.3%	-3.9%	<i>0.3%</i>
All Regions	---	-7.8%	-2.0%	1.8%	3.2%	6.0%	3.3%	2.1%	2.2%	3.8%	0.0%	-0.8%	0.0%	-3.9%	<i>-0.3%</i>

Region	Cumulative Injury Claims per 100 Indemnity Claims for Accident Year														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	8.82	7.39	6.51	7.51	7.55	8.20	8.18	8.21	7.73	9.12	8.74	8.04	8.05	8.09	<i>8.48</i>
Los Angeles/LA Basin	10.47	7.98	7.86	8.50	8.90	10.60	11.63	11.26	12.52	14.89	15.62	16.18	16.58	16.63	<i>14.61</i>
San Diego	8.86	6.58	6.00	6.43	6.96	7.30	9.20	8.51	8.77	11.76	12.44	12.22	12.17	12.08	<i>11.53</i>
All Other	6.16	4.47	4.92	4.86	4.86	5.77	6.30	5.94	6.15	7.02	7.12	6.79	6.66	6.44	<i>7.05</i>
All Regions	8.76	6.71	6.60	7.09	7.37	8.61	9.39	9.04	9.69	11.51	11.90	11.89	12.02	11.77	<i>10.80</i>

Region	Annual Change														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bay Area	---	-16.2%	-11.9%	15.4%	0.5%	8.7%	-0.3%	0.4%	-5.8%	18.0%	-4.1%	-8.0%	0.1%	0.5%	<i>4.9%</i>
Los Angeles/LA Basin	---	-23.8%	-1.5%	8.1%	4.8%	19.1%	9.6%	-3.1%	11.2%	18.9%	4.9%	3.6%	2.5%	0.3%	<i>-12.1%</i>
San Diego	---	-25.8%	-8.8%	7.1%	8.4%	4.8%	26.1%	-7.6%	3.0%	34.2%	5.8%	-1.8%	-0.4%	-0.8%	<i>-4.5%</i>
All Other	---	-27.6%	10.2%	-1.2%	-0.1%	18.8%	9.2%	-5.8%	3.6%	14.1%	1.5%	-4.7%	-1.9%	-3.3%	<i>9.5%</i>
All Regions	---	-23.4%	-1.6%	7.4%	4.0%	16.9%	9.1%	-3.8%	7.2%	18.8%	3.3%	0.0%	1.0%	-2.1%	<i>-8.2%</i>

Figures in italics are based on preliminary partial data. Cumulative injury claims include occupational disease.

Indemnity Claim Frequency by Geographic Region

Bay Area

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	22.98	23.63	24.14	23.84	23.87	2001	---	---	---	---	---
2002	22.49	22.88	23.09	23.08	23.12	2002	-2.1%	-3.2%	-4.3%	-3.2%	-3.2%
2003	20.97	21.33	21.46	21.56	21.85	2003	-6.8%	-6.7%	-7.1%	-6.6%	-5.5%
2004	18.41	18.64	18.72	18.96	19.02	2004	-12.2%	-12.6%	-12.8%	-12.1%	-13.0%
2005	16.25	16.28	16.55	16.62	16.59	2005	-11.8%	-12.6%	-11.6%	-12.4%	-12.8%
2006	14.85	15.14	15.28	15.30	15.29	2006	-8.6%	-7.0%	-7.7%	-8.0%	-7.8%
2007	13.93	14.19	14.27	14.33	14.36	2007	-6.2%	-6.3%	-6.6%	-6.3%	-6.1%
2008	12.82	13.07	13.22	13.31	13.36	2008	-8.0%	-7.9%	-7.4%	-7.2%	-7.0%
2009	12.18	12.56	12.71	12.80	12.83	2009	-5.0%	-3.9%	-3.9%	-3.8%	-3.9%
2010	12.17	12.71	12.85	12.94	12.98	2010	-0.1%	1.2%	1.2%	1.1%	1.1%
2011	11.85	12.40	12.61	12.71	12.76	2011	-2.6%	-2.4%	-1.9%	-1.7%	-1.7%
2012	11.72	12.22	12.43	12.51	12.55	2012	-1.1%	-1.4%	-1.5%	-1.6%	-1.6%
2013	11.38	11.86	12.00	12.07	12.10	2013	-2.9%	-3.0%	-3.5%	-3.5%	-3.6%
2014	11.27	11.71	11.83	11.88	<i>11.91</i>	2014	-1.0%	-1.2%	-1.4%	-1.5%	-1.5%
2015	10.93	11.35	11.45	<i>11.50</i>		2015	-3.0%	-3.1%	-3.2%	-3.3%	
2016	10.14	10.56	<i>10.66</i>			2016	-7.3%	-6.9%	-6.9%		
2017	10.01	<i>10.45</i>				2017	-1.3%	-1.1%			
2018	<i>10.09</i>					2018	<i>0.8%</i>				

Los Angeles/L.A. Basin

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	31.44	33.00	33.39	33.34	33.19	2001	---	---	---	---	---
2002	31.71	33.21	33.16	33.06	32.96	2002	0.8%	0.7%	-0.7%	-0.8%	-0.7%
2003	30.45	31.45	31.23	31.21	31.06	2003	-4.0%	-5.3%	-5.8%	-5.6%	-5.8%
2004	26.57	26.74	26.78	26.73	26.77	2004	-12.7%	-15.0%	-14.3%	-14.4%	-13.8%
2005	22.81	22.79	22.87	23.02	23.09	2005	-14.2%	-14.8%	-14.6%	-13.9%	-13.7%
2006	21.11	21.30	21.51	21.68	21.73	2006	-7.5%	-6.5%	-5.9%	-5.8%	-5.9%
2007	20.31	20.90	21.20	21.36	21.45	2007	-3.8%	-1.9%	-1.5%	-1.5%	-1.3%
2008	19.64	20.61	20.98	21.21	21.32	2008	-3.3%	-1.4%	-1.0%	-0.7%	-0.6%
2009	19.77	20.90	21.37	21.57	21.67	2009	0.7%	1.4%	1.9%	1.7%	1.7%
2010	20.76	22.03	22.56	22.76	22.83	2010	5.0%	5.4%	5.6%	5.5%	5.4%
2011	21.33	22.85	23.36	23.58	23.68	2011	2.8%	3.7%	3.5%	3.6%	3.7%
2012	22.31	23.96	24.44	24.63	24.78	2012	4.6%	4.9%	4.6%	4.5%	4.6%
2013	22.87	24.44	24.87	25.06	25.18	2013	2.5%	2.0%	1.8%	1.7%	1.6%
2014	23.43	24.99	25.41	25.57	<i>25.66</i>	2014	2.4%	2.3%	2.2%	2.0%	1.9%
2015	23.41	24.92	25.28	<i>25.39</i>		2015	-0.1%	-0.3%	-0.5%	-0.7%	
2016	22.76	24.38	<i>24.68</i>			2016	-2.8%	-2.2%	-2.4%		
2017	22.42	<i>24.17</i>				2017	-1.5%	-0.9%			
2018	<i>21.64</i>					2018	-3.5%				

San Diego

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	32.07	32.87	33.08	33.04	32.84	2001	---	---	---	---	---
2002	30.73	31.05	31.03	30.74	30.84	2002	-4.2%	-5.6%	-6.2%	-7.0%	-6.1%
2003	28.14	28.34	28.10	28.03	28.14	2003	-8.4%	-8.7%	-9.4%	-8.8%	-8.8%
2004	24.62	24.52	24.56	24.44	24.02	2004	-12.5%	-13.5%	-12.6%	-12.8%	-14.6%
2005	21.42	21.49	21.49	20.81	20.57	2005	-13.0%	-12.4%	-12.5%	-14.9%	-14.4%
2006	20.02	19.90	19.33	18.99	19.02	2006	-6.5%	-7.4%	-10.1%	-8.7%	-7.5%
2007	19.31	18.81	18.52	18.23	18.28	2007	-3.5%	-5.5%	-4.2%	-4.0%	-3.9%
2008	17.74	17.80	17.96	17.73	17.82	2008	-8.2%	-5.4%	-3.0%	-2.7%	-2.5%
2009	16.73	17.40	17.58	17.70	17.80	2009	-5.7%	-2.2%	-2.1%	-0.1%	-0.1%
2010	17.37	18.11	18.35	18.55	18.61	2010	3.9%	4.1%	4.4%	4.8%	4.6%
2011	17.67	18.35	18.62	18.81	18.87	2011	1.7%	1.3%	1.5%	1.4%	1.3%
2012	17.85	18.50	18.74	18.86	18.92	2012	1.0%	0.8%	0.7%	0.3%	0.3%
2013	17.59	18.25	18.41	18.50	18.57	2013	-1.5%	-1.3%	-1.8%	-1.9%	-1.9%
2014	17.90	18.66	18.80	18.89	<i>18.96</i>	2014	1.8%	2.2%	2.1%	2.1%	2.1%
2015	18.14	18.95	19.08	<i>19.17</i>		2015	1.3%	1.6%	1.5%	1.5%	
2016	17.82	18.54	<i>18.61</i>			2016	-1.8%	-2.2%	-2.5%		
2017	17.32	<i>17.97</i>				2017	-2.8%	-3.0%			
2018	<i>16.06</i>					2018	-7.3%				

Figures in italics are based on preliminary partial data.
Source: WCIRB unit statistical data

Indemnity Claim Frequency by Geographic Region

All Other

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	39.17	40.85	40.98	41.49	42.03	2001	---	---	---	---	---
2002	38.30	39.40	40.10	40.60	40.93	2002	-2.2%	-3.6%	-2.2%	-2.2%	-2.6%
2003	36.21	37.50	37.98	38.16	38.31	2003	-5.5%	-4.8%	-5.3%	-6.0%	-6.4%
2004	33.04	33.80	33.93	34.12	34.25	2004	-8.8%	-9.8%	-10.7%	-10.6%	-10.6%
2005	28.91	29.33	29.55	29.80	29.97	2005	-12.5%	-13.2%	-12.9%	-12.7%	-12.5%
2006	26.44	26.79	27.12	27.36	27.44	2006	-8.5%	-8.7%	-8.2%	-8.2%	-8.4%
2007	25.07	25.64	26.10	26.36	26.41	2007	-5.2%	-4.3%	-3.8%	-3.7%	-3.8%
2008	23.63	24.38	24.71	24.91	24.98	2008	-5.7%	-4.9%	-5.3%	-5.5%	-5.4%
2009	23.08	23.85	24.04	24.20	24.29	2009	-2.3%	-2.2%	-2.7%	-2.8%	-2.7%
2010	23.49	24.42	24.75	24.86	25.02	2010	1.8%	2.4%	2.9%	2.7%	3.0%
2011	23.72	24.88	25.27	25.43	25.53	2011	1.0%	1.9%	2.1%	2.3%	2.1%
2012	24.30	25.43	25.81	25.99	26.03	2012	2.4%	2.2%	2.1%	2.2%	2.0%
2013	24.15	25.21	25.56	25.70	25.77	2013	-0.6%	-0.9%	-1.0%	-1.1%	-1.0%
2014	23.90	24.96	25.34	25.48	25.56	2014	-1.0%	-1.0%	-0.8%	-0.9%	-0.8%
2015	23.84	24.84	25.21	25.34		2015	-0.2%	-0.5%	-0.5%	-0.5%	
2016	22.74	23.73	24.04			2016	-4.6%	-4.5%	-4.6%		
2017	22.65	23.65				2017	-0.4%	-0.3%			
2018	23.07					2018	1.8%				

All Regions

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level						Annual Change					
AY/RL	1	2	3	4	5	AY/RL	1	2	3	4	5
2001	31.13	32.34	32.73	32.68	32.71	2001	---	---	---	---	---
2002	30.84	31.89	32.01	32.03	32.07	2002	-0.9%	-1.4%	-2.2%	-2.0%	-2.0%
2003	29.30	30.05	30.06	30.11	30.14	2003	-5.0%	-5.8%	-6.1%	-6.0%	-6.0%
2004	25.85	26.13	26.18	26.23	26.24	2004	-11.8%	-13.0%	-12.9%	-12.9%	-12.9%
2005	22.43	22.52	22.65	22.72	22.76	2005	-13.2%	-13.8%	-13.5%	-13.4%	-13.3%
2006	20.64	20.86	21.02	21.11	21.16	2006	-8.0%	-7.4%	-7.2%	-7.1%	-7.1%
2007	19.68	20.10	20.31	20.43	20.50	2007	-4.7%	-3.7%	-3.3%	-3.2%	-3.1%
2008	18.61	19.26	19.55	19.71	19.80	2008	-5.4%	-4.2%	-3.8%	-3.5%	-3.4%
2009	18.31	19.15	19.46	19.63	19.71	2009	-1.6%	-0.6%	-0.4%	-0.4%	-0.5%
2010	18.84	19.82	20.19	20.34	20.42	2010	2.9%	3.5%	3.7%	3.6%	3.6%
2011	19.05	20.17	20.57	20.75	20.83	2011	1.1%	1.8%	1.9%	2.0%	2.0%
2012	19.52	20.66	21.02	21.18	21.27	2012	2.4%	2.4%	2.2%	2.1%	2.1%
2013	19.59	20.67	20.98	21.12	21.20	2013	0.4%	0.1%	-0.2%	-0.3%	-0.3%
2014	19.70	20.77	21.08	21.20	21.27	2014	0.6%	0.5%	0.5%	0.4%	0.3%
2015	19.45	20.49	20.77	20.87		2015	-1.3%	-1.3%	-1.5%	-1.6%	
2016	18.62	19.71	19.94			2016	-4.3%	-3.8%	-4.0%		
2017	18.30	19.47				2017	-1.7%	-1.2%			
2018	18.03					2018	-1.5%				

Frequency of Indemnity Claims Caused by Motor Vehicle Accidents

Indemnity Claim Frequency per \$100M of Exposure at AY 2018 Level				Annual Change			
<u>AY/RL</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>AY/RL</u>	<u>1</u>	<u>2</u>	<u>3</u>
2001	0.96	0.89	0.92	2001			
2002	0.81	0.89	0.90	2002	-15.3%	0.5%	-3.2%
2003	0.91	0.93	0.92	2003	12.0%	3.7%	3.3%
2004	0.78	0.77	0.76	2004	-13.5%	-17.2%	-18.2%
2005	0.66	0.64	0.63	2005	-16.4%	-17.1%	-16.5%
2006	0.65	0.63	0.62	2006	-0.9%	-1.5%	-1.4%
2007	0.64	0.62	0.62	2007	-2.0%	-0.4%	-0.6%
2008	0.58	0.58	0.58	2008	-8.5%	-7.4%	-6.4%
2009	0.54	0.54	0.54	2009	-7.4%	-7.2%	-6.8%
2010	0.58	0.58	0.57	2010	7.9%	7.8%	6.4%
2011	0.54	0.54	0.55	2011	-6.9%	-5.7%	-5.1%
2012	0.53	0.54	0.53	2012	-2.2%	-1.6%	-2.0%
2013	0.55	0.54	0.54	2013	2.9%	0.9%	1.7%
2014	0.51	0.51	0.51	2014	-6.2%	-4.8%	-5.3%
2015	0.56	0.57	0.56	2015	10.4%	10.1%	8.6%
2016	0.58	0.57	0.56	2016	2.4%	1.1%	1.0%
2017	0.57	0.60		2017	-0.9%	5.0%	
2018	0.62			2018	8.9%		

Percentage of Indemnity Claims			
<u>AY/RL</u>	<u>1</u>	<u>2</u>	<u>3</u>
2001	2.9%	2.8%	2.8%
2002	3.0%	2.9%	2.9%
2003	2.9%	2.9%	2.9%
2004	3.1%	3.0%	2.9%
2005	3.1%	3.0%	2.9%
2006	3.2%	3.0%	3.0%
2007	3.2%	3.1%	3.1%
2008	3.2%	3.0%	3.0%
2009	3.1%	3.0%	2.9%
2010	3.0%	2.9%	2.8%
2011	2.9%	2.8%	2.7%
2012	2.7%	2.6%	2.5%
2013	2.7%	2.6%	2.5%
2014	2.6%	2.4%	2.4%
2015	2.9%	2.7%	2.7%
2016	3.0%	2.8%	2.7%
2017	3.0%	3.0%	
2018	2.8%		

Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year

Accident Year	Paid Indemnity								
	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
1994							0.370	0.273	0.192
1995						0.414	0.292	0.244	0.191
1996					0.475	0.328	0.278	0.234	0.195
1997				0.506	0.403	0.320	0.282	0.217	0.182
1998			0.600	0.469	0.359	0.309	0.250	0.224	0.215
1999		0.759	0.561	0.442	0.394	0.316	0.273	0.243	0.214
2000	1.149	0.720	0.520	0.461	0.367	0.320	0.311	0.261	0.227
2001	1.170	0.731	0.590	0.487	0.401	0.366	0.292	0.266	0.227
2002	1.123	0.714	0.563	0.482	0.431	0.365	0.326	0.266	0.251
2003	1.033	0.699	0.597	0.505	0.411	0.337	0.276	0.260	0.251
2004	0.959	0.605	0.536	0.423	0.377	0.322	0.307	0.282	0.299
2005	1.141	0.706	0.567	0.483	0.399	0.341	0.302	0.308	0.267
2006	1.229	0.761	0.557	0.468	0.407	0.362	0.313	0.287	0.243
2007	1.388	0.778	0.569	0.472	0.423	0.379	0.338	0.264	0.292
2008	1.475	0.804	0.632	0.518	0.442	0.383	0.329	0.273	0.258
2009	1.545	0.807	0.636	0.528	0.447	0.387	0.348	0.331	0.300
2010	1.626	0.836	0.658	0.554	0.480	0.436	0.383	0.339	0.335
2011	1.654	0.813	0.625	0.515	0.455	0.413	0.402	0.379	
2012	1.656	0.802	0.636	0.545	0.523	0.415	0.392		
2013	1.600	0.813	0.676	0.586	0.512	0.428			
2014	1.608	0.882	0.706	0.593	0.490				
2015	1.629	0.867	0.677	0.564					
2016	1.665	0.859	0.682						
2017	1.641	0.840							
2018	1.618								

Accident Year	Paid Medical								
	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
1994							0.287	0.207	0.189
1995						0.278	0.227	0.219	0.170
1996					0.340	0.273	0.250	0.217	0.164
1997				0.400	0.359	0.290	0.266	0.176	0.158
1998			0.487	0.381	0.322	0.267	0.195	0.200	0.165
1999		0.671	0.510	0.410	0.353	0.250	0.210	0.191	0.202
2000	1.335	0.686	0.491	0.404	0.297	0.231	0.228	0.241	0.179
2001	1.399	0.743	0.530	0.399	0.310	0.283	0.275	0.213	0.204
2002	1.453	0.688	0.429	0.372	0.335	0.324	0.263	0.237	0.190
2003	1.271	0.561	0.439	0.376	0.356	0.266	0.255	0.218	0.190
2004	1.051	0.542	0.442	0.402	0.335	0.294	0.247	0.230	0.229
2005	1.062	0.491	0.444	0.400	0.358	0.294	0.239	0.281	0.205
2006	1.078	0.556	0.453	0.391	0.338	0.296	0.260	0.226	0.188
2007	1.150	0.578	0.468	0.395	0.354	0.331	0.278	0.217	0.198
2008	1.186	0.571	0.492	0.432	0.385	0.319	0.261	0.215	0.190
2009	1.209	0.583	0.501	0.465	0.376	0.303	0.259	0.214	0.196
2010	1.230	0.596	0.542	0.443	0.376	0.333	0.287	0.239	0.244
2011	1.144	0.560	0.466	0.394	0.349	0.290	0.265	0.243	
2012	1.096	0.520	0.453	0.401	0.369	0.289	0.275		
2013	1.060	0.504	0.454	0.410	0.337	0.295			
2014	1.054	0.530	0.473	0.406	0.351				
2015	1.021	0.520	0.444	0.375					
2016	1.067	0.508	0.421						
2017	1.012	0.489							
2018	1.020								

Note: Entries for paid medical from accident years 2011 and prior reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident years 2012 and subsequent exclude the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience

Comparison of Projected Loss Ratios as of September 30, 2019
Accident Year 2013 Projected to 81 Months^[1]

Indemnity

Methodology	Based on Experience Evaluated as of (in months):					Current
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	
3-Year Avg. Incurred	0.229	0.221	0.215	0.211	0.207	0.205
Latest Year Incurred	0.224	0.219	0.214	0.210	0.206	0.205
3-Year Avg. Paid	0.223	0.220	0.217	0.213	0.209	0.205
Latest Year Paid	0.219	0.218	0.216	0.213	0.208	0.205
Reform-Adj. Paid ^[2]	0.219	0.218	0.216	0.213	0.208	0.205
Latest Yr. Pd. Adj. for Settlement ^[3]	0.215	0.214	0.213	0.212	0.209	0.205

	Difference from Actual 81-Month Loss Ratio					Current
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	
3-Year Avg. Incurred	11.7%	8.2%	5.2%	3.0%	1.3%	0.0%
Latest Year Incurred	9.5%	7.1%	4.7%	2.7%	0.9%	0.0%
3-Year Avg. Paid	8.9%	7.7%	6.0%	4.2%	2.1%	0.0%
Latest Year Paid	6.8%	6.4%	5.6%	4.0%	1.8%	0.0%
Reform-Adj. Paid ^[2]	6.8%	6.4%	5.6%	4.0%	1.8%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	4.9%	4.6%	4.3%	3.4%	1.9%	0.0%

Medical

	Based on Experience Evaluated as of (in months):					Current
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	
3-Year Avg. Incurred	0.325	0.306	0.290	0.277	0.266	0.257
Latest Year Incurred	0.308	0.298	0.284	0.275	0.265	0.257
3-Year Avg. Paid	0.281	0.280	0.275	0.270	0.264	0.257
Latest Year Paid	0.285	0.283	0.278	0.273	0.265	0.257
Reform-Adj. Paid ^[2]	0.277	0.278	0.274	0.270	0.263	0.257
Latest Yr. Pd. Adj. for Settlement ^[3]	0.282	0.280	0.276	0.272	0.265	0.257

	Difference from Actual 81-Month Loss Ratio					Current
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	
3-Year Avg. Incurred	26.2%	19.0%	12.7%	7.8%	3.4%	0.0%
Latest Year Incurred	19.8%	15.9%	10.4%	6.9%	2.8%	0.0%
3-Year Avg. Paid	9.1%	8.8%	6.7%	5.0%	2.5%	0.0%
Latest Year Paid	10.8%	9.9%	8.0%	6.0%	2.8%	0.0%
Reform-Adj. Paid ^[2]	7.8%	7.9%	6.6%	5.1%	2.3%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	9.7%	8.8%	7.1%	5.5%	2.9%	0.0%

^[1] Each loss ratio is projected to incurred losses at 81 months. Loss ratios projected under paid methods are converted to an incurred basis using the ratio of incurred losses to paid losses reported at 81 months.

^[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

^[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also includes adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of September 30, 2019
Accident Year 2014 Projected to 69 Months^[1]**

Indemnity

Methodology	Based on Experience Evaluated as of (in months):				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	0.196	0.197	0.196	0.194	0.191
Latest Year Incurred	0.189	0.193	0.194	0.194	0.191
3-Year Avg. Paid	0.196	0.200	0.199	0.195	0.191
Latest Year Paid	0.192	0.197	0.197	0.195	0.191
Reform-Adj. Paid ^[2]	0.192	0.197	0.197	0.195	0.191
Latest Yr. Pd. Adj. for Settlement ^[3]	0.188	0.193	0.194	0.193	0.191

Difference from Actual 69-Month Loss Ratio					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	2.8%	3.3%	2.6%	1.5%	0.0%
Latest Year Incurred	-1.2%	0.9%	1.6%	1.3%	0.0%
3-Year Avg. Paid	2.6%	4.7%	4.1%	2.1%	0.0%
Latest Year Paid	0.5%	3.3%	3.3%	1.9%	0.0%
Reform-Adj. Paid ^[2]	0.5%	3.3%	3.3%	1.9%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	-1.8%	1.3%	1.8%	1.1%	0.0%

Medical

Methodology	Based on Experience Evaluated as of (in months):				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	0.260	0.250	0.242	0.231	0.224
Latest Year Incurred	0.241	0.239	0.237	0.229	0.224
3-Year Avg. Paid	0.245	0.243	0.238	0.231	0.224
Latest Year Paid	0.239	0.238	0.235	0.230	0.224
Reform-Adj. Paid ^[2]	0.238	0.238	0.234	0.230	0.224
Latest Yr. Pd. Adj. for Settlement ^[3]	0.236	0.235	0.233	0.229	0.224

Difference from Actual 69-Month Loss Ratio					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	16.0%	11.6%	7.8%	3.0%	0.0%
Latest Year Incurred	7.2%	6.6%	5.8%	2.0%	0.0%
3-Year Avg. Paid	9.1%	8.1%	6.0%	3.1%	0.0%
Latest Year Paid	6.7%	6.2%	4.6%	2.5%	0.0%
Reform-Adj. Paid ^[2]	6.2%	6.1%	4.5%	2.4%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	5.3%	4.9%	3.7%	2.0%	0.0%

^[1] Each loss ratio is projected to incurred losses at 69 months. Loss ratios projected under paid methods are converted to an incurred basis using the ratio of incurred losses to paid losses reported at 69 months.

^[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

^[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also includes adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

Comparison of Projected Loss Ratios as of September 30, 2019
Accident Year 2015 Projected to 57 Months^[1]

Indemnity

Methodology

Based on Experience Evaluated as of (in months):

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	0.188	0.188	0.185	0.181
Latest Year Incurred	0.188	0.186	0.185	0.181
3-Year Avg. Paid	0.186	0.188	0.186	0.181
Latest Year Paid	0.188	0.186	0.184	0.181
Reform-Adj. Paid ^[2]	0.188	0.186	0.184	0.181
Latest Yr. Pd. Adj. for Settlement ^[3]	0.184	0.183	0.183	0.181

Difference from Actual 57-Month Loss Ratio

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	3.6%	3.5%	2.0%	0.0%
Latest Year Incurred	3.5%	2.7%	1.7%	0.0%
3-Year Avg. Paid	2.6%	3.5%	2.3%	0.0%
Latest Year Paid	3.5%	2.7%	1.6%	0.0%
Reform-Adj. Paid ^[2]	3.5%	2.7%	1.6%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	1.2%	1.0%	0.6%	0.0%

Medical

Based on Experience Evaluated as of (in months):

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	0.227	0.224	0.218	0.209
Latest Year Incurred	0.218	0.218	0.215	0.209
3-Year Avg. Paid	0.224	0.220	0.215	0.209
Latest Year Paid	0.219	0.217	0.214	0.209
Reform-Adj. Paid ^[2]	0.222	0.219	0.215	0.209
Latest Yr. Pd. Adj. for Settlement ^[3]	0.216	0.215	0.212	0.209

Difference from Actual 57-Month Loss Ratio

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	9.0%	7.5%	4.4%	0.0%
Latest Year Incurred	4.4%	4.5%	3.1%	0.0%
3-Year Avg. Paid	7.1%	5.7%	3.2%	0.0%
Latest Year Paid	5.1%	4.2%	2.5%	0.0%
Reform-Adj. Paid ^[2]	6.3%	5.1%	2.9%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	3.6%	3.0%	1.7%	0.0%

^[1] Each loss ratio is projected to incurred losses at 57 months. Loss ratios projected under paid methods are converted to an incurred basis using the ratio of incurred losses to paid losses reported at 57 months.

^[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

^[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also includes adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

Comparison of Projected Loss Ratios as of September 30, 2019
Accident Year 2016 Projected to 45 Months^[1]

Indemnity

Methodology	Based on Experience Evaluated as of (in months):		
	21	33	Current
3-Year Avg. Incurred	0.169	0.166	0.163
Latest Year Incurred	0.170	0.167	0.163
3-Year Avg. Paid	0.170	0.167	0.163
Latest Year Paid	0.171	0.167	0.163
Reform-Adj. Paid ^[2]	0.171	0.167	0.163
Latest Yr. Pd. Adj. for Settlement ^[3]	0.166	0.164	0.163
Difference from Actual 45-Month Loss Ratio			
	21	33	Current
3-Year Avg. Incurred	3.6%	2.0%	0.0%
Latest Year Incurred	4.2%	2.4%	0.0%
3-Year Avg. Paid	4.4%	2.3%	0.0%
Latest Year Paid	4.8%	2.3%	0.0%
Reform-Adj. Paid ^[2]	4.8%	2.3%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	2.0%	0.7%	0.0%

Medical

Methodology	Based on Experience Evaluated as of (in months):		
	21	33	Current
3-Year Avg. Incurred	0.201	0.197	0.189
Latest Year Incurred	0.201	0.197	0.189
3-Year Avg. Paid	0.203	0.197	0.189
Latest Year Paid	0.200	0.195	0.189
Reform-Adj. Paid ^[2]	0.201	0.196	0.189
Latest Yr. Pd. Adj. for Settlement ^[3]	0.198	0.194	0.189
Difference from Actual 45-Month Loss Ratio			
	21	33	Current
3-Year Avg. Incurred	6.4%	4.3%	0.0%
Latest Year Incurred	6.1%	4.1%	0.0%
3-Year Avg. Paid	7.2%	4.1%	0.0%
Latest Year Paid	5.7%	3.4%	0.0%
Reform-Adj. Paid ^[2]	6.4%	3.9%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	4.7%	2.8%	0.0%

^[1] Each loss ratio is projected to incurred losses at 45 months. Loss ratios projected under paid methods are converted to an incurred basis using the ratio of incurred losses to paid losses reported at 45 months.

^[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

^[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also includes adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

Comparison of Projected Loss Ratios as of September 30, 2019
Accident Year 2017 Projected to 33 Months^[1]

Indemnity

Methodology	Based on Experience Evaluated as of (in months):	
	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	0.156	0.152
Latest Year Incurred	0.154	0.152
3-Year Avg. Paid	0.156	0.152
Latest Year Paid	0.153	0.152
Reform-Adj. Paid ^[2]	0.153	0.152
Latest Yr. Pd. Adj. for Settlement ^[3]	0.151	0.152

Difference from Actual 33-Month Loss Ratio

	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	2.8%	0.0%
Latest Year Incurred	1.2%	0.0%
3-Year Avg. Paid	2.7%	0.0%
Latest Year Paid	0.7%	0.0%
Reform-Adj. Paid ^[2]	0.7%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	-0.9%	0.0%

Medical

	Based on Experience Evaluated as of (in months):	
	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	0.192	0.185
Latest Year Incurred	0.189	0.185
3-Year Avg. Paid	0.193	0.185
Latest Year Paid	0.190	0.185
Reform-Adj. Paid ^[2]	0.190	0.185
Latest Yr. Pd. Adj. for Settlement ^[3]	0.189	0.185

Difference from Actual 33-Month Loss Ratio

	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	3.3%	0.0%
Latest Year Incurred	1.9%	0.0%
3-Year Avg. Paid	4.1%	0.0%
Latest Year Paid	2.3%	0.0%
Reform-Adj. Paid ^[2]	2.7%	0.0%
Latest Yr. Pd. Adj. for Settlement ^[3]	2.0%	0.0%

^[1] Each loss ratio is projected to incurred losses at 33 months. Loss ratios projected under paid methods are converted to an incurred basis using the ratio of incurred losses to paid losses reported at 33 months.

^[2] The Reform-Adjusted Paid Methodology reflects adjustments for SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.

^[3] The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also includes adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

Average Incurred Indemnity Loss per Reported Indemnity Claim
As of September 30, 2019

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1994									12,495	12,593
1995								14,178	14,389	14,505
1996							16,096	16,411	16,631	16,682
1997						18,147	18,605	18,936	18,961	18,989
1998					19,429	20,261	20,766	20,874	20,893	20,998
1999				19,936	21,276	22,060	22,349	22,430	22,609	22,710
2000			18,807	21,290	22,544	22,954	23,124	23,454	23,644	23,776
2001		14,652	20,444	22,937	24,156	24,628	25,211	25,548	25,867	26,048
2002	9,666	15,056	19,817	21,678	22,451	23,268	23,689	24,055	24,296	24,567
2003	10,249	15,205	19,444	21,030	22,302	23,069	23,685	24,119	24,586	24,988
2004	9,683	13,207	15,512	17,079	17,834	18,639	19,158	19,734	20,110	20,420
2005	7,731	10,504	13,255	14,700	15,834	16,646	17,386	17,962	18,274	18,498
2006	7,557	10,994	14,334	16,136	17,387	18,420	19,172	19,624	19,898	20,065
2007	7,409	11,722	15,585	17,690	18,936	19,960	20,677	21,240	21,472	21,713
2008	7,688	12,722	16,953	19,543	21,100	22,051	22,712	23,132	23,434	23,607
2009	7,957	13,273	17,589	20,298	21,909	22,933	23,517	23,932	24,297	24,530
2010	7,913	13,030	17,461	19,897	21,382	22,269	22,882	23,297	23,576	23,867
2011	7,994	13,493	17,587	19,939	21,129	21,916	22,436	22,854	23,126	
2012	8,264	13,518	17,411	19,331	20,630	21,520	21,991	22,429		
2013	8,480	13,445	17,056	19,130	20,199	20,906	21,395			
2014	8,494	13,403	17,584	19,818	21,077	21,767				
2015	8,665	14,009	18,231	20,320	21,397					
2016	8,811	14,098	17,948	19,847						
2017	8,944	14,388	18,316							
2018	9,448	15,090								
2019	9,894									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1995									15.2%	15.2%
1996								15.7%	15.6%	15.0%
1997							15.6%	15.4%	14.0%	13.8%
1998						11.6%	11.6%	10.2%	10.2%	10.6%
1999					9.5%	8.9%	7.6%	7.5%	8.2%	8.2%
2000				6.8%	6.0%	4.1%	3.5%	4.6%	4.6%	4.7%
2001			8.7%	7.7%	7.2%	7.3%	9.0%	8.9%	9.4%	9.6%
2002		2.8%	-3.1%	-5.5%	-7.1%	-5.5%	-6.0%	-5.8%	-6.1%	-5.7%
2003	6.0%	1.0%	-1.9%	-3.0%	-0.7%	-0.9%	0.0%	0.3%	1.2%	1.7%
2004	-5.5%	-13.1%	-20.2%	-18.8%	-20.0%	-19.2%	-19.1%	-18.2%	-18.2%	-18.3%
2005	-20.2%	-20.5%	-14.6%	-13.9%	-11.2%	-10.7%	-9.2%	-9.0%	-9.1%	-9.4%
2006	-2.3%	4.7%	8.1%	9.8%	9.8%	10.7%	10.3%	9.3%	8.9%	8.5%
2007	-2.0%	6.6%	8.7%	9.6%	8.9%	8.4%	7.8%	8.2%	7.9%	8.2%
2008	3.8%	8.5%	8.8%	10.5%	11.4%	10.5%	9.8%	8.9%	9.1%	8.7%
2009	3.5%	4.3%	3.8%	3.9%	3.8%	4.0%	3.5%	3.5%	3.7%	3.9%
2010	-0.6%	-1.8%	-0.7%	-2.0%	-2.4%	-2.9%	-2.7%	-2.7%	-3.0%	-2.7%
2011	1.0%	3.6%	0.7%	0.2%	-1.2%	-1.6%	-2.0%	-1.9%	-1.9%	
2012	3.4%	0.2%	-1.0%	-3.0%	-2.4%	-1.8%	-2.0%	-1.9%		
2013	2.6%	-0.5%	-2.0%	-1.0%	-2.1%	-2.9%	-2.7%			
2014	0.2%	-0.3%	3.1%	3.6%	4.3%	4.1%				
2015	2.0%	4.5%	3.7%	2.5%	1.5%					
2016	1.7%	0.6%	-1.6%	-2.3%						
2017	1.5%	2.1%	2.1%							
2018	5.6%	4.9%								
2019	4.7%									

Annual Trend*										
All-Year	0.6%	0.7%	0.1%	-0.1%	-0.2%	-0.1%	0.2%	0.9%	1.7%	2.6%
R ²	0.082	0.112	0.003	0.003	0.008	0.003	0.010	0.129	0.279	0.405
5-Year	3.4%	2.7%	1.6%	1.1%	0.5%	-0.9%	-2.3%	-1.1%	1.6%	4.8%
R ²	0.932	0.936	0.776	0.563	0.105	0.386	0.996	0.505	0.281	0.807

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Incurred Medical Loss per Reported Claim
As of September 30, 2019

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1998									18,934	19,559
1999								20,579	21,397	22,100
2000							22,299	23,259	24,041	24,436
2001						24,729	25,709	26,863	28,044	29,003
2002					23,595	24,720	25,933	26,978	27,875	28,684
2003				21,625	22,845	24,385	25,532	26,595	27,686	28,541
2004			17,520	19,417	21,168	22,604	24,042	25,159	26,058	26,782
2005		15,534	18,261	20,221	21,724	23,606	24,985	26,223	27,250	27,589
2006	12,980	16,724	20,469	22,875	24,771	26,515	27,944	29,106	29,765	30,142
2007	13,813	18,461	22,663	25,472	27,662	29,603	31,175	32,268	32,859	33,120
2008	14,820	20,390	24,614	27,822	30,503	32,482	33,804	34,722	35,137	35,275
2009	15,983	21,310	26,082	29,480	32,381	34,224	35,269	35,938	36,237	36,444
2010	16,102	21,110	26,029	29,615	31,774	33,215	34,124	34,530	34,790	35,170
2011	16,017	21,229	25,523	28,436	30,324	31,356	31,930	32,202	32,442	
2012	16,459	21,007	24,534	26,470	27,906	28,904	29,355	29,777		
2013	16,105	20,292	22,980	24,820	25,874	26,423	26,859			
2014	15,951	19,408	22,160	23,922	24,781	25,519				
2015	16,302	19,523	22,335	23,894	24,594					
2016	16,263	19,705	22,029	22,997						
2017	17,229	20,108	22,322							
2018	17,698	21,045								
2019	17,728									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1999										13.0%
2000								13.0%	12.4%	10.6%
2001							15.3%	15.5%	16.7%	18.7%
2002						0.0%	0.9%	0.4%	-0.6%	-1.1%
2003					-3.2%	-1.4%	-1.5%	-1.4%	-0.7%	-0.5%
2004				-10.2%	-7.3%	-7.3%	-5.8%	-5.4%	-5.9%	-6.2%
2005			4.2%	4.1%	2.6%	4.4%	3.9%	4.2%	4.6%	3.0%
2006		7.7%	12.1%	13.1%	14.0%	12.3%	11.8%	11.0%	9.2%	9.3%
2007	6.4%	10.4%	10.7%	11.4%	11.7%	11.6%	11.6%	10.9%	10.4%	9.9%
2008	7.3%	10.4%	8.6%	9.2%	10.3%	9.7%	8.4%	7.6%	6.9%	6.5%
2009	7.9%	4.5%	6.0%	6.0%	6.2%	5.4%	4.3%	3.5%	3.1%	3.3%
2010	0.7%	-0.9%	-0.2%	0.5%	-1.9%	-2.9%	-3.2%	-3.9%	-4.0%	-3.5%
2011	-0.5%	0.6%	-1.9%	-4.0%	-4.6%	-5.6%	-6.4%	-6.7%	-6.7%	
2012	2.8%	-1.0%	-3.9%	-6.9%	-8.0%	-7.8%	-8.1%	-7.5%		
2013	-2.1%	-3.4%	-6.3%	-6.2%	-7.3%	-8.6%	-8.5%			
2014	-1.0%	-4.4%	-3.6%	-3.6%	-4.2%	-3.4%				
2015	2.2%	0.6%	0.8%	-0.1%	-0.8%					
2016	-0.2%	0.9%	-1.4%	-3.8%						
2017	5.9%	2.0%	1.3%							
2018	2.7%	4.7%								
2019	0.2%									

Annual Trend*										
All-Year	1.5%	0.7%	0.5%	1.0%	1.4%	1.7%	2.1%	2.9%	3.7%	4.5%
R ²	0.753	0.139	0.035	0.084	0.143	0.217	0.360	0.633	0.795	0.845
5-Year	2.6%	1.9%	-0.6%	-3.1%	-5.2%	-6.7%	-6.7%	-4.1%	-0.4%	4.1%
R ²	0.877	0.854	0.389	0.906	0.921	0.985	0.974	0.773	0.014	0.726

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Indemnity Case Outstanding per Open Indemnity Claim
As of September 30, 2019

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1994									25,767	27,837
1995								27,264	30,413	31,167
1996							29,212	32,228	33,519	32,221
1997						28,267	31,523	33,024	32,002	34,991
1998					25,989	29,733	32,159	31,981	32,346	33,600
1999				23,004	26,161	27,553	27,974	28,517	30,243	31,186
2000			20,490	23,043	23,926	23,509	24,070	25,009	25,799	26,829
2001		15,635	19,765	19,968	19,456	19,590	20,817	22,003	23,718	24,805
2002	9,769	15,954	17,722	16,627	16,051	17,482	18,066	19,093	20,316	22,327
2003	10,315	14,968	15,527	15,044	16,306	17,872	20,268	22,604	26,272	30,092
2004	9,763	12,426	12,777	13,929	15,047	17,463	19,062	22,464	24,601	27,473
2005	7,432	9,237	10,945	12,171	14,391	16,602	20,289	23,651	25,667	27,606
2006	6,937	9,729	12,026	14,285	16,628	19,584	22,011	24,604	26,302	27,558
2007	6,677	10,200	13,122	15,599	17,373	19,389	22,258	25,855	27,761	30,289
2008	6,825	10,853	13,808	16,205	17,918	19,824	22,541	25,018	29,048	31,828
2009	7,104	11,401	13,928	16,207	18,236	20,408	22,227	24,919	27,993	30,921
2010	7,088	11,062	13,932	15,527	17,365	18,980	21,122	24,070	26,688	30,876
2011	7,214	11,784	14,136	16,484	18,219	20,098	22,434	25,737	27,743	
2012	7,478	11,721	14,205	15,428	17,696	19,874	22,805	27,125		
2013	7,676	11,621	13,694	15,296	16,607	18,946	22,903			
2014	7,728	11,621	14,261	16,314	19,293	21,981				
2015	7,959	12,371	15,716	18,279	21,143					
2016	8,033	12,742	16,044	18,758						
2017	8,336	13,718	17,735							
2018	8,862	14,589								
2019	9,243									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1995									18.0%	12.0%
1996								18.2%	10.2%	3.4%
1997							7.9%	2.5%	-4.5%	8.6%
1998						5.2%	2.0%	-3.2%	1.1%	-4.0%
1999					0.7%	-7.3%	-13.0%	-10.8%	-6.5%	-7.2%
2000				0.2%	-8.5%	-14.7%	-14.0%	-12.3%	-14.7%	-14.0%
2001			-3.5%	-13.3%	-18.7%	-16.7%	-13.5%	-12.0%	-8.1%	-7.5%
2002		2.0%	-10.3%	-16.7%	-17.5%	-10.8%	-13.2%	-13.2%	-14.3%	-10.0%
2003	5.6%	-6.2%	-12.4%	-9.5%	1.6%	2.2%	12.2%	18.4%	29.3%	34.8%
2004	-5.4%	-17.0%	-17.7%	-7.4%	-7.7%	-2.3%	-6.0%	-0.6%	-6.4%	-8.7%
2005	-23.9%	-25.7%	-14.3%	-12.6%	-4.4%	-4.9%	6.4%	5.3%	4.3%	0.5%
2006	-6.7%	5.3%	9.9%	17.4%	15.5%	18.0%	8.5%	4.0%	2.5%	-0.2%
2007	-3.7%	4.8%	9.1%	9.2%	4.5%	-1.0%	1.1%	5.1%	5.5%	9.9%
2008	2.2%	6.4%	5.2%	3.9%	3.1%	2.2%	1.3%	-3.2%	4.6%	5.1%
2009	4.1%	5.0%	0.9%	0.0%	1.8%	2.9%	-1.4%	-0.4%	-3.6%	-2.9%
2010	-0.2%	-3.0%	0.0%	-4.2%	-4.8%	-7.0%	-5.0%	-3.4%	-4.7%	-0.1%
2011	1.8%	6.5%	1.5%	6.2%	4.9%	5.9%	6.2%	6.9%	4.0%	
2012	3.7%	-0.5%	0.5%	-6.4%	-2.9%	-1.1%	1.7%	5.4%		
2013	2.6%	-0.9%	-3.6%	-0.9%	-6.2%	-4.7%	0.4%			
2014	0.7%	0.0%	4.1%	6.7%	16.2%	16.0%				
2015	3.0%	6.5%	10.2%	12.0%	9.6%					
2016	0.9%	3.0%	2.1%	2.6%						
2017	3.8%	7.7%	10.5%							
2018	6.3%	6.4%								
2019	4.3%									

Annual Trend*										
All-Year	0.3%	0.4%	0.2%	-0.2%	-0.5%	-1.2%	-1.4%	-1.1%	-0.9%	-0.2%
R ²	0.012	0.017	0.003	0.004	0.033	0.146	0.198	0.145	0.127	0.011
5-Year	4.1%	5.7%	6.6%	5.9%	3.9%	2.4%	1.4%	2.0%	-0.9%	2.5%
R ²	0.951	0.986	0.967	0.896	0.441	0.376	0.444	0.473	0.203	0.505

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Medical Case Outstanding per Open Indemnity Claim
As of September 30, 2019

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1994									37,739	45,866
1995								36,975	47,526	54,520
1996							31,611	38,009	43,561	48,115
1997						26,438	35,428	43,682	50,184	59,532
1998					24,518	33,609	41,704	47,336	55,469	70,021
1999				17,966	24,206	30,849	36,869	44,086	58,235	71,203
2000			15,333	19,834	24,121	29,044	34,642	45,137	54,072	61,398
2001		12,782	15,844	18,383	21,409	26,006	31,907	40,810	54,031	66,244
2002	11,383	13,718	15,296	17,200	19,680	24,659	31,767	40,315	49,278	60,239
2003	12,126	13,167	14,626	16,766	20,283	27,350	35,398	43,656	55,555	68,178
2004	11,678	12,462	13,817	17,575	23,344	29,741	37,987	47,399	56,566	68,739
2005	12,234	13,124	16,355	20,319	24,419	32,602	40,990	51,704	62,440	68,732
2006	11,435	14,395	18,706	23,496	28,881	36,160	43,860	54,552	63,314	69,772
2007	12,551	15,748	20,307	25,422	31,674	38,563	47,989	58,219	66,713	75,063
2008	12,858	17,127	21,109	26,245	32,638	40,057	48,631	58,102	67,527	74,618
2009	13,947	17,675	22,256	26,941	33,570	40,115	47,150	56,101	63,803	72,697
2010	14,122	17,693	22,691	27,735	32,732	38,624	45,242	51,061	57,634	67,866
2011	14,743	19,319	23,698	29,020	35,734	40,954	47,793	54,994	62,653	
2012	15,521	19,365	23,351	26,751	31,800	38,037	45,270	53,999		
2013	14,802	18,922	21,888	25,901	30,319	35,787	43,693			
2014	14,811	17,881	20,991	25,089	29,920	36,906				
2015	15,220	18,289	22,803	28,259	33,993					
2016	15,151	18,991	23,472	28,228						
2017	16,378	20,126	25,339							
2018	16,858	21,517								
2019	17,191									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1995									25.9%	18.9%
1996								2.8%	-8.3%	-11.7%
1997							12.1%	14.9%	15.2%	23.7%
1998						27.1%	17.7%	8.4%	10.5%	17.6%
1999					-1.3%	-8.2%	-11.6%	-6.9%	5.0%	1.7%
2000				10.4%	-0.3%	-5.8%	-6.0%	2.4%	-7.1%	-13.8%
2001			3.3%	-7.3%	-11.2%	-10.5%	-7.9%	-9.6%	-0.1%	7.9%
2002		7.3%	-3.5%	-6.4%	-8.1%	-5.2%	-0.4%	-1.2%	-8.8%	-9.1%
2003	6.5%	-4.0%	-4.4%	-2.5%	3.1%	10.9%	11.4%	8.3%	12.7%	13.2%
2004	-3.7%	-5.4%	-5.5%	4.8%	15.1%	8.7%	7.3%	8.6%	1.8%	0.8%
2005	4.8%	5.3%	18.4%	15.6%	4.6%	9.6%	7.9%	9.1%	10.4%	0.0%
2006	-6.5%	9.7%	14.4%	15.6%	18.3%	10.9%	7.0%	5.5%	1.4%	1.5%
2007	9.8%	9.4%	8.6%	8.2%	9.7%	6.6%	9.4%	6.7%	5.4%	7.6%
2008	2.4%	8.8%	4.0%	3.2%	3.0%	3.9%	1.3%	-0.2%	1.2%	-0.6%
2009	8.5%	3.2%	5.4%	2.7%	2.9%	0.1%	-3.0%	-3.4%	-5.5%	-2.6%
2010	1.3%	0.1%	2.0%	2.9%	-2.5%	-3.7%	-4.0%	-9.0%	-9.7%	-6.6%
2011	4.4%	9.2%	4.4%	4.6%	9.2%	6.0%	5.6%	7.7%	8.7%	
2012	5.3%	0.2%	-1.5%	-7.8%	-11.0%	-7.1%	-5.3%	-1.8%		
2013	-4.6%	-2.3%	-6.3%	-3.2%	-4.7%	-5.9%	-3.5%			
2014	0.1%	-5.5%	-4.1%	-3.1%	-1.3%	3.1%				
2015	2.8%	2.3%	8.6%	12.6%	13.6%					
2016	-0.4%	3.8%	2.9%	-0.1%						
2017	8.1%	6.0%	8.0%							
2018	2.9%	6.9%								
2019	2.0%									

Annual Trend*										
All-Year	2.5%	3.1%	3.4%	3.3%	3.2%	2.3%	2.2%	2.2%	2.0%	2.2%
R ²	0.911	0.837	0.773	0.720	0.649	0.512	0.551	0.661	0.649	0.595
5-Year	3.6%	4.8%	4.1%	2.0%	-1.6%	-2.2%	-1.5%	-1.7%	-2.8%	-0.9%
R ²	0.907	0.962	0.800	0.344	0.113	0.494	0.446	0.301	0.510	0.101

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Paid Indemnity Loss per Reported Indemnity Claim
As of September 30, 2019

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1994									11,659	11,802
1995								12,946	13,235	13,450
1996							14,188	14,708	15,090	15,382
1997						15,441	16,253	16,883	17,303	17,506
1998					15,590	16,899	17,889	18,583	18,987	19,388
1999				14,589	16,894	18,527	19,591	20,211	20,744	21,149
2000			11,365	15,299	17,912	19,536	20,475	21,301	21,879	22,286
2001		6,155	12,111	16,566	19,566	21,277	22,496	23,322	23,935	24,381
2002	1,968	6,139	11,909	16,176	18,756	20,338	21,426	22,178	22,682	23,097
2003	2,035	6,278	12,099	16,166	18,598	20,140	21,164	21,881	22,481	23,025
2004	1,959	5,934	10,040	12,938	14,698	15,900	16,780	17,517	18,159	18,748
2005	1,888	5,445	8,884	11,332	12,954	14,072	14,929	15,669	16,360	16,878
2006	2,016	5,712	9,617	12,164	13,975	15,332	16,433	17,288	17,962	18,406
2007	2,122	6,176	10,326	13,201	15,246	16,762	17,946	18,862	19,470	20,044
2008	2,321	6,700	11,212	14,643	17,079	18,795	20,000	20,849	21,457	21,945
2009	2,363	6,726	11,544	15,154	17,725	19,523	20,780	21,707	22,427	22,979
2010	2,332	6,708	11,515	15,185	17,689	19,363	20,589	21,431	22,053	22,559
2011	2,372	6,819	11,704	15,174	17,463	19,074	20,219	21,088	21,752	
2012	2,457	6,920	11,689	15,050	17,284	18,979	20,003	20,772		
2013	2,464	6,929	11,645	15,144	17,371	18,780	19,666			
2014	2,437	6,956	12,158	15,807	18,097	19,514				
2015	2,437	7,281	12,621	16,305	18,505					
2016	2,574	7,488	12,637	16,112						
2017	2,602	7,622	12,889							
2018	2,783	7,969								
2019	2,929									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
1995									13.5%	14.0%
1996								13.6%	14.0%	14.4%
1997							14.6%	14.8%	14.7%	13.8%
1998						9.4%	10.1%	10.1%	9.7%	10.7%
1999					8.4%	9.6%	9.5%	8.8%	9.3%	9.1%
2000				4.9%	6.0%	5.4%	4.5%	5.4%	5.5%	5.4%
2001			6.6%	8.3%	9.2%	8.9%	9.9%	9.5%	9.4%	9.4%
2002		-0.3%	-1.7%	-2.4%	-4.1%	-4.4%	-4.8%	-4.9%	-5.2%	-5.3%
2003	3.4%	2.3%	1.6%	-0.1%	-0.8%	-1.0%	-1.2%	-1.3%	-0.9%	-0.3%
2004	-3.7%	-5.5%	-17.0%	-20.0%	-21.0%	-21.1%	-20.7%	-19.9%	-19.2%	-18.6%
2005	-3.6%	-8.2%	-11.5%	-12.4%	-11.9%	-11.5%	-11.0%	-10.6%	-9.9%	-10.0%
2006	6.8%	4.9%	8.3%	7.3%	7.9%	9.0%	10.1%	10.3%	9.8%	9.1%
2007	5.3%	8.1%	7.4%	8.5%	9.1%	9.3%	9.2%	9.1%	8.4%	8.9%
2008	9.4%	8.5%	8.6%	10.9%	12.0%	12.1%	11.4%	10.5%	10.2%	9.5%
2009	1.8%	0.4%	3.0%	3.5%	3.8%	3.9%	3.9%	4.1%	4.5%	4.7%
2010	-1.3%	-0.3%	-0.2%	0.2%	-0.2%	-0.8%	-0.9%	-1.3%	-1.7%	-1.8%
2011	1.7%	1.7%	1.6%	-0.1%	-1.3%	-1.5%	-1.8%	-1.6%	-1.4%	
2012	3.6%	1.5%	-0.1%	-0.8%	-1.0%	-0.5%	-1.1%	-1.5%		
2013	0.3%	0.1%	-0.4%	0.6%	0.5%	-1.1%	-1.7%			
2014	-1.1%	0.4%	4.4%	4.4%	4.2%	3.9%				
2015	0.0%	4.7%	3.8%	3.1%	2.3%					
2016	5.6%	2.8%	0.1%	-1.2%						
2017	1.1%	1.8%	2.0%							
2018	7.0%	4.5%								
2019	5.3%									

Annual Trend*										
All-Year	2.3%	1.9%	1.0%	0.5%	0.2%	0.2%	0.4%	1.0%	1.7%	2.6%
R ²	0.899	0.807	0.241	0.046	0.008	0.007	0.032	0.137	0.276	0.397
5-Year	4.6%	3.2%	2.4%	2.1%	1.6%	0.0%	-1.4%	-0.4%	2.5%	5.6%
R ²	0.967	0.979	0.899	0.847	0.739	0.000	0.991	0.095	0.504	0.854

*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Indemnity Claim
As of September 30, 2019

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
2001									22,423	23,334
2002								21,816	22,748	23,506
2003							19,823	20,953	21,906	22,761
2004						16,501	17,846	19,011	20,094	21,113
2005					15,156	16,853	18,310	19,486	20,861	21,818
2006				14,523	17,005	18,957	20,618	22,053	23,221	24,047
2007			12,625	16,223	18,973	21,275	23,306	24,922	26,040	26,964
2008		8,978	13,866	17,886	21,160	23,864	25,906	27,348	28,456	29,291
2009	3,595	9,278	14,499	18,988	22,707	25,529	27,445	28,896	29,928	30,743
2010	3,611	9,174	14,498	19,325	22,918	25,373	27,265	28,601	29,516	30,299
2011	3,191	8,572	13,918	18,281	21,335	23,743	25,356	26,560	27,453	
2012	3,108	8,424	13,423	17,318	20,135	22,248	23,593	24,644		
2013	3,285	8,101	12,713	16,410	19,006	20,679	21,816			
2014	3,056	7,810	12,459	15,992	18,373	19,934				
2015	3,107	7,887	12,467	15,919	18,151					
2016	3,167	8,090	12,452	15,526						
2017	3,358	8,300	12,636							
2018	3,519	8,593								
2019	3,321									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
2002									1.5%	0.7%
2003								-4.0%	-3.7%	-3.2%
2004							-10.0%	-9.3%	-8.3%	-7.2%
2005						2.1%	2.6%	2.5%	3.8%	3.3%
2006					12.2%	12.5%	12.6%	13.2%	11.3%	10.2%
2007				11.7%	11.6%	12.2%	13.0%	13.0%	12.1%	12.1%
2008			9.8%	10.3%	11.5%	12.2%	11.2%	9.7%	9.3%	8.6%
2009		3.3%	4.6%	6.2%	7.3%	7.0%	5.9%	5.7%	5.2%	5.0%
2010**	0.5%	-1.1%	0.0%	1.8%	0.9%	-0.6%	-0.7%	-1.0%	-1.4%	-1.4%
2011**	-11.6%	-6.6%	-4.0%	-5.4%	-6.9%	-6.4%	-7.0%	-7.1%	-7.0%	
2012**	-2.6%	-1.7%	-3.6%	-5.3%	-5.6%	-6.3%	-7.0%	-7.2%		
2013	5.7%	-3.8%	-5.3%	-5.2%	-5.6%	-7.1%	-7.5%			
2014	-7.0%	-3.6%	-2.0%	-2.5%	-3.3%	-3.6%				
2015	1.7%	1.0%	0.1%	-0.5%	-1.2%					
2016	1.9%	2.6%	-0.1%	-2.5%						
2017	6.0%	2.6%	1.5%							
2018	4.8%	3.5%								
2019	-5.6%									

Annual Trend*										
All-Year	0.1%	-1.2%	-1.8%	-1.6%	-0.4%	1.4%	3.2%	4.1%	4.2%	3.9%
R ²	0.005	0.362	0.776	0.370	0.012	0.102	0.372	0.610	0.709	0.688
5-Year	2.4%	2.5%	-0.1%	-2.5%	-4.1%	-6.0%	-5.9%	-2.9%	1.4%	6.1%
R ²	0.584	0.969	0.044	0.899	0.945	0.991	0.951	0.518	0.159	0.850

*Trend is based on an exponential distribution.

**Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident years 2012 and subsequent exclude the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Claim**
As of September 30, 2019

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1998									5,048	5,225
1999								5,745	5,964	6,199
2000							6,234	6,526	6,845	7,076
2001						6,930	7,344	7,737	8,040	8,343
2002					6,824	7,333	7,824	8,192	8,519	8,779
2003				5,789	6,485	7,063	7,475	7,866	8,192	8,486
2004			3,718	4,535	5,193	5,695	6,122	6,485	6,821	7,140
2005		2,476	3,450	4,282	4,923	5,426	5,851	6,192	6,595	6,872
2006	1,167	2,596	3,816	4,734	5,459	6,023	6,503	6,920	7,257	7,504
2007	1,170	2,931	4,299	5,386	6,212	6,899	7,505	7,984	8,323	8,600
2008	1,423	3,297	4,852	6,114	7,141	7,987	8,624	9,084	9,428	9,693
2009	1,582	3,608	5,389	6,906	8,160	9,114	9,768	10,253	10,599	10,871
2010	1,592	3,709	5,610	7,323	8,593	9,471	10,138	10,609	10,930	11,203
2011	1,469	3,566	5,548	7,153	8,291	9,168	9,756	10,194	10,517	
2012	1,454	3,556	5,452	6,927	7,977	8,764	9,264	9,652		
2013	1,531	3,519	5,329	6,740	7,743	8,377	8,811			
2014	1,483	3,438	5,228	6,575	7,476	8,062				
2015	1,511	3,476	5,243	6,540	7,378					
2016	1,541	3,579	5,279	6,449						
2017	1,596	3,557	5,171							
2018	1,670	3,699								
2019	1,606									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
1999										18.7%
2000								13.6%	14.8%	14.1%
2001							17.8%	18.6%	17.5%	17.9%
2002						5.8%	6.5%	5.9%	6.0%	5.2%
2003					-5.0%	-3.7%	-4.5%	-4.0%	-3.8%	-3.3%
2004				-21.7%	-19.9%	-19.4%	-18.1%	-17.6%	-16.7%	-15.9%
2005			-7.2%	-5.6%	-5.2%	-4.7%	-4.4%	-4.5%	-3.3%	-3.8%
2006		4.8%	10.6%	10.5%	10.9%	11.0%	11.2%	11.7%	10.0%	9.2%
2007	0.2%	12.9%	12.7%	13.8%	13.8%	14.5%	15.4%	15.4%	14.7%	14.6%
2008	21.6%	12.5%	12.9%	13.5%	15.0%	15.8%	14.9%	13.8%	13.3%	12.7%
2009	11.2%	9.4%	11.1%	12.9%	14.3%	14.1%	13.3%	12.9%	12.4%	12.2%
2010	0.6%	2.8%	4.1%	6.0%	5.3%	3.9%	3.8%	3.5%	3.1%	3.1%
2011	-7.7%	-3.9%	-1.1%	-2.3%	-3.5%	-3.2%	-3.8%	-3.9%	-3.8%	
2012	-1.0%	-0.3%	-1.7%	-3.2%	-3.8%	-4.4%	-5.0%	-5.3%		
2013	5.3%	-1.0%	-2.3%	-2.7%	-2.9%	-4.4%	-4.9%			
2014	-3.1%	-2.3%	-1.9%	-2.4%	-3.5%	-3.8%				
2015	1.9%	1.1%	0.3%	-0.5%	-1.3%					
2016	2.0%	3.0%	0.7%	-1.4%						
2017	3.6%	-0.6%	-2.0%							
2018	4.6%	4.0%								
2019	-3.8%									

Annual Trend*										
All-Year	1.5%	1.7%	2.8%	3.6%	3.5%	3.3%	3.3%	3.6%	4.1%	4.6%
R ²	0.432	0.436	0.492	0.573	0.519	0.458	0.465	0.549	0.625	0.655
5-Year	2.0%	1.7%	-0.5%	-1.7%	-2.9%	-4.0%	-2.9%	1.2%	6.4%	10.9%
R ²	0.678	0.888	0.510	0.940	0.979	0.997	0.736	0.090	0.749	0.964

*Trend is based on an exponential distribution.

**All entries reflect the paid cost of medical cost containment programs.

Source: WCIRB quarterly calls for experience

Average Paid Indemnity Loss per Closed Indemnity Claim**
As of September 30, 2019

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1994									10,593	10,801
1995								11,481	11,839	12,122
1996							12,385	12,908	13,341	13,743
1997						13,084	13,935	14,651	15,220	15,503
1998					12,564	13,986	15,206	16,141	16,637	17,194
1999				11,061	13,445	15,221	16,643	17,496	18,232	18,897
2000			6,689	10,920	13,944	16,023	17,432	18,244	19,179	19,895
2001		2,333	6,503	11,397	15,315	17,203	18,341	19,659	20,531	21,134
2002	1,001	2,089	6,475	11,650	14,715	16,363	17,945	18,938	19,675	20,211
2003	1,260	2,685	7,623	12,038	14,345	16,503	17,719	18,569	19,249	19,869
2004	937	2,739	6,265	8,987	11,509	12,893	13,858	14,645	15,422	16,308
2005	965	2,439	4,697	7,801	9,894	11,124	12,089	12,962	13,996	14,771
2006	1,223	2,458	5,578	8,435	10,520	12,033	13,294	14,589	15,588	16,353
2007	1,075	2,741	5,999	8,990	11,290	13,016	14,649	15,996	16,964	17,884
2008	1,206	3,141	6,508	9,894	12,583	14,929	16,668	17,982	18,983	19,811
2009	1,451	3,251	6,850	10,403	13,508	15,886	17,714	19,169	20,153	21,022
2010	1,206	3,229	6,979	10,895	13,972	16,263	18,000	19,346	20,267	20,990
2011	1,273	3,584	7,510	11,413	14,306	16,488	18,082	19,293	20,233	
2012	1,458	3,925	8,102	11,818	14,512	16,620	18,030	19,154		
2013	1,635	4,368	8,444	12,186	14,911	16,718	17,943			
2014	1,627	4,546	9,043	12,970	15,795	17,598				
2015	1,724	4,993	9,807	13,714	16,384					
2016	1,851	5,368	9,913	13,690						
2017	1,969	5,399	10,089							
2018	2,135	5,819								
2019	2,412									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
1995									11.8%	12.2%
1996								12.4%	12.7%	13.4%
1997							12.5%	13.5%	14.1%	12.8%
1998						6.9%	9.1%	10.2%	9.3%	10.9%
1999					7.0%	8.8%	9.5%	8.4%	9.6%	9.9%
2000				-1.3%	3.7%	5.3%	4.7%	4.3%	5.2%	5.3%
2001			-2.8%	4.4%	9.8%	7.4%	5.2%	7.8%	7.0%	6.2%
2002		-10.5%	-0.4%	2.2%	-3.9%	-4.9%	-2.2%	-3.7%	-4.2%	-4.4%
2003	25.8%	28.5%	17.7%	3.3%	-2.5%	0.9%	-1.3%	-1.9%	-2.2%	-1.7%
2004	-25.6%	2.0%	-17.8%	-25.4%	-19.8%	-21.9%	-21.8%	-21.1%	-19.9%	-17.9%
2005	2.9%	-11.0%	-25.0%	-13.2%	-14.0%	-13.7%	-12.8%	-11.5%	-9.2%	-9.4%
2006	26.8%	0.8%	18.8%	8.1%	6.3%	8.2%	10.0%	12.6%	11.4%	10.7%
2007	-12.1%	11.5%	7.5%	6.6%	7.3%	8.2%	10.2%	9.6%	8.8%	9.4%
2008	12.1%	14.6%	8.5%	10.1%	11.5%	14.7%	13.8%	12.4%	11.9%	10.8%
2009	20.3%	3.5%	5.3%	5.1%	7.4%	6.4%	6.3%	6.6%	6.2%	6.1%
2010	-16.9%	-0.7%	1.9%	4.7%	3.4%	2.4%	1.6%	0.9%	0.6%	-0.2%
2011	5.5%	11.0%	7.6%	4.8%	2.4%	1.4%	0.5%	-0.3%	-0.2%	
2012	14.6%	9.5%	7.9%	3.5%	1.4%	0.8%	-0.3%	-0.7%		
2013	12.1%	11.3%	4.2%	3.1%	2.7%	0.6%	-0.5%			
2014	-0.5%	4.1%	7.1%	6.4%	5.9%	5.3%				
2015	6.0%	9.9%	8.5%	5.7%	3.7%					
2016	7.4%	7.5%	1.1%	-0.2%						
2017	6.3%	0.6%	1.8%							
2018	8.5%	7.8%								
2019	13.0%									

Annual Trend*										
All-Year	5.2%	6.3%	3.4%	1.7%	0.9%	0.7%	0.8%	1.3%	1.9%	2.7%
R ²	0.862	0.953	0.632	0.253	0.096	0.066	0.084	0.189	0.318	0.431
5-Year	8.5%	5.9%	4.6%	4.2%	3.6%	1.7%	0.3%	1.3%	4.3%	6.8%
R ²	0.981	0.941	0.889	0.936	0.956	0.814	0.291	0.472	0.747	0.913

*Trend is based on an exponential distribution.

**Paid indemnity losses used in the severity calculations above represent paid indemnity losses on closed claims only.

Source: WCIRB quarterly calls for experience

Average Paid Medical Loss per Closed Indemnity Claim***
As of September 30, 2019

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
2001									18,243	19,094
2002								17,752	18,715	19,492
2003							15,842	16,866	17,735	18,576
2004						12,248	13,444	14,512	15,593	16,916
2005					10,585	12,156	13,432	14,668	16,271	17,634
2006				9,361	11,589	13,522	15,227	17,046	18,566	19,869
2007			7,266	10,303	12,865	15,079	17,397	19,530	21,225	22,828
2008		4,543	7,971	11,374	14,431	17,661	20,200	22,202	23,896	25,240
2009	3,022	4,699	8,314	12,274	16,113	19,407	22,143	24,292	25,843	27,348
2010	2,793	4,685	8,613	13,149	17,052	20,117	22,747	24,868	26,314	27,366
2011	1,784	4,180	8,444	12,871	16,456	19,694	21,916	23,711	25,019	
2012	1,823	4,489	8,889	12,941	16,225	18,807	20,662	22,102		
2013	2,002	4,803	8,871	12,783	15,969	18,128	19,597			
2014	1,943	4,839	9,063	12,841	15,781	17,738				
2015	2,012	5,159	9,483	13,111	15,721					
2016	2,161	5,459	9,467	12,779						
2017	2,243	5,572	9,768							
2018	2,407	5,774								
2019	2,544									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
2002									2.6%	2.1%
2003								-5.0%	-5.2%	-4.7%
2004							-15.1%	-14.0%	-12.1%	-8.9%
2005						-0.8%	-0.1%	1.1%	4.4%	4.2%
2006					9.5%	11.2%	13.4%	16.2%	14.1%	12.7%
2007				10.1%	11.0%	11.5%	14.2%	14.6%	14.3%	14.9%
2008			9.7%	10.4%	12.2%	17.1%	16.1%	13.7%	12.6%	10.6%
2009		3.4%	4.3%	7.9%	11.7%	9.9%	9.6%	9.4%	8.1%	8.3%
2010**	-7.6%	-0.3%	3.6%	7.1%	5.8%	3.7%	2.7%	2.4%	1.8%	0.1%
2011**	-36.1%	-10.8%	-2.0%	-2.1%	-3.5%	-2.1%	-3.7%	-4.7%	-4.9%	
2012**	2.2%	7.4%	5.3%	0.5%	-1.4%	-4.5%	-5.7%	-6.8%		
2013	9.8%	7.0%	-0.2%	-1.2%	-1.6%	-3.6%	-5.2%			
2014	-2.9%	0.7%	2.2%	0.5%	-1.2%	-2.2%				
2015	3.5%	6.6%	4.6%	2.1%	-0.4%					
2016	7.4%	5.8%	-0.2%	-2.5%						
2017	3.8%	2.1%	3.2%							
2018	7.3%	3.6%								
2019	5.7%									

Annual Trend*										
All-Year	1.6%	3.0%	2.1%	1.9%	2.9%	4.3%	5.7%	6.1%	5.7%	5.1%
R ²	0.102	0.749	0.954	0.525	0.485	0.549	0.677	0.740	0.736	0.695
5-Year	5.9%	4.4%	2.4%	0.0%	-1.2%	-3.3%	-3.3%	-0.3%	4.3%	8.6%
R ²	0.993	0.961	0.935	0.000	0.964	0.985	0.803	0.010	0.613	0.912

*Trend is based on an exponential distribution.

**Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident years 2012 and subsequent exclude the paid cost of medical cost containment programs.

***Paid medical losses used in the severity calculations above represent paid medical losses on closed indemnity claims only.

Source: WCIRB quarterly calls for experience

Ratio of Quarterly Paid Medical to Indemnity Claims Inventory*
Through September 30, 2019

Development	Evaluation Years													
Period	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
3/0	1,201	1,147	1,289	1,553	1,615	1,714	1,601	1,587	1,672	1,847	1,737	2,105	2,124	2,273
6/3	2,477	2,330	2,870	3,029	3,071	3,139	3,000	3,013	2,873	3,178	3,161	3,357	3,497	3,296
9/6	2,440	2,517	2,952	3,160	3,137	3,108	3,148	3,269	3,080	3,089	3,221	3,310	3,604	3,312
12/9	2,431	2,697	3,012	3,075	3,134	3,065	3,243	3,033	2,983	2,951	3,157	3,361	3,513	
12/0	4,839	5,103	6,035	6,228	6,172	6,076	6,139	6,065	5,902	5,997	6,232	6,547	6,844	
15/12	2,284	2,571	2,927	3,040	3,131	3,159	3,354	3,316	3,074	3,130	3,135	3,406	3,446	3,558
18/15	2,430	2,186	2,680	2,784	2,924	2,982	3,221	3,187	2,839	2,871	3,006	3,039	3,150	3,171
21/18	1,881	2,168	2,474	2,616	2,711	2,802	2,975	2,914	2,827	2,824	2,817	2,791	2,933	3,061
24/21	1,834	2,190	2,407	2,537	2,603	2,738	3,035	2,929	2,747	2,706	2,790	2,870	2,921	
24/12	6,360	7,576	8,762	9,141	9,420	9,576	10,215	9,966	9,299	9,274	9,359	9,483	9,685	
27/24	1,495	1,728	2,214	2,353	2,531	2,563	2,740	3,022	2,862	2,784	2,810	2,889	2,811	3,111
30/27	1,865	1,801	2,337	2,607	2,708	2,857	2,988	3,162	3,036	3,027	3,055	3,016	3,080	3,105
33/30	1,632	1,807	2,342	2,560	2,770	2,912	3,100	3,196	3,177	3,003	2,984	2,926	3,094	3,192
36/33	1,704	1,965	2,389	2,596	2,731	2,889	3,406	3,308	3,120	3,096	3,072	3,041	3,092	
36/24	5,540	6,452	8,158	8,942	9,452	9,861	10,661	11,007	10,483	10,161	10,091	9,885	9,910	
39/36	1,471	1,710	2,032	2,278	2,500	2,680	3,019	3,258	3,177	3,265	3,026	3,041	3,111	3,102
42/39	1,981	1,791	2,146	2,524	2,786	2,944	3,124	3,539	3,463	3,344	3,114	3,267	3,481	3,205
45/42	1,646	1,836	2,166	2,517	2,735	3,083	3,246	3,427	3,691	3,372	3,215	3,017	3,237	3,279
48/45	1,812	1,953	2,251	2,551	2,913	3,072	3,411	3,629	3,433	3,281	3,414	3,141	3,410	
48/36	5,551	6,360	7,478	8,645	9,621	10,316	11,224	12,024	11,867	11,391	10,771	10,478	10,940	

Development	Year-to-Year Change													
Period	05-to-06	06-to-07	07-to-08	08-to-09	09-to-10	10-to-11	11-to-12	12-to-13	13-to-14	14-to-15	15-to-16	16-to-17	17-to-18	18-to-19
3/0	8.8%	-4.6%	12.4%	20.5%	4.0%	6.1%	-6.6%	-0.8%	5.4%	10.5%	-6.0%	21.2%	0.9%	7.0%
6/3	17.9%	-6.0%	23.2%	5.5%	1.4%	2.2%	-4.4%	0.4%	-4.6%	10.6%	-0.6%	6.2%	4.2%	-5.7%
9/6	19.1%	3.1%	17.3%	7.0%	-0.7%	-0.9%	1.3%	3.9%	-5.8%	0.3%	4.3%	2.8%	8.9%	-8.1%
12/9	11.8%	11.0%	11.7%	2.1%	1.9%	-2.2%	5.8%	-6.5%	-1.6%	-1.1%	7.0%	6.5%	4.5%	
12/0	13.0%	5.5%	18.2%	3.2%	-0.9%	-1.5%	1.0%	-1.2%	-2.7%	1.6%	3.9%	5.1%	4.5%	
15/12	1.2%	12.6%	13.8%	3.9%	3.0%	0.9%	6.2%	-1.1%	-7.3%	1.8%	0.1%	8.7%	1.2%	3.3%
18/15	15.9%	-10.1%	22.6%	3.9%	5.0%	2.0%	8.0%	-1.1%	-10.9%	1.1%	4.7%	1.1%	3.7%	0.7%
21/18	7.4%	15.3%	14.1%	5.8%	3.6%	3.4%	6.2%	-2.1%	-3.0%	-0.1%	-0.3%	-0.9%	5.1%	4.4%
24/21	9.8%	19.4%	9.9%	5.4%	2.6%	5.2%	10.8%	-3.5%	-6.2%	-1.5%	3.1%	2.9%	1.8%	
24/12	0.0%	19.1%	15.7%	4.3%	3.0%	1.7%	6.7%	-2.4%	-6.7%	-0.3%	0.9%	1.3%	2.1%	
27/24	-13.1%	15.6%	28.1%	6.3%	7.6%	1.2%	6.9%	10.3%	-5.3%	-2.7%	0.9%	2.8%	-2.7%	10.7%
30/27	12.8%	-3.5%	29.8%	11.5%	3.9%	5.5%	4.6%	5.8%	-4.0%	-0.3%	0.9%	-1.3%	2.1%	0.8%
33/30	5.7%	10.7%	29.6%	9.3%	8.2%	5.1%	6.5%	3.1%	-0.6%	-5.5%	-0.6%	-2.0%	5.8%	3.2%
36/33	7.1%	15.3%	21.6%	8.7%	5.2%	5.8%	17.9%	-2.9%	-5.7%	-0.7%	-0.8%	-1.0%	1.7%	
36/24	-4.2%	16.5%	26.4%	9.6%	5.7%	4.3%	8.1%	3.2%	-4.8%	-3.1%	-0.7%	-2.0%	0.3%	
39/36	-11.9%	16.2%	18.8%	12.1%	9.8%	7.2%	12.6%	7.9%	-2.5%	2.7%	-7.3%	0.5%	2.3%	-0.3%
42/39	23.7%	-9.6%	19.8%	17.6%	10.4%	5.7%	6.1%	13.3%	-2.1%	-3.4%	-6.9%	4.9%	6.6%	-7.9%
45/42	3.2%	11.5%	18.0%	16.2%	8.7%	12.7%	5.3%	5.6%	7.7%	-8.7%	-4.6%	-6.2%	7.3%	1.3%
48/45	10.9%	7.8%	15.2%	13.3%	14.2%	5.4%	11.0%	6.4%	-5.4%	-4.4%	4.1%	-8.0%	8.5%	
48/36	-2.2%	14.6%	17.6%	15.6%	11.3%	7.2%	8.8%	7.1%	-1.3%	-4.0%	-5.4%	-2.7%	4.4%	

* All paid medical include the paid cost of medical cost containment programs. Indemnity claim inventory is the sum of indemnity claims open at the beginning of the development period and newly-reported indemnity claims during that period.

Source: WCIRB accident year experience calls.

Estimated Ultimate Severities by Injury Type

Accident Year	Ultimate Indemnity Severity			Indemnity Severity Adjusted to PY 2020 Benefit Level			Accident Year	Ultimate Medical Severity**			Medical Severity Adjusted to PY 2020 Benefit Level**		
	Permanent	Temporary	Annual Change	Permanent	Temporary	Annual Change		Permanent	Temporary	Medical Only	Permanent	Temporary	Medical Only
2002	42,449	3,968	-1.3%	47,878	6,260	-2.0%	2002	47,655	5,365	854	26,705	3,007	479
2003	41,889	4,214	-14.0%	49,785	6,138	-4.7%	2003	47,357	5,680	909	27,561	3,306	529
2004	36,040	4,116	-4.0%	53,230	5,848	-8.3%	2004	48,393	5,357	842	29,548	3,271	514
2005	34,593	3,844	0.6%	61,026	5,364	-2.0%	2005	53,023	5,345	854	42,824	4,317	689
2006	37,276	3,866	7.8%	60,554	5,257	2.5%	2006	57,083	5,517	881	46,103	4,456	711
2007	39,812	4,153	6.8%	62,080	5,526	5.1%	2007	62,047	6,303	962	49,912	5,070	774
2008	41,887	4,806	7.4%	59,021	6,268	13.4%	2008	63,900	7,188	1,038	50,444	5,675	819
2009	41,907	5,427	5.2%	58,745	7,029	12.1%	2009	63,497	8,124	1,156	49,925	6,388	909
2010	40,648	6,379	-3.0%	56,216	8,139	-0.5%	2010	61,024	9,240	1,182	47,790	7,236	926
2011	39,130	6,680	-2.6%	53,264	8,388	-4.9%	2011	55,527	8,956	1,134	43,355	6,993	886
2012	38,117	7,166	-0.8%	50,633	8,776	2.5%	2012	51,275	8,993	1,131	41,150	7,218	907
2013	36,455	7,450	7.8%	46,712	9,057	15.7%	2013	46,367	8,542	1,163	39,090	7,201	981
2014	38,549	7,434	5.2%	44,349	8,737	12.9%	2014	44,853	8,239	1,225	41,557	7,633	1,135
2015	39,090	7,571	0.0%	43,853	8,653	17.5%	2015	43,896	8,270	1,244	43,229	8,145	1,225
2016	38,755	7,748	-3.7%	42,949	8,727	15.8%	2016	43,539	8,235	1,317	43,843	8,293	1,326
2017	39,743	8,047	-3.0%	42,925	8,795	3.1%	2017	44,854	8,412	1,292	45,124	8,463	1,300
2018*	41,414	8,700	-0.1%	43,775	9,269	0.8%	2018*	47,695	8,985	1,356	47,981	9,039	1,364
			4.2%			5.4%							

Accident Year	Annual Change	Annual Change	Annual Change
2002	-1.3%	-2.0%	6.5%
2003	-14.0%	-4.7%	-7.4%
2004	-4.0%	-8.3%	1.4%
2005	0.6%	-2.0%	3.1%
2006	7.8%	2.5%	9.2%
2007	6.8%	5.1%	7.9%
2008	5.2%	13.4%	11.4%
2009	0.0%	12.9%	13.0%
2010	-3.0%	-0.5%	-3.9%
2011	-3.7%	-4.3%	-9.0%
2012	-2.6%	-4.9%	-7.7%
2013	-4.4%	-7.7%	-9.6%
2014	5.7%	-5.1%	-3.3%
2015	1.4%	-1.1%	-2.1%
2016	-0.9%	-2.1%	-0.8%
2017	2.6%	-0.1%	3.0%
2018*	4.2%	2.0%	6.3%

Accident Year	Annual Change	Annual Change	Annual Change
2002	3.2%	10.0%	10.6%
2003	7.2%	-1.1%	-2.9%
2004	44.9%	32.0%	34.1%
2005	7.7%	3.2%	3.1%
2006	8.3%	13.8%	8.8%
2007	1.1%	11.9%	5.9%
2008	-1.0%	12.6%	10.9%
2009	-4.3%	13.3%	1.9%
2010	-9.3%	-3.4%	-4.3%
2011	-5.1%	3.2%	2.4%
2012	-5.0%	-0.2%	8.1%
2013	6.3%	6.0%	15.7%
2014	4.0%	6.7%	7.9%
2015	1.4%	1.8%	8.3%
2016	2.9%	2.0%	-2.0%
2017	6.3%	6.8%	5.0%

* Accident year 2018 experience is partial in that it only reflects experience from policy year 2017.

** Entries for accident years 2010 and 2011 only reflect the paid cost of medical cost containment programs attributable to policies with effective dates prior to July 1, 2010. Entries for accident year 2012 and forward exclude the paid cost of medical cost containment programs.

Source: WCIRB unit statistical data

Average Permanent Disability Ratings by Type of Loss

All Permanent Disability Claims						Cumulative Permanent Disability Claims						Non-Cumulative Permanent Disability Claims					
Average Permanent Disability Rating						Average Permanent Disability Rating						Average Permanent Disability Rating					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2002	18.7	23.5	24.7	25.4	25.2	2002	16.9	20.4	21.4	22.0	22.1	2002	18.9	23.9	25.2	25.8	25.6
2003	19.8	22.0	23.2	23.0	22.6	2003	17.4	19.1	20.2	20.1	19.9	2003	20.0	22.3	23.6	23.3	23.0
2004	16.3	18.2	18.8	18.4	18.2	2004	15.0	16.0	16.7	16.4	16.7	2004	16.4	18.4	19.1	18.6	18.4
2005	12.5	14.6	15.8	16.1	16.9	2005	11.0	12.7	14.4	15.3	16.4	2005	12.6	14.8	15.9	16.2	16.9
2006	11.8	14.2	15.5	16.6	17.2	2006	10.3	12.7	14.6	16.0	16.7	2006	12.0	14.4	15.6	16.7	17.2
2007	12.0	14.6	16.6	17.5	18.1	2007	10.9	13.5	15.5	16.7	17.6	2007	12.1	14.7	16.7	17.6	18.2
2008	12.8	15.5	17.3	18.2	18.3	2008	12.4	14.4	16.1	17.4	17.6	2008	12.9	15.7	17.4	18.3	18.4
2009	12.5	15.2	16.8	17.3	17.3	2009	11.5	14.0	15.8	16.2	16.6	2009	12.6	15.3	16.9	17.4	17.4
2010	12.7	15.0	15.8	16.1	16.6	2010	11.4	14.9	15.4	15.7	16.4	2010	12.7	15.0	15.9	16.2	16.6
2011	12.6	14.4	15.1	15.8	16.3	2011	11.8	13.4	14.2	14.8	15.6	2011	12.7	14.5	15.2	15.9	16.5
2012	11.7	13.0	14.1	14.9	15.3	2012	10.9	12.1	13.1	13.9	14.3	2012	11.8	13.2	14.3	15.1	15.5
2013	11.2	12.8	13.8	14.4	14.8	2013	10.3	11.5	12.4	13.0	13.6	2013	11.3	13.1	14.1	14.7	15.1
2014	10.7	12.2	13.4	14.0		2014	10.1	10.9	12.0	12.8		2014	10.9	12.5	13.7	14.3	
2015	10.1	12.0	13.1			2015	9.4	11.0	12.0			2015	10.3	12.2	13.3		
2016	10.1	11.7				2016	9.0	10.1				2016	10.4	12.1			
2017	9.9					2017	9.1					2017	10.1				

Count of Permanent Disability Claims						Count of Permanent Disability Claims						Count of Permanent Disability Claims					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2002	84,211	96,994	101,877	102,617	103,228	2002	9,284	11,078	11,784	11,975	12,161	2002	74,927	85,916	90,093	90,642	91,067
2003	72,753	83,307	85,811	87,080	88,430	2003	7,824	9,320	9,756	10,101	10,348	2003	64,929	73,987	76,055	76,979	78,082
2004	55,724	62,004	65,470	67,410	70,372	2004	5,130	6,060	6,722	7,227	7,958	2004	50,594	55,944	58,748	60,183	62,414
2005	45,067	53,120	56,970	60,958	61,722	2005	3,463	4,592	5,383	6,197	6,821	2005	41,604	48,528	51,587	54,761	55,101
2006	42,384	51,362	57,892	59,647	60,965	2006	3,324	4,721	5,677	6,216	6,585	2006	39,060	46,641	52,215	53,431	54,380
2007	40,159	53,324	57,504	60,145	61,007	2007	3,256	4,816	5,797	6,326	6,596	2007	36,903	48,508	51,707	53,819	54,411
2008	39,867	50,766	56,318	58,294	59,068	2008	3,414	5,047	6,109	6,595	6,925	2008	36,453	45,719	50,209	51,699	52,143
2009	38,727	50,679	55,149	56,650	58,566	2009	3,782	5,585	6,624	7,273	7,823	2009	34,945	45,094	48,525	49,377	50,743
2010	39,833	51,715	56,323	58,831	59,820	2010	3,985	5,767	6,780	7,643	8,197	2010	35,848	45,948	49,543	51,188	51,623
2011	41,715	53,010	57,939	60,117	61,957	2011	4,230	6,243	7,635	8,495	9,176	2011	37,485	46,767	50,304	51,622	52,781
2012	41,005	53,428	59,482	62,494	64,484	2012	4,991	7,478	9,052	10,091	10,686	2012	36,014	45,950	50,430	52,403	53,798
2013	41,949	56,146	63,704	66,925	67,809	2013	6,327	9,358	11,179	12,012	12,242	2013	35,622	46,788	52,525	54,913	55,567
2014	45,032	59,647	66,334	68,511		2014	7,173	10,608	11,918	12,445		2014	37,859	49,039	54,416	56,066	
2015	46,233	60,767	66,216			2015	7,905	11,031	12,110			2015	38,328	49,736	54,106		
2016	45,982	60,345				2016	8,387	12,730				2016	37,595	47,615			
2017	44,287					2017	7,385					2017	36,902				

Median Permanent Disability Rating						Median Permanent Disability Rating						Median Permanent Disability Rating					
PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5	PY/RL	1	2	3	4	5
2002	15.0	19.5	22.0	22.0	21.5	2002	14.5	15.5	17.5	18.0	19.0	2002	16.0	20.5	22.0	22.5	23.0
2003	17.0	19.0	20.0	19.5	19.5	2003	14.5	14.5	14.5	15.0	14.5	2003	17.0	19.0	20.0	20.0	19.5
2004	12.5	14.5	14.5	14.5	14.5	2004	10.5	11.5	12.5	12.0	12.5	2004	12.5	14.5	14.5	15.0	14.5
2005	10.0	9.5	11.5	11.5	12.5	2005	8.0	9.5	10.0	11.0	12.0	2005	9.5	10.5	12.0	12.0	13.0
2006	8.5	9.5	11.5	13.0	13.0	2006	6.5	9.0	10.0	10.5	12.0	2006	8.5	10.0	12.0	13.0	12.5
2007	9.0	10.5	12.5	13.0	14.0	2007	7.5	9.5	11.0	11.5	11.5	2007	9.0	10.5	13.0	14.0	14.0
2008	10.0	10.5	12.5	13.5	13.5	2008	8.5	10.0	11.0	12.0	12.0	2008	10.0	12.0	13.0	14.0	14.0
2009	10.0	11.0	13.0	12.5	12.5	2009	9.5	10.0	10.5	12.0	12.0	2009	10.0	10.5	13.0	14.0	14.0
2010	10.0	11.0	12.0	13.0	12.5	2010	10.0	11.0	10.5	12.0	12.0	2010	9.5	10.5	12.0	12.5	13.0
2011	10.0	10.5	12.0	13.0	13.0	2011	9.5	10.0	11.0	11.0	11.5	2011	10.0	11.0	11.5	12.5	13.0
2012	10.0	9.5	10.5	11.5	11.5	2012	9.0	9.5	10.0	10.0	9.5	2012	9.5	9.5	10.5	12.0	11.5
2013	9.0	9.5	9.5	11.0	11.0	2013	8.0	8.5	9.5	10.0	9.5	2013	8.5	9.5	11.0	11.0	12.0
2014	7.5	10.0	9.5	10.0	11.0	2014	7.5	8.5	8.5	10.0		2014	9.0	10.0	9.5	10.5	
2015	8.0	10.0	9.5			2015	7.0	8.0	8.5			2015	7.5	9.5	9.5		
2016	7.5	10.0				2016	7.0	7.5				2016	8.0	10.0			
2017	8.0					2017	7.0					2017					

Note: Cumulative claims include both cumulative and occupational disease claims.

Source: WCIRB unit statistical data

Average Paid ALAE^[1] per Reported Indemnity Claim - Private Insurers
As of September 30, 2019

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
2000								4,492	4,662	4,858
2001							5,407	5,637	5,927	6,099
2002						5,570	5,859	6,202	6,401	6,576
2003					5,348	5,796	6,232	6,527	6,756	6,968
2004				4,134	4,911	5,460	5,865	6,157	6,388	6,590
2005			2,722	3,774	4,549	5,101	5,501	5,824	6,092	6,281
2006		1,480	2,831	3,909	4,704	5,306	5,766	6,090	6,352	6,572
2007	378	1,616	3,025	4,177	5,043	5,711	6,244	6,613	6,912	7,144
2008	415	1,734	3,273	4,582	5,577	6,331	6,862	7,294	7,615	7,837
2009	464	1,944	3,685	5,142	6,238	7,024	7,653	8,107	8,428	8,663
2010	510	2,060	3,861	5,274	6,318	7,129	7,753	8,164	8,453	8,673
2011	496	2,091	3,800	5,214	6,311	7,170	7,733	8,115	8,396	
2012	509	2,086	3,925	5,422	6,548	7,308	7,804	8,157		
2013	518	2,282	4,171	5,647	6,652	7,301	7,740			
2014	569	2,452	4,378	5,778	6,685	7,274				
2015	627	2,548	4,468	5,777	6,604					
2016	631	2,617	4,501	5,781						
2017	677	2,710	4,576							
2018	751	2,835								
2019	756									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
2001								25.5%	27.1%	25.6%
2002							8.4%	10.0%	8.0%	7.8%
2003						4.1%	6.4%	5.3%	5.5%	6.0%
2004					-8.2%	-5.8%	-5.9%	-5.7%	-5.5%	-5.4%
2005				-8.7%	-7.4%	-6.6%	-6.2%	-5.4%	-4.6%	-4.7%
2006			4.0%	3.6%	3.4%	4.0%	4.8%	4.6%	4.3%	4.6%
2007		9.1%	6.8%	6.8%	7.2%	7.6%	8.3%	8.6%	8.8%	8.7%
2008	9.7%	7.3%	8.2%	9.7%	10.6%	10.9%	9.9%	10.3%	10.2%	9.7%
2009	11.9%	12.1%	12.6%	12.2%	11.9%	10.9%	11.5%	11.1%	10.7%	10.5%
2010	10.0%	5.9%	4.8%	2.6%	1.3%	1.5%	1.3%	0.7%	0.3%	0.1%
2011	-2.8%	1.5%	-1.6%	-1.1%	-0.1%	0.6%	-0.3%	-0.6%	-0.7%	
2012	2.6%	-0.2%	3.3%	4.0%	3.8%	1.9%	0.9%	0.5%		
2013	1.7%	9.4%	6.3%	4.2%	1.6%	-0.1%	-0.8%			
2014	9.9%	7.5%	5.0%	2.3%	0.5%	-0.4%				
2015	10.1%	3.9%	2.1%	0.0%	-1.2%					
2016	0.6%	2.7%	0.7%	0.1%						
2017	7.3%	3.5%	1.7%							
2018	11.0%	4.6%								
2019	0.7%									

Annual Trend^[2]

All-Year	5.6%	5.3%	4.6%	3.9%	3.3%	3.2%	3.4%	4.3%	4.5%	4.5%
R ³	0.964	0.968	0.936	0.882	0.771	0.772	0.812	0.820	0.808	0.786
5-Year	5.7%	3.6%	2.2%	1.5%	1.1%	0.6%	0.3%	2.3%	5.1%	7.8%
R ³	0.914	0.993	0.890	0.738	0.594	0.668	0.429	0.527	0.771	0.948

^[1] All paid ALAE exclude the paid cost of medical cost containment programs.

^[2] Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

Percentage of Represented Permanent Disability Claims by Region and Loss Type
First and Second Survey Level, Open Claims Only

<u>First Survey Level</u>			
% of Represented	Northern <u>California</u>	Southern <u>California</u>	
	<u>CT Claims</u>	<u>Non-CT Claims</u>	
AY 2011	66.1%	80.9%	73.0%
AY 2012	67.3%	82.4%	74.3%
AY 2013	68.8%	84.2%	76.0%
AY 2014	67.8%	83.1%	75.0%
AY 2015	66.5%	81.4%	73.5%
AY 2016	66.7%	81.7%	73.7%
AY 2017	61.4%	75.3%	67.9%
<u>Second Survey Level</u>			
% of Represented	Northern <u>California</u>	Southern <u>California</u>	
	<u>CT Claims</u>	<u>Non-CT Claims</u>	
AY 2011	69.2%	84.7%	76.4%
AY 2012	71.4%	87.5%	78.9%
AY 2013	71.7%	87.8%	79.3%
AY 2014	69.4%	85.0%	76.7%
AY 2015	70.3%	86.1%	77.7%
AY 2016	68.4%	83.8%	75.6%

Note: Claims are assigned to Northern and Southern California regions based on the WCAB office code reported on the Permanent Disability Claim Survey forms. If the WCAB office code was not reported, the zip code of the claimant's residence was used.

Source: WCIRB Permanent Disability Claim Survey for each accident year (AY)
Data is recast from survey proportions to true proportions.
Data in italics is preliminary

Changes in the Number and Cost of Medical-Legal Reports by Service Year

Service Year	Number of Med-Legal Reports per Claim ^[1] by Service Year							
	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2013	0.21	0.21	0.25	0.22	---	---	---	---
2014	0.22	0.23	0.25	0.23	6.5%	7.5%	0.3%	4.9%
2015	0.22	0.24	0.25	0.23	-2.7%	7.6%	0.4%	-0.5%
2016	0.23	0.28	0.25	0.24	8.3%	13.7%	-0.2%	7.2%
2017	0.23	0.26	0.24	0.24	-2.7%	-6.3%	-5.6%	-3.9%
2018	0.22	0.27	0.24	0.23	-2.2%	3.7%	0.1%	-0.6%

Service Year	Med-Legal Payment per Report by Service Year on All Claims ^[2]							
	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>	<u>Southern</u>	<u>Central</u>	<u>Northern</u>	<u>All</u>
2013	\$1,689	\$1,064	\$1,305	\$1,485	---	---	---	---
2014	\$1,859	\$1,222	\$1,382	\$1,636	10.1%	14.8%	6.0%	10.1%
2015	\$1,821	\$1,285	\$1,368	\$1,624	-2.0%	5.1%	-1.1%	-0.8%
2016	\$1,878	\$1,244	\$1,354	\$1,643	3.1%	-3.2%	-1.0%	1.2%
2017	\$1,692	\$1,029	\$1,242	\$1,467	-9.9%	-17.3%	-8.3%	-10.7%
2018	\$1,631	\$1,028	\$1,236	\$1,423	-3.6%	-0.2%	-0.5%	-3.0%

^[1] Includes claims with any medical transaction for the service year.

^[2] Includes services on all claims on the 10 most recent accident years for the service year and where payment for the service was made within the same service year.

Source: WCIRB medical data call (MDC).

Average Paid M CCP per Reported Indemnity Claim - Statewide
As of September 30, 2019

Accident	Evaluated as of (in months):							
<u>Year</u>	<u>9</u>	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>	<u>93</u>
2012	544	1,230	1,675	1,933	2,066	2,186	2,265	2,347
2013	531	1,136	1,541	1,780	1,933	2,044	2,120	
2014	512	1,091	1,505	1,745	1,902	1,998		
2015	504	1,095	1,473	1,704	1,844			
2016	485	1,041	1,386	1,593				
2017	467	1,019	1,373					
2018	495	1,078						
2019	491							

Accident	Annual Change							
<u>Year</u>	<u>9</u>	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>81</u>	<u>93</u>
2013	-2.4%	-7.6%	-8.0%	-7.9%	-6.4%	-6.5%	-6.4%	
2014	-3.5%	-4.0%	-2.4%	-2.0%	-1.6%	-2.2%		
2015	-1.5%	0.4%	-2.1%	-2.3%	-3.1%			
2016	-3.9%	-5.0%	-5.9%	-6.5%				
2017	-3.7%	-2.1%	-0.9%					
2018	5.9%	5.9%						
2019	-0.7%							

Source: WCIRB accident year experience calls.

Item AC20-03-02 12/31/2019 Experience – Review of Methodologies

Staff has prepared a preliminary analysis of statewide experience through December 31, 2019, which is included in Exhibits 1 through 8. This information reflects insurers writing approximately 100% of the market based on 2019 premium levels. The methodologies used were consistent with those reflected in the January 1, 2020 Pure Premium Rate Filing. Wage and loss levels were projected to April 1, 2021 (the approximate midpoint of experience on policies incepting between July 1, 2020 and December 31, 2020) and premiums were adjusted to the industry average filed pure premium rate level as of July 1, 2019 as reflected in the January 1, 2020 Pure Premium Rate Filing.

As shown on Exhibit 8, the projected loss to the industry average filed pure premium ratio for policies incepting between July 1, 2020 and December 31, 2020 based on December 31, 2019 experience and the January 1, 2020 Pure Premium Rate Filing methodology is 0.557. (The policy year 2020 loss to pure premium ratio reflected in the January 1, 2020 Pure Premium Rate Filing based on March 31, 2019 experience was 0.583. The comparable projected loss to pure premium ratio based on September 30, 2019 experience was 0.567.)

Additional supplemental information is included in Exhibits 9 through 12.

California Workers' Compensation
Accident Year Experience as of December 31, 2019

<u>Year</u>	<u>Earned Premium</u>	<u>Paid Indemnity</u>	<u>Indemnity Reserves</u>	<u>Paid Medical**</u>	<u>Medical Reserves</u>	<u>IBNR*</u>	<u>Total Incurred**</u>	<u>Loss Ratio*</u>
1987	4,374,085,383	1,506,586,217	6,788,123	1,334,475,511	44,824,706	51,174,762	2,943,849,319	0.673
1988	5,173,049,472	1,703,995,443	6,020,498	1,542,154,007	34,457,070	38,596,813	3,325,223,831	0.643
1989	5,676,279,371	1,940,504,130	6,885,040	1,798,369,778	50,426,878	37,727,348	3,833,913,174	0.675
1990	5,705,878,797	2,261,017,175	7,080,474	2,045,692,846	41,984,392	60,949,353	4,416,724,240	0.774
1991	5,872,566,346	2,481,039,430	15,443,972	2,203,949,723	48,346,440	54,904,603	4,803,684,168	0.818
1992	5,692,939,950	1,979,853,751	13,426,410	1,765,835,664	52,311,831	57,815,580	3,869,243,236	0.680
1993	5,942,544,967	1,695,567,397	13,112,257	1,516,394,844	62,774,974	46,215,598	3,334,065,070	0.561
1994	5,034,831,820	1,628,835,229	20,387,175	1,467,360,963	86,322,151	38,983,681	3,241,889,199	0.644
1995	3,790,122,732	1,766,934,235	25,504,579	1,624,334,746	94,743,497	50,559,246	3,562,076,303	0.940
1996	3,748,266,525	1,957,534,276	30,979,364	1,718,844,292	96,206,132	58,590,457	3,862,154,521	1.030
1997	3,928,295,572	2,319,753,353	38,165,376	2,016,714,398	125,090,083	93,758,099	4,593,481,309	1.169
1998	4,333,560,338	2,775,301,843	49,731,336	2,643,031,839	215,345,949	184,625,971	5,868,036,938	1.354
1999	4,551,546,853	3,057,436,790	54,879,885	3,039,124,528	171,629,260	246,938,847	6,570,009,310	1.443
2000	5,923,031,823	3,429,896,218	64,584,283	3,561,057,107	209,688,221	401,680,518	7,666,906,347	1.294
2001	10,120,534,867	4,842,975,436	99,258,469	5,366,989,563	367,527,793	597,064,069	11,273,815,330	1.114
2002	13,434,933,190	4,774,257,970	91,263,940	5,484,565,192	323,197,790	886,436,297	11,559,721,189	0.860
2003	19,476,317,174	4,548,266,768	147,991,461	5,053,039,913	362,086,426	1,241,416,519	11,352,801,087	0.583
2004	23,096,787,993	3,210,920,223	124,057,962	4,053,390,069	284,630,028	1,370,396,727	9,043,395,009	0.392
2005	21,398,213,516	2,528,360,799	106,037,924	3,648,292,351	270,201,460	1,117,651,765	7,670,544,299	0.358
2006	17,232,800,048	2,615,380,965	112,324,564	3,753,259,909	293,829,483	779,799,688	7,554,594,609	0.438
2007	13,275,649,610	2,752,845,612	141,041,071	4,019,738,128	352,170,330	837,885,639	8,103,680,780	0.610
2008	10,764,323,955	2,800,230,280	145,508,251	4,012,666,932	357,273,618	503,888,243	7,819,567,324	0.726
2009	8,896,709,168	2,674,163,104	145,733,439	3,820,462,528	357,725,388	486,082,391	7,484,166,850	0.841
2010	9,398,228,398	2,683,942,798	148,125,181	3,904,953,059	319,455,389	575,975,201	7,632,451,628	0.812
2011	10,129,285,077	2,648,185,813	156,442,964	3,531,529,486	355,245,243	775,259,193	7,466,662,699	0.737
2012	11,692,134,220	2,671,212,764	196,152,434	3,412,555,946	392,748,838	943,055,095	7,615,725,077	0.651
2013	14,149,827,161	2,690,505,286	215,029,517	3,234,915,576	416,076,424	1,566,658,373	8,123,185,176	0.574
2014	15,997,914,039	2,785,329,665	288,703,155	3,112,667,472	488,337,668	2,108,327,654	8,783,365,614	0.549
2015	17,059,168,432	2,738,649,314	382,788,628	2,946,471,879	635,041,110	3,305,456,369	10,008,407,300	0.587
2016	17,954,524,605	2,474,625,444	510,151,659	2,662,666,253	778,878,915	3,241,081,865	9,667,404,136	0.538
2017	17,671,411,530	2,049,736,188	744,721,796	2,278,277,185	1,068,207,473	3,627,798,360	9,768,741,002	0.553
2018	17,426,435,785	1,389,844,965	1,024,199,430	1,742,216,812	1,443,893,460	4,488,561,257	10,088,715,924	0.579
2019	16,086,555,826	474,396,762	872,599,990	729,709,757	1,492,423,315	5,708,948,950	9,278,078,774	0.577

* Shown for informational purposes only.

** Paid medical for accident years 2011 and subsequent exclude the paid cost of medical cost containment programs (MCCP).
Paid medical for accident years 2010 and prior include paid MCCP costs.

Source: WCIRB quarterly experience calls

Incurred Indemnity Loss Development Factors

Accident Year	Age-to-Age (in months)															
	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	<u>108/96</u>	<u>120/108</u>	<u>132/120</u>	<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1994											1.000	1.002	1.002	0.997	1.000	1.000
1995										0.998	1.003	1.003	1.000	1.002	1.002	1.000
1996									1.003	1.001	1.004	1.000	1.000	1.000	1.001	1.002
1997								1.002	1.007	1.005	1.002	1.002	1.003	1.002	1.001	1.001
1998							1.007	1.008	1.004	1.004	1.002	1.003	1.004	1.001	1.002	1.001
1999						1.014	1.011	1.006	1.007	1.004	1.002	1.003	1.003	1.002	1.002	1.001
2000					1.021	1.015	1.011	1.008	1.004	1.004	1.005	1.003	1.001	1.004	1.002	1.000
2001				1.035	1.023	1.021	1.014	1.009	1.006	1.007	1.006	1.005	1.003	1.002	1.001	1.001
2002			1.069	1.033	1.033	1.018	1.011	1.010	1.010	1.007	1.005	1.003	1.002	1.002	1.003	1.002
2003		1.187	1.069	1.056	1.033	1.021	1.018	1.015	1.015	1.009	1.006	1.004	1.003	1.002	1.002	1.004
2004	1.448	1.158	1.083	1.042	1.041	1.026	1.028	1.018	1.014	1.007	1.007	1.003	1.001	1.002	1.006	
2005	1.503	1.218	1.098	1.068	1.053	1.040	1.028	1.016	1.012	1.006	1.005	1.006	1.003	1.004		
2006	1.690	1.247	1.111	1.080	1.053	1.035	1.023	1.015	1.009	1.007	1.004	1.005	1.002			
2007	1.784	1.273	1.120	1.070	1.049	1.037	1.022	1.012	1.011	1.005	1.007	1.010				
2008	1.858	1.302	1.136	1.074	1.045	1.030	1.019	1.012	1.009	1.006	1.007					
2009	1.983	1.293	1.142	1.076	1.048	1.024	1.019	1.014	1.009	1.011						
2010	1.994	1.315	1.131	1.069	1.045	1.026	1.016	1.012	1.012							
2011	1.997	1.277	1.133	1.061	1.037	1.022	1.018	1.012								
2012	1.992	1.279	1.113	1.063	1.041	1.023	1.016									
2013	1.931	1.259	1.111	1.055	1.032	1.021										
2014	1.960	1.278	1.115	1.059	1.030											
2015	1.969	1.260	1.101	1.049												
2016	1.941	1.246	1.097													
2017	1.911	1.243														
2018	1.906															
Selected (a)	1.906	1.243	1.097	1.049	1.030	1.021	1.016	1.012	1.010	1.007	1.006	1.005	1.002	1.003	1.003	1.002
Cumulative	3.097	1.625	1.307	1.192	1.136	1.103	1.080	1.063	1.051	1.040	1.033	1.027	1.021	1.019	1.016	1.013

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and six-year average for the subsequent age-to-age factors.

Incurred Indemnity Loss Development Factors (Continued)

Accident Year	Age-to-Age (in months)																		ULT/420Inc (b)
	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	
1983						1.002	1.001	1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	
1984					1.000	1.001	1.000	1.000	1.001	1.001	1.000	1.001	1.001	1.000	0.999	1.000	1.000	1.001	
1985				1.000	1.001	1.001	1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	
1986			1.000	1.000	1.000	1.001	1.001	1.000	1.001	1.002	1.001	1.000	0.999	1.000	1.000	1.000	1.000		
1987		0.999	1.000	1.000	0.999	1.000	1.000	1.001	1.002	1.000	1.001	1.001	1.001	1.001	1.001	1.000			
1988	1.001	1.001	1.000	1.001	1.000	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001				
1989	1.003	1.000	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000					
1990	1.000	1.001	1.000	0.999	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000						
1991	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001							
1992	0.998	1.001	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.001								
1993	0.999	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001									
1994	1.001	1.001	1.002	1.000	1.001	1.001	0.999	1.001	1.001										
1995	1.003	1.001	0.998	1.001	1.000	1.001	1.000	1.001											
1996	1.003	1.000	1.000	1.000	1.001	1.001	1.002												
1997	1.000	1.000	1.000	1.000	1.001	1.001													
1998	1.003	1.001	1.001	1.000	1.001														
1999	1.000	1.000	1.002	1.002															
2000	1.002	1.001	1.001																
2001	1.001	1.002																	
2002	1.002																		
Selected (a)	1.001	1.001	1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	
Cumulative	1.012	1.011	1.010	1.010	1.009	1.008	1.007	1.007	1.007	1.007	1.006	1.006	1.006	1.005	1.005	1.005	1.005	1.005	1.004

(b) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Incurred Medical Loss Development Factors

Accident Year	Age-to-Age (in months) (b)															
	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	<u>108/96</u>	<u>120/108</u>	<u>132/120</u>	<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1994											1.011	1.018	1.008	1.009	1.021	1.011
1995										1.018	1.011	1.023	1.028	1.016	1.005	1.009
1996									1.019	1.019	1.014	1.024	1.018	1.013	1.014	1.005
1997								1.021	1.015	1.023	1.030	1.012	1.015	1.012	1.003	1.007
1998							1.022	1.024	1.038	1.023	1.020	1.017	1.004	1.014	1.008	1.012
1999						1.033	1.026	1.038	1.030	1.019	1.018	1.013	1.011	1.013	1.005	0.999
2000					1.038	1.029	1.044	1.028	1.017	1.024	1.018	1.018	1.012	1.006	0.999	0.995
2001				1.047	1.041	1.045	1.040	1.034	1.035	1.022	1.017	1.015	1.013	1.001	0.997	0.994
2002			1.059	1.039	1.056	1.040	1.036	1.029	1.028	1.022	1.014	1.010	0.999	0.997	1.000	0.999
2003		1.119	1.057	1.059	1.060	1.042	1.042	1.037	1.029	1.018	1.011	1.003	0.998	0.999	1.001	1.007
2004	1.351	1.135	1.113	1.081	1.060	1.061	1.043	1.032	1.026	1.012	1.006	1.001	0.996	0.998	1.003	
2005	1.389	1.172	1.087	1.074	1.084	1.055	1.045	1.032	1.020	1.006	1.006	0.999	1.000	1.000		
2006	1.460	1.196	1.103	1.081	1.066	1.048	1.040	1.022	1.012	1.000	1.001	1.006	1.000			
2007	1.518	1.204	1.124	1.081	1.070	1.050	1.032	1.018	1.004	1.008	1.001	1.004				
2008	1.527	1.212	1.129	1.092	1.061	1.041	1.026	1.010	1.005	1.002	1.005					
2009	1.604	1.227	1.140	1.087	1.061	1.030	1.016	1.007	1.006	1.009						
2010	1.620	1.245	1.134	1.077	1.045	1.025	1.012	1.008	1.010							
2011	1.667	1.222	1.125	1.069	1.034	1.016	1.010	1.011								
2012	1.592	1.188	1.092	1.056	1.031	1.015	1.016									
2013	1.559	1.150	1.086	1.039	1.022	1.015										
2014	1.523	1.159	1.079	1.035	1.028											
2015	1.511	1.146	1.064	1.031												
2016	1.498	1.124	1.046													
2017	1.440	1.119														
2018	1.452															
Selected (a)	1.452	1.119	1.046	1.031	1.028	1.015	1.016	1.011	1.010	1.006	1.005	1.004	1.001	1.000	1.001	1.001
Cumulative	1.979	1.363	1.218	1.165	1.129	1.099	1.082	1.065	1.054	1.044	1.038	1.032	1.028	1.027	1.027	1.026

- (a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and six-year average for the subsequent age-to-age factors.
(b) Incurred medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.

Incurred Medical Loss Development Factors (Continued)

Accident Year	Age-to-Age (in months)																		ULT/420Inc (c)
	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	
1983						1.001	1.005	1.001	1.006	1.004	1.002	1.006	1.003	1.004	1.003	0.997	0.999	0.998	
1984					1.002	1.004	1.002	1.003	1.003	1.002	1.003	1.001	1.003	1.001	0.997	1.000	1.001	1.000	
1985				1.008	1.004	1.000	1.001	1.003	1.003	1.003	1.005	1.002	1.003	0.998	0.999	0.999	1.000	1.001	
1986			1.004	1.001	1.005	1.003	1.006	1.005	1.006	1.004	1.005	1.000	1.002	0.998	1.001	1.006	0.994		
1987		0.998	1.006	1.000	1.003	1.011	0.999	1.007	1.003	1.004	1.005	1.001	0.997	1.001	1.000	1.005			
1988	1.004	1.004	1.002	1.006	1.005	1.005	1.002	1.005	1.003	1.003	1.002	0.998	0.999	1.000	1.001				
1989	0.999	1.007	1.006	1.005	1.005	1.008	1.006	1.000	1.003	0.999	0.999	0.999	0.999	1.002					
1990	1.003	1.007	1.007	1.005	1.003	1.003	1.003	0.997	1.002	1.000	1.000	0.998	0.999						
1991	1.008	1.005	1.006	1.002	1.003	1.002	1.003	1.001	1.000	0.999	0.998	1.000							
1992	1.005	1.004	1.002	1.005	1.003	1.005	1.000	0.999	1.001	0.999	1.002								
1993	1.007	1.011	1.014	1.004	0.999	1.000	0.996	0.999	0.998	0.998									
1994	1.011	1.004	1.007	1.006	1.001	0.996	0.995	1.002	1.002										
1995	1.015	0.996	1.006	0.999	1.006	0.992	0.999	1.001											
1996	1.008	1.005	1.001	0.998	0.999	0.997	1.000												
1997	1.001	0.994	0.998	0.997	0.998	1.001													
1998	1.001	1.001	0.994	1.001	1.003														
1999	0.999	0.995	1.002	0.999															
2000	0.996	0.999	0.999																
2001	1.001	1.004																	
2002	1.002																		
Selected (a)	1.000	1.000	1.000	1.000	1.001	0.999	0.999	1.000	1.001	1.000	1.001	0.999	1.000	1.000	1.000	1.001	0.999	1.000	
Cumulative	1.025	1.025	1.026	1.026	1.026	1.025	1.026	1.027	1.028	1.027	1.027	1.026	1.027	1.027	1.027	1.027	1.025	1.027	1.027

(c) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Paid Indemnity Loss Development Factors

Accident Year	Age-to-Age (in months)															
	<u>24/12</u>	<u>36/24</u>	<u>48/36</u>	<u>60/48</u>	<u>72/60</u>	<u>84/72</u>	<u>96/84</u>	<u>108/96</u>	<u>120/108</u>	<u>132/120</u>	<u>144/132</u>	<u>156/144</u>	<u>168/156</u>	<u>180/168</u>	<u>192/180</u>	<u>204/192</u>
1994											1.009	1.008	1.007	1.006	1.003	1.003
1995										1.010	1.012	1.008	1.007	1.005	1.005	1.003
1996									1.018	1.014	1.012	1.009	1.006	1.006	1.004	1.004
1997								1.025	1.018	1.016	1.012	1.008	1.007	1.006	1.006	1.005
1998							1.037	1.027	1.021	1.015	1.012	1.009	1.009	1.007	1.006	1.006
1999						1.055	1.036	1.025	1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.004
2000					1.088	1.052	1.035	1.025	1.016	1.013	1.010	1.009	1.008	1.007	1.005	1.004
2001				1.145	1.077	1.051	1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.006	1.005
2002			1.290	1.127	1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006	1.005
2003		1.696	1.249	1.128	1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.007	1.007
2004	2.914	1.522	1.236	1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009	1.008	1.009	
2005	2.734	1.512	1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013	1.010	1.010		
2006	2.866	1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016	1.012	1.011			
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020	1.016	1.013				
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023	1.018	1.015					
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031	1.023	1.021						
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038	1.027	1.022							
2011	3.208	1.613	1.266	1.144	1.087	1.056	1.041	1.027								
2012	3.137	1.597	1.262	1.137	1.087	1.051	1.035									
2013	3.169	1.606	1.260	1.129	1.072	1.044										
2014	3.229	1.635	1.257	1.129	1.071											
2015	3.278	1.618	1.244	1.119												
2016	3.235	1.586	1.230													
2017	3.185	1.569														
2018	3.109															
Selected (a)	3.109	1.569	1.230	1.119	1.071	1.044	1.035	1.027	1.023	1.020	1.016	1.013	1.010	1.009	1.007	1.006
Cumulative	9.187	2.955	1.883	1.531	1.368	1.278	1.224	1.182	1.151	1.126	1.104	1.087	1.073	1.063	1.054	1.046

(a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors.

Paid Indemnity Loss Development Factors (Continued)

Accident Year	Age-to-Age (in months)																		420Inc/420Pd (b)	ULT/420Inc (c)
	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408		
1983						1.003	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.006	
1984					1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.005	
1985				1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.005	
1986			1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001		1.005	
1987		0.999	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001			1.005	
1988	1.001	1.001	1.002	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001				1.003	
1989	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001					1.003	
1990	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.001							
1991	1.002	1.002	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001								
1992	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001									
1993	1.002	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001										
1994	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.001	1.001											
1995	1.005	1.005	1.003	1.003	1.002	1.002	1.002	1.003												
1996	1.005	1.004	1.003	1.003	1.002	1.003	1.003													
1997	1.004	1.003	1.003	1.002	1.003	1.003														
1998	1.006	1.004	1.003	1.003	1.003															
1999	1.004	1.003	1.003	1.003																
2000	1.004	1.004	1.003																	
2001	1.005	1.005																		
2002	1.005																			
Selected (a)	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.003	
Cumulative	1.040	1.035	1.031	1.028	1.025	1.023	1.020	1.018	1.016	1.015	1.014	1.013	1.012	1.011	1.010	1.009	1.008	1.008		1.004

(b) Three-year averages of the 420Inc/420Pd factors are selected.
(c) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Paid Medical Loss Development Factors

Unadjusted (a)	Age-to-Age (in months)															
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
1994										1.020	1.017	1.018	1.014	1.017	1.013	1.012
1995										1.025	1.024	1.021	1.019	1.018	1.018	1.015
1996									1.029	1.027	1.027	1.023	1.020	1.018	1.016	1.013
1997								1.036	1.033	1.028	1.026	1.022	1.019	1.016	1.014	1.014
1998							1.047	1.039	1.033	1.032	1.030	1.021	1.019	1.019	1.015	1.017
1999						1.059	1.044	1.035	1.032	1.032	1.025	1.025	1.016	1.016	1.018	1.015
2000					1.079	1.056	1.042	1.038	1.031	1.027	1.023	1.020	1.020	1.017	1.013	1.010
2001				1.109	1.076	1.057	1.045	1.038	1.034	1.030	1.022	1.022	1.022	1.017	1.012	1.011
2002			1.168	1.112	1.072	1.054	1.046	1.034	1.032	1.024	1.023	1.018	1.016	1.012	1.011	1.010
2003		1.318	1.170	1.112	1.074	1.057	1.048	1.041	1.030	1.030	1.026	1.019	1.016	1.013	1.012	1.010
2004	2.298	1.345	1.189	1.123	1.092	1.070	1.055	1.040	1.036	1.034	1.024	1.018	1.015	1.012	1.013	
2005	2.251	1.345	1.209	1.138	1.095	1.073	1.054	1.049	1.038	1.031	1.021	1.019	1.014	1.013		
2006	2.340	1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025	1.020	1.015	1.015			
2007	2.416	1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031	1.022	1.020	1.015				
2008	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027	1.018	1.017					
2009	2.408	1.447	1.251	1.160	1.104	1.067	1.046	1.032	1.024	1.020						
2010	2.479	1.468	1.265	1.152	1.096	1.066	1.043	1.030	1.025							
2011	2.580	1.470	1.248	1.145	1.095	1.058	1.041	1.029								
2012	2.561	1.468	1.247	1.143	1.087	1.056	1.040									
2013	2.492	1.464	1.238	1.130	1.077	1.048										
2014	2.518	1.462	1.226	1.121	1.076											
2015	2.533	1.439	1.218	1.111												
2016	2.480	1.410	1.197													
2017	2.373	1.391														
2018	2.378															
Adjusted (b)	Age-to-Age (in months)															
Accident Year	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192
2001																1.012
2002															1.012	1.011
2003															1.013	1.011
2004														1.014		
2005												1.020	1.016	1.015		
2006											1.022	1.016	1.016			
2007										1.024	1.022	1.017				
2008									1.029	1.020	1.018					
2009								1.034	1.026	1.022						
2010							1.044	1.032	1.027							
2011						1.062	1.046	1.032								
2012					1.092	1.062	1.043									
2013				1.137	1.084	1.052										
2014			1.233	1.128	1.080											
2015		1.443	1.224	1.114												
2016	2.486	1.416	1.199													
2017	2.386	1.393														
2018	2.378															
Selected (c)	2.378	1.393	1.199	1.114	1.080	1.052	1.043	1.032	1.027	1.022	1.021	1.018	1.016	1.014	1.013	1.011
Cumulative Unadjusted for Impact of SB 1160	7.280	3.062	2.198	1.833	1.645	1.524	1.448	1.389	1.346	1.310	1.282	1.256	1.234	1.214	1.198	1.182
Cumulative Adjusted for Impact of SB 1160(d)	6.983	2.936	2.108	1.782	1.618	1.509	---	---	---	---	---	---	---	---	---	---

- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.
- (b) These factors are adjusted for the losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -2.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
- (c) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent age-to-age factors.
- (d) The cumulative factors for 36, 48, 60, and 72 months are adjusted by -4.1%, -2.8%, -1.7%, and -1.0%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Paid Medical Loss Development Factors (Continued)

Unadjusted (a)		Age-to-Age (in months)																		
Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	420Inc/420Pd (e)	ULT/420Inc (f)
1983						1.004	1.005	1.005	1.003	1.005	1.004	1.004	1.003	1.004	1.003	1.002	1.004	1.003	1.037	
1984					1.004	1.004	1.004	1.003	1.004	1.003	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.037	
1985				1.005	1.005	1.006	1.004	1.004	1.003	1.004	1.004	1.004	1.003	1.002	1.003	1.002	1.002	1.002	1.027	
1986			1.006	1.004	1.005	1.004	1.005	1.005	1.005	1.005	1.005	1.005	1.004	1.006	1.004	1.004	1.003		1.020	
1987		1.007	1.006	1.007	1.006	1.005	1.005	1.005	1.005	1.005	1.005	1.003	1.003	1.003	1.003	1.002			1.023	
1988	1.005	1.006	1.007	1.006	1.005	1.005	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.004	1.003				1.017	
1989	1.005	1.006	1.007	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.003	1.003	1.003	1.003					1.019	
1990	1.006	1.005	1.005	1.005	1.005	1.006	1.004	1.004	1.003	1.002	1.003	1.002	1.003							
1991	1.007	1.006	1.006	1.005	1.006	1.005	1.006	1.003	1.003	1.003	1.003	1.004								
1992	1.008	1.007	1.002	1.006	1.008	1.006	1.005	1.005	1.005	1.004	1.006									
1993	1.011	1.011	1.010	1.013	1.011	1.007	1.006	1.006	1.005	1.008										
1994	1.013	1.009	1.010	1.010	1.009	1.008	1.007	1.004	1.004											
1995	1.011	1.016	1.013	1.012	1.009	1.012	1.007	1.008												
1996	1.014	1.013	1.011	1.009	1.007	1.009	1.008													
1997	1.014	1.011	1.006	1.006	1.007	1.007														
1998	1.013	1.010	1.009	1.008	1.009															
1999	1.012	1.009	1.009	1.008																
2000	1.009	1.008	1.007																	
2001	1.010	1.010																		
2002	1.009																			
Adjusted (b)		Age-to-Age (in months)																		
Accident Year	216/204	228/216	240/228	252/240	264/252	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	420Inc/420Pd (e)	ULT/420Inc (f)
1983																	1.000	1.000	1.037	
1985																1.002	1.002	1.002	1.027	
1986															1.005	1.004	1.003		1.020	
1987														1.003	1.004	1.002			1.023	
1988													1.003	1.004	1.003				1.017	
1989												1.003	1.004	1.003					1.019	
1990											1.003	1.002	1.003							
1991										1.003	1.004	1.004								
1992									1.006	1.004	1.006									
1993								1.007	1.005	1.009										
1994							1.008	1.005	1.005											
1995						1.014	1.008	1.010												
1996					1.008	1.010	1.009													
1997				1.007	1.008	1.008														
1998			1.009	1.009	1.010															
1999		1.010	1.010	1.009																
2000	1.010	1.009	1.007																	
2001	1.012	1.011																		
2002	1.010																			
Selected (c)	1.011	1.010	1.009	1.008	1.009	1.011	1.008	1.007	1.005	1.005	1.004	1.003	1.003	1.003	1.004	1.003	1.002	1.001	1.024	
Cumulative	1.169	1.157	1.145	1.135	1.126	1.116	1.105	1.095	1.087	1.082	1.076	1.071	1.068	1.064	1.061	1.057	1.054	1.052		1.027

(e) Six-year averages of the 420Inc/420Pd factors are selected.
(f) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Age 264, Incurred from Age 264 to Ultimate

Accident Year	Age-to-Age (in months)																					
	24/12	36/24	48/36	60/48	72/60	84/72	96/84	108/96	120/108	132/120	144/132	156/144	168/156	180/168	192/180	204/192	216/204	228/216	240/228	252/240	264/252	264Inc/264Pd (b)
1993												1.004	1.004	1.004	1.004	1.003	1.002	1.003	1.003	1.002	1.002	1.012
1994											1.009	1.008	1.007	1.006	1.003	1.003	1.004	1.003	1.003	1.003	1.002	1.016
1995										1.010	1.012	1.008	1.007	1.005	1.005	1.003	1.005	1.005	1.003	1.003	1.002	1.020
1996									1.018	1.014	1.012	1.009	1.006	1.006	1.004	1.004	1.005	1.004	1.003	1.003	1.002	1.020
1997								1.025	1.018	1.016	1.012	1.008	1.007	1.006	1.006	1.005	1.004	1.003	1.003	1.002	1.003	1.018
1998							1.037	1.027	1.021	1.015	1.012	1.009	1.009	1.007	1.006	1.006	1.006	1.004	1.003	1.003	1.003	1.018
1999						1.055	1.036	1.025	1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.004	1.004	1.003	1.003	1.003		
2000					1.088	1.052	1.035	1.025	1.016	1.013	1.010	1.009	1.008	1.007	1.005	1.004	1.004	1.004	1.003			
2001				1.145	1.077	1.051	1.034	1.024	1.017	1.014	1.012	1.011	1.008	1.007	1.006	1.005	1.005	1.005				
2002			1.290	1.127	1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.006	1.005	1.005					
2003		1.696	1.249	1.128	1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.007	1.007						
2004	2.914	1.522	1.236	1.116	1.073	1.049	1.041	1.035	1.030	1.020	1.015	1.011	1.009	1.008	1.009							
2005	2.734	1.512	1.235	1.121	1.079	1.060	1.047	1.042	1.028	1.020	1.015	1.013	1.010	1.010								
2006	2.866	1.539	1.229	1.135	1.090	1.068	1.050	1.035	1.026	1.018	1.016	1.012	1.011									
2007	2.905	1.547	1.246	1.140	1.092	1.066	1.046	1.033	1.027	1.020	1.016	1.013										
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023	1.018	1.015											
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031	1.023	1.021												
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038	1.027	1.022													
2011	3.208	1.613	1.266	1.144	1.087	1.056	1.041	1.027														
2012	3.137	1.597	1.262	1.137	1.087	1.051	1.035															
2013	3.169	1.606	1.260	1.129	1.072	1.044																
2014	3.229	1.635	1.257	1.129	1.071																	
2015	3.278	1.618	1.244	1.119																		
2016	3.235	1.586	1.230																			
2017	3.185	1.569																				
2018	3.109																					
Selected (a)	3.106(c)	1.568(c)	1.210(c)	1.104(c)	1.058(c)	1.039(c)	1.035	1.027	1.023	1.020	1.016	1.013	1.010	1.009	1.007	1.006	1.005	1.004	1.003	1.003	1.003	1.019
Cumulative	8.795	2.832	1.806	1.492	1.351	1.277	1.229	1.188	1.156	1.131	1.109	1.092	1.078	1.067	1.058	1.051	1.045	1.040	1.036	1.033	1.030	

- (a) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 264, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (b) A three-year average of the 264Inc/264Pd factor is selected.
- (c) Based on calculations shown on Exhibits 2.5.3 to 2.5.8. Each of these selections is calculated as the latest year paid indemnity age-to-age factor multiplied by an adjustment for changes in claim settlement rates.

Selected Indemnity Development Factors - Paid to Age 264, Incurred from Age 264 to Ultimate (Continued)

<u>Accident Year</u>	<u>Age-to-Age (in months)</u>													<u>ULT/420Inc (c)</u>
	<u>276/264</u>	<u>288/276</u>	<u>300/288</u>	<u>312/300</u>	<u>324/312</u>	<u>336/324</u>	<u>348/336</u>	<u>360/348</u>	<u>372/360</u>	<u>384/372</u>	<u>396/384</u>	<u>408/396</u>	<u>420/408</u>	
1983	1.002	1.001	1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	
1984	1.001	1.000	1.000	1.001	1.001	1.000	1.001	1.001	1.000	0.999	1.000	1.000	1.001	
1985	1.001	1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	
1986	1.001	1.001	1.000	1.001	1.002	1.001	1.000	0.999	1.000	1.000	1.000	1.000		
1987	1.000	1.000	1.001	1.002	1.000	1.001	1.001	1.001	1.001	1.001	1.000			
1988	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001				
1989	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000					
1990	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000						
1991	1.000	1.000	1.000	1.000	1.000	1.000	1.001							
1992	1.001	1.000	1.000	1.000	1.000	1.001								
1993	1.000	1.000	1.000	1.000	1.001									
1994	1.001	0.999	1.001	1.001										
1995	1.001	1.000	1.001											
1996	1.001	1.002												
1997	1.001													
1998														
Selected (a)	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	
Cumulative	1.008	1.007	1.007	1.007	1.007	1.006	1.006	1.006	1.005	1.005	1.005	1.005	1.005	1.004

- (d) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							102,485
2011						104,081	104,223
2012					110,133	110,427	110,545
2013				118,524	119,067	119,282	119,454
2014			123,470	124,674	125,185	125,448	
2015		125,703	129,076	129,821	130,153		
2016	103,246	128,490	132,165	132,976			
2017	106,364	129,759	132,527				
2018	108,501	132,009					
2019	110,942						

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):						
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-Ult</u>
2011						1.001	
2012					1.003	1.001	
2013				1.005	1.002	1.001	
2014			1.010	1.004	1.002		
2015		1.027	1.006	1.003			
2016	1.244	1.029	1.006				
2017	1.220	1.021					
2018	1.217						
Latest Year	1.217	1.021	1.006	1.003	1.002	1.001	
Cumulative	1.263	1.038	1.016	1.010	1.007	1.005	1.004

Acc. Year	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Ult. Claim Counts	140,090	137,007	134,672	134,304	131,118	126,113	119,914

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							92,315
2011						90,578	94,785
2012					91,303	97,567	101,718
2013				90,727	100,829	107,058	111,226
2014			81,274	97,335	107,769	113,802	
2015		63,518	88,067	104,555	114,305		
2016	29,143	68,603	93,756	109,617			
2017	32,349	73,006	97,072				
2018	33,681	74,428					
2019	34,839						

Source: Accident year experience of insurers with available claim count data

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							89.7%
2011						86.6%	90.6%
2012					82.3%	87.9%	91.7%
2013				75.7%	84.1%	89.3%	92.8%
2014			64.4%	77.2%	85.5%	90.2%	
2015		48.4%	67.2%	79.7%	87.2%		
2016	21.7%	51.1%	69.8%	81.6%			
2017	24.0%	54.2%	72.1%				
2018	24.6%	54.3%					
2019	24.9%						

E. Adjusted Closed Indemnity Claim Counts at Equal Percentiles of Ultimate Claim Counts (b)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							95,448
2011						94,413	97,046
2012					96,742	100,138	102,931
2013				97,872	104,538	108,208	111,226
2014			90,903	102,931	109,942	113,802	
2015		71,229	94,510	107,016	114,305		
2016	33,400	72,960	96,807	109,617			
2017	33,492	73,159	97,072				
2018	34,072	74,428					
2019	34,839						

F. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							18,492
2011						16,943	18,469
2012					15,094	16,994	18,282
2013				12,928	15,376	17,028	18,141
2014			10,096	13,671	16,209	17,797	
2015		6,127	10,800	14,368	16,706		
2016	2,474	6,494	10,941	14,341			
2017	2,582	6,621	10,998				
2018	2,876	7,016					
2019	3,138						

- (a) Ratio of closed indemnity claim counts (Item C) to the estimated ultimate indemnity claim counts (Item B) for that accident year.
- (b) The claim counts for the latest evaluation of each accident year are equal to the reported number of closed indemnity claims. All prior evaluations shown are the product of the latest ultimate indemnity claim settlement ratio (Item D) and the ultimate indemnity claim counts (Item B) for that accident year.

Source: Accident year experience of insurers with available claim count data

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

G. Adjusted Average Paid Indemnity per Closed Claim (c)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							19,812
2011						18,329	19,368
2012					16,731	17,781	18,734
2013				14,616	16,340	17,329	18,141
2014			12,108	14,978	16,764	17,797	
2015		7,321	12,074	14,925	16,706		
2016	2,745	7,108	11,525	14,341			
2017	2,651	6,642	10,998				
2018	2,901	7,016					
2019	3,138						

H. Adjusted Paid Indemnity on Closed Claims (in \$000) (d)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							1,891,050
2011						1,730,497	1,879,561
2012					1,618,554	1,780,574	1,928,298
2013				1,430,455	1,708,149	1,875,118	2,017,751
2014			1,100,640	1,541,754	1,843,066	2,025,312	
2015		521,460	1,141,136	1,597,248	1,909,522		
2016	91,687	518,600	1,115,732	1,571,977			
2017	88,787	485,952	1,067,593				
2018	98,846	522,198					
2019	109,314						

I. Paid Indemnity on Open Claims (in \$000)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							435,106
2011						493,651	391,085
2012					570,818	461,676	368,130
2013				695,566	558,813	437,801	342,170
2014			800,371	704,930	550,496	435,998	
2015		692,027	798,031	672,888	523,134		
2016	277,020	683,980	766,040	632,930			
2017	282,198	681,622	751,490				
2018	304,706	716,916					
2019	316,448						

- (c) Adjusted based on ultimate indemnity claim settlement ratios (Item D) and assuming a log-linear relationship between maturities.
- (d) Each amount is the product of the adjusted closed indemnity claim counts (Item E) and the adjusted average paid indemnity per closed claim (Item G), and divided by \$1,000.

Source: Accident year experience of insurers with available claim count data

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

J. Average Paid Indemnity per Open Claim for Indemnity Claims in Transition (e)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							42,784
2011						36,561	41,438
2012					30,314	35,900	41,705
2013				25,023	30,640	35,815	41,586
2014			18,968	25,784	31,609	37,438	
2015		11,128	19,460	26,632	33,009		
2016	3,738	11,421	19,944	27,096			
2017	3,813	12,010	21,196				
2018	4,073	12,451					
2019	4,158						

K. Changes in Paid Indemnity on Open Claims Resulting from the Impact of Changes in
Claim Settlement Rates (in \$000) (f)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							-134,044
2011						-140,210	-93,691
2012					-164,881	-92,298	-50,588
2013				-178,790	-113,645	-41,187	
2014			-182,625	-144,289	-68,686		
2015		-85,812	-125,379	-65,542			
2016	-15,918	-49,762	-60,850				
2017	-4,358	-1,838					
2018	-1,592						

L. Adjusted Paid Indemnity on Open Claims (in \$000) (g)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							301,062
2011						353,442	297,394
2012					405,937	369,378	317,542
2013				516,776	445,168	396,614	342,170
2014			617,746	560,641	481,810	435,998	
2015		606,216	672,652	607,346	523,134		
2016	261,103	634,218	705,190	632,930			
2017	277,840	679,785	751,490				
2018	303,113	716,916					
2019	316,448						

- (e) Each amount is equal to the product of [the average monthly indemnity payment per open indemnity claim] and [the number of months for the current evaluation]. For evaluations indicating claim settlement rate decreases, the average monthly indemnity payment per open indemnity claim at the prior evaluation is used. For evaluations indicating claim settlement rate increases, the average monthly indemnity payment per open indemnity claim at the same evaluation is used.
- (f) Each amount is equal to [the difference between unadjusted and adjusted closed indemnity claim counts (Items C and E)] multiplied by the corresponding [average paid indemnity per open claim for indemnity claims in transition (Item J)].
- (g) Each amount is the sum of [paid indemnity on open claims (Item I)] and the corresponding [incremental changes in paid indemnity on open claims resulting from the impact of changes in claim settlement rates (Item K)].

Source: Accident year experience of insurers with available claim count data

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

M. Adjusted Total Paid Indemnity (in \$000) (h)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							2,192,112
2011						2,083,939	2,176,955
2012					2,024,491	2,149,952	2,245,840
2013				1,947,231	2,153,316	2,271,732	2,359,921
2014			1,718,386	2,102,395	2,324,876	2,461,310	
2015		1,127,676	1,813,788	2,204,594	2,432,656		
2016	352,790	1,152,818	1,820,922	2,204,906			
2017	366,627	1,165,737	1,819,083				
2018	401,959	1,239,114					
2019	425,762						

N. Paid Indemnity Loss Development Factors Based on Adjusted Total Paid Indemnity

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2010						
2011						1.045
2012					1.062	1.045
2013				1.106	1.055	1.039
2014			1.223	1.106	1.059	
2015		1.608	1.215	1.103		
2016	3.268	1.580	1.211			
2017	3.180	1.560				
2018	3.083					
Latest Year	3.083	1.560	1.211	1.103	1.059	1.039
3-Year Average	3.177	1.583	1.217	1.105	1.059	1.043

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2011						1.056
2012					1.088	1.051
2013				1.129	1.072	1.044
2014			1.256	1.129	1.071	
2015		1.618	1.244	1.118		
2016	3.235	1.586	1.231			
2017	3.186	1.561				
2018	3.086					

(h) Each amount is the sum of the adjusted paid indemnity on closed claims (Item H) and the adjusted paid indemnity on open claims (Item L).

(i) Development factors are based on paid indemnity losses from the same insurer mix as that used in the adjustment for changes in claim settlement rates and applied in the calculation of the development factors in Item N.

Source: Accident year experience of insurers with available claim count data

**Paid Indemnity Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

P. Impact of Adjustment for Changes in Claim Settlement Rates (j)

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2011						-1.06%
2012					-2.36%	-0.61%
2013				-2.04%	-1.58%	-0.48%
2014			-2.58%	-2.02%	-1.19%	
2015		-0.58%	-2.26%	-1.34%		
2016	1.00%	-0.43%	-1.60%			
2017	-0.18%	-0.06%				
2018	-0.09%					

Q. Paid Indemnity Loss Development Factors Adjusted for Changes in
Indemnity Claim Settlement Rates (k)

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2011						1.045
2012					1.061	1.045
2013				1.106	1.055	1.039
2014			1.225	1.106	1.058	
2015		1.609	1.216	1.104		
2016	3.267	1.579	1.210			
2017	3.179	1.568				
2018	3.106					
Latest Year	3.106	1.568	1.210	1.104	1.058	1.039
3-Year Average	3.184	1.585	1.217	1.105	1.058	1.043

(j) Each factor represents the change in age-to-age development factors from Item O to those in Item N.

(k) Each factor is the product of [1.0 + the impact of adjustment for changes in claim settlement rates (Item P)] and [the paid indemnity age-to-age development factor from Exhibit 2.5.1].

Source: Accident year experience of insurers with available claim count data

[illegible]

- (a) Paid medical loss development factors include the paid cost of medical cost containment programs for accident years 2011 and prior.
- (b) These factors are adjusted for the losses paid prior to July 1, 2017 by -3.6%, -3.8%, -3.4%, -2.4%, -0.9%, and -0.1% to accident years 2011 to 2016, respectively, for the SB 1160 lien reforms. Factors are also adjusted for the impact of pharmaceutical cost reductions to bring the historical payments to the current pharmaceutical cost level.
- (c) Selections are latest year for the 12-to-24 month through 96-to-108 month factors and three-year average for the subsequent paid age-to-age factors. Paid development factors are selected to age 264, where an incurred-to-paid ratio is chosen, and subsequently, six-year average incurred loss development factors are selected until ultimate.
- (d) A three-year average of the 264Inc/264Pd factor is selected.
- (e) Based on calculations shown on Exhibits 2.6.3 to 2.6.8. Each of these selections are calculated as the latest year paid medical age-to-age factor multiplied by an adjustment for changes in claim settlement rates.
- (f) The cumulative factors for 36, 48, 60, and 72 months are adjusted by -4.1%, -2.8%, -1.7%, and -1.0%, respectively, for the impact of the SB 1160 reductions in future lien filings.

Selected Medical Development Factors - Paid to Age 264, Incurred from Age 264 to Ultimate (Continued)

Accident Year	Age-to-Age (in months)													ULT/420Inc (g)
	276/264	288/276	300/288	312/300	324/312	336/324	348/336	360/348	372/360	384/372	396/384	408/396	420/408	
1983	1.001	1.005	1.001	1.006	1.004	1.002	1.006	1.003	1.004	1.003	0.997	0.999	0.998	
1984	1.004	1.002	1.003	1.003	1.002	1.003	1.001	1.003	1.001	0.997	1.000	1.001	1.000	
1985	1.000	1.001	1.003	1.003	1.003	1.005	1.002	1.003	0.998	0.999	0.999	1.000	1.001	
1986	1.003	1.006	1.005	1.006	1.004	1.005	1.000	1.002	0.998	1.001	1.006	0.994		
1987	1.011	0.999	1.007	1.003	1.004	1.005	1.001	0.997	1.001	1.000	1.005			
1988	1.005	1.002	1.005	1.003	1.003	1.002	0.998	0.999	1.000	1.001				
1989	1.008	1.006	1.000	1.003	0.999	0.999	0.999	0.999	1.002					
1990	1.003	1.003	0.997	1.002	1.000	1.000	0.998	0.999						
1991	1.002	1.003	1.001	1.000	0.999	0.998	1.000							
1992	1.005	1.000	0.999	1.001	0.999	1.002								
1993	1.000	0.996	0.999	0.998	0.998									
1994	0.996	0.995	1.002	1.002										
1995	0.992	0.999	1.001											
1996	0.997	1.000												
1997	1.001													
1998														
Selected (c)	0.999	0.999	1.000	1.001	1.000	1.001	0.999	1.000	1.000	1.000	1.001	0.999	1.000	
Cumulative	1.025	1.026	1.027	1.028	1.027	1.027	1.026	1.027	1.027	1.027	1.027	1.025	1.027	1.027

(g) The ULT/420Inc tail factor was calculated based on an inverse power curve fit to a six-year average of the 108-to-120 through 348-to-360 factors, excluding the 2016, 2017, and 2018 evaluations, and extrapolated to 80 development years.

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

A. Total Reported Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							102,485
2011						104,081	104,223
2012					110,133	110,427	110,545
2013				118,524	119,067	119,282	119,454
2014			123,470	124,674	125,185	125,448	
2015		125,703	129,076	129,821	130,153		
2016	103,246	128,490	132,165	132,976			
2017	106,364	129,759	132,527				
2018	108,501	132,009					
2019	110,942						

B. Development of Total Reported Indemnity Claim Counts

Accident Year	Age-to-Age Development (in months):						
	12-24	24-36	36-48	48-60	60-72	72-84	84-Ult
2011						1.001	
2012					1.003	1.001	
2013				1.005	1.002	1.001	
2014			1.010	1.004	1.002		
2015		1.027	1.006	1.003			
2016	1.244	1.029	1.006				
2017	1.220	1.021					
2018	1.217						
Latest Year	1.217	1.021	1.006	1.003	1.002	1.001	
Cumulative	1.263	1.038	1.016	1.010	1.007	1.005	1.004

Acc. Year	2019	2018	2017	2016	2015	2014	2013
Ult. Claim Counts	140,090	137,007	134,672	134,304	131,118	126,113	119,914

C. Closed Indemnity Claim Counts

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							92,315
2011						90,578	94,785
2012					91,303	97,567	101,718
2013				90,727	100,829	107,058	111,226
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2015		63,518	88,067	104,555	114,305		
2016	29,143	68,603	93,756	109,617			
2017	32,349	73,006	97,072				
2018	33,681	74,428					
2019	34,839						

Source: Accident year experience of insurers with available claim count and paid loss data

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

D. Ultimate Indemnity Claim Settlement Ratio (a)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							89.7%
2011						86.6%	90.6%
2012					82.3%	87.9%	91.7%
2013				75.7%	84.1%	89.3%	92.8%
2014			64.4%	77.2%	85.5%	90.2%	
2015		48.4%	67.2%	79.7%	87.2%		
2016	21.7%	51.1%	69.8%	81.6%			
2017	24.0%	54.2%	72.1%				
2018	24.6%	54.3%					
2019	24.9%						

E. Adjusted Closed Indemnity Claim Counts at Equal Percentiles of Ultimate Claim Counts (b)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							95,448
2011						94,413	97,046
2012					96,742	100,138	102,931
2013				97,872	104,538	108,208	111,226
2014			90,903	102,931	109,942	113,802	
2015		71,229	94,510	107,016	114,305		
2016	33,400	72,960	96,807	109,617			
2017	33,492	73,159	97,072				
2018	34,072	74,428					
2019	34,839						

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							24,091
2011						20,750	23,000
2012					17,344	19,737	21,472
2013				13,887	16,841	18,913	20,282
2014			10,208	13,872	16,614	18,425	
2015		6,330	10,577	14,043	16,380		
2016	2,739	6,542	10,600	13,588			
2017	2,867	6,722	10,722				
2018	3,026	7,033					
2019	3,279						

- (a) Ratio of closed indemnity claim counts (Item C) to the estimated ultimate indemnity claim counts (Item B) for that accident year.
- (b) The claim counts for the latest evaluation of each accident year are equal to the reported number of closed indemnity claims. All prior evaluations shown are the product of the latest ultimate indemnity claim settlement ratio (Item D) and the ultimate indemnity claim counts (Item B) for that accident year.

Source: Accident year experience of insurers with available claim count and paid loss data

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

G. Adjusted Average Paid Medical per Closed Indemnity Claim (c)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							26,156
2011						22,792	24,337
2012					19,404	20,795	22,045
2013				15,917	18,046	19,282	20,282
2014			12,269	15,281	17,245	18,425	
2015		7,438	11,816	14,600	16,380		
2016	3,008	7,112	11,119	13,588			
2017	2,936	6,742	10,722				
2018	3,051	7,033					
2019	3,279						

H. Adjusted Paid Medical (in \$000) on Closed Indemnity Claims (d)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							2,496,490
2011						2,151,897	2,361,827
2012					1,877,195	2,082,365	2,269,126
2013				1,557,799	1,886,505	2,086,468	2,255,853
2014			1,115,244	1,572,903	1,895,938	2,096,790	
2015		529,791	1,116,739	1,562,384	1,872,265		
2016	100,483	518,894	1,076,365	1,489,492			
2017	98,338	493,249	1,040,774				
2018	103,950	523,435					
2019	114,254						

I. Paid Medical on Open Indemnity Claims (in \$000)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							683,274
2011						705,645	566,883
2012					740,091	611,804	503,904
2013				809,119	657,622	521,964	421,888
2014			857,547	756,534	591,763	482,773	
2015		753,862	813,286	697,864	553,123		
2016	344,155	744,676	769,112	662,087			
2017	366,313	743,183	761,371				
2018	381,804	788,962					
2019	371,518						

- (c) Adjusted based on ultimate indemnity claim settlement ratios (Item D) and assuming a log-linear relationship between maturities.
- (d) Each amount is equal to the product of [adjusted closed indemnity claim counts (Item E)] and [adjusted average paid medical per closed indemnity claim (Item G)], and divided by \$1,000.

Source: Accident year experience of insurers with available claim count and paid loss data

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

J. Average Paid Medical per Open Indemnity Claim for Indemnity Claims in Transition (e)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							67,187
2011						52,261	60,065
2012					39,304	47,574	57,087
2013				29,108	36,058	42,700	51,275
2014			20,323	27,672	33,978	41,454	
2015		12,123	19,832	27,621	34,902		
2016	4,644	12,435	20,024	28,344			
2017	4,949	13,095	21,474				
2018	5,103	13,702					
2019	4,882						

K. Changes in Paid Medical on Open Indemnity Claims Resulting from the Impact of Changes in Indemnity Claim Settlement Rates (in \$000) (f)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							-210,497
2011						-200,421	-135,806
2012					-213,775	-122,312	-69,246
2013				-207,978	-133,740	-49,105	
2014			-195,671	-154,851	-73,834		
2015		-93,479	-127,776	-67,974			
2016	-19,775	-54,178	-61,094				
2017	-5,657	-2,004					
2018	-1,995						

L. Adjusted Paid Medical on Open Indemnity Claims (in \$000) (g)

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2010							472,776
2011						505,224	431,077
2012					526,316	489,493	434,658
2013				601,141	523,882	472,859	421,888
2014			661,876	601,682	517,929	482,773	
2015		660,382	685,510	629,890	553,123		
2016	324,380	690,498	708,018	662,087			
2017	360,657	741,180	761,371				
2018	379,809	788,962					
2019	371,518						

- (e) Each amount is equal to the product of [the average monthly medical payment per open indemnity claim] and [the number of months for the current evaluation]. For evaluations indicating claim settlement rate decreases, the average monthly medical payment per open indemnity claim at the prior evaluation is used. For evaluations indicating claim settlement rate increases, the average monthly medical payment per open indemnity claim at the same evaluation is used.
- (f) Each amount is equal to [the difference between unadjusted and adjusted closed indemnity claim counts (Items C and E)] multiplied by [the corresponding average paid medical per open indemnity claim for indemnity claims in transition (Item J)].
- (g) Each amount is the sum of [paid medical on open indemnity claims (Item I)] and the corresponding [incremental changes in paid medical on open indemnity claims resulting from the impact of changes in indemnity claim settlement rates (Item K)].

Source: Accident year experience of insurers with available claim count and paid loss data

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

M. Paid Medical on Medical-Only Claims (in \$000)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							202,851
2011						192,622	195,766
2012					196,471	200,526	202,402
2013				198,211	203,951	206,497	209,050
2014			211,765	218,348	221,910	224,358	
2015		207,596	216,852	222,091	227,482		
2016	145,811	219,737	229,512	237,046			
2017	159,507	233,656	244,153				
2018	170,747	246,458					
2019	168,455						

N. Adjusted Total Paid Medical (in \$000) (h)

Accident Year	Evaluated as of (in months)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2010							3,172,117
2011						2,849,744	2,988,670
2012					2,599,981	2,772,383	2,906,186
2013				2,357,152	2,614,338	2,765,824	2,886,791
2014			1,988,885	2,392,933	2,635,777	2,803,921	
2015		1,397,769	2,019,100	2,414,365	2,652,869		
2016	570,674	1,429,129	2,013,895	2,388,625			
2017	618,501	1,468,085	2,046,298				
2018	654,506	1,558,855					
2019	654,226						

O. Paid Medical Loss Development Factors Based on Adjusted Total Paid Medical

Accident Year	Evaluated as of (in months)					
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>
2011						1.049
2012					1.066	1.048
2013				1.109	1.058	1.044
2014			1.203	1.101	1.064	
2015		1.445	1.196	1.099		
2016	2.504	1.409	1.186			
2017	2.374	1.394				
2018	2.382					
Latest Year	2.382	1.394	1.186	1.099	1.064	1.044

(h) Each amount is the sum of [adjusted paid medical on closed indemnity claims (Item H)], [adjusted paid medical on open indemnity claims (Item L)] and [paid medical on medical-only claims (Item M)]. The effect of the paid cost of medical cost containment programs are only present for accident years 2011 and prior.

Source: Accident year experience of insurers with available claim count and paid loss data

**Paid Medical Loss Development Factors
With Separate Adjustments on Open and Closed Claims
for Changes in Claim Settlement Rates**

P. Paid Medical Loss Development Factors (i)

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2011						1.059
2012					1.086	1.056
2013				1.129	1.076	1.048
2014			1.224	1.120	1.077	
2015		1.439	1.217	1.111		
2016	2.480	1.410	1.199			
2017	2.373	1.394				
2018	2.382					

Q. Impact of Adjustment for Changes in Indemnity Claim Settlement Rates (j)

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2011						-1.00%
2012					-1.86%	-0.70%
2013				-1.76%	-1.65%	-0.45%
2014			-1.73%	-1.65%	-1.20%	
2015		0.41%	-1.78%	-1.08%		
2016	0.97%	-0.05%	-1.07%			
2017	0.04%	-0.03%				
2018	0.00%					

R. Paid Medical Loss Development Factors Adjusted for Changes in Indemnity
Claim Settlement Rates (k)

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2011						1.051
2012					1.072	1.055
2013				1.117	1.066	1.047
2014			1.212	1.109	1.067	
2015		1.449	1.202	1.102		
2016	2.510	1.415	1.186			
2017	2.387	1.393				
2018	2.378					
Latest Year	2.378	1.393	1.186	1.102	1.067	1.047
3-Year Average	2.425	1.419	1.200	1.109	1.068	1.051

- (i) Development factors are based on paid medical losses from the same insurer mix as that used in the adjustment for changes in claim settlement rates and applied in the calculation of the development factors in Item O.
- (j) Each factor represents the change in age-to-age development factors from Item P to those in Item O.
- (k) Each factor is the product of [1.0 + the impact of adjustment for changes in claim settlement rates (Item Q)] and [the adjusted paid medical age-to-age development factor from Exhibit 2.6.1].

Source: Accident year experience of insurers with available claim count and paid loss data

**Developed Indemnity Loss Ratios Using Selected Loss Development Factors
Adjusted for Changes in Claim Settlement Rates
Based on Experience as of December 31, 2019**

Accident Year	Development Factors			
	(1) Paid or Incurred Loss Ratio (a)	(2) Annual (b)	(3) Cumulative	(4) Projected Ultimate Loss Ratio (4) = (1) x (3)
1986	0.396	1.001	1.005	0.398
1987	0.346	1.000	1.005	0.348
1988	0.331	1.000	1.005	0.332
1989	0.343	1.000	1.005	0.345
1990	0.398	1.000	1.005	0.400
1991	0.425	1.000	1.006	0.427
1992	0.350	1.001	1.006	0.352
1993	0.288	1.000	1.006	0.289
1994	0.328	1.000	1.007	0.330
1995	0.473	1.000	1.007	0.476
1996	0.531	1.000	1.007	0.534
1997	0.600	1.000	1.007	0.605
1998	0.652	1.001	1.008	0.657
1999	0.672	1.003	1.030	0.692
2000	0.579	1.003	1.033	0.598
2001	0.479	1.003	1.036	0.496
2002	0.355	1.004	1.040	0.369
2003	0.234	1.005	1.045	0.244
2004	0.139	1.006	1.051	0.146
2005	0.118	1.007	1.058	0.125
2006	0.152	1.009	1.067	0.162
2007	0.207	1.010	1.078	0.224
2008	0.260	1.013	1.092	0.284
2009	0.301	1.016	1.109	0.333
2010	0.286	1.020	1.131	0.323
2011	0.261	1.023	1.156	0.302
2012	0.228	1.027	1.188	0.271
2013	0.190	1.035	1.229	0.234
2014	0.174	1.039	1.277	0.222
2015	0.161	1.058	1.351	0.217
2016	0.138	1.104	1.492	0.206
2017	0.116	1.210	1.806	0.209
2018	0.080	1.568	2.832	0.226
2019	0.029	3.106	8.795	0.259

- (a) Based on Exhibit 1. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
- (b) See Exhibits 2.5.1 and 2.5.2.

**Developed Medical Loss Ratios Using Selected Loss Development Factors
Adjusted for Changes in Claim Settlement Rates
Based on Experience as of December 31, 2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Reform Adjusted			
				<u>Development Factors</u>			
Accident Year	Paid or Incurred Loss Ratio (a)	Adjusted Paid or Incurred Loss Ratio (b)	Annual (c)	Unadjusted for Reforms (c)	Adjusted for Reforms (c)	Adjusted Developed Loss Ratio (d) (2) x (5)	Projected Ultimate Loss Ratio (1) + ((6) - (2))
1986	0.332	0.332	1.000	1.027	1.027	0.341	0.341
1987	0.315	0.315	0.999	1.025	1.025	0.323	0.323
1988	0.305	0.305	1.001	1.027	1.027	0.313	0.313
1989	0.326	0.326	1.000	1.027	1.027	0.334	0.334
1990	0.366	0.366	1.000	1.027	1.027	0.376	0.376
1991	0.384	0.384	1.000	1.027	1.027	0.394	0.394
1992	0.319	0.319	0.999	1.026	1.026	0.328	0.328
1993	0.266	0.266	1.001	1.027	1.027	0.273	0.273
1994	0.309	0.309	1.000	1.027	1.027	0.317	0.317
1995	0.454	0.454	1.001	1.028	1.028	0.466	0.466
1996	0.484	0.484	1.000	1.027	1.027	0.498	0.498
1997	0.545	0.545	0.999	1.026	1.026	0.560	0.560
1998	0.660	0.660	0.999	1.025	1.025	0.676	0.676
1999	0.668	0.595	1.009	1.111	1.111	0.661	0.734
2000	0.601	0.536	1.008	1.120	1.120	0.601	0.666
2001	0.530	0.475	1.009	1.130	1.130	0.537	0.592
2002	0.408	0.367	1.010	1.141	1.141	0.419	0.460
2003	0.259	0.234	1.011	1.153	1.153	0.270	0.295
2004	0.175	0.159	1.011	1.166	1.166	0.186	0.202
2005	0.170	0.155	1.013	1.182	1.182	0.183	0.199
2006	0.218	0.198	1.014	1.198	1.198	0.237	0.257
2007	0.303	0.276	1.016	1.217	1.217	0.336	0.363
2008	0.373	0.341	1.018	1.239	1.239	0.422	0.454
2009	0.429	0.397	1.021	1.264	1.264	0.502	0.534
2010	0.415	0.385	1.022	1.292	1.292	0.498	0.528
2011	0.349	0.326	1.027	1.328	1.328	0.433	0.456
2012	0.292	0.275	1.032	1.370	1.370	0.377	0.394
2013	0.229	0.218	1.043	1.429	1.429	0.311	0.322
2014	0.195	0.189	1.047	1.496	1.482	0.280	0.286
2015	0.173	0.170	1.067	1.597	1.570	0.266	0.269
2016	0.148	0.147	1.102	1.760	1.711	0.251	0.253
2017	0.129	0.129	1.186	2.087	2.002	0.257	0.258
2018	0.100	0.100	1.393	2.906	2.788	0.279	0.279
2019	0.045	0.045	2.378	6.911	6.629	0.301	0.301

- (a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent. To reflect the selected loss development methodology, reported loss ratios displayed prior to 1999 are on an incurred basis. Subsequent reported loss ratios are on a paid basis.
- (b) Based on experience evaluated as of December 31, 2019. Reflects an adjustment for the pharmaceutical cost reductions to restate the historical medical paid-to-date ratios at a 2018 pharmaceutical cost level.
- (c) See Exhibits 2.6.1 and 2.6.2.
- (d) The developed medical loss ratios shown were derived based on an adjustment for pharmaceutical cost reductions. They are only for purposes of projecting future medical loss ratios and do not reflect true estimates of ultimate loss ratios for those accident years.

Indemnity Benefit Level Factors

Accident Year	(1) Annual Benefit Change Prior to Frequency Adjustments (a)	(2) Frequency Adjustments (a)	(3) Annual Impact on Indemnity Benefits Due to Wage Inflation (b)	(4) Annual Cost Impact on Indemnity (c)	(5) Composite Indemnity Adjustment Factor (d)	
1987	0.0	0.0	1.9	1.9	1.550	
1988	0.0	0.0	1.5	1.5	1.527	
1989	0.0	0.0	1.5	1.5	1.505	
1990	2.3	19.9	1.7	24.7	1.206	
1991	4.9	14.8	0.8	21.4	0.994	
1992	1.8	-8.3	1.6	-5.2	1.048	
1993	0.2	-18.1	0.4	-17.6	1.272	
1994	-5.1	0.2	0.6	-4.3	1.329	
1995	6.3	0.6	1.0	8.0	1.231	
1996	5.3	0.4	1.2	7.0	1.150	
1997	9.7	0.2	1.6	11.7	1.030	
1998	6.5	0.0	1.8	8.4	0.950	
1999	5.7	0.0	2.1	7.9	0.880	
2000	3.9	0.0	3.1	7.1	0.822	
2001	-0.3	0.0	0.2	-0.1	0.823	
2002	-0.7	0.0	0.4	-0.3	0.843	(e)
2003	7.3	0.0	1.2	8.6	0.840	(e)
2004	-6.0	-13.7	2.1	-17.2	1.150	(e)
2005	-31.6	-15.3	1.6	-41.2	1.558	
2006	5.6	-5.7	2.2	1.8	1.531	
2007	1.6	0.0	2.1	3.7	1.476	
2008	4.8	0.6	1.0	6.5	1.386	
2009	0.4	1.4	0.2	2.0	1.359	
2010	0.4	0.0	1.5	1.9	1.334	
2011	0.0	0.0	1.4	1.4	1.315	
2012	-0.8	0.0	2.1	1.3	1.299	
2013	1.4	0.2	0.6	2.3	1.270	
2014	5.8	1.5	1.7	9.2	1.163	
2015	-0.8	0.0	2.3	1.4	1.147	
2016	0.3	0.0	1.0	1.3	1.132	
2017	0.5	0.0	2.2	2.7	1.103	
2018	0.4	0.0	2.0	2.4	1.076	
2019	0.4	0.0	2.2	2.6	1.049	
2020	0.5	0.0	2.5	3.0		
4/1/2021	0.3 (Annual 0.4)	0.0	1.6 (Annual 2.1)	1.9		

- (a) Based on WCIRB evaluations of the average impact of legislative changes on the cost of indemnity benefits. These annual changes in benefits reflect the WCIRB's retrospective estimates of the cost impact of recent legislation as reflected in emerging post-reform costs. The annual cost impacts have been segregated between claim severity and claim frequency impacts.
- (b) These impacts are based on the weekly wages (See Exhibit 5.1) of injured workers and the legislatively scheduled benefits for that year. Values for 2017 and prior have been updated to reflect a recent WCIRB reassessment of the impact of wage inflation on indemnity benefit levels.
- (c) $\{ [\text{Column (1)} / 100 + 1.0] \times [\text{Column (2)} / 100 + 1.0] \times [\text{Column (3)} / 100 + 1.0] - 1.0 \} \times 100$.
- (d) These factors represent the combined impact of the annual benefit changes on claim severity shown in Column (1), claim frequencies shown in Column (2) and wage inflation impact on benefits shown in Column (3), adjusted to the 2020 level.
- (e) On-level factors for accident years 2002, 2003 and 2004 adjust the portion of permanent disability claims that are estimated to not be subject to the January 1, 2005 PDRS (95% for accident year 2002, 75% for accident year 2003 and 40% for accident year 2004) to the January 1, 2005 PDRS level, and adjust for the corresponding utilization impacts on all 2002, 2003 and 2004 indemnity claims.

Annual Medical Cost Level Change - Non-Legislative

Accident Year	(1) Proportion of Medical Subject to Fee Schedule (a)	(2) Proportion of Medical Not Subject to Fee Schedule (a)	(3) Impact of Fee Schedule Change on Total Medical (b)	(4) Change in Medical CPI (c)	(5) Impact of CPI Change on Total Medical (d)	(6) Annual Non-Legislative Cost Impact on Total Medical (e)
1987	0.610	0.390	0.9%	7.4%	2.9%	3.8%
1988	0.649	0.351	0.8%	7.7%	3.0%	3.8%
1989	0.647	0.353	0.0%	8.6%	3.0%	3.0%
1990	0.661	0.339	0.0%	10.4%	3.7%	3.7%
1991	0.631	0.369	0.0%	10.6%	3.6%	3.6%
1992	0.628	0.372	0.0%	8.1%	3.0%	3.0%
1993	0.565	0.435	0.0%	7.3%	2.7%	2.7%
1994	0.691	0.309	-3.6%	4.3%	1.3% (i)	-2.3%
1995	0.681	0.319	0.0%	3.0%	0.9%	0.9%
1996	0.663	0.337	0.0%	3.0%	1.0%	1.0%
1997	0.643	0.357	0.0%	2.2%	0.7%	0.7%
1998	0.658	0.342	0.0%	2.2%	0.8%	0.8%
1999	0.728	0.272	1.6%	3.3%	0.9% (ii)	2.5%
2000	0.715	0.285	0.5%	4.3%	1.2%	1.7%
2001	0.722	0.278	1.5%	4.8%	1.4%	2.9%
2002	0.635	0.365	0.6%	5.1%	1.4%	2.0%
2003	0.786	0.214	0.0%	4.8%	1.4% (iii)	1.4%
2004	0.952	0.048	0.0%	5.0%	0.0% (iv),(v)	0.0%
2005	0.936	0.064	0.0%	4.8%	0.0% (v)	0.0%
2006	0.926	0.074	0.0%	4.1%	0.3%	0.3%
2007	0.923	0.077	1.4%	5.3%	0.4%	1.8%
2008	0.896	0.104	-0.1%	4.2%	0.3%	0.2%
2009	0.894	0.106	0.0%	3.6%	0.4%	0.4%
2010	0.895	0.105	0.0%	2.8%	0.3%	0.3%
2011	0.969	0.031	0.0%	3.2%	0.3%	0.3%
2012	0.969	0.031	0.0%	2.7%	0.1%	0.1%
2013	0.938	0.062	0.0%	2.6%	0.1%	0.1%
2014	0.928	0.072	0.0%	4.2%	0.3%	0.3%
2015	0.933	0.067	0.0%	3.1%	0.2%	0.2%
2016	0.919	0.081	0.0%	5.4%	0.4%	0.4%
2017	0.906	0.094	0.0%	2.2%	0.2%	0.2%
2018	0.905	0.095	0.0%	2.4%	0.2%	0.2%
2019	0.905	0.095	0.0%	3.8%	0.4%	0.4%
2020	0.905	0.095	0.0%	3.5%	0.3%	0.3%
4/1/2021	0.905	0.095	0.0% (Annual 0.0%)	2.3% (Annual 3.1%)	0.2%	0.2%

(a) From a Special Carrier Study through 1990. Based on WCIRB's Aggregate Indemnity and Medical Costs Calls for years 1991 through 2012. Based on WCIRB medical transaction data from 2013 onwards. Accident years 2011 and subsequent do not include MCCP costs.

(b) Based on the WCIRB's evaluation of the cost impact of changes in the medical fee schedules.

(c) Based on a component of the Consumer Price Index. Projections furnished by the California Department of Finance.

(d) Adjusted CPI on workers' compensation medical costs that are not subject to fee schedules. The current year impact is the weighted average of 0% and Column (4), with Columns (1) and (2) from prior years as weights. (i) 1993's non-fee proportion is reduced by 13.8% due to the new medical-legal fee schedule enacted in 1994. (ii) 1998's non-fee proportion is reduced by 7.7% due to the Inpatient Hospital Fee Schedule (IHFS) effective 4/1/1999. (iii) 2002's non-fee proportion is reduced by 7.6% due to the new pharmaceutical fee schedule effective 1/1/2003. (iv) 2003's non-fee proportion is reduced by 17.2% due to the outpatient fee schedule effective 1/1/2004. (v) Given the anticipated impact of legislative reform, a 0% inflation rate has been assumed for 2004 and 2005.

(e) Column (6) = Column (3) + Column (5).

Annual Medical Cost Level Change - Legislative

Accident Year	(1) Annual Legislative Cost Impact on Medical Severity (a)	(2) Annual Legislative Cost Impact on Medical Due to Frequency Changes (b)	(3) Annual Total Legislative Cost Impact on Medical (c)
1987	0.0%	0.0%	0.0%
1988	0.0%	0.0%	0.0%
1989	0.0%	0.0%	0.0%
1990	-0.7%	19.9%	19.1%
1991	-1.6%	14.7%	12.9%
1992	0.5%	-8.4%	-7.9%
1993	-0.7%	-18.1%	-18.7%
1994	-2.6%	0.3%	-2.3%
1995	0.0%	0.5%	0.5%
1996	0.0%	0.4%	0.4%
1997	0.0%	0.2%	0.2%
1998	12.6%	0.0%	12.6%
1999	12.6%	0.0%	12.6%
2000	7.0%	0.0%	7.0%
2001	6.6%	0.0%	6.6%
2002	-5.6%	0.0%	-5.6%
2003	-6.0%	0.0%	-6.0%
2004	-24.4%	-12.5%	-33.9%
2005	0.0%	-13.9%	-13.9%
2006	0.1%	-5.2%	-5.1%
2007	0.1%	0.0%	0.1%
2008	0.2%	0.3%	0.5%
2009	0.0%	1.0%	1.0%
2010	0.0%	0.0%	0.0%
2011	-2.0%	0.0%	-2.0%
2012	-4.4%	0.0%	-4.4%
2013	-8.2%	0.2%	-8.0%
2014	-5.9%	1.3%	-4.7%
2015	-2.0%	0.0%	-2.0%
2016	-0.5%	0.0%	-0.5%
2017	-0.4%	0.0%	-0.4%
2018	-0.3%	0.0%	-0.3%
2019	0.0%	0.0%	0.0%
2020	0.0%	0.0%	0.0%
4/1/2021	0.0%	0.0%	0.0%

- (a) Reflects the WCIRB's most recent estimates of the cost impact of legislation. Does not include the impact of the SB 1160 lien provisions on future medical costs as well as the estimated reductions to pharmaceutical costs attributable to SB 863, which are reflected in the medical loss development projections.
- (b) This reflects the annual percentage impact on medical costs due to changes in the frequency of indemnity claims as a result of benefit changes.
- (c) $[\text{Column (1)} + 1.0] \times [\text{Column (2)} + 1.0] - 1.0$

Total Medical Cost Level Factors

Accident Year	(1) Annual Non-Legislative Cost Impact on Medical (a)	(2) Annual Legislative Cost Impact on Medical (b)	(3) Total Annual Cost Impact on Medical (c)	(4) Composite Medical On-level Factor (d)
1987	3.8%	0.0%	3.8%	0.803
1988	3.8%	0.0%	3.8%	0.774
1989	3.0%	0.0%	3.0%	0.751
1990	3.7%	19.1%	23.5%	0.608
1991	3.6%	12.9%	16.9%	0.520
1992	3.0%	-7.9%	-5.2%	0.549
1993	2.7%	-18.7%	-16.5%	0.657
1994	-2.3%	-2.3%	-4.6%	0.688
1995	0.9%	0.5%	1.4%	0.679
1996	1.0%	0.4%	1.4%	0.669
1997	0.7%	0.2%	0.9%	0.663
1998	0.8%	12.6%	13.5%	0.585
1999	2.5%	12.6%	15.4%	0.506
2000	1.7%	7.0%	8.8%	0.465
2001	2.9%	6.6%	9.7%	0.424
2002	2.0%	-5.6%	-3.7%	0.441
2003	1.4%	-6.0%	-4.7%	0.462
2004	0.0%	-33.9%	-33.9%	0.699
2005	0.0%	-13.9%	-13.9%	0.812
2006	0.3%	-5.1%	-4.8%	0.853
2007	1.8%	0.1%	1.9%	0.837
2008	0.2%	0.5%	0.7%	0.831
2009	0.4%	1.0%	1.4%	0.820
2010	0.3%	0.0%	0.3%	0.817
2011	0.3%	-2.0%	-1.7%	0.831
2012	0.1%	-4.4%	-4.3%	0.869
2013	0.1%	-8.0%	-7.9%	0.944
2014	0.3%	-4.7%	-4.4%	0.987
2015	0.2%	-2.0%	-1.8%	1.005
2016	0.4%	-0.5%	-0.1%	1.006
2017	0.2%	-0.4%	-0.2%	1.008
2018	0.2%	-0.3%	-0.1%	1.009
2019	0.4%	0.0%	0.4%	1.005
2020	0.3%	0.0%	0.3%	
4/1/2021	0.2%	0.0%	0.2%	

- (a) See Exhibit 4.2, Column (6).
- (b) See Exhibit 4.3, Column (3).
- (c) $\text{Column (3)} = [1.0 + \text{Column (1)}] \times [1.0 + \text{Column (2)}] - 1.0$.
- (d) These factors adjust the annual impact shown in Column (3) to the 4/1/2021 level.

Annual Wage Level Changes

<u>Year</u>	<u>Annual Wage Level Change (a)</u>	<u>Factor to a 4/1/2021 Wage Level</u>
1987	5.6	3.197
1988	4.4	3.063
1989	4.3	2.936
1990	5.0	2.796
1991	2.3	2.734
1992	4.7	2.611
1993	1.2	2.580
1994	1.8	2.534
1995	2.9	2.463
1996	3.4	2.382
1997	4.7	2.275
1998	5.2	2.163
1999	6.2	2.036
2000	9.0	1.868
2001	0.6	1.857
2002	1.1	1.837
2003	3.6	1.773
2004	5.0	1.689
2005	3.2	1.636
2006	4.6	1.564
2007	4.5	1.497
2008	2.1	1.466
2009	0.5	1.459
2010	3.0	1.416
2011	3.0	1.375
2012	4.3	1.318
2013	0.7	1.309
2014	3.3	1.267
2015	4.5	1.213
2016	1.8	1.191
2017	4.1	1.144
2018	3.4	1.107
2019	3.6	1.068
Projected:		
2020	4.1	
4/1/2021	2.6	(Annual = 3.5)

(a) Historical wage changes through 2018 are based on Bureau of Labor Statistics data. Forecasts for 2019 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of December 2019 and those made by the California Department of Finance as of November 2019.

Premium Adjustment Factors

	(1)	(2a)	(2b)	(2c)	(3)	(4)	(5)	(6)	(7)
		Ratio of Industry Average Charged Rates to Advisory Pure Premium	Factor to Industry Average Filed Pure Premium Rate Level as of July 1, 2019 (c)	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of July 1, 2019 (d)	Adjustment to Remove Surcharge Premium (e)	Average Experience Modification (f)	Off-Balance Correction in Advisory January 1, 2019 Pure Premium Rates	Factor to Adjust for Impact of Premium Resulting from Audits (g)	Composite Premium Adjustment Factor (h)
Calendar Year	Factor to a 4/1/2021 Wage Level (a)	Pure Premium Rates (b)	Rate Level as of July 1, 2019 (c)	Rate Level as of July 1, 2019 (d)	Premium (e)	Modification (f)	Pure Premium Rates	Audits (g)	Factor (h)
1987	3.197	---	---	0.635	0.992	0.983	1.017	---	2.013
1988	3.063	---	---	0.568	0.993	0.963	1.017	---	1.763
1989	2.936	---	---	0.559	0.993	0.945	1.017	---	1.695
1990	2.796	---	---	0.545	0.991	0.942	1.017	---	1.576
1991	2.734	---	---	0.504	0.987	0.939	1.017	---	1.425
1992	2.611	---	---	0.484	0.982	0.940	1.017	---	1.299
1993	2.580	---	---	0.478	0.981	0.949	1.017	---	1.253
1994	2.534	---	---	0.547	0.986	0.948	1.017	---	1.419
1995	2.463	---	---	0.741	0.995	0.958	1.017	---	1.863
1996	2.382	1.023	0.787	0.769	1.000	0.935	1.017	---	1.927
1997	2.275	0.989	0.785	0.794	1.000	0.949	1.017	---	1.872
1998	2.163	0.965	0.818	0.848	1.000	0.959	1.017	---	1.879
1999	2.036	0.972	0.827	0.851	1.000	0.954	1.017	---	1.785
2000	1.868	1.005	0.750	0.746	1.000	0.970	1.017	---	1.413
2001	1.857	1.030	0.660	0.641	1.000	0.969	1.017	---	1.208
2002	1.837	1.157	0.591	0.511	1.000	0.991	1.017	---	0.931
2003	1.773	1.266	0.484	0.382	1.000	1.005	1.017	---	0.663
2004	1.689	1.397	0.492	0.352	1.000	0.981	1.017	---	0.596
2005	1.636	1.470	0.592	0.403	1.000	0.982	1.017	---	0.660
2006	1.564	1.447	0.763	0.527	1.000	0.956	1.017	---	0.848
2007	1.497	1.492	1.039	0.696	1.000	0.931	1.017	0.985	1.084
2008	1.466	1.426	1.237	0.867	1.000	0.946	1.017	0.991	1.310
2009	1.459	1.366	1.219	0.892	1.000	0.937	1.017	1.034	1.412
2010	1.416	1.384	1.195	0.863	1.000	0.941	1.017	1.005	1.284
2011	1.375	1.401	1.194	0.852	1.000	0.982	1.017	---	1.173
2012	1.318	1.223	0.984	0.805	1.000	1.000	1.017	---	1.043
2013	1.309	1.138	0.792	0.696	1.000	0.983	1.017	---	0.911
2014	1.267	1.126	0.730	0.648	1.000	0.961	1.017	---	0.840
2015	1.213	1.109	0.709	0.640	1.000	0.951	1.017	---	0.802
2016	1.191	1.148	0.772	0.672	1.000	0.949	1.017	---	0.830
2017	1.144	1.156	0.854	0.739	1.000	0.955	1.017	---	0.871
2018	1.107	1.196	0.966	0.808	1.000	0.956	1.017	---	0.919
2019	1.068	1.215	1.122	0.924	1.000	0.948	1.017	---	1.024

- (a) See Exhibit 5.1.
- (b) Based on WCIRB calendar year experience calls. The industry average charged rates reflect most rating plan adjustments but do not reflect the application of deductible credits or retrospective rating plan adjustments.
- (c) Reflects (1) advisory pure premium rate level changes to bring premium to the advisory January 1, 2019 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2019 pure premium rate (\$1.67) to the industry average filed pure premium rate as of July 1, 2019 (\$1.99).
- (d) (2b) ÷ (2a). This column adjusts premiums at the industry average charged rate level to the industry average filed pure premium rate level as of July 1, 2019.
- (e) Based on unit statistical data.
- (f) Based on average promulgated experience modifications. Calendar years 1996 through 2000 include adjustments for the impacts of AB 1913 and SB 1217 (1998).
- (g) Based on a comparison of premium reported on a calendar year basis to premium reported on an estimated ultimate policy year basis over the course of two accident years. The factor is applied only for calendar years 2007 to 2010, during which reported premiums were impacted by recessionary economic forces.
- (h) (1)x(2c)x(3)x(6) ÷ [(4)x(5)] for calendar years 2007 to 2010. (1)x(2c)x(3) ÷ [(4)x(5)] for all other calendar years.

2019 Accident Year Indemnity Claim Frequency Model
As of PY 2017 Preliminary 1st Set & December 2019 UCLA

AY	Annual % Changes Intra- Class Ind Freq	Annual Log Differences						
		Intra-Class Indemnity Frequency per \$M Exposure at PY 2017 Level			AY+1 Indemnity Benefit Level	Cumulative Injury Index	Economic Variables (1st Prin. Comp.)	CalOSHA Dummy Variable
		Total	Cumulative	Non-cum.				
1979	0.5%	0.005	-0.053	0.007	0.000	-0.060	0.134	0.000
1980	-6.5%	-0.068	-0.132	-0.066	0.033	-0.066	-0.080	0.000
1981	-3.5%	-0.036	-0.028	-0.036	0.000	0.008	-0.079	0.000
1982	-1.6%	-0.016	0.153	-0.022	0.352	0.175	-0.294	0.000
1983	6.2%	0.060	0.214	0.054	0.081	0.160	0.029	0.000
1984	9.5%	0.091	0.235	0.084	0.000	0.151	0.222	0.000
1985	2.0%	0.020	0.138	0.014	0.000	0.124	0.081	0.000
1986	-2.4%	-0.024	0.039	-0.028	0.000	0.067	0.078	0.000
1987	1.5%	0.015	0.053	0.013	0.000	0.041	0.151	0.000
1988	0.7%	0.007	0.104	0.000	0.000	0.104	0.088	0.000
1989	2.5%	0.024	0.212	0.009	0.046	0.203	0.045	0.000
1990	9.0%	0.087	0.337	0.061	0.071	0.276	-0.121	0.000
1991	0.3%	0.003	0.166	-0.018	0.023	0.184	-0.293	0.000
1992	-11.1%	-0.118	-0.272	-0.098	0.013	-0.174	-0.186	0.068
1993	-14.9%	-0.162	-0.240	-0.153	-0.057	-0.088	-0.022	0.464
1994	-12.8%	-0.136	-0.462	-0.107	0.061	-0.355	0.106	0.173
1995	-4.6%	-0.048	-0.016	-0.050	0.053	0.034	0.092	0.295
1996	-6.8%	-0.070	-0.136	-0.065	0.096	-0.071	0.075	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.138	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.079	0.000
1999	1.5%	0.014	0.100	0.008	0.040	0.092	0.128	0.000
2000	4.0%	0.039	0.071	0.037	-0.003	0.034	0.066	0.000
2001	-6.9%	-0.072	-0.018	-0.076	-0.007	0.059	-0.101	0.000
2002	-2.3%	-0.023	0.007	-0.026	0.060	0.033	-0.202	0.000
2003	-2.9%	-0.029	-0.005	-0.031	-0.065	0.026	-0.023	0.000
2004	-16.6%	-0.182	-0.209	-0.180	-0.398	-0.030	0.093	0.000
2005	-13.6%	-0.146	-0.298	-0.133	0.051	-0.165	0.141	0.000
2006	-5.7%	-0.059	-0.050	-0.059	0.016	0.009	0.095	0.000
2007	-1.6%	-0.017	0.021	-0.019	0.049	0.040	-0.084	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.308	0.000
2009	-0.2%	-0.002	0.168	-0.018	0.066	0.186	-0.427	0.000
2010	8.9%	0.085	0.139	0.079	0.012	0.060	-0.092	0.000
2011	1.2%	0.012	0.032	0.010	0.003	0.022	0.043	0.000
2012	4.8%	0.046	0.127	0.037	0.025	0.091	0.123	0.000
2013	0.3%	0.003	0.126	-0.013	0.071	0.139	0.151	0.000
2014	0.1%	0.001	0.050	-0.006	0.003	0.056	0.178	0.000
2015	-1.2%	-0.012	0.026	-0.018	0.002	0.043	0.194	0.000
2016	-2.4%	-0.025	0.062	-0.039	0.004	0.101	0.124	0.000
2017	-2.3%	-0.023	-0.043	-0.020	0.004	-0.023	0.137	0.000
2018*	-2.0%	-0.021	-0.092	-0.007	0.003	-0.085	0.132	0.000
2019	-1.8%	-0.019	-0.019	-0.019	0.004	0.000	0.006	0.000
2020	-2.1%	-0.021	-0.021	-0.021	0.004	0.000	-0.019	0.000
2021	-2.7%	-0.027	-0.027	-0.027	0.004	0.000	-0.074	0.000
2022	-2.0%	-0.020	-0.020	-0.020	0.004	0.000	-0.011	0.000

Y = Hazardousness-Adjusted Noncumulative Indemnity Claim Frequency

Constant

Std Err of Y Est

R Squared

No. of Observations

Degrees of Freedom

0.000

0.039

0.574

40

35

X Coefficient(s)

Std Err of Coef.

0.177

0.071

0.277

0.060

0.103

0.043

-0.142

0.075

Notes:

Indemnity Benefit Level variable is leading. The benefit level change for AY 2004 is related to the AY 2003 change in non-cumulative frequency.

The Indemnity Benefit Level change for Ogilvie & Almaraz / Guzman in 2009-2010 is not leading.

The Indemnity Benefit Level variable excludes indemnity benefit utilization, and changes in the death and permanent total benefits.

The Indemnity Benefit Level variable has been revised due to on-leveling reassessments. See Actuarial Committee item AC09-03-03.

For 1993 on, cumulative claims include both cumulative trauma and occupational disease claims. See March 19, 2014 Actuarial Committee Agenda Item III.

Economic variables are historical through 2018; December 2019 UCLA Anderson Forecasts for 2019 on.

Regression is over AY 1979 through AY 2018. AY 2019 through AY 2022 are projections.

The constant term, -0.020, consists of measured offsets that recognize annual changes in real benefit levels relative to nominal benefit levels and long-term economic growth. Without these offsets, the indemnity benefit level and economic variables would project frequency to increase without bound.

*AY 2018 is preliminary and change is based on a comparison of 2018 accidents on 2017 policies to 2017 accidents on 2016 policies.

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**Projection of Indemnity Severity Trends by Accident Year
Based on Experience as of December 31, 2019**

Accident Year	(1) Estimated Ultimate Severity	(2) Annual % Change	(3) Indemnity Adjustment Factor (a)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	9,974	---	1.929	19,243	---
1991	10,921	9.5%	1.825	19,926	3.6%
1992	11,027	1.0%	1.764	19,453	-2.4%
1993	11,997	8.8%	1.753	21,037	8.1%
1994	12,973	8.1%	1.837	23,827	13.3%
1995	14,546	12.1%	1.711	24,885	4.4%
1996	16,320	12.2%	1.605	26,199	5.3%
1997	19,359	18.6%	1.440	27,884	6.4%
1998	21,231	9.7%	1.329	28,207	1.2%
1999	23,286	9.7%	1.231	28,666	1.6%
2000	24,723	6.2%	1.149	28,412	-0.9%
2001	27,210	10.1%	1.150	31,302	10.2%
2002	26,313	-3.3%	1.178	31,006	-0.9%
2003	25,978	-1.3%	1.175	30,516	-1.6%
2004	21,214	-18.3%	1.388	29,438	-3.5%
2005	19,182	-9.6%	1.593	30,558	3.8%
2006	20,918	9.0%	1.476	30,876	1.0%
2007	22,733	8.7%	1.423	32,348	4.8%
2008	24,827	9.2%	1.344	33,376	3.2%
2009	26,124	5.2%	1.336	34,910	4.6%
2010	25,700	-1.6%	1.311	33,701	-3.5%
2011	25,440	-1.0%	1.293	32,899	-2.4%
2012	24,926	-2.0%	1.277	31,834	-3.2%
2013	24,381	-2.2%	1.251	30,512	-4.2%
2014	25,182	3.3%	1.163	29,293	-4.0%
2015	25,392	0.8%	1.147	29,116	-0.6%
2016	24,720	-2.6%	1.132	27,990	-3.9%
2017	24,674	-0.2%	1.103	27,208	-2.8%
2018	25,698	4.2%	1.076	27,660	1.7%
2019	26,686	3.8%	1.049	28,002	1.2%

(6) Estimated Annual Exponential Trend Based on 1990 to 2019: 1.2%

(7) Estimated Annual Exponential Trend Based on 2005 to 2019: -1.3%

(8) Estimated Annual Exponential Trend Based on 2015 to 2019: -0.9%

Selected Indemnity Severity Trend: -0.5%

(a) These adjustment factors are based on Exhibit 4.1, excluding the impact of frequency.

Source: WCIRB experience calls.

**Projection of Medical Severity Trends by Accident Year
Based on Experience as of December 31, 2019**

Accident Year	(1) Estimated Ultimate Severity (a)	(2) Annual % Change	(3) Medical Adjustment Factor (b)	(4) Ultimate On-level Severity (1) x (3)	(5) Annual % Change
1990	8,733	---	0.911	7,958	---
1991	9,386	7.5%	0.894	8,390	5.4%
1992	9,479	1.0%	0.864	8,185	-2.4%
1993	10,462	10.4%	0.847	8,859	8.2%
1994	11,583	10.7%	0.890	10,307	16.3%
1995	13,274	14.6%	0.882	11,706	13.6%
1996	14,191	6.9%	0.873	12,391	5.9%
1997	16,889	19.0%	0.867	14,644	18.2%
1998	20,709	22.6%	0.764	15,821	8.0%
1999	23,470	13.3%	0.662	15,535	-1.8%
2000	26,220	11.7%	0.608	15,949	2.7%
2001	31,235	19.1%	0.555	17,321	8.6%
2002	31,496	0.8%	0.576	18,139	4.7%
2003	30,080	-4.5%	0.604	18,174	0.2%
2004	27,802	-7.6%	0.799	22,220	22.3%
2005	28,660	3.1%	0.799	22,906	3.1%
2006	31,238	9.0%	0.796	24,867	8.6%
2007	34,810	11.4%	0.781	27,193	9.4%
2008	37,538	7.8%	0.778	29,207	7.4%
2009	39,743	5.9%	0.775	30,799	5.5%
2010	39,943	0.5%	0.773	30,861	0.2%
2011	36,358 (c)	---	0.794	28,874 (c)	---
2012	34,242	-5.8%	0.839	28,717	-0.5%
2013	31,745	-7.3%	0.923	29,291	2.0%
2014	30,396	-4.3%	0.982	29,843	1.9%
2015	29,567	-2.7%	1.005	29,714	-0.4%
2016	28,322	-4.2%	1.006	28,492	-4.1%
2017	28,156	-0.6%	1.008	28,382	-0.4%
2018	29,428	4.5%	1.009	29,693	4.6%
2019	28,740	-2.3%	1.005	28,883	-2.7%

Selected Medical Severity Trend: 2.5%

(a) Estimated ultimate severities for all accident years are derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts. The estimated ultimate medical severities were derived from the projected ultimate loss ratios shown in Exhibit 3.2, column (7).

(b) These adjustment factors are based on Exhibit 4.4, excluding the impact of frequency, and including the impact of SB 1160 provisions applicable to outstanding medical losses.

(c) Severities for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Severities for accident years 2010 and prior do reflect MCCP costs.

Source: WCIRB experience calls.

**Projection of Medical Severity Trends by Accident Year
Adjusted to Remove the Cost of Medical Cost Containment Programs (MCCP)
Based on Experience as of December 31, 2019**

(1) Accident Year	MCCP Included				MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
	(2) Estimated Ultimate Severity (a)	(3) Annual % Change	(4) Ultimate On-Level Severity (c)	(5) Annual % Change	(6) Estimated Ultimate Severity (a)	(7) Annual % Change	(8) Ultimate On-Level Severity (c)	(9) Annual % Change
2005	28,660	---	22,906	---	27,227	---	21,760	---
2006	31,238	9.0%	24,867	8.6%	29,364	7.8%	23,375	7.4%
2007	34,810	11.4%	27,193	9.4%	32,583	11.0%	25,453	8.9%
2008	37,538	7.8%	29,207	7.4%	34,348	5.4%	26,725	5.0%
2009	39,743	5.9%	30,799	5.5%	36,524	6.3%	28,304	5.9%
2010	39,943	0.5%	30,861	0.2%	36,671	0.4%	28,333	0.1%
2011	39,819	-0.3%	31,622	2.5%	36,358	-0.9%	28,874	1.9%
2012	37,434	-6.0%	31,394	-0.7%	34,242	-5.8%	28,717	-0.5%
2013	34,795	-7.1%	32,105	2.3%	31,745	-7.3%	29,291	2.0%
2014	33,292	-4.3%	32,686	1.8%	30,396	-4.3%	29,843	1.9%
2015	32,307	-3.0%	32,467	-0.7%	29,567	-2.7%	29,714	-0.4%
2016	30,888	-4.4%	31,073	-4.3%	28,322	-4.2%	28,492	-4.1%
2017	30,773	-0.4%	31,020	-0.2%	28,156	-0.6%	28,382	-0.4%
2018	32,368	5.2%	32,661	5.3%	29,428	4.5%	29,693	4.6%
2019	31,662	-2.2%	31,821	-2.6%	28,740	-2.3%	28,883	-2.7%

Estimated Annual Exponential Trend

Trend Based on 1990 to 2019:	5.5%	N/A
Trend Based on 2005 to 2019:	1.8%	1.6%
Trend Based on 2015 to 2019:	0.1%	-0.2%

Selected Medical Severity Trend: 2.5%

- (a) Estimated ultimate severities for all accident years were derived by dividing ultimate medical losses on indemnity claims by ultimate indemnity claim counts.
(b) Adjustments to accident years 2005 through 2010 based on WCIRB's Annual Calls for Direct California Workers' Compensation Aggregate Indemnity and Medical Costs.
(c) Ultimate severities are on-leveled based on adjustment factors shown on Exhibit 6.3.

Source: WCIRB experience calls.

**Projected On-Level Accident Year
Indemnity Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2019**

Accident Year	(1) Developed Indemnity Loss Ratio (a)	(2) Composite Indemnity Adjustment Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Indemnity to Industry Average Filed Pure Premium Ratio (1)×(2)÷(3)
1986	0.398	1.580	2.416	0.260
1987	0.348	1.550	2.013	0.268
1988	0.332	1.527	1.763	0.288
1989	0.345	1.505	1.695	0.306
1990	0.400	1.206	1.576	0.306
1991	0.427	0.994	1.425	0.298
1992	0.352	1.048	1.299	0.284
1993	0.289	1.272	1.253	0.294
1994	0.330	1.329	1.419	0.309
1995	0.476	1.231	1.863	0.315
1996	0.534	1.150	1.927	0.319
1997	0.605	1.030	1.872	0.333
1998	0.657	0.950	1.879	0.332
1999	0.692	0.880	1.785	0.341
2000	0.598	0.822	1.413	0.348
2001	0.496	0.823	1.208	0.338
2002	0.369	0.843	0.931	0.335
2003	0.244	0.840	0.663	0.309
2004	0.146	1.150	0.596	0.282
2005	0.125	1.558	0.660	0.295
2006	0.162	1.531	0.848	0.292
2007	0.224	1.476	1.084	0.304
2008	0.284	1.386	1.310	0.301
2009	0.333	1.359	1.412	0.321
2010	0.323	1.334	1.284	0.335
2011	0.302	1.315	1.173	0.339
2012	0.271	1.299	1.043	0.338
2013	0.234	1.270	0.911	0.326
2014	0.222	1.163	0.840	0.308
2015	0.217	1.147	0.802	0.310
2016	0.206	1.132	0.830	0.281
2017	0.209	1.103	0.871	0.265
2018	0.226	1.076	0.919	0.264
2019	0.259	1.049	1.024	0.266
				Projections (d)
2020				0.258
4/1/2021				0.252

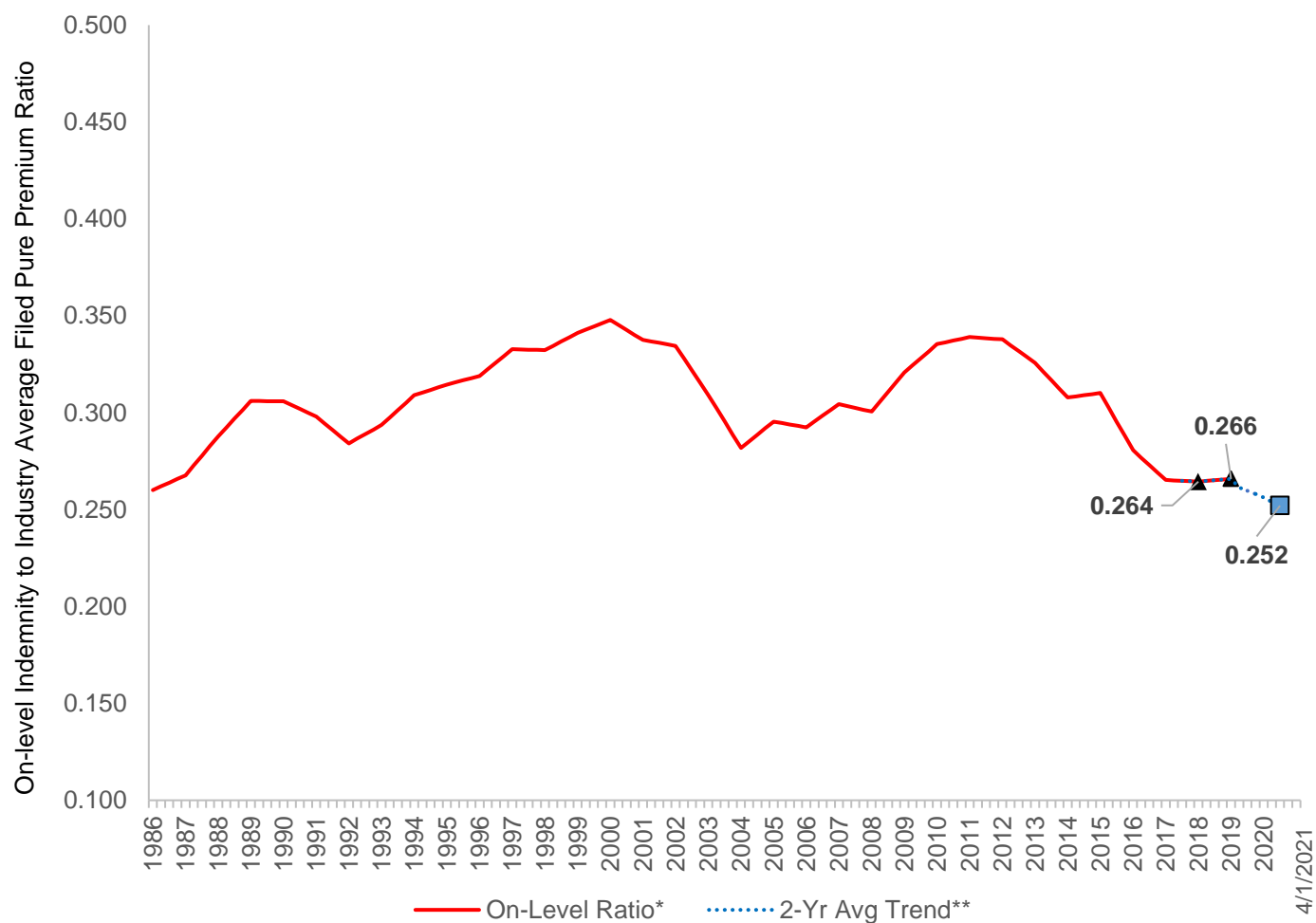
(a) See Exhibit 3.1.

(b) See Exhibit 4.1.

(c) See Exhibit 5.2.

(d) These on-level ratios were projected based on an estimated annual indemnity severity trend from Exhibit 6.2, the actual frequency trend for accident year 2019 from Exhibit 12, and projected frequency trends for accident years 2020 and 2021 from Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.

**On-Level Indemnity Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2019**



* On-level indemnity to industry average filed pure premium ratios (see Exhibit 7.1)

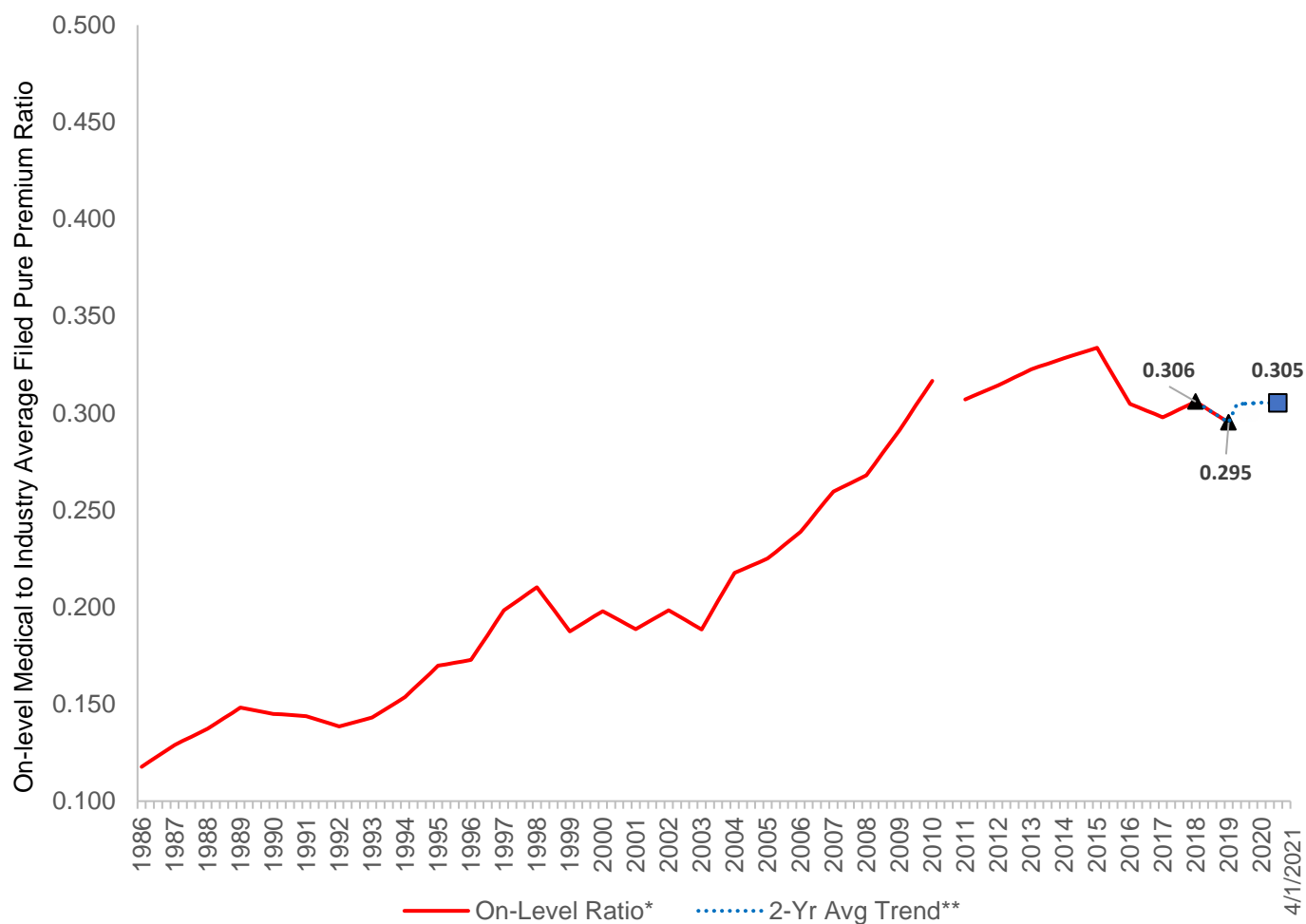
** The 4/1/2021 indemnity to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2018 and 2019 years.

**Projected On-Level Accident Year
Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2019**

Accident Year	(1) Developed Medical Loss Ratio (a)	(2) Composite Medical On-Level Factor (b)	(3) Composite Premium Adjustment Factor (c)	(4) On-Level Medical to Industry Average Filed Pure Premium Ratio (e) (1)×(2)÷(3)
1986	0.341	0.834	2.416	0.118
1987	0.323	0.803	2.013	0.129
1988	0.313	0.774	1.763	0.137
1989	0.334	0.751	1.695	0.148
1990	0.376	0.608	1.576	0.145
1991	0.394	0.520	1.425	0.144
1992	0.328	0.549	1.299	0.138
1993	0.273	0.657	1.253	0.143
1994	0.317	0.688	1.419	0.154
1995	0.466	0.679	1.863	0.170
1996	0.498	0.669	1.927	0.173
1997	0.560	0.663	1.872	0.198
1998	0.676	0.585	1.879	0.210
1999	0.661	0.506	1.785	0.188
2000	0.601	0.465	1.413	0.198
2001	0.537	0.424	1.208	0.189
2002	0.419	0.441	0.931	0.198
2003	0.270	0.462	0.663	0.189
2004	0.186	0.699	0.596	0.218
2005	0.183	0.812	0.660	0.225
2006	0.237	0.853	0.848	0.239
2007	0.336	0.837	1.084	0.260
2008	0.422	0.831	1.310	0.268
2009	0.502	0.820	1.412	0.291
2010	0.498	0.817	1.284	0.317
2011	0.433	0.831	1.173	0.307
2012	0.377	0.869	1.043	0.314
2013	0.311	0.944	0.911	0.323
2014	0.280	0.987	0.840	0.328
2015	0.266	1.005	0.802	0.334
2016	0.251	1.006	0.830	0.305
2017	0.257	1.008	0.871	0.298
2018	0.279	1.009	0.919	0.306
2019	0.301	1.005	1.024	0.295
				Projections (d)
2020				0.306
4/1/2021				0.305

- (a) See Exhibit 3.2. Medical loss ratios for accident years 2011 and subsequent do not reflect the cost of medical cost containment programs (MCCP). Ratios for accident years 2010 and prior do reflect MCCP costs.
- (b) See Exhibit 4.4.
- (c) See Exhibit 5.2.
- (d) These on-level ratios were projected based on an estimated annual medical severity trend from Exhibit 6.4, the actual frequency trend for accident year 2019 from Exhibit 12, and projected frequency trends for accident years 2020 and 2021 from Exhibit 6.1; these trends were then separately applied to the 2018 and 2019 on-level ratios.
- (e) Accident years 2011 and subsequent do not reflect the paid MCCP costs. Accident years 2010 and prior do reflect paid MCCP costs.

**On-Level Medical Loss to Industry Average Filed Pure Premium Ratios
Based on Experience as of December 31, 2019**



* On-level medical to industry average filed pure premium ratios (see Exhibit 7.3)

** The 4/1/2021 medical to industry average filed pure premium ratio was calculated based on separate frequency and severity trends applied to the 2018 and 2019 years.

**Indicated Loss to Industry Average Filed Pure Premium Ratios
For Policies with Effective Dates between July 1, 2020 and December 31, 2020
Based on Experience as of December 31, 2019**

	<u>Indemnity</u>	<u>Medical</u>	<u>Total</u>
1. Projected Loss to Industry Average Filed Pure Premium Ratio (See Exhibits 7.1 and 7.3)	0.252	0.305	0.557

Quarterly Incurred Indemnity Loss Development Factors
Through December 31, 2019

Age in	Accident Year																					
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
6/3	2.542	2.715	2.755	2.740	2.841	2.834	2.736	2.463	2.417	2.724	2.785	3.031	3.116	3.052	3.238	3.344	3.303	3.209	3.201	3.356	3.200	3.227
9/6	1.750	1.808	1.780	1.784	1.790	1.808	1.776	1.618	1.656	1.776	1.820	1.848	1.904	2.001	1.966	1.940	1.960	1.948	1.945	1.874	1.998	2.016
12/9	1.437	1.530	1.518	1.500	1.520	1.473	1.460	1.355	1.448	1.511	1.510	1.530	1.564	1.632	1.587	1.585	1.570	1.578	1.578	1.580	1.578	1.599
15/12	1.229	1.260	1.268	1.250	1.257	1.238	1.180	1.149	1.189	1.234	1.248	1.293	1.306	1.306	1.303	1.301	1.301	1.313	1.309	1.298	1.298	
18/15	1.172	1.202	1.188	1.184	1.206	1.167	1.101	1.103	1.140	1.158	1.182	1.194	1.197	1.195	1.206	1.178	1.190	1.187	1.189	1.177	1.183	
21/18	1.145	1.140	1.150	1.148	1.153	1.127	1.066	1.096	1.117	1.128	1.139	1.153	1.140	1.146	1.141	1.141	1.132	1.137	1.134	1.138	1.122	
24/21	1.126	1.112	1.121	1.111	1.117	1.094	1.045	1.082	1.098	1.106	1.106	1.114	1.119	1.117	1.111	1.104	1.114	1.111	1.104	1.100	1.106	
27/24	1.074	1.096	1.093	1.100	1.094	1.073	1.045	1.070	1.082	1.081	1.088	1.089	1.091	1.085	1.087	1.081	1.082	1.087	1.079	1.078		
30/27	1.078	1.069	1.074	1.082	1.064	1.051	1.040	1.054	1.057	1.072	1.075	1.075	1.080	1.071	1.068	1.067	1.074	1.066	1.064	1.059		
33/30	1.045	1.058	1.048	1.062	1.047	1.032	1.036	1.042	1.049	1.053	1.059	1.052	1.064	1.053	1.060	1.047	1.055	1.050	1.047	1.047		
36/33	1.043	1.046	1.039	1.046	1.035	1.020	1.029	1.033	1.039	1.043	1.051	1.049	1.049	1.043	1.041	1.043	1.042	1.035	1.037	1.039		
39/36	1.038	1.041	1.035	1.038	1.028	1.017	1.027	1.029	1.031	1.033	1.040	1.039	1.039	1.041	1.035	1.031	1.036	1.031	1.028			
42/39	1.027	1.028	1.034	1.030	1.023	1.018	1.020	1.020	1.031	1.033	1.036	1.038	1.035	1.032	1.028	1.031	1.030	1.027	1.027			
45/42	1.024	1.026	1.026	1.020	1.009	1.019	1.018	1.024	1.026	1.028	1.030	1.035	1.027	1.033	1.022	1.024	1.024	1.024	1.024	1.021		
48/45	1.025	1.020	1.022	1.013	1.008	1.013	1.013	1.021	1.019	1.021	1.024	1.024	1.026	1.023	1.024	1.020	1.020	1.016	1.019			
51/48	1.022	1.017	1.018	1.015	1.010	1.016	1.010	1.018	1.021	1.018	1.022	1.023	1.021	1.018	1.017	1.015	1.019	1.015				
54/51	1.019	1.018	1.013	1.009	1.007	1.017	1.009	1.017	1.021	1.020	1.021	1.020	1.020	1.016	1.019	1.015	1.014	1.013				
57/54	1.014	1.017	1.012	1.006	1.008	1.011	1.011	1.018	1.017	1.014	1.018	1.017	1.015	1.014	1.013	1.011	1.014	1.011				
60/57	1.013	1.014	1.007	1.005	1.008	1.009	1.011	1.013	1.019	1.016	1.013	1.015	1.012	1.014	1.012	1.012	1.011	1.008				
63/60	1.012	1.012	1.007	1.007	1.008	1.008	1.010	1.014	1.013	1.015	1.011	1.014	1.014	1.009	1.012	1.009	1.010					
66/63	1.014	1.009	1.005	1.006	1.011	1.008	1.010	1.013	1.016	1.014	1.015	1.013	1.013	1.009	1.010	1.009	1.008					
69/66	1.010	1.007	1.003	1.005	1.008	1.007	1.011	1.012	1.011	1.010	1.009	1.012	1.007	1.010	1.010	1.007	1.006					
72/69	1.009	1.006	1.005	1.005	1.005	1.009	1.009	1.013	1.011	1.009	1.009	1.009	1.010	1.008	1.007	1.006	1.006					
75/72	1.006	1.004	1.004	1.005	1.003	1.005	1.007	1.010	1.011	1.010	1.010	1.008	1.007	1.004	1.006	1.007						
78/75	1.007	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.006	1.005	1.007						
81/78	1.005	1.002	1.003	1.004	1.004	1.005	1.006	1.010	1.009	1.007	1.007	1.006	1.006	1.007	1.005	1.005						
84/81	1.003	1.003	1.005	1.003	1.006	1.006	1.007	1.008	1.005	1.009	1.006	1.004	1.007	1.004	1.007	1.003						
87/84	1.003	1.003	1.002	1.003	1.004	1.002	1.007	1.010	1.007	1.004	1.005	1.006	1.004	1.006	1.004							
90/87	1.001	1.003	1.003	1.003	1.003	1.004	1.008	1.008	1.008	1.008	1.004	1.005	1.005	1.005	1.004							
93/90	1.001	1.002	1.004	1.003	1.002	1.005	1.006	1.008	1.006	1.007	1.006	1.003	1.004	1.005	1.005							
96/93	1.002	1.003	1.001	1.004	1.002	1.006	1.006	1.003	1.002	1.003	1.004	1.004	1.003	1.003	1.003							

Source: WCIRB accident year experience calls

Quarterly Incurred Medical Loss Development Factors *
Through December 31, 2019

Age in	Accident Year																					
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
6/3	2.561	2.661	2.536	2.624	2.797	2.805	2.671	2.530	2.584	2.662	2.782	2.892	2.992	2.757	2.853	2.843	2.921	2.863	3.019	3.199	2.891	2.830
9/6	1.705	1.733	1.713	1.725	1.768	1.762	1.703	1.670	1.650	1.744	1.717	1.807	1.800	1.827	1.833	1.819	1.840	1.884	1.755	1.741	1.820	1.844
12/9	1.418	1.461	1.463	1.447	1.570	1.425	1.400	1.375	1.453	1.443	1.466	1.454	1.488	1.521	1.484	1.500	1.482	1.451	1.487	1.448	1.459	1.472
15/12	1.144	1.168	1.201	1.207	1.203	1.197	1.132	1.145	1.138	1.182	1.167	1.199	1.206	1.228	1.211	1.207	1.199	1.206	1.215	1.185	1.191	
18/15	1.093	1.116	1.123	1.144	1.151	1.126	1.086	1.087	1.103	1.106	1.126	1.135	1.129	1.141	1.136	1.117	1.114	1.094	1.095	1.087	1.096	
21/18	1.078	1.086	1.101	1.122	1.116	1.093	1.055	1.061	1.073	1.081	1.090	1.097	1.101	1.103	1.085	1.088	1.077	1.082	1.069	1.069	1.063	
24/21	1.074	1.072	1.080	1.083	1.082	1.060	1.040	1.052	1.070	1.074	1.067	1.074	1.080	1.080	1.067	1.064	1.055	1.059	1.057	1.046	1.047	
27/24	1.044	1.061	1.070	1.080	1.075	1.042	1.034	1.048	1.055	1.058	1.053	1.071	1.066	1.072	1.058	1.048	1.046	1.048	1.041	1.036		
30/27	1.044	1.052	1.058	1.070	1.051	1.038	1.039	1.049	1.046	1.054	1.057	1.048	1.063	1.052	1.046	1.037	1.044	1.037	1.032	1.028		
33/30	1.035	1.047	1.051	1.059	1.035	1.018	1.032	1.030	1.041	1.045	1.045	1.051	1.055	1.045	1.046	1.031	1.033	1.033	1.026	1.028		
36/33	1.037	1.042	1.035	1.040	1.029	1.016	1.024	1.034	1.042	1.033	1.042	1.040	1.041	1.037	1.028	1.026	1.027	1.021	1.021	1.021		
39/36	1.029	1.032	1.034	1.037	1.018	1.012	1.028	1.025	1.027	1.029	1.033	1.031	1.040	1.039	1.027	1.021	1.023	1.022	1.011			
42/39	1.025	1.031	1.036	1.026	1.019	1.013	1.017	1.020	1.025	1.035	1.036	1.037	1.037	1.031	1.022	1.026	1.022	1.017	1.010			
45/42	1.025	1.033	1.032	1.023	1.012	1.019	1.033	1.021	1.025	1.029	1.026	1.030	1.028	1.027	1.021	1.018	1.017	1.015	1.011			
48/45	1.028	1.023	1.026	1.017	1.008	1.013	1.025	1.018	1.022	1.025	1.029	1.034	1.022	1.023	1.020	1.018	1.014	1.008	1.014			
51/48	1.019	1.020	1.024	1.014	1.009	1.013	1.018	1.015	1.020	1.021	1.021	1.026	1.024	1.019	1.014	1.013	1.010	1.008				
54/51	1.025	1.027	1.017	1.016	1.010	1.012	1.021	1.019	1.022	1.022	1.027	1.023	1.019	1.018	1.015	1.011	1.009	1.009				
57/54	1.027	1.024	1.014	1.007	1.011	1.017	1.020	1.018	1.019	1.019	1.023	1.020	1.017	1.018	1.013	1.007	1.009	1.007				
60/57	1.021	1.021	1.015	1.009	1.008	1.014	1.020	1.019	1.018	1.017	1.019	1.016	1.015	1.014	1.012	1.007	1.007	1.006				
63/60	1.014	1.020	1.013	1.012	1.008	1.016	1.015	1.021	1.015	1.018	1.016	1.020	1.015	1.009	1.009	1.005	1.008					
66/63	1.023	1.016	1.010	1.012	1.015	1.013	1.015	1.022	1.019	1.018	1.017	1.015	1.010	1.008	1.008	1.006	1.010					
69/66	1.025	1.013	1.006	1.008	1.016	1.018	1.015	1.023	1.017	1.017	1.015	1.014	1.010	1.008	1.008	1.005	1.008					
72/69	1.020	1.009	1.007	1.009	1.015	1.010	1.014	1.015	1.013	1.014	1.012	1.011	1.010	1.007	1.005	1.005	1.003					
75/72	1.015	1.008	1.006	1.008	1.010	1.009	1.012	1.012	1.011	1.018	1.013	1.008	1.006	1.001	1.003	1.006						
78/75	1.012	1.012	1.008	1.012	1.010	1.011	1.018	1.013	1.012	1.012	1.010	1.008	1.008	1.006	1.005	1.003						
81/78	1.006	1.006	1.006	1.009	1.010	1.014	1.018	1.017	1.016	1.009	1.009	1.005	1.006	1.006	1.004	1.004						
84/81	1.008	1.006	1.009	1.014	1.009	1.007	1.012	1.011	1.008	1.010	1.008	1.007	1.005	1.001	1.003	1.002						
87/84	1.005	1.008	1.008	1.010	1.009	1.010	1.012	1.014	1.012	1.008	1.007	1.004	1.003	1.001	1.002							
90/87	1.002	1.005	1.008	1.008	1.009	1.012	1.009	1.009	1.013	1.008	1.006	1.006	1.003	1.006	1.006							
93/90	1.006	1.007	1.015	1.009	1.011	1.010	1.011	1.012	1.009	1.009	1.007	1.002	1.003	1.002	1.005							
96/93	1.007	1.007	1.010	1.012	1.008	1.010	1.011	1.009	1.005	1.006	1.005	1.003	1.002	1.001	1.003							

Source: WCIRB accident year experience calls

* Incurred medical loss development factors include the paid cost of medical cost containment programs (MCCP) for accident years 2011 and prior.

Quarterly Paid Indemnity Loss Development Factors
Through December 31, 2019

Age in	Accident Year																					
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
6/3	4.325	4.024	4.170	4.461	4.720	4.908	4.745	4.512	4.376	4.495	4.553	4.807	4.911	4.722	4.854	5.099	5.076	5.056	5.087	5.060	4.987	5.082
9/6	2.284	2.367	2.283	2.369	2.443	2.424	2.399	2.303	2.259	2.375	2.377	2.398	2.452	2.432	2.484	2.462	2.462	2.484	2.456	2.445	2.538	2.504
12/9	1.826	1.806	1.839	1.855	1.897	1.876	1.841	1.774	1.812	1.834	1.810	1.825	1.861	1.869	1.877	1.866	1.879	1.910	1.882	1.892	1.891	1.902
15/12	1.499	1.536	1.538	1.552	1.550	1.516	1.491	1.456	1.482	1.488	1.481	1.507	1.532	1.539	1.506	1.539	1.540	1.559	1.571	1.544	1.527	
18/15	1.380	1.399	1.395	1.401	1.403	1.379	1.331	1.306	1.306	1.327	1.332	1.343	1.355	1.361	1.361	1.353	1.364	1.372	1.366	1.358	1.354	
21/18	1.323	1.298	1.303	1.303	1.311	1.297	1.241	1.217	1.233	1.235	1.243	1.259	1.257	1.261	1.261	1.263	1.267	1.264	1.256	1.260	1.248	
24/21	1.259	1.257	1.256	1.258	1.260	1.244	1.183	1.181	1.195	1.191	1.194	1.206	1.209	1.215	1.213	1.204	1.216	1.211	1.206	1.205	1.206	
27/24	1.186	1.199	1.203	1.200	1.205	1.186	1.140	1.142	1.151	1.149	1.153	1.162	1.165	1.168	1.164	1.159	1.170	1.176	1.161	1.159		
30/27	1.157	1.161	1.165	1.175	1.172	1.161	1.122	1.117	1.126	1.129	1.130	1.141	1.141	1.137	1.134	1.141	1.147	1.142	1.137	1.131		
33/30	1.118	1.125	1.130	1.142	1.136	1.123	1.097	1.096	1.100	1.101	1.108	1.114	1.116	1.112	1.111	1.111	1.115	1.107	1.104	1.105		
36/33	1.102	1.103	1.103	1.115	1.111	1.097	1.085	1.081	1.080	1.084	1.092	1.094	1.098	1.091	1.091	1.096	1.092	1.089	1.088	1.083		
39/36	1.074	1.081	1.081	1.092	1.087	1.072	1.070	1.066	1.064	1.067	1.074	1.078	1.077	1.073	1.075	1.074	1.075	1.071	1.068			
42/39	1.067	1.071	1.077	1.080	1.073	1.063	1.059	1.058	1.058	1.062	1.067	1.067	1.071	1.070	1.065	1.064	1.066	1.062	1.060			
45/42	1.057	1.054	1.063	1.064	1.056	1.049	1.047	1.049	1.047	1.051	1.058	1.059	1.057	1.055	1.054	1.052	1.050	1.050	1.045			
48/45	1.049	1.050	1.055	1.053	1.046	1.044	1.041	1.044	1.043	1.047	1.049	1.051	1.050	1.048	1.048	1.048	1.045	1.041	1.040			
51/48	1.039	1.038	1.043	1.044	1.036	1.035	1.033	1.036	1.036	1.037	1.042	1.042	1.043	1.039	1.038	1.038	1.039	1.035				
54/51	1.035	1.038	1.036	1.037	1.034	1.035	1.030	1.028	1.035	1.036	1.038	1.041	1.038	1.036	1.036	1.033	1.032	1.031				
57/54	1.029	1.033	1.037	1.030	1.028	1.026	1.025	1.028	1.030	1.032	1.033	1.033	1.032	1.033	1.028	1.027	1.028	1.025				
60/57	1.025	1.030	1.027	1.026	1.024	1.024	1.024	1.024	1.028	1.029	1.029	1.032	1.027	1.030	1.028	1.025	1.025	1.023				
63/60	1.023	1.026	1.024	1.021	1.022	1.019	1.019	1.021	1.023	1.025	1.025	1.024	1.026	1.025	1.025	1.021	1.021					
66/63	1.023	1.023	1.023	1.021	1.019	1.019	1.019	1.020	1.025	1.025	1.025	1.025	1.023	1.022	1.022	1.018	1.018					
69/66	1.019	1.021	1.020	1.017	1.016	1.017	1.016	1.021	1.020	1.020	1.020	1.022	1.020	1.019	1.022	1.017	1.014					
72/69	1.018	1.016	1.018	1.016	1.016	1.015	1.017	1.015	1.020	1.019	1.019	1.019	1.019	1.019	1.016	1.014	1.016					
75/72	1.015	1.016	1.015	1.014	1.012	1.012	1.013	1.015	1.019	1.018	1.016	1.016	1.017	1.015	1.014	1.012						
78/75	1.014	1.014	1.012	1.013	1.012	1.011	1.012	1.015	1.017	1.016	1.015	1.016	1.016	1.015	1.013	1.011						
81/78	1.013	1.013	1.011	1.012	1.011	1.010	1.012	1.015	1.015	1.016	1.015	1.015	1.013	1.012	1.011	1.010						
84/81	1.011	1.011	1.013	1.010	1.010	1.009	1.011	1.013	1.015	1.014	1.013	1.012	1.013	1.013	1.011	1.010						
87/84	1.012	1.010	1.008	1.010	1.009	1.008	1.009	1.012	1.014	1.013	1.010	1.012	1.010	1.011	1.010							
90/87	1.008	1.009	1.010	1.009	1.008	1.008	1.011	1.012	1.013	1.012	1.011	1.010	1.010	1.010	1.009							
93/90	1.009	1.009	1.008	1.008	1.007	1.008	1.012	1.011	1.011	1.012	1.010	1.010	1.009	1.009	1.008							
96/93	1.008	1.009	1.006	1.007	1.007	1.007	1.008	1.011	1.011	1.008	1.010	1.010	1.009	1.010	1.007							

Source: WCIRB accident year experience calls

Quarterly Paid Medical Loss Development Factors *
Through December 31, 2019

Age in	Accident Year																					
Months	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
6/3	6.375	5.955	5.518	6.168	7.221	7.127	7.617	5.563	5.308	5.615	6.579	6.101	6.048	5.854	5.989	6.284	5.604	5.720	5.897	5.238	5.462	4.985
9/6	2.369	2.406	2.356	2.432	2.694	2.577	2.483	2.236	2.348	2.381	2.348	2.375	2.361	2.327	2.398	2.498	2.428	2.287	2.326	2.249	2.351	2.286
12/9	1.728	1.739	1.749	1.857	1.882	1.825	1.759	1.666	1.716	1.765	1.731	1.723	1.756	1.746	1.763	1.736	1.750	1.705	1.752	1.737	1.719	1.795
15/12	1.453	1.490	1.514	1.547	1.554	1.510	1.437	1.423	1.429	1.444	1.413	1.429	1.445	1.472	1.446	1.443	1.460	1.454	1.479	1.434	1.425	
18/15	1.241	1.267	1.286	1.310	1.330	1.295	1.243	1.230	1.227	1.259	1.243	1.259	1.268	1.282	1.284	1.263	1.265	1.278	1.262	1.250	1.245	
21/18	1.164	1.168	1.192	1.219	1.211	1.179	1.153	1.151	1.163	1.173	1.170	1.178	1.182	1.187	1.192	1.193	1.192	1.189	1.173	1.170	1.173	
24/21	1.132	1.124	1.149	1.159	1.154	1.125	1.115	1.118	1.127	1.133	1.132	1.137	1.144	1.153	1.154	1.148	1.146	1.146	1.141	1.131	1.143	
27/24	1.096	1.108	1.121	1.128	1.123	1.093	1.090	1.093	1.106	1.107	1.110	1.112	1.119	1.120	1.123	1.122	1.122	1.124	1.111	1.111		
30/27	1.077	1.088	1.101	1.108	1.103	1.077	1.084	1.087	1.097	1.100	1.100	1.106	1.107	1.111	1.109	1.111	1.111	1.105	1.100	1.092		
33/30	1.065	1.072	1.086	1.089	1.077	1.063	1.071	1.065	1.081	1.083	1.086	1.092	1.094	1.093	1.094	1.090	1.089	1.082	1.082	1.077		
36/33	1.055	1.066	1.069	1.076	1.061	1.055	1.062	1.062	1.071	1.072	1.072	1.077	1.083	1.082	1.078	1.080	1.076	1.071	1.067	1.065		
39/36	1.051	1.059	1.060	1.061	1.049	1.044	1.053	1.056	1.057	1.059	1.061	1.066	1.071	1.066	1.069	1.065	1.064	1.061	1.055			
42/39	1.044	1.049	1.055	1.054	1.041	1.044	1.049	1.054	1.055	1.058	1.059	1.061	1.068	1.063	1.062	1.057	1.059	1.057	1.049			
45/42	1.039	1.045	1.047	1.044	1.036	1.037	1.040	1.047	1.048	1.049	1.054	1.053	1.056	1.056	1.053	1.051	1.045	1.044	1.042			
48/45	1.035	1.039	1.044	1.037	1.032	1.035	1.037	1.043	1.043	1.046	1.047	1.050	1.051	1.046	1.045	1.046	1.041	1.040	1.038			
51/48	1.030	1.035	1.037	1.034	1.031	1.030	1.033	1.037	1.036	1.036	1.039	1.041	1.043	1.040	1.039	1.038	1.037	1.032				
54/51	1.031	1.036	1.032	1.027	1.030	1.029	1.034	1.034	1.035	1.035	1.036	1.042	1.038	1.035	1.035	1.034	1.032	1.029				
57/54	1.026	1.030	1.027	1.024	1.024	1.024	1.029	1.031	1.034	1.031	1.033	1.038	1.034	1.034	1.031	1.028	1.026	1.025				
60/57	1.026	1.028	1.026	1.021	1.023	1.026	1.028	1.029	1.028	1.032	1.032	1.035	1.030	1.030	1.030	1.023	1.022	1.021				
63/60	1.023	1.025	1.022	1.019	1.019	1.020	1.024	1.024	1.024	1.024	1.027	1.027	1.026	1.027	1.025	1.022	1.022					
66/63	1.026	1.021	1.020	1.020	1.018	1.021	1.023	1.024	1.026	1.026	1.029	1.029	1.024	1.028	1.023	1.021	1.018					
69/66	1.021	1.022	1.019	1.018	1.016	1.019	1.021	1.023	1.023	1.021	1.024	1.024	1.022	1.020	1.020	1.017	1.016					
72/69	1.022	1.018	1.016	1.017	1.018	1.016	1.021	1.021	1.022	1.022	1.023	1.021	1.020	1.019	1.016	1.015	1.017					
75/72	1.017	1.016	1.014	1.015	1.015	1.014	1.018	1.020	1.019	1.019	1.018	1.018	1.018	1.015	1.015	1.013						
78/75	1.018	1.015	1.014	1.015	1.016	1.015	1.016	1.018	1.017	1.022	1.019	1.018	1.017	1.016	1.015	1.013						
81/78	1.015	1.014	1.013	1.014	1.013	1.014	1.018	1.018	1.015	1.019	1.018	1.015	1.015	1.013	1.012	1.011						
84/81	1.013	1.012	1.013	1.012	1.012	1.013	1.016	1.016	1.015	1.018	1.015	1.015	1.015	1.013	1.013	1.011						
87/84	1.013	1.011	1.010	1.012	1.012	1.012	1.014	1.013	1.015	1.017	1.013	1.013	1.011	1.012	1.010							
90/87	1.013	1.012	1.011	1.013	1.012	1.013	1.015	1.013	1.015	1.013	1.013	1.012	1.011	1.012	1.009							
93/90	1.011	1.010	1.011	1.012	1.011	1.013	1.013	1.012	1.014	1.014	1.013	1.011	1.010	1.009	1.010							
96/93	1.010	1.010	1.008	1.010	1.010	1.009	1.013	1.015	1.016	1.011	1.012	1.010	1.009	1.009	1.009							

Source: WCIRB accident year experience calls

* Paid medical loss development factors include the paid cost of medical cost containment programs (MCCP) for accident years 2011 and prior.

Reported Indemnity Claim Count Development																
Accident Year	Development															
	<u>12-24</u>	<u>24-36</u>	<u>36-48</u>	<u>48-60</u>	<u>60-72</u>	<u>72-84</u>	<u>84-96</u>	<u>96-108</u>	<u>108-120</u>	<u>120-132</u>	<u>132-144</u>	<u>144-156</u>	<u>156-168</u>	<u>168-180</u>	<u>180-192</u>	<u>192-204</u>
1994																1.000
1995															1.001	1.000
1996														1.000	1.000	1.000
1997													1.000	1.000	1.000	1.000
1998												1.001	1.000	1.000	1.000	1.000
1999											1.001	1.000	1.000	1.000	1.000	1.000
2000										1.000	1.000	1.001	1.000	1.000	1.000	1.000
2001									1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002								1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003							0.999	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2004						1.000	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
2005					1.001	1.001	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000		
2006				1.002	1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000			
2007			1.006	1.004	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000				
2008		1.022	1.011	1.005	1.003	1.001	1.001	1.001	1.000	1.000	1.000					
2009	1.189	1.028	1.011	1.006	1.004	1.001	1.001	1.000	1.000	1.000						
2010	1.215	1.029	1.011	1.006	1.002	1.002	1.001	1.000	1.000							
2011	1.229	1.032	1.013	1.005	1.002	1.001	1.001	1.001								
2012	1.244	1.034	1.010	1.005	1.003	1.001	1.001									
2013	1.248	1.025	1.010	1.005	1.002	1.001										
2014	1.215	1.027	1.010	1.004	1.002											
2015	1.236	1.027	1.006	1.003												
2016	1.244	1.029	1.006													
2017	1.220	1.021														
2018	1.217															
Latest Year																
<u>Age-to-Age</u>	1.217	1.021	1.006	1.003	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<u>Age-to-Ultimate</u>	1.263	1.038	1.016	1.010	1.007	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.002	1.002

Source: WCIRB accident year experience calls

Quarterly Reported Indemnity Claim Count Development Factors

Accident	Development														
<u>Year</u>	<u>3-6</u>	<u>6-9</u>	<u>9-12</u>	<u>12-15</u>	<u>15-18</u>	<u>18-21</u>	<u>21-24</u>	<u>24-27</u>	<u>27-30</u>	<u>30-33</u>	<u>33-36</u>	<u>36-39</u>	<u>39-42</u>	<u>42-45</u>	<u>45-48</u>
2008	2.539	1.651	1.336	1.093	1.025	1.015	1.010	1.008	1.006	1.004	1.003	1.003	1.002	1.003	1.002
2009	2.681	1.683	1.382	1.109	1.036	1.021	1.012	1.009	1.007	1.007	1.005	1.004	1.003	1.002	1.002
2010	2.688	1.708	1.407	1.124	1.037	1.021	1.015	1.011	1.008	1.005	1.005	1.003	1.004	1.003	1.001
2011	2.691	1.738	1.424	1.123	1.041	1.026	1.018	1.010	1.010	1.006	1.005	1.004	1.004	1.003	1.002
2012	2.749	1.727	1.420	1.123	1.050	1.028	1.018	1.012	1.010	1.007	1.004	1.004	1.003	1.007	1.001
2013	2.821	1.739	1.421	1.138	1.045	1.027	1.016	1.010	1.009	1.013	1.003	1.003	1.003	1.001	1.002
2014	2.778	1.723	1.421	1.130	1.045	1.037	1.015	1.010	1.008	1.004	1.003	1.003	1.003	1.002	1.002
2015	2.817	1.781	1.414	1.135	1.045	1.023	1.014	1.014	1.008	1.005	1.003	1.003	1.002	1.002	1.002
2016	2.733	1.717	1.410	1.144	1.045	1.027	1.017	1.012	1.010	1.005	1.004	1.003	1.002	1.002	1.002
2017	2.848	1.689	1.417	1.129	1.041	1.025	1.013	1.009	1.008	1.005	1.004				
2018	2.825	1.731	1.414	1.139	1.045	1.023	1.017								
2019	2.780	1.751	1.426												

Source: WCIRB accident year experience calls

Reported Indemnity Claim Settlement Ratios

Accident Year	Evaluated as of (in months):																
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>	<u>108</u>	<u>120</u>	<u>132</u>	<u>144</u>	<u>156</u>	<u>168</u>	<u>180</u>	<u>192</u>	<u>204</u>
1994																	98.9%
1995																98.5%	98.7%
1996															98.2%	98.4%	98.6%
1997														97.7%	98.0%	98.2%	98.4%
1998													97.1%	97.5%	97.8%	98.0%	98.2%
1999												96.6%	97.0%	97.3%	97.7%	97.9%	98.1%
2000										95.5%	96.2%	96.6%	97.2%	97.5%	97.8%	97.8%	98.0%
2001										93.5%	94.5%	95.2%	96.0%	96.5%	96.9%	97.3%	97.6%
2002									92.4%	93.7%	94.6%	95.7%	96.3%	96.8%	97.3%	97.7%	98.0%
2003								90.6%	92.4%	93.7%	95.1%	95.9%	96.4%	97.0%	97.5%	97.9%	98.3%
2004							88.2%	90.6%	92.4%	94.3%	95.3%	96.0%	96.8%	97.3%	97.8%	98.2%	
2005						85.4%	88.5%	90.8%	93.0%	94.4%	95.5%	96.4%	97.0%	97.6%	98.1%		
2006					81.0%	85.2%	88.2%	91.2%	93.0%	94.3%	95.5%	96.4%	97.1%	97.7%			
2007				73.5%	80.2%	84.6%	88.7%	91.3%	93.2%	94.8%	95.9%	96.7%	97.4%				
2008			61.8%	72.0%	79.1%	84.9%	88.7%	91.5%	93.6%	95.1%	96.2%	97.0%					
2009		46.2%	59.9%	70.6%	79.0%	84.5%	88.5%	91.7%	93.8%	95.3%	96.4%						
2010	26.9%	46.7%	60.6%	72.4%	80.5%	85.9%	90.1%	92.8%	94.7%	96.0%							
2011	27.5%	47.1%	62.1%	73.6%	81.5%	87.0%	90.9%	93.6%	95.4%								
2012	27.4%	47.8%	63.1%	74.9%	82.9%	88.4%	92.0%	94.4%									
2013	26.8%	48.1%	64.3%	76.5%	84.7%	89.8%	93.1%										
2014	26.4%	49.1%	65.8%	78.1%	86.1%	90.7%											
2015	26.8%	50.5%	68.2%	80.5%	87.8%												
2016	28.2%	53.4%	70.9%	82.4%													
2017	30.4%	56.3%	73.2%														
2018	31.0%	56.4%															
2019	31.4%																

Source: WCIRB accident year experience calls

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																	
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	
1994																	98.6%	
1995																98.3%	98.5%	
1996															98.0%	98.2%	98.4%	
1997														97.4%	97.7%	97.9%	98.2%	
1998													96.8%	97.2%	97.5%	97.8%	98.0%	
1999												96.3%	96.7%	97.1%	97.5%	97.8%	98.0%	
2000											95.2%	95.9%	96.4%	97.0%	97.3%	97.6%	97.9%	
2001										93.2%	94.2%	95.0%	95.8%	96.3%	96.7%	97.1%	97.5%	
2002									92.3%	93.5%	94.5%	95.6%	96.2%	96.7%	97.1%	97.5%	97.8%	
2003								90.6%	92.3%	93.6%	95.0%	95.7%	96.2%	96.9%	97.3%	97.7%	98.1%	
2004							88.3%	90.6%	92.4%	94.2%	95.2%	95.9%	96.6%	97.2%	97.6%	98.0%		
2005						85.3%	88.4%	90.7%	93.0%	94.4%	95.4%	96.3%	96.9%	97.5%	97.9%			
2006					80.6%	84.9%	88.0%	90.9%	92.8%	94.2%	95.4%	96.3%	97.0%	97.5%				
2007				72.8%	79.7%	84.2%	88.4%	91.1%	92.9%	94.6%	95.7%	96.6%	97.3%					
2008			60.3%	71.1%	78.4%	84.5%	88.3%	91.1%	93.4%	94.8%	96.0%	96.8%						
2009		43.9%	58.4%	69.6%	78.3%	84.0%	88.1%	91.5%	93.5%	95.1%	96.2%							
2010	20.9%	44.3%	59.1%	71.4%	79.8%	85.4%	89.7%	92.5%	94.5%	95.8%								
2011	21.2%	44.5%	60.5%	72.7%	80.9%	86.6%	90.6%	93.3%	95.1%									
2012	20.9%	45.2%	61.7%	73.9%	82.3%	87.9%	91.7%	94.1%										
2013	20.5%	45.9%	63.0%	75.7%	84.1%	89.3%	92.8%											
2014	20.7%	46.8%	64.4%	77.2%	85.5%	90.2%												
2015	20.8%	48.4%	67.2%	79.7%	87.2%													
2016	21.7%	51.1%	69.8%	81.6%														
2017	24.0%	54.2%	72.1%															
2018	24.6%	54.3%																
2019	24.9%																	

Source: WCIRB quarterly calls for experience

Quarterly Ultimate Settlement Ratios

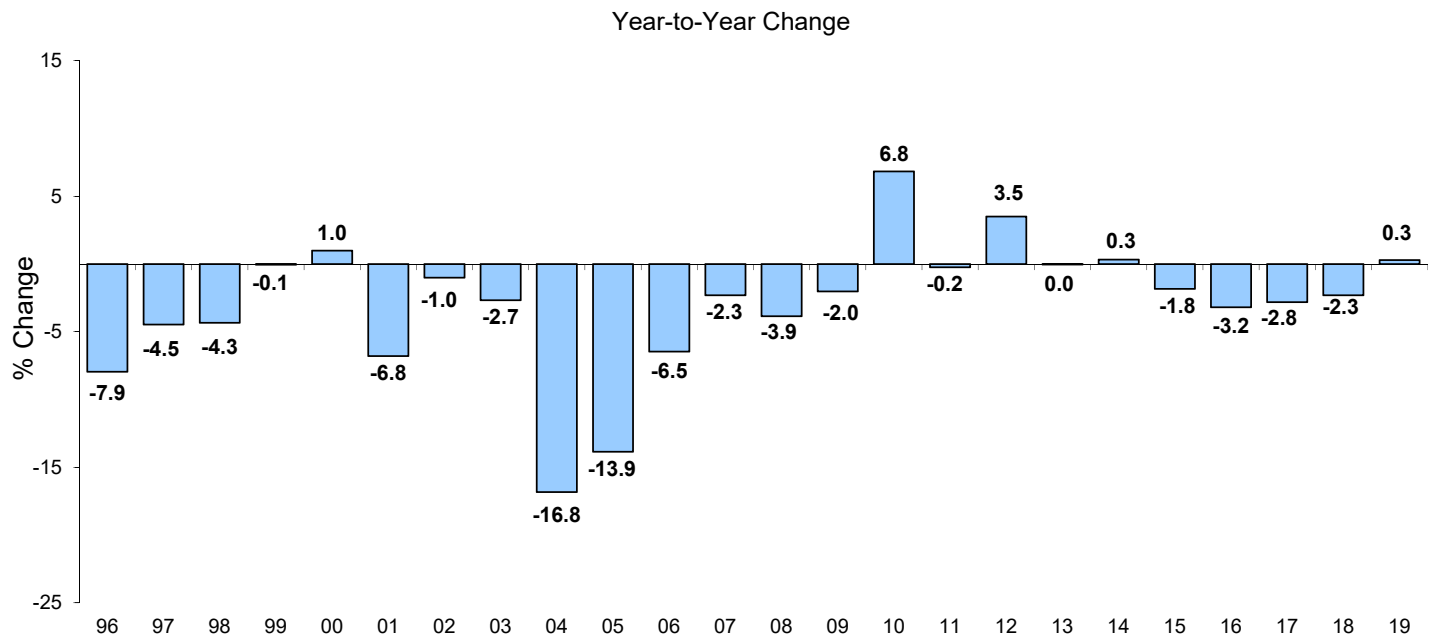
Accident Year	Evaluated as of (in months):															
	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>	<u>15</u>	<u>18</u>	<u>21</u>	<u>24</u>	<u>27</u>	<u>30</u>	<u>33</u>	<u>36</u>	<u>39</u>	<u>42</u>	<u>45</u>	<u>48</u>
2010	0.6%	4.7%	11.9%	21.1%	29.9%	35.9%	40.2%	44.5%	48.3%	52.2%	55.8%	59.3%	62.5%	65.9%	68.9%	71.8%
2011	0.8%	5.1%	12.0%	21.3%	29.7%	35.9%	40.3%	44.7%	48.6%	52.9%	56.8%	60.8%	64.1%	67.1%	70.2%	72.9%
2012	0.8%	5.1%	12.1%	21.2%	29.5%	35.9%	40.8%	45.6%	49.8%	54.1%	58.3%	62.2%	65.6%	68.8%	71.7%	74.4%
2013	0.9%	5.1%	11.8%	21.0%	29.4%	36.0%	41.4%	46.4%	51.0%	55.5%	59.6%	63.6%	67.1%	70.5%	73.4%	76.2%
2014	0.8%	4.8%	11.8%	20.8%	29.6%	36.4%	42.1%	47.3%	52.0%	56.5%	60.8%	64.8%	68.2%	71.7%	74.6%	77.5%
2015	0.8%	4.8%	12.2%	21.2%	30.4%	37.8%	43.5%	48.8%	53.9%	59.0%	63.4%	67.5%	71.1%	74.4%	77.4%	80.0%
2016	0.8%	5.1%	12.3%	21.9%	31.7%	39.5%	45.5%	51.3%	56.3%	61.5%	65.9%	70.1%	73.7%	76.9%	79.3%	81.6%
2017	0.9%	5.6%	13.5%	24.2%	34.2%	42.1%	48.3%	54.2%	59.1%	64.0%	68.1%	72.1%				
2018	1.0%	5.8%	13.9%	24.6%	34.7%	42.6%	48.6%	54.3%								
2019	1.0%	5.9%	13.7%	24.9%												

Accident Year	Quarterly Incremental Change														
	<u>3-6</u>	<u>6-9</u>	<u>9-12</u>	<u>12-15</u>	<u>15-18</u>	<u>18-21</u>	<u>21-24</u>	<u>24-27</u>	<u>27-30</u>	<u>30-33</u>	<u>33-36</u>	<u>36-39</u>	<u>39-42</u>	<u>42-45</u>	<u>45-48</u>
2010	4.1%	7.2%	9.2%	8.8%	6.0%	4.3%	4.3%	3.8%	3.9%	3.5%	3.5%	3.2%	3.4%	3.0%	2.9%
2011	4.3%	6.9%	9.3%	8.5%	6.1%	4.5%	4.3%	3.9%	4.4%	3.9%	4.0%	3.3%	3.1%	3.0%	2.7%
2012	4.2%	7.1%	9.1%	8.3%	6.4%	4.8%	4.9%	4.1%	4.3%	4.2%	3.9%	3.4%	3.2%	3.0%	2.7%
2013	4.2%	6.7%	9.1%	8.4%	6.6%	5.4%	5.0%	4.6%	4.5%	4.1%	3.9%	3.6%	3.4%	2.9%	2.8%
2014	4.1%	6.9%	9.1%	8.8%	6.7%	5.8%	5.1%	4.8%	4.5%	4.3%	4.0%	3.4%	3.5%	2.9%	2.8%
2015	4.0%	7.4%	9.0%	9.3%	7.4%	5.7%	5.3%	5.1%	5.1%	4.4%	4.1%	3.6%	3.4%	3.0%	2.6%
2016	4.2%	7.3%	9.6%	9.8%	7.8%	6.0%	5.8%	5.0%	5.2%	4.3%	4.3%	3.6%	3.2%	2.3%	2.3%
2017	4.8%	7.8%	10.7%	10.0%	7.9%	6.2%	5.9%	5.0%	4.9%	4.1%	4.0%				
2018	4.9%	8.1%	10.7%	10.1%	7.9%	6.0%	5.7%								
2019	4.9%	7.9%	11.1%												

Notes All figures in each accident year contain information from the same combination of insurers, all of whom submitted complete data for all evaluations for that accident year. Therefore, each accident year may contain a different mix of insurers (ranging from 87% to 100% of the total California workers' compensation insured market measured using 2019 earned premium levels).

Source: WCIRB quarterly calls for experience

California Workers' Compensation Estimated Indemnity Claim Frequency by Accident Year



Note:

The 2019 estimate is based on a comparison of claim counts based on WCIRB accident year experience as of December 31, 2019 relative to the estimated change in statewide employment. Prior years are based on unit statistical data.