

# Actuarial Committee

## Meeting Agenda

Date	Time	Location	Staff Contact
March 16, 2021	9:00 AM	Webinar Teleconference	David M. Bellusci
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### I. Approval of Minutes

Meeting held on February 16, 2021

### II. Working Group Meeting Summaries

None

### III. Unfinished Business

A. AC20-08-04: Impact of Economic Slowdown on Pure Premium Rate Indications

B. AC21-02-02: Pandemic Impact on 2020 Development

### IV. New Business

A. AC21-03-01: First Quarter 2021 Review of Diagnostics

B. AC21-03-02: 12/31/2020 Experience Review

C. AC21-03-03: Review of COVID-19 Claim Diagnostics

D. AC21-03-04: 9/1/2021 Filing – COVID-19 Claim Cost Projection

E. AC21-03-05: Pandemic Impact on Premium Measures

### V. Matters Arising at Time of Meeting

### VI. Next Meeting Date: April 15, 2021

### VII. Adjournment

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## **Item AC20-08-04**

### **Impact of Economic Slowdown on Pure Premium Rate Indications**

At the August 4, 2020 meeting, the Committee reviewed an analysis of economic changes related to the COVID-19 pandemic and their impacts on the indicated January 1, 2021 pure premium rates. This item presents an update of this analysis as it pertains to the September 1, 2021 Pure Premium Rate Filing.

#### **Statewide Average Wage**

Changes in the statewide average wage flow directly into the proposed pure premium rates and are also used for benefit on-leveling. Historical changes from the Bureau of Labor Statistics (BLS) are used for past years. For future years, projections are made as an average of forecasts made by the California Department of Finance (CDOF) and the UCLA Anderson School of Business (UCLA). (See Exhibit 5.1 of Item AC21-03-02.<sup>1</sup>) In the January 1, 2021 Pure Premium Rate Filing, due to concerns that the average wage growth projection for 2020 may be overstated due to significantly greater job losses among lower wage employees, the WCIRB adjusted the 2020 projected wage growth downward based on the average difference between the mean and median wage growth in the Great Recession.

The most current forecast from CDOF is from November 2020, while the most recent forecast from UCLA is from December 2020. Current wage growth projections based on the average of these two projections are 6.7% for 2020, 0.5% for 2021, 2.1% for 2022, and 3.1% for 2023.

Both forecasts show an average wage calculated as projected total wages divided by projected total employment. Given the extreme changes in the employment mix, the use of an average wage would be artificially inflated as lower wage industries and employees have suffered greater employment declines.<sup>2</sup> Staff has derived two potential adjustments to an average wage change to account for the changing industrial mix that were initially discussed at the August 4, 2020 meeting.

The first adjustment uses data through December 2020 from the BLS Current Employment Statistics data set. This method calculates overall average wages at the industrial mix from the current and previous year to determine the amount of change due to the industrial mix. The largest change due to mix from 2007 through 2019 was -0.5% in 2009. The change due to mix in 2020 is 1.8%, i.e., the overall statewide average wage will be artificially inflated by 1.8% due solely to the change industrial mix. This data series does not include agriculture and no forecasts are available. The derivation of this index is shown in Exhibit 1.

The second adjustment combines historical annual industrial wage relativities through 2019 from the BLS Quarterly Census of Employment and Wages (QCEW) data series with industrial employment forecasts from UCLA. Staff calculated estimates via this methodology for 2020 through 2023 assuming future industry wage relativities remained equal to either the latest 1-, 3-, or 5-year average. The timeframe used to select the industry relativities was immaterial. This method shows 1.8% inflation due to mix in 2020, -0.5% in 2021, 0% in 2022 and 0.2% in 2023. These calculations are shown in Exhibit 2.

Given the very large observed change in average wage in 2020 and the very small change in 2021, staff has completed a sensitivity analysis to reflect the differing levels of employment change by wage level for workers within an industry. This adjustment relies on data from the American Community Survey (ACS) that has been mapped to a classification level for use in classification ratemaking.<sup>3</sup>

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<sup>1</sup> As in the January 1, 2021 Pure Premium Rate Filing, the average wage change for 2020 shown in Exhibit 5.1 of Item AC21-03-02 includes an adjustment of -0.8% to reflect the difference in changes in average and median wages during an economic downturn (based on the Great Recession).

<sup>2</sup> *COVID-19 and the State Economy*, California Center for Jobs & the Economy/California Business Roundtable, February 2021.

<sup>3</sup> This data is used to derive classification factors to adjust payroll. See Part A, Section C, Appendix C of the WCIRB's September 1, 2021 Regulatory Filing.

To determine the potential impacts of greater employment loss at lower wage levels within an industry, classification mix is held constant so that it remains independent of the industry mix adjustments detailed above. Employment changes are assumed to differ by wage quartile under several alternative assumptions and the impact on the average wage is calculated. A sensitivity analysis contemplating several different assumed employment changes by wage level is shown in Exhibit 3. Staff will discuss issues with selecting an appropriate employment change distribution by wage level at the meeting.

### **Indemnity Claim Frequency**

The WCIRB's indemnity frequency model predicts the change (as measured by a log difference) in the mix-adjusted non-cumulative indemnity claim frequency as a linear combination of the changes in the indemnity benefit level, the cumulative injury index (the ratio of cumulative trauma indemnity claims to all non-cumulative trauma indemnity claims), and economic variables. Projections of changes in the indemnity benefit level are made using proposed legislation and/or cost of living adjustments. Changes in the economic variables are based on UCLA forecasts. The WCIRB has not yet found a reasonable approach to regularly project future changes in the cumulative injury index.

The economic variable used in the model are the first principal component decomposition of the changes in aggregate employment and the unemployment rate. The magnitude of the change in 2020 is more than twice as much as the next most extreme observation going back to the 1960s, which occurred during the Great Recession in 2009 and is greater in magnitude than 2007 through 2010 combined. The economic variable series is shown in Exhibit 4.

At the August 4, 2020 meeting, staff presented investigations into potentially capping the magnitude of the economic variables for use in frequency projections. Capping at any level resulted in a decrease in model performance and the Committee agreed that no capping adjustment was appropriate for the January 1, 2021 Pure Premium Rate Filing.

In the WCIRB frequency model, the cumulative injury index is calculated as the ratio of cumulative frequency to non-cumulative frequency. This variable is intended to be a proxy for the level of discretionary claim filing and is the most predictive explanatory variable in the model. To date, staff has not been able to produce a reliable projection of this variable and no change forecast is typically used in the model. As shown in the WCIRB's recent study of the impact of economic changes on claim frequency,<sup>4</sup> during the prior recession, there was a large uptick in the cumulative injury index. Alternate frequency projections using observed values of the change in the index from the prior two recessions are shown in Exhibit 5.<sup>5</sup> The adjustment was used in projecting claim frequency in the January 1, 2021 Pure Premium Rate Filing. As shown in Exhibit 10 of Item AC21-03-02, the preliminary 2020 claim frequency change based on changes in total reported indemnity claims (excluding COVID-19 claims) and changes in total employment is -5.7%.<sup>6</sup> This compares to the frequency model projection including the impact of shifting industrial mix of -9.3%.

The final frequency-related adjustment is for industrial mix. Exhibit 6 shows a contracted version of Exhibit C7.2 of the standard set of diagnostic exhibits reviewed by the Committee twice a year, which shows the history and projections of the frequency model. Changes in inter-class frequency show the change in overall frequency due to changes in industrial mix. Accident years up to 2019 use USR data at a class level to calculate the change. For AYs 2020 through 2023, inter-class changes use observed industry frequency relativities with industry exposure distributions adjusted for forecast employment changes from UCLA.

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<sup>4</sup> *Impact of Economic Downturn on California Workers' Compensation Claim Frequency*, WCIRB, June 2020.

<sup>5</sup> These projections exclude the impact of COVID-19 claims.

<sup>6</sup> The 2020 change in employment level may not fully reflect the change in 2020 exposure, Staff is reviewing whether additional adjustments are appropriate and will discuss any potential adjustments at the meeting.

### **Indemnity Claim Severity**

The WCIRB tracks changes in indemnity claim severity due to shifting class mix in Exhibit S15 of the standard set of diagnostic exhibits reviewed by the Committee twice a year. These changes have been very modest over time and have not historically been reflected in pure premium rate filing projections. Given the magnitude of current economic changes, staff has calculated a projected change in indemnity claim severity due to changes in the industrial mix. This method uses historic industry severity relativities from USR data and estimated future indemnity count distributions based on forecast changes in employment mix.

Exhibit 7 shows the derivation of projected indemnity count distributions by industry. Standard exception data has been allocated to industry using previous WCIRB studies. Some industries shown are collapsed in the forecast data and will have the same projected employment changes.

Calculations of change in indemnity and medical severity due to industry mix are shown in Exhibits 8.1 and 8.2. Neither is impacted significantly by the selection of the severity relativity. Both severities show increases due to industry mix in 2020 and decreases in 2021 and 2022. Changes in 2023 are negligible. Total claim severity is shown for reference in Exhibit 8.3. This calculation implicitly assumes that industry frequency and severity relativities are stable.

**Exhibit 1: Change in Average Wage Due to Industrial Mix**  
**Bureau of Labor Statistics Current Employment Statistics Data Series**

<b>Employment in Thousands</b>	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Supersector</b>														
Construction	892.8	787.9	623.3	560.0	561.5	590.2	637.7	674.4	732.1	775.7	810.3	860.2	882.6	852.2
Manufacturing	1,465.7	1,428.6	1,285.5	1,247.4	1,254.0	1,259.8	1,261.9	1,279.7	1,302.4	1,309.1	1,311.7	1,323.1	1,322.5	1,238.6
Trade, Transportation, and Utilities	2,898.4	2,835.3	2,629.1	2,613.0	2,662.3	2,714.0	2,768.9	2,835.2	2,908.8	2,966.9	3,017.0	3,047.9	3,051.9	2,882.0
Information	471.4	476.4	441.1	428.5	430.9	436.3	450.0	463.9	488.6	526.4	529.3	543.2	562.6	534.7
Financial Activities	897.8	843.0	783.9	760.9	762.3	773.7	783.0	782.8	802.6	823.3	832.7	837.9	841.2	841.6
Professional and Business Services	2,279.0	2,249.2	2,070.6	2,084.3	2,142.1	2,249.7	2,347.6	2,427.0	2,490.8	2,531.7	2,582.4	2,669.4	2,721.1	2,617.8
Education and Health Services	1,966.4	2,051.5	2,114.2	2,131.9	2,162.7	2,232.6	2,308.6	2,377.9	2,464.6	2,552.9	2,650.3	2,722.2	2,803.4	2,702.5
Leisure and Hospitality	1,560.1	1,572.4	1,502.9	1,500.8	1,534.8	1,597.4	1,675.2	1,757.1	1,829.3	1,902.9	1,953.6	1,993.2	2,033.2	1,537.4
Other Services	511.1	510.2	484.9	483.6	492.4	503.5	515.5	534.8	543.6	553.7	563.7	571.7	576.1	480.2
Mining and Logging	24.6	26.6	23.9	24.6	26.7	28.3	28.3	29.3	26.4	22.3	21.9	22.4	22.5	22.0
<b>Average Weekly Wage</b>														
<b>Supersector</b>														
Construction	922.7	929.4	965.8	979.8	979.2	1,073.8	1,139.2	1,143.5	1,156.2	1,189.5	1,258.5	1,308.5	1,380.1	1,402.7
Manufacturing	964.8	981.4	1,015.6	1,047.7	1,064.0	1,077.6	1,119.2	1,144.4	1,156.9	1,178.5	1,232.1	1,266.0	1,310.2	1,344.0
Trade, Transportation, and Utilities	720.8	717.1	725.8	804.6	803.9	761.9	757.7	765.5	801.8	826.2	841.7	839.3	865.8	943.1
Information	1,239.4	1,231.8	1,205.8	1,321.5	1,493.9	1,554.7	1,516.5	1,528.9	1,548.5	1,521.3	1,609.2	1,723.0	1,870.1	1,935.1
Financial Activities	1,298.5	1,136.7	1,127.7	1,114.1	1,110.8	1,121.2	1,152.1	1,226.5	1,250.8	1,270.6	1,325.6	1,411.4	1,462.7	1,531.2
Professional and Business Services	1,089.2	1,082.1	1,110.1	1,155.4	1,236.0	1,221.2	1,210.6	1,236.3	1,300.2	1,342.6	1,398.5	1,450.4	1,513.8	1,622.2
Education and Health Services	807.5	834.8	853.7	855.9	871.0	927.0	939.6	945.2	946.6	962.5	1,006.7	1,036.5	1,057.4	1,083.6
Leisure and Hospitality	367.4	374.2	374.5	385.2	391.9	392.5	394.7	416.3	438.8	457.8	468.2	485.6	511.5	535.5
Other Services	582.5	593.7	640.8	634.2	671.3	667.4	687.0	706.5	741.5	749.2	819.3	842.2	877.3	977.5
Mining and Logging	935.8	1,892.9	3,871.8	4,699.6	5,415.5	2,674.6	1,406.3	784.9	740.4	857.2	1,227.3	1,428.7	1,524.9	1,271.2
<b>New Industry Mix x Old Wages</b>	848.2	841.3	860.2	861.4	896.1	924.8	924.8	929.1	946.4	973.5	996.2	1,039.4	1,073.4	1,137.0
<b>Old Industry Mix x Old Wages</b>	851.5	845.0	861.4	861.4	896.1	924.6	925.3	930.4	946.3	973.8	997.1	1,037.9	1,072.7	1,116.2
<b>Laspeyres Index</b>	<b>0.996</b>	<b>0.996</b>	<b>0.996</b>	<b>0.999</b>	<b>1.000</b>	<b>1.000</b>	<b>0.999</b>	<b>0.999</b>	<b>1.000</b>	<b>1.000</b>	<b>0.999</b>	<b>1.001</b>	<b>1.001</b>	<b>1.019</b>
<b>New Industry Mix x New Wages</b>	845.0	861.4	896.1	896.1	924.6	925.3	930.4	946.3	973.8	997.1	1,037.9	1,072.7	1,116.2	1,196.1
<b>Old Industry Mix x New Wages</b>	847.4	865.5	897.2	897.2	924.4	925.2	930.8	947.8	973.8	997.5	1,038.9	1,071.1	1,115.4	1,174.5
<b>Paasche Index</b>	<b>0.997</b>	<b>0.997</b>	<b>0.995</b>	<b>0.999</b>	<b>1.000</b>	<b>1.000</b>	<b>1.000</b>	<b>0.998</b>	<b>1.000</b>	<b>1.000</b>	<b>0.999</b>	<b>1.002</b>	<b>1.001</b>	<b>1.018</b>
<b>Geomean of Laspeyres and Paasche Indices</b>	<b>0.997</b>	<b>0.997</b>	<b>0.995</b>	<b>0.999</b>	<b>1.000</b>	<b>1.000</b>	<b>0.999</b>	<b>0.999</b>	<b>1.000</b>	<b>1.000</b>	<b>0.999</b>	<b>1.001</b>	<b>1.001</b>	<b>1.018</b>

**Exhibit 2.1: Change in Average Wage Due to Industrial Mix**  
**Bureau of Labor Statistics Quarterly Census of Employment and Wages Data Series/UCLA Anderson Forecas**

NAICS	QCEW Average Annual Wage											Average Relativity			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		1-Yr	3-Yr	5-Yr	
11	24,773	25,563	26,636	27,740	28,751	30,283	32,316	33,299	34,521	36,212		0.508	0.506	0.504	
21	129,811	128,432	134,410	135,181	138,053	136,862	134,266	121,769	123,590	124,226		1.743	1.798	1.949	
22	100,108	104,672	107,762	114,079	114,900	124,352	123,633	130,445	131,945	138,608		1.944	1.950	1.966	
23	54,865	56,206	57,999	58,211	59,464	62,257	64,472	67,561	70,084	73,343		1.029	1.026	1.022	
31	72,561	74,882	77,364	77,916	81,368	83,868	87,160	92,246	95,627	98,222		1.378	1.391	1.384	
42	64,348	66,794	68,407	68,871	71,780	75,654	75,496	78,610	78,293	80,979		1.136	1.157	1.180	
44	30,893	31,552	32,560	32,412	33,175	34,630	34,527	35,466	36,669	38,129		0.535	0.536	0.544	
48	46,212	47,426	48,609	49,300	50,140	51,582	53,153	54,446	56,960	62,833		0.881	0.846	0.844	
51	99,973	106,238	113,046	132,339	136,214	145,627	147,264	172,309	188,173	191,278		2.683	2.681	2.549	
52	92,300	95,702	101,367	101,804	108,366	113,062	116,415	123,665	128,085	135,130		1.024	1.018	1.017	
53	48,610	51,329	54,309	55,792	59,119	62,541	63,903	67,607	68,901	72,964		1.900	1.940	1.971	
54	89,642	93,421	102,250	97,589	103,921	111,771	111,856	116,802	122,460	127,874		0.674	0.672	0.673	
55	94,264	100,545	105,363	110,264	118,880	123,826	127,534	128,485	134,943	135,414		0.789	0.801	0.809	
56	36,553	37,777	39,322	38,769	39,477	41,402	42,513	44,781	45,463	48,062		0.752	0.757	0.768	
61	44,426	45,413	46,134	47,197	48,787	50,571	51,782	53,389	54,989	56,271		0.868	0.872	0.877	
62	52,389	53,506	54,406	46,218	46,848	48,396	49,321	50,401	51,795	53,580		0.374	0.367	0.364	
71	49,369	51,591	53,066	52,164	53,678	54,527	55,447	57,842	59,737	61,870		0.593	0.600	0.598	
72	19,010	19,422	19,827	19,944	20,570	21,778	23,022	23,858	25,006	26,675		1.019	1.023	1.031	
81	25,919	26,178	24,209	34,171	35,023	36,446	37,701	40,412	40,668	42,293		0.508	0.506	0.504	
92	57,002	58,575	59,506	60,189	62,175	64,138	65,787	67,701	70,128	72,662		1.743	1.784	1.789	
Total	53,699	55,412	57,389	57,092	59,036	61,653	62,950	65,922	68,501	71,284		1.019	1.023	1.031	

NAICS	Average Annual Wage Relativity											Average Relativity			
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		1-Yr	3-Yr	5-Yr	
11	0.461	0.461	0.464	0.486	0.487	0.491	0.513	0.505	0.504	0.508		0.508	0.506	0.504	
21	2.417	2.318	2.342	2.368	2.338	2.220	2.133	1.847	1.804	1.743		1.743	1.798	1.949	
22	1.864	1.889	1.878	1.998	1.946	2.017	1.964	1.979	1.926	1.944		1.944	1.950	1.966	
23	1.022	1.014	1.011	1.020	1.007	1.010	1.024	1.025	1.023	1.029		1.029	1.026	1.022	
31	1.351	1.351	1.348	1.365	1.378	1.360	1.385	1.399	1.396	1.378		1.378	1.391	1.384	
42	1.198	1.205	1.192	1.206	1.216	1.227	1.199	1.192	1.143	1.136		1.136	1.157	1.180	
44	0.575	0.569	0.567	0.568	0.562	0.562	0.548	0.538	0.535	0.535		0.535	0.536	0.544	
48	0.861	0.856	0.847	0.864	0.849	0.837	0.844	0.826	0.832	0.881		0.881	0.846	0.844	
51	1.862	1.917	1.970	2.318	2.307	2.362	2.339	2.614	2.747	2.683		2.683	2.681	2.549	
52	1.719	1.727	1.766	1.783	1.836	1.834	1.849	1.876	1.870	1.896		1.896	1.880	1.865	
53	0.905	0.926	0.946	0.977	1.001	1.014	1.015	1.026	1.006	1.024		1.024	1.018	1.017	
54	1.669	1.686	1.782	1.709	1.760	1.813	1.777	1.772	1.788	1.794		1.794	1.784	1.789	
55	1.755	1.815	1.836	1.931	2.014	2.008	2.026	1.949	1.970	1.900		1.900	1.940	1.971	
56	0.681	0.682	0.685	0.679	0.669	0.672	0.675	0.679	0.664	0.674		0.674	0.672	0.673	
61	0.827	0.820	0.804	0.827	0.826	0.820	0.823	0.810	0.803	0.789		0.789	0.801	0.809	
62	0.976	0.966	0.948	0.810	0.794	0.785	0.783	0.765	0.756	0.752		0.752	0.757	0.768	
71	0.919	0.931	0.925	0.914	0.909	0.884	0.881	0.877	0.872	0.868		0.868	0.872	0.877	
72	0.354	0.351	0.345	0.349	0.348	0.353	0.366	0.362	0.365	0.374		0.374	0.367	0.364	
81	0.483	0.472	0.422	0.599	0.593	0.591	0.599	0.613	0.594	0.598		0.593	0.600	0.598	
92	1.062	1.057	1.037	1.054	1.053	1.040	1.045	1.027	1.024	1.019		1.019	1.023	1.031	

**Exhibit 2.2: Change in Average Wage Due to Industrial Mix**  
**Bureau of Labor Statistics Quarterly Census of Employment and Wages Data Series/UCLA Anderson Forecast**

NAICS	UCLA Employment														
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
11	382,925	389,800	399,925	412,833	416,675	422,450	425,317	422,300	421,583	423,950	357,131	378,629	404,890	414,519	
21	24,617	26,700	28,333	28,308	29,242	26,425	22,292	21,867	22,425	22,517	22,163	21,708	21,645	21,943	
22	57,788	58,591	59,587	59,085	58,148	58,240	59,357	58,084	57,046	60,136	59,102	60,735	62,712	64,842	
23	559,917	561,608	590,258	637,717	674,550	731,758	775,367	810,167	860,283	883,783	850,690	881,686	891,481	911,079	
31	1,247,442	1,254,108	1,259,608	1,261,683	1,279,650	1,302,350	1,309,067	1,311,692	1,322,983	1,323,017	1,240,930	1,250,303	1,283,830	1,323,241	
42	629,642	642,250	656,475	671,250	683,283	690,850	693,150	695,950	698,975	694,467	660,736	674,059	681,094	688,797	
44	1,516,675	1,545,258	1,568,875	1,593,225	1,627,667	1,660,292	1,679,767	1,688,400	1,683,758	1,656,692	1,537,691	1,606,579	1,589,344	1,563,183	
48	408,912	416,134	428,405	444,590	466,385	498,985	535,110	573,941	607,588	640,505	629,488	646,880	667,933	690,629	
51	428,342	431,383	436,633	450,200	463,475	488,167	526,608	529,933	543,525	562,517	534,799	562,816	589,533	618,966	
52	511,700	514,387	522,216	523,459	516,632	529,835	544,465	546,942	544,873	546,986	547,439	558,759	564,988	574,130	
53	249,033	247,772	251,534	259,624	266,135	272,532	278,494	285,849	293,285	294,422	294,666	300,759	304,112	309,033	
54	1,015,915	1,049,394	1,101,396	1,139,165	1,169,641	1,194,317	1,214,505	1,241,090	1,283,148	1,309,325	1,254,980	1,315,287	1,404,970	1,450,980	
55	206,879	211,617	218,141	230,072	234,448	235,986	235,069	245,141	254,846	260,045	249,251	261,229	279,041	288,179	
56	860,781	880,739	930,021	978,755	1,023,136	1,060,139	1,081,835	1,095,444	1,131,423	1,154,505	1,106,586	1,159,762	1,238,840	1,279,410	
61	292,635	307,723	317,134	327,372	339,573	347,311	354,540	363,553	374,816	386,208	372,119	383,385	393,210	399,048	
62	1,839,090	1,854,735	1,915,300	1,981,328	2,038,536	2,117,056	2,197,710	2,286,905	2,347,442	2,418,792	2,330,550	2,401,108	2,462,643	2,499,207	
71	242,078	245,845	254,963	264,976	274,738	284,958	300,227	307,169	315,495	321,672	246,972	278,332	299,503	313,523	
72	1,258,488	1,289,138	1,342,629	1,410,307	1,482,004	1,543,617	1,602,714	1,646,881	1,678,155	1,711,012	1,313,675	1,480,483	1,593,091	1,667,669	
81	483,442	492,367	503,550	515,658	534,842	543,442	553,483	563,775	571,842	576,442	483,372	509,666	557,710	580,299	
92	2,448,217	2,406,492	2,376,050	2,374,033	2,412,958	2,462,292	2,515,508	2,554,358	2,581,192	2,607,350	2,504,712	2,475,892	2,580,898	2,656,613	
Total	14,664,517	14,826,042	15,161,033	15,563,642	15,991,717	16,471,000	16,904,583	17,249,442	17,594,683	17,854,342	16,597,054	17,208,056	17,871,465	18,315,294	

**Statewide Average Wages**

Mix		2011	2012	2013	2014	2015	2016	2017	2018	2019
		Wages	Wages	Wages	Wages	Wages	Wages	Wages	Wages	Wages
New	New	55,412	57,389	57,092	59,036	61,653	62,950	65,922	68,501	71,284
Old	New	55,464	57,452	57,237	59,237	61,738	62,962	66,037	68,444	71,205
	Paasche Index	0.999	0.999	0.997	0.997	0.999	1.000	0.998	1.001	1.001
New	Old	53,647	55,337	57,256	56,905	58,952	61,638	62,852	65,971	68,574
Old	Old	53,699	55,412	57,389	57,092	59,036	61,653	62,950	65,922	68,501
	Laspeyres Index	0.999	0.999	0.998	0.997	0.999	1.000	0.998	1.001	1.001
<b>Geomean Index</b>		<b>0.999</b>	<b>0.999</b>	<b>0.998</b>	<b>0.997</b>	<b>0.999</b>	<b>1.000</b>	<b>0.998</b>	<b>1.001</b>	<b>1.001</b>

\* Change due to mix is calculated as the employment weighted average  
relativity in the stated year compared to the prior year.

Change Due to Mix*		2020	2021	2022	2023
Avg. Relt.	1-Yr	1.017	0.995	1.000	1.002
	3-Yr	1.018	0.995	1.000	1.002
	5-Yr	1.018	0.995	1.000	1.002

**Exhibit 3: Change in Average Wage Due to Wage Distribution**

**Share of Employment Gains or Losses by Wage Quartile**

Scenario	1	2	3	4	Total
1	25%	25%	25%	25%	100%
2	40%	30%	20%	10%	100%
3	50%	30%	15%	5%	100%
4	55%	30%	10%	5%	100%
5	100%	0%	0%	0%	100%

**Employment Gain or Loss by Wage Quartile - 2020**

Scenario	1	2	3	4	Total
1	-6.8%	-6.8%	-6.8%	-6.8%	-6.8%
2	10.7%	8.5%	5.2%	2.8%	-6.8%
3	13.4%	8.5%	3.9%	1.4%	-6.8%
4	14.7%	8.5%	2.6%	1.4%	-6.8%
5	27.3%	0.0%	0.0%	0.0%	-6.8%

**Employment Gain or Loss by Wage Quartile - 2021**

Scenario	1	2	3	4	Total
1	3.6%	3.6%	3.6%	3.6%	3.6%
2	-5.7%	-4.5%	-2.8%	-1.5%	3.6%
3	-7.1%	-4.5%	-2.1%	-0.7%	3.6%
4	-7.8%	-4.5%	-1.4%	-0.7%	3.6%
5	-14.5%	0.0%	0.0%	0.0%	3.6%

**Impact on Average Wage**

Scenario	2020	2021
1	0.0%	0.0%
2	2.5%	-1.2%
3	3.5%	-1.7%
4	3.8%	-1.8%
5	5.9%	-2.8%

Exhibit 4: Economic Variables

CY	Aggregate Employment	Unemployment Rate	Annual Log Differences		Economic Variables 1st Prin. Comp.
			Aggregate Employment	Unemployment Rate	
1961	3,961,384	6.90			
1962	4,144,806	5.80	0.045	-0.174	
1963	4,291,954	6.00	0.035	0.034	-0.029
1964	4,424,294	6.00	0.030	0.000	0.004
1965	4,544,588	5.90	0.027	-0.017	0.020
1966	4,791,717	4.90	0.053	-0.186	0.191
1967	4,926,847	5.70	0.028	0.151	-0.147
1968	5,132,196	5.40	0.041	-0.054	0.059
1969	5,366,754	5.20	0.045	-0.038	0.043
1970	5,334,044	7.30	-0.006	0.339	-0.337
1971	5,282,585	8.79	-0.010	0.186	-0.186
1972	6,019,812	7.61	0.131	-0.145	0.160
1973	6,497,659	7.02	0.076	-0.081	0.090
1974	6,706,356	7.30	0.032	0.040	-0.035
1975	6,682,097	9.88	-0.004	0.302	-0.300
1976	7,257,806	9.17	0.083	-0.075	0.084
1977	7,678,371	8.25	0.056	-0.105	0.112
1978	9,198,786	7.11	0.181	-0.149	0.171
1979	9,617,306	6.24	0.044	-0.130	0.134
1980	10,264,517	6.83	0.065	0.090	-0.081
1981	10,403,370	7.41	0.013	0.081	-0.079
1982	10,230,275	9.95	-0.017	0.294	-0.294
1983	10,329,942	9.68	0.010	-0.028	0.029
1984	10,820,932	7.79	0.046	-0.218	0.222
1985	11,173,091	7.21	0.032	-0.077	0.080
1986	11,483,890	6.69	0.027	-0.075	0.078
1987	11,888,129	5.77	0.035	-0.148	0.151
1988	12,355,278	5.31	0.039	-0.084	0.088
1989	12,686,848	5.09	0.026	-0.042	0.045
1990	12,940,808	5.77	0.020	0.125	-0.121
1991	12,776,338	7.74	-0.013	0.294	-0.293
1992	12,576,366	9.32	-0.016	0.186	-0.186
1993	12,477,367	9.52	-0.008	0.021	-0.022
1994	12,609,908	8.56	0.011	-0.106	0.106
1995	12,867,375	7.82	0.020	-0.090	0.092
1996	13,225,422	7.28	0.027	-0.072	0.074
1997	13,619,654	6.37	0.029	-0.135	0.137
1998	14,082,965	5.91	0.033	-0.075	0.078
1999	14,479,767	5.21	0.028	-0.125	0.128
2000	14,992,265	4.90	0.035	-0.062	0.066
2001	15,098,050	5.43	0.007	0.103	-0.101
2002	14,972,541	6.65	-0.008	0.203	-0.202
2003	14,950,702	6.81	-0.001	0.023	-0.023
2004	15,130,469	6.20	0.012	-0.093	0.093
2005	15,422,217	5.40	0.019	-0.139	0.141
2006	15,697,957	4.92	0.018	-0.093	0.095
2007	15,844,029	5.36	0.009	0.087	-0.085
2008	15,689,423	7.31	-0.010	0.310	-0.309
2009	14,807,953	11.15	-0.058	0.423	-0.427
2010	14,664,517	12.22	-0.010	0.091	-0.092
2011	14,826,042	11.72	0.011	-0.042	0.043
2012	15,161,033	10.38	0.022	-0.121	0.123
2013	15,563,642	8.94	0.026	-0.149	0.151
2014	15,991,717	7.50	0.027	-0.176	0.178
2015	16,471,000	6.19	0.030	-0.191	0.193
2016	16,904,583	5.49	0.026	-0.122	0.124
2017	17,249,442	4.79	0.020	-0.135	0.136
2018	17,594,683	4.26	0.020	-0.118	0.119
2019	17,854,342	4.04	0.015	-0.052	0.053
2020	16,597,054	10.22	-0.073	0.927	-0.929
2021	17,208,059	6.94	0.036	-0.387	0.388
2022	17,871,465	5.17	0.038	-0.295	0.298
2023	18,315,294	4.43	0.025	-0.154	0.156

Notes: The first principal component is of the annual log difference data from 1962-2020.  
The first principal component of the annual log difference of the economic variables is:  
1st PC of Econ Variables = -0.1246162 x Aggregate Employment + 0.992205 x Unemployment Rate

Sources: Government historical labor statistics through 2019  
UCLA Anderson forecasts through 2023 are as of December 2020

**Exhibit 5: Modeled Frequency Changes  
with Assumed Changes in Cumulative Claim Filing**

<b>AY</b>	Assumed Cumulative Inj. Index	Frequency Change	
		with Adjustment	without Adjustment
2020	0.109	-6.8%	<b>-11.2%</b>
2021	-0.004	2.1%	<b>2.2%</b>
2022	0.000	1.2%	<b>1.2%</b>
2023	0.000	-0.3%	<b>-0.3%</b>

**Unadjusted model projections**

**Exhibit 6: 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	0.483	0.921	0.582	---	---	---
1980	0.452	0.914	0.540	-6.54%	-0.75%	-7.24%
1981	0.436	0.900	0.513	-3.54%	-1.56%	-5.04%
1982	0.429	0.882	0.495	-1.59%	-2.00%	-3.56%
1983	0.456	0.873	0.520	6.20%	-0.98%	5.17%
1984	0.499	0.871	0.569	9.53%	-0.18%	9.32%
1985	0.509	0.867	0.578	2.05%	-0.51%	1.52%
1986	0.497	0.859	0.559	-2.39%	-0.92%	-3.28%
1987	0.505	0.854	0.564	1.53%	-0.56%	0.97%
1988	0.508	0.854	0.568	0.69%	-0.06%	0.64%
1989	0.521	0.853	0.581	2.47%	-0.08%	2.39%
1990	0.568	0.845	0.628	9.04%	-0.89%	8.07%
1991	0.569	0.832	0.620	0.28%	-1.58%	-1.30%
1992	0.506	0.820	0.543	-11.09%	-1.45%	-12.37%
1993	0.431	0.810	0.456	-14.91%	-1.25%	-15.98%
1994	0.376	0.809	0.398	-12.76%	-0.06%	-12.81%
1995	0.358	0.811	0.380	-4.64%	0.16%	-4.49%
1996	0.334	0.800	0.350	-6.78%	-1.25%	-7.94%
1997	0.323	0.791	0.334	-3.27%	-1.23%	-4.46%
1998	0.311	0.786	0.320	-3.76%	-0.60%	-4.34%
1999	0.315	0.774	0.320	1.45%	-1.48%	-0.05%
2000	0.328	0.752	0.323	4.02%	-2.91%	0.99%
2001	0.305	0.753	0.301	-6.91%	0.13%	-6.79%
2002	0.298	0.763	0.298	-2.31%	1.34%	-1.00%
2003	0.290	0.764	0.290	-2.86%	0.20%	-2.67%
2004	0.242	0.763	0.241	-16.65%	-0.21%	-16.82%
2005	0.209	0.760	0.208	-13.59%	-0.31%	-13.85%
2006	0.197	0.754	0.194	-5.69%	-0.81%	-6.46%
2007	0.194	0.749	0.190	-1.64%	-0.68%	-2.31%
2008	0.188	0.740	0.183	-2.71%	-1.18%	-3.86%
2009	0.188	0.727	0.179	-0.20%	-1.82%	-2.02%
2010	0.205	0.713	0.191	8.87%	-1.87%	6.83%
2011	0.207	0.703	0.191	1.22%	-1.42%	-0.22%
2012	0.217	0.694	0.197	4.71%	-1.20%	3.46%
2013	0.218	0.692	0.197	0.36%	-0.36%	0.00%
2014	0.218	0.693	0.198	0.16%	0.21%	0.37%
2015	0.215	0.689	0.194	-1.39%	-0.60%	-1.98%
2016	0.209	0.684	0.188	-2.61%	-0.75%	-3.34%
2017	0.205	0.679	0.182	-2.07%	-0.72%	-2.77%
2018(c)	0.203	0.676	0.180	-1.01%	-0.53%	-1.53%
2018(d)	0.199	0.676	0.176	---	---	---
2019(e)	0.199	0.675	0.176	0.09%	-0.09%	0.00%
2020	0.186	0.657	0.160	-6.82%	-2.67%	-9.31%
2021	0.190	0.661	0.164	2.05%	0.63%	2.69%
2022	0.192	0.658	0.165	1.25%	-0.46%	0.78%
2023	0.192	0.657	0.165	-0.27%	-0.13%	-0.40%

Notes: (a) All frequencies are per \$M exposure at PY 2019 Level.  
 (b) Index is to AY 1961.  
 (c) 2018 accidents on 2018 and 2017 policies.  
 (d) 2018 accidents on 2017 policies only.  
 (e) AY 2019 percent changes are based on a comparison of 2019 accidents on 2018 policies to 2018 accidents on 2017 policies.  
 (f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

Exhibit 7: Deviation of Projected Indemnity Count Distribution

NAICS	UCLA CY Employment					Employment Change				Count Distribution				
	2019	2020	2021	2022	2023	2020	2021	2022	2023	2019	2020	2021	2022	2023
11&21	446,467	379,295	400,337	426,535	436,463	-15.0%	5.5%	6.5%	2.3%	5.4%	5.0%	5.1%	5.3%	5.3%
22&23	943,920	909,792	942,421	954,192	975,922	-3.6%	3.6%	1.2%	2.3%	11.2%	11.7%	11.7%	11.4%	11.4%
31	1,323,017	1,240,930	1,250,303	1,283,830	1,323,241	-6.2%	0.8%	2.7%	3.1%	15.9%	16.3%	15.7%	15.6%	15.7%
42	694,467	660,736	674,059	681,094	688,797	-4.9%	2.0%	1.0%	1.1%	7.9%	8.2%	8.0%	7.8%	7.7%
44	1,656,692	1,537,691	1,606,579	1,589,344	1,563,183	-7.2%	4.5%	-1.1%	-1.6%	11.0%	11.2%	11.2%	10.7%	10.3%
48	640,505	629,488	646,880	667,933	690,629	-1.7%	2.8%	3.3%	3.4%	7.4%	8.0%	7.9%	7.8%	7.9%
51	562,517	534,799	562,816	589,533	618,966	-4.9%	5.2%	4.7%	5.0%	2.2%	2.3%	2.3%	2.4%	2.4%
52	546,986	547,439	558,759	564,988	574,130	0.1%	2.1%	1.1%	1.6%	1.7%	1.9%	1.9%	1.8%	1.8%
53	294,422	294,666	300,759	304,112	309,033	0.1%	2.1%	1.1%	1.6%	2.3%	2.5%	2.4%	2.4%	2.4%
54	1,309,325	1,254,980	1,315,287	1,404,970	1,450,980	-4.2%	4.8%	6.8%	3.3%	2.2%	2.3%	2.3%	2.4%	2.4%
56	1,154,505	1,106,586	1,159,762	1,238,840	1,279,410	-4.2%	4.8%	6.8%	3.3%	5.1%	5.4%	5.4%	5.6%	5.6%
61	386,208	372,119	383,385	393,210	399,048	-3.6%	3.0%	2.6%	1.5%	1.6%	1.7%	1.7%	1.7%	1.6%
62	2,418,792	2,330,550	2,401,108	2,462,643	2,499,207	-3.6%	3.0%	2.6%	1.5%	7.6%	8.0%	7.9%	7.9%	7.8%
71	321,672	246,972	278,332	299,503	313,523	-23.2%	12.7%	7.6%	4.7%	2.0%	1.7%	1.8%	1.9%	1.9%
72	1,711,012	1,313,675	1,480,483	1,593,091	1,667,669	-23.2%	12.7%	7.6%	4.7%	12.8%	10.7%	11.6%	12.0%	12.3%
81	576,442	483,372	509,666	557,710	580,299	-16.1%	5.4%	9.4%	4.1%	3.4%	3.1%	3.1%	3.3%	3.3%
Total	17,854,342	16,597,054	17,208,056	17,871,465	18,315,294	-7.0%	3.7%	3.9%	2.5%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: AY 2019 count distribution is taken as PY 2018 value from USR.  
Example calculation for 2020 - 2023:

$$5.0\% = \frac{5.4\% \times (1 - 15.0\%)}{\sum (B \times (1 + A))}$$

Exhibit 8.1: Change in Indemnity Severity due to Industry Mix

NAICS	Indemnity Severity Developed to 5th RL by PY							Severity Relativity			Severity Change Due to Industry Mix		
	2014	2015	2016	2017	2018	1-Yr	3-Yr	5-Yr	1-Yr	3-Yr	2020	2021	2022
11&21	17,412	17,261	17,935	19,224	19,941	0.734	0.785	0.787	1-Yr	1.42%	1.42%	-0.49%	-0.29%
22&23	33,254	33,047	35,094	37,007	42,116	1.551	1.565	1.543	3-Yr	1.38%	1.38%	-0.45%	-0.01%
31	23,363	23,407	21,976	25,628	31,433	1.158	1.077	1.072	5-Yr	1.37%	1.37%	-0.45%	-0.01%
42	20,071	21,388	21,316	21,300	24,149	0.889	0.917	0.928					
44	19,279	19,144	19,701	19,844	22,967	0.846	0.857	0.864					
48	26,339	26,395	25,851	27,076	29,056	1.070	1.126	1.156					
51	27,812	29,005	28,563	30,548	36,287	1.336	1.305	1.300					
52	26,172	26,523	28,622	32,252	37,313	1.374	1.342	1.285					
53	24,266	22,640	23,966	24,937	30,466	1.122	1.085	1.078					
54	24,026	23,220	24,452	23,643	27,141	1.000	1.033	1.050					
56	22,429	22,267	24,119	23,755	29,471	1.085	1.059	1.042					
61	17,848	18,710	17,910	18,311	18,960	0.698	0.760	0.789					
62	19,568	19,913	20,242	21,096	23,212	0.855	0.886	0.891					
71	17,225	19,258	17,959	21,638	24,600	0.906	0.876	0.858					
72	13,549	13,719	13,925	14,256	16,010	0.590	0.606	0.612					
81	21,089	21,110	21,008	23,099	25,190	0.928	0.950	0.954					
Total	21,891	22,018	22,209	23,654	27,154	1.000	1.000	1.000					

$$\begin{array}{c}
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 \end{array}
 =
 \begin{array}{c}
 (D \times C) \\
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 (D \times B)
 \end{array}$$

Exhibit 8.2: Change in Medical Severity due to Industry Mix

NAICS	Medical Severity Developed to 5th RL by PY							Severity Relativity			Severity Change Due to Industry Mix			
	2014	2015	2016	2017	2018	1-Yr	3-Yr	5-Yr	1-Yr	3-Yr	2020	2021	2022	2023
11&21	21,969	20,991	21,107	24,117	23,788	0.938	0.959	0.948	1-Yr		0.99%	-0.36%	-0.21%	0.00%
22&23	33,958	33,830	36,516	37,835	38,403	1.514	1.569	1.529	3-Yr		0.95%	-0.31%	-0.22%	-0.02%
31	24,153	23,767	21,259	25,803	28,869	1.138	1.051	1.046	5-Yr		0.92%	-0.31%	-0.20%	-0.01%
42	22,863	22,783	22,882	20,884	21,494	0.847	0.910	0.942						
44	20,412	19,211	20,443	19,663	22,110	0.872	0.866	0.863						
48	25,296	22,972	21,637	24,493	22,856	0.901	0.960	0.994						
51	21,356	23,134	20,884	22,999	27,663	1.091	0.991	0.981						
52	25,977	26,783	27,463	32,896	35,260	1.390	1.326	1.253						
53	25,838	22,057	23,423	25,647	30,023	1.184	1.096	1.073						
54	23,641	24,396	22,989	26,229	24,507	0.966	1.026	1.032						
56	25,290	22,754	24,499	23,008	28,287	1.115	1.053	1.048						
61	20,493	21,748	18,808	22,871	19,280	0.760	0.849	0.875						
62	20,358	20,321	20,281	20,596	21,054	0.830	0.862	0.870						
71	18,393	20,133	19,239	24,964	22,699	0.895	0.929	0.891						
72	17,718	17,077	16,991	16,641	17,624	0.695	0.714	0.730						
81	23,601	22,864	20,243	22,978	23,452	0.925	0.926	0.958						
Total	23,389	22,763	22,512	24,072	25,366	1.000	1.000	1.000						

$$\begin{array}{c}
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 \end{array}
 = \frac{(\text{D} \times \text{C})}{(\text{D} \times \text{B})}$$

Exhibit 8.3: Change in Total Severity due to Industry Mix

NAICS	Total Severity Developed to 5th RL by PY							Severity Relativity			Severity Change Due to Industry Mix			
	2014	2015	2016	2017	2018	1-Yr	3-Yr	5-Yr	1-Yr	3-Yr	2020	2021	2022	2023
11&21	39,381	38,253	39,042	43,341	43,729	0.833	0.871	0.868	1-Yr		1.21%	-0.43%	-0.25%	0.00%
22&23	67,212	66,877	71,610	74,842	80,520	1.533	1.568	1.536	3-Yr		1.17%	-0.38%	-0.25%	-0.01%
31	47,516	47,174	43,234	51,431	60,302	1.148	1.064	1.059	5-Yr		1.14%	-0.38%	-0.24%	-0.01%
42	42,934	44,171	44,198	42,184	45,643	0.869	0.914	0.935						
44	39,691	38,354	40,145	39,507	45,077	0.858	0.861	0.863						
48	51,635	49,366	47,488	51,568	51,912	0.988	1.044	1.075						
51	49,168	52,139	49,448	53,548	63,950	1.218	1.148	1.139						
52	52,149	53,305	56,085	65,148	72,573	1.382	1.334	1.269						
53	50,103	44,697	47,390	50,583	60,489	1.152	1.090	1.075						
54	47,667	47,616	47,441	49,872	51,648	0.983	1.030	1.041						
56	47,719	45,021	48,617	46,763	57,758	1.100	1.056	1.045						
61	38,341	40,458	36,718	41,182	38,240	0.728	0.804	0.832						
62	39,926	40,234	40,523	41,693	44,267	0.843	0.874	0.881						
71	35,618	39,390	37,197	46,601	47,299	0.901	0.903	0.875						
72	31,266	30,796	30,915	30,897	33,634	0.640	0.660	0.671						
81	44,690	43,974	41,252	46,077	48,642	0.926	0.938	0.957						
Total	45,280	44,781	44,721	47,726	52,520	1.000	1.000	1.000						

$$\begin{aligned}
 & \text{Severity Relativity} = \frac{\sum (\text{D} \times \text{C})}{\sum (\text{D} \times \text{B})} \\
 & \text{Change in Total Severity} = -38\%
 \end{aligned}$$

## **Item AC21-02-02**

### **Pandemic Impact on 2020 Development**

At the February 16, 2021 meeting, the Committee discussed an initial study on the impact of the COVID-19 pandemic on loss development emerging beginning in the second quarter of 2020 based on data through the third quarter of 2020. The study included a review of potential approaches to adjust for the distortions in the second quarter 2020 loss development for the impact of the stay-at-home orders. At the February 16, 2021 meeting, the Committee preliminarily agreed with staff's recommendation that the method which utilizes a two-year average of the Berquist-Sherman-adjusted paid loss development factors substantially adjusts for the distortions while not adding significant complexity to the loss development projection.

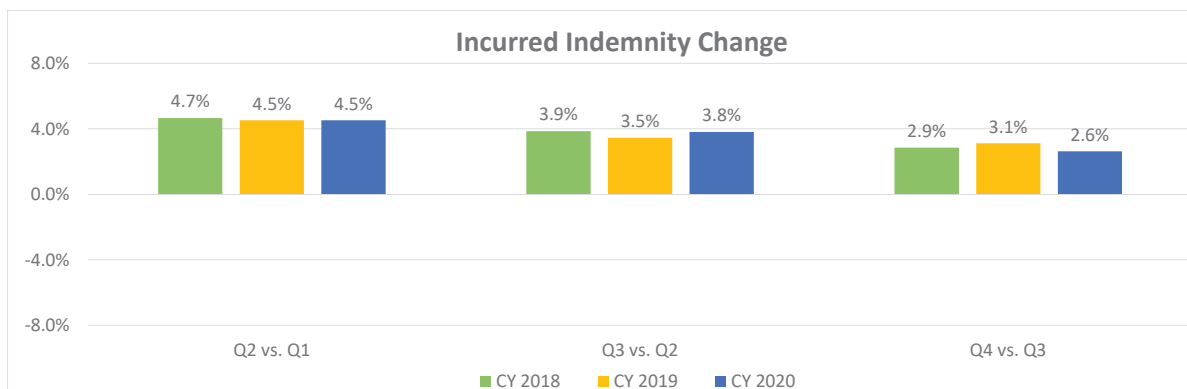
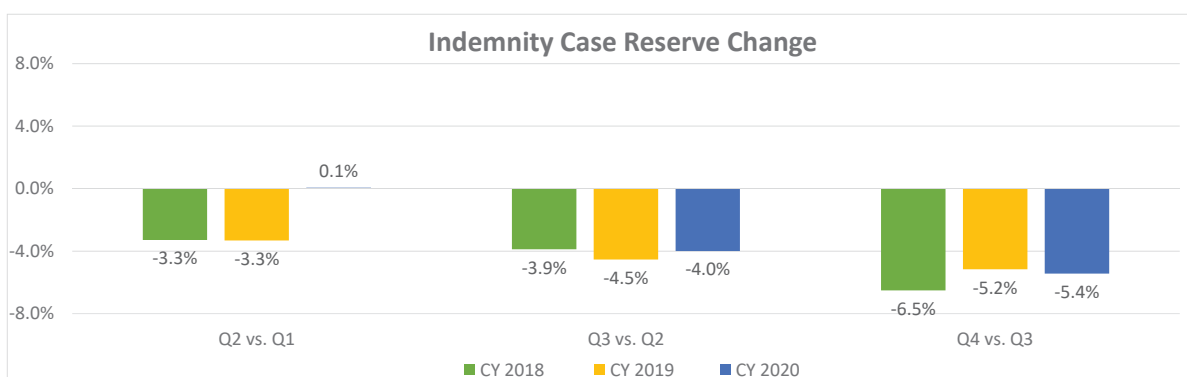
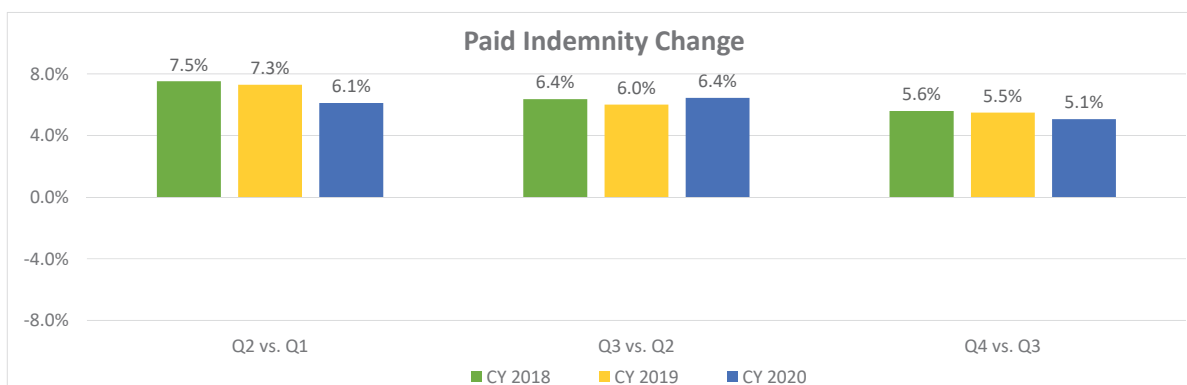
Exhibits 1.1 through 3.2 show comparisons of quarterly loss development changes that were discussed at the February 16, 2021 meeting and have been updated to include fourth quarter experience. Similar to the third quarter of 2020, paid and incurred development in the fourth quarter of 2020 was comparable to recent prior calendar years.

Exhibits 4.1 through 6 show information based on WCIRB medical transaction data that was discussed at the February 16, 2021 meeting (medical transaction data for the fourth quarter of 2020 will not be available until April). Exhibit 4.2 includes a comparison of average paid medical per transaction and average paid medical per claim. Average paid medical per transaction declined in the second quarter of 2020 but not as sharply as the decline in the number of transactions, which also declined sharply in the third quarter of 2020 (as shown in Exhibit 4.1).

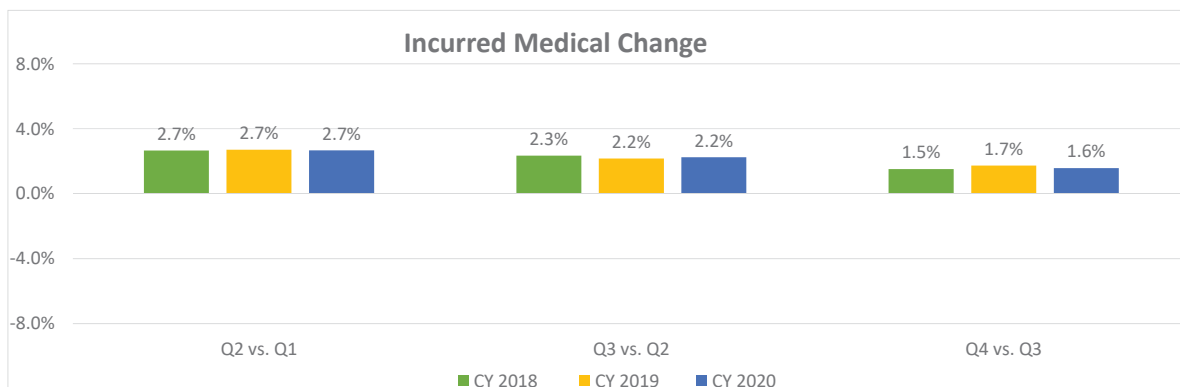
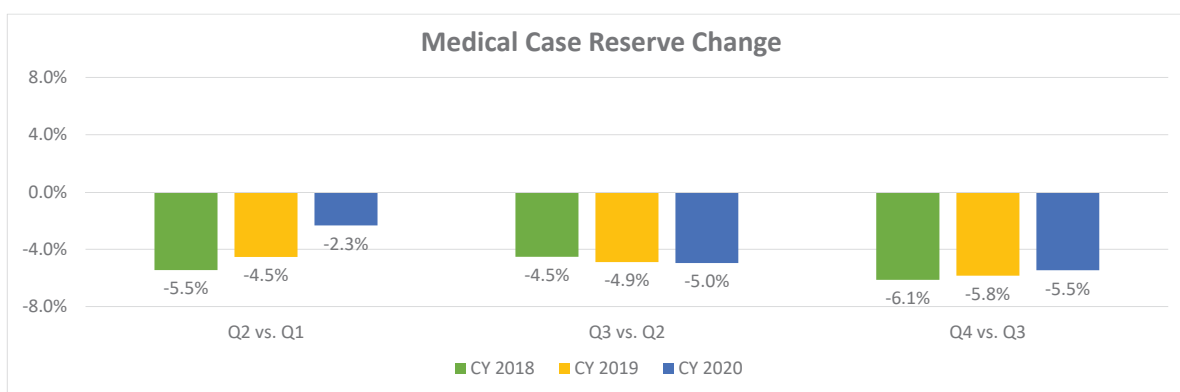
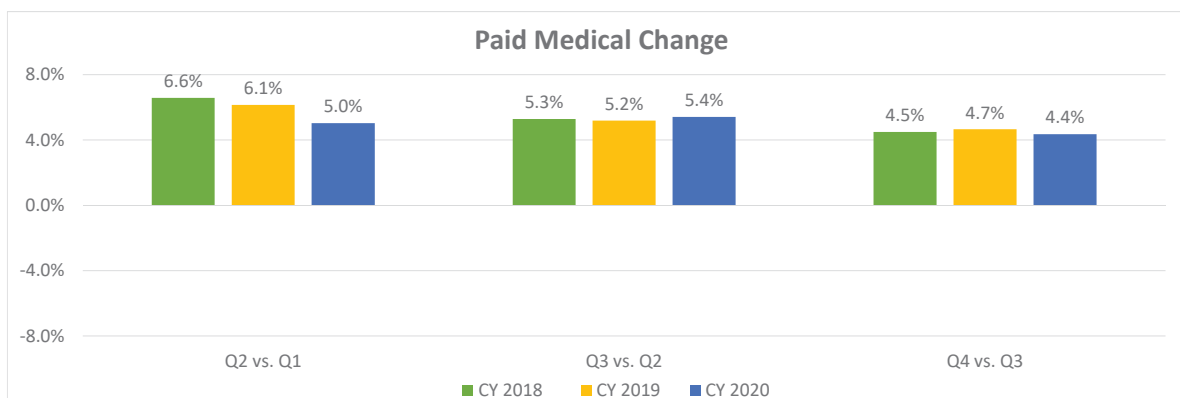
Exhibit 7 shows projected ultimate claim settlement rates by quarter (COVID-19 claims have been removed from accident year 2020). Claim settlement rates continued to emerge lower in the fourth quarter of 2020. Exhibit 8 shows the results of staff's sensitivity tests of the Berquist-Sherman adjustment to age-to-age paid development for changes in claim settlement rates, which were discussed at the February 16, 2021 meeting.

Exhibits 9.1 to 9.3 show the alternative methods to adjust for the distortions in second quarter 2020 loss development, which were discussed at the February 16, 2021 meeting. These approaches are prior to reflecting the impact of the Berquist-Sherman adjustments. Exhibits 10.1 to 10.3 show analogous information but for which the age-to-age paid development factors are adjusted for the Berquist-Sherman approach. To derive the impact of the claim settlement rate adjustments on a quarterly basis, the annualized impact was distributed proportionately to each quarter. As shown in Exhibit 10.3, after adjusting for changes in claim settlement rates, the difference in the cumulative paid loss development factors are more modest (as compared to the analogous information shown in Exhibit 9.3). In addition, the approach that uses the average of the two most recent years has a generally similar impact compared to the approaches that substitute the second and third quarter 2020 development with development in 2019. As discussed at the February 16, 2021 meeting, staff recommends this approach given its relative simplicity compared to the substitution methods. The impact of this approach on projected loss development as of December 31, 2020 experience will be discussed at the meeting.

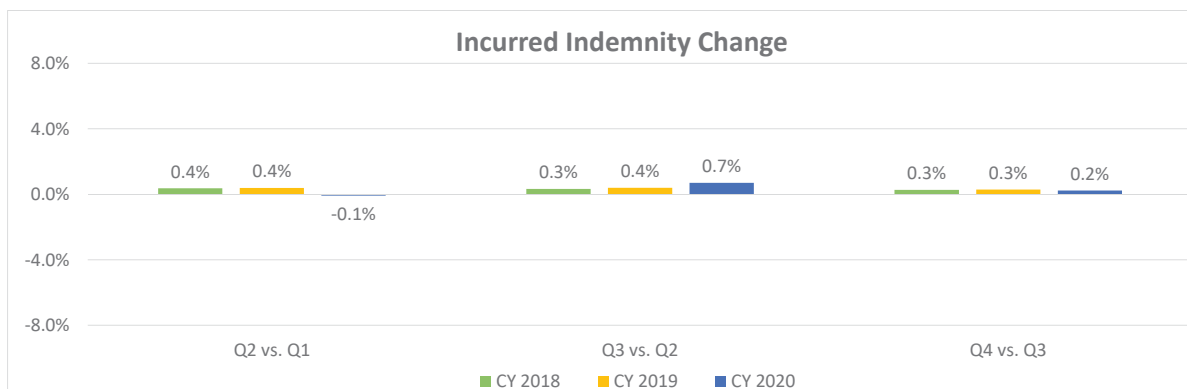
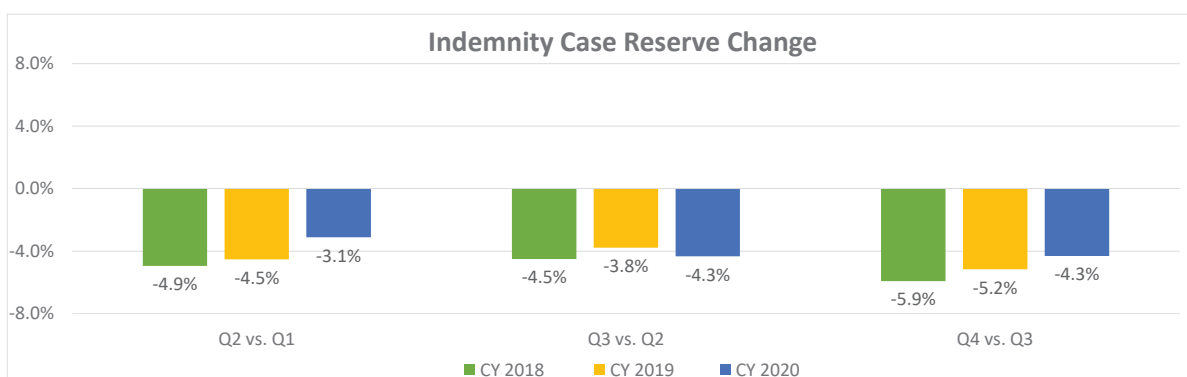
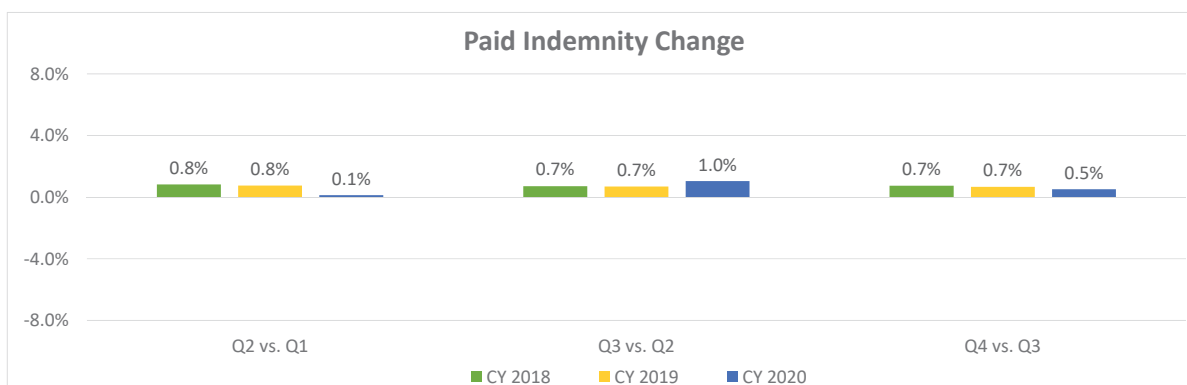
Quarterly Loss Change for the 2nd through 6th Least Mature Accident Years



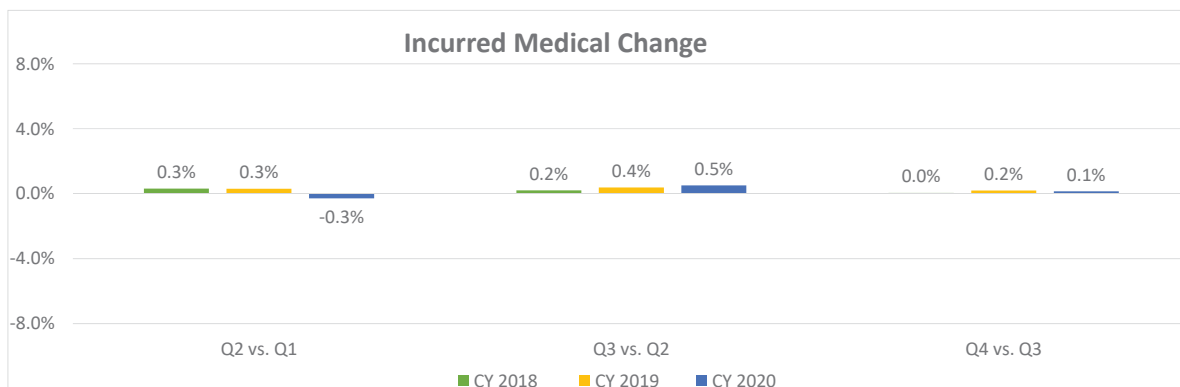
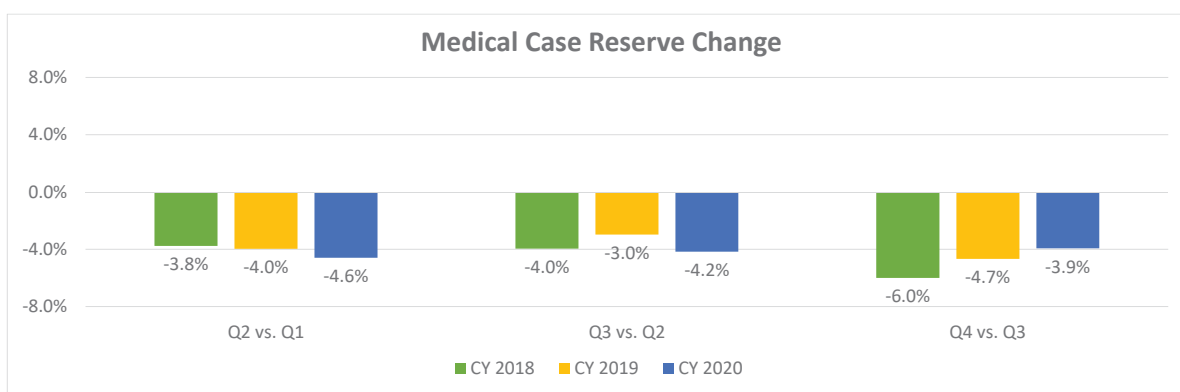
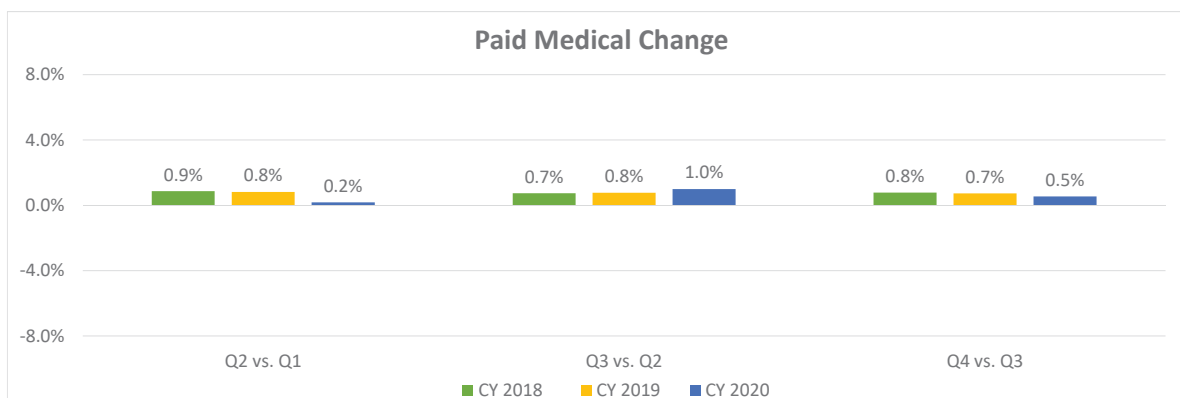
**Quarterly Loss Change for the 2nd through 6th Least Mature Accident Years**



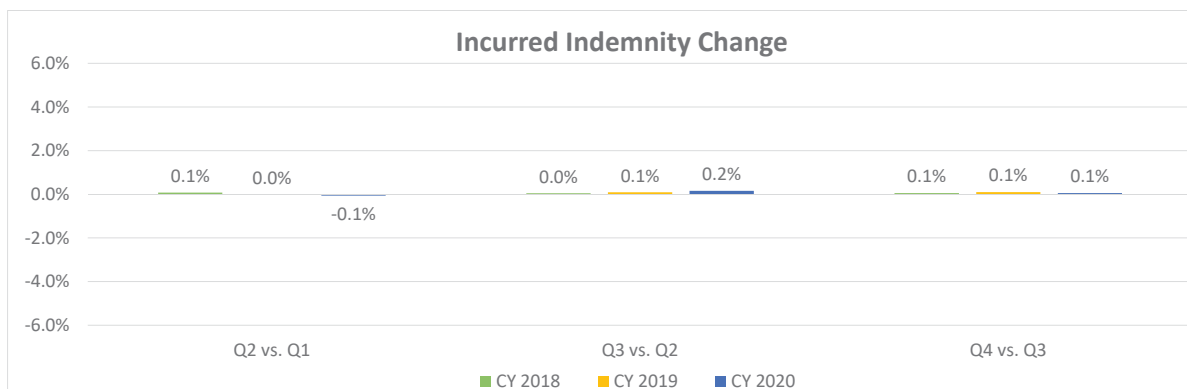
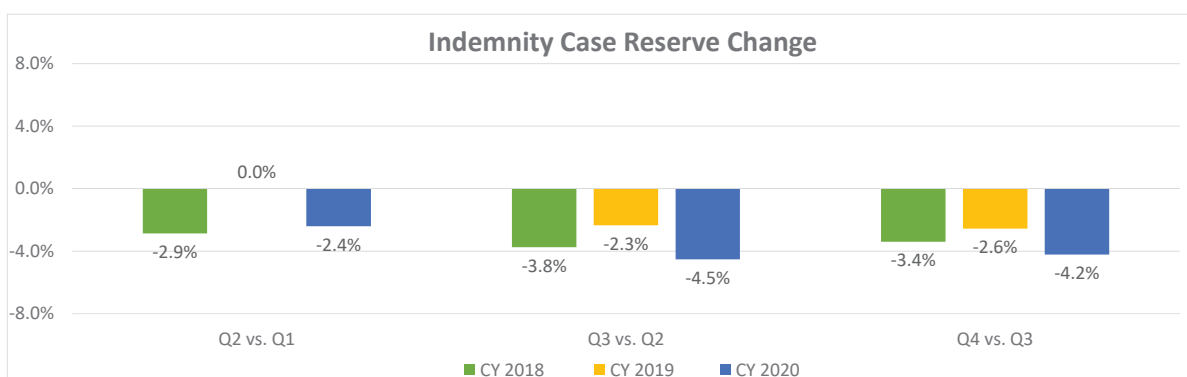
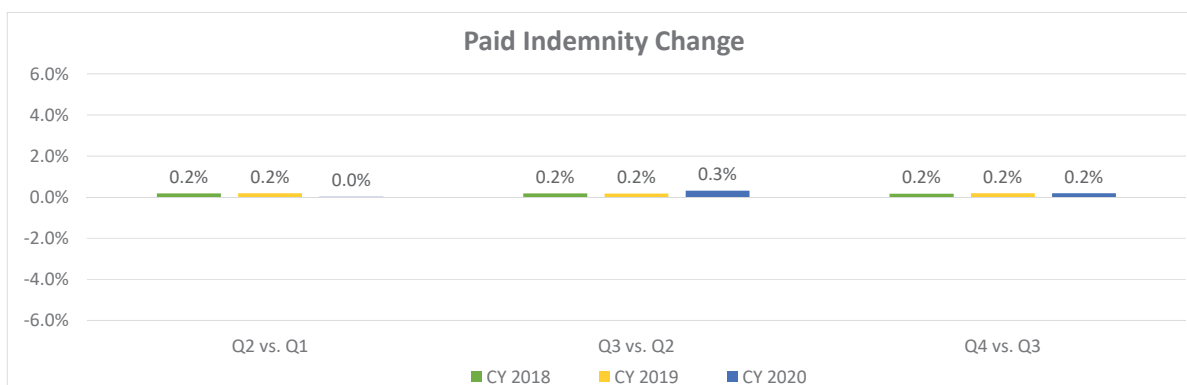
**Quarterly Loss Change for the 7th through 11th Least Mature Accident Years**



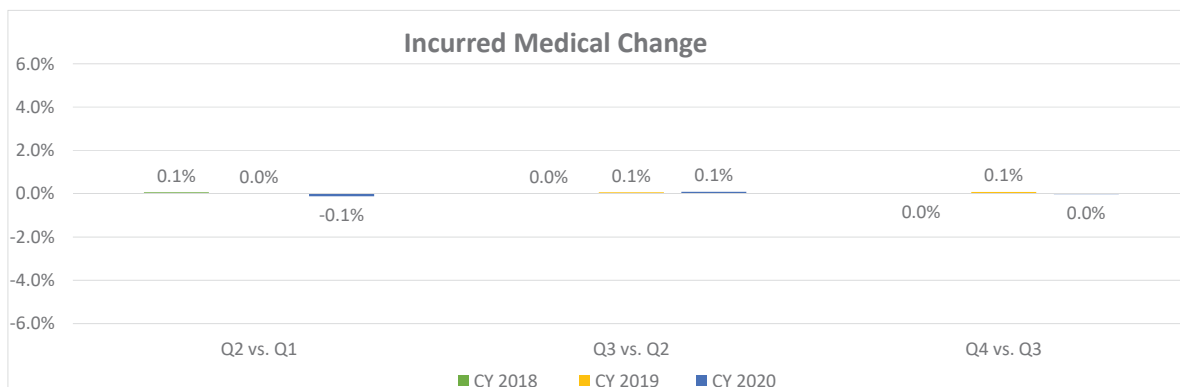
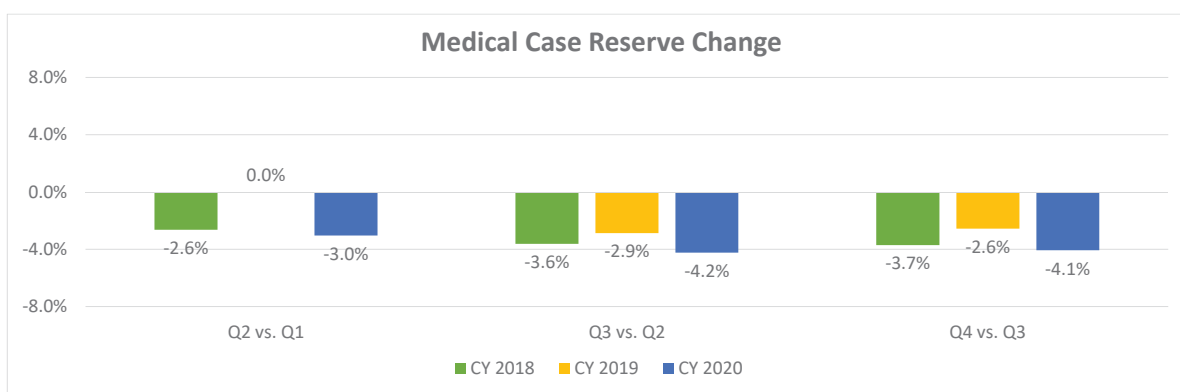
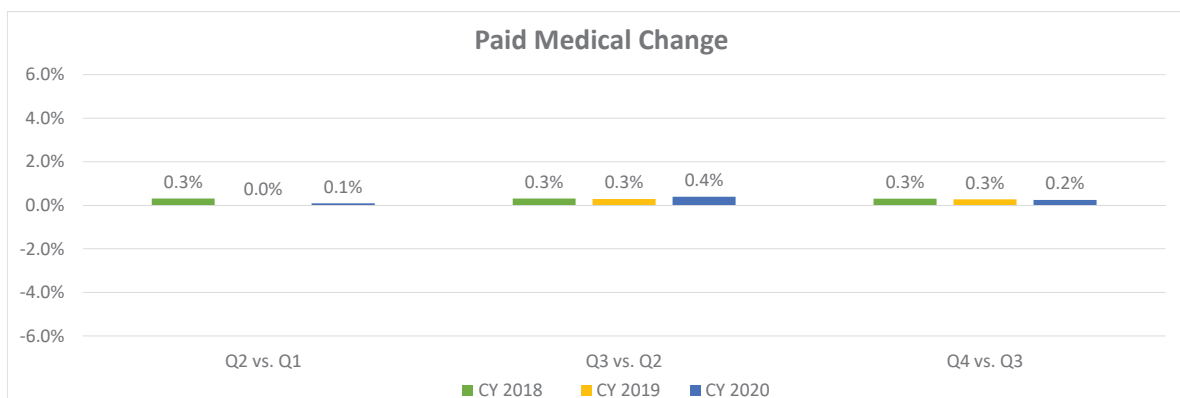
Quarterly Loss Change for the 7th through 11th Least Mature Accident Years



Quarterly Loss Change for the 12th through 21th Least Mature Accident Years



Quarterly Loss Change for the 12th through 21th Least Mature Accident Years



**Calendar Quarter Medical Payments (\$000)**

All Accident Years					Excluding Latest Accident Year				
Cal. Qtr.	1st	2nd	3rd	4th	Cal. Qtr.	1st	2nd	3rd	4th
2015	524,748	516,993	533,895	497,896	2015	498,544	418,178	387,189	327,739
2016	508,391	509,214	535,464	515,026	2016	478,965	409,373	375,388	325,145
2017	499,907	523,572	494,729	497,432	2017	463,944	405,563	334,288	300,122
2018	501,018	511,598	499,011	476,370	2018	463,632	388,443	324,797	276,748
2019	481,514	473,159	484,360	467,618	2019	442,769	357,942	317,902	265,775
2020	471,809	405,591	428,827		2020	432,810	312,425	288,082	
						1st	2nd	3rd	4th
2015-16	-3.1%	-1.5%	0.3%	3.4%	2015-16	-3.9%	-2.1%	-3.0%	-0.8%
2016-17	-1.7%	2.8%	-7.6%	-3.4%	2016-17	-3.1%	-0.9%	-10.9%	-7.7%
2017-18	0.2%	-2.3%	0.9%	-4.2%	2017-18	-0.1%	-4.2%	-2.8%	-7.8%
2018-19	-3.9%	-7.5%	-2.9%	-1.8%	2018-19	-4.5%	-7.9%	-2.1%	-4.0%
2019-20	-2.0%	-14.3%	-11.5%		2019-20	-2.2%	-12.7%	-9.4%	

**Number of Claim Counts with Medical Payments**

All Accident Years					Excluding Latest Accident Year				
Cal. Qtr.	1st	2nd	3rd	4th	Cal. Qtr.	1st	2nd	3rd	4th
2015	300,423	306,177	310,169	301,445	2015	266,200	218,411	185,418	160,262
2016	303,169	310,077	320,130	313,933	2016	268,965	219,169	189,858	164,469
2017	303,975	304,587	309,816	306,585	2017	266,018	210,661	178,551	154,550
2018	299,915	301,766	304,993	299,214	2018	260,022	203,829	169,283	145,603
2019	288,711	291,512	294,309	295,295	2019	249,772	195,346	161,035	140,243
2020	284,591	260,684	251,640		2020	244,902	188,435	152,116	
2015-16	0.9%	1.3%	3.2%	4.1%	2015-16	1.0%	0.3%	2.4%	2.6%
2016-17	0.3%	-1.8%	-3.2%	-2.3%	2016-17	-1.1%	-3.9%	-6.0%	-6.0%
2017-18	-1.3%	-0.9%	-1.6%	-2.4%	2017-18	-2.3%	-3.2%	-5.2%	-5.8%
2018-19	-3.7%	-3.4%	-3.5%	-1.3%	2018-19	-3.9%	-4.2%	-4.9%	-3.7%
2019-20	-1.4%	-10.6%	-14.5%		2019-20	-1.9%	-3.5%	-5.5%	

**Number of Transactions (000) with Medical Payments**

All Accident Years					Excluding Latest Accident Year				
Cal. Qtr.	1st	2nd	3rd	4th	Cal. Qtr.	1st	2nd	3rd	4th
2015	4,012	4,014	4,005	3,734	2015	3,665	2,843	2,321	1,870
2016	3,920	3,888	4,120	3,980	2016	3,543	2,662	2,292	1,904
2017	3,850	3,910	3,898	3,916	2017	3,447	2,630	2,121	1,803
2018	3,764	3,872	3,744	3,678	2018	3,334	2,512	1,934	1,609
2019	3,540	3,564	3,670	3,536	2019	3,129	2,323	1,915	1,541
2020	3,404	3,076	3,057		2020	2,984	2,103	1,716	
2015-16	-2.3%	-3.1%	2.9%	6.6%	2015-16	-3.3%	-6.4%	-1.3%	1.8%
2016-17	-1.8%	0.6%	-5.4%	-1.6%	2016-17	-2.7%	-1.2%	-7.5%	-5.3%
2017-18	-2.2%	-1.0%	-3.9%	-6.1%	2017-18	-3.3%	-4.5%	-8.8%	-10.7%
2018-19	-6.0%	-8.0%	-2.0%	-3.9%	2018-19	-6.2%	-7.5%	-1.0%	-4.2%
2019-20	-3.8%	-13.7%	-16.7%		2019-20	-4.6%	-9.5%	-10.4%	

Source: WCIRB medical transaction data.

**Average Medical Paid per Transaction**

<b>All Accident Years</b>					<b>Excluding Latest Accident Year</b>				
Cal. Qtr.	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	Cal. Qtr.	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
2015	\$131	\$129	\$133	\$133	2015	\$136	\$147	\$167	\$175
2016	\$130	\$131	\$130	\$129	2016	\$135	\$154	\$164	\$171
2017	\$130	\$134	\$127	\$127	2017	\$135	\$154	\$158	\$166
2018	\$133	\$132	\$133	\$130	2018	\$139	\$155	\$168	\$172
2019	\$136	\$133	\$132	\$132	2019	\$142	\$154	\$166	\$172
2020	\$139	\$132	\$140		2020	\$145	\$149	\$168	
2015-16	-0.8%	1.7%	-2.5%	-3.0%	2015-16	-0.6%	4.6%	-1.8%	-2.6%
2016-17	0.1%	2.3%	-2.3%	-1.8%	2016-17	-0.4%	0.3%	-3.8%	-2.5%
2017-18	2.5%	-1.3%	5.0%	2.0%	2017-18	3.3%	0.3%	6.6%	3.3%
2018-19	2.2%	0.5%	-1.0%	2.1%	2018-19	1.8%	-0.4%	-1.2%	0.3%
2019-20	1.9%	-0.7%	6.3%		2019-20	2.5%	-3.6%	1.1%	

**Average Medical Paid per Claim**

<b>All Accident Years</b>					<b>Excluding Latest Accident Year</b>				
Cal. Qtr.	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	Cal. Qtr.	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>
2015	\$1,747	\$1,689	\$1,721	\$1,652	2015	\$1,873	\$1,915	\$2,088	\$2,045
2016	\$1,677	\$1,642	\$1,673	\$1,641	2016	\$1,781	\$1,868	\$1,977	\$1,977
2017	\$1,645	\$1,719	\$1,597	\$1,622	2017	\$1,744	\$1,925	\$1,872	\$1,942
2018	\$1,671	\$1,695	\$1,636	\$1,592	2018	\$1,783	\$1,906	\$1,919	\$1,901
2019	\$1,668	\$1,623	\$1,646	\$1,584	2019	\$1,773	\$1,832	\$1,974	\$1,895
2020	\$1,658	\$1,556	\$1,704		2020	\$1,767	\$1,658	\$1,894	
2015-16	-4.0%	-2.7%	-2.8%	-0.7%	2015-16	-4.9%	-2.4%	-5.3%	-3.3%
2016-17	-1.9%	4.7%	-4.5%	-1.1%	2016-17	-2.1%	3.1%	-5.3%	-1.8%
2017-18	1.6%	-1.4%	2.5%	-1.9%	2017-18	2.2%	-1.0%	2.5%	-2.1%
2018-19	-0.2%	-4.3%	0.6%	-0.5%	2018-19	-0.6%	-3.9%	2.9%	-0.3%
2019-20	-0.6%	-4.1%	3.5%		2019-20	-0.3%	-9.5%	-4.1%	

Source: WCIRB medical transaction data.

Share of Total Medical Payments by Service Type

Service Type	First Quarter of Calendar Year						Second Quarter of Calendar Year					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Physicians	41.1%	42.4%	44.0%	44.5%	45.5%	48.5%	43.5%	42.9%	43.7%	46.2%	47.2%	50.0%
Medical Legal	11.0%	12.5%	11.7%	10.5%	10.8%	11.1%	11.1%	12.9%	10.9%	10.3%	11.0%	10.7%
Outpatient	10.1%	10.7%	11.5%	12.3%	13.1%	11.6%	9.2%	12.1%	12.2%	11.8%	12.0%	11.1%
HCPCS	7.7%	7.8%	9.3%	9.6%	9.8%	10.1%	8.2%	7.8%	9.3%	9.8%	10.0%	10.6%
Inpatient	11.8%	9.4%	9.5%	11.8%	11.1%	10.4%	9.4%	9.7%	10.9%	10.8%	10.5%	9.4%
Medical Lien	6.0%	7.1%	7.1%	5.9%	5.1%	4.3%	6.9%	6.6%	6.2%	6.2%	5.3%	3.9%
Pharmaceutical	11.7%	9.3%	6.1%	4.6%	3.6%	3.0%	11.2%	7.2%	6.0%	4.0%	3.2%	3.6%
Dental	0.6%	0.7%	0.8%	0.8%	0.9%	1.0%	0.6%	0.7%	0.8%	0.9%	0.9%	0.7%
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Service Type	Third Quarter of Calendar Year						Fourth Quarter of Calendar Year					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	
Physicians	42.6%	44.0%	45.4%	46.7%	47.9%	48.3%	42.4%	43.8%	45.9%	46.9%	49.4%	
Medical Legal	11.3%	12.7%	10.7%	10.5%	11.3%	10.8%	11.4%	11.7%	10.3%	10.8%	11.0%	
Outpatient	10.4%	11.9%	12.3%	11.7%	10.4%	12.1%	11.2%	11.5%	11.9%	12.1%	10.9%	
HCPCS	8.1%	7.8%	9.6%	10.3%	10.4%	10.2%	8.1%	8.8%	9.5%	10.4%	10.3%	
Inpatient	9.6%	9.2%	10.2%	10.7%	10.9%	10.6%	8.8%	9.8%	10.7%	10.2%	10.0%	
Medical Lien	6.6%	7.1%	5.6%	5.8%	5.1%	3.9%	7.2%	7.1%	5.7%	5.2%	4.4%	
Pharmaceutical	10.7%	6.3%	5.5%	3.7%	3.1%	3.2%	10.2%	6.6%	5.2%	3.5%	3.1%	
Dental	0.6%	0.9%	0.7%	0.7%	0.9%	0.9%	0.7%	0.8%	0.8%	1.0%	0.9%	
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Service Type	9-Months of Calendar Year						Calendar Year					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Physicians	42.4%	43.1%	44.3%	45.8%	46.8%	48.9%	42.4%	43.3%	44.7%	46.0%	47.5%	
Medical Legal	11.1%	12.7%	11.1%	10.4%	11.1%	10.9%	11.2%	12.4%	10.9%	10.5%	11.0%	
Outpatient	9.9%	11.6%	12.0%	11.9%	11.8%	11.6%	10.2%	11.6%	12.0%	12.0%	11.6%	
HCPCS	8.0%	7.8%	9.4%	9.9%	10.0%	10.3%	8.0%	8.1%	9.4%	10.0%	10.1%	
Inpatient	10.3%	9.5%	10.2%	11.1%	10.8%	10.2%	9.9%	9.5%	10.3%	10.9%	10.6%	
Medical Lien	6.5%	6.9%	6.3%	6.0%	5.2%	4.0%	6.7%	7.0%	6.2%	5.8%	5.0%	
Pharmaceutical	11.2%	7.6%	5.9%	4.1%	3.3%	3.2%	11.0%	7.4%	5.7%	4.0%	3.3%	
Dental	0.6%	0.8%	0.8%	0.8%	0.9%	0.9%	0.6%	0.8%	0.8%	0.8%	0.9%	
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: WCIRB medical transaction data.

**Share of Total Medical Payments by Service Type**  
Excluding Latest Accident Year

First Quarter of Calendar Year							Second Quarter of Calendar Year						
Service Type	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	
Physicians	39.6%	40.5%	42.0%	42.6%	43.7%	46.8%	38.1%	37.0%	37.4%	39.5%	41.4%	45.0%	
Medical Legal	11.6%	13.3%	12.6%	11.4%	11.8%	12.1%	13.7%	16.0%	14.0%	13.5%	14.4%	13.8%	
Outpatient	10.1%	11.0%	11.7%	12.5%	13.3%	11.9%	9.0%	12.4%	12.5%	12.3%	12.0%	11.4%	
HPCPS	7.8%	7.8%	9.6%	9.8%	10.0%	10.3%	8.5%	8.0%	10.1%	10.6%	10.9%	11.5%	
Inpatient	11.9%	9.5%	9.4%	11.7%	10.9%	10.0%	8.5%	9.3%	10.0%	10.1%	9.4%	8.1%	
Medical Lien	6.3%	7.5%	7.7%	6.4%	5.5%	4.7%	8.5%	8.2%	8.0%	8.2%	7.0%	5.1%	
Pharmaceutical	12.1%	9.7%	6.3%	4.9%	3.8%	3.2%	12.9%	8.3%	7.1%	4.9%	3.9%	4.3%	
Dental	0.6%	0.8%	0.9%	0.8%	1.0%	1.1%	0.7%	0.7%	0.8%	1.0%	1.0%	0.8%	
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Third Quarter of Calendar Year							Fourth Quarter of Calendar Year						
Service Type	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	
Physicians	34.4%	35.2%	37.2%	37.3%	39.3%	41.6%	31.6%	32.9%	35.0%	36.1%	38.1%		
Medical Legal	15.3%	17.6%	15.4%	15.6%	16.7%	15.6%	16.2%	17.0%	15.6%	16.8%	17.4%		
Outpatient	10.0%	11.7%	11.8%	11.1%	10.5%	12.3%	10.7%	10.9%	11.2%	10.6%	10.6%		
HPCPS	8.4%	8.3%	10.4%	11.5%	11.6%	11.4%	8.6%	9.7%	10.7%	11.9%	11.6%		
Inpatient	8.8%	8.1%	9.0%	9.8%	8.9%	8.2%	7.7%	9.0%	10.0%	9.4%	9.0%		
Medical Lien	9.1%	10.1%	8.3%	8.9%	7.8%	5.7%	10.9%	11.2%	9.4%	9.0%	7.8%		
Pharmaceutical	13.3%	7.9%	7.1%	5.1%	4.2%	4.2%	13.5%	8.7%	7.3%	5.2%	4.6%		
Dental	0.7%	1.0%	0.7%	0.8%	0.9%	1.1%	0.7%	0.8%	0.9%	1.1%	1.1%		
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

9-Months of Calendar Year							Calendar Year						
Service Type	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	
Physicians	37.6%	37.8%	39.1%	40.1%	41.7%	44.8%	36.4%	36.8%	38.3%	39.3%	41.0%		
Medical Legal	13.4%	15.4%	13.9%	13.2%	14.0%	13.6%	14.0%	15.7%	14.2%	13.9%	14.7%		
Outpatient	9.7%	11.6%	12.0%	12.0%	12.1%	11.9%	9.9%	11.5%	11.8%	11.8%	11.8%		
HPCPS	8.2%	8.1%	10.0%	10.6%	10.7%	11.0%	8.3%	8.4%	10.1%	10.8%	10.9%		
Inpatient	9.9%	9.0%	9.5%	10.6%	9.8%	8.9%	9.5%	9.0%	9.6%	10.4%	9.7%		
Medical Lien	7.8%	8.5%	7.9%	7.7%	6.7%	5.1%	8.5%	9.1%	8.2%	7.9%	6.9%		
Pharmaceutical	12.7%	8.7%	6.8%	4.9%	4.0%	3.8%	12.9%	8.7%	6.9%	5.0%	4.1%		
Dental	0.6%	0.8%	0.8%	0.9%	1.0%	1.0%	0.7%	0.8%	0.8%	0.9%	1.0%		
All Services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Source: WCIRB medical transaction data.

Share of Total Medical Payments by Age and Service Type - 9 Months

Development Age in Years	Pharmaceuticals						Physician Services - All					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
21+	28.5%	22.8%	18.7%	15.7%	13.6%	12.4%	19.8%	19.0%	20.0%	21.0%	22.7%	22.6%
11 to 20	26.2%	19.8%	15.5%	13.1%	11.6%	11.9%	22.3%	25.5%	25.0%	26.0%	26.4%	28.2%
6 to 10	16.6%	12.1%	9.6%	6.9%	6.0%	5.6%	25.6%	26.1%	26.7%	27.4%	28.9%	31.7%
4 to 5	11.0%	7.5%	6.1%	4.4%	3.0%	3.1%	31.1%	30.5%	32.0%	33.4%	35.6%	39.0%
3	9.7%	6.0%	4.9%	3.0%	2.3%	2.6%	40.2%	38.9%	41.0%	43.0%	44.5%	44.8%
2	6.4%	4.0%	3.0%	1.8%	1.4%	1.5%	55.4%	53.7%	54.6%	54.2%	54.3%	57.2%
1	3.9%	2.9%	2.3%	1.3%	1.1%	1.2%	65.2%	66.3%	64.3%	65.7%	64.7%	64.4%
All Years	11.2%	7.6%	5.9%	4.1%	3.3%	3.2%	42.4%	43.1%	44.3%	45.8%	46.8%	48.9%

Development Age in Years	Hospital Services - Outpatient						Hospital Services - Inpatient					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
21+	16.7%	19.4%	17.0%	17.3%	18.6%	19.8%	13.2%	13.0%	16.0%	15.7%	13.9%	14.8%
11 to 20	12.0%	14.5%	15.5%	13.6%	14.8%	15.3%	11.8%	12.0%	12.3%	13.6%	11.4%	9.4%
6 to 10	9.0%	9.6%	8.7%	9.1%	8.7%	9.2%	9.5%	8.6%	9.8%	9.8%	10.0%	10.0%
4 to 5	7.6%	8.1%	8.9%	9.0%	9.6%	10.6%	9.2%	7.4%	8.0%	9.7%	9.1%	7.5%
3	7.9%	10.6%	11.4%	10.9%	10.7%	10.2%	9.0%	7.7%	8.9%	8.5%	7.1%	7.8%
2	11.1%	13.7%	14.1%	14.5%	13.9%	12.6%	9.9%	9.6%	9.1%	11.2%	10.6%	9.1%
1	10.6%	11.3%	12.1%	11.5%	10.9%	10.6%	12.2%	11.4%	12.9%	12.8%	14.2%	15.0%
All Years	9.9%	11.6%	12.0%	11.9%	11.8%	11.6%	10.3%	9.5%	10.2%	11.1%	10.8%	10.2%

Development Age in Years	Medical Supplies and Equipment						Dental					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
21+	16.6%	19.1%	23.6%	24.9%	24.8%	24.2%	1.2%	1.3%	1.5%	1.3%	1.7%	1.5%
11 to 20	13.9%	12.7%	17.9%	18.9%	19.2%	19.0%	1.3%	2.1%	2.0%	1.7%	1.8%	1.7%
6 to 10	7.8%	7.9%	10.1%	10.6%	10.0%	10.7%	0.6%	0.6%	0.6%	0.6%	0.7%	0.9%
4 to 5	6.1%	6.1%	7.3%	7.9%	9.2%	9.5%	0.3%	0.4%	0.4%	0.7%	0.7%	0.7%
3	7.0%	6.9%	7.9%	9.6%	8.8%	9.6%	0.3%	0.7%	0.5%	0.6%	0.7%	1.1%
2	7.4%	7.4%	8.8%	8.5%	9.0%	9.4%	0.8%	0.8%	0.8%	0.9%	1.0%	0.9%
1	7.1%	6.8%	7.3%	7.6%	7.7%	7.7%	0.5%	0.6%	0.5%	0.5%	0.7%	0.5%
All Years	8.0%	7.8%	9.4%	9.9%	10.0%	10.3%	0.6%	0.8%	0.8%	0.8%	0.9%	0.9%

Development Age in Years	Med-Legal						Liens					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
21+	3.0%	2.8%	2.6%	2.5%	2.9%	2.5%	0.9%	2.6%	0.6%	1.6%	1.8%	2.3%
11 to 20	7.1%	7.7%	7.1%	7.2%	7.7%	7.4%	5.5%	5.7%	4.8%	5.9%	7.1%	7.2%
6 to 10	16.0%	18.8%	17.2%	15.9%	16.6%	16.8%	14.9%	16.3%	17.2%	19.7%	19.1%	15.2%
4 to 5	20.1%	21.6%	18.7%	18.2%	20.0%	20.3%	14.7%	18.5%	18.6%	16.8%	12.7%	9.3%
3	18.6%	22.3%	20.4%	20.4%	22.1%	20.5%	7.2%	6.8%	5.0%	4.0%	3.7%	3.5%
2	7.8%	9.9%	9.1%	8.7%	9.3%	8.8%	1.2%	0.9%	0.5%	0.3%	0.5%	0.5%
1	0.4%	0.7%	0.5%	0.6%	0.6%	0.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
All Years	11.1%	12.7%	11.1%	10.4%	11.1%	10.9%	6.5%	6.9%	6.3%	6.0%	5.2%	4.0%

Source: WCIRB medical transaction data

Quarterly Ultimate Settlement Ratios

Accident Year	Evaluated as of (in months):															
	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
2011	0.8%	5.1%	12.0%	21.2%	29.7%	35.9%	40.3%	44.5%	48.6%	52.9%	56.8%	60.5%	64.1%	67.1%	70.2%	72.6%
2012	0.8%	5.1%	12.1%	20.9%	29.5%	35.9%	40.8%	45.3%	49.8%	54.1%	58.3%	61.8%	65.6%	68.8%	71.7%	74.0%
2013	0.9%	5.1%	11.8%	20.6%	29.4%	36.0%	41.4%	46.0%	51.0%	55.5%	59.6%	63.0%	67.1%	70.5%	73.4%	75.8%
2014	0.8%	4.8%	11.8%	20.8%	29.6%	36.4%	42.1%	47.0%	52.0%	56.5%	60.8%	64.7%	68.2%	71.7%	74.6%	77.5%
2015	0.8%	4.8%	12.2%	20.9%	30.4%	37.8%	43.5%	48.6%	53.9%	59.0%	63.4%	67.4%	71.1%	74.4%	77.4%	80.0%
2016	0.8%	5.1%	12.3%	21.8%	31.7%	39.5%	45.5%	51.2%	56.3%	61.5%	65.9%	70.0%	73.7%	76.9%	79.3%	81.9%
2017	0.9%	5.6%	13.5%	24.0%	34.2%	42.1%	48.3%	54.2%	59.1%	64.0%	68.1%	72.2%	75.1%	77.4%	79.7%	82.0%
2018	1.0%	5.8%	13.9%	24.5%	34.7%	42.6%	48.6%	54.4%	59.0%	62.9%	66.6%	70.4%				
2019	1.0%	5.9%	13.7%	24.6%	34.5%	41.2%	46.8%	52.2%								
2020	---	---	---	23.7%												

Accident Year	Quarterly Incremental Change														
	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
2011	4.3%	6.9%	9.2%	8.6%	6.1%	4.5%	4.2%	4.1%	4.4%	3.9%	3.7%	3.6%	3.1%	3.0%	2.5%
2012	4.2%	7.1%	8.7%	8.6%	6.4%	4.8%	4.5%	4.5%	4.3%	4.2%	3.5%	3.8%	3.2%	3.0%	2.3%
2013	4.2%	6.7%	8.7%	8.8%	6.6%	5.4%	4.6%	5.0%	4.5%	4.1%	3.4%	4.1%	3.4%	2.9%	2.4%
2014	4.1%	6.9%	9.1%	8.8%	6.7%	5.8%	4.9%	5.0%	4.5%	4.3%	3.9%	3.5%	3.5%	2.9%	2.8%
2015	4.0%	7.4%	8.7%	9.6%	7.4%	5.7%	5.1%	5.3%	5.1%	4.4%	4.0%	3.7%	3.4%	3.0%	2.6%
2016	4.2%	7.3%	9.4%	10.0%	7.8%	6.0%	5.7%	5.1%	5.2%	4.3%	4.1%	3.7%	3.2%	2.3%	2.6%
2017	4.8%	7.8%	10.5%	10.1%	7.9%	6.2%	5.9%	5.0%	4.9%	4.1%	4.1%	2.9%	2.3%	2.3%	2.3%
2018	4.9%	8.1%	10.7%	10.2%	7.9%	6.0%	5.7%	4.6%	3.9%	3.7%	3.8%				
2019	4.9%	7.9%	10.9%	9.9%	6.7%	5.6%	5.4%								
2020	---	---	---												

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 83% to 98% of the total California workers' compensation insured market measured using 2019 earned premium levels).

Source: WCIRB quarterly calls for experience

### Sensitivity Testing of Claim Settlement Rate Adjustments

#### Berquist-Sherman Adjustment to Paid Age-to-Age Factors

	Age	Claim Settlement Rate Change	Indemnity		Medical	
			Age-to-Age Factor	Diff. from Unadjusted	Age-to-Age Factor	Diff. from Unadjusted
No Change (Unadjusted)	21-to-33	0.0%	1.709	0.0%	1.478	0.0%
3Q 2019 Actual Change	21-to-33	0.3%	1.706	-0.2%	1.477	-0.1%
<b>3Q 2020 Actual Change</b>	<b>21-to-33</b>	<b>-1.6%</b>	<b>1.733</b>	<b>1.4%</b>	<b>1.486</b>	<b>0.5%</b>
14-year Max. Increase	21-to-33	2.8%	1.675	-2.0%	1.463	-1.0%
14-year Max. Decrease	21-to-33	-2.2%	1.741	1.9%	1.489	0.7%
5 Point Increase	21-to-33	5.0%	1.640	-4.0%	1.447	-2.1%
5 Point Decrease	21-to-33	-5.0%	1.774	3.8%	1.498	1.4%
No Change (Unadjusted)	33-to-45	0.0%	1.263	0.0%	1.215	0.0%
3Q 2019 Actual Change	33-to-45	2.5%	1.237	-2.1%	1.200	-1.2%
<b>3Q 2020 Actual Change</b>	<b>33-to-45</b>	<b>-1.4%</b>	<b>1.285</b>	<b>1.7%</b>	<b>1.228</b>	<b>1.1%</b>
14-year Max. Increase	33-to-45	2.6%	1.236	-2.1%	1.199	-1.3%
14-year Max. Decrease	33-to-45	-2.0%	1.293	2.4%	1.232	1.4%
5 Point Increase	33-to-45	5.0%	1.207	-4.4%	1.181	-2.8%
5 Point Decrease	33-to-45	-5.0%	1.331	5.4%	1.252	3.0%

#### Adjustment to Loss Development Paid Tail Factor

	Age	Avg. Ratio of Proj. Open Claim Rate to Historical Open Claim Rate	Indemnity		Medical	
			Age-to-Age Factor	Diff. from Unadjusted	Age-to-Age Factor	Diff. from Unadjusted
No Change (Unadjusted)	273-to-393	1.00	1.013	0.0%	1.051	0.0%
3Q 2019 Projection	273-to-393	0.41	1.010	-0.3%	1.038	-1.2%
<b>3Q 2020 Projection</b>	<b>273-to-393</b>	<b>0.35</b>	<b>1.009</b>	<b>-0.4%</b>	<b>1.037</b>	<b>-1.3%</b>
Extreme High	273-to-393	2.00	1.018	0.5%	1.072	2.0%
Extreme Low	273-to-393	0.10	1.008	-0.5%	1.032	-1.8%

Source: WCIRB aggregate financial data

**Relativity of Historical Loss Development  
to Current Loss Development  
Using Data Through September 30, 2020**

(1)		(2)	(3)			(4)	(5)		(6)	(7)	
Quarterly Development Factors (2Q)			Quarterly Development Factors (3Q)				Quarterly Multiplicative Factors			Semi-Annual Mult. Factors	
Age in Months	2Q20 Development	2Q19 Development	Age in Months	3Q20 Development	3Q19 Development	Age in Months	Relative Difference in 2Q19 from 2Q20 (2) / (1)	Relative Difference in 3Q19 from 3Q20 (4) / (3)		Age in Months	Relative Difference in 2Q19 & 3Q19 from 2Q20 & 3Q20 (5) x (6)
<b><u>Incurring Indemnity</u></b>											
18/15	1.189	1.183	21/18	1.128	1.123	18/15	0.995	0.995		21/15	0.990
30/27	1.066	1.059	33/30	1.045	1.047	30/27	0.993	1.002		33/27	0.995
42/39	1.028	1.026	45/42	1.016	1.021	42/39	0.998	1.005		45/39	1.003
54/51	1.015	1.013	57/54	1.009	1.011	54/51	0.998	1.002		57/51	1.000
66/63	1.007	1.008	69/66	1.007	1.006	66/63	1.000	0.999		69/63	1.000
78/75	1.005	1.006	81/78	1.003	1.005	78/75	1.001	1.002		81/75	1.003
90/87	1.004	1.004	93/90	1.003	1.004	90/87	1.001	1.001		93/87	1.002
102/99	1.006	1.002	105/102	1.003	1.003	102/99	0.997	1.000		105/99	0.997
114/111	1.000	1.004	117/114	1.004	1.003	114/111	1.003	0.999		117/111	1.002
<b><u>Incurring Medical</u></b>											
18/15	1.100	1.096	21/18	1.060	1.064	18/15	0.996	1.003		21/15	0.999
30/27	1.036	1.028	33/30	1.024	1.029	30/27	0.992	1.005		33/27	0.997
42/39	1.015	1.010	45/42	1.009	1.011	42/39	0.995	1.002		45/39	0.997
54/51	1.012	1.009	57/54	1.006	1.007	54/51	0.997	1.000		57/51	0.998
66/63	1.006	1.010	69/66	1.003	1.008	66/63	1.003	1.005		69/63	1.008
78/75	1.005	1.003	81/78	1.002	1.004	78/75	0.998	1.002		81/75	1.000
90/87	1.001	1.006	93/90	1.000	1.004	90/87	1.005	1.004		93/87	1.009
102/99	1.001	1.003	105/102	1.001	1.002	102/99	1.002	1.001		105/99	1.003
114/111	0.998	1.002	117/114	1.002	1.002	114/111	1.004	1.000		117/111	1.004
<b><u>Paid Indemnity</u></b>											
18/15	1.341	1.353	21/18	1.258	1.248	18/15	1.009	0.992		21/15	1.001
30/27	1.116	1.131	33/30	1.103	1.105	30/27	1.013	1.002		33/27	1.016
42/39	1.050	1.059	45/42	1.044	1.045	42/39	1.008	1.002		45/39	1.010
54/51	1.024	1.031	57/54	1.024	1.025	54/51	1.007	1.001		57/51	1.008
66/63	1.014	1.018	69/66	1.013	1.014	66/63	1.005	1.001		69/63	1.006
78/75	1.009	1.011	81/78	1.008	1.010	78/75	1.002	1.001		81/75	1.004
90/87	1.007	1.009	93/90	1.007	1.008	90/87	1.002	1.000		93/87	1.002
102/99	1.005	1.007	105/102	1.007	1.006	102/99	1.002	0.998		105/99	1.000
114/111	1.004	1.006	117/114	1.005	1.006	114/111	1.002	1.001		117/111	1.003
<b><u>Paid Medical</u></b>											
18/15	1.231	1.245	21/18	1.170	1.173	18/15	1.011	1.003		21/15	1.014
30/27	1.083	1.092	33/30	1.078	1.077	30/27	1.008	0.999		33/27	1.007
42/39	1.040	1.048	45/42	1.039	1.042	42/39	1.008	1.002		45/39	1.010
54/51	1.023	1.029	57/54	1.023	1.025	54/51	1.006	1.002		57/51	1.008
66/63	1.015	1.018	69/66	1.014	1.016	66/63	1.003	1.002		69/63	1.006
78/75	1.011	1.013	81/78	1.009	1.011	78/75	1.002	1.001		81/75	1.004
90/87	1.008	1.009	93/90	1.006	1.010	90/87	1.001	1.004		93/87	1.005
102/99	1.005	1.008	105/102	1.006	1.006	102/99	1.003	1.000		105/99	1.003
114/111	1.004	1.006	117/114	1.004	1.006	114/111	1.002	1.002		117/111	1.004

**Note:**

1. Source: WCIRB aggregate financial data.

**Annual Loss Development Factors  
Adjustments and Scenarios  
Using Data Through September 30, 2020**

	(8)	(9)		(10)	(11)	(12)
	Annual Age-to-Age Development Factors			Adjusted Annual Age-to-Age Development Factors (Note 2)		
Age in Months	3Q20 LDFs	3Q19 LDFs	Age in Months	Using 2Q19 LDFs (5) x (8)	Using 2Q19-3Q19 LDFs (7) x (8)	Average of Current and Prior Avg[(8),(9)]
<b><u>Incurred Indemnity</u></b>						
21/9	2.774	2.721	21/9	2.760	2.747	2.748
33/21	1.316	1.315	33/21	1.307	1.309	1.316
45/33	1.114	1.116	45/33	1.112	1.117	1.115
57/45	1.057	1.057	57/45	1.055	1.057	1.057
69/57	1.029	1.035	69/57	1.029	1.029	1.032
81/69	1.017	1.024	81/69	1.018	1.020	1.021
93/81	1.013	1.020	93/81	1.014	1.015	1.017
105/93	1.014	1.012	105/93	1.011	1.011	1.013
117/105	1.009	1.012	117/105	1.012	1.011	1.011
<b><u>Incurred Medical</u></b>						
21/9	2.028	2.026	21/9	2.020	2.026	2.027
33/21	1.141	1.147	33/21	1.132	1.137	1.144
45/33	1.063	1.054	45/33	1.058	1.060	1.059
57/45	1.039	1.033	57/45	1.036	1.036	1.036
69/57	1.020	1.032	69/57	1.024	1.028	1.026
81/69	1.012	1.018	81/69	1.010	1.012	1.015
93/81	1.005	1.015	93/81	1.010	1.014	1.010
105/93	1.007	1.009	105/93	1.009	1.010	1.008
117/105	1.003	1.011	117/105	1.007	1.007	1.007
<b><u>Paid Indemnity</u></b>						
21/9	4.886	4.877	21/9	4.930	4.891	4.882
33/21	1.709	1.746	33/21	1.732	1.736	1.728
45/33	1.263	1.287	45/33	1.274	1.276	1.275
57/45	1.125	1.139	57/45	1.133	1.134	1.132
69/57	1.069	1.081	69/57	1.074	1.075	1.075
81/69	1.046	1.048	81/69	1.048	1.050	1.047
93/81	1.031	1.038	93/81	1.033	1.033	1.035
105/93	1.026	1.031	105/93	1.028	1.026	1.029
117/105	1.019	1.022	117/105	1.021	1.022	1.021
<b><u>Paid Medical</u></b>						
21/9	3.705	3.577	21/9	3.746	3.756	3.641
33/21	1.478	1.480	33/21	1.490	1.489	1.479
45/33	1.215	1.232	45/33	1.225	1.227	1.224
57/45	1.120	1.135	57/45	1.126	1.129	1.128
69/57	1.072	1.085	69/57	1.076	1.078	1.079
81/69	1.054	1.057	81/69	1.056	1.058	1.056
93/81	1.036	1.047	93/81	1.037	1.041	1.042
105/93	1.031	1.034	105/93	1.034	1.034	1.033
117/105	1.021	1.027	117/105	1.023	1.025	1.024

**Notes:**

1. Source: WCIRB aggregate financial data.
2. The post-pandemic quarterly experience is removed by dividing from the annual LDFs, then the appropriate quarterly LDFs are multiplied to adjust the annual LDFs.

**Projected Cumulative Development Factors  
and Impact of Implementing Historical Development Patterns  
Using Data through September 30, 2020**

	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
	Cumulative Development Factors Using:					Comparison to Current CDF			
Age to Ultimate	Latest Diagonal (Note 2)	Prior Diagonal (9) x [117-Ult]	2Q19 Incremental LDFs (10) x [117-Ult]	2Q19-3Q19 Incremental LDFs (11) x [117-Ult]	Average of Current and Prior (12) x [117-Ult]	Prior Diagonal (14) / (13) -1	2Q19 Incremental LDFs (15) / (13) -1	2Q19-3Q19 Incremental LDFs (16) / (13) -1	Average of Current and Prior (17) / (13) -1
<b><u>Incurred Indemnity</u></b>									
21-Ult	1.693	1.730	1.677	1.695	1.711	2.2%	-0.9%	0.1%	1.1%
33-Ult	1.286	1.315	1.284	1.294	1.301	2.3%	-0.2%	0.6%	1.1%
45-Ult	1.155	1.179	1.154	1.159	1.167	2.1%	0.0%	0.3%	1.0%
57-Ult	1.092	1.115	1.095	1.096	1.104	2.1%	0.2%	0.3%	1.0%
69-Ult	1.062	1.077	1.063	1.065	1.069	1.5%	0.2%	0.4%	0.7%
81-Ult	1.044	1.052	1.044	1.045	1.048	0.8%	0.0%	0.1%	0.4%
93-Ult	1.030	1.031	1.030	1.029	1.031	0.1%	0.0%	-0.1%	0.0%
105-Ult	1.016	1.019	1.019	1.018	1.018	0.3%	0.3%	0.2%	0.1%
117-Ult	1.007								
<b><u>Incurred Medical</u></b>									
21-Ult	1.328	1.366	1.323	1.349	1.347	2.9%	-0.4%	1.6%	1.4%
33-Ult	1.164	1.191	1.169	1.186	1.177	2.3%	0.4%	1.9%	1.2%
45-Ult	1.095	1.130	1.105	1.119	1.112	3.2%	0.9%	2.2%	1.6%
57-Ult	1.054	1.094	1.066	1.079	1.074	3.8%	1.2%	2.4%	1.9%
69-Ult	1.033	1.060	1.042	1.050	1.046	2.6%	0.8%	1.6%	1.3%
81-Ult	1.021	1.041	1.032	1.037	1.031	2.0%	1.1%	1.6%	1.0%
93-Ult	1.016	1.026	1.022	1.023	1.021	1.0%	0.6%	0.7%	0.5%
105-Ult	1.009	1.017	1.013	1.013	1.013	0.8%	0.4%	0.4%	0.4%
117-Ult	1.006								
<b><u>Paid Indemnity</u></b>									
21-Ult	3.284	3.558	3.421	3.446	3.419	8.4%	4.2%	4.9%	4.1%
33-Ult	1.922	2.038	1.975	1.986	1.979	6.1%	2.8%	3.3%	3.0%
45-Ult	1.521	1.584	1.551	1.557	1.552	4.1%	1.9%	2.3%	2.0%
57-Ult	1.352	1.390	1.370	1.373	1.371	2.8%	1.3%	1.5%	1.4%
69-Ult	1.265	1.286	1.275	1.277	1.276	1.7%	0.8%	0.9%	0.8%
81-Ult	1.209	1.227	1.216	1.216	1.218	1.5%	0.6%	0.5%	0.7%
93-Ult	1.173	1.182	1.178	1.177	1.178	0.8%	0.4%	0.3%	0.4%
105-Ult	1.143	1.147	1.146	1.147	1.145	0.3%	0.2%	0.3%	0.1%
117-Ult	1.122								
<b><u>Paid Medical</u></b>									
21-Ult	3.190	3.397	3.300	3.344	3.292	6.5%	3.5%	4.8%	3.2%
33-Ult	2.158	2.295	2.215	2.246	2.226	6.3%	2.6%	4.0%	3.1%
45-Ult	1.776	1.863	1.808	1.830	1.819	4.9%	1.8%	3.0%	2.4%
57-Ult	1.586	1.641	1.606	1.620	1.613	3.5%	1.2%	2.2%	1.7%
69-Ult	1.480	1.513	1.493	1.503	1.496	2.2%	0.9%	1.6%	1.1%
81-Ult	1.404	1.431	1.413	1.420	1.417	2.0%	0.7%	1.2%	1.0%
93-Ult	1.355	1.367	1.362	1.365	1.361	0.9%	0.5%	0.7%	0.4%
105-Ult	1.314	1.322	1.317	1.320	1.318	0.6%	0.2%	0.4%	0.3%
117-Ult	1.287								

**Notes:**

1. Source: WCIRB aggregate financial data.
2. Source: Exhibits 2.2.1 through 2.4.2 of AC20-12-01.

**Relativity of Historical Berquist-Sherman Loss Development  
to Current Loss Development  
Using Data Through September 30, 2020**

(1) Quarterly Development Factors (2Q)		(2) Quarterly Development Factors (2Q)		(3) Quarterly Development Factors (3Q)		(4) Quarterly Development Factors (3Q)		(5) Quarterly Multiplicative Factors Relative Difference in 2Q19 from 2Q20 (2) / (1)		(6) Quarterly Multiplicative Factors Relative Difference in 3Q19 from 3Q20 (4) / (3)		(7) Semi-Annual Mult. Factors Relative Difference in 2Q19 & 3Q19 from 2Q20 & 3Q20 (5) x (6)	
Age in Months	2Q20 Development	2Q19 Development	Age in Months	3Q20 Development	3Q19 Development	Age in Months	3Q20 Development	Age in Months	Age in Months	Age in Months	Age in Months	Age in Months	Age in Months
<b><u>Paid Indemnity</u></b>													
30/27	1.120	1.130	33/30	1.106	1.105	30/27	1.106	30/27	30/27	30/27	30/27	33/27	1.008
42/39	1.054	1.055	45/42	1.047	1.042	42/39	1.047	42/39	42/39	42/39	42/39	45/39	0.996
54/51	1.023	1.027	57/54	1.023	1.022	54/51	1.023	54/51	54/51	54/51	54/51	57/51	1.003
66/63	1.013	1.015	69/66	1.012	1.012	66/63	1.012	66/63	66/63	66/63	66/63	69/63	1.003
78/75	1.008	1.010	81/78	1.007	1.009	78/75	1.007	78/75	78/75	78/75	78/75	81/75	1.004
90/87	1.006	1.007	93/90	1.007	1.006	90/87	1.007	90/87	90/87	90/87	90/87	93/87	1.000
102/99	1.004	1.005	105/102	1.005	1.005	102/99	1.005	102/99	102/99	102/99	102/99	105/99	1.001
114/111	1.003	1.005	117/114	1.004	1.004	114/111	1.004	114/111	114/111	114/111	114/111	117/111	1.002
<b><u>Paid Medical</u></b>													
30/27	1.084	1.092	33/30	1.079	1.077	30/27	1.079	30/27	30/27	30/27	30/27	33/27	1.005
42/39	1.043	1.046	45/42	1.042	1.040	42/39	1.042	42/39	42/39	42/39	42/39	45/39	1.002
54/51	1.023	1.027	57/54	1.022	1.023	54/51	1.022	54/51	54/51	54/51	54/51	57/51	1.005
66/63	1.014	1.016	69/66	1.013	1.015	66/63	1.013	66/63	66/63	66/63	66/63	69/63	1.004
78/75	1.010	1.013	81/78	1.009	1.011	78/75	1.009	78/75	78/75	78/75	78/75	81/75	1.005
90/87	1.008	1.009	93/90	1.006	1.009	90/87	1.006	90/87	90/87	90/87	90/87	93/87	1.003
102/99	1.005	1.008	105/102	1.005	1.006	102/99	1.005	102/99	102/99	102/99	102/99	105/99	1.003
114/111	1.003	1.006	117/114	1.004	1.006	114/111	1.004	114/111	114/111	114/111	114/111	117/111	1.005

**Note:**

1. Source: WCIRB aggregate financial data, adjusted for claim settlement rates using the Berquist-Sherman method. Columns (1) through (4) are derived by proportioning the impact of the annualized claim settlement adjustment into quarters.

**Annual Loss Development Factors  
Adjustments and Scenarios  
Using Data Through September 30, 2020**

	(8)	(9)	(10)	Adjusted Annual Age-to-Age Development Factors (Note 2)			(13)
	Annual Age-to-Age Development Factors				(11)	(12)	
	BS Adjusted 3Q20 LDFs	BS Adjusted 3Q19 LDFs	Prior Diag of 3Q20 BS LDFs		Using 2Q19 LDFs (5) x (8)	Using 2Q19-3Q19 LDFs (7) x (8)	Average of Current and Prior Avg[(8),(10)]
Age in Months				Age in Months			
<b><u>Paid Indemnity</u></b>							
33/21	1.733	1.742	1.735	33/21	1.749	1.746	1.734
45/33	1.285	1.267	1.283	45/33	1.286	1.279	1.284
57/45	1.121	1.123	1.125	57/45	1.125	1.125	1.123
69/57	1.063	1.067	1.068	69/57	1.066	1.066	1.066
81/69	1.040	1.043	1.040	81/69	1.042	1.043	1.040
93/81	1.028	1.029	1.031	93/81	1.029	1.028	1.029
105/93	1.020	1.025	1.018	105/93	1.021	1.020	1.019
117/105	1.016	1.018	1.016	117/105	1.017	1.018	1.016
<b><u>Paid Medical</u></b>							
33/21	1.486	1.477	1.472	33/21	1.496	1.493	1.479
45/33	1.228	1.220	1.231	45/33	1.232	1.230	1.229
57/45	1.117	1.122	1.124	57/45	1.121	1.123	1.121
69/57	1.067	1.072	1.073	69/57	1.069	1.070	1.070
81/69	1.048	1.053	1.049	81/69	1.051	1.053	1.049
93/81	1.034	1.040	1.043	93/81	1.034	1.037	1.038
105/93	1.024	1.029	1.023	105/93	1.027	1.027	1.024
117/105	1.019	1.025	1.029	117/105	1.021	1.024	1.024

**Notes:**

1. Source: WCIRB aggregate financial data, adjusted for claim settlement rates using the Berquist-Sherman method.
2. Columns (8) and (10) are from the 3Q20 Loss Analysis; Column (9) is from the 3Q19 Loss Analysis.
3. The post-pandemic quarterly experience is removed by dividing from the annual LDFs, then the appropriate quarterly LDFs are multiplied to adjust the annual LDFs.

**Projected BS Method Cumulative Development Factors  
and Impact of Implementing Historical Development Patterns  
Using Data through September 30, 2020**

	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Cumulative Development Factors Using:					Comparison to Current CDF			
Age to Ultimate	Latest Diagonal (Note 2)	Prior Diagonal (9) x [117-Ult]	2Q19 Incremental LDFs (11) x [117-Ult]	2Q19-3Q19 Incremental LDFs (12) x [117-Ult]	Average of Current and Prior (13) x [117-Ult]	Prior Diagonal (15) / (14) -1	2Q19 Incremental LDFs (16) / (14) -1	2Q19-3Q19 Incremental LDFs (17) / (14) -1	Average of Current and Prior (18) / (14) -1
<b><u>Paid Indemnity</u></b>									
21-Ult	3.297	3.323	3.371	3.349	3.313	0.8%	2.3%	1.6%	0.5%
33-Ult	1.902	1.908	1.928	1.918	1.911	0.3%	1.3%	0.8%	0.4%
45-Ult	1.480	1.506	1.499	1.499	1.488	1.7%	1.3%	1.3%	0.5%
57-Ult	1.321	1.342	1.332	1.333	1.325	1.6%	0.9%	0.9%	0.3%
69-Ult	1.242	1.257	1.250	1.250	1.243	1.2%	0.6%	0.7%	0.1%
81-Ult	1.195	1.205	1.199	1.198	1.196	0.9%	0.4%	0.3%	0.1%
93-Ult	1.162	1.171	1.166	1.166	1.161	0.7%	0.3%	0.3%	-0.1%
105-Ult	1.140	1.142	1.142	1.142	1.140	0.2%	0.1%	0.2%	0.0%
117-Ult	1.122								
<b><u>Paid Medical</u></b>									
21-Ult	3.161	3.226	3.243	3.262	3.202	2.1%	2.6%	3.2%	1.3%
33-Ult	2.127	2.183	2.167	2.184	2.165	2.7%	1.9%	2.7%	1.8%
45-Ult	1.733	1.789	1.759	1.776	1.761	3.3%	1.5%	2.5%	1.7%
57-Ult	1.551	1.595	1.569	1.582	1.572	2.8%	1.1%	2.0%	1.3%
69-Ult	1.454	1.487	1.467	1.478	1.469	2.3%	0.9%	1.6%	1.0%
81-Ult	1.387	1.412	1.396	1.403	1.401	1.8%	0.6%	1.1%	0.9%
93-Ult	1.342	1.359	1.350	1.353	1.349	1.2%	0.6%	0.8%	0.5%
105-Ult	1.311	1.320	1.315	1.318	1.318	0.7%	0.3%	0.5%	0.5%
117-Ult	1.287								

**Notes:**

1. Source: WCIRB aggregate financial data, adjusted for claim settlement rates using the Berquist-Sherman method.
2. Source: Exhibits 2.5 through 2.6 of AC20-12-01.

## **Item AC21-03-01**

### **First Quarter 2021 Review of Diagnostics**

Twice a year, 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. At least prior to the pandemic, permanent disability claims continued to close at a faster rate throughout the state. The percent of statewide permanent disability claims closed increased from 38% for policy year 2012 to 50% for policy year 2017 at second report level (30 months from policy inception). Los Angeles and San Diego's permanent disability closed claim percentages are higher than the rest of the state, while the Bay Area generally has the lowest closure rates. Claim closer rates for temporary claims have also gradually increased over the last few years. Temporary closed claim percentages for Los Angeles are the lowest among all regions at all report levels. (Exhibit M5)
2. Since Senate Bill No. 1160 (SB 1160) became effective January 1, 2017, the number of filed liens has continued to decrease and the decrease accelerated during the pandemic. The number of liens filed in 2020 is 18% less than 2019 and almost 80% below 2016. Lien filings continue to be primarily related to medical treatment and have declined in all regions. (Exhibit M9.2)
3. After reaching a historical high in 2018, the number of independent medical review (IMR) applications eligible for review declined by 7.4% in 2019 and 18.7% in 2020. (Exhibit M14)
4. After declining at a moderate rate for several years, the cumulative injury share of total indemnity counts for 2019 at the preliminary first report level is higher than 2018. (Exhibit C15)
5. On a preliminary basis, at first report level, San Diego's ratio of permanent disability claims to indemnity claims increased from AY 2018 to AY 2019. The percentage of claims involving cumulative injury increased in all regions. (Exhibit C17)
6. 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)
7. The number of claims in excess of \$1,000,000 has continued to grow with a sharp increase in 2017, as these claims contributed significantly more to overall incurred indemnity losses and incurred medical losses. (Exhibit S16.3)
8. The percentage of permanent disability claims that are represented across regions and loss types at first and second survey levels have recently increased after dropping during the prior year. (Exhibit E7)

9. The average cost of medical cost containment programs (MCCP) per indemnity claim has continued to decrease since accident year 2018. The average cost of MCCP of accident year 2020 (excluding COVID-19 claims) is consistent with that for accident year 2017. (Exhibit E15)

## Exhibit Numbering Guide March 2021

<b>Exhibit #</b>	<b>Exhibit Name</b>
<b>Market/Claim Characteristics</b>	
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
M8	Quarterly Expedited Hearings by Region
M9	Number of Division of Workers' Compensation (DWC) Lien Decisions
M14	IMR Filed Counts
<b>Claim Count</b>	
C1	Reported Indemnity Claim Count Development - Statewide
C3	Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims
C7	Accident Year Indemnity Claim Frequency Model & Indemnity Claim Frequency History and Projections
C10	Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness
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
<b>Loss Development</b>	
D4	Ratios of Incremental Paid Losses to Prior Outstanding Losses by Accident Year
D6	Comparison of Projected Loss Ratios
<b>Claim Severity</b>	
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
S6	Ratio of Incremental Paid Indemnity & Medical to Indemnity Claims Open During Period
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
S15	Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness
S16	Claim Counts and Losses on Claims in Excess of \$250,000 & \$500,000 & \$1,000,000
<b>Loss Adjustment Expense</b>	
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>
2003	53.8%	46.2%	100%
2004	49.8%	50.2%	100%
2005	46.2%	53.8%	100%
2006	47.3%	52.7%	100%
2007	48.3%	51.7%	100%
2008	50.4%	49.6%	100%
2009	51.8%	48.2%	100%
2010	51.2%	48.8%	100%
2011	51.0%	49.0%	100%
2012	50.2%	49.8%	100%
2013	50.0%	50.0%	100%
2014	50.3%	49.7%	100%
2015	50.8%	49.2%	100%
2016	50.0%	50.0%	100%
2017	48.7%	51.3%	100%
2018	48.2%	51.8%	100%
2019*	48.7%	51.3%	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>
2003	18.7%	16.1%	65.2%	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	15.5%	15.2%	69.3%	100%
2009	17.1%	16.0%	66.9%	100%
2010	17.7%	16.9%	65.4%	100%
2011	18.1%	17.4%	64.5%	100%
2012	18.3%	18.1%	63.6%	100%
2013	18.7%	18.7%	62.6%	100%
2014	18.8%	18.6%	62.6%	100%
2015	18.9%	18.3%	62.8%	100%
2016	18.6%	18.6%	62.8%	100%
2017	17.4%	18.3%	64.3%	100%
2018	17.1%	18.4%	64.5%	100%
2019*	17.6%	18.5%	63.9%	100%

\* Accident year 2019 experience is partial in that it only reflects experience from policy year 2018.

\*\* 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
<u>Report Level</u>	<u>Region*</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
1	Bay Area	14%	15%	16%	18%	19%	20%	19%	14%
1	Los Angeles	15%	16%	17%	21%	24%	25%	26%	53%
1	San Diego	17%	20%	20%	23%	26%	27%	27%	7%
1	Remainder of CA	15%	17%	17%	20%	22%	23%	24%	26%
	ALL REGIONS COMBINED	<b>15%</b>	<b>16%</b>	<b>17%</b>	<b>20%</b>	<b>23%</b>	<b>24%</b>	<b>25%</b>	<b>100%</b>
2	Bay Area	38%	38%	41%	45%	47%	47%		15%
2	Los Angeles	37%	37%	40%	45%	51%	51%		52%
2	San Diego	43%	44%	46%	50%	53%	52%		7%
2	Remainder of CA	38%	39%	42%	47%	48%	49%		26%
	ALL REGIONS COMBINED	<b>38%</b>	<b>38%</b>	<b>41%</b>	<b>46%</b>	<b>50%</b>	<b>50%</b>		<b>100%</b>
3	Bay Area	58%	59%	62%	65%	67%			14%
3	Los Angeles	55%	55%	59%	65%	70%			56%
3	San Diego	62%	65%	67%	70%	71%			7%
3	Remainder of CA	58%	59%	62%	67%	67%			24%
	ALL REGIONS COMBINED	<b>56%</b>	<b>58%</b>	<b>61%</b>	<b>66%</b>	<b>69%</b>			<b>100%</b>
Temporary		Policy Year							Latest Year Reported Claim Distribution
<u>Report Level</u>	<u>Region*</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
1	Bay Area	54%	56%	59%	60%	61%	62%	64%	18%
1	Los Angeles	49%	47%	50%	51%	52%	54%	53%	45%
1	San Diego	56%	55%	56%	57%	60%	62%	61%	6%
1	Remainder of CA	57%	55%	59%	60%	61%	61%	61%	31%
	ALL REGIONS COMBINED	<b>53%</b>	<b>52%</b>	<b>55%</b>	<b>55%</b>	<b>57%</b>	<b>58%</b>	<b>58%</b>	<b>100%</b>
2	Bay Area	73%	77%	77%	79%	79%	82%		18%
2	Los Angeles	67%	68%	70%	72%	73%	73%		44%
2	San Diego	75%	75%	76%	77%	80%	80%		6%
2	Remainder of CA	73%	74%	76%	77%	78%	78%		32%
	ALL REGIONS COMBINED	<b>71%</b>	<b>72%</b>	<b>73%</b>	<b>75%</b>	<b>76%</b>	<b>77%</b>		<b>100%</b>
3	Bay Area	85%	87%	89%	89%	90%			17%
3	Los Angeles	80%	81%	82%	84%	86%			45%
3	San Diego	86%	87%	88%	89%	89%			7%
3	Remainder of CA	85%	86%	86%	88%	89%			31%
	ALL REGIONS COMBINED	<b>83%</b>	<b>84%</b>	<b>85%</b>	<b>86%</b>	<b>88%</b>			<b>100%</b>

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

Source: WCIRB 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%
1st Qtr 2020	17.8%	13.7%	68.5%	5,773	1.2%
2nd Qtr 2020	18.3%	13.3%	68.4%	4,773	-18.1%
3rd Qtr 2020	19.3%	13.5%	67.1%	5,638	-11.6%
4th Qtr 2020	19.9%	15.2%	64.8%	5,992	3.4%

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%
2020	81.4%	17.2%	1.4%

### 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%
2020	81.9%	17.7%	0.5%

### 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%
2020	79.7%	15.1%	5.3%

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%
2019	42.1	-15.3%

\*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 2020 Annual Report (draft)

**Liens Filed Counts\***

Counts by Region**								
Time Period	Bay Area	Central Coast/Valley	Los Angeles County	Remainder of LA Basin	Remaining CA Zip Codes	Sacramento	San Diego County	Total
2011	18,723	24,414	283,774	114,554	2,535	3,934	15,922	<b>463,856</b>
1st Qtr 2012	5,490	7,245	97,245	38,034	895	1,248	4,936	<b>155,093</b>
2nd Qtr 2012	5,467	8,970	122,040	44,065	1,102	1,322	4,991	<b>187,957</b>
3rd Qtr 2012	6,434	15,289	207,639	85,152	698	1,407	6,611	<b>323,230</b>
4th Qtr 2012	10,397	25,730	342,549	123,129	1,119	1,557	8,523	<b>513,004</b>
1st Qtr 2013	1,232	2,193	46,830	17,032	230	268	1,312	<b>69,097</b>
2nd Qtr 2013	1,450	1,562	18,947	6,917	211	339	684	<b>30,110</b>
3rd Qtr 2013	1,607	1,795	25,999	9,855	247	410	991	<b>40,904</b>
4th Qtr 2013	1,928	2,025	29,537	10,893	276	358	1,136	<b>46,153</b>
1st Qtr 2014	1,841	2,029	25,668	10,117	239	384	1,165	<b>41,443</b>
2nd Qtr 2014	1,697	2,306	29,417	11,942	265	354	1,263	<b>47,244</b>
3rd Qtr 2014	1,941	1,996	29,665	12,198	355	424	1,378	<b>47,957</b>
4th Qtr 2014	1,690	2,371	34,772	12,469	374	384	1,488	<b>53,548</b>
1st Qtr 2015	2,071	3,058	45,827	18,016	431	488	2,133	<b>72,024</b>
2nd Qtr 2015	2,370	4,218	54,147	22,198	501	500	2,787	<b>86,721</b>
3rd Qtr 2015	2,428	4,977	61,619	24,827	691	526	3,047	<b>98,115</b>
4th Qtr 2015	2,338	4,991	68,843	26,571	686	495	3,085	<b>107,009</b>
1st Qtr 2016	2,884	5,410	67,259	27,326	672	538	3,931	<b>108,020</b>
2nd Qtr 2016	2,543	5,112	66,511	26,852	536	506	3,912	<b>105,972</b>
3rd Qtr 2016	2,243	4,167	45,707	20,136	420	462	3,404	<b>76,539</b>
4th Qtr 2016	1,872	4,433	66,169	25,942	506	397	4,400	<b>103,719</b>
1st Qtr 2017	1,228	1,872	24,947	9,594	334	312	1,380	<b>39,667</b>
2nd Qtr 2017	1,537	2,211	33,194	11,969	349	369	1,764	<b>51,393</b>
3rd Qtr 2017	1,700	2,047	29,215	10,487	298	419	1,149	<b>45,315</b>
4th Qtr 2017	1,535	1,804	26,566	9,914	313	366	1,176	<b>41,674</b>
1st Qtr 2018	1,501	1,575	28,754	10,848	312	406	1,314	<b>44,710</b>
2nd Qtr 2018	1,264	1,538	23,697	9,034	312	338	986	<b>37,169</b>
3rd Qtr 2018	1,156	1,178	18,596	6,340	241	309	702	<b>28,522</b>
4th Qtr 2018	1,276	1,217	19,034	6,108	230	308	690	<b>28,863</b>
1st Qtr 2019	1,206	1,044	17,863	5,664	268	336	577	<b>26,958</b>
2nd Qtr 2019	1,447	1,049	15,862	5,073	244	334	445	<b>24,454</b>
3rd Qtr 2019	1,246	1,195	16,354	4,731	319	381	549	<b>24,775</b>
4th Qtr 2019	1,206	948	15,597	4,496	286	334	434	<b>23,301</b>
1st Qtr 2020	1,189	1,108	14,627	4,095	260	360	461	<b>22,100</b>
2nd Qtr 2020	1,059	878	11,743	3,548	213	288	480	<b>18,209</b>
3rd Qtr 2020	1,462	825	13,277	3,875	260	420	408	<b>20,527</b>
4th Qtr 2020	1,368	706	13,494	4,128	261	255	325	<b>20,537</b>

Counts by Type						
Time Period	Interpreter	Medical	Medical-Legal	Copy Service	Other***	Total
2011	28,721	292,982	39,569	539	102,045	<b>463,856</b>
1st Qtr 2012	12,937	85,152	22,931	139	33,934	<b>155,093</b>
2nd Qtr 2012	17,162	106,336	37,440	65	26,954	<b>187,957</b>
3rd Qtr 2012	46,095	182,474	64,912	91	29,658	<b>323,230</b>
4th Qtr 2012	47,427	317,241	80,916	62	67,358	<b>513,004</b>
1st Qtr 2013	2,397	45,631	11,411	11	9,647	<b>69,097</b>
2nd Qtr 2013	831	22,480	587	20	6,192	<b>30,110</b>
3rd Qtr 2013	484	32,356	653	23	7,388	<b>40,904</b>
4th Qtr 2013	378	37,515	537	8	7,715	<b>46,153</b>
1st Qtr 2014	421	33,105	397	16	7,504	<b>41,443</b>
2nd Qtr 2014	275	38,534	320	10	8,105	<b>47,244</b>
3rd Qtr 2014	140	39,810	179	7	7,821	<b>47,957</b>
4th Qtr 2014	156	45,440	160	4	7,788	<b>53,548</b>
1st Qtr 2015	143	60,155	216	18	11,492	<b>72,024</b>
2nd Qtr 2015	152	74,037	268	7	12,257	<b>86,721</b>
3rd Qtr 2015	134	84,290	191	7	13,493	<b>98,115</b>
4th Qtr 2015	101	91,820	236	15	14,837	<b>107,009</b>
1st Qtr 2016	60	93,393	233	5	14,329	<b>108,020</b>
2nd Qtr 2016	90	89,781	467	6	15,628	<b>105,972</b>
3rd Qtr 2016	64	64,924	262	11	11,278	<b>76,539</b>
4th Qtr 2016	94	91,867	68	4	11,686	<b>103,719</b>
1st Qtr 2017	29	33,952	19	3	5,664	<b>39,667</b>
2nd Qtr 2017	33	43,470	34	5	7,851	<b>51,393</b>
3rd Qtr 2017	77	37,815	31	0	7,392	<b>45,315</b>
4th Qtr 2017	65	33,876	18	1	7,714	<b>41,674</b>
1st Qtr 2018	64	36,674	29	2	7,941	<b>44,710</b>
2nd Qtr 2018	103	29,276	22	0	7,768	<b>37,169</b>
3rd Qtr 2018	79	21,334	14	4	7,091	<b>28,522</b>
4th Qtr 2018	60	21,595	22	1	7,185	<b>28,863</b>
1st Qtr 2019	75	19,887	12	1	6,983	<b>26,958</b>
2nd Qtr 2019	54	18,497	17	1	5,885	<b>24,454</b>
3rd Qtr 2019	43	17,721	9	1	6,674	<b>24,775</b>
4th Qtr 2019	48	15,977	14	0	7,262	<b>23,301</b>
1st Qtr 2020	38	15,775	16	0	6,271	<b>22,100</b>
2nd Qtr 2020	16	12,693	8	0	5,492	<b>18,209</b>
3rd Qtr 2020	15	14,211	12	0	6,289	<b>20,527</b>
4th Qtr 2020	10	14,460	10	0	6,057	<b>20,537</b>

\* 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
Jan-20	477	296	5,126	1,402	117	157	169	7,744
Feb-20	396	420	4,720	1,323	76	114	159	7,208
Mar-20	316	392	4,781	1,370	67	89	133	7,148
Apr-20	324	237	4,111	1,322	71	76	163	6,304
May-20	374	226	3,469	1,025	73	81	113	5,361
Jun-20	361	415	4,163	1,201	69	131	204	6,544
Jul-20	445	305	4,659	1,354	98	122	157	7,140
Aug-20	430	260	4,198	1,212	77	195	133	6,505
Sep-20	587	260	4,420	1,309	85	103	118	6,882
Oct-20	518	286	4,963	1,457	86	91	122	7,523
Nov-20	447	220	4,103	1,343	96	81	118	6,408
Dec-20	403	200	4,428	1,328	79	83	85	6,606

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
Jan-20	5	5,335	7	0	2,397	7,744
Feb-20	20	5,157	7	0	2,024	7,208
Mar-20	13	5,283	2	0	1,850	7,148
Apr-20	6	4,447	2	0	1,849	6,304
May-20	5	3,774	5	0	1,577	5,361
Jun-20	5	4,472	1	0	2,066	6,544
Jul-20	4	4,994	8	0	2,134	7,140
Aug-20	8	4,423	1	0	2,073	6,505
Sep-20	3	4,794	3	0	2,082	6,882
Oct-20	9	5,229	6	0	2,279	7,523
Nov-20	0	4,510	2	0	1,896	6,408
Dec-20	1	4,721	2	0	1,882	6,606

\* 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

**IMR Filed Counts**

Quarterly IMRs Filed

<u>Year &amp; Quarter</u>	<u>IMRs Filed</u>	Change from Same Quarter in <u>Prior Year</u>	<u>Eligible IMRs</u>	Change from Same Quarter in <u>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	57,498	-13.7%	43,658	-9.4%
2019 3Q	55,759	-9.6%	43,873	-4.2%
2019 4Q	52,759	-11.4%	42,489	-5.5%
2020 1Q	51,925	-7.4%	38,405	-9.3%
2020 2Q	40,642	-29.3%	31,524	-27.8%
2020 3Q	45,183	-19.0%	34,674	-21.0%
2020 4Q	46,270	-12.3%	35,467	-16.5%

Yearly IMR Counts

	<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	222,099	44,773	4,972	49,745	172,354	-7.4%
2020 IMR Counts	184,020	35,133	8,817	43,950	140,070	-18.7%

Source: DWC Collected from IMR Vendor

DWC Via Commission on Health and Safety & Workers' Compensation 2020 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>	
2002										1.000
2003								0.999		0.999
2004							0.999	0.999		0.999
2005						1.001	1.000	1.000		1.000
2006					1.001	1.000	1.001	1.000		1.001
2007				1.004	1.002	1.001	1.000	1.001		1.001
2008			1.012	1.006	1.003	1.002	1.002	1.001		1.001
2009		1.036	1.014	1.007	1.004	1.003	1.001	1.001		1.000
2010	1.688	1.040	1.015	1.007	1.005	1.002	1.002	1.000		1.000
2011	1.713	1.046	1.016	1.010	1.003	1.001	1.001	1.000		1.000
2012	1.735	1.050	1.019	1.006	1.003	1.002	1.001	1.000		
2013	1.753	1.050	1.011	1.006	1.002	1.001	1.001			
2014	1.749	1.040	1.012	1.005	1.002	1.001				
2015	1.728	1.039	1.007	1.004	1.003					
2016	1.731	1.042	1.009	1.004						
2017	1.707	1.033	1.010							
2018	1.703	1.038								
2019	1.716									
Latest Year										
I. <u>Age-to-Age</u>	1.716	1.038	1.010	1.004	1.003	1.001	1.001	1.000	1.000	
II. <u>Age-to-Ultimate</u>	1.819	1.060	1.021	1.011	1.007	1.004	1.003	1.002	1.002	1.002
III. <u>Estimated Percent of Ultimate Indemnity Claims Reported</u>	55.0%	94.4%	97.9%	98.9%	99.3%	99.6%	99.7%	99.8%	99.8%	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>	
2002										1.001
2003								1.001		1.000
2004							1.001	1.000		1.000
2005						1.002	1.001	1.001		1.000
2006					1.002	1.001	1.001	1.001		1.001
2007				1.004	1.002	1.001	1.001	1.001		1.001
2008			1.009	1.004	1.002	1.002	1.001	1.001		1.000
2009		1.020	1.008	1.004	1.003	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	1.603	1.023	1.009	1.006	1.002	1.001	1.001	1.001		1.000
2012	1.628	1.025	1.010	1.004	1.002	1.001	1.001	1.000		
2013	1.639	1.026	1.007	1.004	1.002	1.001	1.001			
2014	1.649	1.022	1.007	1.004	1.002	1.001				
2015	1.638	1.021	1.006	1.003	1.002					
2016	1.632	1.022	1.007	1.004						
2017	1.635	1.016	1.006							
2018	1.615	1.017								
2019	1.630									
Latest Year										
I. <u>Age-to-Age</u>	1.630	1.017	1.006	1.004	1.002	1.001	1.001	1.000	1.000	
II. <u>Age-to-Ultimate</u>	1.688	1.035	1.018	1.012	1.008	1.005	1.004	1.003	1.003	1.002
III. <u>Estimated Percent of Ultimate Total Claims Reported</u>	59.2%	96.6%	98.3%	98.8%	99.2%	99.5%	99.6%	99.7%	99.7%	99.8%

Source: WCIRB quarterly calls for experience

**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>
2002									16.4%
2003								18.2%	17.5%
2004							20.4%	18.6%	22.2%
2005						22.0%	19.5%	22.9%	20.6%
2006					23.0%	20.7%	23.6%	21.8%	19.3%
2007				26.3%	22.5%	25.4%	24.4%	21.7%	23.4%
2008			27.3%	25.7%	26.6%	26.5%	24.5%	25.0%	23.6%
2009		24.9%	27.0%	27.7%	27.2%	26.8%	27.4%	25.1%	24.6%
2010	31.9%	25.9%	29.0%	29.9%	28.4%	29.0%	28.8%	26.1%	25.1%
2011	32.0%	27.2%	30.6%	31.1%	29.7%	29.8%	30.3%	27.0%	23.5%
2012	32.3%	29.3%	31.9%	32.0%	32.5%	31.9%	29.6%	25.6%	
2013	33.2%	30.8%	34.0%	35.0%	34.0%	32.7%	30.2%		
2014	34.2%	32.2%	35.5%	37.2%	33.6%	30.8%			
2015	35.4%	35.3%	38.1%	37.5%	31.7%				
2016	37.7%	37.1%	39.7%	34.9%					
2017	40.1%	38.4%	36.6%						
2018	40.2%	35.3%							
2019	38.4%								

Source: WCIRB quarterly calls for experience

**Ratio of Incremental Closed Indemnity Claims to Prior Open Indemnity Claims**

Accident Year	Development														
	<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>
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%	9.9%	9.8%	10.4%	10.1%	10.6%
2014	4.1%	7.3%	10.3%	11.2%	9.6%	9.1%	9.0%	9.1%	9.6%	9.9%	10.5%	9.9%	11.4%	10.4%	11.5%
2015	4.0%	7.6%	10.4%	11.8%	10.6%	9.2%	9.7%	10.2%	11.3%	10.7%	11.3%	11.2%	11.9%	11.4%	11.6%
2016	4.2%	7.5%	10.9%	12.5%	11.5%	10.0%	10.7%	10.3%	11.8%	11.3%	12.4%	11.8%	12.0%	11.1%	11.7%
2017	4.7%	8.2%	12.2%	13.1%	12.1%	10.8%	11.5%	10.7%	11.8%	11.6%	12.0%	10.9%	9.6%	10.0%	
2018	4.8%	8.4%	12.3%	13.2%	11.9%	10.7%	10.9%	10.5%	9.6%	9.8%					
2019	4.7%	8.3%	12.3%	13.3%	9.9%	9.3%									
2020	4.4%	10.0%													

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 85% to 100% of the total California workers' compensation insured market measured using 2019 earned premium levels).

Source: WCIRB quarterly calls for experience

**2020 Accident Year Indemnity Claim Frequency Model**  
**As of PY 2018 Preliminary 1st Set & December 2020 UCLA**

AY	Annual %	Annual Log Differences						CalOSHA Dummy Variable
	Changes Intra- Class Ind Freq	Intra-Class Indemnity Frequency per \$M Exposure at PY 2019 Level			AY+1 Indemnity		Economic Variables (1st Prin. Comp.)	
	Total	Total	Cumulative	Non-cum.	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	-0.081	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	0.080	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	0.074	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.137	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.078	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	-0.085	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.309	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	4.7%	0.046	0.127	0.036	0.025	0.091	0.123	0.000
2013	0.4%	0.004	0.126	-0.013	0.071	0.139	0.151	0.000
2014	0.2%	0.002	0.041	-0.004	0.003	0.046	0.178	0.000
2015	-1.4%	-0.014	0.006	-0.017	0.002	0.023	0.193	0.000
2016	-2.6%	-0.026	0.054	-0.039	0.004	0.093	0.124	0.000
2017	-2.1%	-0.021	-0.083	-0.011	0.004	-0.072	0.136	0.000
2018	-1.0%	-0.010	-0.053	-0.004	0.003	-0.049	0.119	0.000
2019*	0.1%	0.001	0.076	-0.012	0.004	0.088	0.053	0.000
2020	-6.8%	-0.071	0.021	-0.088	0.004	0.109	-0.929	0.000
2021	2.1%	0.020	0.017	0.021	0.004	-0.004	0.388	0.000
2022	1.2%	0.012	0.012	0.012	0.004	0.000	0.298	0.000
2023	-0.3%	-0.003	-0.003	-0.003	0.004	0.000	0.156	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 41  
Degrees of Freedom 36

X Coefficient(s) 0.178 0.277 0.107 -0.144  
Std Err of Coef. 0.070 0.059 0.042 0.074

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 2019; December 2020 UCLA Anderson Forecasts for 2020 on.

Regression is over AY 1979 through AY 2019. AY 2020 through AY 2023 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 2019 is preliminary and change is based on a comparison of 2019 accidents on 2018 policies to 2018 accidents on 2017 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	0.483	0.920	0.582	---	---	---
1980	0.452	0.909	0.538	-6.54%	-1.12%	-7.58%
1981	0.436	0.893	0.509	-3.54%	-1.87%	-5.34%
1982	0.429	0.874	0.491	-1.59%	-2.10%	-3.66%
1983	0.456	0.872	0.520	6.20%	-0.20%	5.99%
1984	0.499	0.871	0.568	9.53%	-0.17%	9.34%
1985	0.509	0.864	0.576	2.05%	-0.75%	1.28%
1986	0.497	0.855	0.556	-2.39%	-1.03%	-3.39%
1987	0.505	0.853	0.564	1.53%	-0.22%	1.30%
1988	0.508	0.854	0.568	0.69%	0.06%	0.75%
1989	0.521	0.852	0.581	2.47%	-0.18%	2.29%
1990	0.568	0.840	0.625	9.04%	-1.38%	7.54%
1991	0.569	0.826	0.616	0.28%	-1.72%	-1.44%
1992	0.506	0.816	0.540	-11.09%	-1.26%	-12.21%
1993	0.431	0.805	0.454	-14.91%	-1.24%	-15.97%
1994	0.376	0.811	0.399	-12.76%	0.74%	-12.11%
1995	0.358	0.809	0.380	-4.64%	-0.24%	-4.87%
1996	0.334	0.793	0.347	-6.78%	-1.97%	-8.62%
1997	0.323	0.788	0.333	-3.27%	-0.70%	-3.94%
1998	0.311	0.784	0.319	-3.76%	-0.53%	-4.27%
1999	0.315	0.767	0.317	1.45%	-2.19%	-0.77%
2000	0.328	0.740	0.318	4.02%	-3.45%	0.43%
2001	0.305	0.761	0.304	-6.91%	2.79%	-4.31%
2002	0.298	0.763	0.298	-2.31%	0.28%	-2.04%
2003	0.290	0.764	0.290	-2.86%	0.14%	-2.72%
2004	0.242	0.760	0.240	-16.65%	-0.48%	-17.05%
2005	0.209	0.759	0.207	-13.59%	-0.17%	-13.74%
2006	0.197	0.749	0.193	-5.69%	-1.31%	-6.93%
2007	0.194	0.748	0.190	-1.64%	-0.20%	-1.83%
2008	0.188	0.733	0.181	-2.71%	-1.93%	-4.59%
2009	0.188	0.720	0.177	-0.20%	-1.74%	-1.94%
2010	0.205	0.706	0.189	8.87%	-1.97%	6.72%
2011	0.207	0.699	0.190	1.22%	-0.98%	0.22%
2012	0.217	0.690	0.196	4.71%	-1.37%	3.28%
2013	0.218	0.693	0.198	0.36%	0.47%	0.83%
2014	0.218	0.693	0.198	0.16%	-0.01%	0.15%
2015	0.215	0.685	0.193	-1.39%	-1.10%	-2.47%
2016	0.209	0.682	0.187	-2.61%	-0.45%	-3.06%
2017	0.205	0.676	0.181	-2.07%	-0.94%	-2.99%
2018(c)	0.203	0.681	0.181	-1.01%	0.75%	-0.26%
2018(d)	0.199	0.681	0.178	---	---	---
2019(e)	0.199	0.676	0.176	0.09%	-0.75%	-0.66%
2020	0.186	0.662	0.161	-6.82%	-2.02%	-8.71%
2021	0.190	0.666	0.165	2.05%	0.63%	2.69%
2022	0.192	0.663	0.167	1.25%	-0.46%	0.78%
2023	0.192	0.662	0.166	-0.27%	-0.13%	-0.40%
PY						
2008	0.188	0.727	0.179			
2009	0.196	0.714	0.183	3.88%	-1.84%	1.92%
2010	0.206	0.703	0.189	5.27%	-1.53%	3.69%
2011	0.212	0.695	0.192	2.80%	-1.16%	1.60%
2012	0.217	0.691	0.197	2.70%	-0.55%	2.16%
2013	0.218	0.693	0.198	0.27%	0.25%	0.52%
2014	0.217	0.689	0.196	-0.54%	-0.50%	-1.03%
2015	0.213	0.684	0.190	-1.94%	-0.81%	-2.73%
2016	0.207	0.682	0.184	-2.81%	-0.34%	-3.14%
2017	0.201	0.681	0.179	-2.52%	-0.10%	-2.63%
2018	0.199	0.679	0.177	-0.99%	-0.34%	-1.32%
2019	0.193	0.670	0.170	-3.02%	-1.32%	-4.27%
2020	0.188	0.664	0.163	-2.98%	-0.84%	-3.83%
2021	0.191	0.665	0.166	1.69%	0.13%	1.82%
2022	0.192	0.663	0.166	0.56%	-0.31%	0.24%

Notes: (a) All frequencies are per \$M exposure at PY 2019 Level.  
 (b) Index is to AY 1961.  
 (c) 2018 accidents on 2018 and 2017 policies.  
 (d) 2018 accidents on 2017 policies only.  
 (e) AY 2019 percent changes are based on a comparison of 2019 accidents on 2018 policies to 2018 accidents on 2017 policies.  
 (f) Forecasts below thick solid line.

Source: WCIRB Indemnity Frequency Model

**Annual Changes in Indemnity Frequency Attributable to Changes in Hazardousness**

Policy Year	Report Level	Change in Frequency Hazardousness	Indemnity Frequency Hazardousness Index	Annual % Change in Ind Frequency Attributable to Change in Mix of Exposures
1961	3	1.000000	1.000000	-----
1962	3	0.990262	0.990262	-0.9738
1963	3	0.998718	0.988993	-0.1282
1964	3	0.994304	0.983359	-0.5696
1965	3	0.993875	0.977336	-0.6125
1966	3	0.983584	0.961291	-1.6416
1967	3	0.987626	0.949396	-1.2374
1968	3	0.997512	0.947033	-0.2488
1969	3	0.986390	0.934144	-1.3610
1970	3	0.989966	0.924770	-1.0034
1971	3	1.000824	0.925532	0.0824
1972	3	1.000505	0.926000	0.0505
1973	3	0.998631	0.924732	-0.1369
1974	3	0.986017	0.911802	-1.3983
1975	3	0.984110	0.897313	-1.5890
1976	3	1.004996	0.901796	0.4996
1977	3	1.009490	0.910354	0.9490
1978	3	1.012494	0.921728	1.2494
1979	3	0.997841	0.919739	-0.2159
1980	3	0.988843	0.909477	-1.1157
1981	3	0.981336	0.892503	-1.8664
1982	3	0.979033	0.873790	-2.0967
1983	3	0.997989	0.872032	-0.2011
1984	3	0.998272	0.870525	-0.1728
1985	3	0.992516	0.864010	-0.7484
1986	3	0.989667	0.855082	-1.0333
1987	3	0.997751	0.853159	-0.2249
1988	3	1.000574	0.853649	0.0574
1989	5	0.998212	0.852122	-0.1788
1990	5	0.986184	0.840349	-1.3816
1991	5	0.982822	0.825913	-1.7178
1992	5	0.987393	0.815501	-1.2607
1993	5	0.987562	0.805358	-1.2438
1994	5	1.007382	0.811303	0.7382
1995	5	0.997625	0.809376	-0.2375
1996	5	0.980288	0.793422	-1.9712
1997	5	0.993034	0.787895	-0.6966
1998	5	0.994743	0.783752	-0.5257
1999	5	0.978134	0.766615	-2.1866
2000	5	0.965472	0.740145	-3.4528
2001	5	1.027926	0.760814	2.7926
2002	5	1.002823	0.762962	0.2823
2003	5	1.001398	0.764029	0.1398
2004	5	0.995209	0.760369	-0.4791
2005	5	0.998285	0.759065	-0.1715
2006	5	0.986896	0.749118	-1.3104
2007	5	0.998047	0.747655	-0.1953
2008	5	0.980684	0.733213	-1.9316
2009	5	0.982600	0.720455	-1.7400
2010	5	0.980260	0.706234	-1.9740
2011	5	0.990176	0.699296	-0.9824
2012	5	0.986305	0.689719	-1.3695
2013	5	1.004725	0.692978	0.4725
2014	5	0.999889	0.692901	-0.0111
2015	Proj to 5th	0.989032	0.685301	-1.0968
2016	Proj to 5th	0.995454	0.682186	-0.4546
2017	Proj to 5th	0.990633	0.675796	-0.9367
2018	Proj to 5th	0.998104	0.674515	-0.1896

Source: WCIRB unit statistical data

**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	from Same Quarter at Prior	from Same Quarter at Prior	from Same Quarter at Prior
	<u>Calendar Year</u>	<u>Calendar Year</u>	<u>Calendar Year</u>	<u>Calendar Year</u>
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	2.1%	3.2%	-3.1%	3.0%
12/31/2019	5.6%	3.7%	2.0%	2.2%
3/31/2020	2.4%	3.2%	-5.2%	0.2%
6/30/2020	-13.0%	-0.8%	-30.7%	-9.1%
9/30/2020	5.9%	0.2%	-28.8%	-15.9%

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	3,961,384	6.90			
1962	4,144,806	5.80	0.045	-0.174	
1963	4,291,954	6.00	0.035	0.034	-0.029
1964	4,424,294	6.00	0.030	0.000	0.004
1965	4,544,588	5.90	0.027	-0.017	0.020
1966	4,791,717	4.90	0.053	-0.186	0.191
1967	4,926,847	5.70	0.028	0.151	-0.147
1968	5,132,196	5.40	0.041	-0.054	0.059
1969	5,366,754	5.20	0.045	-0.038	0.043
1970	5,334,044	7.30	-0.006	0.339	-0.337
1971	5,282,585	8.79	-0.010	0.186	-0.186
1972	6,019,812	7.61	0.131	-0.145	0.160
1973	6,497,659	7.02	0.076	-0.081	0.090
1974	6,706,356	7.30	0.032	0.040	-0.035
1975	6,682,097	9.88	-0.004	0.302	-0.300
1976	7,257,806	9.17	0.083	-0.075	0.084
1977	7,678,371	8.25	0.056	-0.105	0.112
1978	9,198,786	7.11	0.181	-0.149	0.171
1979	9,617,306	6.24	0.044	-0.130	0.134
1980	10,264,517	6.83	0.065	0.090	-0.081
1981	10,403,370	7.41	0.013	0.081	-0.079
1982	10,230,275	9.95	-0.017	0.294	-0.294
1983	10,329,942	9.68	0.010	-0.028	0.029
1984	10,820,932	7.79	0.046	-0.218	0.222
1985	11,173,091	7.21	0.032	-0.077	0.080
1986	11,483,890	6.69	0.027	-0.075	0.078
1987	11,888,129	5.77	0.035	-0.148	0.151
1988	12,355,278	5.31	0.039	-0.084	0.088
1989	12,686,848	5.09	0.026	-0.042	0.045
1990	12,940,808	5.77	0.020	0.125	-0.121
1991	12,776,338	7.74	-0.013	0.294	-0.293
1992	12,576,366	9.32	-0.016	0.186	-0.186
1993	12,477,367	9.52	-0.008	0.021	-0.022
1994	12,609,908	8.56	0.011	-0.106	0.106
1995	12,867,375	7.82	0.020	-0.090	0.092
1996	13,225,422	7.28	0.027	-0.072	0.074
1997	13,619,654	6.37	0.029	-0.135	0.137
1998	14,082,965	5.91	0.033	-0.075	0.078
1999	14,479,767	5.21	0.028	-0.125	0.128
2000	14,992,265	4.90	0.035	-0.062	0.066
2001	15,098,050	5.43	0.007	0.103	-0.101
2002	14,972,541	6.65	-0.008	0.203	-0.202
2003	14,950,702	6.81	-0.001	0.023	-0.023
2004	15,130,469	6.20	0.012	-0.093	0.093
2005	15,422,217	5.40	0.019	-0.139	0.141
2006	15,697,957	4.92	0.018	-0.093	0.095
2007	15,844,029	5.36	0.009	0.087	-0.085
2008	15,689,423	7.31	-0.010	0.310	-0.309
2009	14,807,953	11.15	-0.058	0.423	-0.427
2010	14,664,517	12.22	-0.010	0.091	-0.092
2011	14,826,042	11.72	0.011	-0.042	0.043
2012	15,161,033	10.38	0.022	-0.121	0.123
2013	15,563,642	8.94	0.026	-0.149	0.151
2014	15,991,717	7.50	0.027	-0.176	0.178
2015	16,471,000	6.19	0.030	-0.191	0.193
2016	16,904,583	5.49	0.026	-0.122	0.124
2017	17,249,442	4.79	0.020	-0.135	0.136
2018	17,594,683	4.26	0.020	-0.118	0.119
2019	17,854,342	4.04	0.015	-0.052	0.053
2020	16,597,054	10.22	-0.073	0.927	-0.929
2021	17,208,059	6.94	0.036	-0.387	0.388
2022	17,871,465	5.17	0.038	-0.295	0.298
2023	18,315,294	4.43	0.025	-0.154	0.156

Notes: The first principal component is of the annual log difference data from 1962-2020.  
The first principal component of the annual log difference of the economic variables is:  
1st PC of Econ Variables = -0.1246162 x Aggregate Employment + 0.992205 x Unemployment Rate

Sources: Government historical labor statistics through 2019  
UCLA Anderson forecasts through 2023 are as of December 2020

**Accident Year Cumulative Injury Indemnity Claim Counts by Accident Year and Report Level**

Cumulative Injury Indemnity Claim Counts by Accident Year and Report Level

AY/RL	1	2	3	4	5	6	7	8	9	10
2005	7,365	8,179	8,736	9,216	9,742	9,995	10,097	10,156	10,155	10,148
2006	6,766	7,821	8,411	8,883	9,159	9,240	9,298	9,331	9,376	9,412
2007	6,991	8,143	8,838	9,251	9,427	9,534	9,551	9,532	9,595	9,646
2008	6,938	8,200	9,023	9,396	9,596	9,638	9,712	9,787	9,819	9,816
2009	7,362	8,877	9,672	9,999	10,151	10,219	10,324	10,382	10,402	10,423
2010	8,166	9,459	9,988	10,260	10,360	10,532	10,666	10,661	10,663	10,700
2011	8,057	9,720	10,279	10,510	10,756	10,907	10,964	10,964	10,983	
2012	8,931	10,733	11,332	11,791	12,111	12,265	12,296	12,277		
2013	10,875	12,760	13,674	14,169	14,385	14,368	14,412			
2014	11,555	13,788	14,569	14,970	15,057	15,080				
2015	11,891	14,208	14,805	15,008	15,101					
2016	12,132	15,425	16,042	16,416						
2017	11,670	13,962	14,808							
2018	11,517	14,482								
2019	12,376									

Cumulative Injury Share of Total Indemnity Count

AY/RL	1	2	3	4	5	6	7	8	9	10
2005	6.8%	7.4%	7.8%	8.2%	8.7%	8.9%	9.0%	9.1%	9.0%	9.0%
2006	6.7%	7.5%	8.1%	8.5%	8.8%	8.8%	8.9%	8.9%	8.9%	9.0%
2007	7.2%	8.2%	8.8%	9.2%	9.4%	9.5%	9.5%	9.5%	9.5%	9.6%
2008	7.8%	8.9%	9.6%	10.0%	10.1%	10.1%	10.2%	10.3%	10.3%	10.3%
2009	9.1%	10.5%	11.3%	11.6%	11.7%	11.8%	11.9%	11.9%	11.9%	12.0%
2010	10.1%	11.2%	11.6%	11.8%	11.9%	12.1%	12.2%	12.2%	12.2%	12.2%
2011	9.7%	11.1%	11.6%	11.7%	11.9%	12.1%	12.1%	12.1%	12.1%	
2012	10.2%	11.6%	12.0%	12.4%	12.7%	12.9%	12.9%	12.8%		
2013	11.6%	12.9%	13.6%	14.0%	14.2%	14.2%	14.2%			
2014	12.0%	13.6%	14.2%	14.5%	14.5%	14.5%				
2015	12.3%	14.0%	14.4%	14.5%	14.6%					
2016	12.6%	15.1%	15.5%	15.8%						
2017	12.1%	13.8%	14.4%							
2018	11.8%	13.8%								
2019	12.8%									

Source: WCIRB unit statistical data

**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														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	0.309	0.303	0.283	0.296	0.305	0.313	0.323	0.309	0.293	0.302	0.310	0.299	0.284	0.276	<i>0.274</i>
Los Angeles/LA Basin	0.398	0.382	0.388	0.405	0.405	0.397	0.403	0.398	0.369	0.374	0.392	0.381	0.375	0.363	<i>0.353</i>
San Diego	0.341	0.330	0.329	0.336	0.362	0.356	0.357	0.361	0.327	0.348	0.360	0.345	0.353	0.344	<i>0.368</i>
All Other	0.324	0.315	0.299	0.320	0.315	0.325	0.320	0.314	0.290	0.302	0.315	0.301	0.293	0.282	<i>0.284</i>
All Regions	0.356	0.344	0.339	0.357	0.360	0.360	0.363	0.358	0.332	0.341	0.355	0.343	0.334	0.323	<i>0.320</i>

Region	Annual Change														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	---	-1.8%	-6.6%	4.4%	3.1%	2.5%	3.3%	-4.4%	-5.2%	3.0%	2.7%	-3.5%	-4.9%	-2.8%	<i>-0.8%</i>
Los Angeles/LA Basin	---	-4.0%	1.7%	4.3%	-0.1%	-2.1%	1.6%	-1.3%	-7.2%	1.4%	4.8%	-2.8%	-1.5%	-3.2%	<i>-2.9%</i>
San Diego	---	-3.4%	-0.1%	2.2%	7.6%	-1.5%	0.2%	1.1%	-9.3%	6.2%	3.4%	-4.1%	2.3%	-2.4%	<i>6.8%</i>
All Other	---	-2.7%	-5.2%	7.1%	-1.6%	3.3%	-1.7%	-1.8%	-7.8%	4.2%	4.4%	-4.4%	-2.9%	-3.6%	<i>0.5%</i>
All Regions	---	-3.2%	-1.5%	5.3%	0.9%	0.0%	0.8%	-1.5%	-7.3%	2.7%	4.2%	-3.5%	-2.5%	-3.3%	<i>-0.9%</i>

Region	Ratio of Indemnity Claims to Total Claims for Accident Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	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	0.342	<i>0.348</i>
Los Angeles/LA Basin	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	0.370	<i>0.376</i>
San Diego	0.263	0.259	0.260	0.272	0.285	0.303	0.313	0.327	0.329	0.329	0.327	0.327	0.315	0.315	<i>0.312</i>
All Other	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	0.318	<i>0.329</i>
All Regions	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	0.345	<i>0.352</i>

Region	Annual Change														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	---	0.6%	1.1%	2.3%	3.9%	2.7%	2.4%	-0.2%	2.8%	-0.8%	1.4%	0.3%	-0.4%	2.9%	<i>1.6%</i>
Los Angeles/LA Basin	---	-2.4%	2.5%	3.8%	7.9%	3.3%	1.7%	3.7%	4.7%	0.9%	-0.4%	-0.2%	-5.1%	-0.2%	<i>1.8%</i>
San Diego	---	-1.4%	0.2%	4.7%	4.6%	6.4%	3.5%	4.3%	0.5%	0.0%	-0.6%	0.1%	-3.5%	0.0%	<i>-1.1%</i>
All Other	---	-3.2%	1.6%	2.2%	4.2%	2.7%	2.3%	0.4%	3.9%	-1.3%	-2.3%	0.3%	-3.9%	-0.4%	<i>3.4%</i>
All Regions	---	-2.0%	1.8%	3.2%	6.0%	3.3%	2.1%	2.2%	3.8%	0.0%	-0.8%	0.0%	-4.0%	0.2%	<i>2.3%</i>

Region	Cumulative Injury Claims per 100 Indemnity Claims for Accident Year														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	7.39	6.51	7.51	7.55	8.20	8.18	8.21	7.73	9.12	8.74	8.04	8.05	8.11	7.39	<i>7.60</i>
Los Angeles/LA Basin	7.98	7.86	8.50	8.90	10.60	11.63	11.26	12.52	14.89	15.62	16.18	16.58	16.62	15.74	<i>16.93</i>
San Diego	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	11.61	<i>13.97</i>
All Other	4.47	4.92	4.86	4.86	5.77	6.30	5.94	6.15	7.02	7.12	6.79	6.66	6.43	7.30	<i>7.50</i>
All Regions	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	11.46	<i>12.43</i>

Region	Annual Change														
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bay Area	---	-11.9%	15.4%	0.5%	8.7%	-0.3%	0.4%	-5.8%	18.0%	-4.1%	-8.0%	0.1%	0.7%	-8.9%	<i>2.9%</i>
Los Angeles/LA Basin	---	-1.5%	8.1%	4.8%	19.1%	9.6%	-3.1%	11.2%	18.9%	4.9%	3.6%	2.5%	0.2%	-5.3%	<i>7.6%</i>
San Diego	---	-8.8%	7.1%	8.4%	4.8%	26.1%	-7.6%	3.0%	34.2%	5.8%	-1.8%	-0.4%	-0.8%	-3.9%	<i>20.4%</i>
All Other	---	10.2%	-1.2%	-0.1%	18.8%	9.2%	-5.8%	3.6%	14.1%	1.5%	-4.7%	-1.9%	-3.4%	13.6%	<i>2.8%</i>
All Regions	---	-1.6%	7.4%	4.0%	16.9%	9.1%	-3.8%	7.2%	18.8%	3.3%	0.0%	1.0%	-2.1%	-2.6%	<i>8.5%</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
2002	22.49	22.88	23.09	23.08	23.12	2002	---	---	---	---	---
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	11.89	11.91	2014	-1.0%	-1.2%	-1.4%	-1.5%	-1.5%
2015	11.11	11.75	11.45	11.50	11.52	2015	-1.4%	0.3%	-3.2%	-3.3%	-3.3%
2016	10.75	10.80	10.65	10.69		2016	-3.2%	-8.1%	-7.0%	-7.0%	
2017	10.28	10.33	10.41			2017	-4.4%	-4.3%	-2.3%		
2018	9.95	10.23				2018	-3.2%	-1.0%			
2019	9.88					2019	-0.7%				

**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
2002	31.71	33.21	33.16	33.06	32.96	2002	---	---	---	---	---
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	25.65	2014	2.4%	2.3%	2.2%	2.0%	1.9%
2015	23.41	24.92	25.28	25.39	25.46	2015	-0.1%	-0.3%	-0.5%	-0.7%	-0.7%
2016	22.76	24.39	24.74	24.84		2016	-2.8%	-2.1%	-2.1%	-2.2%	
2017	22.43	24.00	24.38			2017	-1.5%	-1.6%	-1.5%		
2018	22.31	23.67				2018	-0.5%	-1.4%			
2019	22.78					2019	2.1%				

**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
2002	30.73	31.05	31.03	30.74	30.84	2002	---	---	---	---	---
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	18.58	2013	-1.5%	-1.3%	-1.8%	-1.9%	-1.8%
2014	17.90	18.66	18.80	18.89	18.96	2014	1.8%	2.2%	2.1%	2.1%	2.1%
2015	18.14	18.95	19.09	19.18	19.22	2015	1.3%	1.6%	1.6%	1.5%	1.4%
2016	17.82	18.55	18.67	18.76		2016	-1.8%	-2.1%	-2.2%	-2.2%	
2017	17.18	17.80	17.94			2017	-3.6%	-4.0%	-3.9%		
2018	16.58	17.11				2018	-3.5%	-3.9%			
2019	16.88					2019	1.8%				

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
2002	38.30	39.40	40.10	40.60	40.93	2002	---	---	---	---	---
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	25.76	2013	-0.6%	-0.9%	-1.0%	-1.1%	-1.0%
2014	23.90	24.96	25.34	25.48	25.58	2014	-1.0%	-1.0%	-0.8%	-0.9%	-0.7%
2015	23.84	24.84	25.21	25.37	25.50	2015	-0.2%	-0.5%	-0.5%	-0.4%	-0.3%
2016	22.74	23.72	24.01	24.20		2016	-4.6%	-4.5%	-4.7%	-4.6%	
2017	22.64	23.60	23.87			2017	-0.4%	-0.5%	-0.6%		
2018	21.95	22.85				2018	-3.1%	-3.1%			
2019	20.65					2019	-5.9%				

**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
2002	30.84	31.89	32.01	32.03	32.07	2002	---	---	---	---	---
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	19.54	20.70	20.77	20.87	20.94	2015	-0.8%	-0.3%	-1.5%	-1.6%	-1.5%
2016	18.94	19.83	19.95	20.05		2016	-3.1%	-4.2%	-3.9%	-3.9%	
2017	18.44	19.27	19.52			2017	-2.7%	-2.8%	-2.1%		
2018	18.01	18.91				2018	-2.3%	-1.9%			
2019	18.04					2019	0.2%				

**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
1995							0.292	0.244	0.191
1996						0.328	0.278	0.233	0.195
1997					0.403	0.320	0.281	0.217	0.182
1998				0.469	0.359	0.308	0.250	0.225	0.215
1999			0.561	0.442	0.394	0.316	0.273	0.243	0.214
2000		0.720	0.520	0.461	0.366	0.319	0.310	0.261	0.227
2001	1.169	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	0.432	0.365	0.326	0.266	0.251
2003	1.033	0.698	0.596	0.505	0.411	0.337	0.276	0.260	0.251
2004	0.959	0.605	0.536	0.423	0.377	0.323	0.307	0.282	0.299
2005	1.141	0.706	0.566	0.483	0.399	0.341	0.302	0.308	0.267
2006	1.229	0.760	0.557	0.468	0.407	0.362	0.313	0.287	0.243
2007	1.388	0.778	0.569	0.473	0.423	0.379	0.339	0.264	0.292
2008	1.475	0.804	0.632	0.518	0.443	0.383	0.329	0.273	0.258
2009	1.545	0.808	0.636	0.528	0.447	0.389	0.349	0.331	0.301
2010	1.628	0.837	0.661	0.554	0.482	0.436	0.383	0.339	0.326
2011	1.655	0.814	0.627	0.517	0.457	0.414	0.402	0.368	0.301
2012	1.657	0.803	0.638	0.548	0.523	0.415	0.388	0.334	
2013	1.602	0.815	0.678	0.586	0.512	0.425	0.361		
2014	1.607	0.883	0.706	0.593	0.489	0.399			
2015	1.629	0.867	0.677	0.564	0.443				
2016	1.665	0.859	0.682	0.537					
2017	1.641	0.841	0.624						
2018	1.619	0.793							
2019	1.634								

Accident Year	Paid Medical								
	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
1995							0.227	0.219	0.170
1996						0.273	0.250	0.217	0.164
1997					0.359	0.290	0.266	0.176	0.158
1998				0.381	0.322	0.267	0.195	0.201	0.164
1999			0.510	0.410	0.353	0.249	0.209	0.191	0.202
2000		0.686	0.491	0.403	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	1.050	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	0.218	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	0.597	0.542	0.443	0.376	0.333	0.288	0.238	0.239
2011	1.143	0.560	0.466	0.394	0.349	0.290	0.265	0.238	0.187
2012	1.095	0.520	0.453	0.401	0.369	0.290	0.273	0.228	
2013	1.060	0.504	0.455	0.411	0.337	0.294	0.242		
2014	1.054	0.530	0.474	0.406	0.351	0.296			
2015	1.021	0.520	0.444	0.375	0.300				
2016	1.067	0.508	0.421	0.368					
2017	1.012	0.490	0.402						
2018	1.020	0.479							
2019	0.996								

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, 2020  
Accident Year 2014 Projected to 81 Months<sup>[1]</sup>**

**Indemnity**

Methodology	Based on Experience Evaluated as of (in months):					
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>Current</u>
3-Year Avg. Incurred	0.203	0.204	0.203	0.200	0.198	0.195
Latest Year Incurred	0.194	0.198	0.200	0.199	0.197	0.195
3-Year Avg. Paid	0.204	0.208	0.207	0.203	0.199	0.195
Latest Year Paid	0.200	0.205	0.205	0.202	0.199	0.195
Reform-Adj. Paid <sup>[2]</sup>	0.200	0.205	0.205	0.202	0.199	0.195
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.193	0.199	0.200	0.199	0.197	0.195
Difference from Actual 81-Month Loss Ratio						
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>Current</u>
3-Year Avg. Incurred	4.3%	4.8%	4.1%	3.0%	1.6%	0.0%
Latest Year Incurred	-0.1%	1.9%	2.7%	2.4%	1.2%	0.0%
3-Year Avg. Paid	4.8%	6.9%	6.2%	4.3%	2.2%	0.0%
Latest Year Paid	2.6%	5.3%	5.3%	4.0%	2.1%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	2.6%	5.3%	5.3%	4.0%	2.1%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	-0.6%	2.5%	3.0%	2.5%	1.3%	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>69</u>	<u>Current</u>
3-Year Avg. Incurred	0.272	0.261	0.252	0.241	0.234	0.227
Latest Year Incurred	0.248	0.247	0.245	0.236	0.232	0.227
3-Year Avg. Paid	0.254	0.251	0.247	0.240	0.233	0.227
Latest Year Paid	0.247	0.246	0.242	0.237	0.232	0.227
Reform-Adj. Paid <sup>[2]</sup>	0.247	0.246	0.242	0.237	0.232	0.227
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.242	0.242	0.239	0.235	0.231	0.227
Difference from Actual 81-Month Loss Ratio						
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>69</u>	<u>Current</u>
3-Year Avg. Incurred	19.5%	14.9%	11.1%	6.1%	3.2%	0.0%
Latest Year Incurred	9.4%	8.7%	7.9%	4.1%	2.2%	0.0%
3-Year Avg. Paid	11.6%	10.7%	8.5%	5.6%	2.6%	0.0%
Latest Year Paid	8.7%	8.2%	6.6%	4.5%	2.2%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	8.7%	8.2%	6.6%	4.5%	2.2%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	6.7%	6.3%	5.1%	3.5%	1.6%	0.0%

<sup>[1]</sup> Each loss ratio is projected to incurred losses at 81 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 81 months.

<sup>[2]</sup> 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.

<sup>[3]</sup> The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of September 30, 2020  
Accident Year 2015 Projected to 69 Months<sup>[1]</sup>**

**Indemnity**

<u>Methodology</u>	<u>Based on Experience Evaluated as of (in months):</u>				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	0.197	0.197	0.194	0.190	0.187
Latest Year Incurred	0.196	0.194	0.192	0.189	0.187
3-Year Avg. Paid	0.197	0.199	0.197	0.192	0.187
Latest Year Paid	0.198	0.197	0.195	0.192	0.187
Reform-Adj. Paid <sup>[2]</sup>	0.198	0.197	0.195	0.192	0.187
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.192	0.192	0.191	0.190	0.187

	<u>Difference from Actual 69-Month Loss Ratio</u>				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	5.4%	5.4%	3.7%	1.8%	0.0%
Latest Year Incurred	4.8%	4.0%	2.9%	1.2%	0.0%
3-Year Avg. Paid	5.7%	6.6%	5.4%	3.0%	0.0%
Latest Year Paid	6.2%	5.4%	4.3%	2.7%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	6.2%	5.4%	4.3%	2.7%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	3.0%	2.8%	2.5%	1.8%	0.0%

**Medical**

	<u>Based on Experience Evaluated as of (in months):</u>				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	0.239	0.236	0.229	0.219	0.213
Latest Year Incurred	0.226	0.226	0.223	0.217	0.213
3-Year Avg. Paid	0.236	0.233	0.228	0.221	0.213
Latest Year Paid	0.231	0.229	0.225	0.220	0.213
Reform-Adj. Paid <sup>[2]</sup>	0.231	0.229	0.225	0.220	0.213
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.226	0.224	0.222	0.218	0.213

	<u>Difference from Actual 69-Month Loss Ratio</u>				
	<u>21</u>	<u>33</u>	<u>45</u>	<u>57</u>	<u>Current</u>
3-Year Avg. Incurred	12.3%	10.8%	7.4%	3.2%	0.0%
Latest Year Incurred	6.3%	6.3%	4.8%	1.9%	0.0%
3-Year Avg. Paid	11.0%	9.5%	7.0%	3.8%	0.0%
Latest Year Paid	8.4%	7.5%	5.7%	3.4%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	8.4%	7.5%	5.7%	3.4%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	6.0%	5.4%	4.2%	2.6%	0.0%

<sup>[1]</sup> Each loss ratio is projected to incurred losses at 69 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 69 months.

<sup>[2]</sup> 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.

<sup>[3]</sup> The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of September 30, 2020  
Accident Year 2016 Projected to 57 Months<sup>[1]</sup>**

**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	0.181	0.178	0.175	0.172
Latest Year Incurred	0.181	0.177	0.173	0.172
3-Year Avg. Paid	0.186	0.182	0.178	0.172
Latest Year Paid	0.186	0.181	0.177	0.172
Reform-Adj. Paid <sup>[2]</sup>	0.186	0.181	0.177	0.172
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.179	0.177	0.176	0.172

Difference from Actual 57-Month Loss Ratio

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	4.8%	3.0%	1.2%	0.0%
Latest Year Incurred	4.8%	2.8%	0.6%	0.0%
3-Year Avg. Paid	7.6%	5.4%	3.1%	0.0%
Latest Year Paid	7.6%	5.0%	2.7%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	7.6%	5.0%	2.7%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	3.9%	2.5%	1.8%	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	0.214	0.209	0.201	0.197
Latest Year Incurred	0.210	0.206	0.199	0.197
3-Year Avg. Paid	0.218	0.211	0.204	0.197
Latest Year Paid	0.214	0.209	0.203	0.197
Reform-Adj. Paid <sup>[2]</sup>	0.214	0.209	0.203	0.197
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.209	0.205	0.201	0.197

Difference from Actual 57-Month Loss Ratio

	<u>21</u>	<u>33</u>	<u>45</u>	<u>Current</u>
3-Year Avg. Incurred	8.9%	6.5%	2.4%	0.0%
Latest Year Incurred	7.0%	4.8%	1.0%	0.0%
3-Year Avg. Paid	10.7%	7.6%	3.6%	0.0%
Latest Year Paid	8.8%	6.4%	3.2%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	8.8%	6.4%	3.2%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	6.2%	4.4%	2.3%	0.0%

<sup>[1]</sup> Each loss ratio is projected to incurred losses at 57 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 57 months.

<sup>[2]</sup> 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.

<sup>[3]</sup> The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of September 30, 2020  
Accident Year 2017 Projected to 45 Months<sup>[1]</sup>**

**Indemnity**

<u>Methodology</u>	<u>Based on Experience Evaluated as of (in months):</u>		
	<u>21</u>	<u>33</u>	<u>Current</u>
3-Year Avg. Incurred	0.177	0.172	0.169
Latest Year Incurred	0.172	0.171	0.169
3-Year Avg. Paid	0.180	0.176	0.169
Latest Year Paid	0.176	0.175	0.169
Reform-Adj. Paid <sup>[2]</sup>	0.176	0.175	0.169
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.170	0.172	0.169
<b>Difference from Actual 45-Month Loss Ratio</b>			
	<u>21</u>	<u>33</u>	<u>Current</u>
3-Year Avg. Incurred	4.2%	1.7%	0.0%
Latest Year Incurred	1.7%	0.8%	0.0%
3-Year Avg. Paid	6.5%	3.8%	0.0%
Latest Year Paid	3.7%	3.0%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	3.7%	3.0%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.5%	1.5%	0.0%

**Medical**

	<u>Based on Experience Evaluated as of (in months):</u>		
	<u>21</u>	<u>33</u>	<u>Current</u>
3-Year Avg. Incurred	0.208	0.202	0.197
Latest Year Incurred	0.203	0.200	0.197
3-Year Avg. Paid	0.214	0.206	0.197
Latest Year Paid	0.208	0.204	0.197
Reform-Adj. Paid <sup>[2]</sup>	0.210	0.205	0.197
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	0.206	0.203	0.197
<b>Difference from Actual 45-Month Loss Ratio</b>			
	<u>21</u>	<u>33</u>	<u>Current</u>
3-Year Avg. Incurred	5.4%	2.3%	0.0%
Latest Year Incurred	2.9%	1.3%	0.0%
3-Year Avg. Paid	8.3%	4.3%	0.0%
Latest Year Paid	5.5%	3.4%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	6.5%	4.0%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>[3]</sup>	4.6%	2.8%	0.0%

<sup>[1]</sup> Each loss ratio is projected to incurred losses at 45 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 45 months.

<sup>[2]</sup> 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.

<sup>[3]</sup> The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Comparison of Projected Loss Ratios as of September 30, 2020  
Accident Year 2018 Projected to 33 Months<sup>[1]</sup>**

**Indemnity**

<u>Methodology</u>	<u>Based on Experience Evaluated as of (in months):</u>	
	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	0.167	0.165
Latest Year Incurred	0.165	0.165
3-Year Avg. Paid	0.171	0.165
Latest Year Paid	0.168	0.165
Reform-Adj. Paid <sup>[2]</sup>	0.168	0.165
Latest Yr. Pd. Adj. for Settlement <sup>1</sup>	0.168	0.165

**Difference from Actual 33-Month Loss Ratio**

	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	1.2%	0.0%
Latest Year Incurred	-0.1%	0.0%
3-Year Avg. Paid	3.5%	0.0%
Latest Year Paid	2.2%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	2.2%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>1</sup>	2.0%	0.0%

**Medical**

	<u>Based on Experience Evaluated as of (in months):</u>	
	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	0.204	0.199
Latest Year Incurred	0.200	0.199
3-Year Avg. Paid	0.203	0.199
Latest Year Paid	0.199	0.199
Reform-Adj. Paid <sup>[2]</sup>	0.200	0.199
Latest Yr. Pd. Adj. for Settlement <sup>1</sup>	0.200	0.199

**Difference from Actual 33-Month Loss Ratio**

	<u>21</u>	<u>Current</u>
3-Year Avg. Incurred	2.3%	0.0%
Latest Year Incurred	0.5%	0.0%
3-Year Avg. Paid	2.1%	0.0%
Latest Year Paid	0.0%	0.0%
Reform-Adj. Paid <sup>[2]</sup>	0.1%	0.0%
Latest Yr. Pd. Adj. for Settlement <sup>1</sup>	0.1%	0.0%

<sup>[1]</sup> Each loss ratio is projected to incurred losses at 33 months. Loss ratios projected under paid methods are converted to an incurred basis causing the ratio of incurred losses to paid losses reported at 33 months.

<sup>[2]</sup> 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.

<sup>[3]</sup> The Latest Year Claim-Settlement Methodology for projecting ultimate loss ratios also contemplates adjustments for reforms. See [2] above.

Source: WCIRB quarterly calls for experience

**Average Incurred Indemnity Loss per Reported Indemnity Claim**  
As of September 30, 2020

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1995										14,442
1996									16,774	16,824
1997								19,168	19,193	19,222
1998							20,993	21,100	21,118	21,224
1999						22,851	23,151	23,234	23,420	23,524
2000					22,930	23,345	23,513	23,849	24,041	24,175
2001				22,942	24,161	24,633	25,215	25,552	25,871	26,052
2002			19,822	21,682	22,455	23,272	23,693	24,058	24,300	24,570
2003		15,210	19,449	21,032	22,305	23,071	23,685	24,120	24,586	24,988
2004	9,685	13,211	15,513	17,080	17,835	18,640	19,159	19,735	20,111	20,421
2005	7,728	10,508	13,257	14,701	15,835	16,647	17,386	17,962	18,275	18,499
2006	7,556	10,993	14,332	16,134	17,384	18,418	19,169	19,621	19,895	20,063
2007	7,409	11,722	15,585	17,690	18,936	19,960	20,676	21,240	21,471	21,712
2008	7,689	12,722	16,953	19,546	21,103	22,054	22,714	23,134	23,436	23,608
2009	7,958	13,273	17,591	20,298	21,910	22,935	23,524	23,940	24,307	24,540
2010	7,909	13,024	17,453	19,900	21,381	22,276	22,891	23,306	23,584	23,858
2011	8,007	13,514	17,621	19,981	21,177	21,971	22,497	22,917	23,173	23,381
2012	8,254	13,500	17,389	19,311	20,613	21,502	21,975	22,402	22,713	
2013	8,462	13,417	17,026	19,110	20,181	20,890	21,371	21,628		
2014	8,486	13,385	17,560	19,793	21,053	21,741	22,086			
2015	8,664	14,008	18,230	20,318	21,392	21,950				
2016	8,811	14,098	17,948	19,847	20,883					
2017	8,944	14,388	18,321	20,202						
2018	9,448	15,097	19,142							
2019	9,828	15,886								
2020	10,230									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1996										16.5%
1997									14.4%	14.2%
1998								10.1%	10.0%	10.4%
1999							10.3%	10.1%	10.9%	10.8%
2000						2.2%	1.6%	2.6%	2.7%	2.8%
2001					5.4%	5.5%	7.2%	7.1%	7.6%	7.8%
2002				-5.5%	-7.1%	-5.5%	-6.0%	-5.8%	-6.1%	-5.7%
2003			-1.9%	-3.0%	-0.7%	-0.9%	0.0%	0.3%	1.2%	1.7%
2004		-13.1%	-20.2%	-18.8%	-20.0%	-19.2%	-19.1%	-18.2%	-18.2%	-18.3%
2005	-20.2%	-20.5%	-14.5%	-13.9%	-11.2%	-10.7%	-9.3%	-9.0%	-9.1%	-9.4%
2006	-2.2%	4.6%	8.1%	9.7%	9.8%	10.6%	10.3%	9.2%	8.9%	8.5%
2007	-2.0%	6.6%	8.7%	9.6%	8.9%	8.4%	7.9%	8.3%	7.9%	8.2%
2008	3.8%	8.5%	8.8%	10.5%	11.4%	10.5%	9.9%	8.9%	9.1%	8.7%
2009	3.5%	4.3%	3.8%	3.8%	3.8%	4.0%	3.6%	3.5%	3.7%	3.9%
2010	-0.6%	-1.9%	-0.8%	-2.0%	-2.4%	-2.9%	-2.7%	-2.7%	-3.0%	-2.8%
2011	1.2%	3.8%	1.0%	0.4%	-1.0%	-1.4%	-1.7%	-1.7%	-1.7%	-2.0%
2012	3.1%	-0.1%	-1.3%	-3.4%	-2.7%	-2.1%	-2.3%	-2.2%	-2.0%	
2013	2.5%	-0.6%	-2.1%	-1.0%	-2.1%	-2.8%	-2.7%	-3.5%		
2014	0.3%	-0.2%	3.1%	3.6%	4.3%	4.1%	3.3%			
2015	2.1%	4.7%	3.8%	2.7%	1.6%	1.0%				
2016	1.7%	0.6%	-1.5%	-2.3%	-2.4%					
2017	1.5%	2.1%	2.1%	1.8%						
2018	5.6%	4.9%	4.5%							
2019	4.0%	5.2%								
2020	4.1%									

Annual Trend*										
All-Year	1.3%	1.3%	0.7%	0.2%	-0.1%	-0.3%	-0.2%	0.1%	0.8%	1.6%
R <sup>2</sup>	0.465	0.370	0.115	0.007	0.003	0.016	0.010	0.005	0.112	0.260
5-Year	4.0%	3.3%	1.8%	1.1%	0.8%	0.1%	-1.2%	-2.4%	-1.1%	1.6%
R <sup>2</sup>	0.980	0.910	0.777	0.563	0.367	0.005	0.565	0.985	0.492	0.302

\*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

**Average Incurred Medical Loss per Reported Claim**  
As of September 30, 2020

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1999										7,460
2000									8,033	8,164
2001								9,144	9,539	9,858
2002							9,244	9,604	9,914	10,189
2003						8,654	9,034	9,394	9,763	10,054
2004					6,745	7,178	7,627	7,968	8,240	8,463
2005				5,933	6,353	6,905	7,302	7,657	7,956	8,050
2006			5,948	6,626	7,175	7,673	8,082	8,418	8,605	8,719
2007		5,468	6,709	7,558	8,209	8,788	9,254	9,574	9,752	9,828
2008	4,480	6,176	7,542	8,556	9,400	10,018	10,431	10,723	10,850	10,899
2009	5,058	6,889	8,559	9,726	10,705	11,330	11,689	11,910	12,009	12,077
2010	5,155	7,127	8,947	10,248	11,019	11,540	11,860	12,001	12,088	12,212
2011	5,215	7,384	9,078	10,181	10,904	11,282	11,489	11,588	11,663	11,681
2012	5,444	7,406	8,856	9,640	10,181	10,550	10,717	10,866	10,941	
2013	5,500	7,404	8,578	9,294	9,711	9,917	10,081	10,125		
2014	5,465	7,051	8,193	8,883	9,215	9,491	9,591			
2015	5,609	7,086	8,250	8,836	9,097	9,257				
2016	5,569	7,157	8,154	8,535	8,832					
2017	5,765	7,025	7,926	8,377						
2018	5,888	7,387	8,281							
2019	5,926	7,372								
2020	6,674									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
2000										9.4%
2001									18.7%	20.7%
2002								5.0%	3.9%	3.4%
2003							-2.3%	-2.2%	-1.5%	-1.3%
2004						-17.1%	-15.6%	-15.2%	-15.6%	-15.8%
2005					-5.8%	-3.8%	-4.3%	-3.9%	-3.5%	-4.9%
2006				11.7%	12.9%	11.1%	10.7%	9.9%	8.2%	8.3%
2007			12.8%	14.1%	14.4%	14.5%	14.5%	13.7%	13.3%	12.7%
2008		12.9%	12.4%	13.2%	14.5%	14.0%	12.7%	12.0%	11.3%	10.9%
2009	12.9%	11.5%	13.5%	13.7%	13.9%	13.1%	12.1%	11.1%	10.7%	10.8%
2010	1.9%	3.5%	4.5%	5.4%	2.9%	1.9%	1.5%	0.8%	0.7%	1.1%
2011	1.2%	3.6%	1.5%	-0.7%	-1.1%	-2.2%	-3.1%	-3.4%	-3.5%	-4.3%
2012	4.4%	0.3%	-2.4%	-5.3%	-6.6%	-6.5%	-6.7%	-6.2%	-6.2%	
2013	1.0%	0.0%	-3.1%	-3.6%	-4.6%	-6.0%	-5.9%	-6.8%		
2014	-0.6%	-4.8%	-4.5%	-4.4%	-5.1%	-4.3%	-4.9%			
2015	2.6%	0.5%	0.7%	-0.5%	-1.3%	-2.5%				
2016	-0.7%	1.0%	-1.2%	-3.4%	-2.9%					
2017	3.5%	-1.9%	-2.8%	-1.8%						
2018	2.1%	5.2%	4.5%							
2019	0.6%	-0.2%								
2020	12.6%									

Annual Trend*										
All-Year	2.3%	1.5%	1.5%	2.2%	2.8%	2.7%	2.5%	2.5%	2.8%	3.2%
R <sup>2</sup>	0.858	0.416	0.246	0.266	0.361	0.369	0.368	0.411	0.517	0.564
5-Year	4.0%	1.1%	-0.2%	-2.4%	-3.4%	-4.9%	-5.4%	-4.2%	-0.1%	4.7%
R <sup>2</sup>	0.812	0.580	0.029	0.956	0.956	0.970	0.990	0.874	0.001	0.652

\*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, 2020

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1995										25,836
1996									27,756	26,082
1997								29,745	28,187	29,889
1998							30,805	30,188	30,086	30,661
1999						28,039	28,298	28,649	30,137	30,789
2000					24,065	23,530	23,929	24,698	25,270	26,041
2001				19,972	19,458	19,590	20,819	22,003	23,720	24,807
2002			17,726	16,632	16,050	17,481	18,067	19,094	20,319	22,327
2003		14,972	15,532	15,043	16,306	17,870	20,253	22,600	26,265	30,081
2004	9,765	12,430	12,776	13,931	15,049	17,465	19,063	22,467	24,602	27,480
2005	7,430	9,241	10,945	12,171	14,390	16,600	20,282	23,647	25,658	27,601
2006	6,937	9,728	12,024	14,278	16,620	19,576	21,995	24,592	26,285	27,566
2007	6,676	10,197	13,117	15,589	17,359	19,379	22,244	25,838	27,747	30,281
2008	6,824	10,848	13,803	16,196	17,904	19,807	22,515	25,002	29,045	31,830
2009	7,102	11,396	13,920	16,199	18,222	20,392	22,203	24,889	27,987	30,945
2010	7,079	11,050	13,905	15,496	17,329	18,956	21,096	24,058	26,670	30,807
2011	7,214	11,773	14,103	16,396	18,062	19,863	22,079	25,214	27,029	30,475
2012	7,459	11,682	14,142	15,317	17,519	19,631	22,489	26,668	31,094	
2013	7,652	11,581	13,623	15,211	16,511	18,853	22,796	26,204		
2014	7,719	11,600	14,231	16,268	19,257	21,950	24,355			
2015	7,958	12,370	15,714	18,275	21,177	23,785				
2016	8,033	12,742	16,044	18,807	22,022					
2017	8,336	13,718	17,794	21,069						
2018	8,862	14,627	18,811							
2019	9,199	15,071								
2020	9,741									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1996										1.0%
1997									1.6%	14.6%
1998								1.5%	6.7%	2.6%
1999							-8.1%	-5.1%	0.2%	0.4%
2000						-16.1%	-15.4%	-13.8%	-16.2%	-15.4%
2001					-19.1%	-16.7%	-13.0%	-10.9%	-6.1%	-4.7%
2002				-16.7%	-17.5%	-10.8%	-13.2%	-13.2%	-14.3%	-10.0%
2003			-12.4%	-9.6%	1.6%	2.2%	12.1%	18.4%	29.3%	34.7%
2004		-17.0%	-17.7%	-7.4%	-7.7%	-2.3%	-5.9%	-0.6%	-6.3%	-8.6%
2005	-23.9%	-25.7%	-14.3%	-12.6%	-4.4%	-4.9%	6.4%	5.3%	4.3%	0.4%
2006	-6.6%	5.3%	9.9%	17.3%	15.5%	17.9%	8.4%	4.0%	2.4%	-0.1%
2007	-3.8%	4.8%	9.1%	9.2%	4.4%	-1.0%	1.1%	5.1%	5.6%	9.8%
2008	2.2%	6.4%	5.2%	3.9%	3.1%	2.2%	1.2%	-3.2%	4.7%	5.1%
2009	4.1%	5.1%	0.8%	0.0%	1.8%	3.0%	-1.4%	-0.4%	-3.6%	-2.8%
2010	-0.3%	-3.0%	-0.1%	-4.3%	-4.9%	-7.0%	-5.0%	-3.3%	-4.7%	-0.4%
2011	1.9%	6.6%	1.4%	5.8%	4.2%	4.8%	4.7%	4.8%	1.3%	-1.1%
2012	3.4%	-0.8%	0.3%	-6.6%	-3.0%	-1.2%	1.9%	5.8%	15.0%	
2013	2.6%	-0.9%	-3.7%	-0.7%	-5.8%	-4.0%	1.4%	-1.7%		
2014	0.9%	0.2%	4.5%	6.9%	16.6%	16.4%	6.8%			
2015	3.1%	6.6%	10.4%	12.3%	10.0%	8.4%				
2016	0.9%	3.0%	2.1%	2.9%	4.0%					
2017	3.8%	7.7%	10.9%	12.0%						
2018	6.3%	6.6%	5.7%							
2019	3.8%	3.0%								
2020	5.9%									

Annual Trend*										
All-Year	1.3%	1.5%	1.3%	1.1%	0.6%	-0.1%	-0.5%	-0.3%	0.3%	0.8%
R <sup>2</sup>	0.292	0.269	0.225	0.165	0.052	0.001	0.042	0.015	0.016	0.181
5-Year	5.0%	5.5%	7.1%	8.3%	7.3%	4.8%	3.2%	2.1%	1.0%	-0.2%
R <sup>2</sup>	0.994	0.978	0.973	0.977	0.838	0.620	0.932	0.628	0.067	0.027

\*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, 2020

Accident	Evaluated as of (in months):									
Year	9	21	33	45	57	69	81	93	105	117
1995										43,368
1996									34,777	37,297
1997								38,118	42,673	48,979
1998							38,953	43,529	50,224	62,260
1999						31,023	36,856	43,792	57,478	69,735
2000					24,046	28,832	34,212	44,369	52,829	59,555
2001				18,385	21,410	26,009	31,913	40,819	54,047	66,273
2002			15,299	17,204	19,682	24,662	31,772	40,321	49,294	60,250
2003		13,169	14,627	16,768	20,288	27,357	35,406	43,672	55,572	68,190
2004	11,679	12,464	13,818	17,578	23,349	29,747	37,999	47,416	56,585	68,758
2005	12,233	13,126	16,357	20,321	24,423	32,607	40,996	51,699	62,422	68,733
2006	11,435	14,393	18,702	23,493	28,880	36,153	43,846	54,537	63,289	69,768
2007	12,548	15,746	20,301	25,413	31,662	38,557	47,987	58,209	66,695	75,056
2008	12,858	17,125	21,108	26,238	32,623	40,043	48,612	58,093	67,529	74,631
2009	13,953	17,673	22,249	26,932	33,554	40,077	47,098	56,021	63,724	72,689
2010	14,120	17,674	22,657	27,673	32,638	38,481	45,025	50,753	57,257	67,377
2011	14,739	19,288	23,621	28,828	35,381	40,379	46,891	53,686	60,715	66,817
2012	15,483	19,293	23,220	26,513	31,432	37,468	44,507	52,956	60,285	
2013	14,800	18,882	21,787	25,724	30,054	35,472	43,303	49,903		
2014	14,809	17,854	20,942	25,012	29,835	36,807	41,872			
2015	15,219	18,288	22,801	28,255	34,048	39,918				
2016	15,151	18,991	23,472	28,303	34,349					
2017	16,378	20,126	25,426	30,950						
2018	16,858	21,573	25,410							
2019	17,109	20,965								
2020	16,876									

Accident	Annual Change									
Year	9	21	33	45	57	69	81	93	105	117
1996										-14.0%
1997									22.7%	31.3%
1998								14.2%	17.7%	27.1%
1999							-5.4%	0.6%	14.4%	12.0%
2000						-7.1%	-7.2%	1.3%	-8.1%	-14.6%
2001					-11.0%	-9.8%	-6.7%	-8.0%	2.3%	11.3%
2002				-6.4%	-8.1%	-5.2%	-0.4%	-1.2%	-8.8%	-9.1%
2003			-4.4%	-2.5%	3.1%	10.9%	11.4%	8.3%	12.7%	13.2%
2004		-5.3%	-5.5%	4.8%	15.1%	8.7%	7.3%	8.6%	1.8%	0.8%
2005	4.7%	5.3%	18.4%	15.6%	4.6%	9.6%	7.9%	9.0%	10.3%	0.0%
2006	-6.5%	9.7%	14.3%	15.6%	18.2%	10.9%	7.0%	5.5%	1.4%	1.5%
2007	9.7%	9.4%	8.6%	8.2%	9.6%	6.7%	9.4%	6.7%	5.4%	7.6%
2008	2.5%	8.8%	4.0%	3.2%	3.0%	3.9%	1.3%	-0.2%	1.3%	-0.6%
2009	8.5%	3.2%	5.4%	2.6%	2.9%	0.1%	-3.1%	-3.6%	-5.6%	-2.6%
2010	1.2%	0.0%	1.8%	2.8%	-2.7%	-4.0%	-4.4%	-9.4%	-10.1%	-7.3%
2011	4.4%	9.1%	4.3%	4.2%	8.4%	4.9%	4.1%	5.8%	6.0%	-0.8%
2012	5.0%	0.0%	-1.7%	-8.0%	-11.2%	-7.2%	-5.1%	-1.4%	-0.7%	
2013	-4.4%	-2.1%	-6.2%	-3.0%	-4.4%	-5.3%	-2.7%	-5.8%		
2014	0.1%	-5.4%	-3.9%	-2.8%	-0.7%	3.8%	-3.3%			
2015	2.8%	2.4%	8.9%	13.0%	14.1%	8.5%				
2016	-0.4%	3.8%	2.9%	0.2%	0.9%					
2017	8.1%	6.0%	8.3%	9.4%						
2018	2.9%	7.2%	-0.1%							
2019	1.5%	-2.8%								
2020	-1.4%									

Annual Trend*										
All-Year	2.5%	3.1%	3.4%	3.5%	3.3%	2.6%	2.0%	2.1%	2.6%	2.9%
R <sup>2</sup>	0.916	0.837	0.774	0.757	0.677	0.619	0.512	0.614	0.583	0.560
5-Year	2.6%	4.1%	5.1%	5.1%	3.1%	-0.4%	-2.2%	-1.9%	-2.7%	-3.3%
R <sup>2</sup>	0.702	0.861	0.928	0.841	0.509	0.014	0.701	0.420	0.487	0.896

\*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, 2020

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1995										13,350
1996									15,163	15,456
1997								17,067	17,491	17,696
1998							18,094	18,795	19,201	19,606
1999						19,205	20,309	20,951	21,504	21,924
2000					18,234	19,888	20,841	21,682	22,269	22,684
2001				16,568	19,568	21,280	22,499	23,326	23,939	24,385
2002			11,910	16,177	18,759	20,341	21,429	22,181	22,684	23,100
2003		6,279	12,101	16,167	18,601	20,143	21,166	21,883	22,482	23,026
2004	1,959	5,935	10,040	12,938	14,699	15,901	16,781	17,518	18,161	18,749
2005	1,888	5,445	8,885	11,333	12,955	14,073	14,930	15,668	16,361	16,879
2006	2,015	5,711	9,616	12,163	13,973	15,330	16,431	17,286	17,960	18,404
2007	2,121	6,176	10,326	13,202	15,247	16,763	17,946	18,862	19,470	20,044
2008	2,320	6,700	11,212	14,645	17,082	18,799	20,004	20,852	21,458	21,946
2009	2,364	6,727	11,547	15,156	17,727	19,526	20,789	21,716	22,436	22,988
2010	2,332	6,706	11,514	15,188	17,690	19,367	20,594	21,433	22,056	22,547
2011	2,381	6,841	11,741	15,226	17,526	19,145	20,295	21,167	21,814	22,220
2012	2,461	6,926	11,694	15,057	17,298	18,991	20,014	20,775	21,313	
2013	2,465	6,927	11,642	15,144	17,371	18,782	19,662	20,260		
2014	2,436	6,953	12,151	15,798	18,087	19,500	20,375			
2015	2,437	7,281	12,621	16,304	18,502	19,726				
2016	2,574	7,488	12,637	16,111	18,043					
2017	2,602	7,622	12,888	16,122						
2018	2,783	7,970	13,125							
2019	2,909	8,283								
2020	3,134									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
1996										15.8%
1997									15.4%	14.5%
1998								10.1%	9.8%	10.8%
1999							12.2%	11.5%	12.0%	11.8%
2000						3.6%	2.6%	3.5%	3.6%	3.5%
2001					7.3%	7.0%	8.0%	7.6%	7.5%	7.5%
2002				-2.4%	-4.1%	-4.4%	-4.8%	-4.9%	-5.2%	-5.3%
2003			1.6%	-0.1%	-0.8%	-1.0%	-1.2%	-1.3%	-0.9%	-0.3%
2004		-5.5%	-17.0%	-20.0%	-21.0%	-21.1%	-20.7%	-19.9%	-19.2%	-18.6%
2005	-3.6%	-8.3%	-11.5%	-12.4%	-11.9%	-11.5%	-11.0%	-10.6%	-9.9%	-10.0%
2006	6.8%	4.9%	8.2%	7.3%	7.9%	8.9%	10.1%	10.3%	9.8%	9.0%
2007	5.3%	8.1%	7.4%	8.5%	9.1%	9.3%	9.2%	9.1%	8.4%	8.9%
2008	9.3%	8.5%	8.6%	10.9%	12.0%	12.1%	11.5%	10.5%	10.2%	9.5%
2009	1.9%	0.4%	3.0%	3.5%	3.8%	3.9%	3.9%	4.1%	4.6%	4.7%
2010	-1.4%	-0.3%	-0.3%	0.2%	-0.2%	-0.8%	-0.9%	-1.3%	-1.7%	-1.9%
2011	2.1%	2.0%	2.0%	0.3%	-0.9%	-1.1%	-1.5%	-1.2%	-1.1%	-1.5%
2012	3.4%	1.2%	-0.4%	-1.1%	-1.3%	-0.8%	-1.4%	-1.9%	-2.3%	
2013	0.2%	0.0%	-0.4%	0.6%	0.4%	-1.1%	-1.8%	-2.5%		
2014	-1.2%	0.4%	4.4%	4.3%	4.1%	3.8%	3.6%			
2015	0.0%	4.7%	3.9%	3.2%	2.3%	1.2%				
2016	5.6%	2.8%	0.1%	-1.2%	-2.5%					
2017	1.1%	1.8%	2.0%	0.1%						
2018	7.0%	4.6%	1.8%							
2019	4.5%	3.9%								
2020	7.7%									

Annual Trend*										
All-Year	2.6%	2.1%	1.4%	0.7%	0.3%	0.1%	0.1%	0.3%	0.9%	1.7%
R <sup>2</sup>	0.909	0.859	0.439	0.104	0.015	0.001	0.001	0.021	0.126	0.265
5-Year	5.2%	3.3%	1.8%	1.5%	1.5%	0.9%	-0.5%	-1.7%	-0.4%	2.4%
R <sup>2</sup>	0.959	0.978	0.929	0.615	0.658	0.473	0.220	0.976	0.101	0.483

\*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

**Average Paid Medical Loss per Indemnity Claim**  
As of September 30, 2020

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
2002										23,510
2003									21,910	22,765
2004								19,014	20,096	21,116
2005							18,309	19,485	20,860	21,817
2006						18,956	20,618	22,053	23,221	24,047
2007					18,974	21,276	23,306	24,922	26,042	26,967
2008				17,892	21,168	23,872	25,915	27,356	28,465	29,299
2009			14,496	18,982	22,698	25,519	27,435	28,886	29,916	30,732
2010		9,174	14,498	19,324	22,918	25,374	27,266	28,599	29,513	30,282
2011	3,208	8,607	13,965	18,340	21,401	23,815	25,433	26,641	27,518	28,068
2012	3,112	8,431	13,426	17,315	20,128	22,241	23,584	24,626	25,345	
2013	3,296	8,122	12,740	16,440	19,037	20,711	21,843	22,588		
2014	3,063	7,826	12,478	16,013	18,397	19,957	21,033			
2015	3,107	7,887	12,467	15,919	18,147	19,455				
2016	3,167	8,090	12,452	15,525	17,491					
2017	3,358	8,300	12,636	15,554						
2018	3,519	8,594	13,008							
2019	3,289	8,317								
2020	3,158									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
2003										-3.2%
2004									-8.3%	-7.2%
2005								2.5%	3.8%	3.3%
2006							12.6%	13.2%	11.3%	10.2%
2007						12.2%	13.0%	13.0%	12.1%	12.1%
2008					11.6%	12.2%	11.2%	9.8%	9.3%	8.6%
2009				6.1%	7.2%	6.9%	5.9%	5.6%	5.1%	4.9%
2010**			0.0%	1.8%	1.0%	-0.6%	-0.6%	-1.0%	-1.3%	-1.5%
2011**		-6.2%	-3.7%	-5.1%	-6.6%	-6.1%	-6.7%	-6.8%	-6.8%	-7.3%
2012	-3.0%	-2.0%	-3.9%	-5.6%	-5.9%	-6.6%	-7.3%	-7.6%	-7.9%	
2013	5.9%	-3.7%	-5.1%	-5.1%	-5.4%	-6.9%	-7.4%	-8.3%		
2014	-7.1%	-3.6%	-2.1%	-2.6%	-3.4%	-3.6%	-3.7%			
2015	1.4%	0.8%	-0.1%	-0.6%	-1.4%	-2.5%				
2016	1.9%	2.6%	-0.1%	-2.5%	-3.6%					
2017	6.0%	2.6%	1.5%	0.2%						
2018	4.8%	3.5%	3.0%							
2019	-6.5%	-3.2%								
2020	-4.0%									

Annual Trend*										
All-Year	0.5%	-0.6%	-1.7%	-2.5%	-2.1%	-0.8%	1.0%	2.8%	3.8%	4.0%
R <sup>2</sup>	0.141	0.145	0.671	0.817	0.447	0.056	0.052	0.316	0.590	0.710
5-Year	-0.3%	1.7%	1.0%	-1.4%	-3.2%	-5.0%	-6.5%	-6.2%	-3.1%	1.1%
R <sup>2</sup>	0.009	0.668	0.682	0.906	0.959	0.960	0.989	0.950	0.567	0.109

\*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, 2020

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1999										6,271
2000									6,808	7,036
2001								7,739	8,042	8,344
2002							7,825	8,193	8,521	8,780
2003						7,064	7,476	7,867	8,193	8,487
2004					5,194	5,696	6,123	6,486	6,822	7,141
2005				4,283	4,923	5,427	5,851	6,193	6,596	6,873
2006			3,816	4,734	5,459	6,023	6,504	6,920	7,257	7,505
2007		2,932	4,300	5,387	6,212	6,900	7,506	7,985	8,324	8,602
2008	1,423	3,297	4,853	6,115	7,143	7,989	8,626	9,086	9,431	9,695
2009	1,581	3,607	5,389	6,905	8,158	9,111	9,765	10,250	10,597	10,868
2010	1,594	3,713	5,619	7,336	8,608	9,487	10,155	10,627	10,948	11,216
2011	1,476	3,585	5,579	7,191	8,334	9,216	9,808	10,249	10,566	10,766
2012	1,459	3,570	5,472	6,951	8,005	8,795	9,296	9,683	9,948	
2013	1,539	3,541	5,362	6,781	7,790	8,427	8,861	9,146		
2014	1,489	3,452	5,249	6,601	7,506	8,093	8,497			
2015	1,512	3,476	5,244	6,541	7,378	7,876				
2016	1,541	3,579	5,279	6,448	7,188					
2017	1,596	3,557	5,170	6,241						
2018	1,670	3,699	5,372							
2019	1,595	3,625								
2020	1,741									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
2000										12.2%
2001									18.1%	18.6%
2002								5.9%	5.9%	5.2%
2003							-4.5%	-4.0%	-3.8%	-3.3%
2004						-19.4%	-18.1%	-17.6%	-16.7%	-15.9%
2005					-5.2%	-4.7%	-4.4%	-4.5%	-3.3%	-3.8%
2006				10.5%	10.9%	11.0%	11.2%	11.7%	10.0%	9.2%
2007			12.7%	13.8%	13.8%	14.6%	15.4%	15.4%	14.7%	14.6%
2008		12.5%	12.9%	13.5%	15.0%	15.8%	14.9%	13.8%	13.3%	12.7%
2009	11.1%	9.4%	11.0%	12.9%	14.2%	14.0%	13.2%	12.8%	12.4%	12.1%
2010	0.8%	2.9%	4.3%	6.2%	5.5%	4.1%	4.0%	3.7%	3.3%	3.2%
2011	-7.4%	-3.5%	-0.7%	-2.0%	-3.2%	-2.9%	-3.4%	-3.6%	-3.5%	-4.0%
2012	-1.2%	-0.4%	-1.9%	-3.3%	-3.9%	-4.6%	-5.2%	-5.5%	-5.8%	
2013	5.5%	-0.8%	-2.0%	-2.4%	-2.7%	-4.2%	-4.7%	-5.5%		
2014	-3.3%	-2.5%	-2.1%	-2.6%	-3.6%	-4.0%	-4.1%			
2015	1.5%	0.7%	-0.1%	-0.9%	-1.7%	-2.7%				
2016	1.9%	3.0%	0.7%	-1.4%	-2.6%					
2017	3.6%	-0.6%	-2.0%	-3.2%						
2018	4.6%	4.0%	3.9%							
2019	-4.4%	-2.0%								
2020	9.1%									

Annual Trend*										
All-Year	1.0%	0.9%	1.7%	2.6%	3.4%	3.4%	3.2%	3.2%	3.5%	3.9%
R <sup>2</sup>	0.455	0.303	0.343	0.381	0.495	0.475	0.448	0.463	0.562	0.626
5-Year	2.5%	1.2%	0.3%	-1.9%	-2.7%	-3.9%	-4.5%	-3.2%	1.0%	6.1%
R <sup>2</sup>	0.663	0.646	0.138	0.960	0.988	0.992	0.996	0.741	0.076	0.743

\*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, 2020

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
1995										11,500
1996									12,724	13,107
1997								14,282	14,837	15,113
1998							15,103	16,031	16,523	17,076
1999						15,149	16,566	17,415	18,147	18,809
2000					13,803	15,861	17,253	18,056	18,982	19,691
2001				11,398	15,317	17,207	18,344	19,663	20,536	21,138
2002			6,477	11,654	14,718	16,366	17,948	18,940	19,678	20,214
2003		2,686	7,627	12,040	14,347	16,505	17,721	18,571	19,250	19,870
2004	937	2,740	6,266	8,987	11,510	12,894	13,859	14,647	15,423	16,309
2005	964	2,439	4,700	7,804	9,896	11,125	12,090	12,962	13,995	14,771
2006	1,223	2,458	5,577	8,434	10,520	12,032	13,294	14,587	15,586	16,352
2007	1,075	2,742	6,001	8,992	11,292	13,018	14,652	15,998	16,966	17,885
2008	1,206	3,140	6,506	9,896	12,585	14,932	16,671	17,987	18,984	19,812
2009	1,450	3,251	6,852	10,403	13,506	15,882	17,719	19,175	20,160	21,029
2010	1,205	3,223	6,968	10,889	13,953	16,255	17,993	19,341	20,262	20,972
2011	1,276	3,589	7,522	11,438	14,340	16,528	18,127	19,343	20,271	20,834
2012	1,461	3,927	8,110	11,830	14,526	16,636	18,048	19,166	19,879	
2013	1,639	4,379	8,439	12,188	14,918	16,731	17,955	18,845		
2014	1,630	4,545	9,042	12,965	15,788	17,593	18,801			
2015	1,724	4,994	9,808	13,714	16,382	17,957				
2016	1,851	5,368	9,913	13,688	15,979					
2017	1,969	5,399	10,083	13,778						
2018	2,135	5,796	10,409							
2019	2,311	6,015								
2020	2,491									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
1996										14.0%
1997									16.6%	15.3%
1998								12.2%	11.4%	13.0%
1999							9.7%	8.6%	9.8%	10.2%
2000						4.7%	4.1%	3.7%	4.6%	4.7%
2001					11.0%	8.5%	6.3%	8.9%	8.2%	7.4%
2002				2.2%	-3.9%	-4.9%	-2.2%	-3.7%	-4.2%	-4.4%
2003			17.7%	3.3%	-2.5%	0.9%	-1.3%	-1.9%	-2.2%	-1.7%
2004		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%	-9.3%	-9.4%
2006	26.9%	0.8%	18.7%	8.1%	6.3%	8.2%	10.0%	12.5%	11.4%	10.7%
2007	-12.1%	11.5%	7.6%	6.6%	7.3%	8.2%	10.2%	9.7%	8.9%	9.4%
2008	12.2%	14.5%	8.4%	10.0%	11.4%	14.7%	13.8%	12.4%	11.9%	10.8%
2009	20.2%	3.5%	5.3%	5.1%	7.3%	6.4%	6.3%	6.6%	6.2%	6.1%
2010	-16.9%	-0.9%	1.7%	4.7%	3.3%	2.3%	1.6%	0.9%	0.5%	-0.3%
2011	5.9%	11.4%	7.9%	5.0%	2.8%	1.7%	0.7%	0.0%	0.0%	-0.7%
2012	14.5%	9.4%	7.8%	3.4%	1.3%	0.7%	-0.4%	-0.9%	-1.9%	
2013	12.2%	11.5%	4.1%	3.0%	2.7%	0.6%	-0.5%	-1.7%		
2014	-0.5%	3.8%	7.1%	6.4%	5.8%	5.2%	4.7%			
2015	5.7%	9.9%	8.5%	5.8%	3.8%	2.1%				
2016	7.4%	7.5%	1.1%	-0.2%	-2.5%					
2017	6.3%	0.6%	1.7%	0.7%						
2018	8.5%	7.3%	3.2%							
2019	8.2%	3.8%								
2020	7.8%									

Annual Trend*										
All-Year	5.9%	6.2%	3.9%	2.1%	1.2%	0.9%	0.8%	1.0%	1.5%	2.3%
R <sup>2</sup>	0.949	0.951	0.714	0.374	0.174	0.103	0.086	0.135	0.261	0.386
5-Year	7.8%	4.6%	3.1%	3.0%	2.9%	2.2%	0.8%	-0.4%	1.0%	3.7%
R <sup>2</sup>	0.998	0.959	0.872	0.799	0.808	0.881	0.421	0.425	0.312	0.692

\*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, 2020

Accident Year	Evaluated as of (in months):									
	9	21	33	45	57	69	81	93	105	117
2002										19,495
2003									17,738	18,579
2004								14,514	15,595	16,918
2005							13,433	14,669	16,271	17,634
2006						13,522	15,228	17,046	18,566	19,869
2007					12,867	15,081	17,400	19,533	21,227	22,830
2008				11,378	14,436	17,670	20,209	22,211	23,904	25,248
2009			8,314	12,269	16,105	19,397	22,132	24,281	25,832	27,335
2010		4,680	8,606	13,140	17,038	20,099	22,729	24,850	26,290	27,334
2011	1,787	4,178	8,441	12,872	16,455	19,692	21,915	23,710	24,999	25,812
2012	1,826	4,497	8,898	12,954	16,241	18,828	20,682	22,124	23,196	
2013	2,012	4,819	8,890	12,813	16,008	18,172	19,640	20,709		
2014	1,951	4,844	9,070	12,851	15,793	17,751	19,087			
2015	2,012	5,159	9,484	13,112	15,717	17,404				
2016	2,161	5,459	9,467	12,779	15,048					
2017	2,243	5,572	9,765	12,844						
2018	2,407	5,758	10,017							
2019	2,371	5,727								
2020	1,942									

Accident Year	Annual Change									
	9	21	33	45	57	69	81	93	105	117
2003										-4.7%
2004									-12.1%	-8.9%
2005								1.1%	4.3%	4.2%
2006							13.4%	16.2%	14.1%	12.7%
2007						11.5%	14.3%	14.6%	14.3%	14.9%
2008					12.2%	17.2%	16.1%	13.7%	12.6%	10.6%
2009				7.8%	11.6%	9.8%	9.5%	9.3%	8.1%	8.3%
2010**			3.5%	7.1%	5.8%	3.6%	2.7%	2.3%	1.8%	0.0%
2011**		-10.7%	-1.9%	-2.0%	-3.4%	-2.0%	-3.6%	-4.6%	-4.9%	-5.6%
2012	2.2%	7.6%	5.4%	0.6%	-1.3%	-2.0%	-4.4%	-5.6%	-6.7%	-7.2%
2013	10.2%	7.2%	-0.1%	-1.1%	-1.4%	-3.5%	-5.0%	-6.4%		
2014	-3.0%	0.5%	2.0%	0.3%	-1.3%	-2.3%	-2.8%			
2015	3.1%	6.5%	4.6%	2.0%	-0.5%	-2.0%				
2016	7.4%	5.8%	-0.2%	-2.5%	-4.3%					
2017	3.8%	2.1%	3.1%	0.5%						
2018	7.3%	3.3%	2.6%							
2019	-1.5%	-0.5%								
2020	-18.1%									

Annual Trend*										
All-Year	2.4%	3.4%	2.0%	0.8%	1.0%	2.1%	3.8%	5.3%	5.8%	5.5%
R <sup>2</sup>	0.496	0.868	0.959	0.336	0.151	0.259	0.423	0.612	0.742	0.763
5-Year	-1.6%	2.7%	2.3%	0.0%	-1.7%	-3.0%	-4.5%	-4.3%	-0.9%	3.3%
R <sup>2</sup>	0.085	0.869	0.934	0.000	0.886	0.971	0.989	0.847	0.079	0.481

\*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 Incremental Paid Indemnity to Indemnity Claims Open During the Period**  
As of September 30, 2020

Accident	Evaluated as of (in months):									
Year	0-9	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
1995										4,809
1996									6,149	5,245
1997								7,858	6,204	3,907
1998							8,731	7,623	5,865	6,458
1999						10,262	8,714	6,711	7,015	6,672
2000					10,463	8,742	6,885	7,557	6,700	5,880
2001				10,920	9,532	7,533	7,189	6,209	5,964	5,407
2002			10,442	9,681	8,002	6,935	6,463	5,942	5,088	5,126
2003		5,757	9,843	8,723	7,569	6,759	6,099	5,616	5,907	6,634
2004	1,959	5,398	7,123	6,809	5,920	5,724	5,610	5,848	6,392	7,348
2005	1,888	4,914	6,351	6,159	5,855	5,653	5,578	6,092	7,176	6,926
2006	2,015	5,066	7,236	6,572	6,575	6,669	7,002	6,939	7,106	6,269
2007	2,121	5,547	7,705	7,292	7,225	7,240	7,255	7,492	6,749	8,050
2008	2,320	6,022	8,279	8,436	8,220	7,794	7,499	7,290	6,767	7,391
2009	2,364	6,066	8,575	8,521	8,296	8,029	7,804	7,665	8,179	8,357
2010	2,332	6,090	8,614	8,820	8,431	8,142	8,153	7,923	8,088	8,629
2011	2,381	6,255	8,877	8,608	8,250	8,175	8,204	8,877	9,365	8,123
2012	2,461	6,321	8,733	8,653	8,261	9,102	8,147	8,797	8,874	
2013	2,465	6,297	8,678	9,027	8,751	8,414	8,005	8,124		
2014	2,436	6,344	9,562	9,777	9,492	9,327	8,678			
2015	2,437	6,715	10,008	10,434	10,142	9,185				
2016	2,574	6,891	10,129	10,646	9,895					
2017	2,602	7,092	10,815	10,763						
2018	2,783	7,415	10,763							
2019	2,909	7,700								
2020	3,134									

Accident	Annual Change									
Year	0-9	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
1996										9.1%
1997										-25.5%
1998								-3.0%	-5.5%	65.3%
1999							-0.2%	-12.0%	19.6%	3.3%
2000						-14.8%	-21.0%	12.6%	-4.5%	-11.9%
2001					-8.9%	-13.8%	4.4%	-17.8%	-11.0%	-8.0%
2002				-11.3%	-16.1%	-7.9%	-10.1%	-4.3%	-14.7%	-5.2%
2003			-5.7%	-9.9%	-5.4%	-2.5%	-5.6%	-5.5%	16.1%	29.4%
2004		-6.2%	-27.6%	-21.9%	-21.8%	-15.3%	-8.0%	4.1%	8.2%	10.8%
2005	-3.6%	-9.0%	-10.8%	-9.6%	-1.1%	-1.2%	-0.6%	4.2%	12.3%	-5.7%
2006	6.8%	3.1%	13.9%	6.7%	12.3%	18.0%	25.5%	13.9%	-1.0%	-9.5%
2007	5.3%	9.5%	6.5%	11.0%	9.9%	8.6%	3.6%	8.0%	-5.0%	28.4%
2008	9.3%	8.6%	7.5%	15.7%	13.8%	7.7%	3.4%	-2.7%	0.3%	-8.2%
2009	1.9%	0.7%	3.6%	1.0%	0.9%	3.0%	4.1%	5.1%	20.9%	13.1%
2010	-1.4%	0.4%	0.5%	3.5%	1.6%	1.4%	4.5%	3.4%	-1.1%	3.2%
2011	2.1%	2.7%	3.0%	-2.4%	-2.2%	0.4%	0.6%	12.0%	15.8%	-5.9%
2012	3.4%	1.1%	-1.6%	0.5%	0.1%	11.3%	-0.7%	-0.9%	-5.2%	
2013	0.2%	-0.4%	-0.6%	4.3%	5.9%	-7.6%	-1.7%	-7.7%		
2014	-1.2%	0.7%	10.2%	8.3%	8.5%	10.8%	8.4%			
2015	0.0%	5.8%	4.7%	6.7%	6.9%	-1.5%				
2016	5.6%	2.6%	1.2%	2.0%	-2.4%					
2017	1.1%	2.9%	6.8%	1.1%						
2018	7.0%	4.6%	-0.5%							
2019	4.5%	3.8%								
2020	7.7%									

Annual Trend*										
All-Year	2.6%	2.3%	1.7%	1.5%	1.2%	1.1%	0.9%	1.3%	2.4%	3.7%
R <sup>2</sup>	0.909	0.854	0.307	0.191	0.114	0.100	0.091	0.220	0.574	0.690
5-Year	5.2%	3.5%	3.2%	4.5%	5.2%	2.6%	1.0%	2.2%	7.0%	1.7%
R <sup>2</sup>	0.959	0.989	0.914	0.886	0.877	0.482	0.266	0.291	0.753	0.223

\*Trend is based on an exponential distribution.

Source: WCIRB quarterly calls for experience

**Ratio of Incremental Paid Medical to Indemnity Claims Open During the Period\*\***  
As of September 30, 2020

Accident	Evaluated as of (in months):									
Year	0-9	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
2002										9,454
2003									9,527	10,547
2004								9,288	10,880	12,805
2005							9,439	9,708	14,200	12,807
2006						9,576	10,551	11,606	12,310	11,460
2007					9,690	10,946	12,393	13,193	12,326	12,934
2008				9,901	11,014	12,202	12,607	12,247	12,282	12,502
2009			9,399	10,595	11,931	12,509	11,759	11,948	11,682	12,327
2010		8,042	9,653	11,566	12,060	11,849	12,515	12,507	11,842	13,479
2011	3,208	7,727	9,792	10,777	10,918	12,119	11,507	12,263	12,694	11,007
2012	3,112	7,618	9,244	10,001	10,340	11,333	10,663	12,025	11,841	
2013	3,296	7,120	8,609	9,548	10,176	9,966	10,259	10,079		
2014	3,063	6,933	8,664	9,500	9,877	10,268	10,633			
2015	3,107	6,966	8,693	9,792	10,272	9,779				
2016	3,167	7,188	8,712	9,451	10,053					
2017	3,358	7,365	9,029	9,745						
2018	3,519	7,639	9,344							
2019	3,289	7,481								
2020	3,158									

Accident	Annual Change									
Year	0-9	9-21	21-33	33-45	45-57	57-69	69-81	81-93	93-105	105-117
2003										11.6%
2004									14.2%	21.4%
2005								4.5%	30.5%	0.0%
2006							11.8%	19.6%	-13.3%	-10.5%
2007						14.3%	17.5%	13.7%	0.1%	12.9%
2008					13.7%	11.5%	1.7%	-7.2%	-0.4%	-3.3%
2009				7.0%	8.3%	2.5%	-6.7%	-2.4%	-4.9%	-1.4%
2010**			2.7%	9.2%	1.1%	-5.3%	6.4%	4.7%	1.4%	9.3%
2011**		-3.9%	1.4%	-6.8%	-9.5%	2.3%	-8.1%	-1.9%	7.2%	-18.3%
2012	-3.0%	-1.4%	-5.6%	-7.2%	-5.3%	-6.5%	-7.3%	-1.9%	-6.7%	
2013	5.9%	-6.5%	-6.9%	-4.5%	-1.6%	-12.1%	-3.8%	-16.2%		
2014	-7.1%	-2.6%	0.6%	-0.5%	-2.9%	3.0%	3.6%			
2015	1.4%	0.5%	0.3%	3.1%	4.0%	-4.8%				
2016	1.9%	3.2%	0.2%	-3.5%	-2.1%					
2017	6.0%	2.5%	3.6%	3.1%						
2018	4.8%	3.7%	3.5%							
2019	-6.5%	-2.1%								
2020	-4.0%									

Annual Trend*										
All-Year	0.5%	-0.5%	-0.8%	-1.3%	-1.0%	-0.9%	-0.1%	1.4%	1.2%	1.8%
R <sup>2</sup>	0.141	0.108	0.245	0.378	0.161	0.080	0.000	0.127	0.121	0.235
5-Year	-0.3%	2.1%	1.9%	0.4%	-0.5%	-5.1%	-4.3%	-3.7%	0.1%	-2.4%
R <sup>2</sup>	0.009	0.810	0.832	0.128	0.166	0.829	0.766	0.479	0.002	0.266

\*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

Ratio of Quarterly Paid Medical to Indemnity Claims Inventory\*  
Through September 30, 2020

Development	Evaluation Years													
Period	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
3/0	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	2,241
6/3	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	3,218
9/6	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	2,932
12/9	2,697	3,012	3,075	3,134	3,065	3,243	3,033	2,983	2,951	3,157	3,361	3,513	3,519	
<b>12/0</b>	<b>5,103</b>	<b>6,035</b>	<b>6,228</b>	<b>6,172</b>	<b>6,076</b>	<b>6,139</b>	<b>6,065</b>	<b>5,902</b>	<b>5,997</b>	<b>6,232</b>	<b>6,547</b>	<b>6,844</b>	<b>6,580</b>	
15/12	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	3,467
18/15	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	2,974
21/18	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	2,898
24/21	2,190	2,407	2,537	2,603	2,738	3,035	2,929	2,747	2,706	2,790	2,870	2,921	3,236	
<b>24/12</b>	<b>7,576</b>	<b>8,762</b>	<b>9,141</b>	<b>9,420</b>	<b>9,576</b>	<b>10,215</b>	<b>9,966</b>	<b>9,299</b>	<b>9,274</b>	<b>9,359</b>	<b>9,483</b>	<b>9,685</b>	<b>10,106</b>	
27/24	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	3,115
30/27	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	2,910
33/30	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	3,229
36/33	1,965	2,389	2,596	2,731	2,889	3,406	3,308	3,120	3,096	3,072	3,041	3,092	3,311	
<b>36/24</b>	<b>6,452</b>	<b>8,158</b>	<b>8,942</b>	<b>9,452</b>	<b>9,861</b>	<b>10,661</b>	<b>11,007</b>	<b>10,483</b>	<b>10,161</b>	<b>10,091</b>	<b>9,885</b>	<b>9,910</b>	<b>10,397</b>	
39/36	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	3,332
42/39	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	2,902
45/42	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	3,231
48/45	1,953	2,251	2,551	2,913	3,072	3,411	3,629	3,433	3,281	3,414	3,141	3,410	3,511	
<b>48/36</b>	<b>6,360</b>	<b>7,478</b>	<b>8,645</b>	<b>9,621</b>	<b>10,316</b>	<b>11,224</b>	<b>12,024</b>	<b>11,867</b>	<b>11,391</b>	<b>10,771</b>	<b>10,478</b>	<b>10,940</b>	<b>10,673</b>	

Development	Year-to-Year Change													
Period	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	19-to-20
3/0	-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%	-1.4%
6/3	-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%	-2.4%
9/6	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%	-11.5%
12/9	11.0%	11.7%	2.1%	1.9%	-2.2%	5.8%	-6.5%	-1.6%	-1.1%	7.0%	6.5%	4.5%	0.2%	
<b>12/0</b>	<b>5.5%</b>	<b>18.2%</b>	<b>3.2%</b>	<b>-0.9%</b>	<b>-1.5%</b>	<b>1.0%</b>	<b>-1.2%</b>	<b>-2.7%</b>	<b>1.6%</b>	<b>3.9%</b>	<b>5.1%</b>	<b>4.5%</b>	<b>-3.9%</b>	
15/12	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%	-2.6%
18/15	-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%	-6.2%
21/18	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%	-5.3%
24/21	19.4%	9.9%	5.4%	2.6%	5.2%	10.8%	-3.5%	-6.2%	-1.5%	3.1%	2.9%	1.8%	10.8%	
<b>24/12</b>	<b>19.1%</b>	<b>15.7%</b>	<b>4.3%</b>	<b>3.0%</b>	<b>1.7%</b>	<b>6.7%</b>	<b>-2.4%</b>	<b>-6.7%</b>	<b>-0.3%</b>	<b>0.9%</b>	<b>1.3%</b>	<b>2.1%</b>	<b>4.3%</b>	
27/24	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%	0.1%
30/27	-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%	-6.3%
33/30	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%	1.2%
36/33	15.3%	21.6%	8.7%	5.2%	5.8%	17.9%	-2.9%	-5.7%	-0.7%	-0.8%	-1.0%	1.7%	7.1%	
<b>36/24</b>	<b>16.5%</b>	<b>26.4%</b>	<b>9.6%</b>	<b>5.7%</b>	<b>4.3%</b>	<b>8.1%</b>	<b>3.2%</b>	<b>-4.8%</b>	<b>-3.1%</b>	<b>-0.7%</b>	<b>-2.0%</b>	<b>0.3%</b>	<b>4.9%</b>	
39/36	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%	7.4%
42/39	-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%	-9.4%
45/42	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%	-1.5%
48/45	7.8%	15.2%	13.3%	14.2%	5.4%	11.0%	6.4%	-5.4%	-4.4%	4.1%	-8.0%	8.5%	3.0%	
<b>48/36</b>	<b>14.6%</b>	<b>17.6%</b>	<b>15.6%</b>	<b>11.3%</b>	<b>7.2%</b>	<b>8.8%</b>	<b>7.1%</b>	<b>-1.3%</b>	<b>-4.0%</b>	<b>-5.4%</b>	<b>-2.7%</b>	<b>4.4%</b>	<b>-2.4%</b>	

\* 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**

Indemnity Severity Adjusted to PY 2021 Benefit Level					Medical Severity Adjusted to PY 2021 Benefit Level**						
Accident Year	Ultimate Indemnity Severity		Permanent	Temporary	Accident Year	Ultimate Medical Severity**			Permanent	Temporary	Medical Only
	Permanent	Temporary				Permanent	Temporary	Only			
2003	41,756	4,238	44,417	6,332	2003	47,523	5,762	897	26,631	3,229	503
2004	35,986	4,122	40,205	5,983	2004	48,853	5,413	831	28,432	3,150	484
2005	34,540	3,848	61,958	5,460	2005	53,537	5,399	843	32,689	3,297	515
2006	37,219	3,871	61,119	5,320	2006	57,627	5,577	869	46,542	4,504	702
2007	39,752	4,159	62,353	5,566	2007	62,634	6,371	950	50,587	5,145	767
2008	41,911	4,715	59,228	6,167	2008	64,565	7,174	1,025	51,938	5,771	824
2009	41,812	5,416	58,783	7,034	2009	63,717	8,180	1,141	50,299	6,458	901
2010	40,715	6,366	56,194	8,106	2010	61,673	9,329	1,168	48,492	7,335	919
2011	38,902	6,864	52,951	8,619	2011	55,456	9,516	1,122	43,429	7,452	879
2012	37,955	7,442	50,464	9,123	2012	51,188	9,444	1,116	39,967	7,374	872
2013	36,245	7,782	46,394	9,451	2013	46,071	9,187	1,147	36,973	7,373	920
2014	38,349	7,702	44,072	9,043	2014	44,312	8,653	1,206	37,357	7,295	1,016
2015	38,481	7,768	43,124	8,869	2015	42,776	8,529	1,225	39,633	7,902	1,135
2016	38,174	7,990	42,261	8,990	2016	41,811	8,495	1,298	41,176	8,366	1,279
2017	39,505	8,302	42,623	9,064	2017	43,572	8,651	1,286	43,877	8,711	1,295
2018	41,383	8,709	43,525	9,233	2018	44,985	9,140	1,330	45,255	9,195	1,338
2019*	42,260	8,949	43,269	9,206	2019*	44,006	9,243	1,338	44,270	9,298	1,346

Accident Year	Annual Change		Annual Change		Accident Year	Annual Change			Annual Change		
2003	---	---	---	---	2003	---	---	---	---	---	---
2004	-13.8%	-2.7%	-9.5%	-5.5%	2004	2.8%	-6.0%	-7.3%	6.8%	-2.4%	-3.8%
2005	-4.0%	-6.6%	54.1%	-8.7%	2005	9.6%	-0.3%	1.4%	15.0%	4.6%	6.4%
2006	7.8%	0.6%	-1.4%	-2.6%	2006	7.6%	3.3%	3.1%	42.4%	36.6%	36.4%
2007	6.8%	7.4%	2.0%	4.6%	2007	8.7%	14.2%	9.2%	8.7%	14.2%	9.2%
2008	5.4%	13.4%	-5.0%	10.8%	2008	3.1%	12.6%	7.9%	2.7%	12.2%	7.5%
2009	-0.2%	14.9%	-0.8%	14.1%	2009	-1.3%	14.0%	11.4%	-3.2%	11.9%	9.3%
2010	-2.6%	17.5%	-4.4%	15.2%	2010	-3.2%	14.0%	2.4%	-3.6%	13.6%	2.0%
2011	-4.5%	7.8%	-5.8%	6.3%	2011	-10.1%	2.0%	-3.9%	-10.4%	1.6%	-4.3%
2012	-2.4%	8.4%	-4.7%	5.8%	2012	-7.7%	-0.8%	-0.5%	-8.0%	-1.1%	-0.8%
2013	-4.5%	4.6%	-8.1%	3.6%	2013	-10.0%	-2.7%	2.7%	-7.5%	0.0%	5.6%
2014	5.8%	-1.0%	-5.0%	-4.3%	2014	-3.8%	-5.8%	5.1%	1.0%	-1.1%	10.4%
2015	0.3%	0.9%	-2.2%	-1.9%	2015	-3.5%	-1.4%	1.6%	6.1%	8.3%	11.7%
2016	-0.8%	2.9%	-2.0%	1.4%	2016	-2.3%	-0.4%	6.0%	3.9%	5.9%	12.7%
2017	3.5%	3.9%	0.9%	0.8%	2017	4.2%	1.8%	-0.9%	6.6%	4.1%	1.3%
2018	4.8%	4.9%	2.1%	1.9%	2018	3.2%	5.7%	3.4%	3.1%	5.6%	3.3%
2019*	2.1%	2.8%	-0.6%	-0.3%	2019*	-2.2%	1.1%	0.6%	-2.2%	1.1%	0.6%

\* Accident year 2019 experience is partial in that it only reflects experience from policy year 2018.

\*\* 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

**Annual Changes in Indemnity Severity Attributable to Changes in Hazardousness**

Policy Year	Report Level	Indemnity Claim Severity			Total Claim Severity		
		Change in Severity Hazardousness	Severity Hazardousness Index	Annual % Change Attributable to Change in Industrial Mix	Change in Severity Hazardousness	Severity Hazardousness Index	Annual % Change Attributable to Change in Industrial Mix
1993	5	1.0000	1.0000	---	1.0000	1.0000	---
1994	5	1.0010	1.0010	0.10%	0.9986	0.9986	-0.14%
1995	5	1.0007	1.0017	0.07%	1.0013	0.9998	0.13%
1996	5	0.9988	1.0005	-0.12%	0.9993	0.9991	-0.07%
1997	5	1.0032	1.0036	0.32%	1.0045	1.0036	0.45%
1998	5	1.0037	1.0074	0.37%	1.0050	1.0086	0.50%
1999	5	1.0023	1.0096	0.23%	1.0011	1.0097	0.11%
2000	5	1.0016	1.0112	0.16%	1.0009	1.0107	0.09%
2001	5	1.0031	1.0144	0.31%	1.0001	1.0108	0.01%
2002	5	0.9984	1.0128	-0.16%	0.9996	1.0104	-0.04%
2003	5	1.0042	1.0170	0.42%	1.0071	1.0176	0.71%
2004	5	1.0020	1.0190	0.20%	1.0048	1.0224	0.48%
2005	5	1.0010	1.0201	0.10%	1.0027	1.0252	0.27%
2006	5	0.9965	1.0165	-0.35%	0.9917	1.0167	-0.83%
2007	5	0.9935	1.0098	-0.65%	0.9861	1.0025	-1.39%
2008	5	0.9908	1.0005	-0.92%	0.9845	0.9870	-1.55%
2009	5	0.9884	0.9889	-1.16%	0.9832	0.9704	-1.68%
2010	5	0.9961	0.9851	-0.39%	0.9938	0.9644	-0.62%
2011	5	0.9996	0.9847	-0.04%	1.0014	0.9657	0.14%
2012	5	0.9972	0.9819	-0.28%	0.9978	0.9636	-0.22%
2013	5	1.0012	0.9830	0.12%	1.0030	0.9665	0.30%
2014	5	1.0012	0.9842	0.12%	1.0058	0.9721	0.58%
2015	Proj 5	1.0004	0.9847	0.04%	1.0028	0.9748	0.28%
2016	Proj 5	0.9982	0.9829	-0.18%	0.9970	0.9719	-0.30%
2017	Proj 5	1.0027	0.9855	0.27%	1.0038	0.9755	0.38%
2018	Proj 5	0.9993	0.9849	-0.07%	1.0004	0.9760	0.04%

Note: Changes in industrial mix are based on indemnity claim severity by collapsed NAICS industrial sector.

Source: WCIRB unit statistical data

Claim Counts and Losses on Claims in Excess of \$250,000

PY/RL	Number of Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	602	1,282	2,109	2,990	3,838	4,500	4,866	5,232
2005	540	928	1,550	2,323	3,104	3,589	4,071	4,395
2006	472	719	1,163	1,741	2,296	2,874	3,273	3,547
2007	496	783	1,292	1,921	2,657	3,169	3,504	3,782
2008	667	1,036	1,673	2,401	3,108	3,603	3,984	4,211
2009	666	1,189	2,092	3,015	3,755	4,319	4,641	4,842
2010	653	1,260	2,099	3,077	3,878	4,389	4,685	3,976
2011	604	1,219	2,111	3,083	3,784	4,226	3,549	
2012	588	1,167	1,951	2,806	3,376	2,898		
2013	653	1,205	1,919	2,654	2,551			
2014	668	1,127	1,729	2,296				
2015	709	1,119	1,760					
2016	704	1,297						
2017	887							

PY/RL	% of Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	0.112%	0.227%	0.372%	0.525%	0.672%	0.790%	0.857%	0.925%
2005	0.107%	0.177%	0.295%	0.441%	0.588%	0.681%	0.775%	0.839%
2006	0.098%	0.146%	0.235%	0.351%	0.463%	0.581%	0.663%	0.718%
2007	0.109%	0.168%	0.276%	0.409%	0.567%	0.676%	0.747%	0.805%
2008	0.153%	0.233%	0.374%	0.536%	0.692%	0.801%	0.885%	0.935%
2009	0.161%	0.282%	0.494%	0.707%	0.880%	1.010%	1.085%	1.131%
2010	0.182%	0.342%	0.566%	0.826%	1.038%	1.173%	1.250%	1.166%
2011	0.182%	0.359%	0.616%	0.896%	1.097%	1.223%	1.034%	
2012	0.175%	0.339%	0.562%	0.804%	0.965%	0.823%		
2013	0.194%	0.348%	0.549%	0.756%	0.703%			
2014	0.194%	0.319%	0.484%	0.609%				
2015	0.200%	0.308%	0.453%					
2016	0.192%	0.329%						
2017	0.220%							

PY/RL	% of Indemnity Incurred on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	4.35%	6.36%	9.13%	12.64%	16.07%	18.67%	20.07%	21.84%
2005	5.80%	7.10%	9.89%	13.19%	16.47%	18.55%	21.16%	22.92%
2006	6.58%	7.79%	9.70%	13.11%	15.78%	19.69%	22.24%	24.01%
2007	7.95%	8.27%	11.00%	15.00%	19.77%	23.04%	25.51%	27.31%
2008	11.02%	11.47%	14.89%	18.94%	22.71%	25.75%	28.08%	29.89%
2009	10.15%	11.62%	16.22%	20.89%	24.90%	27.50%	29.41%	30.54%
2010	9.37%	11.20%	15.22%	20.28%	24.26%	27.11%	28.70%	25.51%
2011	9.06%	10.45%	15.09%	19.60%	23.44%	26.26%	22.97%	
2012	9.14%	10.82%	13.89%	18.16%	21.17%	19.89%		
2013	9.46%	10.54%	13.48%	17.23%	16.55%			
2014	9.02%	9.77%	12.43%	15.49%				
2015	7.59%	8.80%	12.44%					
2016	8.55%	10.86%						
2017	11.79%							

PY/RL	% of Medical Incurred on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	10.02%	12.42%	15.41%	18.77%	22.93%	26.16%	28.53%	30.77%
2005	11.23%	12.96%	15.75%	19.79%	23.77%	26.34%	30.08%	32.17%
2006	11.21%	12.93%	16.17%	19.88%	23.28%	28.00%	31.31%	33.79%
2007	12.87%	15.04%	17.09%	20.69%	26.00%	30.09%	32.71%	35.48%
2008	14.59%	16.50%	19.82%	23.83%	28.06%	31.56%	34.40%	36.03%
2009	13.37%	15.89%	20.71%	26.16%	30.13%	33.64%	35.80%	37.30%
2010	12.95%	15.33%	19.43%	24.70%	29.07%	32.32%	34.35%	31.10%
2011	12.52%	15.39%	19.88%	24.82%	28.64%	31.58%	27.38%	
2012	13.20%	15.70%	19.02%	23.15%	26.43%	24.44%		
2013	13.48%	15.29%	18.56%	22.30%	19.79%			
2014	14.07%	15.09%	17.82%	20.08%				
2015	11.75%	12.35%	18.06%					
2016	13.96%	17.36%						
2017	19.02%							

PY/RL	Average Severity on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	717,062	592,893	508,878	481,072	488,305	498,121	511,322	529,239
2005	830,287	697,511	579,912	531,520	513,563	511,184	536,729	548,977
2006	751,890	695,515	597,861	550,994	520,593	538,976	553,349	569,398
2007	739,367	668,592	545,833	501,441	498,380	513,170	526,835	543,666
2008	685,716	633,586	554,027	517,029	504,508	515,982	527,649	538,512
2009	656,706	573,916	507,392	494,503	494,898	501,434	512,282	520,029
2010	617,586	515,370	466,652	456,502	457,438	469,921	477,594	495,466
2011	649,166	525,815	479,951	458,056	463,534	478,018	476,281	
2012	711,521	584,687	502,343	474,264	477,077	499,693		
2013	687,390	560,645	499,168	478,213	460,433			
2014	704,191	587,234	522,780	506,671				
2015	579,816	507,683	546,974					
2016	711,664	631,494						
2017	866,669							

PY/RL	Median Severity on Claims in Excess of \$250,000							
	1	2	3	4	5	6	7	8
2004	353,274	323,567	319,385	330,745	342,220	352,489	362,640	377,161
2005	379,413	344,966	331,543	327,919	336,352	350,688	365,700	374,592
2006	384,864	353,041	327,682	333,000	341,796	356,039	366,212	376,147
2007	380,882	341,967	326,677	331,078	341,764	348,959	361,279	365,877
2008	350,752	340,665	334,409	334,408	342,606	352,011	363,123	364,251
2009	354,608	327,574	328,110	332,740	343,611	355,134	362,922	365,739
2010	360,069	325,004	323,876	328,550	337,081	346,627	351,643	357,019
2011	358,189	325,000	320,631	328,483	337,178	341,476	350,946	
2012	348,145	322,140	320,430	320,987	330,255	337,919		
2013	348,789	315,896	313,946	320,441	325,198			
2014	348,892	326,282	317,420	318,644				
2015	337,549	325,027	324,573					
2016	361,832	336,376						
2017	351,618							

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

Claim Counts and Losses on Claims in Excess of \$500,000

Number of Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	171	245	324	481	696	960	1,214	1,449
2005	174	218	300	431	584	800	1,065	1,275
2006	159	198	243	342	453	680	874	1,010
2007	160	184	238	349	532	704	880	1,003
2008	186	257	347	505	679	851	1,038	1,149
2009	187	260	368	528	741	964	1,139	1,255
2010	178	233	340	526	726	940	1,084	861
2011	173	234	335	504	705	842	724	
2012	161	222	317	422	573	543		
2013	179	232	308	442	449			
2014	187	237	294	437				
2015	178	210	309					
2016	213	288						
2017	285							

% of Indemnity Incurred on Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	2.13%	2.53%	3.05%	4.21%	5.73%	7.37%	8.79%	10.46%
2005	3.77%	3.91%	4.68%	5.55%	6.57%	7.94%	10.04%	11.78%
2006	3.89%	4.47%	4.52%	5.96%	6.76%	9.41%	11.48%	13.00%
2007	4.18%	3.64%	4.10%	5.79%	7.94%	9.92%	12.04%	13.53%
2008	5.03%	5.21%	6.38%	8.00%	9.55%	11.68%	13.56%	15.24%
2009	4.80%	5.10%	6.17%	7.74%	10.09%	11.61%	13.34%	14.46%
2010	4.10%	4.26%	5.18%	7.24%	9.06%	11.12%	12.24%	10.70%
2011	4.70%	3.88%	5.23%	6.47%	8.49%	10.35%	8.97%	
2012	4.82%	4.54%	4.95%	6.23%	7.60%	8.12%		
2013	4.91%	4.41%	4.72%	5.99%	5.89%			
2014	4.46%	4.18%	4.72%	5.96%				
2015	2.84%	3.10%	4.74%					
2016	4.35%	4.73%						
2017	7.24%							

Average Severity on Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	1,696,788	1,741,153	1,532,015	1,276,041	1,188,599	1,092,089	1,032,729	1,020,705
2005	1,870,525	1,903,826	1,638,500	1,426,187	1,292,676	1,122,403	1,093,521	1,059,376
2006	1,572,672	1,667,615	1,635,033	1,466,714	1,278,692	1,188,341	1,142,355	1,142,140
2007	1,587,235	1,778,172	1,525,931	1,290,030	1,165,364	1,133,478	1,088,311	1,111,789
2008	1,602,470	1,566,036	1,422,051	1,225,576	1,125,012	1,103,038	1,068,071	1,075,001
2009	1,493,459	1,469,841	1,356,962	1,271,855	1,150,320	1,072,957	1,045,187	1,036,145
2010	1,377,062	1,369,040	1,203,209	1,085,961	1,008,698	973,190	955,105	1,089,348
2011	1,443,063	1,379,530	1,318,329	1,126,985	1,041,463	1,063,152	1,050,625	
2012	1,729,192	1,708,498	1,436,361	1,329,843	1,210,278	1,258,937		
2013	1,644,554	1,578,653	1,443,159	1,263,429	1,103,391			
2014	1,668,685	1,590,226	1,515,563	1,295,284				
2015	1,336,704	1,319,046	1,613,232					
2016	1,590,101	1,721,075						
2017	2,001,159							

% of Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	0.032%	0.043%	0.057%	0.085%	0.122%	0.169%	0.214%	0.256%
2005	0.034%	0.042%	0.057%	0.082%	0.111%	0.152%	0.203%	0.243%
2006	0.033%	0.040%	0.049%	0.069%	0.091%	0.137%	0.177%	0.204%
2007	0.035%	0.040%	0.051%	0.074%	0.113%	0.150%	0.188%	0.214%
2008	0.043%	0.058%	0.078%	0.113%	0.151%	0.189%	0.231%	0.255%
2009	0.045%	0.062%	0.087%	0.124%	0.174%	0.225%	0.266%	0.293%
2010	0.050%	0.063%	0.092%	0.141%	0.194%	0.251%	0.289%	0.253%
2011	0.052%	0.069%	0.098%	0.146%	0.204%	0.244%	0.211%	
2012	0.048%	0.065%	0.091%	0.121%	0.164%	0.154%		
2013	0.053%	0.067%	0.088%	0.126%	0.124%			
2014	0.054%	0.067%	0.082%	0.116%				
2015	0.050%	0.058%	0.080%					
2016	0.058%	0.073%						
2017	0.071%							

% of Medical Incurred on Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	7.40%	7.93%	8.24%	9.14%	11.40%	13.48%	15.57%	17.49%
2005	8.53%	8.91%	9.31%	10.81%	12.38%	13.91%	17.11%	18.91%
2006	8.47%	9.09%	10.06%	11.10%	11.97%	15.26%	17.84%	19.82%
2007	9.77%	10.47%	9.92%	10.55%	13.10%	15.72%	17.78%	20.10%
2008	10.86%	11.37%	11.63%	12.88%	14.71%	16.83%	18.98%	20.32%
2009	9.57%	9.85%	10.75%	12.92%	14.72%	17.07%	18.83%	20.12%
2010	8.84%	8.38%	8.94%	10.75%	12.65%	14.95%	16.59%	15.80%
2011	8.61%	8.67%	9.58%	10.93%	12.87%	14.85%	13.33%	
2012	9.54%	9.71%	9.85%	10.73%	12.41%	12.52%		
2013	9.66%	9.20%	9.72%	10.96%	9.25%			
2014	10.28%	9.58%	9.83%	11.12%				
2015	7.83%	6.93%	10.81%					
2016	10.40%	12.00%						
2017	15.14%							

Median Severity on Claims in Excess of \$500,000								
PY/RL	1	2	3	4	5	6	7	8
2004	885,388	776,001	749,290	689,322	686,961	685,631	686,474	714,772
2005	866,728	914,390	821,735	742,737	729,204	707,027	700,913	711,672
2006	827,255	875,244	772,132	760,725	715,829	712,192	713,607	720,782
2007	825,368	814,506	710,326	704,717	711,051	700,997	686,837	697,792
2008	810,488	782,910	739,379	713,205	711,000	701,420	691,932	695,728
2009	805,589	744,439	712,814	696,427	684,367	677,511	683,218	685,018
2010	844,408	776,176	722,571	683,487	665,759	670,404	684,754	693,254
2011	829,140	747,484	713,222	676,704	657,838	662,532	673,897	
2012	893,022	784,927	702,366	689,490	702,851	686,542		
2013	893,546	775,642	735,663	692,450	684,826			
2014	889,984	791,723	769,498	740,885				
2015	760,344	763,671	736,311					
2016	861,815	838,286						
2017	823,044							

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

Claim Counts and Losses on Claims in Excess of \$1,000,000

PY/RL	Number of Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	71	96	119	135	173	221	265	336
2005	73	95	114	135	161	194	248	315
2006	57	85	96	109	109	165	216	252
2007	58	72	74	95	132	173	208	245
2008	66	87	110	145	173	216	258	287
2009	66	81	109	133	158	200	234	267
2010	69	82	102	125	167	213	242	198
2011	65	81	98	121	150	174	155	
2012	70	84	100	122	147	146		
2013	72	85	94	109	113			
2014	82	86	99	154				
2015	63	70	102					
2016	91	116						
2017	147							

PY/RL	% of Indemnity Incurred on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	1.40%	1.62%	1.83%	2.19%	2.68%	3.25%	3.63%	4.33%
2005	2.87%	2.93%	3.27%	3.40%	3.65%	3.91%	4.82%	5.78%
2006	2.46%	3.21%	3.09%	3.74%	3.73%	5.04%	6.15%	7.04%
2007	2.49%	2.30%	2.31%	3.06%	4.09%	5.16%	6.15%	7.06%
2008	3.02%	3.08%	3.73%	4.26%	4.83%	5.86%	6.76%	7.89%
2009	2.94%	2.96%	3.42%	4.00%	4.97%	5.35%	6.11%	6.57%
2010	2.46%	2.53%	2.88%	3.72%	4.37%	5.28%	5.44%	4.99%
2011	2.80%	2.10%	2.84%	3.12%	3.74%	4.86%	3.82%	
2012	3.63%	3.15%	2.97%	3.60%	3.81%	4.30%		
2013	3.45%	2.98%	2.77%	3.03%	2.86%			
2014	3.06%	2.58%	2.77%	3.25%				
2015	1.66%	1.79%	2.95%					
2016	2.81%	3.00%						
2017	5.54%							

PY/RL	Average Severity on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	3,105,446	3,422,845	3,060,518	2,891,297	2,799,369	2,544,865	2,367,659	2,171,072
2005	3,523,470	3,460,312	3,204,876	3,081,799	2,922,506	2,543,782	2,487,580	2,242,340
2006	3,161,316	2,995,729	3,135,046	3,169,113	3,201,987	2,812,364	2,576,725	2,561,543
2007	3,171,764	3,525,423	3,473,114	2,982,927	2,674,595	2,581,158	2,468,930	2,496,814
2008	3,268,599	3,304,753	3,033,739	2,630,292	2,484,351	2,402,523	2,306,095	2,316,982
2009	2,989,854	3,230,890	3,023,941	3,083,910	2,953,510	2,658,515	2,523,329	2,416,604
2010	2,474,424	2,646,652	2,479,616	2,470,854	2,224,164	2,070,407	1,989,235	2,549,998
2011	2,709,780	2,719,407	2,923,444	2,642,982	2,485,767	2,633,315	2,470,942	
2012	3,086,031	3,438,423	3,153,270	3,001,492	2,809,145	2,892,532		
2013	3,062,899	3,150,573	3,207,977	3,099,384	2,466,704			
2014	2,934,667	3,186,651	3,185,008	2,442,939				
2015	2,566,288	2,620,572	3,539,396					
2016	2,825,150	3,285,851						
2017	3,218,834							

PY/RL	% of Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	0.013%	0.017%	0.021%	0.024%	0.030%	0.039%	0.047%	0.059%
2005	0.014%	0.018%	0.022%	0.026%	0.030%	0.037%	0.047%	0.060%
2006	0.012%	0.017%	0.019%	0.022%	0.022%	0.033%	0.044%	0.051%
2007	0.013%	0.015%	0.016%	0.020%	0.028%	0.037%	0.044%	0.052%
2008	0.015%	0.020%	0.025%	0.032%	0.039%	0.048%	0.057%	0.064%
2009	0.016%	0.019%	0.026%	0.031%	0.037%	0.047%	0.055%	0.062%
2010	0.019%	0.022%	0.027%	0.034%	0.045%	0.057%	0.065%	0.058%
2011	0.020%	0.024%	0.029%	0.035%	0.043%	0.050%	0.045%	
2012	0.021%	0.024%	0.029%	0.035%	0.042%	0.041%		
2013	0.021%	0.025%	0.027%	0.031%	0.031%			
2014	0.024%	0.024%	0.028%	0.041%				
2015	0.018%	0.019%	0.026%					
2016	0.025%	0.029%						
2017	0.036%							

PY/RL	% of Medical Incurred on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	5.81%	6.41%	6.44%	6.28%	7.31%	7.88%	8.48%	9.36%
2005	6.84%	7.22%	7.12%	7.66%	8.13%	8.06%	9.50%	10.22%
2006	6.37%	7.20%	7.89%	7.93%	7.48%	9.04%	10.13%	11.26%
2007	7.42%	8.49%	7.44%	7.05%	7.77%	9.07%	9.75%	11.27%
2008	8.25%	8.56%	8.27%	8.40%	8.65%	9.71%	10.53%	11.15%
2009	7.04%	7.11%	7.55%	8.38%	8.43%	9.19%	9.67%	10.38%
2010	6.40%	5.95%	5.75%	5.95%	6.57%	7.26%	7.89%	9.03%
2011	6.38%	6.28%	6.59%	6.50%	6.92%	7.89%	7.23%	
2012	7.47%	7.59%	7.13%	7.32%	7.87%	8.29%		
2013	7.38%	6.90%	6.90%	7.06%	5.58%			
2014	8.17%	7.29%	7.38%	8.01%				
2015	5.50%	4.79%	8.23%					
2016	8.23%	9.74%						
2017	12.89%							

PY/RL	Median Severity on Claims in Excess of \$1,000,000							
	1	2	3	4	5	6	7	8
2004	1,982,089	2,570,630	2,077,245	1,760,458	1,760,458	1,604,620	1,436,815	1,414,360
2005	2,346,394	2,313,505	2,282,077	2,173,422	1,756,000	1,668,325	1,533,770	1,489,999
2006	2,129,170	2,051,638	2,242,484	2,120,000	2,095,911	1,882,020	1,721,976	1,605,699
2007	1,990,755	2,160,065	2,089,211	1,864,346	1,739,305	1,666,100	1,645,929	1,664,019
2008	1,932,648	2,120,827	2,180,971	1,742,043	1,742,043	1,561,145	1,435,234	1,445,338
2009	1,953,016	2,265,514	1,732,523	1,838,481	1,933,372	1,587,337	1,616,302	1,577,628
2010	1,913,000	1,898,126	1,830,410	1,762,740	1,618,687	1,495,782	1,398,833	1,433,079
2011	1,988,779	1,711,957	1,833,872	1,682,373	1,512,298	1,445,376	1,444,734	
2012	2,153,329	2,215,829	1,946,786	1,814,410	1,779,631	1,765,880		
2013	2,133,690	1,945,519	1,948,017	1,950,524	1,634,185			
2014	1,748,313	1,981,094	2,005,409	2,031,639				
2015	1,749,237	1,835,395	1,767,043					
2016	1,854,543	1,986,862						
2017	1,873,825							

Notes: Incurred Amounts and Severities are first dollar.

Source: WCIRB unit statistical data

**Average Paid ALAE<sup>[1]</sup> per Reported Indemnity Claim - Private Insurers**  
As of December 31, 2020

Accident	Evaluated as of (in months):									
Year	12	24	36	48	60	72	84	96	108	120
2000								4,521	4,709	4,900
2001							5,480	5,704	5,977	6,144
2002						5,673	5,944	6,260	6,454	6,614
2003					5,475	5,917	6,315	6,597	6,809	7,015
2004				4,369	5,062	5,577	5,955	6,223	6,437	6,644
2005			3,023	3,987	4,698	5,219	5,591	5,899	6,162	6,330
2006		1,853	3,126	4,127	4,876	5,436	5,865	6,184	6,410	6,622
2007	575	1,978	3,323	4,419	5,230	5,864	6,378	6,697	6,978	7,190
2008	619	2,118	3,620	4,859	5,789	6,501	6,986	7,387	7,671	7,884
2009	675	2,406	4,083	5,460	6,484	7,203	7,783	8,196	8,490	8,713
2010	745	2,541	4,279	5,593	6,547	7,290	7,870	8,243	8,514	8,702
2011	753	2,563	4,188	5,522	6,537	7,325	7,837	8,205	8,441	8,688
2012	758	2,555	4,332	5,728	6,766	7,451	7,905	8,224	8,484	
2013	777	2,790	4,582	5,936	6,851	7,426	7,825	8,138		
2014	879	2,992	4,769	6,056	6,865	7,392	7,797			
2015	951	3,067	4,846	6,028	6,767	7,265				
2016	933	3,157	4,897	6,017	6,723					
2017	1,016	3,279	4,939	5,978						
2018	1,110	3,380	5,074							
2019	1,119	3,329								
2020	964									
<u>Excluding COVID-19 Claims:</u>										
2020	1,080									

Accident	Annual Change									
Year	12	24	36	48	60	72	84	96	108	120
2001								26.2%	26.9%	25.4%
2002							8.5%	9.7%	8.0%	7.6%
2003						4.3%	6.2%	5.4%	5.5%	6.1%
2004					-7.5%	-5.7%	-5.7%	-5.7%	-5.5%	-5.3%
2005				-8.7%	-7.2%	-6.4%	-6.1%	-5.2%	-4.3%	-4.7%
2006			3.4%	3.5%	3.8%	4.2%	4.9%	4.8%	4.0%	4.6%
2007		6.8%	6.3%	7.1%	7.3%	7.9%	8.7%	8.3%	8.8%	8.6%
2008	7.8%	7.1%	8.9%	9.9%	10.7%	10.9%	9.5%	10.3%	9.9%	9.7%
2009	8.9%	13.6%	12.8%	12.4%	12.0%	10.8%	11.4%	11.0%	10.7%	10.5%
2010	10.4%	5.6%	4.8%	2.4%	1.0%	1.2%	1.1%	0.6%	0.3%	-0.1%
2011	1.1%	0.9%	-2.1%	-1.3%	-0.1%	0.5%	-0.4%	-0.5%	-0.9%	-0.2%
2012	0.7%	-0.3%	3.4%	3.7%	3.5%	1.7%	0.9%	0.2%	0.5%	
2013	2.5%	9.2%	5.8%	3.6%	1.3%	-0.3%	-1.0%	-1.0%		
2014	13.2%	7.2%	4.1%	2.0%	0.2%	-0.5%	-0.4%			
2015	8.1%	2.5%	1.6%	-0.4%	-1.4%	-1.7%				
2016	-1.8%	2.9%	1.0%	-0.2%	-0.6%					
2017	8.9%	3.9%	0.9%	-0.6%						
2018	9.2%	3.1%	2.7%							
2019	0.8%	-1.5%								
2020	-13.8%									
<u>Excluding COVID-19 Claims:</u>										
2020	-3.4%									

<u>Annual Trend<sup>[2]</sup></u>										
All-Year	4.9%	4.7%	4.1%	3.4%	3.0%	2.9%	3.2%	4.0%	4.2%	4.4%
R <sup>3</sup>	0.913	0.949	0.914	0.863	0.753	0.756	0.812	0.819	0.824	0.817
5-Year	1.6%	2.4%	1.4%	0.1%	-0.3%	-0.2%	-0.2%	-0.2%	2.0%	4.9%
R <sup>4</sup>	0.098	0.849	0.958	0.294	0.196	0.140	0.364	0.285	0.472	0.776

Annual Trend<sup>[2]</sup> excluding COVID-19 Claims:

All-Year	5.2%
5-Year	4.0%

<sup>[1]</sup> All paid ALAE exclude the paid cost of medical cost containment programs.

<sup>[2]</sup> Trend is based on exponential distribution.

Source: WCIRB a WCIRB accident year experience calls.

**Percentage of Represented Permanent Disability Claims by Region and Loss Type**

First and Second Survey Level, Open Claims Only

**First Survey Level**

	<u>Northern California</u>	<u>Southern California</u>	<u>CT Claims</u>	<u>Non-CT Claims</u>
% of Represented				
AY 2011	66.2%	80.9%	88.1%	73.1%
AY 2012	67.4%	82.4%	89.7%	74.4%
AY 2013	68.8%	84.2%	91.7%	76.0%
AY 2014	67.9%	83.1%	90.5%	75.0%
AY 2015	66.6%	81.4%	88.7%	73.5%
AY 2016	66.8%	81.7%	89.0%	73.8%
AY 2017	61.5%	75.2%	81.9%	67.9%
AY 2018	67.9%	83.0%	90.4%	75.0%

**Second Survey Level**

	<u>Northern California</u>	<u>Southern California</u>	<u>CT Claims</u>	<u>Non-CT Claims</u>
% of Represented				
AY 2011	69.3%	84.7%	92.3%	76.5%
AY 2012	71.5%	87.4%	95.3%	79.0%
AY 2013	71.8%	87.8%	95.7%	79.3%
AY 2014	69.5%	84.9%	92.5%	76.7%
AY 2015	70.4%	86.1%	93.8%	77.8%
AY 2016	69.5%	85.0%	92.5%	76.7%
AY 2017	73.6%	90.0%	98.0%	81.3%

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

**Number of Medical-Legal Reports by Service Year and Quarter**

First Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	6,014	5,972	5,573	5,440	5,246	5,042	4,751	4,563	-0.7%	-6.7%	-2.4%	-3.6%	-3.9%	-5.8%	-4.0%
Los Angeles	14,915	17,281	17,578	18,721	18,043	16,996	16,943	16,764	15.9%	1.7%	6.5%	-3.6%	-5.8%	-0.3%	-1.1%
Other	8,558	9,758	9,888	11,162	10,710	11,143	10,583	9,938	14.0%	1.3%	12.9%	-4.0%	4.0%	-5.0%	-6.1%
All Regions	29,487	33,011	33,039	35,323	33,999	33,181	32,277	31,265	12.0%	0.1%	6.9%	-3.7%	-2.4%	-2.7%	-3.1%
Second Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	5,996	5,548	5,547	5,241	5,222	5,095	4,787	3,603	-7.5%	0.0%	-5.5%	-0.4%	-2.4%	-6.0%	-24.7%
Los Angeles	15,383	17,302	17,761	18,243	17,797	16,850	17,892	13,932	12.5%	2.7%	2.7%	-2.4%	-5.3%	6.2%	-22.1%
Other	8,786	9,787	10,106	11,567	11,216	11,259	10,756	7,907	11.4%	3.3%	14.5%	-3.0%	0.4%	-4.5%	-26.5%
All Regions	30,165	32,637	33,414	35,051	34,235	33,204	33,435	25,442	8.2%	2.4%	4.9%	-2.3%	-3.0%	0.7%	-23.9%
Third Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	5,788	5,184	5,213	5,051	4,959	4,688	4,285	3,592	-10.4%	0.6%	-3.1%	-1.8%	-5.5%	-8.6%	-16.2%
Los Angeles	14,400	15,293	15,974	16,657	15,940	15,830	16,873	13,493	6.2%	4.5%	4.3%	-4.3%	-0.7%	6.6%	-20.0%
Other	8,511	9,454	9,589	11,241	10,553	10,728	10,550	7,772	11.1%	1.4%	17.2%	-6.1%	1.7%	-1.7%	-26.3%
All Regions	28,699	29,931	30,776	32,949	31,452	31,246	31,708	24,857	4.3%	2.8%	7.1%	-4.5%	-0.7%	1.5%	-21.6%
Fourth Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	2,724	2,252	2,252	2,660	2,532	2,497	2,384		-17.3%	0.0%	18.1%	-4.8%	-1.4%	-4.5%	
Los Angeles	5,618	6,152	6,222	8,256	7,953	8,269	9,027		9.5%	1.1%	32.7%	-3.7%	4.0%	9.2%	
Other	3,472	4,086	3,750	5,245	4,885	5,011	5,106		17.7%	-8.2%	39.9%	-6.9%	2.6%	1.9%	
All Regions	11,814	12,490	12,224	16,161	15,370	15,777	16,517		5.7%	-2.1%	32.2%	-4.9%	2.6%	4.7%	
First Three Quarters of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	17,798	16,704	16,333	15,732	15,427	14,825	13,823	11,758	-6.1%	-2.2%	-3.7%	-1.9%	-3.9%	-6.8%	-14.9%
Los Angeles	44,698	49,876	51,313	53,621	51,780	49,676	51,708	44,189	11.6%	2.9%	4.5%	-3.4%	-4.1%	4.1%	-14.5%
Other	25,855	28,999	29,583	33,970	32,479	33,130	31,889	25,617	12.2%	2.0%	14.8%	-4.4%	2.0%	-3.7%	-19.7%
All Regions	88,351	95,579	97,229	103,323	99,686	97,631	97,420	81,564	8.2%	1.7%	6.3%	-3.5%	-2.1%	-0.2%	-16.3%
Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	20,522	18,956	18,585	18,392	17,959	17,322	16,207		-7.6%	-2.0%	-1.0%	-2.4%	-3.5%	-6.4%	
Los Angeles	50,316	56,028	57,535	61,877	59,733	57,945	60,735		11.4%	2.7%	7.5%	-3.5%	-3.0%	4.8%	
Other	29,327	33,085	33,333	39,215	37,364	38,141	36,995		12.8%	0.7%	17.6%	-4.7%	2.1%	-3.0%	
All Regions	100,165	108,069	109,453	119,484	115,056	113,408	113,937		7.9%	1.3%	9.2%	-3.7%	-1.4%	0.5%	

Note: 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. Figures in italics are based on prelim data.

Source: WCIRB medical data call (MDC).

Payment on Medical-Legal Reports by Service Year and Quarter (in \$000)

First Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	7,838	8,088	7,495	7,137	6,845	6,478	6,399	5,993	3.2%	-7.3%	-4.8%	-4.1%	-5.4%	-1.2%	-6.3%
Los Angeles	24,988	32,977	32,154	36,860	32,364	28,339	28,261	27,630	32.0%	-2.5%	14.6%	-12.2%	-12.4%	-0.3%	-2.2%
Other	10,458	14,455	13,996	16,094	13,043	13,195	12,210	12,456	38.2%	-3.2%	15.0%	-19.0%	1.2%	-7.5%	2.0%
All Regions	43,283	55,521	53,645	60,091	52,252	48,012	46,870	46,079	28.3%	-3.4%	12.0%	-13.0%	-8.1%	-2.4%	-1.7%
Second Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	8,123	7,654	7,333	7,167	6,830	6,775	6,312	4,774	-5.8%	-4.2%	-2.3%	-4.7%	-0.8%	-6.8%	-24.4%
Los Angeles	27,246	33,052	32,912	36,152	31,250	27,998	29,205	22,696	21.3%	-0.4%	9.8%	-13.6%	-10.4%	4.3%	-22.3%
Other	11,198	13,882	14,864	16,708	13,022	12,772	13,059	9,468	24.0%	7.1%	12.4%	-22.1%	-1.9%	2.2%	-27.5%
All Regions	46,568	54,588	55,108	60,027	51,102	47,544	48,576	36,938	17.2%	1.0%	8.9%	-14.9%	-7.0%	2.2%	-24.0%
Third Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	7,488	6,794	6,650	6,754	6,148	6,080	5,942	5,167	-9.3%	-2.1%	1.6%	-9.0%	-1.1%	-2.3%	-13.0%
Los Angeles	24,847	28,782	29,961	30,668	26,580	26,479	27,525	23,000	15.8%	4.1%	2.4%	-13.3%	-0.4%	4.0%	-16.4%
Other	10,964	13,133	13,674	15,050	12,496	12,048	12,873	10,577	19.8%	4.1%	10.1%	-17.0%	-3.6%	6.8%	-17.8%
All Regions	43,299	48,710	50,284	52,472	45,224	44,607	46,340	38,743	12.5%	3.2%	4.4%	-13.8%	-1.4%	3.9%	-16.4%
Fourth Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	3,208	2,606	2,764	3,284	2,791	3,044	3,054		-18.8%	6.1%	18.8%	-15.0%	9.1%	0.3%	
Los Angeles	8,370	10,187	10,861	14,046	12,031	12,355	13,757		21.7%	6.6%	29.3%	-14.3%	2.7%	11.4%	
Other	4,062	5,189	5,040	6,434	5,356	5,831	6,299		27.7%	-2.9%	27.7%	-16.7%	8.9%	8.0%	
All Regions	15,641	17,982	18,664	23,764	20,178	21,230	23,111		15.0%	3.8%	27.3%	-15.1%	5.2%	8.9%	
First Three Quarters of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	23,449	22,536	21,478	21,058	19,823	19,332	18,652	15,935	-3.9%	-4.7%	-2.0%	-5.9%	-2.5%	-3.5%	-14.6%
Los Angeles	77,081	94,812	95,026	103,679	90,194	82,815	84,992	73,325	23.0%	0.2%	9.1%	-13.0%	-8.2%	2.6%	-13.7%
Other	32,620	41,470	42,533	47,852	38,561	38,015	38,142	32,501	27.1%	2.6%	12.5%	-19.4%	-1.4%	0.3%	-14.8%
All Regions	133,149	158,818	159,037	172,590	148,577	140,163	141,786	121,760	19.3%	0.1%	8.5%	-13.9%	-5.7%	1.2%	-14.1%
Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	26,657	25,142	24,242	24,342	22,613	22,376	21,706		-5.7%	-3.6%	0.4%	-7.1%	-1.0%	-3.0%	
Los Angeles	85,451	104,999	105,887	117,725	102,225	95,170	98,749		22.9%	0.8%	11.2%	-13.2%	-6.9%	3.8%	
Other	36,682	46,659	47,573	54,286	43,917	43,846	44,441		27.2%	2.0%	14.1%	-19.1%	-0.2%	1.4%	
All Regions	148,790	176,801	177,701	196,353	168,755	161,393	164,897		18.8%	0.5%	10.5%	-14.1%	-4.4%	2.2%	

Note: 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. Figures in italics are based on prelim data.

Source: WCIRB medical data call (MDC).

Medical-Legal Payment per Report by Service Year and Quarter

First Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,303	1,354	1,345	1,312	1,305	1,285	1,347	<i>1,313</i>	3.9%	-0.7%	-2.5%	-0.5%	-1.5%	4.8%	-2.5%
Los Angeles	1,675	1,908	1,829	1,969	1,794	1,667	1,668	<i>1,648</i>	13.9%	-4.1%	7.6%	-8.9%	-7.0%	0.0%	-1.2%
Other	1,222	1,481	1,415	1,442	1,218	1,184	1,154	<i>1,253</i>	21.2%	-4.4%	1.9%	-15.5%	-2.8%	-2.6%	8.6%
All Regions	1,468	1,682	1,624	1,701	1,537	1,447	1,452	<i>1,474</i>	14.6%	-3.5%	4.8%	-9.7%	-5.8%	0.4%	1.5%

Second Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,355	1,380	1,322	1,368	1,308	1,330	1,319	<i>1,325</i>	1.8%	-4.2%	3.4%	-4.4%	1.7%	-0.8%	0.5%
Los Angeles	1,771	1,910	1,853	1,982	1,756	1,662	1,632	<i>1,629</i>	7.9%	-3.0%	6.9%	-11.4%	-5.4%	-1.8%	-0.2%
Other	1,275	1,418	1,471	1,444	1,161	1,134	1,214	<i>1,197</i>	11.3%	3.7%	-1.8%	-19.6%	-2.3%	7.0%	-1.4%
All Regions	1,544	1,673	1,649	1,713	1,493	1,432	1,453	<i>1,452</i>	8.3%	-1.4%	3.8%	-12.8%	-4.1%	1.5%	-0.1%

Third Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,294	1,311	1,276	1,337	1,240	1,297	1,387	<i>1,438</i>	1.3%	-2.7%	4.8%	-7.3%	4.6%	6.9%	3.7%
Los Angeles	1,725	1,882	1,876	1,841	1,668	1,673	1,631	<i>1,705</i>	9.1%	-0.3%	-1.8%	-9.4%	0.3%	-2.5%	4.5%
Other	1,288	1,389	1,426	1,339	1,184	1,123	1,220	<i>1,361</i>	7.8%	2.6%	-6.1%	-11.6%	-5.2%	8.6%	11.5%
All Regions	1,509	1,627	1,634	1,593	1,438	1,428	1,461	<i>1,559</i>	7.9%	0.4%	-2.5%	-9.7%	-0.7%	2.4%	6.6%

Fourth Quarter of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,178	1,157	1,227	1,235	1,102	1,219	1,281		-1.7%	6.1%	0.6%	-10.7%	10.6%	5.1%	
Los Angeles	1,490	1,656	1,746	1,701	1,513	1,494	1,524		11.1%	5.4%	-2.5%	-11.1%	-1.2%	2.0%	
Other	1,170	1,270	1,344	1,227	1,097	1,164	1,234		8.5%	5.8%	-8.7%	-10.6%	6.1%	6.0%	
All Regions	1,324	1,440	1,527	1,470	1,313	1,346	1,399		8.7%	6.1%	-3.7%	-10.7%	2.5%	4.0%	

First Three Quarters of Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,317	1,349	1,315	1,339	1,285	1,304	1,349	<i>1,355</i>	2.4%	-2.5%	1.8%	-4.0%	1.5%	3.5%	0.4%
Los Angeles	1,724	1,901	1,852	1,934	1,742	1,667	1,644	<i>1,659</i>	10.2%	-2.6%	4.4%	-9.9%	-4.3%	-1.4%	1.0%
Other	1,262	1,430	1,438	1,409	1,187	1,147	1,196	<i>1,269</i>	13.4%	0.5%	-2.0%	-15.7%	-3.4%	4.2%	6.1%
All Regions	1,507	1,662	1,636	1,670	1,490	1,436	1,455	<i>1,493</i>	10.3%	-1.6%	2.1%	-10.8%	-3.7%	1.4%	2.6%

Service Year															
Region	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>
Bay Area	1,299	1,326	1,304	1,324	1,259	1,292	1,339		2.1%	-1.7%	1.5%	-4.9%	2.6%	3.7%	
Los Angeles	1,698	1,874	1,840	1,903	1,711	1,642	1,626		10.3%	-1.8%	3.4%	-10.0%	-4.0%	-1.0%	
Other	1,251	1,410	1,427	1,384	1,175	1,150	1,201		12.8%	1.2%	-3.0%	-15.1%	-2.2%	4.5%	
All Regions	1,485	1,636	1,624	1,643	1,467	1,423	1,447		10.1%	-0.8%	1.2%	-10.7%	-3.0%	1.7%	

Note: 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. Figures in italics are based on prelim data.  
Source: WCIRB medical data call (MDC).

**Average Paid MCCP per Reported Indemnity Claim - Statewide**

As of December 31, 2020

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>
2012	674	1,361	1,744	1,990	2,097	2,208	2,285	2,357
2013	655	1,253	1,620	1,821	1,962	2,068	2,131	2,203
2014	616	1,200	1,576	1,786	1,932	2,013	2,104	
2015	603	1,209	1,538	1,749	1,867	1,956		
2016	592	1,152	1,454	1,632	1,750			
2017	585	1,128	1,438	1,628				
2018	639	1,185	1,486					
2019	608	1,158						
2020	517							

Excluding COVID-19 Claims:

2020 585

Accident Year	Annual Change							
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>	<u>96</u>
2013	-2.8%	-7.9%	-7.1%	-8.5%	-6.4%	-6.3%	-6.7%	-6.5%
2014	-6.0%	-4.2%	-2.7%	-1.9%	-1.6%	-2.7%	-1.3%	
2015	-2.1%	0.7%	-2.4%	-2.1%	-3.4%	-2.8%		
2016	-1.9%	-4.7%	-5.5%	-6.7%	-6.3%			
2017	-1.1%	-2.1%	-1.1%	-0.3%				
2018	9.2%	5.1%	3.4%					
2019	-4.9%	-2.3%						
2020	-15.0%							

Excluding COVID-19 Claims:

2020 -3.7%

Annual Trend<sup>[1]</sup>

All-Year	-2.1%	-1.9%	-2.8%	-3.8%	-4.0%	-3.8%	-4.0%
R <sup>2</sup>	0.542	0.652	0.823	0.927	0.959	0.949	0.862

Annual Trend<sup>[1]</sup> excluding COVID-19 Claims:

All-Year	-1.2%
R <sup>2</sup>	0.448

Note:

<sup>[1]</sup> Trend is based on exponential distribution.

Source: WCIRB accident year experience calls.

## **Item AC21-03-02**

### **12/31/2020 Experience Review**

Staff has prepared a preliminary analysis of statewide experience through December 31, 2020, which is included in Exhibits 1 through 6. This information reflects insurers writing approximately 98% of the market based on 2020 premium levels. The loss development and on-leveling methodologies used are generally consistent with those reflected in the January 1, 2021 Pure Premium Rate Filing. Wage and loss levels were projected to September 1, 2022—the approximate midpoint of experience on policies incepting between September 1, 2021 and August 31, 2022, and premiums are adjusted to the industry average filed pure premium rate level as of July 1, 2020 as reflected in the January 1, 2021 Pure Premium Rate Filing.

As discussed at recent Committee meetings, the COVID-19 pandemic and resulting stay-at-home orders have had a significant impact on the workers' compensation system. In particular, many COVID-19 claims have been filed for accident year 2020. The accident year 2020 information shown in Exhibits 1 through 6 have been adjusted to remove COVID-19 claims based on the WCIRB's Special Call for COVID-19 Claim Data Evaluated as of December 31, 2020. Staff will discuss the projection for COVID-19 claim costs on policies incepting between September 1, 2021 and August 31, 2022 separately at the meeting (see Item AC21-03-04). In addition, staff will discuss the potential impact of the pandemic on several other aspects of the pure premium rate projection, including loss development (see Item AC21-02-02), wage and frequency projections (see Item AC20-08-04), and premium measures (see Item AC21-03-05) at the meeting. Given these open issues, the projected loss ratio for policies incepting between September 1, 2021 and August 31, 2022 has not been included in Exhibits 1 through 6.

Additional supplemental information is included in Exhibits 7 through 10. COVID-19 claims have also been excluded from accident year 2020 experience in these exhibits.

**California Workers' Compensation  
Accident Year Experience as of December 31, 2020**

<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	4,373,509,816	1,507,664,683	7,342,594	1,337,649,576	43,787,130	47,596,278	2,944,040,261	0.673
1988	5,172,229,109	1,704,401,135	6,406,940	1,544,833,279	33,614,616	37,641,304	3,326,897,274	0.643
1989	5,673,849,230	1,940,309,028	6,762,863	1,805,271,865	41,477,009	41,835,131	3,835,655,896	0.676
1990	5,702,683,242	2,261,327,882	7,450,278	2,048,892,356	37,340,277	59,413,713	4,414,424,506	0.774
1991	5,865,875,476	2,480,762,950	14,539,699	2,207,310,989	42,832,128	57,574,375	4,803,020,141	0.819
1992	5,684,885,495	1,979,427,613	13,620,885	1,769,449,612	44,554,297	52,322,234	3,859,374,641	0.679
1993	5,934,051,189	1,695,479,635	10,766,238	1,520,133,993	53,375,081	52,792,383	3,332,547,330	0.562
1994	5,031,061,313	1,629,443,754	20,633,505	1,473,327,792	78,424,851	33,736,857	3,235,566,759	0.643
1995	3,788,921,794	1,770,322,764	23,785,006	1,634,222,863	82,012,088	43,756,694	3,554,099,415	0.938
1996	3,746,680,214	1,961,858,797	28,286,828	1,728,437,744	83,793,251	55,222,253	3,857,598,873	1.030
1997	3,926,898,608	2,326,384,512	33,212,666	2,027,055,511	106,847,788	94,312,667	4,587,813,144	1.168
1998	4,332,127,034	2,783,947,187	43,902,705	2,663,743,709	197,800,608	165,770,945	5,855,165,154	1.352
1999	4,550,437,880	3,064,143,243	46,132,679	3,055,921,517	150,398,698	236,983,102	6,553,579,239	1.440
2000	5,921,821,993	3,436,861,930	61,430,717	3,580,337,584	189,851,967	376,650,983	7,645,133,181	1.291
2001	9,941,085,798	4,793,379,131	85,075,983	5,305,972,143	302,618,116	594,869,883	11,081,915,256	1.115
2002	13,037,521,556	4,680,490,672	82,820,176	5,345,480,568	267,885,610	855,162,578	11,231,839,604	0.862
2003	18,883,574,897	4,473,631,374	123,840,757	4,944,854,991	302,862,560	1,216,230,429	11,061,420,111	0.586
2004	22,512,391,262	3,170,330,801	107,763,270	3,996,370,875	241,493,027	1,347,460,900	8,863,418,873	0.394
2005	20,905,796,976	2,506,349,184	89,166,452	3,618,846,498	224,986,941	1,078,634,739	7,517,983,814	0.360
2006	16,631,508,120	2,564,184,661	101,086,168	3,675,486,854	254,933,552	726,942,775	7,322,634,010	0.440
2007	12,973,395,603	2,735,658,642	107,913,300	3,971,992,827	279,575,246	693,716,385	7,788,856,400	0.600
2008	10,633,752,229	2,802,129,509	132,361,376	4,018,456,977	299,850,366	599,964,780	7,852,763,008	0.738
2009	8,729,980,416	2,657,147,446	128,331,448	3,800,208,574	311,435,406	452,388,599	7,349,511,473	0.842
2010	9,200,749,159	2,662,957,837	125,040,184	3,885,297,360	261,742,465	531,527,182	7,466,565,028	0.812
2011	9,912,752,568	2,638,374,016	132,697,088	3,524,039,409	287,190,236	662,677,071	7,244,977,820	0.731
2012	11,462,518,234	2,689,888,309	169,022,813	3,423,392,704	325,186,899	791,759,794	7,399,250,519	0.646
2013	13,873,355,516	2,721,854,722	170,313,931	3,270,036,298	336,444,070	1,388,546,775	7,887,195,796	0.569
2014	15,679,088,189	2,845,679,362	223,512,368	3,194,287,421	386,176,922	1,811,688,607	8,461,344,680	0.540
2015	16,662,996,389	2,843,333,157	295,170,189	3,071,268,655	499,165,693	2,329,886,056	9,038,823,750	0.542
2016	17,577,641,536	2,679,961,460	381,185,316	2,879,807,883	608,724,333	3,145,633,363	9,695,312,355	0.552
2017	17,285,979,325	2,437,619,208	547,989,139	2,637,956,438	815,306,501	2,776,650,297	9,215,521,583	0.533
2018	17,033,876,042	2,080,898,728	816,284,919	2,357,166,713	1,105,962,043	3,185,263,406	9,545,575,809	0.560
2019	15,718,103,385	1,426,751,325	1,078,132,402	1,682,789,234	1,477,591,845	3,794,266,543	9,459,531,349	0.602
2020	13,726,864,205	445,941,738	794,532,566	604,749,634	1,314,949,660	5,034,940,903	8,195,114,500	0.597

\* 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, excluding COVID-19 claims.

**Incurred Indemnity Loss Development Factors**

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
1995											1.003	1.003	1.000	1.002	1.002	1.000
1996										1.001	1.004	1.000	1.000	1.000	1.001	1.002
1997									1.007	1.005	1.002	1.002	1.003	1.002	1.001	1.001
1998								1.008	1.004	1.004	1.002	1.003	1.004	1.001	1.002	1.001
1999							1.011	1.006	1.007	1.004	1.002	1.003	1.003	1.002	1.002	1.001
2000						1.015	1.011	1.008	1.004	1.004	1.005	1.003	1.001	1.004	1.002	1.000
2001					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				1.033	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			1.069	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		1.158	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	1.001
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	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	1.005		
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	1.001			
2008	1.858	1.302	1.136	1.074	1.045	1.030	1.019	1.012	1.009	1.006	1.007	1.006				
2009	1.983	1.293	1.142	1.076	1.048	1.024	1.019	1.014	1.009	1.010	1.005					
2010	1.994	1.315	1.131	1.069	1.045	1.026	1.016	1.012	1.012	1.006						
2011	1.997	1.277	1.133	1.061	1.037	1.022	1.019	1.011	1.008							
2012	1.992	1.279	1.113	1.063	1.041	1.023	1.016	1.012								
2013	1.931	1.259	1.111	1.055	1.032	1.020	1.013									
2014	1.960	1.278	1.115	1.059	1.029	1.016										
2015	1.969	1.260	1.101	1.047	1.027											
2016	1.941	1.246	1.095	1.047												
2017	1.911	1.241	1.089													
2018	1.901	1.227														
2019	1.897															
Selected (a)	1.897	1.227	1.089	1.047	1.027	1.016	1.013	1.012	1.010	1.007	1.006	1.006	1.002	1.003	1.003	1.002
Cumulative	2.989	1.576	1.284	1.179	1.126	1.097	1.079	1.066	1.053	1.043	1.036	1.030	1.024	1.022	1.019	1.016

(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)															
	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
1983							1.001	1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001
1984						1.001	1.000	1.000	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001
1985					1.001	1.001	1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1986				1.000	1.000	1.001	1.001	1.001	1.001	1.002	1.001	1.000	0.999	1.000	1.000	1.001
1987			1.000	1.000	0.999	1.000	1.001	1.001	1.002	1.000	1.001	1.001	1.001	1.001	1.000	1.001
1988		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	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	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	1.001	1.000	1.001
1991	1.000	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.001	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	1.000	1.001	1.001	1.000	1.001	1.001
1993	0.999	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.001	1.000	1.001	1.001	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	1.001	1.001	1.001	1.001	1.001	1.000	1.001
1995	1.003	1.001	0.998	1.001	1.000	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001
1996	1.003	1.000	1.000	1.000	1.000	1.001	1.002	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1997	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1998	1.003	1.001	1.001	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1999	1.000	1.000	1.001	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
2000	1.002	1.001	1.001	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
2001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
2002	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
2003	1.002															
Selected (a)	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.000	1.001	1.000	1.001	1.000	1.001	1.001	1.001
Cumulative	1.015	1.013	1.012	1.011	1.010	1.010	1.009	1.008	1.008	1.008	1.007	1.007	1.006	1.006	1.006	1.004

(b) The ULT/432Inc 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>
1995											1.011	1.023	1.028	1.016	1.005	1.009
1996										1.019	1.014	1.024	1.018	1.013	1.014	1.005
1997									1.015	1.023	1.030	1.012	1.015	1.012	1.003	1.007
1998								1.024	1.038	1.023	1.020	1.017	1.004	1.014	1.008	1.012
1999							1.026	1.038	1.030	1.019	1.018	1.013	1.011	1.013	1.005	0.999
2000						1.029	1.044	1.028	1.017	1.024	1.018	1.018	1.012	1.006	0.999	0.995
2001					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				1.039	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			1.057	1.059	1.060	1.042	1.042	1.037	1.029	1.018	1.011	1.003	0.998	0.999	1.001	1.006
2004		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	1.002	1.000
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	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	0.999	1.003		
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	0.996			
2008	1.527	1.212	1.129	1.092	1.061	1.041	1.026	1.010	1.005	1.002	1.005	0.999				
2009	1.604	1.227	1.140	1.087	1.061	1.030	1.016	1.007	1.006	1.008						
2010	1.620	1.245	1.134	1.077	1.045	1.025	1.012	1.008	1.010	1.005						
2011	1.667	1.222	1.125	1.069	1.034	1.016	1.010	1.008	1.010	1.002						
2012	1.592	1.188	1.092	1.056	1.031	1.015	1.015	1.006								
2013	1.559	1.150	1.086	1.039	1.022	1.014	1.014	1.006								
2014	1.523	1.159	1.079	1.035	1.027	1.011										
2015	1.511	1.146	1.064	1.030	1.017											
2016	1.498	1.124	1.045	1.032												
2017	1.440	1.117	1.051													
2018	1.449	1.110														
2019	1.453															
Selected (a)	1.453	1.110	1.051	1.032	1.017	1.011	1.006	1.006	1.007	1.005	1.004	1.002	0.998	1.000	1.000	0.999
Cumulative	1.845	1.270	1.144	1.089	1.055	1.037	1.026	1.020	1.014	1.007	1.002	0.999	0.997	0.999	0.999	0.999

(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)																		
	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	432/420
1983							1.005	1.001	1.006	1.004	1.002	1.006	1.003	1.004	1.003	0.997	0.999	0.998	1.001
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	1.001	0.999	0.999	1.000	1.000	
1986					1.004	1.003	1.006	1.005	1.006	1.004	1.005	1.000	1.002	0.998	1.001	1.006	0.994	1.002	
1987				1.001	1.003	1.011	0.999	1.007	1.003	1.004	1.005	1.001	1.002	0.997	1.000	1.005	1.002		
1988		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	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	0.999				
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	1.000					
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	1.001						
1992	1.005	1.004	1.002	1.005	1.003	1.005	1.000	0.999	0.999	0.998	1.002	0.999							
1993	1.007	1.011	1.014	1.004	0.999	1.000	0.996	0.999	0.998	0.998	0.997								
1994	1.011	1.004	1.007	1.006	1.001	0.996	0.995	1.002	1.002	0.999									
1995	1.015	0.996	1.006	0.999	1.006	0.992	0.999	1.001	0.999										
1996	1.008	1.005	1.001	0.998	0.999	0.997	1.000	0.999											
1997	1.001	0.994	0.998	0.997	0.998	1.001	0.997												
1998	1.001	1.001	0.994	1.001	1.003	1.000													
1999	0.999	0.995	1.002	0.999	0.999														
2000	0.996	0.999	0.999	1.000															
2001	1.001	1.003	0.998																
2002	1.001	1.001																	
2003	1.001																		
Selected (a)	1.000	0.999	0.999	0.999	1.001	0.998	0.998	1.000	1.000	0.999	1.000	0.999	1.000	1.000	1.000	1.001	0.999	1.000	1.000
Cumulative	1.000	1.001	1.002	1.003	1.004	1.003	1.005	1.008	1.008	1.007	1.008	1.009	1.009	1.010	1.010	1.011	1.009	1.010	1.009

(c) The UL T/432Inc 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	<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>	Age-to-Age (in months)					<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>
1995																			
1996																			
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Selected (a)	3.059	1.525	1.209	1.103	1.058	1.039	1.028	1.023	1.020	1.017	1.014	1.012	1.011	1.009	1.009	1.009	1.009	1.006	
Cumulative	8.269	2.703	1.773	1.466	1.329	1.256	1.209	1.176	1.150	1.127	1.109	1.093	1.081	1.069	1.069	1.059	1.059	1.050	

(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)															
	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
1983							1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1984						1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1985					1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
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	1.000
1987			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
1988		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	1.001
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	1.001	1.001
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	1.001	1.001	1.000
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	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	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	1.001	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	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1995	1.005	1.005	1.003	1.003	1.002	1.002	1.002	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001
1996	1.005	1.004	1.003	1.003	1.002	1.002	1.003	1.002	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001
1997	1.004	1.003	1.003	1.002	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
1998	1.006	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
1999	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
2000	1.004	1.004	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
2001	1.005	1.005	1.004													
2002	1.005	1.004														
2003	1.007															

Selected (a)  
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1.006  
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(b) The ULT/432Pd tail factor was calculated based on an inverse power curve fit to a four-year average of the 108-to-120 through 348-to-360 factors and extrapolated to 80 development years.

**Paid Medical Loss Development Factors**

Unadjusted (a) 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
1995											1.024	1.021	1.019	1.018	1.018	1.015
1996										1.025	1.027	1.023	1.020	1.018	1.016	1.013
1997									1.033	1.028	1.026	1.022	1.019	1.016	1.014	1.013
1998								1.039	1.033	1.032	1.030	1.021	1.019	1.019	1.015	1.017
1999							1.044	1.035	1.032	1.032	1.025	1.020	1.016	1.016	1.018	1.015
2000						1.056	1.042	1.038	1.031	1.027	1.023	1.020	1.017	1.017	1.013	1.010
2001					1.076	1.057	1.045	1.038	1.034	1.030	1.022	1.022	1.017	1.012	1.011	1.011
2002				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			1.170	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		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	1.009
2005		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	1.012	
2006		1.399	1.220	1.140	1.099	1.068	1.056	1.042	1.034	1.025	1.020	1.015	1.014	1.011		
2007		1.413	1.230	1.142	1.097	1.075	1.057	1.041	1.031	1.022	1.020	1.015	1.013			
2008	2.251	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027	1.018	1.017	1.012				
2009	2.325	1.421	1.241	1.148	1.103	1.072	1.051	1.035	1.027	1.018	1.017	1.012				
2010	2.408	1.447	1.251	1.160	1.104	1.067	1.046	1.032	1.024	1.019	1.013					
2011	2.479	1.468	1.265	1.152	1.096	1.066	1.043	1.030	1.024	1.018						
2012	2.561	1.470	1.248	1.145	1.095	1.058	1.041	1.028	1.018							
2013	2.492	1.468	1.247	1.143	1.087	1.056	1.039	1.023								
2014	2.518	1.462	1.226	1.121	1.076	1.043										
2015	2.533	1.439	1.218	1.111	1.062											
2016	2.480	1.410	1.196	1.099												
2017	2.373	1.391	1.177													
2018	2.378	1.378														
2019	2.348															

Adjusted (b) 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
2002																1.011
2003															1.013	1.011
2004														1.013	1.014	1.010
2005														1.013	1.013	
2006														1.015		
2007														1.012		
2008														1.016		
2009														1.016		
2010														1.014		
2011														1.013		
2012														1.013		
2013														1.013		
2014														1.013		
2015														1.013		
2016														1.013		
2017														1.013		
2018														1.013		
2019														1.013		

Selected (c) 2.348 1.378 1.178 1.100 1.063 1.045 1.031 1.025 1.024 1.020 1.018 1.015 1.015 1.013 1.013 1.011

Cumulative Unadjusted  
for Impact of SB 1160

6.699 2.853 2.070 1.758 1.598 1.503 1.438 1.395 1.361 1.329 1.303 1.280 1.261 1.242 1.225 1.209

Cumulative Adjusted  
for Impact of SB 1160(d)

6.513 2.774 2.013 1.709 1.571 1.489 1.438 1.395 1.361 1.329 1.303 1.280 1.261 1.242 1.225 1.209

- (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 48, 60, and 72 months are adjusted by -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) Accident Year	Age-to-Age (in months)																ULT/432Pd (e)		
	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							1.005	1.005	1.003	1.005	1.004	1.004	1.003	1.004	1.003	1.002	1.004	1.003	1.003
1984						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	1.002
1985					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	1.002
1986				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	1.003	1.003
1987			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	1.002	1.002	1.002
1988		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	1.002	1.002	1.002	1.002
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	1.004	1.002	1.002	1.002	1.002
1990	1.006	1.005	1.005	1.005	1.005	1.006	1.004	1.004	1.003	1.002	1.003	1.003	1.002	1.003	1.002	1.003	1.003	1.003	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	1.003	1.003	1.004	1.004	1.004	1.004	1.004
1992	1.008	1.007	1.002	1.006	1.008	1.006	1.005	1.005	1.005	1.005	1.006	1.003	1.003	1.003	1.004	1.003	1.002	1.002	1.002
1993	1.011	1.011	1.010	1.013	1.011	1.007	1.006	1.006	1.005	1.008	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
1994	1.013	1.009	1.010	1.010	1.009	1.008	1.007	1.004	1.004	1.005	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
1995	1.011	1.016	1.013	1.012	1.009	1.012	1.007	1.008	1.007	1.005	1.008	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
1996	1.014	1.013	1.011	1.009	1.007	1.009	1.008	1.006	1.008	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007
1997	1.014	1.011	1.006	1.006	1.007	1.007	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006
1998	1.013	1.010	1.009	1.008	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009
1999	1.012	1.009	1.009	1.008	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006
2000	1.009	1.008	1.007	1.006															
2001	1.010	1.010	1.009																
2002	1.009	1.008																	
2003	1.011																		

Adjusted (b) Accident Year	Age-to-Age (in months)																			UL T/432Pd (e)
	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	432/420	
1983																			1.003	
1984																		1.002	1.002	
1985																		1.002	1.002	
1986																	1.002	1.002	1.002	
1987																1.004	1.003	1.004	1.004	
1988															1.004	1.002	1.003	1.003	1.003	
1989															1.004	1.002	1.003	1.003	1.003	
1990															1.004	1.003	1.002	1.002	1.002	
1991															1.004	1.003	1.002	1.002	1.002	
1992															1.002	1.003	1.003	1.003	1.003	
1993															1.004	1.003	1.003	1.003	1.003	
1994															1.004	1.003	1.003	1.003	1.003	
1995															1.004	1.003	1.003	1.003	1.003	
1996															1.004	1.003	1.003	1.003	1.003	
1997															1.004	1.003	1.003	1.003	1.003	
1998															1.004	1.003	1.003	1.003	1.003	
1999															1.004	1.003	1.003	1.003	1.003	
2000															1.004	1.003	1.003	1.003	1.003	
2001															1.004	1.003	1.003	1.003	1.003	
2002															1.004	1.003	1.003	1.003	1.003	
2003															1.004	1.003	1.003	1.003	1.003	

Selected (c)	1.011	1.010	1.009	1.008	1.008	1.009	1.008	1.007	1.006	1.006	1.005	1.003	1.003	1.003	1.004	1.003	1.003	1.003	1.002	
Cumulative	1.197	1.183	1.172	1.162	1.152	1.143	1.134	1.125	1.117	1.110	1.104	1.099	1.095	1.092	1.088	1.084	1.081	1.078	1.076	1.073

(e) The UL T/432Pd tail factor was calculated based on an inverse power curve fit to a four-year average of the 108-to-120 through 348-to-360 adjusted factors and extrapolated to 80 development years.

Selected Indemnity Development Factors - Paid to Ultimate

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	216/204	228/216	240/228	252/240	264/252
1994												1.008	1.007	1.006	1.003	1.003	1.004	1.003	1.003	1.003	1.002
1995											1.012	1.008	1.007	1.005	1.005	1.003	1.005	1.005	1.003	1.003	1.002
1996										1.014	1.012	1.009	1.006	1.006	1.005	1.004	1.005	1.004	1.003	1.003	1.002
1997									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
1998								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
1999							1.036	1.025	1.018	1.015	1.011	1.009	1.008	1.007	1.006	1.006	1.004	1.003	1.003	1.003	1.002
2000						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	1.003	1.002
2001						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	1.004	1.003	1.002
2002					1.077	1.075	1.046	1.031	1.020	1.018	1.015	1.014	1.008	1.008	1.006	1.005	1.005	1.005	1.004	1.003	1.002
2003			1.249	1.127	1.072	1.043	1.030	1.026	1.023	1.021	1.015	1.012	1.009	1.008	1.007	1.007	1.007	1.007	1.007	1.007	1.007
2004		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	1.007	1.006	1.005	1.005	1.004	1.003	1.002
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	1.010	1.009	1.006	1.006	1.003	1.003	1.002
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	1.008	1.007	1.006	1.005	1.004	1.003	1.002
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	1.013	1.013	1.010	1.009	1.008	1.007	1.006	1.005	1.004
2008	2.927	1.577	1.271	1.150	1.092	1.060	1.041	1.027	1.023	1.018	1.015	1.010	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003
2009	3.069	1.616	1.280	1.156	1.092	1.061	1.043	1.031	1.023	1.019	1.011	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2010	3.157	1.628	1.281	1.147	1.091	1.060	1.038	1.027	1.021	1.013	1.011	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2011	3.208	1.613	1.266	1.144	1.087	1.056	1.041	1.026	1.016	1.013	1.011	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2012	3.137	1.597	1.262	1.137	1.087	1.051	1.034	1.023	1.016	1.013	1.011	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2013	3.169	1.606	1.260	1.129	1.072	1.044	1.028	1.023	1.016	1.013	1.011	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2014	3.229	1.635	1.257	1.129	1.071	1.039	1.023	1.016	1.013	1.011	1.010	1.010	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002
2015	3.278	1.618	1.244	1.119	1.058																
2016	3.235	1.586	1.230	1.103																	
2017	3.185	1.569	1.209																		
2018	3.110	1.525																			
2019	3.059																				
Selected (a)	3.069(b)	1.560(b)	1.232(b)	1.102(b)	1.055(b)	1.035(b)	1.028	1.023	1.020	1.017	1.014	1.012	1.011	1.009	1.009	1.006	1.006	1.004	1.003	1.003	1.003
Cumulative	8.521	2.776	1.779	1.444	1.310	1.242	1.201	1.168	1.142	1.119	1.101	1.086	1.073	1.061	1.052	1.043	1.037	1.031	1.026	1.023	1.020

(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.  
(b) 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 Ultimate (Continued)**

Accident Year	Age-to-Age (in months)															
	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	432/420	ULT/432Pd (d)	
1983		1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1984	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	1.001		
1985	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	1.000		
1986	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.000	1.001		
1987	1.001	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.001	1.001	1.001		
1988	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1989	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	1.001		
1990	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1991	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	1.001		
1992	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	1.001		
1993	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	1.001		
1994	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	1.001		
1995	1.002	1.002	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1996	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1997	1.003	1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001		
1998	1.003															
Unadjusted (a)	1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.007	
Selected (c)	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	1.001	1.005	
Cumulative	1.017	1.015	1.014	1.012	1.011	1.011	1.010	1.009	1.009	1.008	1.007	1.007	1.006	1.006	1.005	

(c) Adjusted for the impact of changes in claim settlement rates on later period development. See Exhibits 2.5.9 through 2.5.12.

(d) The ULT/432Pd tail factor was calculated based on an inverse power curve fit to a four-year average of the 108-to-120 through 348-to-360 factors 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	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							118,046
2012						125,396	125,529
2013					132,864	133,103	133,308
2014				137,397	137,959	138,259	138,292
2015			140,901	141,714	142,139	142,472	
2016		140,331	144,337	145,335	145,770		
2017	115,790	141,249	144,533	145,613			
2018	117,306	143,795	147,235				
2019	119,384	146,138					
2020	104,604						

B. Development of Total Reported Indemnity Claim Counts

Accident	Age-to-Age Development (in months):						
Year	12-24	24-36	36-48	48-60	60-72	72-84	84-Ult
2012						1.001	
2013					1.002	1.002	
2014				1.004	1.002	1.000	
2015			1.006	1.003	1.002		
2016		1.029	1.007	1.003			
2017	1.220	1.023	1.007				
2018	1.226	1.024					
2019	1.224						
Latest Year	1.224	1.024	1.007	1.003	1.002	1.000	
Cumulative	1.274	1.040	1.016	1.009	1.006	1.003	1.003

Acc. Year	2020	2019	2018	2017	2016	2015	2014
Ult. Claim Counts	133,219	152,042	149,604	146,859	146,578	142,927	138,701

C. Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							107,308
2012						110,852	115,579
2013					112,660	119,647	124,310
2014				107,483	119,015	125,618	129,382
2015			96,270	114,297	124,937	130,267	
2016		75,058	102,570	120,043	128,669		
2017	35,270	79,563	105,960	120,391			
2018	36,694	81,327	105,374				
2019	37,460	79,332					
2020	31,560						

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)					
	12	24	36	48	60	84
2011						90.6%
2012						88.1%
2013					84.3%	89.5%
2014				77.5%	85.8%	90.6%
2015			67.4%	80.0%	87.4%	91.1%
2016		51.2%	70.0%	81.9%	87.8%	
2017	24.0%	54.2%	72.2%	82.0%		
2018	24.5%	54.4%	70.4%			
2019	24.6%	52.2%				
2020	23.7%					

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	84
2011						110,485
2012						114,745
2013					117,366	121,859
2014				113,703	121,754	126,415
2015			100,671	117,168	125,464	130,267
2016		76,481	103,243	120,161	128,669	
2017	34,791	76,628	103,440	120,391		
2018	35,442	78,060	105,374			
2019	36,019	79,332				
2020	31,560					

F. Average Paid Indemnity per Closed Claim

Accident Year	Evaluated as of (in months)					
	12	24	36	48	60	84
2011						18,504
2012						17,085
2013					15,479	17,147
2014				13,798	16,359	17,957
2015			10,897	14,497	16,898	18,293
2016		6,533	11,013	14,452	16,423	
2017	2,596	6,659	11,161	14,372		
2018	2,878	7,038	11,418			
2019	3,165	7,073				
2020	3,839					

- (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>
2011							19,627
2012						18,147	19,002
2013					16,584	17,676	18,407
2014				15,125	17,004	18,180	19,034
2015			11,684	15,109	17,031	18,293	
2016		6,712	11,129	14,478	16,423		
2017	2,570	6,256	10,624	14,372			
2018	2,807	6,592	11,418				
2019	3,079	7,073					
2020	3,839						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							2,168,462
2012						2,082,301	2,231,509
2013					1,946,351	2,154,024	2,295,761
2014				1,719,769	2,070,293	2,298,209	2,462,648
2015			1,176,221	1,770,328	2,136,776	2,382,957	
2016		513,345	1,148,946	1,739,691	2,113,135		
2017	89,400	479,390	1,098,965	1,730,312			
2018	99,471	514,565	1,203,113				
2019	110,886	561,153					
2020	121,154						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							445,690
2012						525,864	418,396
2013					622,489	485,126	375,242
2014				784,308	611,968	485,353	384,625
2015			882,733	745,334	577,100	460,831	
2016		754,994	846,374	696,038	567,334		
2017	311,659	754,757	833,138	707,536			
2018	333,043	792,021	877,785				
2019	347,920	865,598					
2020	350,247						

(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	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							41,508
2012						36,157	42,051
2013					30,810	36,052	41,703
2014				26,219	32,305	38,395	43,168
2015			19,779	27,186	33,548	37,758	
2016		11,567	20,264	27,520	33,175		
2017	3,871	7,741	18,353	28,052			
2018	4,131	8,263	20,969				
2019	4,247	12,957					
2020	4,795						

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

Accident	Evaluated as of (in months)						
Year	12	24	36	48	60	72	84
2011							-131,871
2012						-140,758	-78,172
2013					-144,993	-79,748	-17,056
2014				-163,080	-88,483	-30,601	
2015			-87,046	-78,051	-17,680		
2016		-16,471	-13,638	-3,247			
2017	1,850	22,728	46,251				
2018	5,173	26,995					
2019	6,120						

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

Accident	Evaluated as of (in months)						
<u>Year</u>	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							313,820
2012						385,106	340,223
2013					477,496	405,378	358,186
2014				621,228	523,485	454,753	384,625
2015			795,687	667,284	559,420	460,831	
2016		738,523	832,736	692,791	567,334		
2017	313,509	777,485	879,388	707,536			
2018	338,215	819,015	877,785				
2019	354,039	865,598					
2020	350,247						

(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)						
	12	24	36	48	60	72	84
2011							2,482,282
2012						2,467,406	2,571,732
2013					2,423,847	2,559,402	2,653,947
2014				2,340,997	2,593,778	2,752,961	2,847,274
2015			1,971,908	2,437,611	2,696,196	2,843,788	
2016		1,251,868	1,981,682	2,432,482	2,680,469		
2017	402,909	1,256,875	1,978,354	2,437,848			
2018	437,686	1,333,581	2,080,899				
2019	464,925	1,426,751					
2020	471,401						

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2011						
2012						1.042
2013					1.056	1.037
2014				1.108	1.061	1.034
2015			1.236	1.106	1.055	
2016		1.583	1.227	1.102		
2017	3.120	1.574	1.232			
2018	3.047	1.560				
2019	3.069					
Latest Year	3.069	1.560	1.232	1.102	1.055	1.034
3-Year Average	3.078	1.572	1.232	1.105	1.057	1.038

O. Paid Indemnity Loss Development Factors (i)

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						1.051
2013					1.072	1.044
2014				1.129	1.071	1.039
2015			1.244	1.119	1.058	
2016		1.587	1.230	1.103		
2017	3.186	1.569	1.209			
2018	3.110	1.525				
2019	3.059					

- (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)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						-0.83%
2013					-1.50%	-0.66%
2014				-1.83%	-0.91%	-0.43%
2015			-0.59%	-1.16%	-0.29%	
2016		-0.23%	-0.23%	-0.06%		
2017	-2.08%	0.31%	1.89%			
2018	-2.04%	2.31%				
2019	0.33%					

Q. Paid Indemnity 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
2012						1.042
2013					1.056	1.037
2014				1.108	1.061	1.035
2015			1.237	1.106	1.055	
2016		1.582	1.227	1.102		
2017	3.119	1.574	1.232			
2018	3.046	1.560				
2019	3.069					
Latest Year	3.069	1.560	1.232	1.102	1.055	1.035
3-Year Average	3.078	1.572	1.232	1.106	1.057	1.038

- (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

**Paid Loss Development Factors**  
**Adjusted for the Impact of Claim Settlement Rate**  
**Changes on Later Period Development**

1. Reported Closed Indemnity Claim Counts

Accident	Evaluated as of (in months)									
<u>Year</u>	<u>264</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989							221,717	221,809	221,869	221,945
1990						247,402	247,519	247,603	247,698	
1991					247,690	247,815	247,914	248,010		
1992				196,620	196,707	196,793	196,884			
1993			154,576	154,677	154,759	154,869				
1994		141,908	142,026	142,113	142,217					
1995	132,929	133,066	133,185	133,319						
1996	130,387	130,522	130,630							
1997	134,961	135,140								
1998	145,420									
1999										

Accident Year	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>	<u>1993</u>	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>
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<u>2. Ult. Claim Counts (a)</u>	147,728	137,584	133,288	135,336	143,761	156,144	198,382	249,715	248,983	222,669
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3. Ultimate Indemnity Claim Settlement Ratio (b)

Accident	Evaluated as of (in months)									
<u>Year</u>	<u>264</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989							99.6%	99.6%	99.6%	99.7%
1990						99.4%	99.4%	99.4%	99.5%	
1991					99.2%	99.2%	99.3%	99.3%		
1992				99.1%	99.2%	99.2%	99.2%			
1993			99.0%	99.1%	99.1%	99.2%				
1994		98.7%	98.8%	98.9%	98.9%					
1995	98.2%	98.3%	98.4%	98.5%						
1996	97.8%	97.9%	98.0%							
1997	98.1%	98.2%								
1998	98.4%									

(a) Based on the latest year age-to-age development in indemnity claim counts. See Exhibit 2.5.3.

(b) Ratio of closed indemnity claim counts (Item 1) to the estimated ultimate indemnity claim counts (Item 2) for that accident year.

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

**Paid Loss Development Factors**  
**Adjusted for the Impact of Claim Settlement Rate**  
**Changes on Later Period Development**

4. Ratio of Incremental Closed Indemnity Claims to Estimated Prior Open Indemnity Claims (c)

Accident	Evaluated as of (in months)									
Year	252-264	264-276	276-288	288-300	300-312	312-324	324-336	336-348	348-360	360-372
1989								7.4%	5.8%	6.9%
1990							6.2%	5.2%	5.3%	
1991						4.9%	5.1%	5.7%		
1992					6.5%	5.6%	7.9%			
1993				6.4%	5.0%	6.3%				
1994			5.7%	5.2%	6.2%					
1995		5.7%	4.6%	3.9%						
1996	6.7%	7.0%	6.8%							
1997	7.8%	9.0%								
1998	11.1%									
1999										
3-Year Average	8.5%	7.2%	5.7%	5.2%	5.9%	5.6%	6.4%	6.1%	6.9%	6.9%
Share of Open on Prior (d)	91.5%	92.8%	94.3%	94.8%	94.1%	94.4%	93.6%	93.9%	93.1%	93.1%

5. Projected Open + IBNR Indemnity Claim Counts (e)

Accident	Evaluated as of (in months)									
Year	264	276	288	300	312	324	336	348	360	372
1989										724
1990									1,285	1,163
1991								1,705	1,587	1,436
1992							1,498	1,394	1,298	1,175
1993						1,275	1,198	1,115	1,038	939
1994					1,544	1,445	1,357	1,263	1,176	1,064
1995				2,017	1,904	1,782	1,673	1,557	1,449	1,312
1996			2,658	2,501	2,360	2,209	2,074	1,931	1,797	1,626
1997		2,444	2,318	2,181	2,059	1,927	1,809	1,684	1,567	1,418
1998	2,308	2,176	2,063	1,941	1,832	1,715	1,610	1,499	1,395	1,262
1999	1,822	1,718	1,629	1,533	1,447	1,354	1,271	1,183	1,101	997
...										
2019	454	428	406	382	361	338	317	295	275	249
2020	390	368	349	328	310	290	272	253	236	213

- (c) Equal to [the difference in ultimate indemnity claim settlement ratios from the prior evaluation (Item 3)] divided by [1.0 less the ultimate indemnity claim settlement ratio from the prior evaluation].
- (d) Equal to 1.0 minus the selected ratio of incremental closed indemnity claims to prior open indemnity claims from Item 4.
- (e) The italicized diagonal is equal to the Ultimate Indemnity Claim Counts (Item 2) less the Reported Closed Indemnity Claim Counts (Item 1) as of the latest evaluation. The remaining figures are projected based on the italicized diagonal and the Share of Open on Prior from Item 4.

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

**Paid Loss Development Factors**  
**Adjusted for the Impact of Claim Settlement Rate**  
**Changes on Later Period Development**

6. Ratio of Projected Open Claim Counts to Ultimate Claim Counts (f)

Accident	Evaluated as of (in months)									
<u>Year</u>	<u>264</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989								0.4%	0.4%	0.3%
1990							0.6%	0.6%	0.5%	0.5%
1991						0.8%	0.7%	0.7%	0.6%	0.6%
1992					0.8%	0.8%	0.8%	0.7%	0.7%	0.6%
1993				0.9%	0.9%	0.8%	0.8%	0.7%	0.7%	0.6%
1994			1.2%	1.1%	1.1%	1.0%	0.9%	0.9%	0.8%	0.7%
1995		1.7%	1.6%	1.5%	1.4%	1.3%	1.2%	1.2%	1.1%	1.0%
1996	2.2%	2.1%	2.0%	1.9%	1.8%	1.7%	1.6%	1.4%	1.3%	1.2%
1997	1.9%	1.8%	1.7%	1.6%	1.5%	1.4%	1.3%	1.2%	1.1%	1.0%
1998	1.6%	1.5%	1.4%	1.3%	1.2%	1.2%	1.1%	1.0%	0.9%	0.9%
1999	1.2%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	0.8%	0.7%	0.7%
...										
2019	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
2020	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
3-Year Historical Avg.	1.9%	1.8%	1.6%	1.2%	0.9%	0.8%	0.7%	0.5%	0.4%	0.3%

7. Ratio of Projected Percent Open to Historical Percent Open (g)

Accident	Evaluated as of (in months)									
<u>Year</u>	<u>264</u>	<u>276</u>	<u>288</u>	<u>300</u>	<u>312</u>	<u>324</u>	<u>336</u>	<u>348</u>	<u>360</u>	<u>372</u>
1989										
1990										1.44
1991									1.45	1.77
1992								1.30	1.49	1.82
1993							1.11	1.32	1.52	1.85
1994						1.27	1.37	1.62	1.87	2.28
1995					1.50	1.66	1.80	2.13	2.45	2.98
1996				1.57	1.89	2.09	2.26	2.68	3.08	3.75
1997			1.06	1.33	1.60	1.77	1.91	2.26	2.60	3.17
1998		0.80	0.87	1.10	1.33	1.46	1.58	1.87	2.16	2.63
1999	0.65	0.63	0.68	0.86	1.04	1.15	1.24	1.47	1.69	2.06
...										
2019	0.16	0.15	0.17	0.21	0.25	0.28	0.30	0.36	0.41	0.50
2020	0.16	0.15	0.16	0.21	0.25	0.27	0.30	0.35	0.40	0.49

(f) Equal to the Projected Open + IBNR Indemnity Claim Counts (Item 5) divided by the Ultimate Indemnity Claim Counts (Item 2).

The italicized diagonals are based on historical data while the remaining figures are projections.

(g) Equal to the Ratio of Projected Open Claim Counts to Ultimate Claim Counts (Item 6) divided by the three-year historical average.

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

**Paid Loss Development Factors  
Adjusted for the Impact of Claim Settlement Rate  
Changes on Later Period Development**

Age-to-Age Paid Development (in months):										
Age	<u>264-276</u>	<u>276-288</u>	<u>288-300</u>	<u>300-312</u>	<u>312-324</u>	<u>324-336</u>	<u>336-348</u>	<u>348-360</u>	<u>360-372</u>	<u>372-384</u>

8. 3-Year Average (h)

Indemnity	1.003	1.003	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Medical	1.009	1.008	1.007	1.006	1.006	1.005	1.003	1.003	1.003	1.004

9. Adjustment Ratio (i)

Accident Year 2019	0.66	0.66	0.67	0.68	0.70	0.71	0.72	0.74	0.76	0.80
Accident Year 2020	0.66	0.66	0.67	0.68	0.70	0.71	0.72	0.74	0.76	0.80

10. Adjusted Factors (j)

Indemnity										
Accident Year 2019	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Accident Year 2020	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Medical										
Accident Year 2019	1.006	1.005	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.003
Accident Year 2020	1.009	1.005	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.003

(h) Indemnity development factors are from Exhibit 2.3.2. Medical development factors are from Exhibit 2.4.2 and include adjustments for SB 1160 and changes in pharmaceutical costs.

(i) Equal to the Ratio of Projected Percent Open to Historical Percent Open (Item 7) for the given accident year, with the difference from 1.0 adjusted by 40% to reflect the estimated impact of claim settlement rate changes on later period development.

(j) Equal to the [three year average factors (Item 8) - 1.0] multiplied by the Adjustment Ratio (Item 9), and adding 1.0.

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

**Selected Medical Development Factors - Paid to Ultimate**

Adjusted (a)(b) 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	216/204	228/216	240/228	252/240	264/252
1997																					1.008
1998																					1.009
1999																					1.009
2000																					1.006
2001																					1.006
2002																					1.006
2003																					1.006
2004																					1.006
2005																					1.006
2006																					1.006
2007																					1.006
2008																					1.006
2009																					1.006
2010																					1.006
2011																					1.006
2012																					1.006
2013																					1.006
2014																					1.006
2015																					1.006
2016																					1.006
2017																					1.006
2018																					1.006
2019																					1.006
Selected (c)	2.351(d)	1.396(d)	1.192(d)	1.099(d)	1.060(d)	1.041(d)	1.031	1.025	1.024	1.020	1.018	1.015	1.015	1.013	1.013	1.011	1.011	1.010	1.009	1.008	1.008
Cumulative Unadjusted Impact of SB 1160	6.563	2.792	2.000	1.678	1.526	1.440	1.383	1.342	1.309	1.278	1.253	1.231	1.212	1.194	1.178	1.163	1.151	1.138	1.127	1.117	1.108
Cumulative Adjusted for Impact of SB 1160(e)	6.380	2.714	1.944	1.631	1.501	1.426	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- (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.  
 (d) 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.  
 (e) The cumulative factors for 48, 60, and 72 months are adjusted by -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 Ultimate (Continued)**

Accident Year	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	432/420	ULT/432Pd (g)
1983														1.003	
1984													1.002	1.002	
1985												1.002	1.002	1.002	
1986											1.004	1.003	1.004		
1987										1.004	1.002	1.003			
1988									1.004	1.003	1.002				
1989								1.004	1.003	1.005					
1990							1.002	1.003	1.002						
1991						1.004	1.004	1.003							
1992					1.004	1.006	1.003								
1993				1.005	1.009	1.004									
1994			1.005	1.005	1.005										
1995		1.008	1.010	1.007											
1996	1.010	1.009	1.007												
1997	1.008	1.006													
1998	1.008														
Unadjusted (c)	1.009	1.008	1.007	1.006	1.006	1.005	1.003	1.003	1.003	1.004	1.003	1.003	1.003	1.002	1.073
Selected (f)	1.007	1.005	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.003	1.002	1.002	1.002	1.002	1.050
Cumulative	1.099	1.092	1.087	1.081	1.077	1.073	1.069	1.067	1.064	1.062	1.058	1.056	1.054	1.052	1.050

- (f) Adjusted for the impact of changes in claim settlement rates on later period development. See Exhibits 2.5.9 through 2.5.12.  
(g) The UL T/432Pd tail factor was calculated based on an inverse power curve fit to a four-year average of the 108-to-120 through 348-to-360 factors 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)						
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>	<u>72</u>	<u>84</u>
2011							118,046
2012						125,396	125,529
2013					132,864	133,103	133,308
2014				137,397	137,959	138,259	138,292
2015			140,901	141,714	142,139	142,472	
2016		140,331	144,337	145,335	145,770		
2017	115,790	141,249	144,533	145,613			
2018	117,306	143,795	147,235				
2019	119,384	146,138					
2020	104,604						

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>
2012						1.001	
2013					1.002	1.002	
2014				1.004	1.002	1.000	
2015			1.006	1.003	1.002		
2016		1.029	1.007	1.003			
2017	1.220	1.023	1.007				
2018	1.226	1.024					
2019	1.224						
Latest Year	1.224	1.024	1.007	1.003	1.002	1.000	
Cumulative	1.274	1.040	1.016	1.009	1.006	1.003	1.003

Acc. Year	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Ult. Claim Counts	133,219	152,042	149,604	146,859	146,578	142,927	138,701

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>
2011							107,308
2012						110,852	115,579
2013					112,660	119,647	124,310
2014				107,483	119,015	125,618	129,382
2015			96,270	114,297	124,937	130,267	
2016		75,058	102,570	120,043	128,669		
2017	35,270	79,563	105,960	120,391			
2018	36,694	81,327	105,374				
2019	37,460	79,332					
2020	31,560						

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
2011						90.6%
2012						88.1% 91.8%
2013					84.3%	89.5% 93.0%
2014				77.5%	85.8%	90.6% 93.3%
2015			67.4%	80.0%	87.4%	91.1%
2016		51.2%	70.0%	81.9%	87.8%	
2017	24.0%	54.2%	72.2%	82.0%		
2018	24.5%	54.4%	70.4%			
2019	24.6%	52.2%				
2020	23.7%					

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
2011						110,485
2012						114,745 117,438
2013					117,366	121,859 124,719
2014				113,703	121,754	126,415 129,382
2015			100,671	117,168	125,464	130,267
2016		76,481	103,243	120,161	128,669	
2017	34,791	76,628	103,440	120,391		
2018	35,442	78,060	105,374			
2019	36,019	79,332				
2020	31,560					

F. Average Paid Medical per Closed Indemnity Claim

Accident Year	Evaluated as of (in months)					
	12	24	36	48	60	72 84
2011						22,477
2012						19,427 21,134
2013					16,578	18,620 20,012
2014				13,693	16,400	18,187 19,351
2015			10,450	13,874	16,246	17,759
2016		6,471	10,487	13,496	15,519	
2017	2,841	6,662	10,657	13,489		
2018	2,980	6,974	11,132			
2019	3,417	6,707				
2020	3,029					

(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
2011						24,102
2012						20,822 21,912
2013					17,927	19,268 20,157
2014				15,092	17,119	18,428 19,351
2015			11,199	14,478	16,390	17,759
2016		6,635	10,589	13,522	15,519	
2017	2,815	6,296	10,190	13,489		
2018	2,909	6,553	11,132			
2019	3,338	6,707				
2020	3,029					

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
2011						2,662,905
2012						2,389,248 2,573,334
2013					2,104,047	2,347,952 2,514,018
2014				1,716,046	2,084,337	2,329,571 2,503,639
2015			1,127,387	1,696,346	2,056,345	2,313,434
2016		507,444	1,093,254	1,624,812	1,996,866	
2017	97,921	482,480	1,054,009	1,623,926		
2018	103,118	511,522	1,173,040			
2019	120,246	532,050				
2020	95,591					

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

Accident Year	Evaluated as of (in months)					
	12	24	36	48	60	72 84
2011						637,902
2012						675,314 553,983
2013					725,367	575,842 459,224
2014				827,914	649,292	528,991 439,476
2015			886,435	765,893	605,716	496,977
2016		815,628	851,133	729,191	607,157	
2017	394,217	810,134	829,913	725,732		
2018	411,877	857,574	883,864			
2019	393,636	863,010				
2020	373,162					

(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
2011							59,409
2012						46,432	55,678
2013					35,902	42,794	51,036
2014				27,676	34,275	41,847	49,324
2015			19,862	27,936	35,212	40,719	
2016		12,496	20,378	28,831	35,504		
2017	4,896	13,133	21,515	28,774			
2018	5,109	13,728	21,114				
2019	4,805	12,918					
2020	5,109						

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
2011							-188,742
2012						-180,762	-103,505
2013					-168,956	-94,660	-20,874
2014				-172,147	-93,880	-33,352	
2015			-87,411	-80,204	-18,557		
2016		-17,794	-13,714	-3,402			
2017	2,340	28,749	49,644				
2018	6,397	33,385					
2019	6,924						

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
2011							449,160
2012						494,552	450,478
2013					556,411	481,181	438,350
2014				655,767	555,412	495,639	439,476
2015			799,024	685,689	587,159	496,977	
2016		797,835	837,419	725,789	607,157		
2017	396,557	838,883	879,557	725,732			
2018	418,274	890,958	883,864				
2019	400,560	863,010					
2020	373,162						

(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)						
	12	24	36	48	60	72	84
2011							219,671
2012						226,006	228,159
2013					228,333	231,186	233,624
2014				243,709	247,736	250,086	252,184
2015			246,747	252,705	258,039	261,221	
2016		252,439	263,682	271,479	276,375		
2017	184,427	270,143	281,574	288,391			
2018	197,816	285,748	300,264				
2019	194,953	287,729					
2020	156,962						

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

Accident Year	Evaluated as of (in months)						
	12	24	36	48	60	72	84
2011							3,609,839
2012						3,109,805	3,251,970
2013					2,888,791	3,060,319	3,185,992
2014				2,615,522	2,887,485	3,075,296	3,195,300
2015			2,173,158	2,634,740	2,901,544	3,071,632	
2016		1,557,717	2,194,355	2,622,080	2,880,398		
2017	678,905	1,591,505	2,215,139	2,638,050			
2018	719,208	1,688,228	2,357,168				
2019	715,759	1,682,789					
2020	625,716						

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

Accident Year	Evaluated as of (in months)					
	12-24	24-36	36-48	48-60	60-72	72-84
2012						1.046
2013					1.059	1.041
2014				1.104	1.065	1.039
2015			1.212	1.101	1.059	
2016		1.409	1.195	1.099		
2017	2.344	1.392	1.191			
2018	2.347	1.396				
2019	2.351					
Latest Year	2.351	1.396	1.191	1.099	1.059	1.039

(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
2012						1.056
2013					1.076	1.048
2014				1.120	1.075	1.043
2015			1.217	1.111	1.062	
2016		1.410	1.196	1.099		
2017	2.372	1.391	1.177			
2018	2.379	1.378				
2019	2.348					

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
2012						-0.94%
2013					-1.51%	-0.66%
2014				-1.44%	-0.96%	-0.38%
2015			-0.41%	-0.88%	-0.28%	
2016		-0.07%	-0.13%	-0.05%		
2017	-1.18%	0.03%	1.15%			
2018	-1.32%	1.32%				
2019	0.11%					

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
2012						1.053
2013					1.069	1.045
2014				1.115	1.070	1.041
2015			1.221	1.104	1.060	
2016		1.416	1.197	1.099		
2017	2.358	1.393	1.192			
2018	2.347	1.396				
2019	2.351					
Latest Year	2.351	1.396	1.192	1.099	1.060	1.041
3-Year Average	2.352	1.402	1.203	1.106	1.066	1.046

- (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, 2020**

Accident Year	(1) Paid Loss Ratio (a)	Development Factors		(4) Projected Ultimate Loss Ratio (4) = (1) x (3)
		(2) Annual (b)	(3) Cumulative	
1987	0.345	1.001	1.006	0.347
1988	0.330	1.001	1.007	0.332
1989	0.342	1.001	1.007	0.344
1990	0.397	1.001	1.008	0.400
1991	0.423	1.001	1.009	0.427
1992	0.348	1.001	1.009	0.351
1993	0.286	1.001	1.010	0.289
1994	0.324	1.001	1.011	0.327
1995	0.467	1.001	1.011	0.473
1996	0.524	1.001	1.012	0.530
1997	0.592	1.001	1.014	0.601
1998	0.643	1.002	1.015	0.653
1999	0.673	1.002	1.017	0.685
2000	0.580	1.003	1.020	0.592
2001	0.482	1.003	1.023	0.493
2002	0.359	1.003	1.026	0.368
2003	0.237	1.004	1.031	0.244
2004	0.141	1.006	1.037	0.146
2005	0.120	1.006	1.043	0.125
2006	0.154	1.009	1.052	0.162
2007	0.211	1.009	1.061	0.224
2008	0.264	1.011	1.073	0.283
2009	0.304	1.012	1.086	0.331
2010	0.289	1.014	1.101	0.319
2011	0.266	1.017	1.119	0.298
2012	0.235	1.020	1.142	0.268
2013	0.196	1.023	1.168	0.229
2014	0.181	1.028	1.201	0.218
2015	0.171	1.035	1.242	0.212
2016	0.152	1.055	1.310	0.200
2017	0.141	1.102	1.444	0.204
2018	0.122	1.232	1.779	0.217
2019	0.091	1.560	2.776	0.252
2020	0.032	3.069	8.521	0.277

- (a) Based on Exhibit 1.  
(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, 2020**

	(1)	(2)	(3)	(4)	(5)	(6)
			<b>Reform Adjusted</b>			
			<u>Development Factors</u>			
Accident Year	Paid Loss Ratio (a)	Adjusted Paid Loss Ratio (b)	Annual (c)	Cumulative (c)	Adjusted Developed Loss Ratio (d) (2) x (4)	Projected Ultimate Loss Ratio (1) + ((5) - (2))
1987	0.306	0.271	1.002	1.054	0.285	0.320
1988	0.299	0.265	1.002	1.056	0.280	0.314
1989	0.318	0.282	1.002	1.058	0.298	0.335
1990	0.359	0.318	1.003	1.062	0.338	0.379
1991	0.376	0.334	1.002	1.064	0.355	0.398
1992	0.311	0.276	1.002	1.067	0.295	0.330
1993	0.256	0.227	1.002	1.069	0.243	0.272
1994	0.293	0.260	1.003	1.073	0.279	0.312
1995	0.431	0.383	1.004	1.077	0.413	0.461
1996	0.461	0.410	1.004	1.081	0.443	0.495
1997	0.516	0.459	1.005	1.087	0.499	0.556
1998	0.615	0.548	1.005	1.092	0.598	0.665
1999	0.672	0.599	1.007	1.099	0.658	0.731
2000	0.605	0.540	1.008	1.108	0.598	0.663
2001	0.534	0.478	1.008	1.117	0.534	0.590
2002	0.410	0.369	1.009	1.127	0.416	0.457
2003	0.262	0.236	1.010	1.138	0.269	0.294
2004	0.178	0.160	1.011	1.151	0.185	0.202
2005	0.173	0.157	1.011	1.163	0.182	0.199
2006	0.221	0.201	1.013	1.178	0.237	0.257
2007	0.306	0.279	1.013	1.194	0.334	0.360
2008	0.378	0.346	1.015	1.212	0.420	0.451
2009	0.435	0.402	1.015	1.231	0.495	0.528
2010	0.422	0.392	1.018	1.253	0.491	0.521
2011	0.356	0.333	1.020	1.278	0.426	0.448
2012	0.299	0.283	1.024	1.309	0.370	0.386
2013	0.236	0.225	1.025	1.342	0.302	0.313
2014	0.204	0.198	1.031	1.383	0.274	0.280
2015	0.184	0.181	1.041	1.426	0.259	0.262
2016	0.164	0.163	1.060	1.501	0.244	0.245
2017	0.153	0.152	1.099	1.631	0.248	0.249
2018	0.138	0.138	1.192	1.944	0.269	0.269
2019	0.107	0.107	1.396	2.714	0.291	0.291
2020	0.044	0.044	2.351	6.380	0.281	0.281

- (a) Based on Exhibit 1. Paid MCCP costs are excluded from accident years 2011 and subsequent.
- (b) Based on experience evaluated as of December 31, 2020. 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	1.584	
1988	0.0	0.0	1.5	1.5	1.561	
1989	0.0	0.0	1.5	1.5	1.538	
1990	2.3	19.9	1.7	24.7	1.233	
1991	4.9	14.8	0.8	21.4	1.016	
1992	1.8	-8.3	1.6	-5.2	1.071	
1993	0.2	-18.1	0.4	-17.6	1.300	
1994	-5.1	0.2	0.6	-4.3	1.358	
1995	6.3	0.6	1.0	8.0	1.258	
1996	5.3	0.4	1.2	7.0	1.176	
1997	9.7	0.2	1.6	11.7	1.053	
1998	6.5	0.0	1.8	8.4	0.971	
1999	5.7	0.0	2.1	7.9	0.900	
2000	3.9	0.0	3.1	7.1	0.840	
2001	-0.3	0.0	0.2	-0.1	0.841	
2002	-0.7	0.0	0.4	-0.3	0.861	(e)
2003	7.3	0.0	1.2	8.6	0.858	(e)
2004	-6.0	-13.7	2.1	-17.2	1.175	(e)
2005	-31.6	-15.3	1.6	-41.2	1.593	
2006	5.6	-5.7	2.2	1.8	1.565	
2007	1.6	0.0	2.1	3.7	1.509	
2008	4.8	0.6	1.0	6.5	1.417	
2009	0.4	1.4	0.2	2.0	1.389	
2010	0.4	0.0	1.5	1.9	1.363	
2011	0.0	0.0	1.4	1.4	1.344	
2012	-0.8	0.0	2.1	1.3	1.327	
2013	1.4	0.2	0.6	2.3	1.298	
2014	5.8	1.5	1.7	9.2	1.189	
2015	-0.8	0.0	2.3	1.4	1.172	
2016	0.3	0.0	1.0	1.3	1.157	
2017	0.5	0.0	2.2	2.7	1.127	
2018	0.4	0.0	2.2	2.6	1.098	
2019	0.4	0.0	2.6	3.0	1.066	
2020	0.4	0.0	3.4	3.8	1.027	
2021	0.4	0.0	0.3	0.7	1.019	
2022	0.4	0.0	1.2	1.6	1.004	
9/1/2022	0.1 (Annual 0.4)	0.0	0.3 (Annual 1.8)	0.4		

- (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	(1) Proportion of Medical Subject to	(2) Proportion of Medical Not Subject to	(3) Impact of Fee Schedule Change on	(4) Change in Medical	(5) Impact of CPI Change on Total	(6) Annual Non-Legislative Cost Impact on
<u>Year</u>	<u>Fee Schedule (a)</u>	<u>Fee Schedule (a)</u>	<u>Total Medical (b)</u>	<u>CPI (c)</u>	<u>Medical (d)</u>	<u>Total Medical (e)</u>
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	0.918	0.082	0.0%	5.4%	0.4%	0.4%
2017	0.906	0.094	0.0%	2.2%	0.2%	0.2%
2018	0.887	0.113	0.0%	2.5%	0.2%	0.2%
2019	0.873	0.127	0.0%	3.8%	0.4%	0.4%
2020	0.873	0.127	0.0%	3.0%	0.4%	0.4%
2021	0.873	0.127	0.0%	2.0%	0.3%	0.3%
2022	0.873	0.127	0.0%	2.6%	0.3%	0.3%
9/1/2022	0.873	0.127	0.0% (Annual 0.0%)	0.5% (Annual 3.1%)	0.1%	0.1%

(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 <u>Year</u>	(1) Annual Legislative Cost Impact on <u>Medical Severity (a)</u>	(2) Annual Legislative Cost Impact on Medical Due to <u>Frequency Changes (b)</u>	(3) Annual Total Legislative Cost <u>Impact on Medical (c)</u>
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	-4.3%	0.0%	-4.3%
2013	-8.2%	0.2%	-8.0%
2014	-5.9%	1.3%	-4.7%
2015	-2.0%	0.0%	-2.0%
2016	-0.6%	0.0%	-0.6%
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%
2021	0.0%	0.0%	0.0%
2022	0.0%	0.0%	0.0%
9/1/2022	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%	0.808
1988	3.8%	0.0%	3.8%	0.778
1989	3.0%	0.0%	3.0%	0.756
1990	3.7%	19.1%	23.5%	0.612
1991	3.6%	12.9%	16.9%	0.524
1992	3.0%	-7.9%	-5.2%	0.552
1993	2.7%	-18.7%	-16.5%	0.661
1994	-2.3%	-2.3%	-4.6%	0.693
1995	0.9%	0.5%	1.4%	0.683
1996	1.0%	0.4%	1.4%	0.674
1997	0.7%	0.2%	0.9%	0.668
1998	0.8%	12.6%	13.5%	0.588
1999	2.5%	12.6%	15.4%	0.510
2000	1.7%	7.0%	8.8%	0.468
2001	2.9%	6.6%	9.7%	0.427
2002	2.0%	-5.6%	-3.7%	0.443
2003	1.4%	-6.0%	-4.7%	0.465
2004	0.0%	-33.9%	-33.9%	0.703
2005	0.0%	-13.9%	-13.9%	0.817
2006	0.3%	-5.1%	-4.8%	0.858
2007	1.8%	0.1%	1.9%	0.842
2008	0.2%	0.5%	0.7%	0.836
2009	0.4%	1.0%	1.4%	0.825
2010	0.3%	0.0%	0.3%	0.822
2011	0.3%	-2.0%	-1.7%	0.836
2012	0.1%	-4.3%	-4.2%	0.873
2013	0.1%	-8.0%	-7.9%	0.948
2014	0.3%	-4.7%	-4.4%	0.992
2015	0.2%	-2.0%	-1.8%	1.010
2016	0.4%	-0.6%	-0.2%	1.012
2017	0.2%	-0.4%	-0.2%	1.014
2018	0.2%	-0.3%	-0.1%	1.015
2019	0.4%	0.0%	0.4%	1.011
2020	0.4%	0.0%	0.4%	1.007
2021	0.3%	0.0%	0.3%	1.004
2022	0.3%	0.0%	0.3%	
9/1/2022	0.1%	0.0%	0.1%	

- (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 9/1/2022 level.

### Annual Wage Level Changes

<u>Year</u>	<u>Annual Wage Level Change (a)</u>	<u>Factor to a 9/1/2022 Wage Level</u>
1988	4.4	3.170
1989	4.3	3.039
1990	5.0	2.895
1991	2.3	2.830
1992	4.7	2.703
1993	1.2	2.671
1994	1.8	2.623
1995	2.9	2.549
1996	3.4	2.466
1997	4.7	2.355
1998	5.2	2.238
1999	6.2	2.108
2000	9.0	1.934
2001	0.6	1.922
2002	1.1	1.901
2003	3.6	1.835
2004	5.0	1.748
2005	3.2	1.694
2006	4.6	1.619
2007	4.5	1.549
2008	2.1	1.518
2009	0.5	1.510
2010	3.0	1.466
2011	3.0	1.423
2012	4.2	1.366
2013	0.7	1.356
2014	3.3	1.313
2015	4.5	1.257
2016	1.9	1.233
2017	4.3	1.182
2018	3.7	1.140
2019	4.4	1.092
2020	5.9 (b)	1.031
Projected:		
2021	0.5	
2022	2.1	
9/1/2022	0.5 (Annual = 3.1)	

- (a) Historical wage changes through 2019 are based on Bureau of Labor Statistics data. Forecasts for 2020 and forward are based on the average of wage level projections made by the UCLA Anderson School of Business as of December 2020 and those made by the California Department of Finance as of November 2020.
- (b) The average wage change for 2020 was judgmentally decreased by 0.8% to reflect the estimated difference between growth in median wages and average wages during a recession.

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	Factor to Adjust Insurer Premium to an Industry Average Filed Pure Premium Rate Level as of	Adjustment to Remove Surcharge	Average Experience	Off-Balance Correction in Advisory January 1, 2020 Pure Premium	Factor to Adjust for Impact of Premium Resulting from	Composite Premium Adjustment
Calendar Year	Wage Level (a)	Rates (b)	July 1, 2020 (c)	July 1, 2020 (d)	Premium (e)	Modification (f)	Rates	Audits (g)	Factor (h)
1987	3.310	---	---	0.574	0.992	0.983	1.014	---	1.889
1988	3.170	---	---	0.513	0.993	0.963	1.014	---	1.655
1989	3.039	---	---	0.506	0.993	0.945	1.014	---	1.592
1990	2.895	---	---	0.493	0.991	0.942	1.014	---	1.480
1991	2.830	---	---	0.457	0.987	0.939	1.014	---	1.340
1992	2.703	---	---	0.438	0.982	0.940	1.014	---	1.218
1993	2.671	---	---	0.433	0.981	0.949	1.014	---	1.178
1994	2.623	---	---	0.495	0.986	0.948	1.014	---	1.332
1995	2.549	---	---	0.670	0.995	0.958	1.014	---	1.750
1996	2.466	1.023	0.712	0.696	1.000	0.935	1.014	---	1.810
1997	2.355	0.989	0.710	0.718	1.000	0.949	1.014	---	1.758
1998	2.238	0.965	0.740	0.767	1.000	0.959	1.014	---	1.765
1999	2.108	0.972	0.748	0.769	1.000	0.954	1.014	---	1.676
2000	1.934	1.005	0.678	0.675	1.000	0.970	1.014	---	1.327
2001	1.922	1.030	0.597	0.580	1.000	0.969	1.014	---	1.134
2002	1.901	1.157	0.534	0.462	1.000	0.991	1.014	---	0.874
2003	1.835	1.266	0.437	0.346	1.000	1.005	1.014	---	0.622
2004	1.748	1.397	0.445	0.319	1.000	0.981	1.014	---	0.560
2005	1.694	1.470	0.535	0.364	1.000	0.982	1.014	---	0.620
2006	1.619	1.450	0.690	0.476	1.000	0.956	1.014	---	0.795
2007	1.549	1.494	0.941	0.630	1.000	0.931	1.014	0.985	1.018
2008	1.518	1.425	1.119	0.785	1.000	0.946	1.014	0.991	1.231
2009	1.510	1.365	1.103	0.808	1.000	0.937	1.014	1.034	1.327
2010	1.466	1.381	1.081	0.782	1.000	0.941	1.014	1.005	1.208
2011	1.423	1.397	1.080	0.773	1.000	0.982	1.014	---	1.105
2012	1.366	1.218	0.890	0.731	1.000	1.000	1.014	---	0.984
2013	1.356	1.134	0.717	0.632	1.000	0.983	1.014	---	0.860
2014	1.313	1.123	0.660	0.588	1.000	0.961	1.014	---	0.792
2015	1.257	1.104	0.641	0.581	1.000	0.951	1.014	---	0.757
2016	1.233	1.144	0.698	0.610	1.000	0.949	1.014	---	0.782
2017	1.182	1.152	0.773	0.671	1.000	0.955	1.014	---	0.819
2018	1.140	1.193	0.874	0.732	1.000	0.955	1.014	---	0.862
2019	1.092	1.212	1.015	0.838	1.000	0.934	1.014	---	0.966
2020	1.031	1.203	1.132	0.941	1.000	0.936	1.014	---	1.022

- (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, 2020 pure premium rate level and (2) an additional adjustment factor, which is the ratio of the average advisory January 1, 2020 pure premium rate (\$1.52) to the industry average filed pure premium rate as of July 1, 2020 (\$1.80).
- (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, 2020.
- (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) × (2c) × (3) × (6) ÷ [(4) × (5)] for calendar years 2007 to 2010. (1) × (2c) × (3) ÷ [(4) × (5)] for all other calendar years.

**Accident Year Indemnity Claim Frequency Model**  
**As of PY 2018 Preliminary 1st Set & December 2020 UCLA**

AY	Annual %	Annual Log Differences						
	Changes Intra- Class Ind Freq	Intra-Class Indemnity Frequency per \$M Exposure at PY 2018 Level			AY+1	Cumulative Injury Index	Economic Variables	CalOSHA
	Total	Total	Cumulative	Non-cum.	Indemnity Benefit Level		(1st Prin. Comp.)	Dummy Variable
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	-0.081	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	0.080	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	0.074	0.000
1997	-3.3%	-0.033	-0.023	-0.034	0.066	0.011	0.137	0.000
1998	-3.8%	-0.038	-0.040	-0.038	0.058	-0.002	0.078	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	-0.085	0.000
2008	-2.7%	-0.027	0.038	-0.033	0.006	0.071	-0.309	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	4.7%	0.046	0.127	0.036	0.025	0.091	0.123	0.000
2013	0.4%	0.004	0.126	-0.013	0.071	0.139	0.151	0.000
2014	0.2%	0.002	0.041	-0.004	0.003	0.046	0.178	0.000
2015	-1.4%	-0.014	0.006	-0.017	0.002	0.023	0.193	0.000
2016	-2.6%	-0.026	0.054	-0.039	0.004	0.093	0.124	0.000
2017	-2.1%	-0.021	-0.083	-0.011	0.004	-0.072	0.136	0.000
2018	-1.0%	-0.010	-0.053	-0.004	0.003	-0.049	0.119	0.000
2019*	0.1%	0.001	0.076	-0.012	0.004	0.088	0.053	0.000
2020	-6.8%	-0.071	0.021	-0.088	0.004	0.109	-0.929	0.000
2021	2.1%	0.020	0.017	0.021	0.004	-0.004	0.388	0.000
2022	1.2%	0.012	0.012	0.012	0.004	0.000	0.298	0.000
2023	-0.3%	-0.003	-0.003	-0.003	0.004	0.000	0.156	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	41
Degrees of Freedom	36

X Coefficient(s)	0.178	0.277	0.107	-0.144
Std Err of Coef.	0.070	0.059	0.042	0.074

**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 2019; December 2020 UCLA Anderson Forecasts for 2020 on.

Regression is over AY 1979 through AY 2019. AY 2020 through AY 2023 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 2019 is preliminary and change is based on a comparison of 2019 accidents on 2018 policies to 2018 accidents on 2017 policies.

**Projection of Indemnity Severity Trends by Accident Year  
Based on Experience as of December 31, 2020**

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	9,976	---	1.972	19,670	---
1991	10,902	9.3%	1.865	20,329	3.4%
1992	11,000	0.9%	1.803	19,831	-2.5%
1993	11,958	8.7%	1.792	21,429	8.1%
1994	12,880	7.7%	1.877	24,177	12.8%
1995	14,433	12.1%	1.748	25,235	4.4%
1996	16,185	12.1%	1.641	26,555	5.2%
1997	19,219	18.7%	1.472	28,293	6.5%
1998	21,074	9.6%	1.358	28,614	1.1%
1999	23,055	9.4%	1.258	29,007	1.4%
2000	24,475	6.2%	1.175	28,746	-0.9%
2001	27,145	10.9%	1.176	31,914	11.0%
2002	26,311	-3.1%	1.204	31,685	-0.7%
2003	26,055	-1.0%	1.201	31,279	-1.3%
2004	21,173	-18.7%	1.418	30,028	-4.0%
2005	19,164	-9.5%	1.628	31,201	3.9%
2006	20,941	9.3%	1.509	31,590	1.2%
2007	22,741	8.6%	1.454	33,071	4.7%
2008	24,707	8.6%	1.374	33,945	2.6%
2009	25,851	4.6%	1.366	35,304	4.0%
2010	25,253	-2.3%	1.340	33,842	-4.1%
2011	24,944	-1.2%	1.322	32,967	-2.6%
2012	24,406	-2.2%	1.305	31,857	-3.4%
2013	23,791	-2.5%	1.279	30,428	-4.5%
2014	24,645	3.6%	1.189	29,299	-3.7%
2015	24,717	0.3%	1.172	28,967	-1.1%
2016	23,967	-3.0%	1.157	27,734	-4.3%
2017	23,980	0.1%	1.127	27,025	-2.6%
2018	24,750	3.2%	1.098	27,173	0.5%
2019	26,052	5.3%	1.066	27,775	2.2%
2020	28,523	9.5%	1.027	29,286	5.4%
(6) Estimated Annual Exponential Trend Based on 1990 to 2020:					1.0%
(7) Estimated Annual Exponential Trend Based on 2005 to 2020:					-1.4%
(8) Estimated Annual Exponential Trend Based on 2016 to 2020:					1.4%
Selected Indemnity Severity Trend:					1.0%

(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, 2020**

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	8,815	---	0.917	8,082	---
1991	9,492	7.7%	0.899	8,536	5.6%
1992	9,550	0.6%	0.869	8,296	-2.8%
1993	10,423	9.1%	0.852	8,879	7.0%
1994	11,395	9.3%	0.895	10,201	14.9%
1995	13,121	15.1%	0.887	11,641	14.1%
1996	14,102	7.5%	0.878	12,388	6.4%
1997	16,774	18.9%	0.872	14,633	18.1%
1998	20,369	21.4%	0.769	15,655	7.0%
1999	23,381	14.8%	0.666	15,570	-0.5%
2000	26,112	11.7%	0.612	15,979	2.6%
2001	31,199	19.5%	0.558	17,406	8.9%
2002	31,367	0.5%	0.579	18,174	4.4%
2003	30,049	-4.2%	0.608	18,266	0.5%
2004	27,729	-7.7%	0.804	22,296	22.1%
2005	28,656	3.3%	0.804	23,041	3.3%
2006	31,229	9.0%	0.801	25,010	8.5%
2007	34,556	10.7%	0.786	27,158	8.6%
2008	37,301	7.9%	0.783	29,198	7.5%
2009	39,196	5.1%	0.780	30,559	4.7%
2010	39,267	0.2%	0.777	30,523	-0.1%
2011	35,578 (c)	---	0.799	28,426 (c)	---
2012	33,250	-6.5%	0.843	28,024	-1.4%
2013	30,619	-7.9%	0.927	28,393	1.3%
2014	29,700	-3.0%	0.987	29,305	3.2%
2015	28,563	-3.8%	1.010	28,848	-1.6%
2016	27,390	-4.1%	1.012	27,719	-3.9%
2017	27,138	-0.9%	1.014	27,519	-0.7%
2018	28,387	4.6%	1.015	28,815	4.7%
2019	27,817	-2.0%	1.011	28,124	-2.4%
2020	26,944	-3.1%	1.007	27,133	-3.5%

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 (6).

(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, 2020**

MCCP Included					MCCP Removed Based on WCIRB Aggregate Calendar Year Data Calls (b)			
(1) Accident Year	(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	28,656	---	23,041	---	27,152	---	21,832	---
2006	31,229	9.0%	25,010	8.5%	29,279	7.8%	23,448	7.4%
2007	34,556	10.7%	27,158	8.6%	32,261	10.2%	25,354	8.1%
2008	37,301	7.9%	29,198	7.5%	34,042	5.5%	26,647	5.1%
2009	39,196	5.1%	30,559	4.7%	35,928	5.5%	28,011	5.1%
2010	39,267	0.2%	30,523	-0.1%	35,957	0.1%	27,950	-0.2%
2011	38,984	-0.7%	31,147	2.0%	35,578	-1.1%	28,426	1.7%
2012	36,360	-6.7%	30,646	-1.6%	33,250	-6.5%	28,024	-1.4%
2013	33,571	-7.7%	31,131	1.6%	30,619	-7.9%	28,393	1.3%
2014	32,526	-3.1%	32,093	3.1%	29,700	-3.0%	29,305	3.2%
2015	31,178	-4.1%	31,489	-1.9%	28,563	-3.8%	28,848	-1.6%
2016	29,814	-4.4%	30,173	-4.2%	27,390	-4.1%	27,719	-3.9%
2017	29,576	-0.8%	29,992	-0.6%	27,138	-0.9%	27,519	-0.7%
2018	31,022	4.9%	31,490	5.0%	28,387	4.6%	28,815	4.7%
2019	30,615	-1.3%	30,954	-1.7%	27,817	-2.0%	28,124	-2.4%
2020	29,673	-3.1%	29,881	-3.5%	26,944	-3.1%	27,133	-3.5%

Estimated Annual Exponential Trend

Trend Based on 1990 to 2020:	5.1%	N/A
Trend Based on 2005 to 2020:	1.3%	1.1%
Trend Based on 2016 to 2020:	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.

Quarterly Incurred Indemnity Loss Development Factors  
Through December 31, 2020

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	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	3.372	3.200	3.227	3.001
9/6	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	2.017	1.953
12/9	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	1.597	1.579
15/12	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	1.295	
18/15	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	1.189	
21/18	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	1.123	1.128	
24/21	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	1.102	1.093	
27/24	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	1.071		
30/27	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	1.066		
33/30	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	1.045		
36/33	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	1.036	1.037	1.038	1.028		
39/36	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	1.030	1.028	1.028			
42/39	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	1.026	1.028			
45/42	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	1.021	1.016			
48/45	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	1.017	1.014			
51/48	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	1.014				
54/51	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	1.015				
57/54	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	1.009				
60/57	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	1.007	1.007				
63/60	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	1.008	1.010	1.007					
66/63	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	1.007					
69/66	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	1.007					
72/69	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	1.007	1.005	1.005					
75/72	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	1.004						
78/75	1.004	1.003	1.007	1.005	1.006	1.006	1.012	1.009	1.010	1.006	1.006	1.006	1.007	1.005	1.006	1.005						
81/78	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	1.003						
84/81	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	1.004						
87/84	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	1.003							
90/87	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	1.004							
93/90	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	1.004	1.003							
96/93	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	1.002							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

Quarterly Incurred Medical Loss Development Factors \*  
Through December 31, 2020

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	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	3.209	2.891	2.830	2.515
9/6	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	1.740	1.820	1.845	1.782
12/9	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	1.470	1.492
15/12	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	1.184	1.191	1.183	
18/15	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	1.100	
21/18	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	1.064	1.060	
24/21	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	1.044	1.052	
27/24	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	1.040	1.036	1.030		
30/27	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	1.036		
33/30	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	1.029	1.024		
36/33	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	1.020	1.016		
39/36	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	1.018			
42/39	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	1.015			
45/42	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	1.009			
48/45	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	1.012	1.008			
51/48	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	1.008				
54/51	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	1.012				
57/54	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	1.006				
60/57	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	1.005	1.005				
63/60	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	1.005					
66/63	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	1.006					
69/66	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	1.003					
72/69	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	1.002	1.003					
75/72	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	1.003						
78/75	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	1.005						
81/78	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	1.005	1.004	1.002						
84/81	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	1.002						
87/84	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	1.002							
90/87	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	1.001							
93/90	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	1.004	1.000							
96/93	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	1.002							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

\* 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, 2020

Age in	Accident Year																						
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
6/3	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	5.272	4.987	5.081	5.061	
9/6	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	2.446	2.538	2.505	2.482	
12/9	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	1.903	1.838	
15/12	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	1.522		
18/15	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	1.353	1.341		
21/18	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	1.258		
24/21	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	1.193		
27/24	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	1.152			
30/27	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	1.116			
33/30	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	1.103			
36/33	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	1.076			
39/36	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	1.064				
42/39	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	1.059	1.050				
45/42	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	1.044				
48/45	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	1.038				
51/48	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	1.031					
54/51	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	1.024					
57/54	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	1.024					
60/57	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	1.020					
63/60	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	1.018						
66/63	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	1.014						
69/66	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	1.013						
72/69	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	1.012						
75/72	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	1.012							
78/75	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	1.009							
81/78	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	1.008							
84/81	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	1.009							
87/84	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	1.007								
90/87	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	1.007								
93/90	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	1.007								
96/93	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	1.007								

Source: WCIRB accident year experience calls  
Includes experience related to COVID claims.

Quarterly Paid Medical Loss Development Factors \*  
Through December 31, 2020

Age in	Accident Year																					
Months	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
6/3	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	5.433	5.460	4.984	4.496
9/6	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	2.248	2.351	2.287	2.240
12/9	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	1.796	1.764
15/12	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	1.432	
18/15	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	1.263	1.250	1.245	1.231	
21/18	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	1.170	
24/21	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	1.138	
27/24	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	1.108		
30/27	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	1.083		
33/30	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	1.078		
36/33	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	1.066		
39/36	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	1.054			
42/39	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	1.048	1.040			
45/42	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	1.039			
48/45	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	1.033			
51/48	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	1.031				
54/51	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	1.023				
57/54	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	1.023				
60/57	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	1.019				
63/60	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	1.021	1.022	1.019					
66/63	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	1.015					
69/66	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	1.014					
72/69	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	1.013					
75/72	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	1.014						
78/75	1.015	1.014	1.015	1.016	1.015	1.016	1.018	1.017	1.022	1.019	1.018	1.017	1.017	1.015	1.013	1.011						
81/78	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	1.009						
84/81	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	1.010	1.009						
87/84	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	1.008							
90/87	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	1.008							
93/90	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	1.006							
96/93	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	1.006							

Source: WCIRB accident year experience calls

Includes experience related to COVID claims.

\* 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	Development															
Year	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
1995																1.000
1996															1.000	1.000
1997														1.000	1.000	1.000
1998													1.000	1.000	1.000	1.000
1999												1.000	1.000	1.000	1.000	1.000
2000											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
2002									1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003								0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2004							0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005						1.001	1.000	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	
2006					1.001	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000		
2007				1.004	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2008			1.011	1.005	1.003	1.001	1.001	1.001	1.000	1.000	1.000	1.000				
2009		1.028	1.011	1.006	1.004	1.001	1.001	1.000	1.000	1.000	1.000					
2010	1.216	1.030	1.011	1.006	1.002	1.002	1.001	1.000	1.000	1.000						
2011	1.229	1.032	1.013	1.005	1.002	1.001	1.001	1.001	1.000							
2012	1.244	1.034	1.010	1.005	1.003	1.001	1.001	1.000								
2013	1.248	1.025	1.010	1.005	1.002	1.002	1.001									
2014	1.214	1.027	1.010	1.004	1.002	1.000										
2015	1.236	1.027	1.006	1.003	1.002											
2016	1.245	1.029	1.007	1.003												
2017	1.220	1.023	1.007													
2018	1.226	1.024														
2019	1.224															
	Latest Year															
Age-to-Age	1.224	1.024	1.007	1.003	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Age-to-Ultimate	1.274	1.040	1.016	1.009	1.006	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.003	1.003

Source: WCIRB accident year experience calls

Quarterly Reported Indemnity Claim Count Development Factors

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	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	1.149	1.048	1.027	1.018	1.013	1.010	1.006	1.004	1.003	1.002	1.002	1.002
2017	2.875	1.691	1.423	1.134	1.043	1.026	1.014	1.009	1.008	1.006	1.004	1.003	1.003	1.002	1.001
2018	2.808	1.729	1.412	1.137	1.045	1.024	1.018	1.011	1.008	1.006	1.002				
2019	2.766	1.752	1.423	1.138	1.035	1.024	1.015								

Source: WCIRB accident year experience calls

Reported Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	<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>
1995																	97.8%
1996																97.2%	97.3%
1997															97.1%	97.3%	97.5%
1998														97.0%	97.3%	97.5%	97.7%
1999													96.8%	97.1%	97.5%	97.7%	97.9%
2000												96.0%	96.5%	97.0%	97.4%	97.6%	97.9%
2001											94.5%	95.2%	96.0%	96.5%	96.9%	97.4%	97.7%
2002										93.7%	94.7%	95.8%	96.4%	96.9%	97.3%	97.7%	98.0%
2003									92.4%	93.7%	95.1%	95.8%	96.4%	97.0%	97.5%	97.9%	98.2%
2004								90.6%	92.4%	94.3%	95.3%	96.0%	96.7%	97.3%	97.8%	98.2%	98.5%
2005							88.4%	90.7%	93.0%	94.4%	95.4%	96.3%	97.0%	97.6%	98.0%	98.4%	
2006						85.1%	88.2%	91.1%	93.0%	94.3%	95.5%	96.4%	97.1%	97.6%	98.0%		
2007					80.2%	84.6%	88.8%	91.3%	93.2%	94.8%	96.0%	96.8%	97.5%	97.9%			
2008				72.0%	79.1%	84.9%	88.8%	91.5%	93.7%	95.1%	96.2%	97.0%	97.6%				
2009			59.9%	70.6%	79.0%	84.5%	88.5%	91.7%	93.8%	95.3%	96.4%	97.1%					
2010		46.7%	60.6%	72.4%	80.5%	85.9%	90.1%	92.8%	94.7%	96.1%	96.9%						
2011	27.5%	47.1%	62.0%	73.5%	81.5%	87.0%	90.9%	93.6%	95.3%	96.4%							
2012	27.5%	47.9%	63.2%	74.9%	82.9%	88.4%	92.1%	94.5%	95.8%								
2013	26.9%	48.2%	64.4%	76.6%	84.8%	89.9%	93.3%	95.1%									
2014	26.5%	49.2%	66.0%	78.2%	86.3%	90.9%	93.6%										
2015	26.8%	50.6%	68.3%	80.7%	87.9%	91.4%											
2016	28.3%	53.5%	71.1%	82.6%	88.3%												
2017	30.5%	56.3%	73.3%	82.7%													
2018	31.3%	56.6%	71.6%														
2019	31.4%	54.3%															
2020	30.2%																

Source: WCIRB accident year experience calls

Estimated Ultimate Indemnity Claim Settlement Ratios

Accident	Evaluated as of (in months):																
Year	<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>
1995																	97.5%
1996																96.9%	97.1%
1997															96.7%	96.9%	97.2%
1998														96.7%	96.9%	97.2%	97.4%
1999													96.5%	96.8%	97.2%	97.5%	97.7%
2000											95.6%	96.2%	96.7%	97.1%	97.4%	97.6%	
2001										94.2%	94.9%	95.7%	96.2%	96.7%	97.1%	97.4%	97.4%
2002									93.5%	94.4%	95.5%	96.1%	96.6%	97.1%	97.5%	97.8%	
2003								92.3%	93.5%	94.9%	95.6%	96.1%	96.8%	97.2%	97.6%	98.0%	
2004							90.5%	92.3%	94.1%	95.1%	95.8%	96.5%	97.0%	97.5%	97.9%	98.2%	
2005						88.3%	90.6%	92.9%	94.3%	95.3%	96.1%	96.8%	97.3%	97.8%	98.1%		
2006					84.8%	87.9%	90.8%	92.7%	94.1%	95.3%	96.2%	96.8%	97.4%	97.8%			
2007				79.7%	84.2%	88.4%	91.0%	92.9%	94.5%	95.7%	96.5%	97.2%	97.7%				
2008			71.0%	78.3%	84.4%	88.3%	91.1%	93.3%	94.8%	95.9%	96.8%	97.4%					
2009			58.4%	69.6%	78.3%	84.0%	88.2%	91.5%	93.5%	95.1%	96.2%	96.9%					
2010		44.3%	59.1%	71.4%	79.8%	85.4%	89.7%	92.5%	94.5%	95.9%	96.7%						
2011	21.2%	44.5%	60.5%	72.6%	80.9%	86.6%	90.6%	93.3%	95.1%	96.1%							
2012	20.9%	45.3%	61.8%	74.0%	82.4%	88.1%	91.8%	94.3%	95.6%								
2013	20.6%	46.0%	63.0%	75.8%	84.3%	89.5%	93.0%	94.9%									
2014	20.8%	47.0%	64.7%	77.5%	85.8%	90.6%	93.3%										
2015	20.9%	48.6%	67.4%	80.0%	87.4%	91.1%											
2016	21.8%	51.2%	70.0%	81.9%	87.8%												
2017	24.0%	54.2%	72.2%	82.0%													
2018	24.5%	54.4%	70.4%														
2019	24.6%	52.2%															
2020	23.7%																

Source: WCIRB quarterly calls for experience

**Quarterly Ultimate Settlement Ratios**

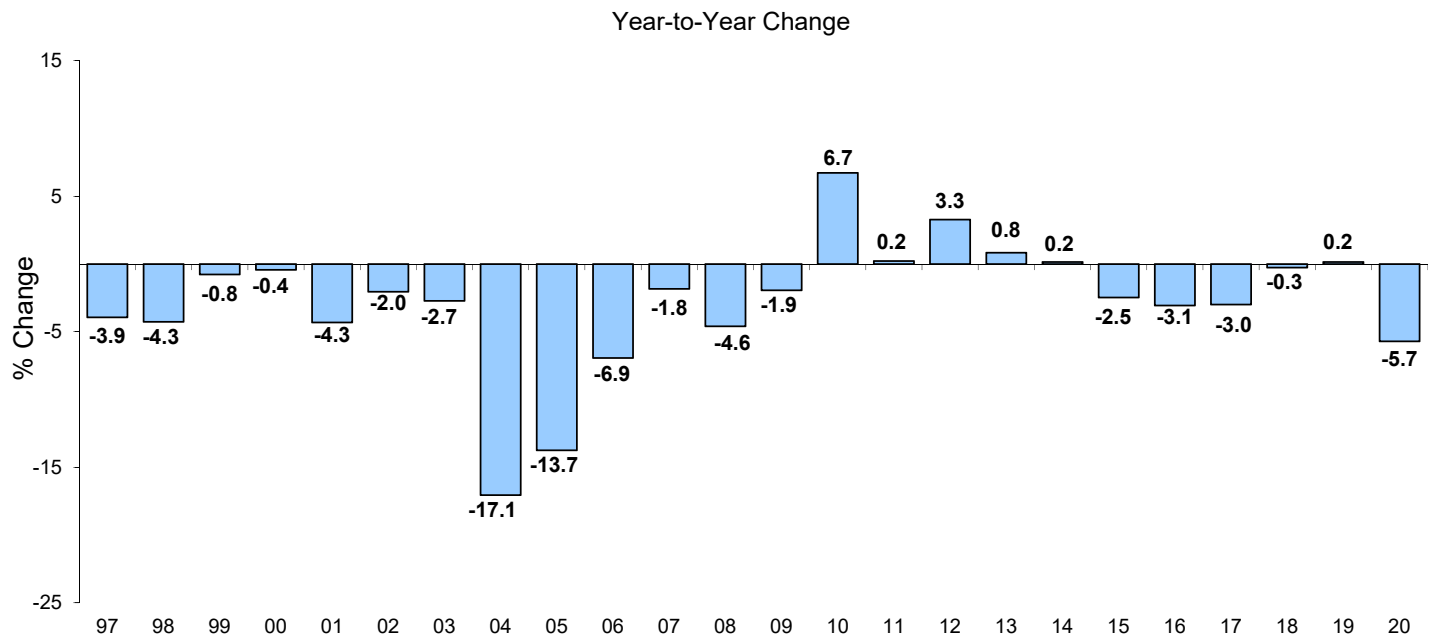
Accident Year	Evaluated as of (in months):															
	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
2011	0.8%	5.1%	12.0%	21.2%	29.7%	35.9%	40.3%	44.5%	48.6%	52.9%	56.8%	60.5%	64.1%	67.1%	70.2%	72.6%
2012	0.8%	5.1%	12.1%	20.9%	29.5%	35.9%	40.8%	45.3%	49.8%	54.1%	58.3%	61.8%	65.6%	68.8%	71.7%	74.0%
2013	0.9%	5.1%	11.8%	20.6%	29.4%	36.0%	41.4%	46.0%	51.0%	55.5%	59.6%	63.0%	67.1%	70.5%	73.4%	75.8%
2014	0.8%	4.8%	11.8%	20.8%	29.6%	36.4%	42.1%	47.0%	52.0%	56.5%	60.8%	64.7%	68.2%	71.7%	74.6%	77.5%
2015	0.8%	4.8%	12.2%	20.9%	30.4%	37.8%	43.5%	48.6%	53.9%	59.0%	63.4%	67.4%	71.1%	74.4%	77.4%	80.0%
2016	0.8%	5.1%	12.3%	21.8%	31.7%	39.5%	45.5%	51.2%	56.3%	61.5%	65.9%	70.0%	73.7%	76.9%	79.3%	81.9%
2017	0.9%	5.6%	13.5%	24.0%	34.2%	42.1%	48.3%	54.2%	59.1%	64.0%	68.1%	72.2%	75.1%	77.4%	79.7%	82.0%
2018	1.0%	5.8%	13.9%	24.5%	34.7%	42.6%	48.6%	54.4%	59.0%	62.9%	66.6%	70.4%				
2019	1.0%	5.9%	13.7%	24.6%	34.5%	41.2%	46.8%	52.2%								
2020	---	---	---	23.7%												

Accident Year	Quarterly Incremental Change														
	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
2011	4.3%	6.9%	9.2%	8.6%	6.1%	4.5%	4.2%	4.1%	4.4%	3.9%	3.7%	3.6%	3.1%	3.0%	2.5%
2012	4.2%	7.1%	8.7%	8.6%	6.4%	4.8%	4.5%	4.5%	4.3%	4.2%	3.5%	3.8%	3.2%	3.0%	2.3%
2013	4.2%	6.7%	8.7%	8.8%	6.6%	5.4%	4.6%	5.0%	4.5%	4.1%	3.4%	4.1%	3.4%	2.9%	2.4%
2014	4.1%	6.9%	9.1%	8.8%	6.7%	5.8%	4.9%	5.0%	4.5%	4.3%	3.9%	3.5%	3.5%	2.9%	2.8%
2015	4.0%	7.4%	8.7%	9.6%	7.4%	5.7%	5.1%	5.3%	5.1%	4.4%	4.0%	3.7%	3.4%	3.0%	2.6%
2016	4.2%	7.3%	9.4%	10.0%	7.8%	6.0%	5.7%	5.1%	5.2%	4.3%	4.1%	3.7%	3.2%	2.3%	2.6%
2017	4.8%	7.8%	10.5%	10.1%	7.9%	6.2%	5.9%	5.0%	4.9%	4.1%	4.1%	2.9%	2.3%	2.3%	2.3%
2018	4.9%	8.1%	10.7%	10.2%	7.9%	6.0%	5.7%	4.6%	3.9%	3.7%	3.8%				
2019	4.9%	7.9%	10.9%	9.9%	6.7%	5.6%	5.4%								
2020	---	---	---												

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 83% to 98% 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 and 2020 estimates are based on a comparison of claim counts based on WCIRB accident year experience as of December 31, 2020 relative to the estimated change in statewide employment. The 2020 estimate is without COVID-19 claims. Prior years are based on unit statistical data.

**Item AC21-03-03**  
**Review of COVID-19 Claim Diagnostics**

The COVID-19 pandemic has had significant impact on many components of experience emerging in 2020 and 2021. Exhibit 1 shows a summary of the WCIRB's Special Call for COVID-19 Claim Data Evaluated as of December 31, 2020. A number of other key system diagnostics developed based on the most current emerging COVID-19 pandemic-related experience will be presented at the meeting. Staff will also present an update to the impact of the pandemic on medical treatment patterns based on medical transaction data updated through February 2021.

**Summary of Special Call for COVID-19 Claim Data Evaluated as of December 31, 2020**

Based on 98% of the Market				AY2020 Average per claim		
AY2020 Loss & ALAE	COVID-19 Data Call	4Q-2020 Data Call	COVID-19 Percentage	COVID-19 Claims	All WC Claims	Without COVID-19 Claims
Ind. Paid	25,459,589	471,401,327	5.4%	\$1,568	\$3,830	\$4,174
<u>Ind. Reserves</u>	<u>56,987,929</u>	<u>851,520,495</u>	6.7%	<u>\$3,510</u>	<u>\$6,918</u>	<u>\$7,436</u>
Ind. Incurred	82,447,519	1,322,921,822	6.2%	\$5,078	\$10,749	\$11,610
Med. Paid	20,966,490	625,716,124	3.4%	\$1,291	\$5,084	\$5,660
<u>Med. Reserves</u>	<u>92,343,205</u>	<u>1,407,292,865</u>	6.6%	<u>\$5,688</u>	<u>\$11,434</u>	<u>\$12,307</u>
Med. Incurred	113,309,695	2,033,008,989	5.6%	\$6,979	\$16,518	\$17,967
ALAE Paid	5,246,846	176,159,919	3.0%	\$323	\$1,431	\$1,600
MCCP Paid	1,203,147	62,402,541	1.9%	\$74	\$507	\$573
<b><u>AY2020 Claim Counts</u></b>						
# of Open Indemnity Claims	6,990	80,034	8.7%			
# of Med-Only Claims	12,139	179,813	6.8%			
# of Indemnity Claims	16,156	120,760	13.4%			
Total Number of Claims	28,295	300,573	9.4%			

Source: WCIRB aggregate financial data

## **Item AC21-03-04**

### **9/1/2021 Filing – COVID-19 Claim Cost Projection**

At the August 4, 2020, August 10, 2020, and September 8, 2020 meetings, the Committee discussed the WCIRB's projection of expected COVID-19 claim costs to be incurred on January 1, 2021 through August 31, 2021 policies. Based on that projection, the WCIRB's January 1, 2021 Pure Premium Rate Filing reflected an average provision for COVID-19 claims of 4%, or \$0.06 per \$100 of payroll.<sup>1</sup> For reference, attached is Section B, Appendix D of the January 1, 2021 Pure Premium Rate Filing which summarizes the WCIRB's COVID-19 claim cost projection.

Updated COVID-19 claim cost projections for policies incepting between September 1, 2021 and August 31, 2022 will be discussed at the meeting.

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<sup>1</sup> In the Insurance Commissioner's Decision on the Filing, the approved advisory pure premium rates did not reflect a provision for projected COVID-19 claim costs on 2021 policies, his Decision indicated that, "[t]he WCIRB's thorough efforts to estimate COVID-19 costs are noted and appreciated but I am not persuaded that there is sufficient and reliable data upon which to base an adjustment for COVID-19 costs. Insurance companies are encouraged to take under advisement the actuarial analyses provided in the proposed decision as well as ongoing developments when evaluating whether and to what extent an adjustment for the costs of COVID-19 should be incorporated into a given insurer's rate filing." The Proposed Decision includes a *Table of Recommended COVID-19 Additive Adjustment per \$100 of Payroll* that average \$0.05 per \$100 of payroll.

**Section B**  
**Appendix D**  
**COVID-19 Claim Cost Projection**

The COVID-19 pandemic began to emerge in California in early 2020. During the initial period of the pandemic, without the presence of a legal presumption of compensability of COVID-19-related illnesses in the workers' compensation system, many claims were filed, particularly by first responders and healthcare workers.

On May 6, 2020, Governor Newsom issued Executive Order N-62-20 (Executive Order) thereby providing a rebuttable presumption of compensability for all workers directed by their employer to work outside their home. In May 2020, the WCIRB estimated that the statewide cost of claims projected to be filed during the effective period of the rebuttable presumption in the Executive Order was \$1.2 billion.<sup>1</sup> While the term of the Executive Order has now expired, workers' compensation claims continue to be filed, with several bills under consideration by the Legislature to re-establish a legal presumption of compensability for COVID-19 claims of specified workers. As of mid-July, data from the Division of Workers' Compensation (DWC) indicates that almost 23,000 workers' compensation claims involving COVID-19 have been filed in California, with the numbers increasing rapidly.

Infectious disease experts and epidemiologists expect the COVID-19 pandemic to continue into 2021 and beyond. As the pandemic began to emerge in California early in 2020, the current advisory workers' compensation pure premium rates, approved by the Commissioner in November 2019 to be effective January 1, 2020, do not reflect a provision for COVID-19 claim costs emerging in 2020. With the pandemic expected to continue into 2021 and beyond, the WCIRB has estimated the cost of COVID-19 claims projected to be incurred on policies incepting between January 1, 2021 and August 31, 2021, and has reflected this cost estimate in the pure premium rates proposed in this filing.

The WCIRB estimates the cost of COVID-19 claims on January 1, 2021 to August 31, 2021 policies to be 3.8% of total losses and loss adjustment expenses (LAE). This equates to an average of \$0.06 per \$100 of payroll. The methodology underlying this projection is summarized below.

**Projection Methodology**

Limited forecasts are available for COVID-19 infection rates in 2020 and projections for 2021 and 2022 are even more limited. To project COVID-19 claims arising on January 1, 2021 to August 31, 2021 policies, the WCIRB first estimated the total cost of losses and LAE for COVID-19 claims arising in 2020 based on available information about COVID-19 deaths and hospitalizations in California as well as from several publicly available disease and statistical models.<sup>2</sup> The WCIRB then projected COVID-19 claim costs for 2021 and 2022 based on judgmental assumptions relating COVID-19 deaths and hospitalizations in 2021 and 2022 to those in 2020. These assumptions were informed by a comprehensive review of published COVID-19 related statistics and research.

Exhibits 1.1 through 1.3 summarize the WCIRB's projection of the estimated cost of COVID-19 losses and LAE incurred on January 1, 2021 to August 31, 2021 policies. Exhibit 1.1 summarizes the computation of the projected accident year 2020 COVID-19 losses and LAE used as a basis to project COVID-19 losses and LAE in 2021 and 2022.

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<sup>1</sup> *Evaluation of Cost Impact of Governor Newsom's Executive Order on Rebuttable Presumption for California COVID-19 Workers' Compensation Claims*, WCIRB, May 2020.

<sup>2</sup> For purposes of this valuation, the WCIRB assumed that a presumption reasonably similar to that included in Executive Order N-62-20 will be in effect for the remainder of year. If by the time of the CDI public hearing on this filing no presumption is enacted or a significantly different presumption is enacted, the WCIRB will reassess this evaluation and, if appropriate, amend the proposed January 1, 2021 advisory pure premium rates.

Line (1) of Exhibit 1.1 shows the projected number of California COVID-19 deaths for the working age population (18-69 years) to occur in 2020. The projection was based on published forecasts as of August 3, 2020 from the Institute for Health Metrics and Evaluation (IHME) and YouYang GU from MIT (MIT-YYG).<sup>3</sup> At the time of this valuation, both sources projected the statewide COVID-19 deaths through November 1, 2020. The WCIRB then extended the average of the two models of projected deaths to the end of 2020 assuming the incremental monthly change in deaths in October persists in November and December 2020, given that a potential winter wave of COVID-19 infections may occur concurrently with the flu season that typically starts around October. Table 1 shows the actual and projected COVID-19 death counts by month for 2020 using this approach.

**Table 1 – Projected COVID-19 Deaths by Month for 2020**

	Actuals from CDPH		Average of IHME and MIT-YYG Projections (as of 8/3/2020)			Estimated Based on October Change	
	June	July	August	September	October	November	December
Cumulative Total	6,090	9,356	12,531	15,158	17,602	20,046	<b>22,490</b>
Incremental Monthly Change	—	3,266	3,175	2,627	2,444	2,444	2,444

The majority of COVID-19 deaths have occurred in older people, many of whom are not working. The WCIRB's year-end projection for 2020 COVID-19 deaths of approximately 22,500 was adjusted to the California working age population based on the age distribution of deaths as of August 2, 2020, published by the California Department of Public Health (CDPH).<sup>4</sup> The projected 2020 death counts for the working age population of approximately 7,800 based on this approach and shown on line (1) of Exhibit 1.1 were validated for reasonableness against the reported-to-date death counts shown in Table 2.

**Table 2 – Projected COVID-19 Deaths and Hospitalizations for Working Age Population (18 to 69 Years) Compared to Reported-to-Date**

	Reported-to-Date (End of July) <sup>5</sup>	Projected 2020 Year-End	% Change between July 2020 and Year-End
Total Deaths	3,230	7,790	+141%
Total Hospitalizations (including deaths) <sup>6</sup>	19,017	48,953	+157%
Death Rate per 100,000	12	29	+141%
Hospitalization rate per 100,000 (including deaths)	71	183	+157%
Hospital Mortality Rate	17%	16%	-6%

Line (2) of Exhibit 1.1 shows the projected number of California COVID-19 hospitalizations (excluding deaths) for the working age population (18-69 years) to occur in 2020. At the time of this valuation, limited reliable forecasts of total COVID-19 hospitalizations in 2020 were available, partly because cumulative hospitalizations at the state level are not always reported. In particular, these forecasts are challenging for California given that the state has not, at the time of this valuation, yet progressed past its "first infection wave" unlike several other states.<sup>7</sup>

<sup>3</sup> [IHME's projection for COVID-19 deaths in California](#) used in this valuation was made on August 3, 2020. Similarly, [YouYang Gu's](#) deaths projection used was made on August 3, 2020.

<sup>4</sup> California Department of Public Health COVID-19 Cases by Age Group: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID-19-Cases-by-Age-Group.aspx> (accessed on August 3, 2020).

<sup>5</sup> The reported-to-date COVID-19 deaths were as of August 2, 2020, published by the CDPH. The reported-to-date COVID-19 hospitalizations were as of July 25, 2020, published by the CDC (COVID-NET) on July 31, 2020. The CDC updates prior weekly hospitalizations when adding the latest weekly hospitalizations.

<sup>6</sup> All reported deaths for working age individuals are assumed to follow hospitalization.

<sup>7</sup> States that passed their first wave of infections include New York, New Jersey, Maryland, Massachusetts and Connecticut. <https://91-divoc.com/pages/covid-visualization/>

The WCIRB projected statewide California 2020 COVID-19 hospitalizations based on an assumed total hospitalization rate (including deaths) after the “first infection wave” by using data from five other states that essentially completed a first infection wave. For many of these states, the rate of COVID-19 infections was higher, compared to California, as they were considered to be “hotspots” in the U.S. during the early months of the pandemic. The Massachusetts total post-first infection wave hospitalization rate of 172 per 100,000 population as of July 28 (the lowest total hospitalization rate among these five states)<sup>8</sup> was selected by the WCIRB to project year-end hospitalizations in California. The year-end projection for COVID-19 hospitalizations (including deaths) was then adjusted to the California working age population based on the age distribution of COVID-19 hospitalizations published by the CDC (COVID-NET) as of July 25, 2020.<sup>9</sup> The WCIRB projected total 2020 COVID-19 hospitalizations (including deaths) in California of approximately 49,000 was also validated for reasonableness against the reported-to-date hospitalizations as shown in Table 2.

The projected total hospitalizations were further categorized as severe cases (those that do not require an ICU stay) and critical cases (ICU cases). Critical cases were assumed to be 30% of all hospitalizations, consistent with the assumption reflected in the WCIRB’s May evaluation of the Executive Order.<sup>10</sup> The projected deaths were excluded from both severe and critical cases by assuming an approximate mortality rate of 45% among critical cases and subtracting the remaining deaths from severe cases.<sup>11</sup> The projected 2020 number of working age hospitalizations excluding deaths computed in this manner is 41,200, as shown on line (2) of Exhibit 1.1.<sup>12</sup>

Lines (1) and (2) of Exhibit 1.1 estimate the total 2020 COVID-19 deaths and hospitalizations of working age Californians. To estimate the number of worker’s compensation claims that will potentially be filed for accident year 2020, the WCIRB compared the number of claims filed with the DWC through First Report of Injury as of July 23, 2020 with reported working age COVID-19 infections from the CDPH (which include deaths, hospitalizations and mild cases) during the same time period. The WCIRB also assumed approximately 50% of the working age mild cases of COVID-19 will not file a claim<sup>13</sup> and about 10% of all COVID-19 claims filed with the DWC will be denied with the denial ultimately upheld. The reasonability of both of these assumptions was validated based on information about COVID-19 claims filed thus far and based on feedback from claims experts. Based on these assumptions, a conversion factor of 12%, as computed in Exhibit 2 and shown on line (3) of Exhibit 1.1, was used to adjust total 2020 working age COVID-19 deaths and hospitalizations to projected workers’ compensation claims.

Line (4) of Exhibit 1.1 shows the projected number of 2020 COVID-19 death claims in the California workers’ compensation system. It is computed as the product of the projected number of COVID-19 working age deaths on line (1) and the workers’ compensation claim conversion factor of 12% shown on line (3). Line (5) of Exhibit 1.1 shows the projected loss and LAE cost of 2020 COVID-19 death claims, which is the product of line (4) and the average cost of losses and LAE on death claims as projected in the WCIRB’s May 2020 evaluation of the Executive Order.<sup>14</sup> Lines (6) and (7) of Exhibit 1.1 show a similar computation for 2020 COVID-19 hospitalization workers’ compensation claims excluding deaths.<sup>15</sup> In the May 2020 evaluation of the Executive Order, the WCIRB estimated the average cost of mild, severe, critical and death COVID-19 claims in California based on a review of WCIRB data and published data as

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<sup>8</sup> [COVID Tracking Project](#).

<sup>9</sup> [CDC COVID-NET Laboratory-confirmed COVID-19-Associated Hospitalizations by Age Group \(accessed on July 31, 2020\)](#).

<sup>10</sup> Based on the [proportion of ICU cases reported in California](#), accessed on August 14, 2020.

<sup>11</sup> Armstrong R.A., Kane, A.D., and Cook, T.M. [Outcomes from intensive care in patients with COVID-19: a systematic review and meta-analysis of observational studies](#). Anaesthesia. June 30, 2020.

<sup>12</sup> The estimated distribution between severe and critical cases of COVID-19 after excluding deaths was also used in the computation of line (7) of Exhibit 1.1, the projected cost of 2020 COVID-19 hospitalization claims in the California workers’ compensation system.

<sup>13</sup> This assumption was also reflected in the WCIRB’s evaluation of the Executive Order.

<sup>14</sup> *Evaluation of Cost Impact of Governor Newsom’s Executive Order on Rebuttable Presumption for California COVID-19 Workers’ Compensation Claims*, WCIRB, May 2020. In the evaluation, the WCIRB projected an average loss and LAE cost of COVID-19 death claims of \$381,800.

<sup>15</sup> In the May 2020 evaluation of the Executive Order, the WCIRB projected an average loss and LAE cost of COVID-19 severe hospitalization claims of \$101,800 and an average cost of critical hospitalization claims of \$260,100.

well as feedback from a number of workers' compensation claims and medical experts. The WCIRB continues to believe those estimates are reasonable.

Line (8) of Exhibit 1.1 shows the estimated statewide accident year 2020 cost of losses and LAE on COVID-19 claims. The total cost on line (8) is computed as the sum of the projected cost of death claims shown on line (5), the cost of hospitalization claims (excluding death claims) shown on line (7) and the estimated cost of "mild" (non-hospital) claims, with the cost of mild claims computed based on the methodology used in the WCIRB's May 2020 evaluation of the Executive Order.<sup>16</sup> Line (9) of Exhibit 1.1 shows that 63% of statewide COVID-19 claim costs are estimated to be generated from the insured market. This estimate is based on the percentage of all COVID-19 claims reported to the DWC as of July 23, 2020 that arose in the insured market. Finally, line (10) of Exhibit 1.1 shows the \$0.7 billion estimated cost of losses and LAE on accident year 2020 COVID-19 claims in the insured market.

Exhibit 1.2 summarizes the computation of the projected accident year 2021 COVID-19 losses and LAE. There is very limited information available on COVID-19 infections to occur in 2021. A number of published expert forecasts indicate that COVID-19 infections in 2021 will not be significantly better or worse than in 2020, and the number of hospitalizations in 2021 is likely to be similar to that in 2020.<sup>17</sup> All available forecasts indicated that more infection waves will occur in 2020 and 2021 and likely continue until the middle of 2022 when herd immunity may be reached. Based on this information, the WCIRB estimates the level of COVID-19 claims in 2021 (prior to reflecting the impact of improved treatments or a potential vaccine) to be generally comparable to that in 2020 (i.e., a relativity of 2021 to 2020 of 1.0) as shown on line (11) of Exhibit 1.2.

There is potential for the pandemic to improve significantly in 2021 due to ongoing improvements in medical treatments for COVID-19 patients or the impact of potential vaccines or treatments likely to be proven effective in 2021. Exhibit 3 summarizes the current significant advances in treatment of COVID-19 illnesses. As shown on line (12) of Exhibit 1.2, the WCIRB judgmentally estimates a 25% reduction in COVID-19 cost levels in 2021 due to improved treatments and the potential impact of a vaccine.

Line (13) of Exhibit 1.2 shows the projected accident year 2021 COVID-19 losses and LAE for the insured market. The projection of \$0.52 billion is based on the 2020 estimate of COVID-19 losses and LAE with a judgmental estimated reduction of 25% to reflect the potential impact of improved treatments and a vaccine. This equates to 4.7% of the total non-COVID-19 accident year 2021 loss and LAE projection of \$10.9 billion, determined using the methodologies summarized in Section B, as shown on lines (14) and (15) of Exhibit 1.2.

Exhibit 1.3 summarizes the computation of the COVID-19 losses and LAE projected for accident year 2022 and the January 1, 2021 to August 31, 2021 policy period. As shown on line (16), the WCIRB judgmentally estimates a 67% reduction in accident year 2022 COVID-19 cost levels relative to 2020 due to continued improvements in treatments and the potential for a reduced number and severity of waves caused by continued impact of COVID-19 vaccines and potential herd immunity to COVID-19. Similar to the computation of the projected accident year 2021 COVID-19 losses and LAE, line (17) of Exhibit 1.3 shows the projected accident year 2022 COVID-19 losses and LAE for the insured market of \$0.23 billion. This equates to 1.9% of the total non-COVID-19 accident year 2022 loss and LAE projection of \$12.0 billion, determined using the methodologies summarized in Section B, as shown on lines (18) and (19) of Exhibit 1.3.

Line (20) of Exhibit 1.3 computes the adjustment factor for the estimated cost impact of COVID-19 claims to be incurred on policies incepting between January 1, 2021 and August 31, 2021. As shown, the

<sup>16</sup> In the May 2020 evaluation of the Executive Order, the WCIRB projected an average loss and LAE cost of COVID-19 mild claims of \$2,900. Mild claims are projected to represent only about 6% of total COVID-19 claim costs.

<sup>17</sup> Based on several studies reviewed: Kronick, Richard, ["How COVID-19 Will Likely Affect Spending, And Why Many Other Analyses May Be Wrong."](#) *Health Affairs Blog*, May 19, 2020; Kissler S.M., Tedijanto, C., Goldstein, E., Grad, Y.H., Lipsitch, M., ["Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period"](#), *Science*, May 22, 2020, 368(6493):860-868; Moore, K.A., Lipsitch, M., Barry, J.M., Osterholm, M.T., ["COVID-19: The CIDRAP Viewpoint - Part 1: The Future of the COVID-19 Pandemic: Lessons Learned from Pandemic Influenza"](#), April 30, 2020.

average of the 2021 and 2022 projections, weighted based on the relative exposure of each year for the January 1, 2021 through August 31, 2021 policy period, is 3.8% of total non-COVID-19 projected losses and LAE. This equates to an average of \$0.06 per \$100 of payroll based on a projected average pure premium rate prior to the impact of COVID-19 claims of \$1.50 per \$100 of payroll. The process to reflect the average provision of \$0.06 per \$100 of payroll based on the relative frequency of COVID-19 claims by industry sector is detailed in Section A, Appendix A.

Limited information on projected COVID-19 infection rates in 2021 and 2022 is available. The WCIRB projected COVID-19 claim costs for 2021 and 2022 based on a series of reasonable assumptions informed by a comprehensive review of a wide range of available COVID-19 related statistics and research. Given the inherent uncertainty in the COVID-19 projection as well as the extreme fluidity of the pandemic, the WCIRB plans to reassess its evaluation of COVID-19 claim costs to be incurred on January 1, 2021 through August 31, 2021 policies in September based on updated information and statistical models as well as any legislation impacting compensability of COVID-19 enacted by the California Legislature by the close of the legislative session. If appropriate based on that re-evaluation, the WCIRB will amend the January 1, 2021 advisory pure premium rates proposed in this filing by the time of the California Department of Insurance public hearing on the filing.

### **Projections Based on Alternative Assumptions**

Given the uncertainty involved as to the future of the pandemic as well as the breadth of the assumptions reflected in the WCIRB's projection summarized above, the WCIRB has also projected a low-range and a high-range COVID-19 cost estimate for the January 1, 2021 to August 31, 2021 policy period.

The WCIRB's low-range projection reflects the same assumptions used in the projection summarized in Exhibits 1.1 to 1.3 with several exceptions. First, the number of death claims projected was based solely on the IHME model estimate, which was the lower of the two model projections. Second, the number of COVID-19 working age hospitalizations for the remainder of 2020 was limited to be only 133% of the number of working age hospitalizations that have occurred thus far in 2020 (in lieu of almost 160% as shown in Table 2). Finally, reflecting more optimistic assumptions regarding future waves, improved treatments and the impact of vaccines, the WCIRB assumed that 2021 COVID-19 costs would be 50% of the 2020 costs (in lieu of 75%) and that 2022 COVID-19 costs would be 25% of the 2020 costs (in lieu of 33%). The WCIRB's low-range estimate computed on this basis is 2.4% of total non-COVID-19 projected losses and LAE for the January 1, 2021 to August 31, 2021 policy period. This equates to an average of \$0.04 per \$100 of payroll.

The WCIRB's high-range projection reflects the same assumptions used in the projection summarized in Exhibits 1.1 to 1.3 with several alternative assumptions. First, the number of death claims projected was based solely on the MIT-YYG model estimate, which was the higher of the two model projections. Second, the number of projected COVID-19 hospitalizations for 2020 was based on the average of the Massachusetts and Maryland hospitalization rates after their first infection wave, which is about 10% higher than the estimate based solely on the Massachusetts information. Finally, reflecting less optimistic assumptions regarding future waves, improved treatments and the impact of vaccines, the WCIRB assumed in the high-range projection that 2021 COVID-19 costs would be 90% of the 2020 costs (in lieu of 75%) and that 2022 COVID-19 costs would be 50% of the 2020 costs (in lieu of 33%). The WCIRB's high-range estimate computed on this basis is 5.2% of total non-COVID-19 projected losses and LAE for the January 1, 2021 to August 31, 2021 policy period. This equates to an average of \$0.08 per \$100 of payroll.

## Projected Accident Year 2020 COVID-19 Claim Costs

(1) AY 2020 Statewide Deaths Working Age Population: (Tables 1 and 2)	7,800
(2) AY 2020 Statewide Hospitalizations (Excl. Deaths) Working Age Population: (Table 2)	41,200
(3) Workers' Compensation Claim Conversion Factor: (Exhibit 2)	12%
(4) AY 2020 Estimated WC Death Claims: (1) x (3)	940
(5) AY 2020 Estimated WC Death Claim Costs: (4) x Avg. Death Severity*	\$0.4B
(6) AY 2020 Estimated WC Hospitalization (Excl. Death) Claims: (2) x (3)	4,950
(7) AY 2020 Estimated WC Hospitalization Claim Costs: (6) x Avg. Hospitalization Severity*	\$0.7B
(8) Statewide AY 2020 COVID-19 Loss & LAE: (5) + (7) + (Mild claim costs**)	\$1.1B
(9) Insured Market Share of COVID-19 Claims: (DWC summary of COVID-19 claims)	63%
<b>(10) Projected AY 2020 Insured Market COVID-19 Loss &amp; LAE: (8) x (9)</b>	<b>\$0.7B</b>

\* Based on severity estimates by COVID-19 claim type in the WCIRB's May 2020 evaluation of the Governor's Executive Order.

\*\* Based on proportion of "mild" COVID-19 claims costs in the WCIRB's May 2020 evaluation of the Governor's Executive Order.

## Projected Accident Year 2021 COVID-19 Claim Costs

11) Estimated Relativity AY 2021 to AY 2020 COVID-19 Claims:	1.0
12) Judgmental Adjustment for Improved Treatment & Potential Vaccine:	25%
13) AY 2021 Insured Market COVID-19 Loss & LAE: {Exhibit 1.1 (10)} x (11) x {1.0 - (12)}	\$0.52B
14) AY 2021 Insured Market Projected Non-COVID-19 Loss & LAE:*	\$10.9B
15) AY 2021 COVID-19 Adjustment Factor: (13) / (14)	<b>4.7%</b>

\* Based on the loss and loss adjustment projection methodologies discussed in Section B.

Projected 1/1/2021 to 8/31/2021 Policy Period COVID-19 Claim Costs

16) Estimated Relativity AY 2022 to AY 2020 COVID-19 Claims: (Includes Judgmental Adjustment for Improved Treatment & Potential Vaccine)	0.33
17) AY 2022 Insured Market COVID-19 Loss & LAE: {Exhibit 1.1 (10)} x (16)	\$0.23B
18) AY 2022 Insured Market Projected Non-COVID-19 Loss & LAE:*	\$12.0B
19) AY 2022 COVID-19 Adjustment Factor: (17) / (18)	1.9%
20) 1/1/2021 to 8/31/2021 Policy Period COVID-19 Adjustment Factor {[Exhibit 1.2 (15)] x 67%} + {(19) x 33%}	3.8%

\* Based on the loss and loss adjustment projection methodologies discussed in Section B.

# Computation of COVID-19 Workers' Compensation Claim Conversion Factor

1) Total COVID-19 Infections Age 18-69 as of July 2020: <sup>1</sup>	312,000
2) Total COVID-19 Hospitalizations (Including Deaths) Age 18-69 as of July 2020: <sup>2</sup>	19,000
3) Total COVID-19 Mild Cases Age 18-69: (1) - (2)	293,000
4) COVID-19 Infections Excluding 50% of Mild Cases Age 18-69: (2) + (3) x 50%	165,500
5) Total COVID-19 Workers' Compensation Claims Filed as of July 2020: <sup>3</sup>	22,300
6) Estimated Proportion of Claims Denied and Upheld:	10%
<b>7) Workers' Compensation Claim Conversion Factor: (5) / (4) x {1.0 - (6)}</b>	<b>12%</b>

<sup>1</sup> COVID Tracking Project as of July 18, 2020 (adjusted to working age population).  
<sup>2</sup> CDC (COVID-NET) as of July 25, 2020. COVID-19 hospitalizations often lag a week behind COVID-19 infections.  
<sup>3</sup> Based on Division of Workers' Compensation First Report of Injury claims as of July 23, 2020.

## COVID-19 Claim Cost Projection

### Published Information on Improved Treatments and Potential Vaccines

- Available Treatments for COVID-19
  - Dexamethasone (an anti-inflammatory steroid recommended for severe COVID-19 infections)
    - Prelim report showed mortality reduced by 12% among ICU patients
  - Remdesivir (FDA approved for emergency use for hospitalized patients)
    - Shown to reduce time to recovery by 4 days (11 vs. 15 days)
  - Convalescent plasma (FDA approved for emergency use)
  - Prone positioning reduces need for ventilators by 46%
- Treatments under clinical trial investigation (about 1,900 ongoing trials as of August 2020)
  - Inhaled beta interferon: a U.K. trial showed an 80% mortality reduction among 100 hospitalized patients
  - Plasma-based therapies
- Potential vaccines
  - An effective vaccine by early 2021 highly likely
    - > 140 potential COVID-19 vaccines in various stages of development (WHO)
  - A study on 2009 influenza pandemic (H1N1) shows the vaccines prevented about 4% of both deaths and hospitalizations, and 3% of total infections.
- Improved clinical guidelines for treating COVID-19

## **Item AC21-03-05**

### **Pandemic Impact on Premium Measures**

At the December 8, 2020 meeting, the Committee discussed the potential impact of the COVID-19 pandemic and economic downturn on calendar year 2020 earned premium amounts. The Committee noted that, during the Great Recession, the economic downturn resulted in atypical amounts of return premiums at audit which distorted reported calendar year earned premium amounts when used as a base for the projected accident year loss ratio. As a result, the Committee recommended staff review the pandemic's impact on calendar year 2020 earned premium amounts which may include potential adjustments to appropriately project the accident year 2020 loss ratio.

Calendar year earned premium is used as the basis for the ultimate accident year loss ratios and reflects premiums earned from policies incepting during the same year as the accident year, premiums earned from policies incepting in the prior calendar year, and audits on older policies reflected in that calendar year. Although the audit amounts on older policies (incepting more than one year prior to the accident year) do not reflect the exposure period when the claims occur, they are typically a small percentage of the total earned premium and stable from year to year. During the Great Recession, audits on recession era policies resulted in atypical amounts of return premiums reflected in earned premium amounts for recovery era calendar years. As a result, the WCIRB reflected an adjustment to the calendar year earned premium amounts from these years to better align with the accident year exposure period. This adjustment was 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.<sup>1</sup>

Exhibit 1 shows quarterly written premium development factors by policy year. Written premium development in the second through fourth quarters of 2020 has been significantly lower than recent prior calendar years. For policy year 2020, this is likely a direct result of the economic downturn on policies incepting in 2020. For policy year 2019 development in 2020 (which in part reflect audit adjustments from 15 to 24 months), this is likely impacted by return premiums on the second quarter 2020 and later portions of 2019 policies due to sharply reduced exposure in 2020.<sup>2</sup> For policy year 2018 development in 2020, the lower-than-typical development is somewhat unexpected given that 2018 policies do not include any exposure in 2020. However, the lower development may be a result of the stay-at-home orders delaying or preventing a physical audit or the policyholder no longer being in operation as a result of the pandemic. Exhibit 2 shows quarterly earned premium development by policy year, which shows a similar development pattern to the written premium.

The sudden and sharp nature of the 2020 economic downturn is contrary to the Great Recession, which occurred more gradually and resulted in the atypical amounts of return premiums when the affected policies were later audited. Given the uncertainty around the economic and premium projections during the pandemic and that some impact of the 2020 economic downturn appears to be already reflected in the reported premium amounts for policy years 2019 and 2020, an adjustment similar to what the WCIRB applied to premium amounts during the Great Recession may not be necessary.

Committee feedback on the 2020 premium measures will be solicited at the meeting.

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<sup>1</sup> See Item AC11-06-02 of the June 3, 2011 and August 3, 2011 WCIRB Actuarial Committee Agendas.

<sup>2</sup> In May 2020, the Insurance Commissioner directed insurers to partially refund premiums related to reduced risk during the COVID-19 pandemic.

**Insurer Level Written Premium Development Factor by Policy Year**

PY	Age-to-Age (in months)										
	<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>
2006	2.031	1.538	1.338	1.108	1.057	1.038	1.026	1.002	1.002	0.999	1.001
2007	1.871	1.520	1.316	1.083	1.047	1.036	1.027	0.998	1.001	0.996	0.999
2008	1.929	1.556	1.293	1.073	1.033	1.015	1.010	0.999	0.999	1.004	0.999
2009	1.880	1.568	1.333	1.090	1.039	1.027	1.024	1.008	1.003	0.996	1.001
2010	1.849	1.535	1.334	1.084	1.053	1.035	1.017	1.008	1.005	1.001	0.999
2011	1.854	1.574	1.356	1.090	1.052	1.039	1.024	1.016	1.014	1.002	1.002
2012	1.969	1.589	1.389	1.090	1.054	1.045	1.017	1.015	1.010	1.001	1.001
2013	2.001	1.570	1.380	1.099	1.054	1.041	1.024	1.013	1.003	1.003	1.000
2014	2.000	1.594	1.379	1.094	1.056	1.038	1.021	1.013	1.006	1.000	1.000
2015	1.945	1.590	1.378	1.090	1.056	1.038	1.022	1.015	1.007	1.003	1.000
2016	1.967	1.573	1.366	1.085	1.050	1.033	1.021	1.019	1.005	1.000	0.999
2017	1.934	1.564	1.368	1.082	1.049	1.036	1.019	1.011	1.008	1.002	1.000
2018	1.959	1.516	1.356	1.084	1.050	1.032	1.015	1.008	1.000	1.001	1.000
2019	2.027	1.520	1.363	1.088	1.036	1.021	1.007				
2020	1.982	1.476	1.351								

Source: WCIRB aggregate financial data.

**Insurer Level Earned Premium Development Factor by Policy Year**

PY	Age-to-Age (in months)										
	<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>
2006	2.969	1.978	1.646	1.311	1.176	1.092	1.026	1.001	1.002	0.999	0.999
2007	2.997	2.007	1.644	1.291	1.192	1.096	1.029	0.997	1.001	0.996	0.999
2008	3.119	2.024	1.640	1.315	1.175	1.082	1.010	0.998	0.999	1.004	0.999
2009	2.846	2.024	1.654	1.332	1.187	1.096	1.034	1.007	1.001	0.996	1.001
2010	2.758	2.040	1.673	1.333	1.198	1.103	1.034	1.007	1.004	1.001	0.999
2011	2.905	2.072	1.671	1.352	1.208	1.105	1.042	1.015	1.013	1.000	1.001
2012	3.056	2.133	1.727	1.357	1.209	1.116	1.035	1.010	1.009	1.001	1.001
2013	3.120	2.107	1.704	1.355	1.200	1.106	1.040	1.010	1.002	1.002	1.000
2014	3.101	2.108	1.716	1.341	1.199	1.099	1.032	1.010	1.004	0.999	0.999
2015	3.033	2.098	1.706	1.346	1.201	1.102	1.036	1.013	1.005	1.003	0.999
2016	3.044	2.087	1.689	1.337	1.196	1.099	1.035	1.017	1.005	1.000	0.998
2017	3.136	2.072	1.694	1.345	1.197	1.104	1.035	1.009	1.008	1.002	1.000
2018	3.043	2.063	1.698	1.332	1.193	1.096	1.030	1.006	1.000	1.001	1.000
2019	3.101	2.048	1.679	1.333	1.181	1.090	1.024				
2020	2.914	2.036	1.691								

Source: WCIRB aggregate financial data.